LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 15

2024

Bate Stamp Numbers
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Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2024

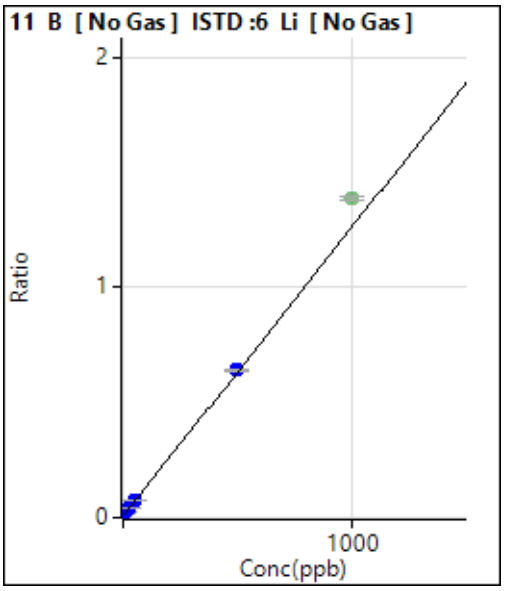
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS
ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX

VOLUME 15

2024

A.	Title:	Report (Cont'd) – Appendix C, File 2 to Draft Final Third Annual Remedial Action Operation Report, LHAAP-16 Landfill, Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas, May 2024
	Author(s):	Department of the Army
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	May 9, 2024
	Bate Stamp:	01238087–01240062

Calibration for 011_ICV.d



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3	☐	25.000	24.104	33479.87	0.0445	P	3.4	-3.6
4	☐	50.000	49.541	56508.04	0.0764	P	2.2	-0.9
5	☐	500.000	500.113	476463.98	0.6412	P	2.0	0.0
6	☑	1000.000		987363.32	1.3876	A	1.5	

y = 0.0013 * x + 0.0143
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BEC = 11.4 ppb

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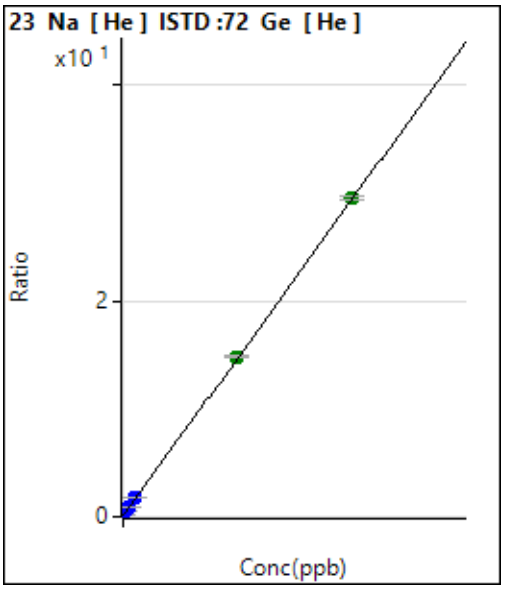

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3	☐	500.000	492.743	408856.82	0.9717	P	0.8	-1.5
4	☐	1000.000	991.045	706568.69	1.7010	P	0.7	-0.9
5	☐	10000.00	9954.875	6219038.87	14.8196	A	1.4	-0.5
6	☐	20000.00	20023.19	11868011.4	29.5546	A	1.4	0.1

y = 0.0015 * x + 0.2506
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DL = 2.137 ppb
BEC = 171.2 ppb

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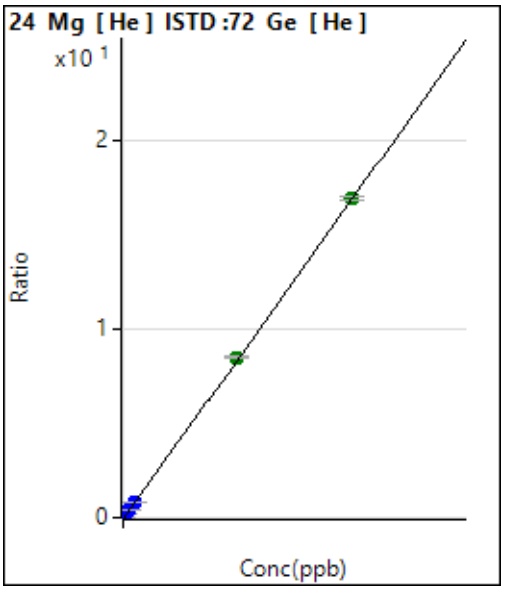
Calibration for 011_ICV.d



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1	☐	0.000	0.000	470.02	0.0011	P	5.4	
2	☐	200.000	201.140	72303.82	0.1718	P	0.4	0.6
3	☐	500.000	482.246	172679.33	0.4104	P	0.8	-3.6
4	☐	1000.000	978.037	345250.79	0.8312	P	1.4	-2.2
5	☐	10000.00	10029.32	3572574.22	8.5129	A	0.9	0.3
6	☐	20000.00	19986.87	6812262.81	16.9638	A	0.9	-0.1

y = 8.4869E-004 * x + 0.0011
R = 1.0000
DL = 0.2141 ppb
BEC = 1.324 ppb

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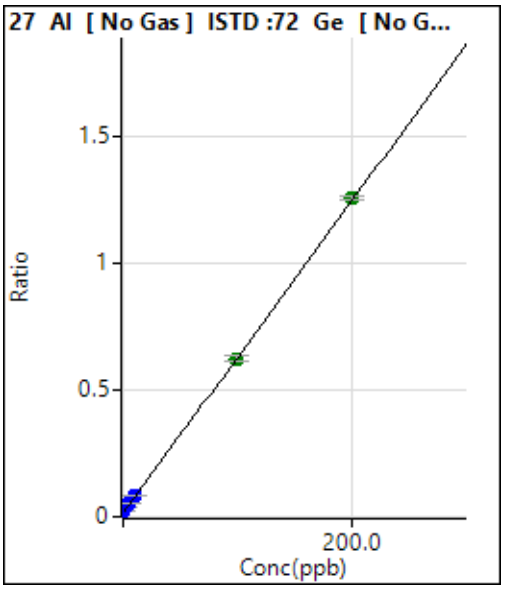

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2	☐	2.000	2.277	49448.14	0.0350	P	1.5	13.9
3	☐	5.000	5.603	78115.36	0.0555	P	0.5	12.1
4	☐	10.000	10.411	117028.95	0.0850	P	2.3	4.1
5	☐	100.000	98.111	859140.04	0.6237	A	2.8	-1.9
6	☐	200.000	200.906	1667461.70	1.2552	A	1.4	0.5

y = 0.0061 * x + 0.0211
R = 0.9999
DL = 0.1737 ppb
BEC = 3.427 ppb

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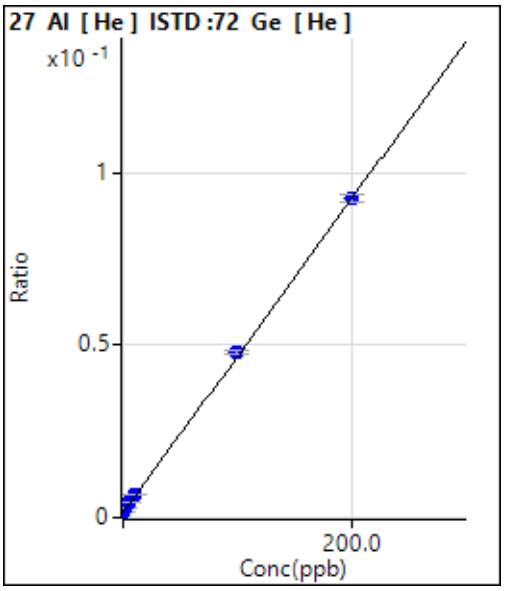
Min Conc: <None>

Calibration for 011_ICV.d



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2	☐	2.000	1.978	1163.40	0.0028	P	8.9	-1.1
3	☐	5.000	5.569	1850.16	0.0044	P	3.5	11.4
4	☐	10.000	10.721	2800.34	0.0067	P	2.2	7.2
5	☐	100.000	101.461	20151.55	0.0480	P	2.1	1.5
6	☐	200.000	199.219	37139.73	0.0925	P	2.3	-0.4

y = 4.5492E-004 * x + 0.0019
R = 1.0000
DL = 0.4317 ppb
BEC = 4.098 ppb

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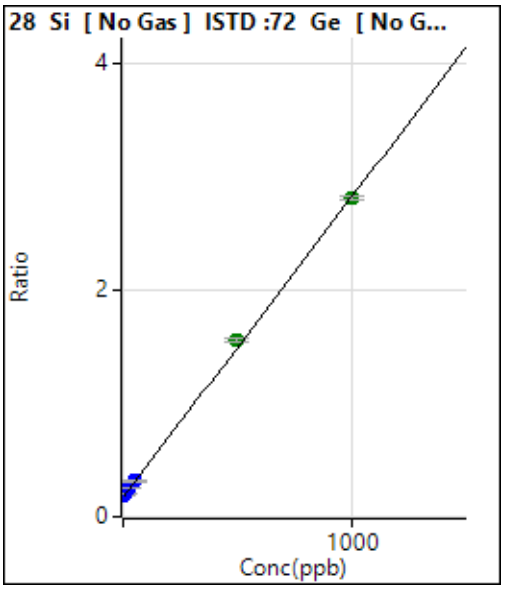
Min Conc: <None>



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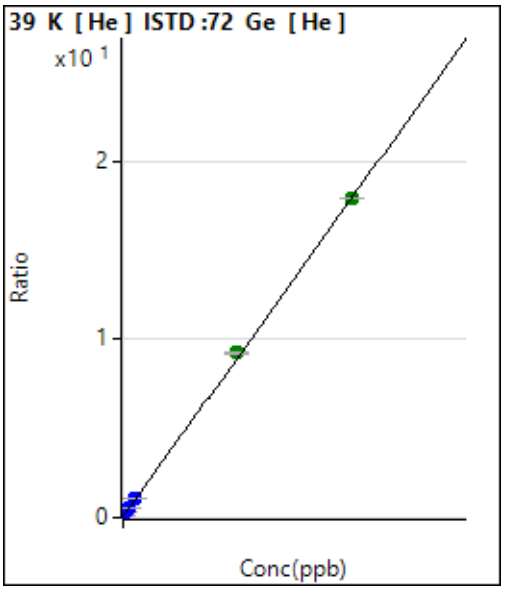
1	☐	0.000	0.000	262450.79	0.1871	P	0.8	
2	☐	10.000	8.374	295310.22	0.2093	P	0.8	-16.3
3	☐	25.000	23.304	350349.55	0.2488	P	1.6	-6.8
4	☐	50.000	48.734	435272.80	0.3162	P	2.5	-2.5
5	☐	500.000	516.658	2143265.59	1.5557	A	1.8	3.3
6	☐	1000.000	991.793	3738753.59	2.8144	A	1.6	-0.8

y = 0.0026 * x + 0.1871
R = 0.9998
DL = 1.612 ppb
BEC = 70.62 ppb

Weight: <None>
Min Conc: <None>

Calibration for 011_ICV.d



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2	☐	200.000	202.569	135580.13	0.3222	P	1.0	1.3
3	☐	500.000	489.042	243231.14	0.5781	P	0.8	-2.2
4	☐	1000.000	996.784	428499.32	1.0316	P	0.3	-0.3
5	☐	10000.00	10211.64	3886991.40	9.2617	A	1.2	2.1
6	☐	20000.00	19894.58	7192440.93	17.9099	A	0.2	-0.5

y = 8.9314E-004 * x + 0.1413
R = 0.9999
DL = 6.919 ppb
BEC = 158.2 ppb

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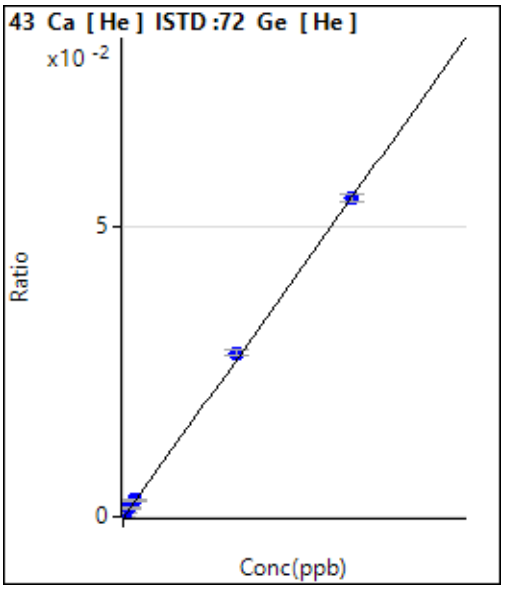
Min Conc: <None>

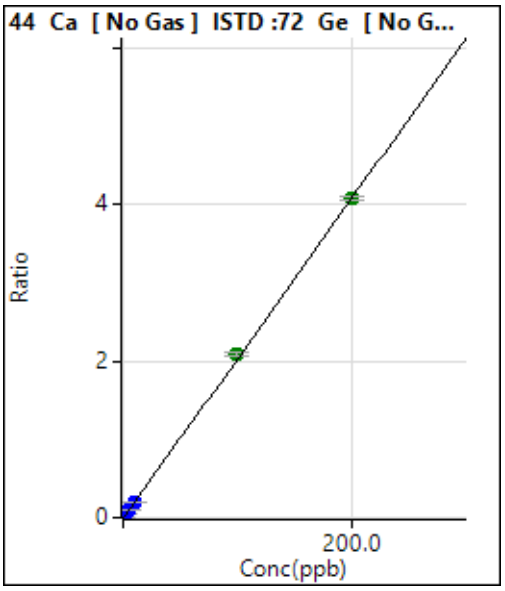


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	200.000	203.777	246.67	0.0006	P	9.8	1.9
3	☐	500.000	542.796	640.03	0.0015	P	19.8	8.6
4	☐	1000.000	1026.001	1186.74	0.0029	P	8.7	2.6
5	☐	10000.00	10234.07	11865.33	0.0283	P	2.5	2.3
6	☐	20000.00	19880.55	22044.62	0.0549	P	2.9	-0.6

y = 2.7602E-006 * x + 2.3900E-005
R = 0.9999
DL = 26.03 ppb
BEC = 8.659 ppb

Weight: <None>
Min Conc: <None>

Calibration for 011_ICV.d



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2	☐	2.000	1.911	69056.21	0.0489	P	1.6	-4.5
3	☐	5.000	4.622	146880.78	0.1043	P	2.4	-7.6
4	☐	10.000	9.386	277611.81	0.2016	P	2.0	-6.1
5	☐	100.000	101.846	2879451.31	2.0904	A	2.4	1.8
6	☐	200.000	199.118	5416404.71	4.0774	A	1.6	-0.4

y = 0.0204 * x + 0.0099
R = 0.9999
DL = 0.007298 ppb
BEC = 0.4849 ppb

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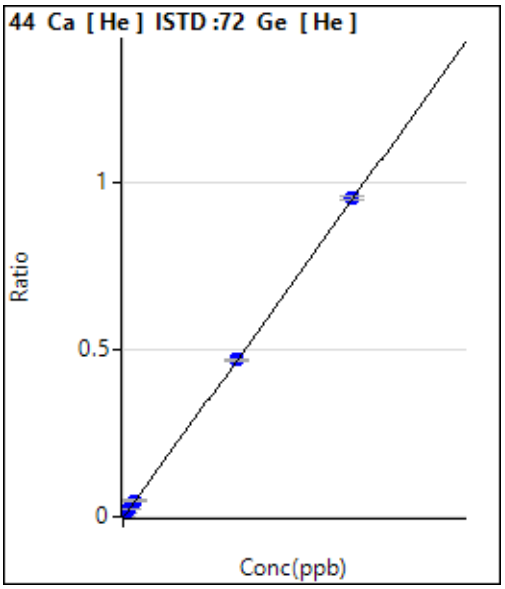
Min Conc: <None>



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1	☐	0.000	0.000	423.35	0.0010	P	20.9	
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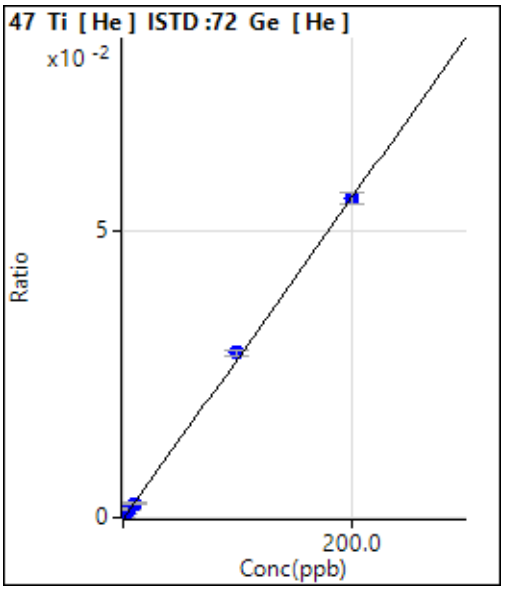
3	☐	500.000	495.051	10337.40	0.0246	P	3.4	-1.0
4	☐	1000.000	1004.452	20275.16	0.0488	P	1.9	0.4
5	☐	10000.00	9890.245	197943.34	0.4717	P	1.1	-1.1
6	☐	20000.00	20054.79	383661.36	0.9554	P	0.9	0.3

y = 4.7589E-005 * x + 0.0010
R = 1.0000
DL = 13.36 ppb
BEC = 21.27 ppb

Weight: <None>
Min Conc: <None>

Calibration for 011_ICV.d



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2	☐	2.000	1.952	236.68	0.0006	P	15.4	-2.4
3	☐	5.000	4.977	593.36	0.0014	P	18.9	-0.5
4	☐	10.000	8.880	1040.06	0.0025	P	3.6	-11.2
5	☐	100.000	102.590	12068.84	0.0288	P	4.0	2.6
6	☐	200.000	198.762	22368.57	0.0557	P	3.6	-0.6

y = 2.8016E-004 * x + 1.5916E-005
R = 0.9999
DL = 0.1476 ppb
BEC = 0.05681 ppb

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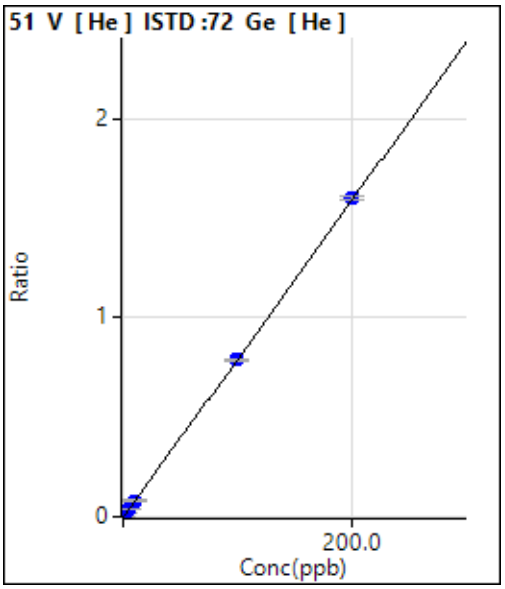
Min Conc: <None>



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3	☐	5.000	4.778	17648.03	0.0419	P	1.7	-4.4
4	☐	10.000	9.791	33983.09	0.0818	P	1.0	-2.1
5	☐	100.000	98.524	330443.40	0.7874	P	1.3	-1.5
6	☐	200.000	200.754	642656.75	1.6004	P	1.2	0.4

y = 0.0080 * x + 0.0039
R = 1.0000
DL = 0.05249 ppb
BEC = 0.4967 ppb

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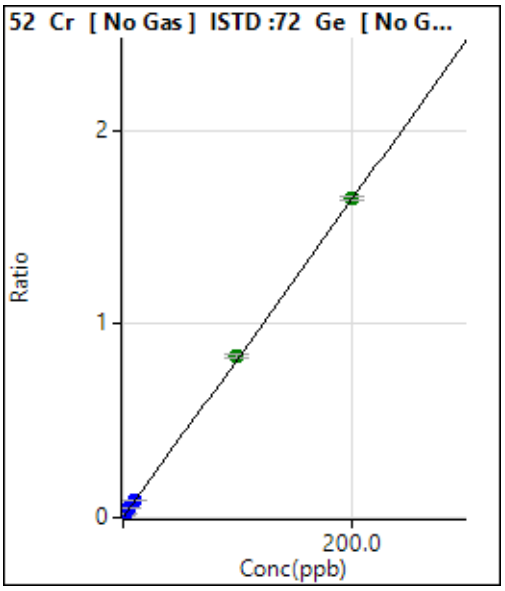
Calibration for 011_ICV.d



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2	☐	2.000	1.895	34864.69	0.0247	P	0.6	-5.2
3	☐	5.000	4.660	66782.60	0.0474	P	2.1	-6.8
4	☐	10.000	9.622	121407.39	0.0882	P	1.0	-3.8
5	☐	100.000	100.292	1147193.39	0.8328	A	2.8	0.3
6	☐	200.000	199.882	2192962.46	1.6508	A	1.1	-0.1

y = 0.0082 * x + 0.0091
R = 1.0000
DL = 0.05413 ppb
BEC = 1.113 ppb

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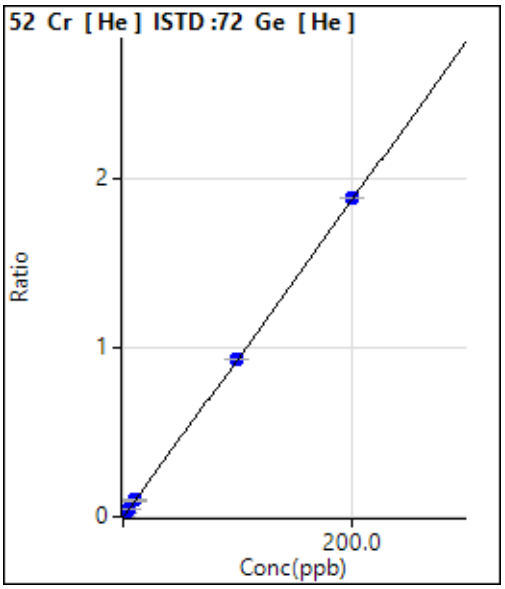
Min Conc: <None>



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3	☐	5.000	4.811	20909.56	0.0497	P	0.4	-3.8
4	☐	10.000	9.806	40078.95	0.0965	P	3.8	-1.9
5	☐	100.000	98.778	390232.94	0.9298	P	0.6	-1.2
6	☐	200.000	200.626	756508.14	1.8838	P	0.6	0.3

y = 0.0094 * x + 0.0046
R = 1.0000
DL = 0.1514 ppb
BEC = 0.4943 ppb

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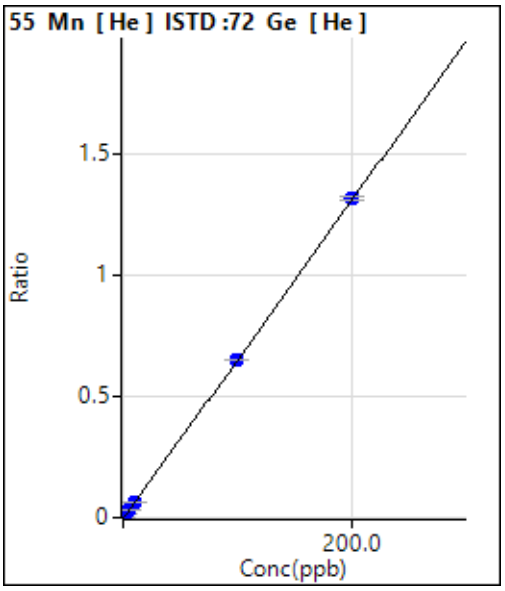
Min Conc: <None>

Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	553.36	0.0013	P	2.4	
2	☐	2.000	1.954	5964.74	0.0142	P	4.9	-2.3
3	☐	5.000	4.982	14344.40	0.0341	P	5.0	-0.4
4	☐	10.000	9.839	27434.54	0.0660	P	2.0	-1.6
5	☐	100.000	99.245	274530.45	0.6541	P	0.3	-0.8
6	☐	200.000	200.386	529829.10	1.3194	P	1.3	0.2

y = 0.0066 * x + 0.0013
R = 1.0000
DL = 0.01442 ppb
BEC = 0.2011 ppb

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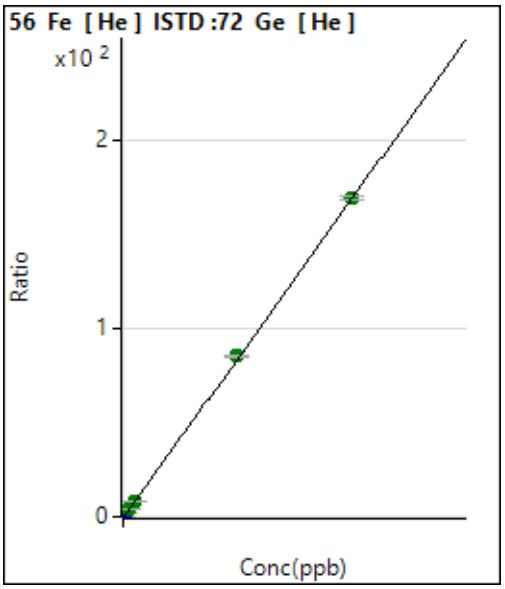
Min Conc: <None>



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1	☐	0.000	0.000	21076.53	0.0504	P	1.0	
2	☐	200.000	202.220	741073.82	1.7611	P	0.3	1.1
3	☐	500.000	509.554	1834952.37	4.3612	A	1.9	1.9
4	☐	1000.000	1012.815	3580090.15	8.6187	A	0.6	1.3
5	☐	10000.00	10057.11	35725491.1	85.1325	A	1.6	0.6
6	☐	20000.00	19970.54	67865248.9	168.999	A	1.0	-0.1

y = 0.0085 * x + 0.0504
R = 1.0000
DL = 0.1736 ppb
BEC = 5.955 ppb

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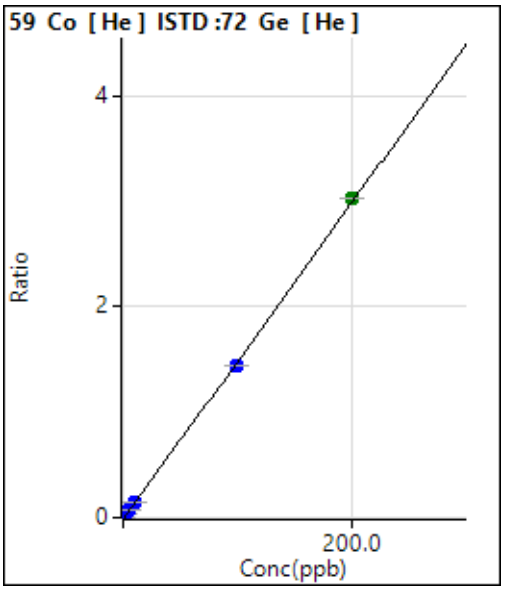
Min Conc: <None>

Calibration for 011_ICV.d



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1	☐	0.000	0.000	56.67	0.0001	P	27.0	
2	☐	2.000	1.905	12082.20	0.0287	P	1.2	-4.7
3	☐	5.000	4.722	29853.01	0.0709	P	1.2	-5.6
4	☐	10.000	9.436	58847.07	0.1417	P	1.1	-5.6
5	☐	100.000	96.116	605031.93	1.4417	P	0.8	-3.9
6	☐	200.000	201.978	1216638.29	3.0294	A	0.6	1.0

y = 0.0150 * x + 1.3543E-004
R = 0.9997
DL = 0.007302 ppb
BEC = 0.00903 ppb

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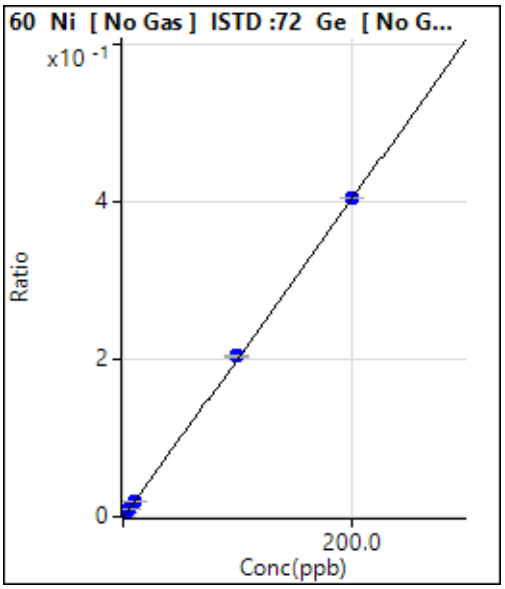
Min Conc: <None>

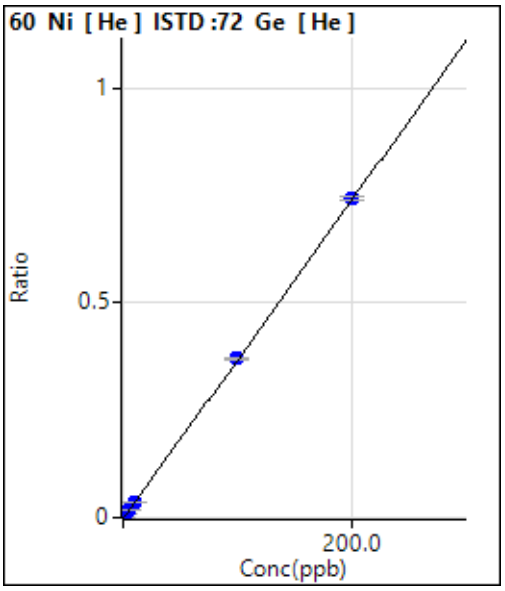


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0003	P	8.3	
2	☐	2.000	1.967	6064.78	0.0043	P	1.8	-1.6
3	☐	5.000	4.930	14511.28	0.0103	P	1.5	-1.4
4	☐	10.000	9.811	27818.72	0.0202	P	0.7	-1.9
5	☐	100.000	100.427	280945.61	0.2039	P	1.9	0.4
6	☐	200.000	199.798	538598.31	0.4054	P	0.5	-0.1

y = 0.0020 * x + 3.0872E-004
R = 1.0000
DL = 0.03769 ppb
BEC = 0.1523 ppb

Weight: <None>
Min Conc: <None>

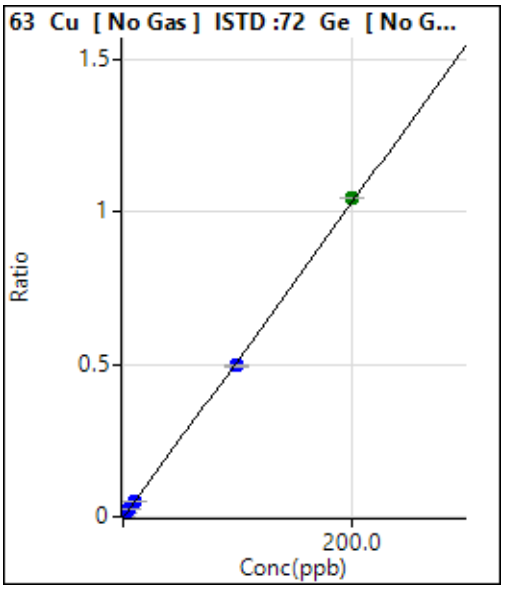
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0004	P	23.3	
2	☐	2.000	1.987	3273.80	0.0078	P	9.9	-0.7
3	☐	5.000	4.767	7612.23	0.0181	P	3.7	-4.7
4	☐	10.000	9.877	15382.24	0.0370	P	3.2	-1.2
5	☐	100.000	99.493	154990.49	0.3693	P	0.5	-0.5
6	☐	200.000	200.266	298348.39	0.7429	P	1.0	0.1

y = 0.0037 * x + 4.1429E-004
R = 1.0000
DL = 0.0782 ppb
BEC = 0.1117 ppb

Weight: <None>
Min Conc: <None>

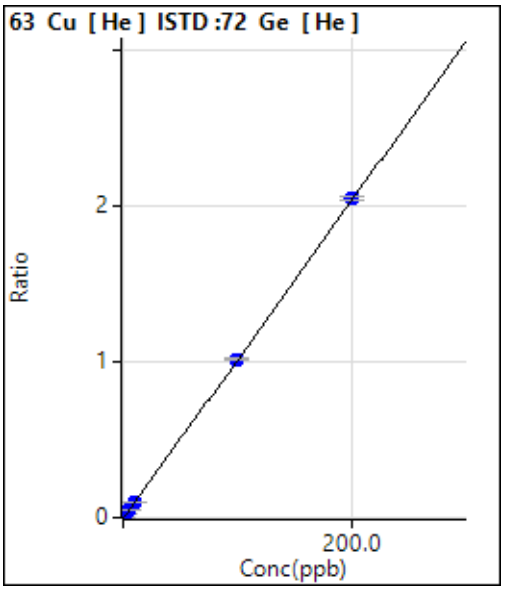


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1956.84	0.0014	P	0.5	
2	☐	2.000	2.003	16566.98	0.0117	P	1.5	0.2
3	☐	5.000	4.690	36074.80	0.0256	P	0.6	-6.2
4	☐	10.000	9.458	69158.75	0.0502	P	2.5	-5.4
5	☐	100.000	95.820	683597.41	0.4962	P	1.5	-4.2
6	☐	200.000	202.125	1388470.24	1.0451	A	0.4	1.1

y = 0.0052 * x + 0.0014
R = 0.9997
DL = 0.00428 ppb
BEC = 0.2701 ppb

Weight: <None>
Min Conc: <None>

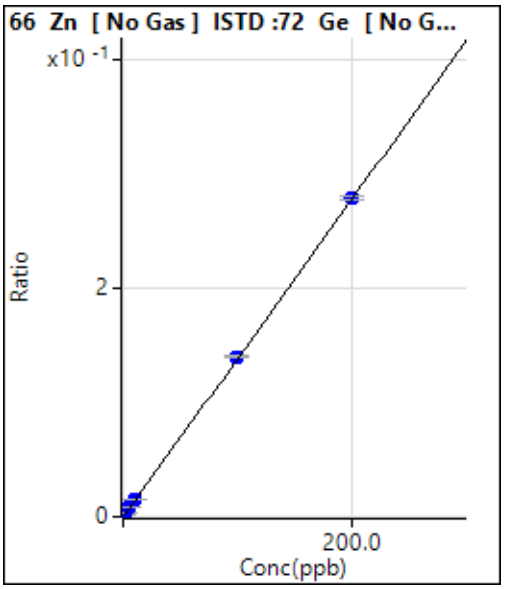
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1153.41	0.0028	P	8.2	
2	☐	2.000	2.068	10030.51	0.0238	P	0.6	3.4
3	☐	5.000	4.953	22401.99	0.0532	P	0.5	-0.9
4	☐	10.000	9.891	43021.71	0.1036	P	1.4	-1.1
5	☐	100.000	99.232	425608.28	1.0142	P	1.2	-0.8
6	☐	200.000	200.390	821308.22	2.0452	P	1.0	0.2

y = 0.0102 * x + 0.0028
R = 1.0000
DL = 0.06631 ppb
BEC = 0.2705 ppb

Weight: <None>
Min Conc: <None>

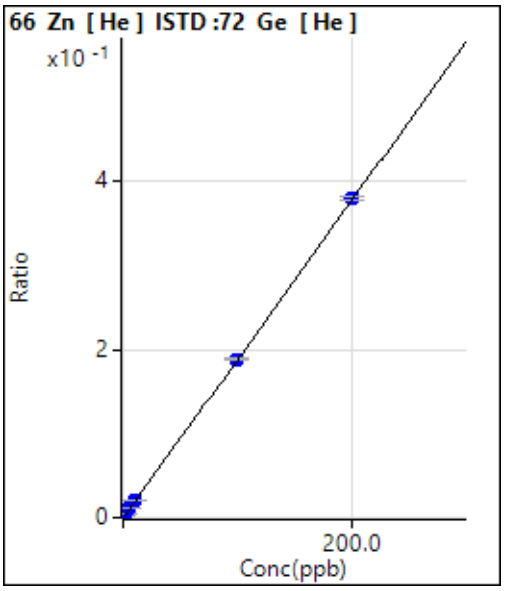


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1423.43	0.0010	P	12.7	
2	☐	2.000	2.088	5531.23	0.0039	P	2.7	4.4
3	☐	5.000	4.924	11071.37	0.0079	P	1.8	-1.5
4	☐	10.000	10.028	20595.91	0.0150	P	3.6	0.3
5	☐	100.000	99.888	192777.03	0.1399	P	1.1	-0.1
6	☐	200.000	200.055	370929.20	0.2792	P	0.8	0.0

y = 0.0014 * x + 0.0010
R = 1.0000
DL = 0.278 ppb
BEC = 0.7301 ppb

Weight: <None>
Min Conc: <None>

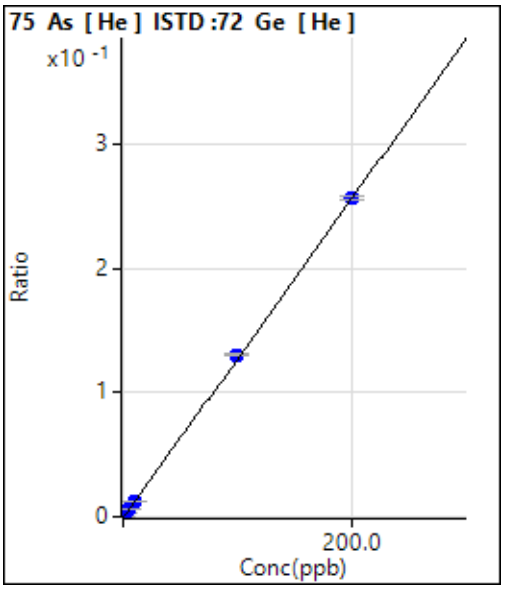
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	623.36	0.0015	P	19.2	
2	☐	2.000	2.039	2250.22	0.0053	P	8.1	2.0
3	☐	5.000	5.126	4704.24	0.0112	P	3.7	2.5
4	☐	10.000	9.928	8416.11	0.0203	P	7.1	-0.7
5	☐	100.000	99.097	79247.57	0.1888	P	1.0	-0.9
6	☐	200.000	200.451	152775.12	0.3804	P	0.7	0.2

y = 0.0019 * x + 0.0015
R = 1.0000
DL = 0.4546 ppb
BEC = 0.7884 ppb

Weight: <None>
Min Conc: <None>

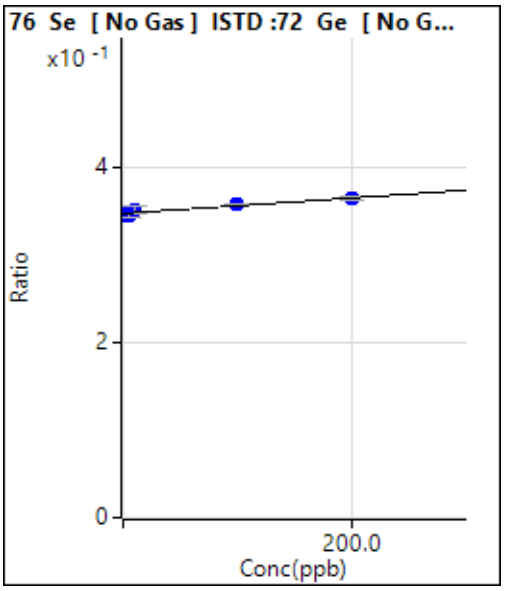


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77.78	0.0002	P	18.1	
2	☐	2.000	2.128	1231.17	0.0029	P	2.6	6.4
3	☐	5.000	4.642	2593.60	0.0062	P	4.2	-7.2
4	☐	10.000	9.654	5241.04	0.0126	P	1.4	-3.5
5	☐	100.000	100.991	54648.89	0.1302	P	1.2	1.0
6	☐	200.000	199.530	103246.89	0.2571	P	0.7	-0.2

y = 0.0013 * x + 1.8597E-004
R = 1.0000
DL = 0.07852 ppb
BEC = 0.1444 ppb

Weight: <None>
Min Conc: <None>

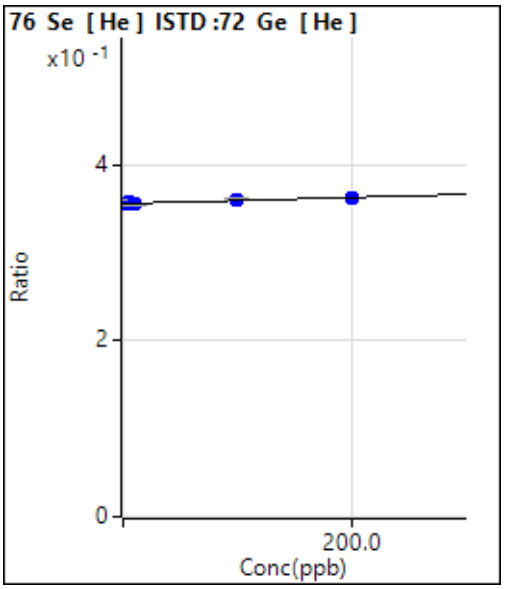
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	488385.34	0.3481	P	0.5	
2	☐	2.000	-19.860	488745.62	0.3464	P	1.0	-1093.
3	☐	5.000	-20.525	487620.55	0.3463	P	1.5	-510.5
4	☐	10.000	48.976	485288.73	0.3525	P	2.0	389.8
5	☐	100.000	108.350	492937.68	0.3578	P	1.1	8.4
6	☐	200.000	194.733	485519.21	0.3655	P	0.7	-2.6

y = 8.9077E-005 * x + 0.3481
R = 0.9619
DL = 63.43 ppb
BEC = 3908 ppb

Weight: <None>
Min Conc: <None>

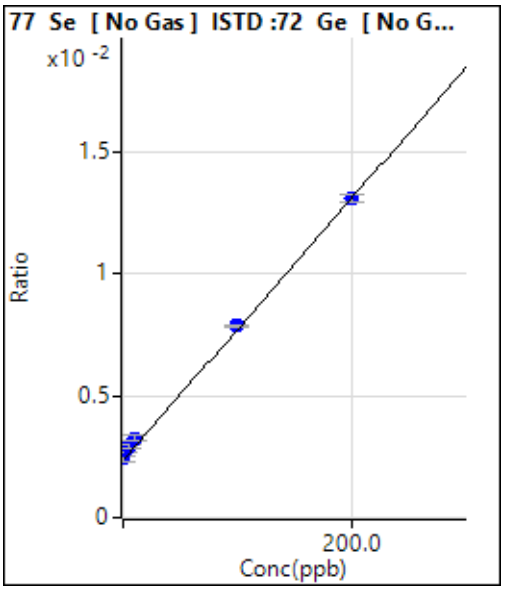


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	148803.51	0.3557	P	1.3	
2	☐	2.000	-30.331	149214.93	0.3546	P	0.7	-1616.
3	☐	5.000	51.126	150407.74	0.3575	P	1.1	922.5
4	☐	10.000	-17.377	147492.90	0.3551	P	0.4	-273.8
5	☐	100.000	137.866	151307.34	0.3605	P	0.9	37.9
6	☐	200.000	181.606	145406.60	0.3621	P	0.5	-9.2

y = 3.5249E-005 * x + 0.3557
R = 0.9231
DL = 398.9 ppb
BEC = 1.009E+04 ppb

Weight: <None>
Min Conc: <None>

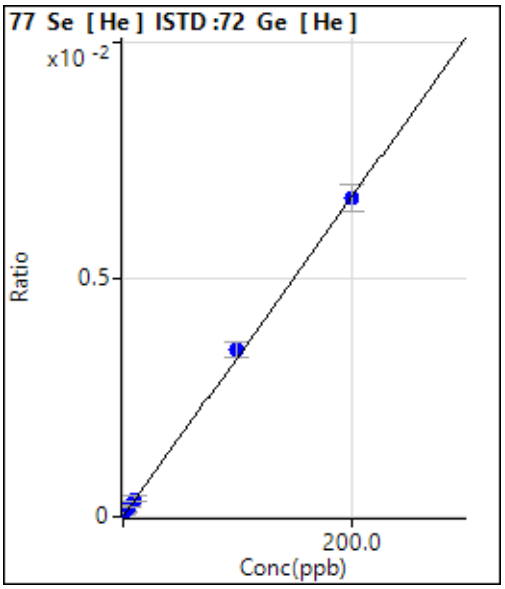
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3413.85	0.0024	P	9.0	
2	☐	2.000	6.902	3957.32	0.0028	P	9.7	245.1
3	☐	5.000	8.712	4080.69	0.0029	P	6.4	74.2
4	☐	10.000	15.758	4510.83	0.0033	P	7.9	57.6
5	☐	100.000	101.448	10861.16	0.0079	P	1.2	1.4
6	☐	200.000	198.847	17421.52	0.0131	P	2.0	-0.6

y = 5.3723E-005 * x + 0.0024
R = 0.9997
DL = 12.22 ppb
BEC = 45.27 ppb

Weight: <None>
Min Conc: <None>

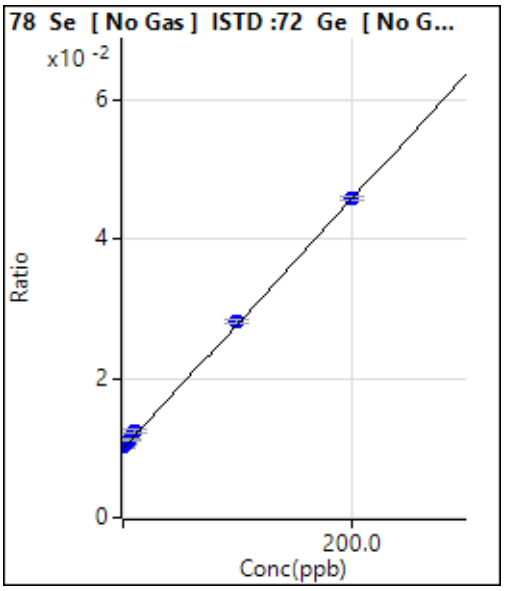


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.5	
2	☐	2.000	2.112	46.67	0.0001	P	32.4	5.6
3	☐	5.000	5.181	90.00	0.0002	P	29.4	3.6
4	☐	10.000	10.043	156.67	0.0004	P	26.1	0.4
5	☐	100.000	103.005	1470.11	0.0035	P	9.1	3.0
6	☐	200.000	198.490	2693.65	0.0067	P	8.4	-0.8

y = 3.3606E-005 * x + 3.9818E-005
R = 0.9998
DL = 1.226 ppb
BEC = 1.185 ppb

Weight: <None>
Min Conc: <None>

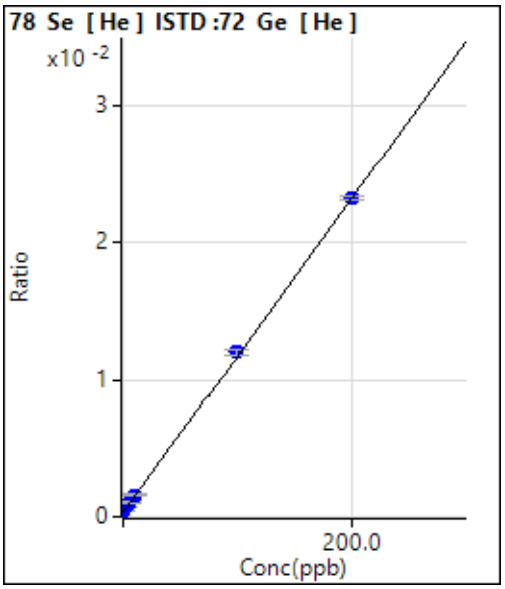
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14277.81	0.0102	P	3.6	
2	☐	2.000	2.423	14978.55	0.0106	P	1.4	21.2
3	☐	5.000	5.487	15726.10	0.0112	P	3.0	9.7
4	☐	10.000	12.666	17137.80	0.0125	P	4.1	26.7
5	☐	100.000	100.775	38919.84	0.0283	P	1.8	0.8
6	☐	200.000	199.463	61041.60	0.0459	P	1.0	-0.3

y = 1.7932E-004 * x + 0.0102
R = 0.9999
DL = 6.164 ppb
BEC = 56.77 ppb

Weight: <None>
Min Conc: <None>

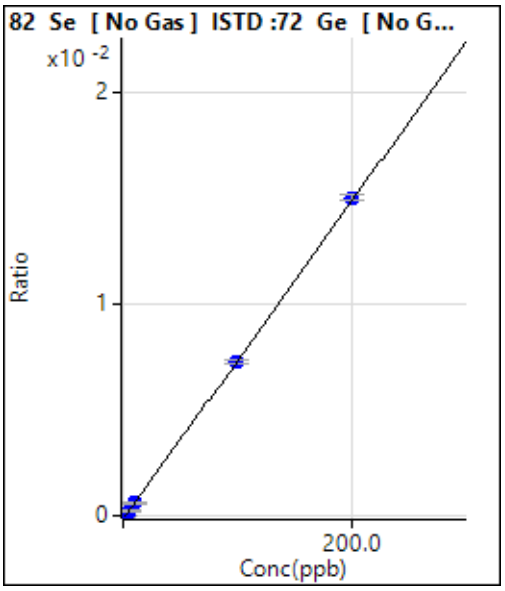


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182.00	0.0004	P	10.9	
2	☐	2.000	2.029	280.67	0.0007	P	1.0	1.4
3	☐	5.000	5.068	426.68	0.0010	P	17.1	1.4
4	☐	10.000	10.095	660.02	0.0016	P	6.3	0.9
5	☐	100.000	101.003	5026.95	0.0120	P	3.0	1.0
6	☐	200.000	199.492	9331.24	0.0232	P	1.8	-0.3

y = 1.1430E-004 * x + 4.3510E-004
R = 1.0000
DL = 1.241 ppb
BEC = 3.807 ppb

Weight: <None>
Min Conc: <None>

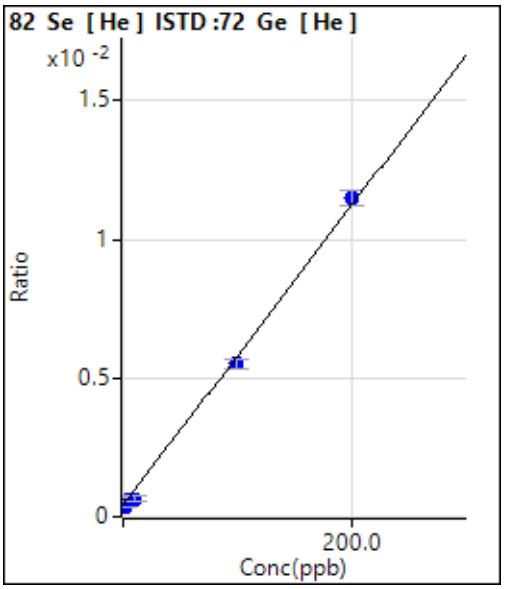
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-81.53	-0.0001	P	-19.8	
2	☐	2.000	1.542	81.18	0.0001	P	26.9	-22.9
3	☐	5.000	4.091	351.47	0.0002	P	17.3	-18.2
4	☐	10.000	9.450	897.98	0.0007	P	14.2	-5.5
5	☐	100.000	97.970	10055.93	0.0073	P	2.3	-2.0
6	☐	200.000	201.070	19981.61	0.0150	P	1.9	0.5

y = 7.5090E-005 * x - 5.8177E-005
R = 0.9999
DL = 0.4606 ppb
BEC = -0.7748 ppb

Weight: <None>
Min Conc: <None>

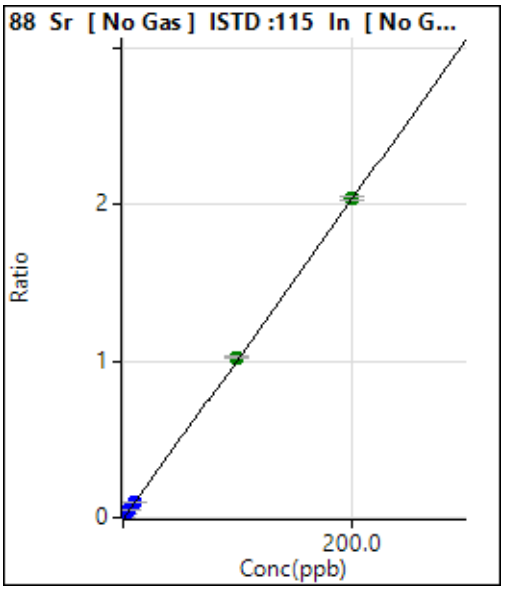


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	200.01	0.0005	P	17.7	
2	☐	2.000	-2.399	146.67	0.0003	P	11.0	-219.9
3	☐	5.000	2.444	256.68	0.0006	P	23.1	-51.1
4	☐	10.000	3.185	270.01	0.0007	P	27.0	-68.1
5	☐	100.000	93.177	2313.58	0.0055	P	6.2	-6.8
6	☐	200.000	203.860	4614.22	0.0115	P	4.5	1.9

y = 5.4023E-005 * x + 4.7828E-004
R = 0.9991
DL = 4.694 ppb
BEC = 8.853 ppb

Weight: <None>
Min Conc: <None>

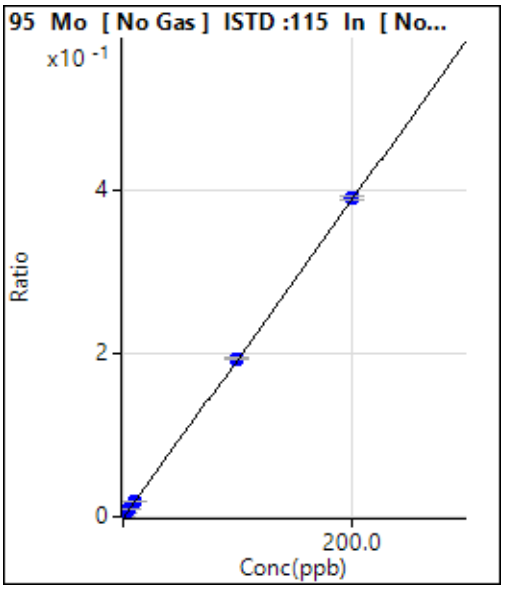
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1160.07	0.0007	P	6.9	
2	☐	2.000	1.829	33425.29	0.0193	P	2.0	-8.5
3	☐	5.000	4.491	81051.17	0.0465	P	2.0	-10.2
4	☐	10.000	9.133	161299.38	0.0938	P	1.4	-8.7
5	☐	100.000	100.343	1743201.90	1.0242	A	0.6	0.3
6	☐	200.000	199.886	3332277.97	2.0396	A	1.4	-0.1

y = 0.0102 * x + 6.6393E-004
R = 1.0000
DL = 0.01357 ppb
BEC = 0.06509 ppb

Weight: <None>
Min Conc: <None>

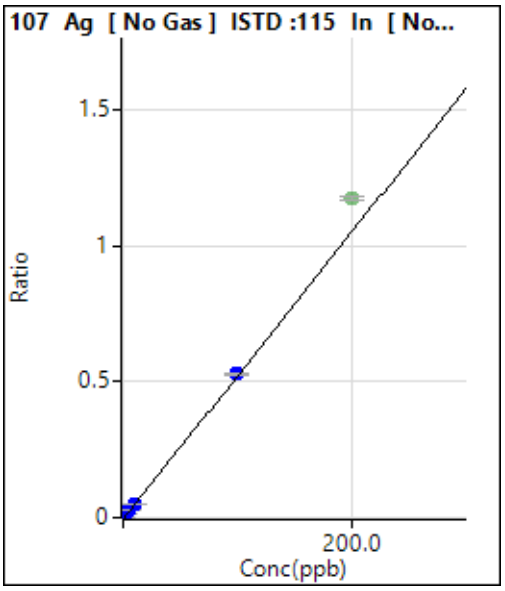


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	233.48	0.0001	P	103.1	
2	☐	2.000	1.801	6281.61	0.0036	P	4.5	-10.0
3	☐	5.000	4.586	15772.89	0.0090	P	0.9	-8.3
4	☐	10.000	9.557	32142.42	0.0187	P	2.4	-4.4
5	☐	100.000	99.158	328043.29	0.1928	P	1.2	-0.8
6	☐	200.000	200.455	636436.32	0.3895	P	0.7	0.2

y = 0.0019 * x + 1.3413E-004
R = 1.0000
DL = 0.2136 ppb
BEC = 0.06905 ppb

Weight: <None>
Min Conc: <None>

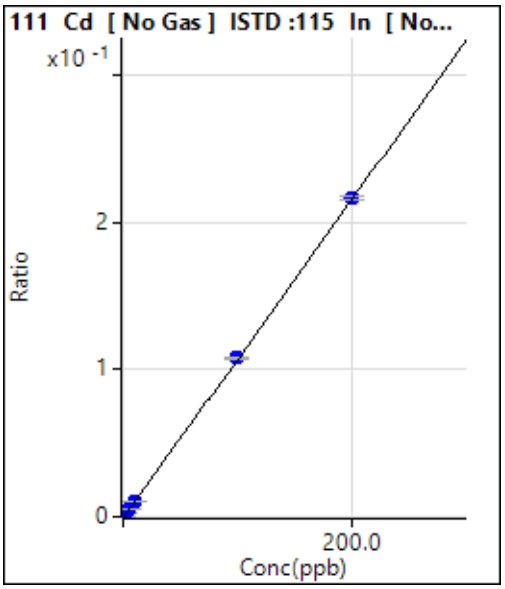
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	806.70	0.0005	P	11.2	
2	☐	2.000	1.962	18746.89	0.0108	P	1.9	-1.9
3	☐	5.000	4.891	45916.86	0.0263	P	0.4	-2.2
4	☐	10.000	9.728	89232.95	0.0519	P	1.7	-2.7
5	☐	100.000	100.033	901199.39	0.5295	P	0.8	0.0
6	☑	200.000		1923290.34	1.1772	A	1.3	

y = 0.0053 * x + 4.6140E-004
R = 1.0000
DL = 0.02931 ppb
BEC = 0.08725 ppb

Weight: <None>
Min Conc: <None>

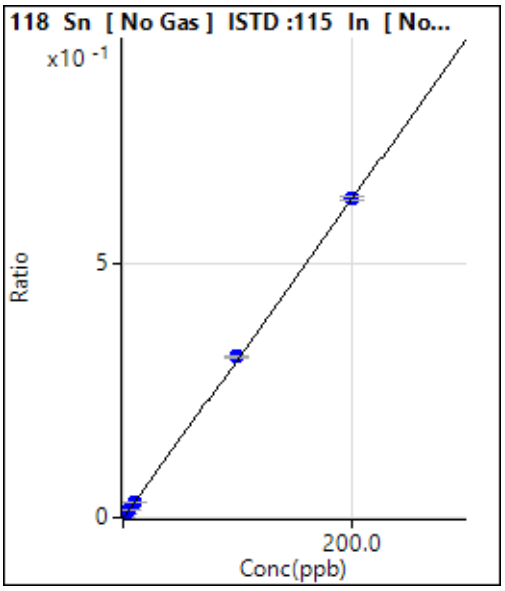


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.7	
2	☐	2.000	1.991	3737.26	0.0022	P	2.1	-0.5
3	☐	5.000	4.818	9099.95	0.0052	P	3.4	-3.6
4	☐	10.000	9.629	17922.48	0.0104	P	2.2	-3.7
5	☐	100.000	99.698	183511.66	0.1078	P	0.5	-0.3
6	☐	200.000	200.174	353705.02	0.2165	P	0.9	0.1

y = 0.0011 * x + 7.6438E-006
R = 1.0000
DL = 0.009265 ppb
BEC = 0.007068 ppb

Weight: <None>
Min Conc: <None>

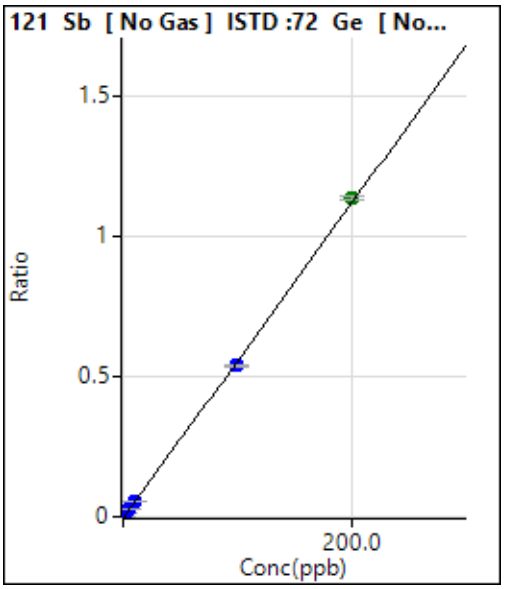
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1710.14	0.0010	P	5.5	
2	☐	2.000	2.036	12733.02	0.0074	P	3.4	1.8
3	☐	5.000	4.652	27141.66	0.0156	P	1.8	-7.0
4	☐	10.000	9.666	53773.47	0.0313	P	1.3	-3.3
5	☐	100.000	100.590	538280.55	0.3163	P	0.9	0.6
6	☐	200.000	199.730	1024465.01	0.6270	P	1.2	-0.1

y = 0.0031 * x + 9.7931E-004
R = 1.0000
DL = 0.05152 ppb
BEC = 0.3124 ppb

Weight: <None>
Min Conc: <None>

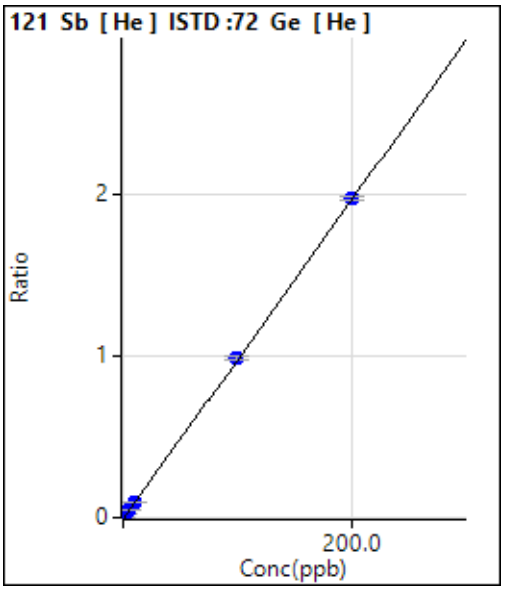


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	586.69	0.0004	P	11.8	
2	☐	2.000	1.879	15506.09	0.0110	P	3.2	-6.0
3	☐	5.000	4.476	36033.23	0.0256	P	1.3	-10.5
4	☐	10.000	9.232	72070.86	0.0523	P	0.2	-7.7
5	☐	100.000	95.616	741433.27	0.5381	P	1.0	-4.4
6	☐	200.000	202.245	1511530.76	1.1378	A	0.8	1.1

y = 0.0056 * x + 4.1779E-004
R = 0.9997
DL = 0.02619 ppb
BEC = 0.07429 ppb

Weight: <None>
Min Conc: <None>

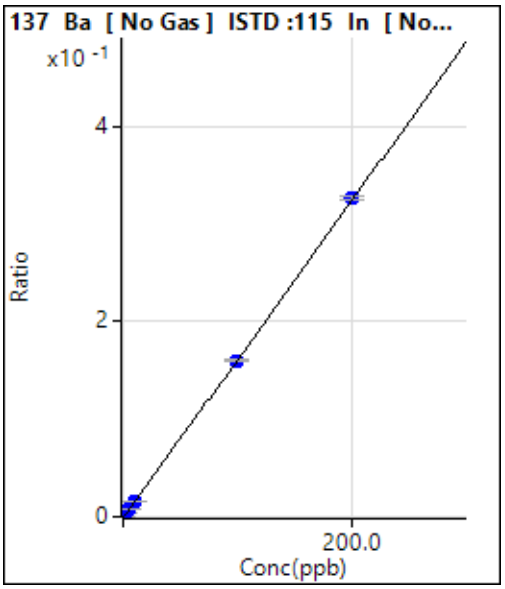
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	360.01	0.0009	P	38.5	
2	☐	2.000	1.991	8629.63	0.0205	P	3.7	-0.5
3	☐	5.000	4.714	19938.72	0.0474	P	2.3	-5.7
4	☐	10.000	9.654	39937.80	0.0961	P	0.5	-3.5
5	☐	100.000	99.972	414443.03	0.9876	P	1.4	0.0
6	☐	200.000	200.038	793168.14	1.9752	P	1.4	0.0

y = 0.0099 * x + 8.6134E-004
R = 1.0000
DL = 0.1007 ppb
BEC = 0.08727 ppb

Weight: <None>
Min Conc: <None>

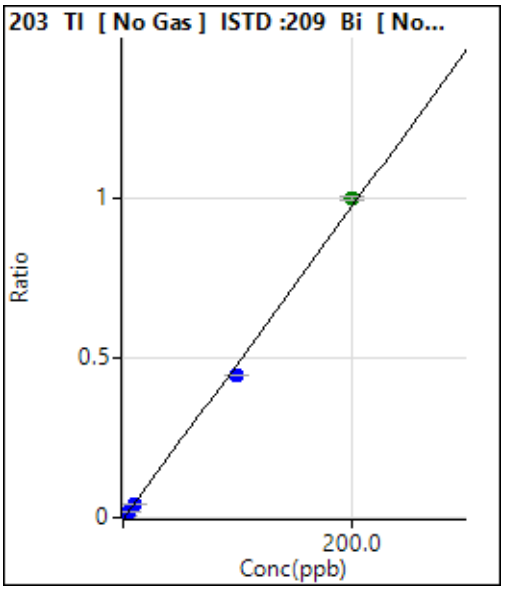


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	403.35	0.0002	P	25.9	
2	☐	2.000	1.919	5794.73	0.0033	P	1.6	-4.1
3	☐	5.000	4.619	13500.58	0.0077	P	1.9	-7.6
4	☐	10.000	9.439	26771.19	0.0156	P	2.2	-5.6
5	☐	100.000	98.410	272597.44	0.1602	P	0.9	-1.6
6	☐	200.000	200.833	533645.60	0.3266	P	1.3	0.4

y = 0.0016 * x + 2.3151E-004
R = 1.0000
DL = 0.1106 ppb
BEC = 0.1424 ppb

Weight: <None>
Min Conc: <None>

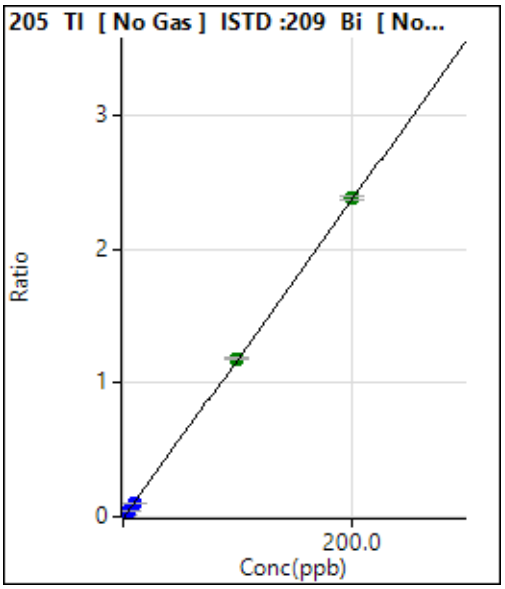
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0000	P	20.3	
2	☐	2.000	1.786	14838.98	0.0088	P	2.2	-10.7
3	☐	5.000	4.246	35393.90	0.0208	P	1.8	-15.1
4	☐	10.000	8.610	70508.47	0.0421	P	1.0	-13.9
5	☐	100.000	91.172	743009.94	0.4457	P	1.3	-8.8
6	☐	200.000	204.504	1594218.21	0.9996	A	1.1	2.3

y = 0.0049 * x + 3.3925E-005
R = 0.9987
DL = 0.00423 ppb
BEC = 0.006941 ppb

Weight: <None>
Min Conc: <None>

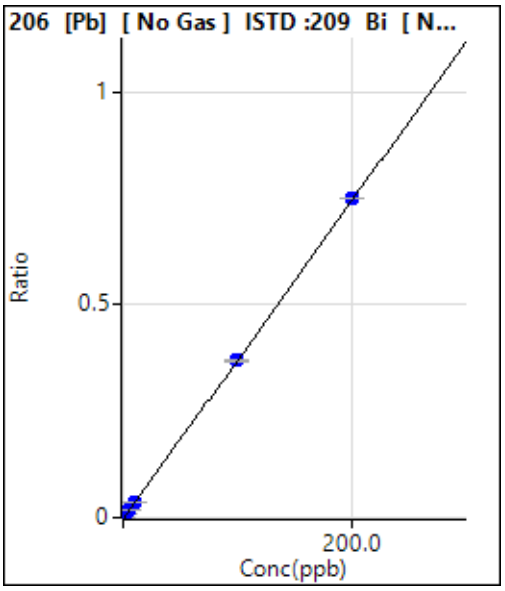


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	186.67	0.0001	P	21.4	
2	☐	2.000	1.713	34738.51	0.0205	P	1.3	-14.3
3	☐	5.000	4.147	84273.71	0.0495	P	0.7	-17.1
4	☐	10.000	8.475	169084.35	0.1010	P	1.1	-15.3
5	☐	100.000	99.389	1973130.33	1.1835	A	1.6	-0.6
6	☐	200.000	200.406	3805747.13	2.3863	A	1.1	0.2

y = 0.0119 * x + 1.1173E-004
R = 1.0000
DL = 0.006031 ppb
BEC = 0.009384 ppb

Weight: <None>
Min Conc: <None>

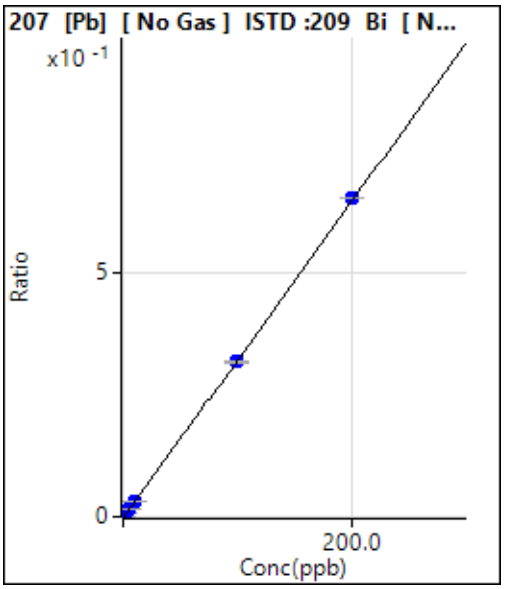
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	376.68	0.0002	P	32.3	
2	☐	2.000	1.937	12649.98	0.0075	P	1.7	-3.2
3	☐	5.000	4.679	30183.52	0.0177	P	2.1	-6.4
4	☐	10.000	9.360	58965.97	0.0352	P	1.6	-6.4
5	☐	100.000	98.691	615770.77	0.3693	P	0.8	-1.3
6	☐	200.000	200.695	1197383.99	0.7508	P	0.6	0.3

y = 0.0037 * x + 2.2571E-004
R = 1.0000
DL = 0.05843 ppb
BEC = 0.06035 ppb

Weight: <None>
Min Conc: <None>

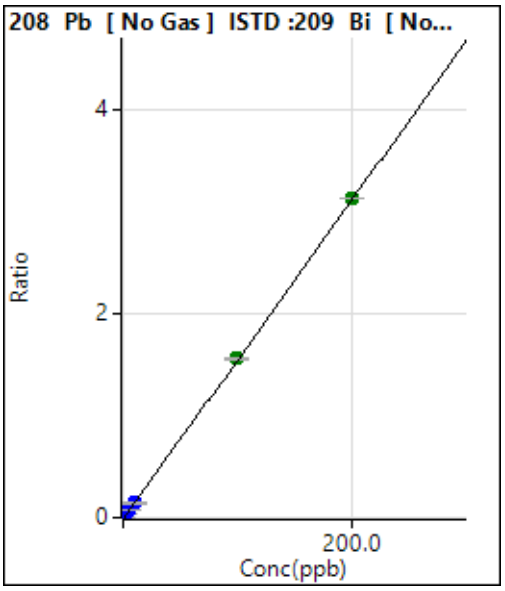


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.01	0.0002	P	8.8	
2	☐	2.000	1.902	10868.23	0.0064	P	2.9	-4.9
3	☐	5.000	4.659	26191.30	0.0154	P	1.1	-6.8
4	☐	10.000	9.534	52279.96	0.0312	P	2.0	-4.7
5	☐	100.000	97.618	529539.62	0.3176	P	1.2	-2.4
6	☐	200.000	201.224	1043752.07	0.6545	P	0.2	0.6

y = 0.0033 * x + 2.3350E-004
R = 0.9999
DL = 0.01902 ppb
BEC = 0.07182 ppb

Weight: <None>
Min Conc: <None>

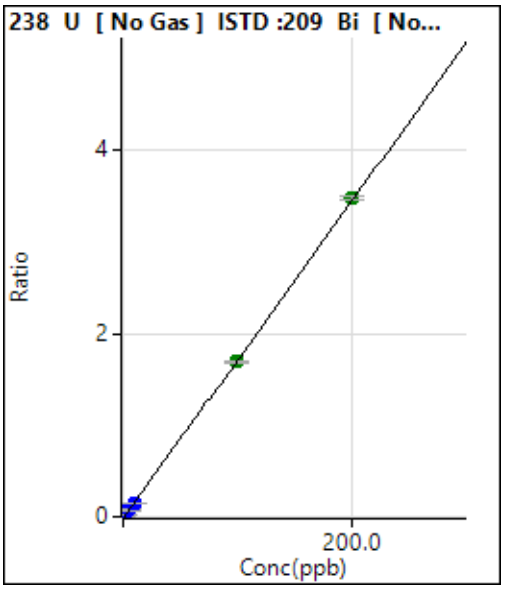
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1570.07	0.0009	P	6.8	
2	☐	2.000	1.826	49949.96	0.0295	P	1.2	-8.7
3	☐	5.000	4.439	119806.26	0.0704	P	1.1	-11.2
4	☐	10.000	9.029	237888.19	0.1421	P	1.5	-9.7
5	☐	100.000	99.521	2596355.22	1.5571	A	0.9	-0.5
6	☐	200.000	200.304	4996628.62	3.1330	A	0.4	0.2

y = 0.0156 * x + 9.4018E-004
R = 1.0000
DL = 0.01218 ppb
BEC = 0.06013 ppb

Weight: <None>
Min Conc: <None>

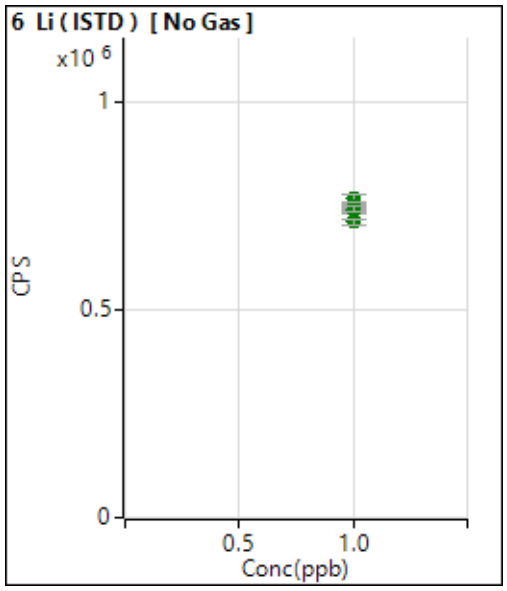


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	65.2	
2	☐	2.000	1.747	51197.08	0.0302	P	0.8	-12.7
3	☐	5.000	4.244	125064.12	0.0734	P	0.3	-15.1
4	☐	10.000	8.740	253126.09	0.1512	P	1.2	-12.6
5	☐	100.000	97.978	2825874.44	1.6950	A	1.5	-2.0
6	☐	200.000	201.095	5548433.46	3.4788	A	1.3	0.5

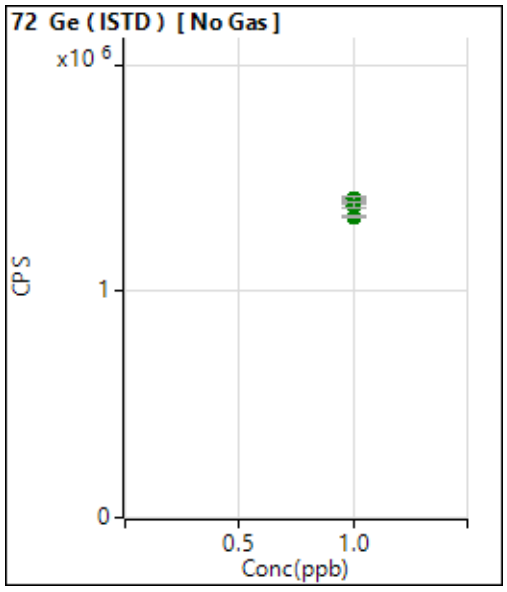
y = 0.0173 * x + 1.3948E-005
R = 0.9999
DL = 0.001576 ppb
BEC = 0.0008063 ppb

Weight: <None>
Min Conc: <None>

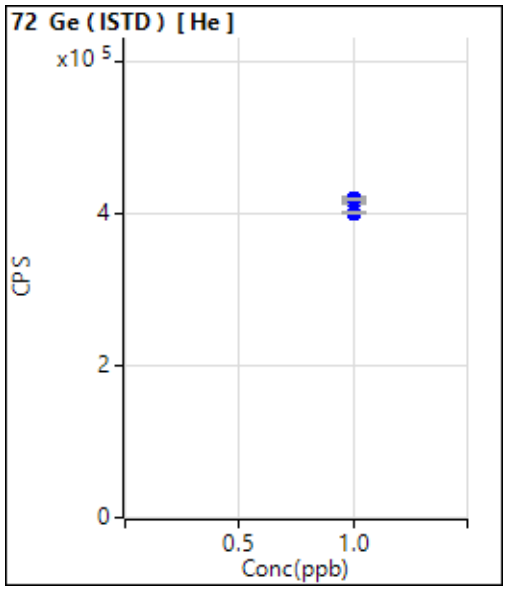
Calibration for 011_ICV.d



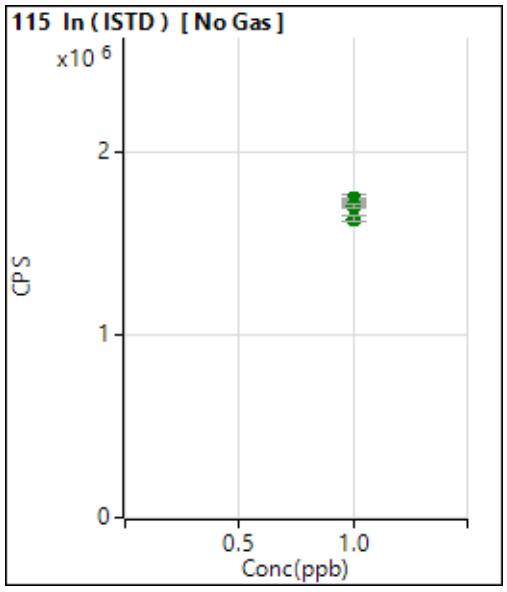
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		750115.18		A	1.8	
2	☐	1.000		769183.29		A	2.6	
3	☐	1.000		752402.57		A	1.4	
4	☐	1.000		739885.24		A	2.5	
5	☐	1.000		743133.75		A	1.6	
6	☐	1.000		711485.96		A	1.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1402911.02		A	1.3	
2	☐	1.000		1411139.36		A	1.0	
3	☐	1.000		1408345.71		A	2.0	
4	☐	1.000		1377046.70		A	1.8	
5	☐	1.000		1377885.08		A	1.8	
6	☐	1.000		1328471.80		A	0.5	

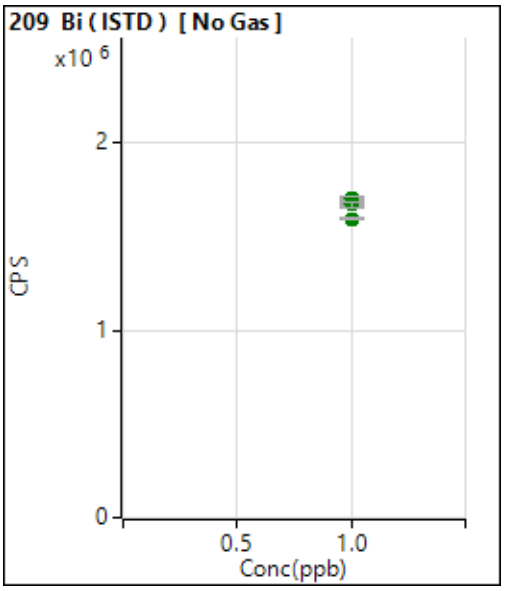


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		418374.05		P	0.4	
2	☐	1.000		420796.57		P	0.6	
3	☐	1.000		420760.58		P	0.5	
4	☐	1.000		415397.08		P	0.6	
5	☐	1.000		419691.67		P	1.0	
6	☐	1.000		401596.63		P	0.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1746411.87		A	1.9	
2	☐	1.000		1729757.13		A	0.5	
3	☐	1.000		1744253.90		A	0.8	
4	☐	1.000		1719414.44		A	2.0	
5	☐	1.000		1701995.82		A	1.2	
6	☐	1.000		1633993.71		A	1.5	

Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1670245.34		A	0.4	
2	☐	1.000		1693618.83		A	0.8	
3	☐	1.000		1703047.99		A	1.0	
4	☐	1.000		1673963.05		A	1.3	
5	☐	1.000		1667462.37		A	1.7	
6	☐	1.000		1594838.31		A	0.6	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	004CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:24:24-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	40998	0.00
Be	9	1	No Gas	38	119.50
V	51	2	He	1652	0.19
Cr	52	2	He	1937	0.52
Fe	56	2	He	21077	0.01
Se	78	2	He	182	5.82
As	75	2	He	78	22.94
Ca	44	2	He	423	4.88
Na	23	2	He	104845	0.00
Mg	24	2	He	470	1.20
K	39	2	He	59110	0.00
Mn	55	2	He	553	0.50
Co	59	2	He	57	47.57
Ni	60	2	He	173	13.45
Cu	63	2	He	1153	0.68
Zn	66	2	He	623	3.05
Al	27	2	He	780	0.49
B	11	1	No Gas	10722	0.01
Al	27	1	No Gas	29532	0.00
Si	28	1	No Gas	262451	0.00
Ag	107	1	No Gas	807	1.57
Cd	111	1	No Gas	13	324.76
Sr	88	1	No Gas	1160	0.71
Mo	95	1	No Gas	233	44.09
Sn	118	1	No Gas	1710	0.33
Sb	121	1	No Gas	587	2.20
Ba	137	1	No Gas	403	6.16
Tl	205	1	No Gas	187	11.60
Tl	203	1	No Gas	57	35.96
Pb	208	1	No Gas	1570	0.41
U	238	1	No Gas	23	280.57
Ca	43	2	He	10	1000.00
Sb	121	2	He	360	10.61
Ti	47	2	He	7	1299.04
Cu	63	1	No Gas	1957	0.04

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	750115	1.78
Ge	72	2	He	418374	0.40
Ge	72	1	No Gas	1402911	1.30
In	115	1	No Gas	1746412	1.90

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1670245	0.39

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	005CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:26:17-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3872	0.05
V	51	2	He	8275	0.02
Cr	52	2	He	9584	0.01
Fe	56	2	He	741074	0.00
Se	78	2	He	281	0.39
As	75	2	He	1231	0.26
Ca	44	2	He	4404	0.13
Na	23	2	He	228264	0.00
Mg	24	2	He	72304	0.00
K	39	2	He	135580	0.00
Mn	55	2	He	5965	0.09
Co	59	2	He	12082	0.01
Ni	60	2	He	3274	0.29
Cu	63	2	He	10031	0.01
Zn	66	2	He	2250	0.38
Al	27	2	He	1163	0.79
B	11	1	No Gas	19564	0.00
Al	27	1	No Gas	49448	0.00
Si	28	1	No Gas	295310	0.00
Ag	107	1	No Gas	18747	0.01
Cd	111	1	No Gas	3737	0.04
Sr	88	1	No Gas	33425	0.01
Mo	95	1	No Gas	6282	0.07
Sn	118	1	No Gas	12733	0.02
Sb	121	1	No Gas	15506	0.03
Ba	137	1	No Gas	5795	0.03
Tl	205	1	No Gas	34739	0.01
Tl	203	1	No Gas	14839	0.02
Pb	208	1	No Gas	49950	0.00
U	238	1	No Gas	51197	0.00
Ca	43	2	He	247	3.80
Sb	121	2	He	8630	0.04
Cu	63	1	No Gas	16567	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	769183	2.61	750115	102.54	70	120	
Ge	72	2	He	420797	0.61	418374	100.58	70	120	
Ge	72	1	No Gas	1411139	0.99	1402911	100.59	70	120	

Calibration Standard Report

In	115	1	No Gas	1729757	0.46	1746412	99.05	70	120	
Bi	209	1	No Gas	1693619	0.76	1670245	101.40	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	006CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:28:11-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	9630	0.01
V	51	2	He	17648	0.01
Cr	52	2	He	20910	0.00
Fe	56	2	He	1834952	0.00
Se	78	2	He	427	3.98
As	75	2	He	2594	0.18
Ca	44	2	He	10337	0.03
Na	23	2	He	408857	0.00
Mg	24	2	He	172679	0.00
K	39	2	He	243231	0.00
Mn	55	2	He	14344	0.03
Co	59	2	He	29853	0.01
Ni	60	2	He	7612	0.06
Cu	63	2	He	22402	0.00
Zn	66	2	He	4704	0.08
Al	27	2	He	1850	0.16
B	11	1	No Gas	33480	0.01
Al	27	1	No Gas	78115	0.00
Si	28	1	No Gas	350350	0.00
Ag	107	1	No Gas	45917	0.00
Cd	111	1	No Gas	9100	0.03
Sr	88	1	No Gas	81051	0.00
Mo	95	1	No Gas	15773	0.00
Sn	118	1	No Gas	27142	0.00
Sb	121	1	No Gas	36033	0.00
Ba	137	1	No Gas	13501	0.02
Tl	205	1	No Gas	84274	0.00
Tl	203	1	No Gas	35394	0.00
Pb	208	1	No Gas	119806	0.00
U	238	1	No Gas	125064	0.00
Ca	43	2	He	640	3.00
Sb	121	2	He	19939	0.01
Cu	63	1	No Gas	36075	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	752403	1.41	750115	100.30	70	120	
Ge	72	2	He	420761	0.52	418374	100.57	70	120	
Ge	72	1	No Gas	1408346	2.04	1402911	100.39	70	120	

Calibration Standard Report

In	115	1	No Gas	1744254	0.83	1746412	99.88	70	120	
Bi	209	1	No Gas	1703048	0.97	1670245	101.96	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:30:04-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	18744	0.02
V	51	2	He	33983	0.00
Cr	52	2	He	40079	0.01
Fe	56	2	He	3580090	0.00
Se	78	2	He	660	0.95
As	75	2	He	5241	0.03
Ca	44	2	He	20275	0.01
Na	23	2	He	706569	0.00
Mg	24	2	He	345251	0.00
K	39	2	He	428499	0.00
Mn	55	2	He	27435	0.01
Co	59	2	He	58847	0.00
Ni	60	2	He	15382	0.02
Cu	63	2	He	43022	0.00
Zn	66	2	He	8416	0.09
Al	27	2	He	2800	0.07
B	11	1	No Gas	56508	0.00
Al	27	1	No Gas	117029	0.00
Si	28	1	No Gas	435273	0.00
Ag	107	1	No Gas	89233	0.00
Cd	111	1	No Gas	17922	0.02
Sr	88	1	No Gas	161299	0.00
Mo	95	1	No Gas	32142	0.00
Sn	118	1	No Gas	53773	0.00
Sb	121	1	No Gas	72071	0.00
Ba	137	1	No Gas	26771	0.01
Tl	205	1	No Gas	169084	0.00
Tl	203	1	No Gas	70508	0.00
Pb	208	1	No Gas	237888	0.00
U	238	1	No Gas	253126	0.00
Ca	43	2	He	1187	0.78
Sb	121	2	He	39938	0.00
Cu	63	1	No Gas	69159	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	739885	2.51	750115	98.64	70	120	
Ge	72	2	He	415397	0.59	418374	99.29	70	120	
Ge	72	1	No Gas	1377047	1.78	1402911	98.16	70	120	

Calibration Standard Report

In	115	1	No Gas	1719414	2.00	1746412	98.45	70	120	
Bi	209	1	No Gas	1673963	1.30	1670245	100.22	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	008CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:31:56-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	193542	0.00
V	51	2	He	330443	0.00
Cr	52	2	He	390233	0.00
Fe	56	2	He	35725491	0.00
Se	78	2	He	5027	0.05
As	75	2	He	54649	0.00
Ca	44	2	He	197943	0.00
Na	23	2	He	6219039	0.00
Mg	24	2	He	3572574	0.00
K	39	2	He	3886991	0.00
Mn	55	2	He	274530	0.00
Co	59	2	He	605032	0.00
Ni	60	2	He	154990	0.00
Cu	63	2	He	425608	0.00
Zn	66	2	He	79248	0.00
Al	27	2	He	20152	0.01
B	11	1	No Gas	476464	0.00
Al	27	1	No Gas	859140	0.00
Si	28	1	No Gas	2143266	0.00
Ag	107	1	No Gas	901199	0.00
Cd	111	1	No Gas	183512	0.00
Sr	88	1	No Gas	1743202	0.00
Mo	95	1	No Gas	328043	0.00
Sn	118	1	No Gas	538281	0.00
Sb	121	1	No Gas	741433	0.00
Ba	137	1	No Gas	272597	0.00
Tl	205	1	No Gas	1973130	0.00
Tl	203	1	No Gas	743010	0.00
Pb	208	1	No Gas	2596355	0.00
U	238	1	No Gas	2825874	0.00
Ca	43	2	He	11865	0.02
Sb	121	2	He	414443	0.00
Cu	63	1	No Gas	683597	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	743134	1.57	750115	99.07	70	120	
Ge	72	2	He	419692	1.04	418374	100.31	70	120	
Ge	72	1	No Gas	1377885	1.76	1402911	98.22	70	120	

Calibration Standard Report

In	115	1	No Gas	1701996	1.23	1746412	97.46	70	120	
Bi	209	1	No Gas	1667462	1.72	1670245	99.83	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	009CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:33:46-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	371571	0.00
V	51	2	He	642657	0.00
Cr	52	2	He	756508	0.00
Fe	56	2	He	67865249	0.00
Se	78	2	He	9331	0.02
As	75	2	He	103247	0.00
Ca	44	2	He	383661	0.00
Na	23	2	He	11868011	0.00
Mg	24	2	He	6812263	0.00
K	39	2	He	7192441	0.00
Mn	55	2	He	529829	0.00
Co	59	2	He	1216638	0.00
Ni	60	2	He	298348	0.00
Cu	63	2	He	821308	0.00
Zn	66	2	He	152775	0.00
Al	27	2	He	37140	0.00
B	11	1	No Gas	987363	0.00
Al	27	1	No Gas	1667462	0.00
Si	28	1	No Gas	3738754	0.00
Ag	107	1	No Gas	1923290	0.00
Cd	111	1	No Gas	353705	0.00
Sr	88	1	No Gas	3332278	0.00
Mo	95	1	No Gas	636436	0.00
Sn	118	1	No Gas	1024465	0.00
Sb	121	1	No Gas	1511531	0.00
Ba	137	1	No Gas	533646	0.00
Tl	205	1	No Gas	3805747	0.00
Tl	203	1	No Gas	1594218	0.00
Pb	208	1	No Gas	4996629	0.00
U	238	1	No Gas	5548433	0.00
Ca	43	2	He	22045	0.01
Sb	121	2	He	793168	0.00
Cu	63	1	No Gas	1388470	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	711486	1.93	750115	94.85	70	120	
Ge	72	2	He	401597	0.92	418374	95.99	70	120	
Ge	72	1	No Gas	1328472	0.48	1402911	94.69	70	120	

Calibration Standard Report

In	115	1	No Gas	1633994	1.53	1746412	93.56	70	120	
Bi	209	1	No Gas	1594838	0.63	1670245	95.49	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	011_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:41:48-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	103.381	1.491	970018	2.10	100	103.4	90	110	
Be	9	1	No Gas	101.209	1.038	196725	0.41	100	101.2	90	110	
V	51	2	He	99.147	0.445	331491	0.52	100	99.1	90	110	
Cr	52	2	He	99.343	0.340	391215	0.27	100	99.3	90	110	
Fe	56	2	He	9988.477	0.065	35372438	0.06	10000	99.9	90	110	
Se	78	2	He	103.123	1.127	5113	1.19	100	103.1	90	110	
As	75	2	He	103.058	0.709	55593	0.78	100	103.1	90	110	
Ca	44	2	He	9843.257	0.772	196392	0.87	10000	98.4	90	110	
Na	23	2	He	9964.692	0.723	6205778	0.64	10000	99.6	90	110	
Mg	24	2	He	10112.715	1.208	3591030	1.30	10000	101.1	90	110	
K	39	2	He	10249.446	0.665	3888750	0.55	10000	102.5	90	110	
Mn	55	2	He	100.577	0.636	277322	0.55	100	100.6	90	110	
Co	59	2	He	97.297	0.319	610540	0.22	100	97.3	90	110	
Ni	60	2	He	100.851	0.237	156608	0.29	100	100.9	90	110	
Cu	63	2	He	99.810	0.359	426748	0.36	100	99.8	90	110	
Zn	66	2	He	101.475	0.285	80877	0.24	100	101.5	90	110	
Al	27	2	He	101.542	1.916	20105	1.75	100	101.5	90	110	
B	11	1	No Gas	467.847	3.455	480597	2.76	500	93.6	90	110	
Al	27	1	No Gas	98.885	3.857	868773	1.28	100	98.9	90	110	
Si	28	1	No Gas	495.692	0.915	2074974	2.38	500	99.1	90	110	
Ag	107	1	No Gas	93.707	0.290	905461	0.52	100	93.7	90	110	
Cd	111	1	No Gas	100.162	0.131	181461	0.55	100	100.2	90	110	
Sr	88	1	No Gas	102.444	0.838	1751628	1.46	100	102.4	90	110	
Mo	95	1	No Gas	99.799	0.861	324974	1.31	100	99.8	90	110	
Sn	118	1	No Gas	102.849	0.458	541681	0.85	100	102.8	90	110	
Sb	121	1	No Gas	95.440	2.126	742739	0.83	100	95.4	90	110	
Ba	137	1	No Gas	100.345	0.210	273573	0.63	100	100.3	90	110	
Tl	205	1	No Gas	103.259	0.493	2010284	0.15	100	103.3	90	110	
Tl	203	1	No Gas	94.204	0.498	752839	0.42	100	94.2	90	110	
Pb	208	1	No Gas	100.896	0.521	2580965	0.69	100	100.9	90	110	
U	238	1	No Gas	100.383	1.571	2839134	1.45	100	100.4	90	110	
Ca	43	2	He	9896.553	2.094	11438	2.19	10000	99.0	90	110	
Sb	121	2	He	100.824	0.630	416669	0.54	100	100.8	90	110	
Ti	47	2	He	99.270	4.393	11642	4.41	100	99.3	90	110	
Cu	63	1	No Gas	96.365	2.568	689943	0.41	100	96.4	90	110	
Se	82	1	No Gas	104.151	6.150	10726	3.68	100	104.2	90	110	

QC ISTD Table

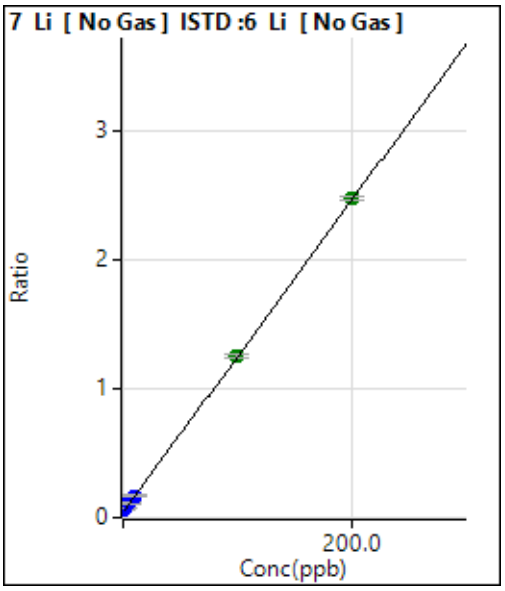
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	744680	0.67	750115	99.28	70	120	
Ge	72	2	He	418352	0.10	418374	99.99	70	120	
Ge	72	1	No Gas	1383177	2.46	1402911	98.59	70	120	
In	115	1	No Gas	1675124	0.66	1746412	95.92	70	120	
Bi	209	1	No Gas	1634935	0.35	1670245	97.89	70	120	

Calibration for 011_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\102722B.b\
Analysis File: 102722B.batch.bin
DA Date-Time: 10/27/2022 21:17:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	CAL BLK	10/27/2022 10:24:24
2	005CALS.d	2/10/200	10/27/2022 10:26:17
3	006CALS.d	5/25/500	10/27/2022 10:28:11
4	007CALS.d	10/50/100	10/27/2022 10:30:04
5	008CALS.d	100/500/10K	10/27/2022 10:31:56
6	009CALS.d	200/1000/20K	10/27/2022 10:33:46

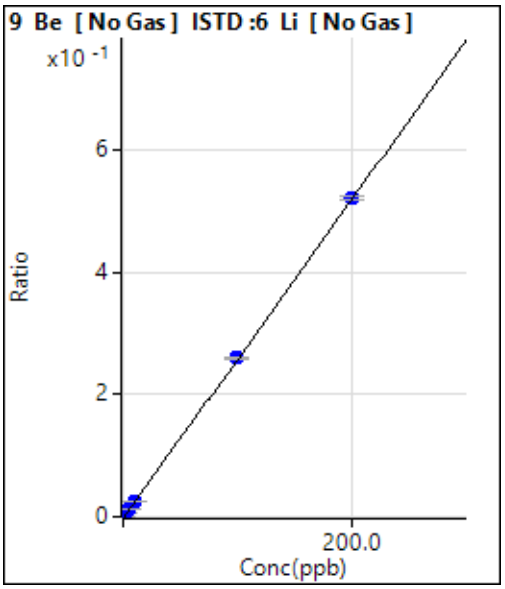
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40997.80	0.0547	P	0.1	
2	☐	2.000	1.841	59120.08	0.0769	P	1.6	-7.9
3	☐	5.000	4.733	84095.96	0.1118	P	1.7	-5.3
4	☐	10.000	9.556	125720.52	0.1700	P	2.9	-4.4
5	☐	100.000	99.485	932768.84	1.2555	A	2.4	-0.5
6	☐	200.000	200.288	1758594.24	2.4722	A	1.7	0.1

y = 0.0121 * x + 0.0547
R = 1.0000
DL = 0.01358 ppb
BEC = 4.528 ppb

Weight: <None>
Min Conc: <None>

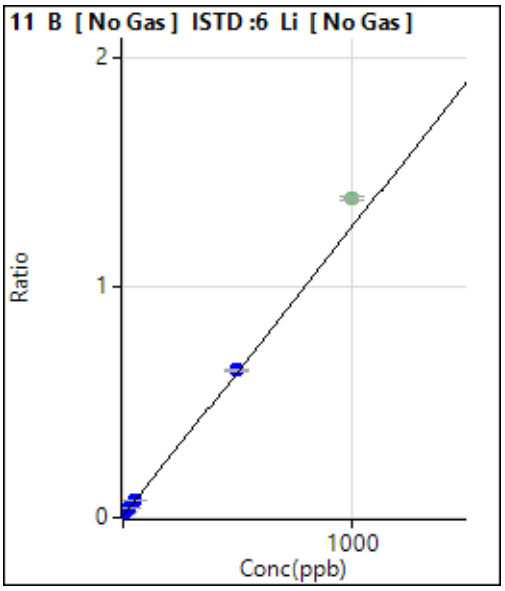


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38.33	0.0001	P	45.8	
2	☐	2.000	1.910	3872.24	0.0050	P	1.5	-4.5
3	☐	5.000	4.885	9630.02	0.0128	P	0.6	-2.3
4	☐	10.000	9.687	18744.25	0.0253	P	1.0	-3.1
5	☐	100.000	99.783	193542.42	0.2605	P	0.8	-0.2
6	☐	200.000	200.128	371570.77	0.5223	P	1.4	0.1

y = 0.0026 * x + 5.1188E-005
R = 1.0000
DL = 0.02693 ppb
BEC = 0.01961 ppb

Weight: <None>
Min Conc: <None>

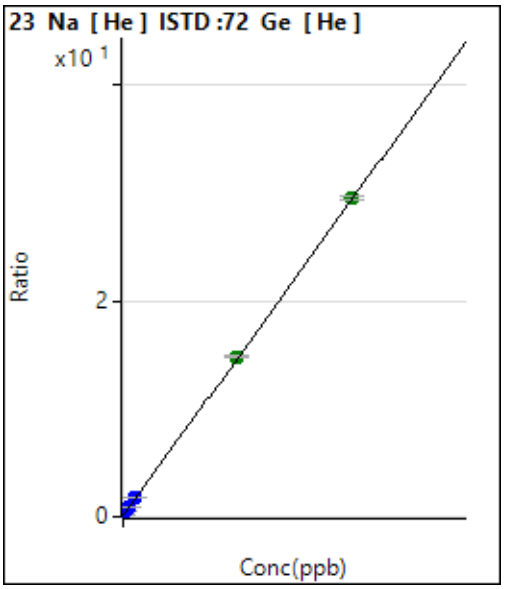
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10722.48	0.0143	P	0.5	
2	☐	10.000	8.895	19563.71	0.0254	P	2.2	-11.1
3	☐	25.000	24.104	33479.87	0.0445	P	3.4	-3.6
4	☐	50.000	49.541	56508.04	0.0764	P	2.2	-0.9
5	☐	500.000	500.113	476463.98	0.6412	P	2.0	0.0
6	☑	1000.000		987363.32	1.3876	A	1.5	

y = 0.0013 * x + 0.0143
R = 1.0000
DL = 0.1749 ppb
BEC = 11.4 ppb

Weight: <None>
Min Conc: <None>

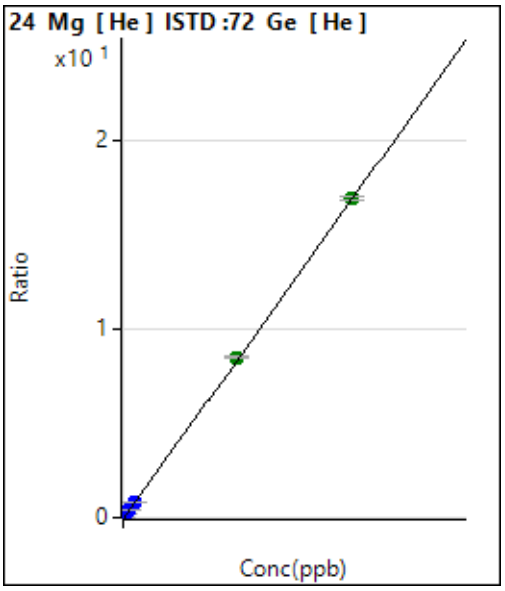


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	104844.86	0.2506	P	0.4	
2	☐	200.000	199.436	228263.77	0.5425	P	0.8	-0.3
3	☐	500.000	492.743	408856.82	0.9717	P	0.8	-1.5
4	☐	1000.000	991.045	706568.69	1.7010	P	0.7	-0.9
5	☐	10000.00	9954.875	6219038.87	14.8196	A	1.4	-0.5
6	☐	20000.00	20023.19	11868011.4	29.5546	A	1.4	0.1

y = 0.0015 * x + 0.2506
R = 1.0000
DL = 2.137 ppb
BEC = 171.2 ppb

Weight: <None>
Min Conc: <None>

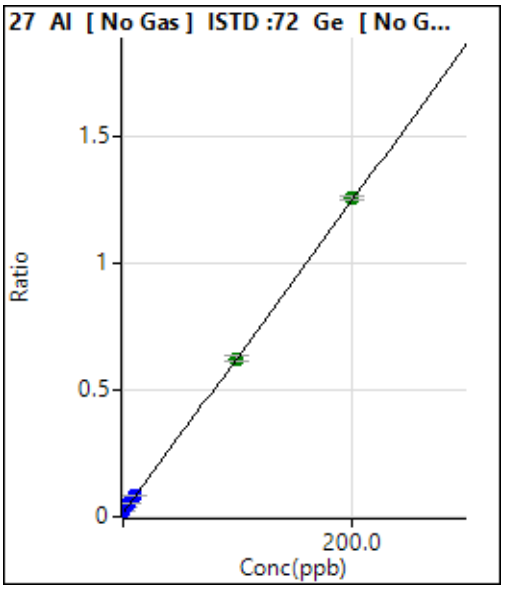
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	470.02	0.0011	P	5.4	
2	☐	200.000	201.140	72303.82	0.1718	P	0.4	0.6
3	☐	500.000	482.246	172679.33	0.4104	P	0.8	-3.6
4	☐	1000.000	978.037	345250.79	0.8312	P	1.4	-2.2
5	☐	10000.00	10029.32	3572574.22	8.5129	A	0.9	0.3
6	☐	20000.00	19986.87	6812262.81	16.9638	A	0.9	-0.1

y = 8.4869E-004 * x + 0.0011
R = 1.0000
DL = 0.2141 ppb
BEC = 1.324 ppb

Weight: <None>
Min Conc: <None>

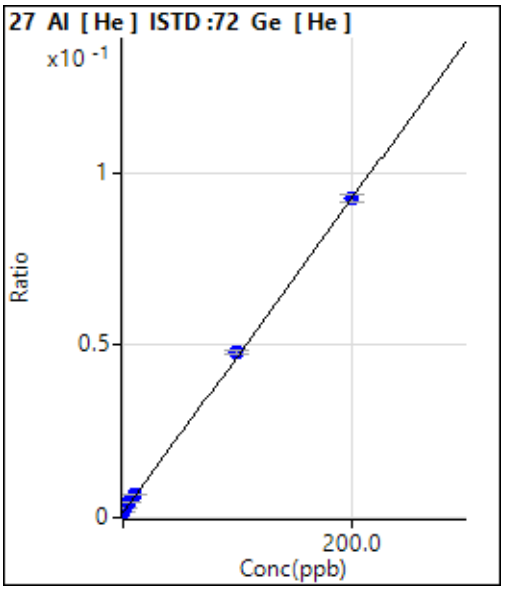


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	29531.64	0.0211	P	1.7	
2	☐	2.000	2.277	49448.14	0.0350	P	1.5	13.9
3	☐	5.000	5.603	78115.36	0.0555	P	0.5	12.1
4	☐	10.000	10.411	117028.95	0.0850	P	2.3	4.1
5	☐	100.000	98.111	859140.04	0.6237	A	2.8	-1.9
6	☐	200.000	200.906	1667461.70	1.2552	A	1.4	0.5

y = 0.0061 * x + 0.0211
R = 0.9999
DL = 0.1737 ppb
BEC = 3.427 ppb

Weight: <None>
Min Conc: <None>

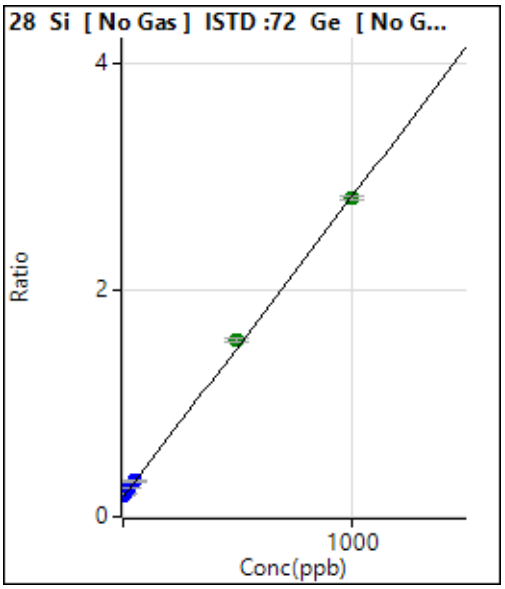
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	780.03	0.0019	P	3.5	
2	☐	2.000	1.978	1163.40	0.0028	P	8.9	-1.1
3	☐	5.000	5.569	1850.16	0.0044	P	3.5	11.4
4	☐	10.000	10.721	2800.34	0.0067	P	2.2	7.2
5	☐	100.000	101.461	20151.55	0.0480	P	2.1	1.5
6	☐	200.000	199.219	37139.73	0.0925	P	2.3	-0.4

y = 4.5492E-004 * x + 0.0019
R = 1.0000
DL = 0.4317 ppb
BEC = 4.098 ppb

Weight: <None>
Min Conc: <None>

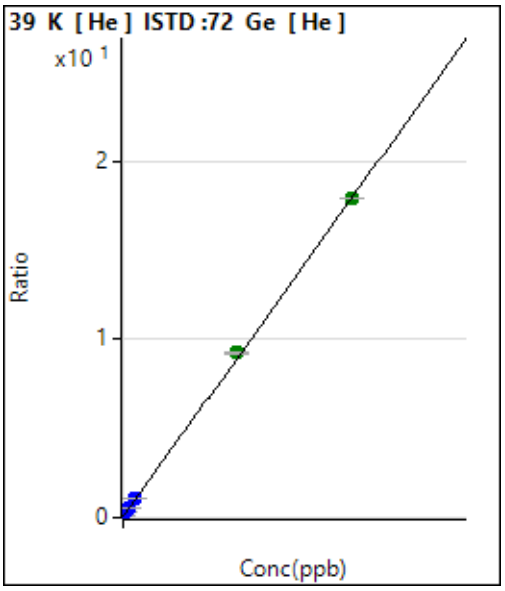


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	262450.79	0.1871	P	0.8	
2	☐	10.000	8.374	295310.22	0.2093	P	0.8	-16.3
3	☐	25.000	23.304	350349.55	0.2488	P	1.6	-6.8
4	☐	50.000	48.734	435272.80	0.3162	P	2.5	-2.5
5	☐	500.000	516.658	2143265.59	1.5557	A	1.8	3.3
6	☐	1000.000	991.793	3738753.59	2.8144	A	1.6	-0.8

y = 0.0026 * x + 0.1871
R = 0.9998
DL = 1.612 ppb
BEC = 70.62 ppb

Weight: <None>
Min Conc: <None>

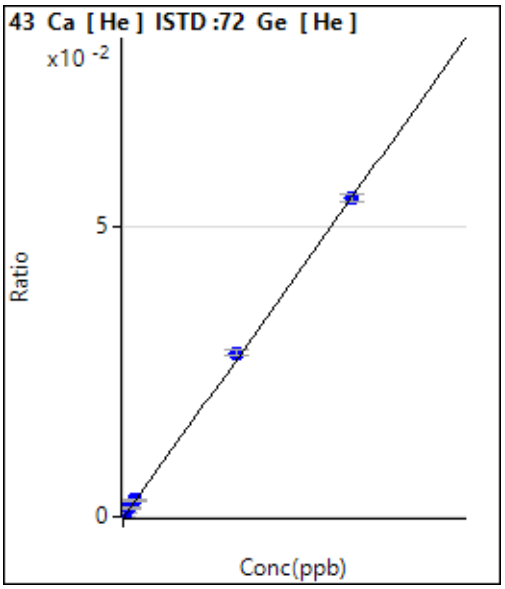
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	59109.58	0.1413	P	1.5	
2	☐	200.000	202.569	135580.13	0.3222	P	1.0	1.3
3	☐	500.000	489.042	243231.14	0.5781	P	0.8	-2.2
4	☐	1000.000	996.784	428499.32	1.0316	P	0.3	-0.3
5	☐	10000.00	10211.64	3886991.40	9.2617	A	1.2	2.1
6	☐	20000.00	19894.58	7192440.93	17.9099	A	0.2	-0.5

y = 8.9314E-004 * x + 0.1413
R = 0.9999
DL = 6.919 ppb
BEC = 158.2 ppb

Weight: <None>
Min Conc: <None>

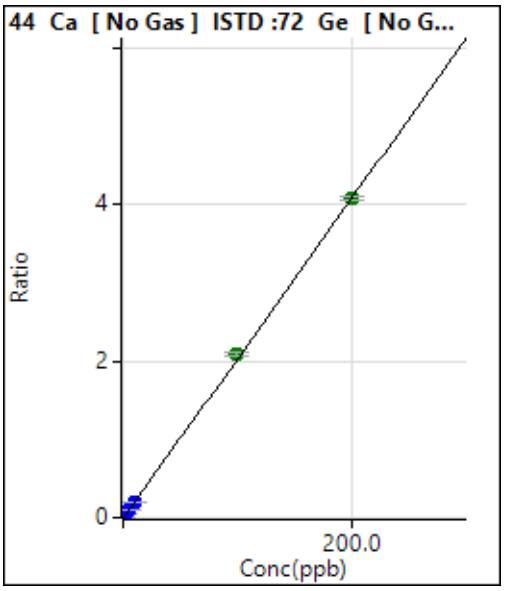


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	200.000	203.777	246.67	0.0006	P	9.8	1.9
3	☐	500.000	542.796	640.03	0.0015	P	19.8	8.6
4	☐	1000.000	1026.001	1186.74	0.0029	P	8.7	2.6
5	☐	10000.00	10234.07	11865.33	0.0283	P	2.5	2.3
6	☐	20000.00	19880.55	22044.62	0.0549	P	2.9	-0.6

y = 2.7602E-006 * x + 2.3900E-005
R = 0.9999
DL = 26.03 ppb
BEC = 8.659 ppb

Weight: <None>
Min Conc: <None>

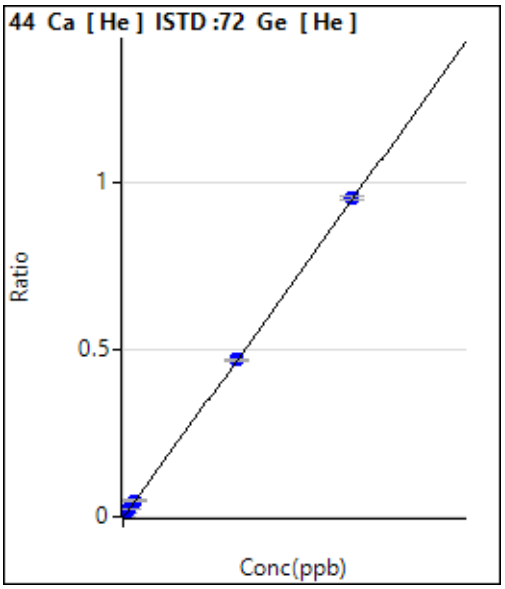
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13897.24	0.0099	P	0.5	
2	☐	2.000	1.911	69056.21	0.0489	P	1.6	-4.5
3	☐	5.000	4.622	146880.78	0.1043	P	2.4	-7.6
4	☐	10.000	9.386	277611.81	0.2016	P	2.0	-6.1
5	☐	100.000	101.846	2879451.31	2.0904	A	2.4	1.8
6	☐	200.000	199.118	5416404.71	4.0774	A	1.6	-0.4

y = 0.0204 * x + 0.0099
R = 0.9999
DL = 0.007298 ppb
BEC = 0.4849 ppb

Weight: <None>
Min Conc: <None>

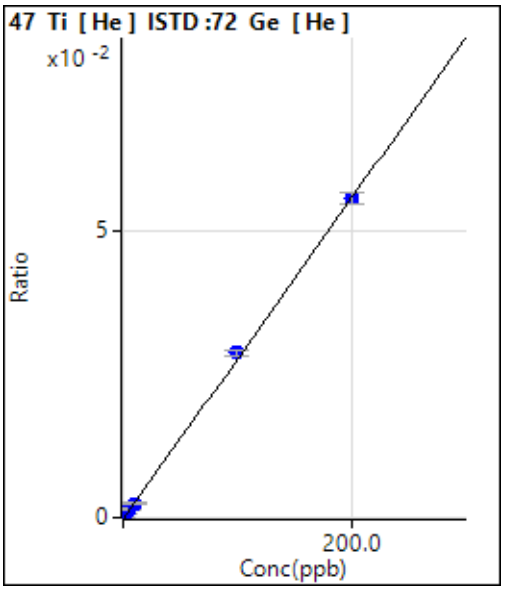


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	423.35	0.0010	P	20.9	
2	☐	200.000	198.716	4404.11	0.0105	P	6.5	-0.6
3	☐	500.000	495.051	10337.40	0.0246	P	3.4	-1.0
4	☐	1000.000	1004.452	20275.16	0.0488	P	1.9	0.4
5	☐	10000.00	9890.245	197943.34	0.4717	P	1.1	-1.1
6	☐	20000.00	20054.79	383661.36	0.9554	P	0.9	0.3

y = 4.7589E-005 * x + 0.0010
R = 1.0000
DL = 13.36 ppb
BEC = 21.27 ppb

Weight: <None>
Min Conc: <None>

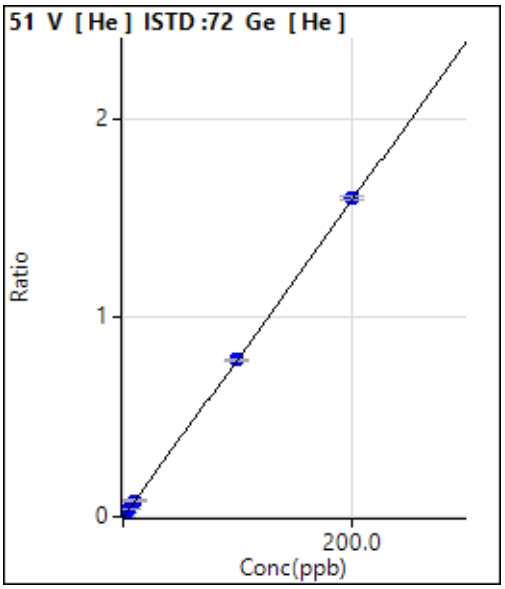
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.952	236.68	0.0006	P	15.4	-2.4
3	☐	5.000	4.977	593.36	0.0014	P	18.9	-0.5
4	☐	10.000	8.880	1040.06	0.0025	P	3.6	-11.2
5	☐	100.000	102.590	12068.84	0.0288	P	4.0	2.6
6	☐	200.000	198.762	22368.57	0.0557	P	3.6	-0.6

y = 2.8016E-004 * x + 1.5916E-005
R = 0.9999
DL = 0.1476 ppb
BEC = 0.05681 ppb

Weight: <None>
Min Conc: <None>

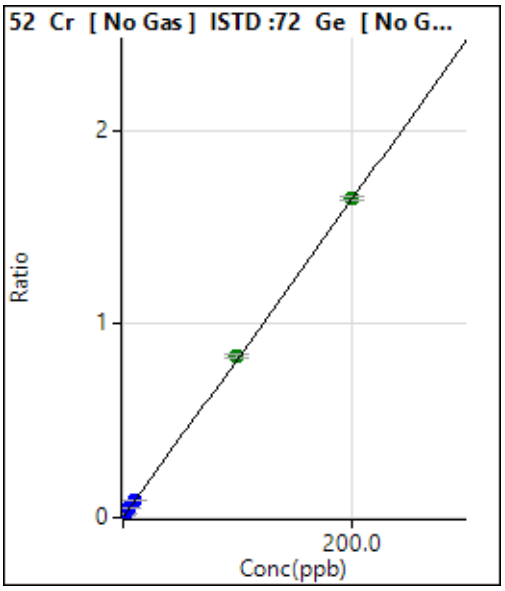


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1652.33	0.0039	P	3.5	
2	☐	2.000	1.976	8274.75	0.0197	P	2.2	-1.2
3	☐	5.000	4.778	17648.03	0.0419	P	1.7	-4.4
4	☐	10.000	9.791	33983.09	0.0818	P	1.0	-2.1
5	☐	100.000	98.524	330443.40	0.7874	P	1.3	-1.5
6	☐	200.000	200.754	642656.75	1.6004	P	1.2	0.4

y = 0.0080 * x + 0.0039
R = 1.0000
DL = 0.05249 ppb
BEC = 0.4967 ppb

Weight: <None>
Min Conc: <None>

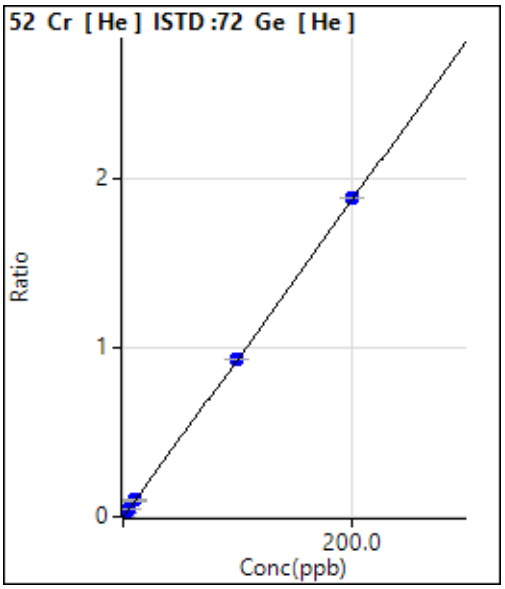
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12829.54	0.0091	P	1.6	
2	☐	2.000	1.895	34864.69	0.0247	P	0.6	-5.2
3	☐	5.000	4.660	66782.60	0.0474	P	2.1	-6.8
4	☐	10.000	9.622	121407.39	0.0882	P	1.0	-3.8
5	☐	100.000	100.292	1147193.39	0.8328	A	2.8	0.3
6	☐	200.000	199.882	2192962.46	1.6508	A	1.1	-0.1

y = 0.0082 * x + 0.0091
R = 1.0000
DL = 0.05413 ppb
BEC = 1.113 ppb

Weight: <None>
Min Conc: <None>

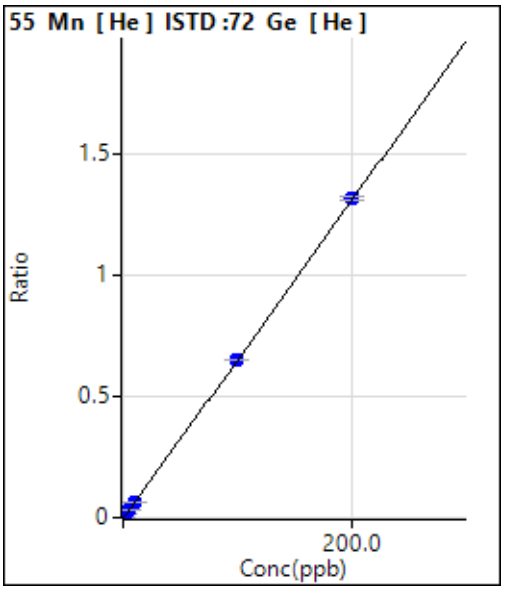


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1936.85	0.0046	P	10.2	
2	☐	2.000	1.937	9583.51	0.0228	P	2.0	-3.1
3	☐	5.000	4.811	20909.56	0.0497	P	0.4	-3.8
4	☐	10.000	9.806	40078.95	0.0965	P	3.8	-1.9
5	☐	100.000	98.778	390232.94	0.9298	P	0.6	-1.2
6	☐	200.000	200.626	756508.14	1.8838	P	0.6	0.3

y = 0.0094 * x + 0.0046
R = 1.0000
DL = 0.1514 ppb
BEC = 0.4943 ppb

Weight: <None>
Min Conc: <None>

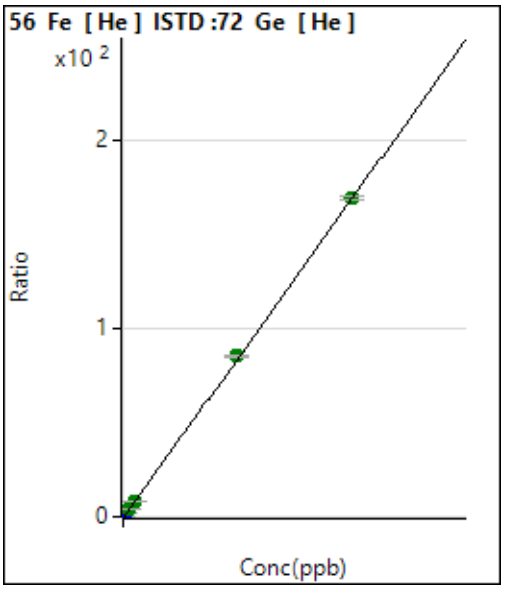
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	553.36	0.0013	P	2.4	
2	☐	2.000	1.954	5964.74	0.0142	P	4.9	-2.3
3	☐	5.000	4.982	14344.40	0.0341	P	5.0	-0.4
4	☐	10.000	9.839	27434.54	0.0660	P	2.0	-1.6
5	☐	100.000	99.245	274530.45	0.6541	P	0.3	-0.8
6	☐	200.000	200.386	529829.10	1.3194	P	1.3	0.2

y = 0.0066 * x + 0.0013
R = 1.0000
DL = 0.01442 ppb
BEC = 0.2011 ppb

Weight: <None>
Min Conc: <None>

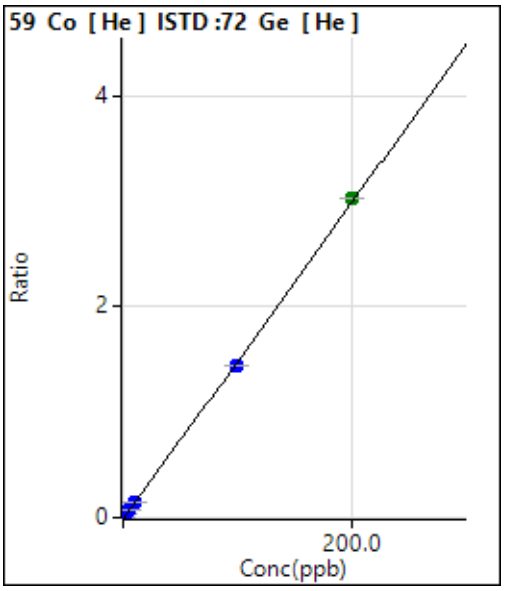


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21076.53	0.0504	P	1.0	
2	☐	200.000	202.220	741073.82	1.7611	P	0.3	1.1
3	☐	500.000	509.554	1834952.37	4.3612	A	1.9	1.9
4	☐	1000.000	1012.815	3580090.15	8.6187	A	0.6	1.3
5	☐	10000.00	10057.11	35725491.1	85.1325	A	1.6	0.6
6	☐	20000.00	19970.54	67865248.9	168.999	A	1.0	-0.1

y = 0.0085 * x + 0.0504
R = 1.0000
DL = 0.1736 ppb
BEC = 5.955 ppb

Weight: <None>
Min Conc: <None>

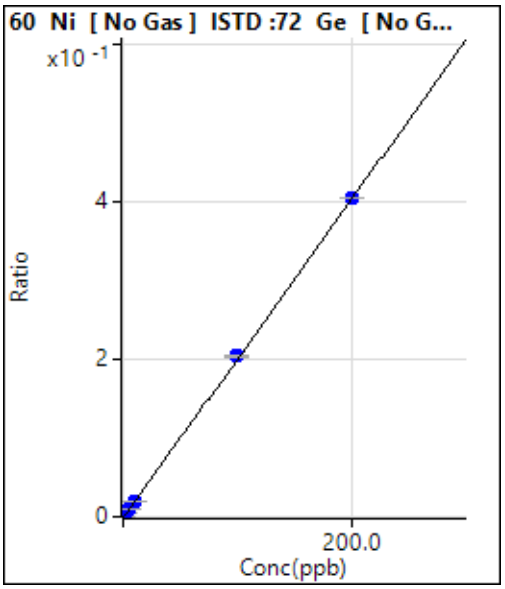
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	27.0	
2	☐	2.000	1.905	12082.20	0.0287	P	1.2	-4.7
3	☐	5.000	4.722	29853.01	0.0709	P	1.2	-5.6
4	☐	10.000	9.436	58847.07	0.1417	P	1.1	-5.6
5	☐	100.000	96.116	605031.93	1.4417	P	0.8	-3.9
6	☐	200.000	201.978	1216638.29	3.0294	A	0.6	1.0

y = 0.0150 * x + 1.3543E-004
R = 0.9997
DL = 0.007302 ppb
BEC = 0.00903 ppb

Weight: <None>
Min Conc: <None>

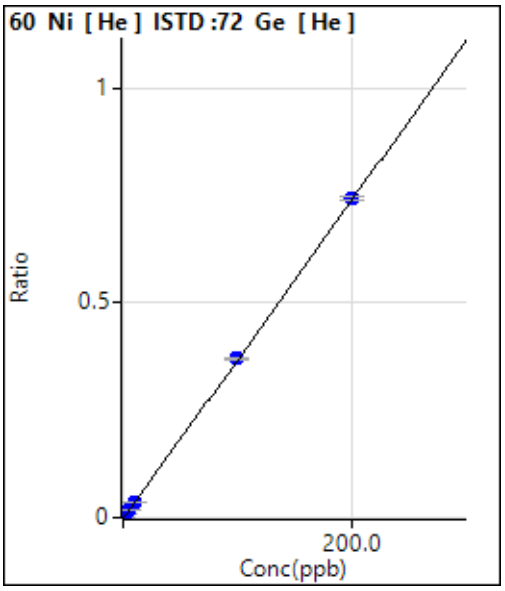


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0003	P	8.3	
2	☐	2.000	1.967	6064.78	0.0043	P	1.8	-1.6
3	☐	5.000	4.930	14511.28	0.0103	P	1.5	-1.4
4	☐	10.000	9.811	27818.72	0.0202	P	0.7	-1.9
5	☐	100.000	100.427	280945.61	0.2039	P	1.9	0.4
6	☐	200.000	199.798	538598.31	0.4054	P	0.5	-0.1

y = 0.0020 * x + 3.0872E-004
R = 1.0000
DL = 0.03769 ppb
BEC = 0.1523 ppb

Weight: <None>
Min Conc: <None>

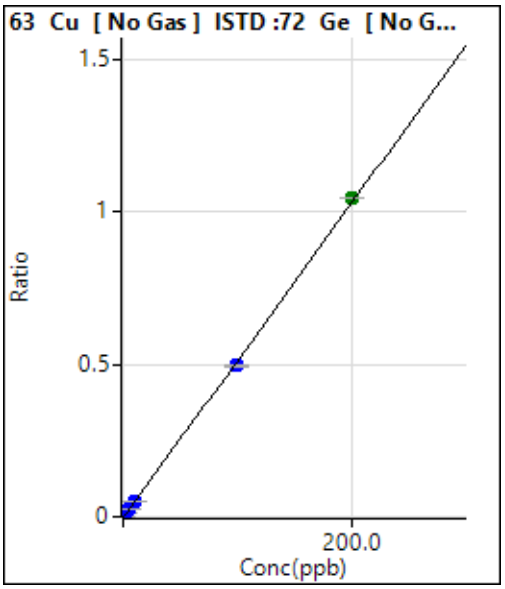
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0004	P	23.3	
2	☐	2.000	1.987	3273.80	0.0078	P	9.9	-0.7
3	☐	5.000	4.767	7612.23	0.0181	P	3.7	-4.7
4	☐	10.000	9.877	15382.24	0.0370	P	3.2	-1.2
5	☐	100.000	99.493	154990.49	0.3693	P	0.5	-0.5
6	☐	200.000	200.266	298348.39	0.7429	P	1.0	0.1

y = 0.0037 * x + 4.1429E-004
R = 1.0000
DL = 0.0782 ppb
BEC = 0.1117 ppb

Weight: <None>
Min Conc: <None>

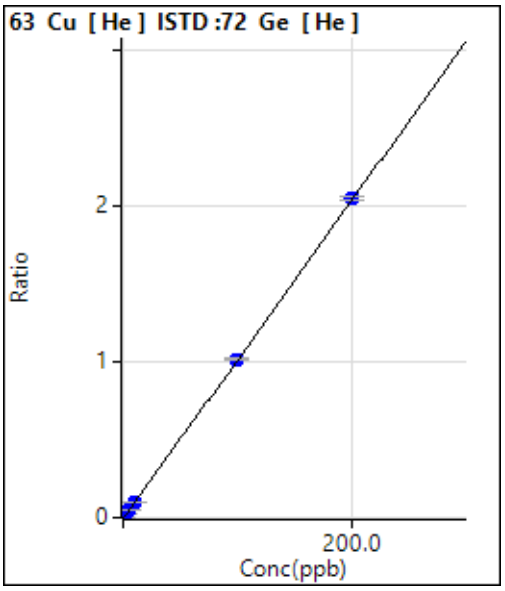


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1956.84	0.0014	P	0.5	
2	☐	2.000	2.003	16566.98	0.0117	P	1.5	0.2
3	☐	5.000	4.690	36074.80	0.0256	P	0.6	-6.2
4	☐	10.000	9.458	69158.75	0.0502	P	2.5	-5.4
5	☐	100.000	95.820	683597.41	0.4962	P	1.5	-4.2
6	☐	200.000	202.125	1388470.24	1.0451	A	0.4	1.1

y = 0.0052 * x + 0.0014
R = 0.9997
DL = 0.00428 ppb
BEC = 0.2701 ppb

Weight: <None>
Min Conc: <None>

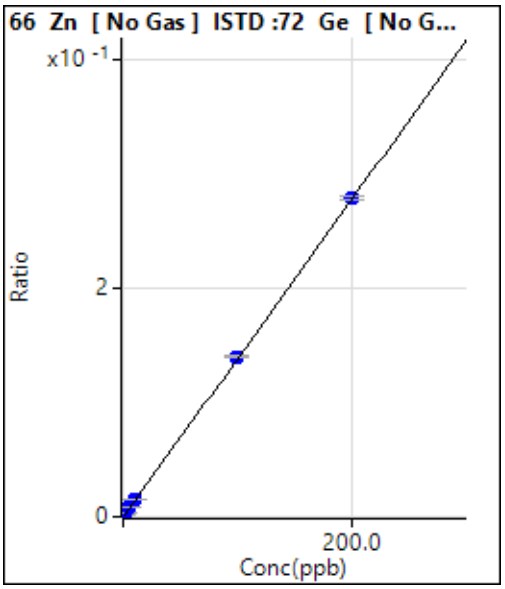
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1153.41	0.0028	P	8.2	
2	☐	2.000	2.068	10030.51	0.0238	P	0.6	3.4
3	☐	5.000	4.953	22401.99	0.0532	P	0.5	-0.9
4	☐	10.000	9.891	43021.71	0.1036	P	1.4	-1.1
5	☐	100.000	99.232	425608.28	1.0142	P	1.2	-0.8
6	☐	200.000	200.390	821308.22	2.0452	P	1.0	0.2

y = 0.0102 * x + 0.0028
R = 1.0000
DL = 0.06631 ppb
BEC = 0.2705 ppb

Weight: <None>
Min Conc: <None>

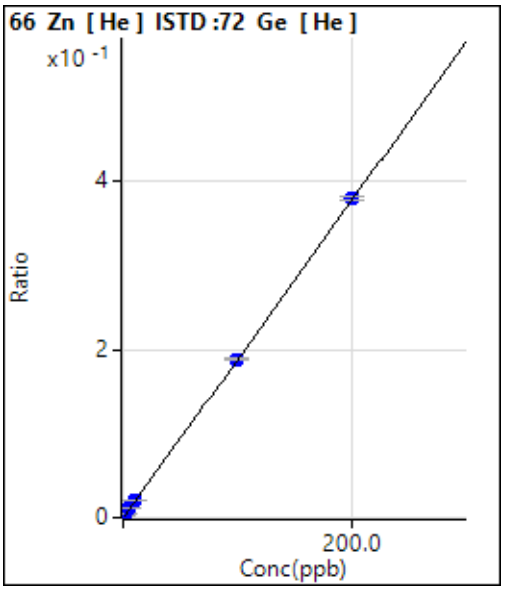


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1423.43	0.0010	P	12.7	
2	☐	2.000	2.088	5531.23	0.0039	P	2.7	4.4
3	☐	5.000	4.924	11071.37	0.0079	P	1.8	-1.5
4	☐	10.000	10.028	20595.91	0.0150	P	3.6	0.3
5	☐	100.000	99.888	192777.03	0.1399	P	1.1	-0.1
6	☐	200.000	200.055	370929.20	0.2792	P	0.8	0.0

y = 0.0014 * x + 0.0010
R = 1.0000
DL = 0.278 ppb
BEC = 0.7301 ppb

Weight: <None>
Min Conc: <None>

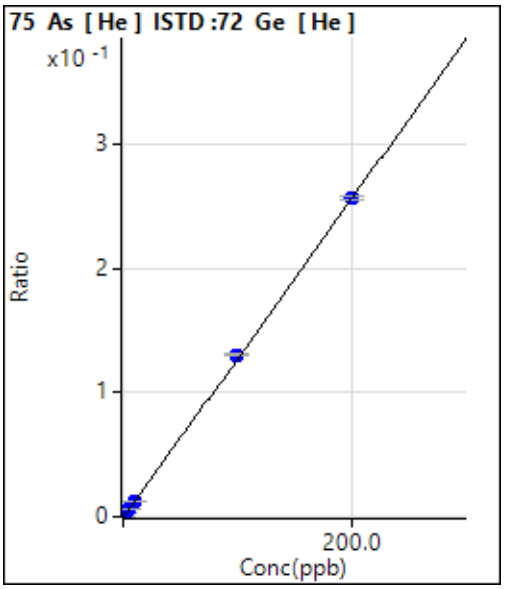
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	623.36	0.0015	P	19.2	
2	☐	2.000	2.039	2250.22	0.0053	P	8.1	2.0
3	☐	5.000	5.126	4704.24	0.0112	P	3.7	2.5
4	☐	10.000	9.928	8416.11	0.0203	P	7.1	-0.7
5	☐	100.000	99.097	79247.57	0.1888	P	1.0	-0.9
6	☐	200.000	200.451	152775.12	0.3804	P	0.7	0.2

y = 0.0019 * x + 0.0015
R = 1.0000
DL = 0.4546 ppb
BEC = 0.7884 ppb

Weight: <None>
Min Conc: <None>

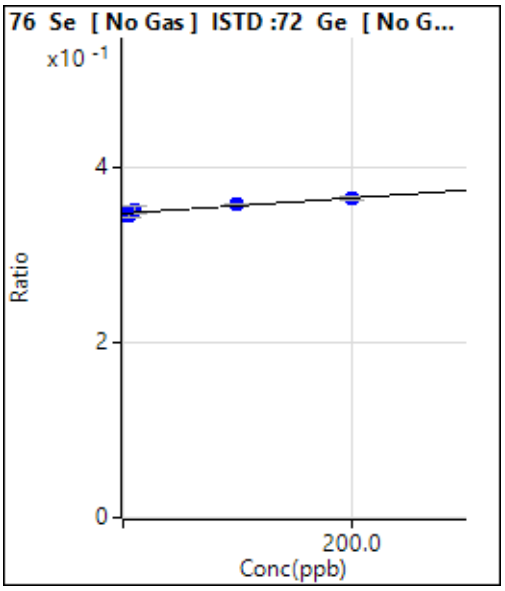


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77.78	0.0002	P	18.1	
2	☐	2.000	2.128	1231.17	0.0029	P	2.6	6.4
3	☐	5.000	4.642	2593.60	0.0062	P	4.2	-7.2
4	☐	10.000	9.654	5241.04	0.0126	P	1.4	-3.5
5	☐	100.000	100.991	54648.89	0.1302	P	1.2	1.0
6	☐	200.000	199.530	103246.89	0.2571	P	0.7	-0.2

y = 0.0013 * x + 1.8597E-004
R = 1.0000
DL = 0.07852 ppb
BEC = 0.1444 ppb

Weight: <None>
Min Conc: <None>

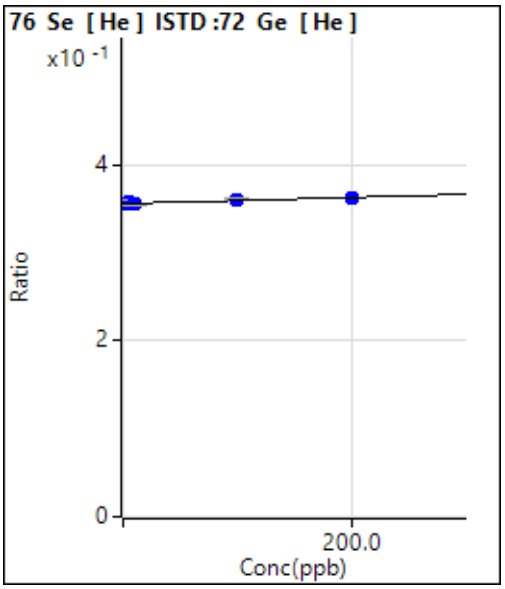
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	488385.34	0.3481	P	0.5	
2	☐	2.000	-19.860	488745.62	0.3464	P	1.0	-1093.
3	☐	5.000	-20.525	487620.55	0.3463	P	1.5	-510.5
4	☐	10.000	48.976	485288.73	0.3525	P	2.0	389.8
5	☐	100.000	108.350	492937.68	0.3578	P	1.1	8.4
6	☐	200.000	194.733	485519.21	0.3655	P	0.7	-2.6

y = 8.9077E-005 * x + 0.3481
R = 0.9619
DL = 63.43 ppb
BEC = 3908 ppb

Weight: <None>
Min Conc: <None>

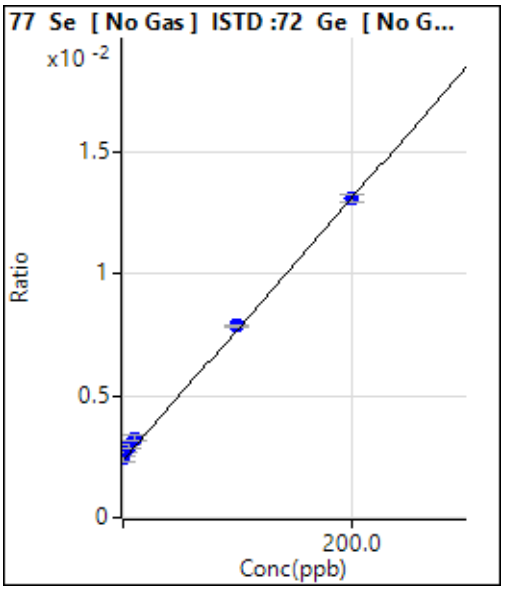


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	148803.51	0.3557	P	1.3	
2	☐	2.000	-30.331	149214.93	0.3546	P	0.7	-1616.
3	☐	5.000	51.126	150407.74	0.3575	P	1.1	922.5
4	☐	10.000	-17.377	147492.90	0.3551	P	0.4	-273.8
5	☐	100.000	137.866	151307.34	0.3605	P	0.9	37.9
6	☐	200.000	181.606	145406.60	0.3621	P	0.5	-9.2

y = 3.5249E-005 * x + 0.3557
R = 0.9231
DL = 398.9 ppb
BEC = 1.009E+04 ppb

Weight: <None>
Min Conc: <None>

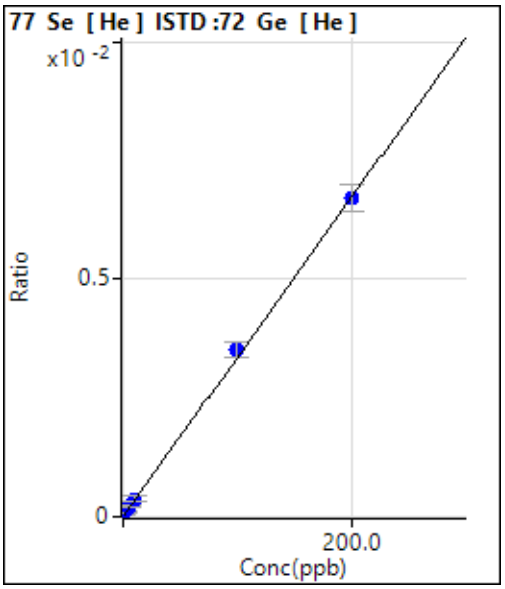
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3413.85	0.0024	P	9.0	
2	☐	2.000	6.902	3957.32	0.0028	P	9.7	245.1
3	☐	5.000	8.712	4080.69	0.0029	P	6.4	74.2
4	☐	10.000	15.758	4510.83	0.0033	P	7.9	57.6
5	☐	100.000	101.448	10861.16	0.0079	P	1.2	1.4
6	☐	200.000	198.847	17421.52	0.0131	P	2.0	-0.6

y = 5.3723E-005 * x + 0.0024
R = 0.9997
DL = 12.22 ppb
BEC = 45.27 ppb

Weight: <None>
Min Conc: <None>

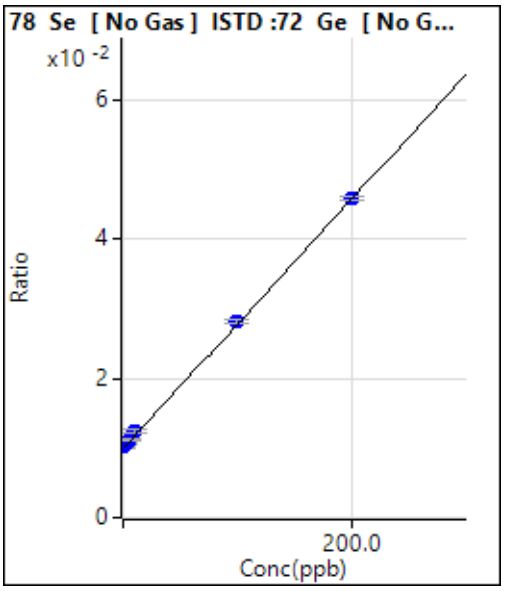


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.5	
2	☐	2.000	2.112	46.67	0.0001	P	32.4	5.6
3	☐	5.000	5.181	90.00	0.0002	P	29.4	3.6
4	☐	10.000	10.043	156.67	0.0004	P	26.1	0.4
5	☐	100.000	103.005	1470.11	0.0035	P	9.1	3.0
6	☐	200.000	198.490	2693.65	0.0067	P	8.4	-0.8

y = 3.3606E-005 * x + 3.9818E-005
R = 0.9998
DL = 1.226 ppb
BEC = 1.185 ppb

Weight: <None>
Min Conc: <None>

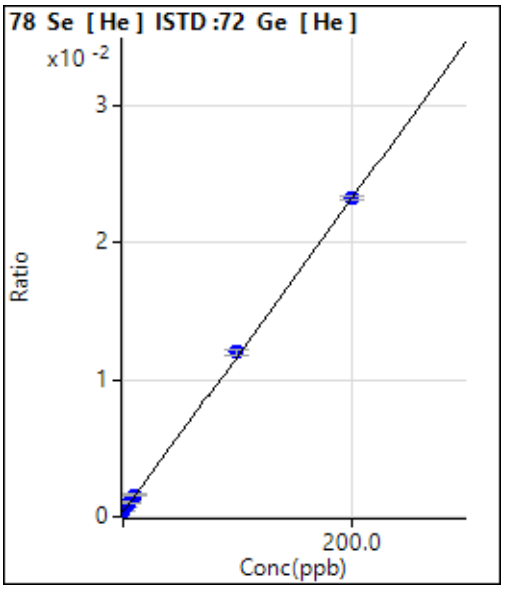
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14277.81	0.0102	P	3.6	
2	☐	2.000	2.423	14978.55	0.0106	P	1.4	21.2
3	☐	5.000	5.487	15726.10	0.0112	P	3.0	9.7
4	☐	10.000	12.666	17137.80	0.0125	P	4.1	26.7
5	☐	100.000	100.775	38919.84	0.0283	P	1.8	0.8
6	☐	200.000	199.463	61041.60	0.0459	P	1.0	-0.3

y = 1.7932E-004 * x + 0.0102
R = 0.9999
DL = 6.164 ppb
BEC = 56.77 ppb

Weight: <None>
Min Conc: <None>

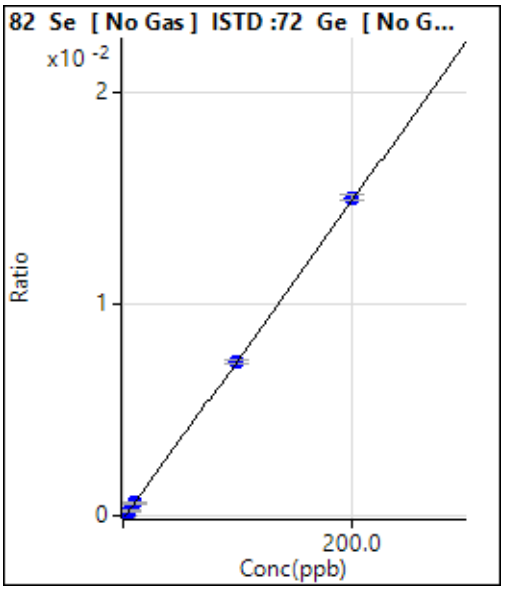


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182.00	0.0004	P	10.9	
2	☐	2.000	2.029	280.67	0.0007	P	1.0	1.4
3	☐	5.000	5.068	426.68	0.0010	P	17.1	1.4
4	☐	10.000	10.095	660.02	0.0016	P	6.3	0.9
5	☐	100.000	101.003	5026.95	0.0120	P	3.0	1.0
6	☐	200.000	199.492	9331.24	0.0232	P	1.8	-0.3

y = 1.1430E-004 * x + 4.3510E-004
R = 1.0000
DL = 1.241 ppb
BEC = 3.807 ppb

Weight: <None>
Min Conc: <None>

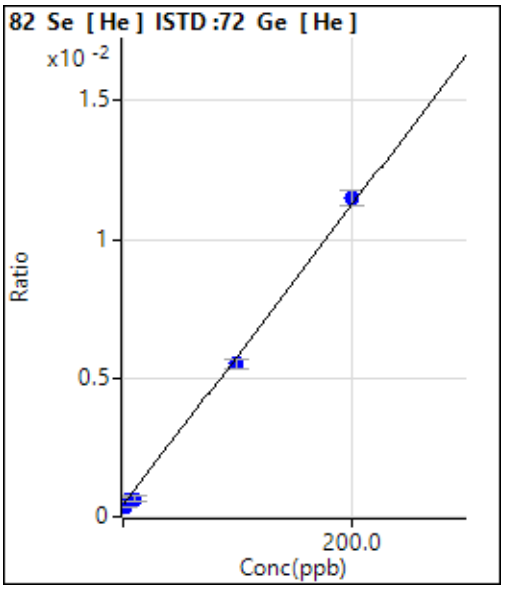
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-81.53	-0.0001	P	-19.8	
2	☐	2.000	1.542	81.18	0.0001	P	26.9	-22.9
3	☐	5.000	4.091	351.47	0.0002	P	17.3	-18.2
4	☐	10.000	9.450	897.98	0.0007	P	14.2	-5.5
5	☐	100.000	97.970	10055.93	0.0073	P	2.3	-2.0
6	☐	200.000	201.070	19981.61	0.0150	P	1.9	0.5

y = 7.5090E-005 * x - 5.8177E-005
R = 0.9999
DL = 0.4606 ppb
BEC = -0.7748 ppb

Weight: <None>
Min Conc: <None>

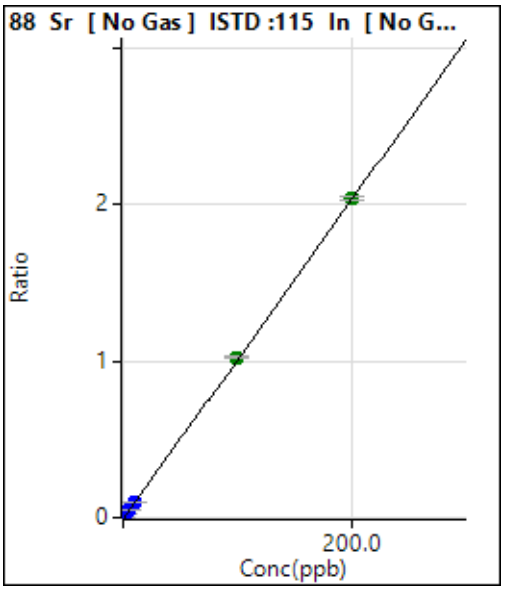


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	200.01	0.0005	P	17.7	
2	☐	2.000	-2.399	146.67	0.0003	P	11.0	-219.9
3	☐	5.000	2.444	256.68	0.0006	P	23.1	-51.1
4	☐	10.000	3.185	270.01	0.0007	P	27.0	-68.1
5	☐	100.000	93.177	2313.58	0.0055	P	6.2	-6.8
6	☐	200.000	203.860	4614.22	0.0115	P	4.5	1.9

y = 5.4023E-005 * x + 4.7828E-004
R = 0.9991
DL = 4.694 ppb
BEC = 8.853 ppb

Weight: <None>
Min Conc: <None>

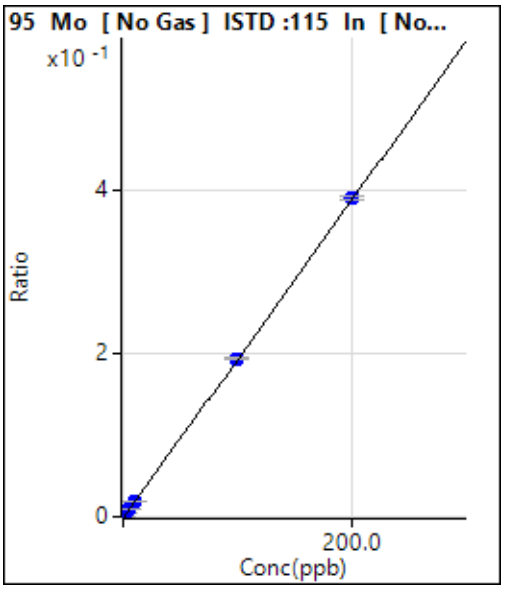
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1160.07	0.0007	P	6.9	
2	☐	2.000	1.829	33425.29	0.0193	P	2.0	-8.5
3	☐	5.000	4.491	81051.17	0.0465	P	2.0	-10.2
4	☐	10.000	9.133	161299.38	0.0938	P	1.4	-8.7
5	☐	100.000	100.343	1743201.90	1.0242	A	0.6	0.3
6	☐	200.000	199.886	3332277.97	2.0396	A	1.4	-0.1

y = 0.0102 * x + 6.6393E-004
R = 1.0000
DL = 0.01357 ppb
BEC = 0.06509 ppb

Weight: <None>
Min Conc: <None>

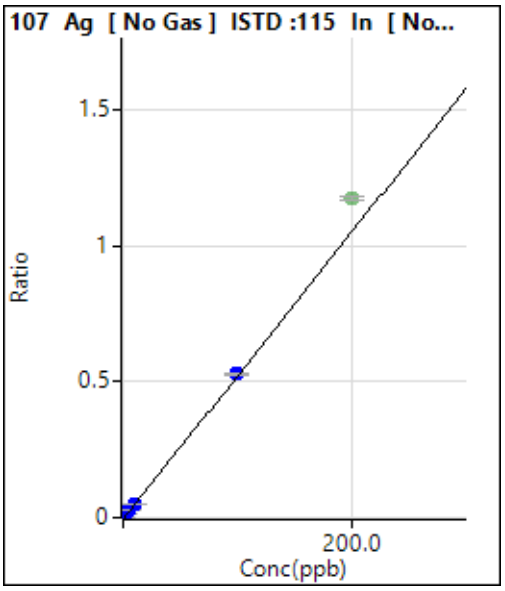


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	233.48	0.0001	P	103.1	
2	☐	2.000	1.801	6281.61	0.0036	P	4.5	-10.0
3	☐	5.000	4.586	15772.89	0.0090	P	0.9	-8.3
4	☐	10.000	9.557	32142.42	0.0187	P	2.4	-4.4
5	☐	100.000	99.158	328043.29	0.1928	P	1.2	-0.8
6	☐	200.000	200.455	636436.32	0.3895	P	0.7	0.2

y = 0.0019 * x + 1.3413E-004
R = 1.0000
DL = 0.2136 ppb
BEC = 0.06905 ppb

Weight: <None>
Min Conc: <None>

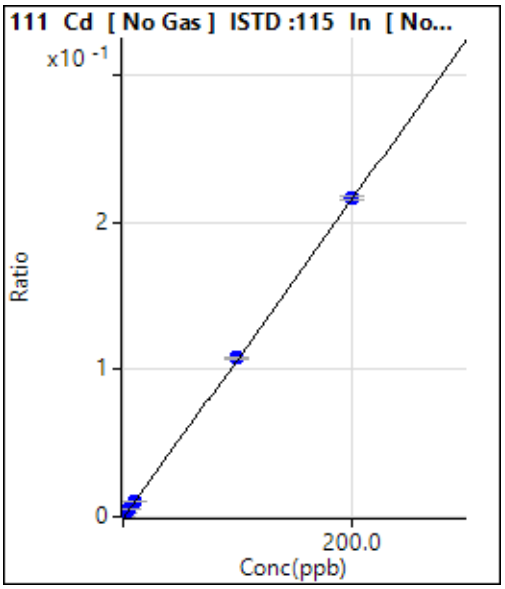
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	806.70	0.0005	P	11.2	
2	☐	2.000	1.962	18746.89	0.0108	P	1.9	-1.9
3	☐	5.000	4.891	45916.86	0.0263	P	0.4	-2.2
4	☐	10.000	9.728	89232.95	0.0519	P	1.7	-2.7
5	☐	100.000	100.033	901199.39	0.5295	P	0.8	0.0
6	☑	200.000		1923290.34	1.1772	A	1.3	

y = 0.0053 * x + 4.6140E-004
R = 1.0000
DL = 0.02931 ppb
BEC = 0.08725 ppb

Weight: <None>
Min Conc: <None>

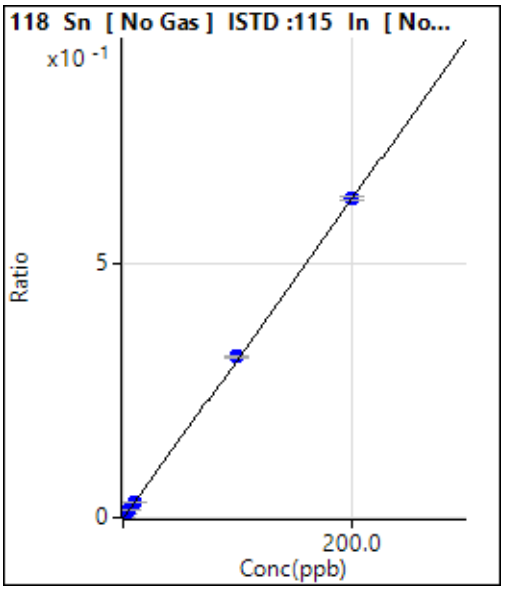


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.7	
2	☐	2.000	1.991	3737.26	0.0022	P	2.1	-0.5
3	☐	5.000	4.818	9099.95	0.0052	P	3.4	-3.6
4	☐	10.000	9.629	17922.48	0.0104	P	2.2	-3.7
5	☐	100.000	99.698	183511.66	0.1078	P	0.5	-0.3
6	☐	200.000	200.174	353705.02	0.2165	P	0.9	0.1

y = 0.0011 * x + 7.6438E-006
R = 1.0000
DL = 0.009265 ppb
BEC = 0.007068 ppb

Weight: <None>
Min Conc: <None>

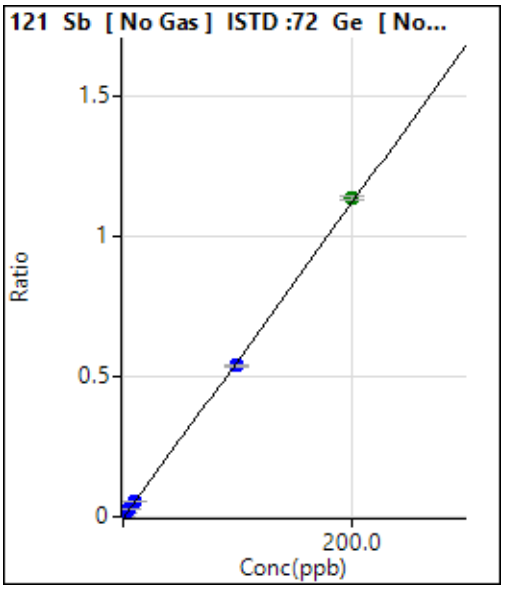
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1710.14	0.0010	P	5.5	
2	☐	2.000	2.036	12733.02	0.0074	P	3.4	1.8
3	☐	5.000	4.652	27141.66	0.0156	P	1.8	-7.0
4	☐	10.000	9.666	53773.47	0.0313	P	1.3	-3.3
5	☐	100.000	100.590	538280.55	0.3163	P	0.9	0.6
6	☐	200.000	199.730	1024465.01	0.6270	P	1.2	-0.1

y = 0.0031 * x + 9.7931E-004
R = 1.0000
DL = 0.05152 ppb
BEC = 0.3124 ppb

Weight: <None>
Min Conc: <None>

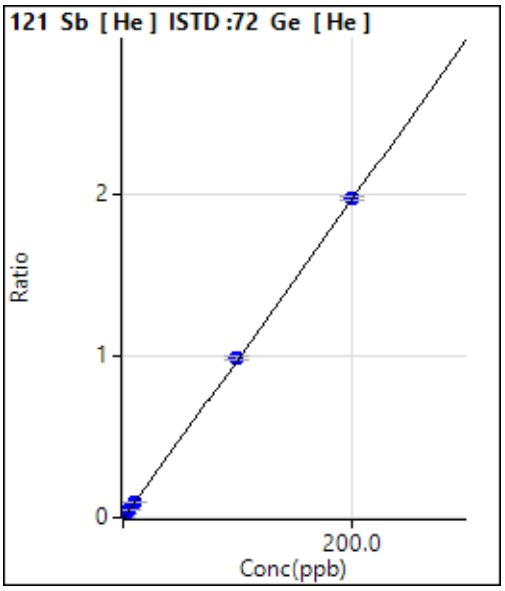


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	586.69	0.0004	P	11.8	
2	☐	2.000	1.879	15506.09	0.0110	P	3.2	-6.0
3	☐	5.000	4.476	36033.23	0.0256	P	1.3	-10.5
4	☐	10.000	9.232	72070.86	0.0523	P	0.2	-7.7
5	☐	100.000	95.616	741433.27	0.5381	P	1.0	-4.4
6	☐	200.000	202.245	1511530.76	1.1378	A	0.8	1.1

y = 0.0056 * x + 4.1779E-004
R = 0.9997
DL = 0.02619 ppb
BEC = 0.07429 ppb

Weight: <None>
Min Conc: <None>

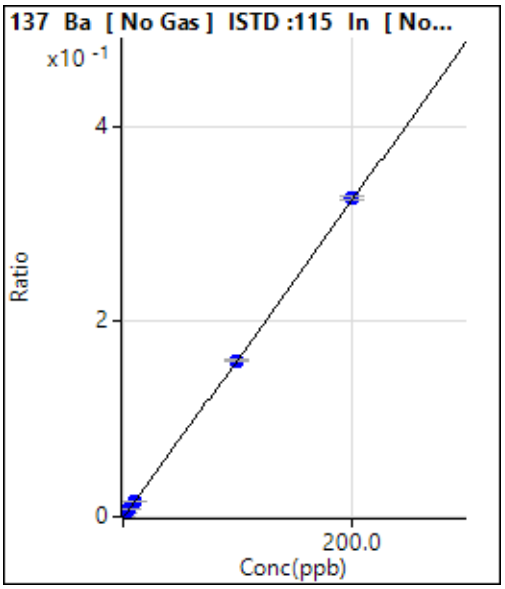
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	360.01	0.0009	P	38.5	
2	☐	2.000	1.991	8629.63	0.0205	P	3.7	-0.5
3	☐	5.000	4.714	19938.72	0.0474	P	2.3	-5.7
4	☐	10.000	9.654	39937.80	0.0961	P	0.5	-3.5
5	☐	100.000	99.972	414443.03	0.9876	P	1.4	0.0
6	☐	200.000	200.038	793168.14	1.9752	P	1.4	0.0

y = 0.0099 * x + 8.6134E-004
R = 1.0000
DL = 0.1007 ppb
BEC = 0.08727 ppb

Weight: <None>
Min Conc: <None>

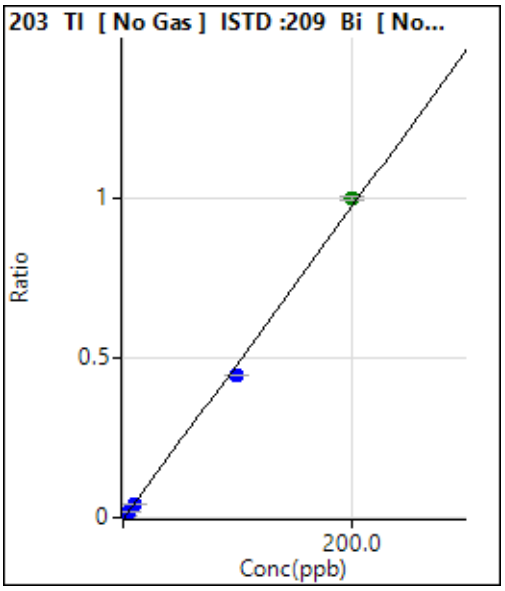


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	403.35	0.0002	P	25.9	
2	☐	2.000	1.919	5794.73	0.0033	P	1.6	-4.1
3	☐	5.000	4.619	13500.58	0.0077	P	1.9	-7.6
4	☐	10.000	9.439	26771.19	0.0156	P	2.2	-5.6
5	☐	100.000	98.410	272597.44	0.1602	P	0.9	-1.6
6	☐	200.000	200.833	533645.60	0.3266	P	1.3	0.4

y = 0.0016 * x + 2.3151E-004
R = 1.0000
DL = 0.1106 ppb
BEC = 0.1424 ppb

Weight: <None>
Min Conc: <None>

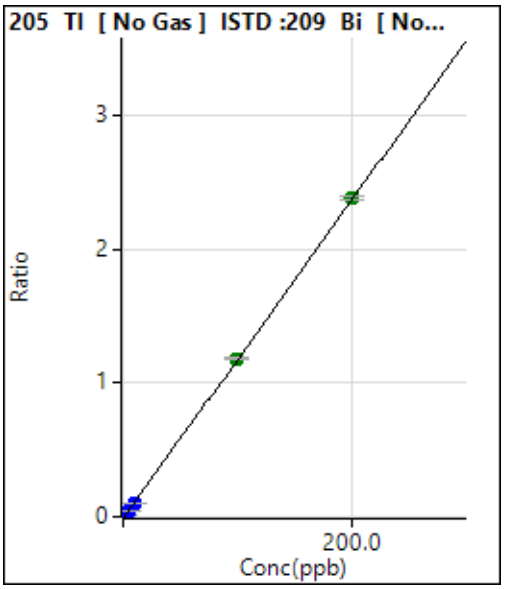
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0000	P	20.3	
2	☐	2.000	1.786	14838.98	0.0088	P	2.2	-10.7
3	☐	5.000	4.246	35393.90	0.0208	P	1.8	-15.1
4	☐	10.000	8.610	70508.47	0.0421	P	1.0	-13.9
5	☐	100.000	91.172	743009.94	0.4457	P	1.3	-8.8
6	☐	200.000	204.504	1594218.21	0.9996	A	1.1	2.3

y = 0.0049 * x + 3.3925E-005
R = 0.9987
DL = 0.00423 ppb
BEC = 0.006941 ppb

Weight: <None>
Min Conc: <None>

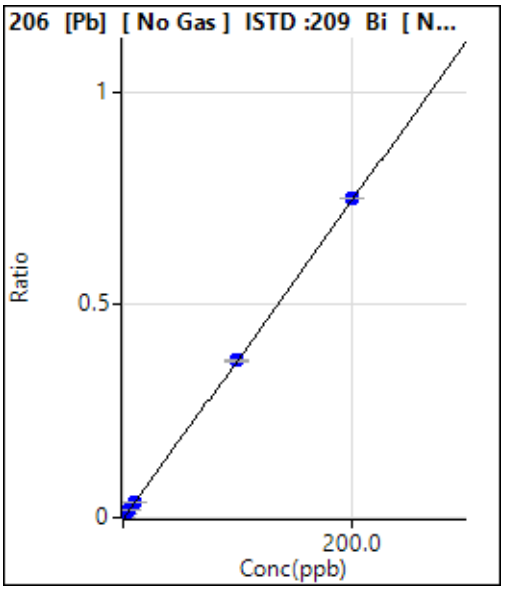


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	186.67	0.0001	P	21.4	
2	☐	2.000	1.713	34738.51	0.0205	P	1.3	-14.3
3	☐	5.000	4.147	84273.71	0.0495	P	0.7	-17.1
4	☐	10.000	8.475	169084.35	0.1010	P	1.1	-15.3
5	☐	100.000	99.389	1973130.33	1.1835	A	1.6	-0.6
6	☐	200.000	200.406	3805747.13	2.3863	A	1.1	0.2

y = 0.0119 * x + 1.1173E-004
R = 1.0000
DL = 0.006031 ppb
BEC = 0.009384 ppb

Weight: <None>
Min Conc: <None>

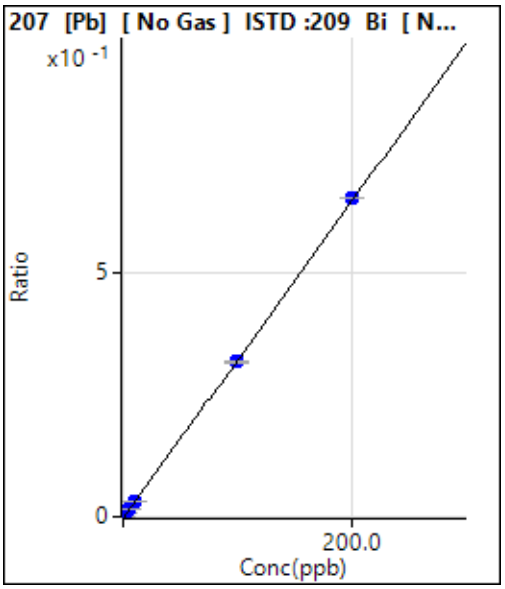
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	376.68	0.0002	P	32.3	
2	☐	2.000	1.937	12649.98	0.0075	P	1.7	-3.2
3	☐	5.000	4.679	30183.52	0.0177	P	2.1	-6.4
4	☐	10.000	9.360	58965.97	0.0352	P	1.6	-6.4
5	☐	100.000	98.691	615770.77	0.3693	P	0.8	-1.3
6	☐	200.000	200.695	1197383.99	0.7508	P	0.6	0.3

y = 0.0037 * x + 2.2571E-004
R = 1.0000
DL = 0.05843 ppb
BEC = 0.06035 ppb

Weight: <None>
Min Conc: <None>

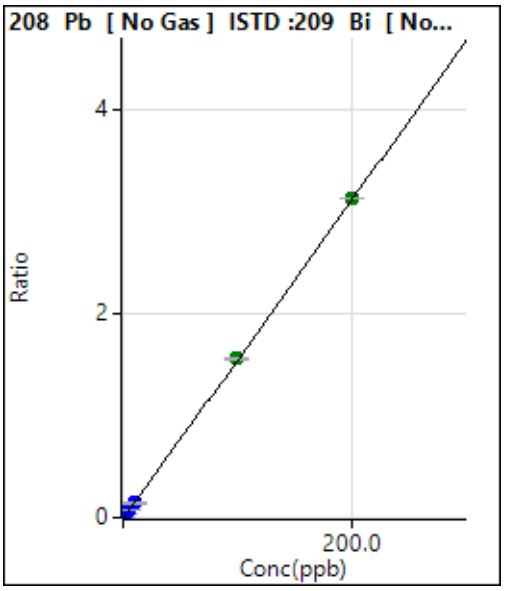


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.01	0.0002	P	8.8	
2	☐	2.000	1.902	10868.23	0.0064	P	2.9	-4.9
3	☐	5.000	4.659	26191.30	0.0154	P	1.1	-6.8
4	☐	10.000	9.534	52279.96	0.0312	P	2.0	-4.7
5	☐	100.000	97.618	529539.62	0.3176	P	1.2	-2.4
6	☐	200.000	201.224	1043752.07	0.6545	P	0.2	0.6

y = 0.0033 * x + 2.3350E-004
R = 0.9999
DL = 0.01902 ppb
BEC = 0.07182 ppb

Weight: <None>
Min Conc: <None>

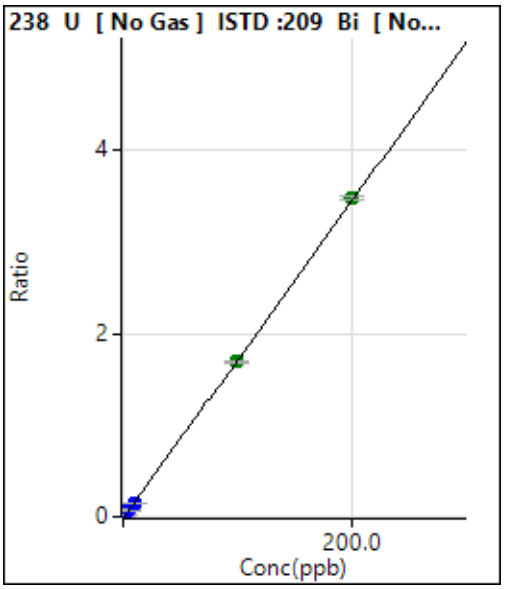
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1570.07	0.0009	P	6.8	
2	☐	2.000	1.826	49949.96	0.0295	P	1.2	-8.7
3	☐	5.000	4.439	119806.26	0.0704	P	1.1	-11.2
4	☐	10.000	9.029	237888.19	0.1421	P	1.5	-9.7
5	☐	100.000	99.521	2596355.22	1.5571	A	0.9	-0.5
6	☐	200.000	200.304	4996628.62	3.1330	A	0.4	0.2

y = 0.0156 * x + 9.4018E-004
R = 1.0000
DL = 0.01218 ppb
BEC = 0.06013 ppb

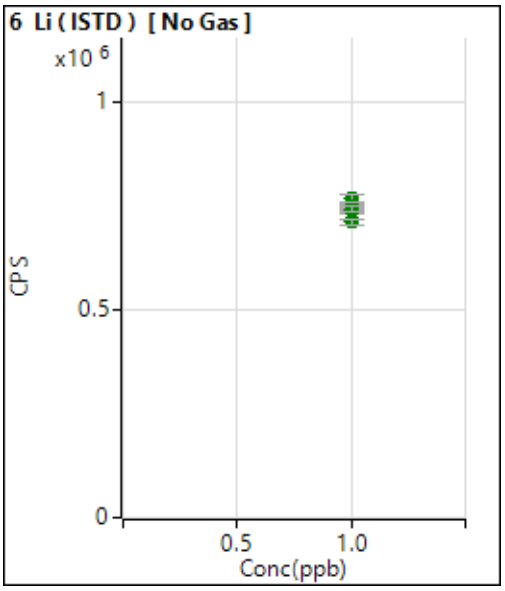
Weight: <None>
Min Conc: <None>



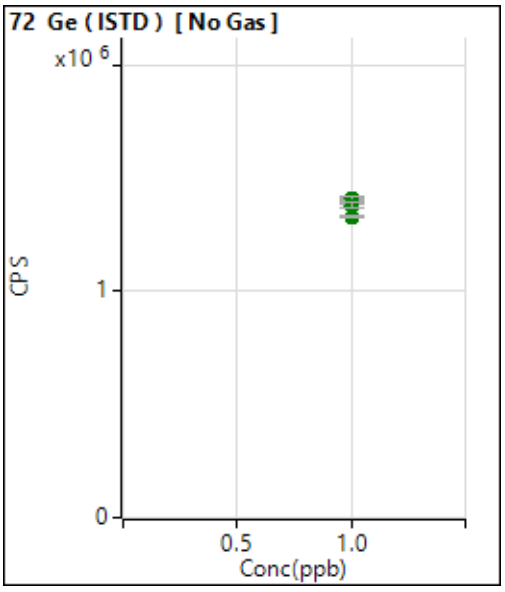
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	65.2	
2	☐	2.000	1.747	51197.08	0.0302	P	0.8	-12.7
3	☐	5.000	4.244	125064.12	0.0734	P	0.3	-15.1
4	☐	10.000	8.740	253126.09	0.1512	P	1.2	-12.6
5	☐	100.000	97.978	2825874.44	1.6950	A	1.5	-2.0
6	☐	200.000	201.095	5548433.46	3.4788	A	1.3	0.5

y = 0.0173 * x + 1.3948E-005
R = 0.9999
DL = 0.001576 ppb
BEC = 0.0008063 ppb

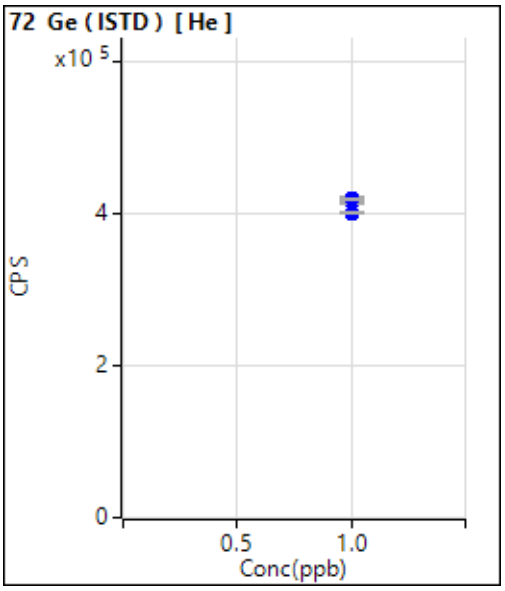
Weight: <None>
Min Conc: <None>



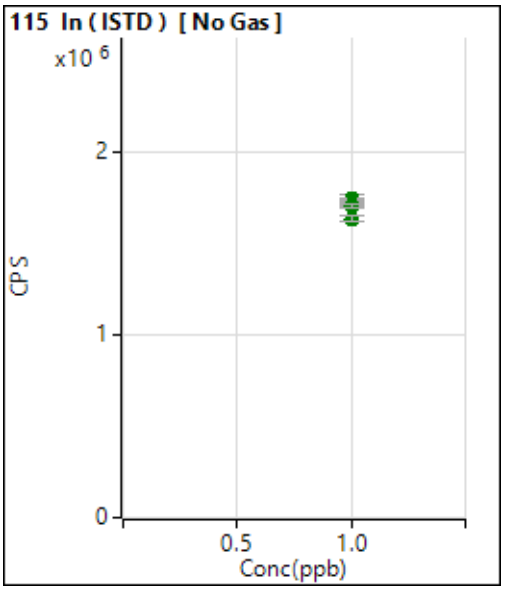
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		750115.18		A	1.8	
2	☐	1.000		769183.29		A	2.6	
3	☐	1.000		752402.57		A	1.4	
4	☐	1.000		739885.24		A	2.5	
5	☐	1.000		743133.75		A	1.6	
6	☐	1.000		711485.96		A	1.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1402911.02		A	1.3	
2	☐	1.000		1411139.36		A	1.0	
3	☐	1.000		1408345.71		A	2.0	
4	☐	1.000		1377046.70		A	1.8	
5	☐	1.000		1377885.08		A	1.8	
6	☐	1.000		1328471.80		A	0.5	

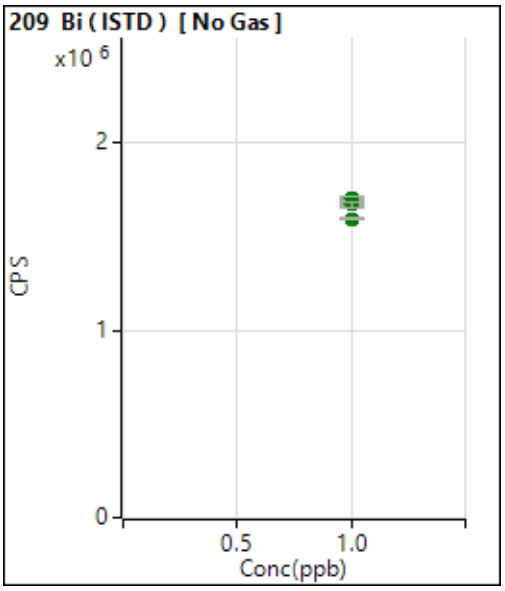


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		418374.05		P	0.4	
2	☐	1.000		420796.57		P	0.6	
3	☐	1.000		420760.58		P	0.5	
4	☐	1.000		415397.08		P	0.6	
5	☐	1.000		419691.67		P	1.0	
6	☐	1.000		401596.63		P	0.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1746411.87		A	1.9	
2	☐	1.000		1729757.13		A	0.5	
3	☐	1.000		1744253.90		A	0.8	
4	☐	1.000		1719414.44		A	2.0	
5	☐	1.000		1701995.82		A	1.2	
6	☐	1.000		1633993.71		A	1.5	

Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1670245.34		A	0.4	
2	☐	1.000		1693618.83		A	0.8	
3	☐	1.000		1703047.99		A	1.0	
4	☐	1.000		1673963.05		A	1.3	
5	☐	1.000		1667462.37		A	1.7	
6	☐	1.000		1594838.31		A	0.6	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	012LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:43:39-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	004CALB.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	1.980	1.980	1.31	58524	0.00	2	
Be	9	1	No Gas	2.024	2.024	5.21	3972	0.05	2	
V	51	2	He	1.657	1.657	1.68	7132	0.02	2	
Cr	52	2	He	1.979	1.979	1.92	9647	0.02	2	
Fe	56	2	He	201.235	201.235	0.58	729937	0.03	200	
Se	78	2	He	1.739	1.739	38.52	264	0.66	2	
As	75	2	He	1.886	1.886	5.66	1089	0.17	2	
Ca	44	2	He	209.696	209.696	2.61	4578	4.58	200	
Na	23	2	He	195.731	195.731	0.55	223650	0.09	200	
Mg	24	2	He	199.047	199.047	1.28	70820	0.28	200	
K	39	2	He	202.673	202.673	2.01	134218	0.15	200	
Mn	55	2	He	1.996	1.996	3.32	6018	0.03	2	
Co	59	2	He	1.951	1.951	1.14	12239	0.02	2	
Ni	60	2	He	1.979	1.979	7.89	3227	0.06	2	
Cu	63	2	He	1.959	1.959	2.20	9463	0.02	2	
Zn	66	2	He	2.108	2.108	18.99	2280	0.09	2	
Al	27	2	He	2.448	2.448	2.93	1240	0.20	2	
B	11	1	No Gas	28.880	28.880	8.33	39696	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.286	2.286	5.51	48625	0.00	2	
Si	28	1	No Gas	13.079	13.079	10.71	307263	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.814	1.814	0.80	18530	0.01	2	
Cd	111	1	No Gas	1.990	1.990	7.40	3664	0.05	2	
Sr	88	1	No Gas	1.870	1.870	1.24	33512	0.01	2	
Mo	95	1	No Gas	1.931	1.931	5.17	6592	0.03	2	
Sn	118	1	No Gas	2.024	2.024	3.21	12429	0.02	2	
Sb	121	1	No Gas	1.866	1.866	1.81	15126	0.01	2	
Ba	137	1	No Gas	2.057	2.057	4.13	6065	0.03	2	
Tl	205	1	No Gas	1.885	1.885	4.54	37875	0.00	2	
Tl	203	1	No Gas	1.900	1.900	4.30	15650	0.01	2	
Pb	208	1	No Gas	1.874	1.874	1.58	50799	0.00	2	
U	238	1	No Gas	1.755	1.755	2.04	51000	0.00	2	
Ca	43	2	He	153.853	153.853	37.98	187	82.42	200	
Sb	121	2	He	2.018	2.018	1.05	8653	0.02	2	
Ti	47	2	He	2.143	2.143	16.46	257	0.83	200	
Cu	63	1	No Gas	2.008	2.008	2.50	16300	0.01	2	
Se	82	1	No Gas	3.028	3.028	60.66	235	1.29	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	744963	1.56	750115	99.31	70	120	
Ge	72	2	He	416445	0.36	418374	99.54	70	120	
Ge	72	1	No Gas	1385869	1.25	1402911	98.79	70	120	
In	115	1	No Gas	1697263	1.21	1746412	97.19	70	120	
Bi	209	1	No Gas	1679573	1.68	1670245	100.56	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	013LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:45:32-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	004CALB.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	4.579	4.579	3.63	83588	0.01	5	
Be	9	1	No Gas	4.742	4.742	1.90	9452	0.05	5	
V	51	2	He	4.496	4.496	0.98	16396	0.03	5	
Cr	52	2	He	4.858	4.858	3.88	20703	0.02	5	
Fe	56	2	He	510.725	510.725	0.70	1805245	0.03	500	
Se	78	2	He	5.015	5.015	32.37	417	1.20	5	
As	75	2	He	4.729	4.729	5.09	2591	0.18	5	
Ca	44	2	He	489.506	489.506	2.23	10040	4.88	500	
Na	23	2	He	489.475	489.475	1.76	399331	0.12	500	
Mg	24	2	He	492.616	492.616	1.26	173130	0.28	500	
K	39	2	He	498.096	498.096	1.33	242077	0.21	500	
Mn	55	2	He	5.002	5.002	2.30	14134	0.04	5	
Co	59	2	He	4.638	4.638	2.57	28787	0.02	5	
Ni	60	2	He	4.959	4.959	5.77	7762	0.06	5	
Cu	63	2	He	4.790	4.790	2.46	21307	0.02	5	
Zn	66	2	He	5.169	5.169	5.28	4651	0.11	5	
Al	27	2	He	5.483	5.483	3.29	1800	0.30	5	
B	11	1	No Gas	28.020	28.020	1.78	39619	0.07	25	
Al	27	1	No Gas	5.584	5.584	3.97	75796	0.01	5	
Si	28	1	No Gas	25.696	25.696	6.76	349434	0.01	25	
Ag	107	1	No Gas	4.599	4.599	1.39	45191	0.01	5	
Cd	111	1	No Gas	5.012	5.012	0.37	9097	0.06	5	
Sr	88	1	No Gas	4.648	4.648	1.67	80565	0.01	5	
Mo	95	1	No Gas	4.837	4.837	0.46	15970	0.03	5	
Sn	118	1	No Gas	4.883	4.883	2.96	27285	0.02	5	
Sb	121	1	No Gas	4.587	4.587	3.05	35900	0.01	5	
Ba	137	1	No Gas	4.843	4.843	1.27	13581	0.04	5	
Tl	205	1	No Gas	4.255	4.255	0.82	84310	0.01	5	
Tl	203	1	No Gas	4.378	4.378	1.20	35584	0.01	5	
Pb	208	1	No Gas	4.534	4.534	0.54	119283	0.00	5	
U	238	1	No Gas	4.414	4.414	0.59	126792	0.00	5	
Ca	43	2	He	509.044	509.044	10.04	590	86.27	500	
Sb	121	2	He	4.877	4.877	4.49	20233	0.02	5	
Ti	47	2	He	4.929	4.929	10.50	577	0.85	5	
Cu	63	1	No Gas	4.863	4.863	1.60	36302	0.01	5	
Se	82	1	No Gas	4.512	4.512	13.70	385	1.17	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	760559	1.79	750115	101.39	70	120	
Ge	72	2	He	413014	0.95	418374	98.72	70	120	
Ge	72	1	No Gas	1369720	1.69	1402911	97.63	70	120	

Sample Report

In	115	1	No Gas	1675949	1.79	1746412	95.97	70	120	
Bi	209	1	No Gas	1660385	1.09	1670245	99.41	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	014_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:47:24-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	-0.126	-108.2	39702	0.5	0.5	
Be	9	1	No Gas	-0.007	-71.6	25	40.0	0.5	
V	51	2	He	-0.279	-1.9	708	2.7	2.5	
Cr	52	2	He	-0.016	-230.3	1833	6.8	2.5	
Fe	56	2	He	1.355	12.0	25310	2.7	100	
Se	78	2	He	-0.034	-1832.5	177	17.3	1	
As	75	2	He	-0.068	-48.8	40	43.3	2.5	
Ca	44	2	He	3.179	124.3	477	17.1	100	
Na	23	2	He	-0.334	-955.8	102357	1.0	100	
Mg	24	2	He	0.750	26.0	720	8.7	100	
K	39	2	He	1.864	151.3	58504	0.9	100	
Mn	55	2	He	0.049	29.6	673	5.2	2.5	
Co	59	2	He	0.002	207.1	67	34.6	2.5	
Ni	60	2	He	-0.013	-152.5	150	20.0	2.5	
Cu	63	2	He	-0.041	-94.9	957	16.5	1	
Zn	66	2	He	0.142	49.1	720	7.7	2.5	
Al	27	2	He	1.019	48.8	953	10.6	5	
B	11	1	No Gas	4.525	23.6	15232	4.2	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	0.710	20.5	34523	2.6	5	
Si	28	1	No Gas	0.119	1442.1	254558	1.0	10	
Ag	107	1	No Gas	-0.011	-19.5	653	3.9	2.5	
Cd	111	1	No Gas	-0.001	-376.4	10	100.0	1	
Sr	88	1	No Gas	0.006	185.1	1200	16.3	2.5	
Mo	95	1	No Gas	-0.044	-13.9	80	25.0	2.5	
Sn	118	1	No Gas	0.142	23.4	2350	7.4	5	
Sb	121	1	No Gas	0.013	64.8	670	10.4	2.5	
Ba	137	1	No Gas	0.020	112.6	437	14.7	2.5	
Tl	205	1	No Gas	0.026	40.2	687	28.3	1	
Tl	203	1	No Gas	0.026	55.0	260	42.3	1	
Pb	208	1	No Gas	-0.008	-52.1	1323	8.8	2.5	
U	238	1	No Gas	0.001	108.3	50	60.0	2.5	
Ca	43	2	He	17.909	50.0	30	33.3	100	
Sb	121	2	He	0.005	177.8	373	9.4	2.5	
Ti	47	2	He	0.059	83.0	13	43.3	2.5	
Se	82	1	No Gas	0.444	447.8	-35	-585.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	747669	2.88	750115	99.67	70	120	
Ge	72	2	He	409291	0.87	418374	97.83	70	120	
Ge	72	1	No Gas	1358681	1.57	1402911	96.85	70	120	
In	115	1	No Gas	1649760	0.63	1746412	94.47	70	120	
Bi	209	1	No Gas	1612841	1.30	1670245	96.56	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	015ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:52:25-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	147.7	39781	1.4	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.045	14.3	120	8.3	0	ICSA Main CR1 Failed
V	51	2	He	0.094	60.9	1888	10.0	0	ICSA Main CR1 Failed
Cr	52	2	He	1.615	6.9	7936	4.3	0	ICSA Main CR1 Failed
Fe	56	2	He	100470.643	1.2	341566128	0.5	0	
Se	78	2	He	0.273	82.0	187	5.0	0	ICSA Main CR1 Failed
As	75	2	He	0.414	16.5	289	12.7	0	ICSA Main CR1 Failed
Ca	44	2	He	106119.974	2.3	2029615	1.8	0	
Na	23	2	He	101416.857	1.2	59741604	0.2	0	
Mg	24	2	He	101229.165	1.2	34522427	0.1	0	
K	39	2	He	101717.488	1.0	36562278	0.2	0	
Mn	55	2	He	0.459	12.2	1743	7.8	0	ICSA Main CR1 Failed
Co	59	2	He	0.242	2.7	1513	3.3	0	ICSA Main CR1 Failed
Ni	60	2	He	0.907	6.8	1517	5.0	0	ICSA Main CR1 Failed
Cu	63	2	He	0.331	8.3	2464	3.7	0	ICSA Main CR1 Failed
Zn	66	2	He	2.709	13.0	2657	10.2	0	ICSA Main CR1 Failed
Al	27	2	He	94310.877	1.0	17241952	1.3	0	
B	11	1	No Gas	10.243	4.2	19282	3.4	0	
Al	27	1	No Gas	93525.069	3.0	750516362	0.6	0	
Si	28	1	No Gas	20.377	14.5	314893	0.6	0	
Ag	107	1	No Gas	0.531	5.2	5254	5.1	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.162	9.3	2030	8.5	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	5.939	1.5	98386	1.4	0	
Mo	95	1	No Gas	2113.399	1.4	6595118	0.8	0	
Sn	118	1	No Gas	0.544	4.7	4314	2.5	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.693	7.1	5631	3.6	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	1.469	7.1	4207	6.1	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.032	13.2	763	9.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.044	12.4	390	10.3	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.204	1.4	6467	2.1	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.132	7.1	3604	8.2	0	ICSA Main CR1 Failed
Ca	43	2	He	100231.953	0.3	111193	1.4	0	
Sb	121	2	He	0.621	10.1	2810	9.1	0	ICSA Main CR1 Failed
Ti	47	2	He	2091.693	0.8	235495	0.9	0	
Se	82	1	No Gas	0.894	57.2	12	436.7	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	710539	2.21	750115	94.72	70	120	
Ge	72	2	He	401861	1.07	418374	96.05	70	120	
Ge	72	1	No Gas	1307001	2.69	1402911	93.16	70	120	
In	115	1	No Gas	1606539	0.90	1746412	91.99	70	120	
Bi	209	1	No Gas	1565579	1.12	1670245	93.73	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	016ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T10:54:19-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	100.713	3.010	864392	1.34	100	100.7	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	100.220	1.501	178037	0.22	100	100.2	80	120	
V	51	2	He	101.974	0.663	325887	0.26	100	102.0	80	120	
Cr	52	2	He	101.675	1.286	382721	0.71	100	101.7	80	120	
Fe	56	2	He	109720.747	0.913	371246901	0.50	100	109720.7	80	120	
Se	78	2	He	98.168	0.296	4661	0.78	100	98.2	80	120	
As	75	2	He	100.256	1.901	51701	1.62	100	100.3	80	120	
Ca	44	2	He	115749.553	0.386	2203409	0.31	100	115749.6	80	120	
Na	23	2	He	110525.166	1.147	64789881	0.66	100	110525.2	80	120	
Mg	24	2	He	109971.159	0.850	37326785	0.51	100	109971.2	80	120	
K	39	2	He	110669.968	0.352	39587904	0.42	100	110670.0	80	120	
Mn	55	2	He	102.299	1.189	269645	1.07	100	102.3	80	120	
Co	59	2	He	96.973	0.474	581721	0.10	100	97.0	80	120	
Ni	60	2	He	99.553	0.924	147791	1.05	100	99.6	80	120	
Cu	63	2	He	98.019	0.896	400657	0.41	100	98.0	80	120	
Zn	66	2	He	102.345	0.295	77976	0.85	100	102.3	80	120	
Al	27	2	He	93022.573	0.832	16924985	0.39	100	93022.6	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	568.632	1.928	494840	1.98	100	568.6	80	120	
Al	27	1	No Gas	90366.957	1.503	725463563	0.49	100	90367.0	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	518.996	2.756	2040985	0.78	100	519.0	80	120	
Ag	107	1	No Gas	98.989	0.801	842215	1.21	100	99.0	80	120	
Cd	111	1	No Gas	100.793	1.110	175211	0.59	100	100.8	80	120	
Sr	88	1	No Gas	110.625	0.754	1814843	0.90	100	110.6	80	120	
Mo	95	1	No Gas	2189.164	0.920	6835299	0.65	100	2189.2	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	101.261	0.509	511760	0.65	100	101.3	80	120	
Sb	121	1	No Gas	95.646	1.787	703465	0.17	100	95.6	80	120	
Ba	137	1	No Gas	103.882	0.902	271753	1.43	100	103.9	80	120	
Tl	205	1	No Gas	100.802	1.397	1888977	0.57	100	100.8	80	120	
Tl	203	1	No Gas	92.425	1.831	710926	0.48	100	92.4	80	120	
Pb	208	1	No Gas	101.367	1.372	2495984	1.26	100	101.4	80	120	
U	238	1	No Gas	104.918	1.722	2856369	1.46	100	104.9	80	120	
Ca	43	2	He	107942.351	0.763	119169	0.45	100	107942.4	80	120	ICSB Main CR1 Failed
Sb	121	2	He	100.454	1.022	396859	0.49	100	100.5	80	120	
Ti	47	2	He	2193.007	0.592	245725	0.15	100	2193.0	80	120	
Cu	63	1	No Gas	94.347	2.253	638466	0.82	100	94.3	80	120	
Se	82	1	No Gas	96.671	6.353	9405	4.84	100	96.7	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	680666	1.61	750115	90.74	70	120	
Ge	72	2	He	399943	0.57	418374	95.59	70	120	
Ge	72	1	No Gas	1307046	1.64	1402911	93.17	70	120	
In	115	1	No Gas	1607350	0.57	1746412	92.04	70	120	
Bi	209	1	No Gas	1573886	1.39	1670245	94.23	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	018_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:04:10-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	0.682	963447	0.99	100	106.3	90	110	
Be	9	1	No Gas	102.168	0.536	192040	0.45	100	102.2	90	110	
V	51	2	He	100.924	0.986	337091	0.25	100	100.9	90	110	
Cr	52	2	He	101.213	0.758	398179	0.24	100	101.2	90	110	
Fe	56	2	He	10562.785	1.007	37370295	0.30	10000	105.6	90	110	
Se	78	2	He	103.376	4.090	5120	3.86	100	103.4	90	110	
As	75	2	He	103.548	1.965	55804	1.57	100	103.5	90	110	
Ca	44	2	He	10510.901	1.430	209483	0.60	10000	105.1	90	110	
Na	23	2	He	10629.061	0.794	6606777	1.14	10000	106.3	90	110	
Mg	24	2	He	10671.946	0.639	3786155	0.63	10000	106.7	90	110	
K	39	2	He	10767.599	1.377	4078502	0.58	10000	107.7	90	110	
Mn	55	2	He	103.119	1.612	284045	0.84	100	103.1	90	110	
Co	59	2	He	98.639	1.127	618380	0.24	100	98.6	90	110	
Ni	60	2	He	101.111	1.117	156865	0.43	100	101.1	90	110	
Cu	63	2	He	101.937	0.685	435426	0.64	100	101.9	90	110	
Zn	66	2	He	102.529	1.188	81638	1.32	100	102.5	90	110	
Al	27	2	He	109.951	3.715	21687	3.83	100	110.0	90	110	
B	11	1	No Gas	526.262	3.274	485283	3.03	500	105.3	90	110	
Al	27	1	No Gas	112.531	1.517	965033	2.09	100	112.5	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	558.718	0.666	2258522	0.75	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.515	1.708	910399	1.38	100	102.5	90	110	
Cd	111	1	No Gas	100.487	2.126	182329	1.28	100	100.5	90	110	
Sr	88	1	No Gas	106.501	1.828	1823796	1.51	100	106.5	90	110	
Mo	95	1	No Gas	103.656	2.234	338038	1.59	100	103.7	90	110	
Sn	118	1	No Gas	107.132	2.033	565026	1.05	100	107.1	90	110	
Sb	121	1	No Gas	100.755	0.945	768175	0.77	100	100.8	90	110	
Ba	137	1	No Gas	100.650	1.160	274844	0.69	100	100.7	90	110	
Tl	205	1	No Gas	101.355	1.979	1998745	1.51	100	101.4	90	110	
Tl	203	1	No Gas	92.846	0.951	751618	1.05	100	92.8	90	110	
Pb	208	1	No Gas	101.630	2.067	2633188	1.11	100	101.6	90	110	
U	238	1	No Gas	101.373	2.628	2903934	1.57	100	101.4	90	110	
Ca	43	2	He	10590.404	1.763	12229	2.17	10000	105.9	90	110	
Sb	121	2	He	105.296	0.921	434731	0.07	100	105.3	90	110	
Ti	47	2	He	102.018	2.483	11952	1.91	100	102.0	90	110	
Cu	63	1	No Gas	98.302	1.566	689536	1.07	100	98.3	90	110	
Se	82	1	No Gas	101.485	2.551	10246	3.05	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	720101	0.34	750115	96.00	70	120	
Ge	72	2	He	417987	0.89	418374	99.91	70	120	
Ge	72	1	No Gas	1354716	0.62	1402911	96.56	70	120	
In	115	1	No Gas	1677945	1.31	1746412	96.08	70	120	
Bi	209	1	No Gas	1656219	1.16	1670245	99.16	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	019_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:06:00-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	-0.047	-188.7	39998	1.0	0.5	
Be	9	1	No Gas	-0.006	-119.2	27	47.2	0.5	
V	51	2	He	-0.137	-23.3	1188	9.1	2.5	
Cr	52	2	He	0.027	97.8	2030	4.7	2.5	
Fe	56	2	He	-0.349	-13.1	19718	0.5	100	
Se	78	2	He	-0.076	-408.8	177	8.5	2	
As	75	2	He	-0.041	-84.6	56	33.0	2.5	
Ca	44	2	He	-7.462	-25.1	273	13.9	100	
Na	23	2	He	1.229	105.6	104949	1.1	100	
Mg	24	2	He	-0.134	-270.6	420	31.0	100	
K	39	2	He	9.841	23.9	62401	1.1	100	
Mn	55	2	He	0.100	9.4	823	3.1	2.5	
Co	59	2	He	0.001	295.6	63	32.9	2.5	
Ni	60	2	He	-0.047	-14.4	100	10.0	2.5	
Cu	63	2	He	-0.002	-1811.6	1137	15.1	2	
Zn	66	2	He	-0.190	-27.8	470	8.5	2.5	
Al	27	2	He	-1.824	-20.7	430	16.3	5	
B	11	1	No Gas	17.718	19.4	26979	10.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.347	-4.5	17344	3.4	5	
Si	28	1	No Gas	-5.290	-110.5	234866	9.0	10	
Ag	107	1	No Gas	-0.007	-120.3	717	11.9	2.5	
Cd	111	1	No Gas	-0.005	-61.0	3	173.2	1	
Sr	88	1	No Gas	-0.030	-11.6	600	10.0	2.5	
Mo	95	1	No Gas	-0.021	-9.7	157	3.7	2.5	
Sn	118	1	No Gas	-0.006	-314.4	1627	6.6	5	
Sb	121	1	No Gas	0.006	39.1	610	3.3	2.5	
Ba	137	1	No Gas	-0.048	-33.4	260	17.6	2.5	
Tl	205	1	No Gas	0.207	37.0	4244	35.6	1	
Tl	203	1	No Gas	0.221	44.1	1837	42.9	1	
Pb	208	1	No Gas	-0.006	-75.0	1390	8.8	2.5	
U	238	1	No Gas	0.005	71.9	163	61.9	2.5	
Ca	43	2	He	0.077	11401.5	10	100.0	100	
Sb	121	2	He	0.024	61.4	457	13.2	2.5	
Ti	47	2	He	0.115	75.0	20	50.0	2.5	
Cu	63	1	No Gas	0.018	43.9	2020	3.1	2.5	
Se	82	1	No Gas	0.069	1494.4	-72	-146.3	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	739723	2.79	750115	98.61	70	120	
Ge	72	2	He	415803	0.43	418374	99.39	70	120	
Ge	72	1	No Gas	1356981	0.52	1402911	96.73	70	120	
In	115	1	No Gas	1693357	1.00	1746412	96.96	70	120	
Bi	209	1	No Gas	1647974	0.18	1670245	98.67	70	120	

Sample Report

Sample Table

Sample Name	MBLK-185275
Data File Name	020SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:08:47-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 185275
ISTD Ref FileName	004CALB.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	-0.119	-0.119	-20.28	40943	0.00	2000	
Be	9	1	No Gas	-0.015	-0.015	-29.28	10	-0.15	2000	
V	51	2	He	-0.083	-0.083	-45.52	1379	-0.01	2000	
Cr	52	2	He	-0.117	-0.117	-22.88	1483	-0.01	2000	
Fe	56	2	He	0.806	0.806	32.82	23995	0.00	200000	
Se	78	2	He	0.030	0.030	1731.21	184	0.02	2000	
As	75	2	He	0.008	0.008	482.64	82	0.01	2000	
Ca	44	2	He	16.467	16.467	11.80	753	2.19	200000	
Na	23	2	He	0.505	0.505	333.16	105429	0.00	200000	
Mg	24	2	He	8.069	8.069	4.01	3344	0.24	200000	
K	39	2	He	8.017	8.017	10.57	62267	0.01	200000	
Mn	55	2	He	0.137	0.137	38.84	933	0.01	2000	
Co	59	2	He	0.005	0.005	78.47	87	0.01	2000	
Ni	60	2	He	0.013	0.013	54.06	193	0.01	2000	
Cu	63	2	He	0.031	0.031	67.45	1290	0.00	2000	
Zn	66	2	He	1.549	1.549	9.57	1853	0.08	2000	
Al	27	2	He	2.086	2.086	13.40	1180	0.18	2000	
B	11	1	No Gas	2.938	2.938	22.63	13837	0.02	2000	
Al	27	1	No Gas	2.591	2.591	3.82	51275	0.01	2000	
Si	28	1	No Gas	34.960	34.960	5.03	387885	0.01	2000	
Ag	107	1	No Gas	-0.006	-0.006	-204.53	737	0.00	2000	
Cd	111	1	No Gas	-0.007	-0.007	0.00	0	#DIV/0!	2000	
Sr	88	1	No Gas	0.022	0.022	38.06	1530	0.00	2000	
Mo	95	1	No Gas	-0.035	-0.035	-47.58	113	-0.03	2000	
Sn	118	1	No Gas	0.002	0.002	1845.00	1697	0.00	2000	
Sb	121	1	No Gas	0.018	0.018	73.59	723	0.00	2000	
Ba	137	1	No Gas	0.041	0.041	73.78	513	0.01	2000	
Tl	205	1	No Gas	0.022	0.022	20.95	633	0.00	2000	
Tl	203	1	No Gas	0.019	0.019	49.26	217	0.01	2000	
Pb	208	1	No Gas	-0.004	-0.004	-112.96	1517	0.00	2000	
U	238	1	No Gas	0.000	0.000	538.27	27	0.00	2000	
Ca	43	2	He	31.630	31.630	41.36	47	67.78	200000	
Sb	121	2	He	0.011	0.011	131.24	407	0.00	2000	
Ti	47	2	He	0.085	0.085	152.53	17	0.51	2000	
Cu	63	1	No Gas	0.057	0.057	14.32	2344	0.00	2000	
Zn	66	1	No Gas	1.375	1.375	7.78	4064	0.03	2000	
Se	82	1	No Gas	1.577	1.577	126.23	83	1.91	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	769423	0.94	750115	102.57	70	120	
Ge	72	2	He	419459	0.63	418374	100.26	70	120	
Ge	72	1	No Gas	1387081	1.88	1402911	98.87	70	120	
In	115	1	No Gas	1723709	0.72	1746412	98.70	70	120	

Sample Report

Bi	209	1	No Gas	1714443	1.69	1670245	102.65	70	120	

Sample Report

Sample Table

Sample Name	LCS-185275
Data File Name	021SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:10:41-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 185275
ISTD Ref FileName	004CALB.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	-0.014	-0.014	-809.28	43221	0.00	2000	
Be	9	1	No Gas	50.416	50.416	2.62	104407	0.05	2000	
V	51	2	He	49.968	49.968	1.21	178575	0.03	2000	
Cr	52	2	He	49.536	49.536	0.41	208526	0.02	2000	
Fe	56	2	He	5053.673	5053.673	1.11	19046112	0.03	200000	
Se	78	2	He	52.519	52.519	3.16	2864	1.83	2000	
As	75	2	He	51.290	51.290	1.37	29469	0.17	2000	
Ca	44	2	He	4976.682	4976.682	0.52	105841	4.70	200000	
Na	23	2	He	5102.800	5102.800	0.99	3434651	0.15	200000	
Mg	24	2	He	5179.679	5179.679	1.11	1956619	0.26	200000	
K	39	2	He	5255.738	5255.738	2.15	2151505	0.24	200000	
Mn	55	2	He	50.797	50.797	0.81	149268	0.03	2000	
Co	59	2	He	48.822	48.822	0.18	325892	0.01	2000	
Ni	60	2	He	50.677	50.677	0.70	83796	0.06	2000	
Cu	63	2	He	50.825	50.825	1.08	231737	0.02	2000	
Zn	66	2	He	52.930	52.930	0.35	45189	0.12	2000	
Al	27	2	He	105.114	105.114	2.99	22105	0.48	2000	
B	11	1	No Gas	-0.008	-0.008	-5580.70	11330	0.00	2000	
Al	27	1	No Gas	107.886	107.886	2.68	994805	0.01	2000	
Si	28	1	No Gas	90.337	90.337	1.10	620434	0.01	2000	
Ag	107	1	No Gas	51.157	51.157	1.53	480738	0.01	2000	
Cd	111	1	No Gas	51.036	51.036	1.78	97918	0.05	2000	
Sr	88	1	No Gas	0.033	0.033	18.10	1777	0.00	2000	
Mo	95	1	No Gas	50.997	50.997	0.75	175969	0.03	2000	
Sn	118	1	No Gas	0.028	0.028	94.32	1894	0.00	2000	
Sb	121	1	No Gas	48.667	48.667	0.83	398853	0.01	2000	
Ba	137	1	No Gas	49.890	49.890	1.03	144248	0.03	2000	
Tl	205	1	No Gas	42.234	42.234	3.60	904231	0.00	2000	
Tl	203	1	No Gas	43.033	43.033	3.22	378205	0.01	2000	
Pb	208	1	No Gas	46.745	46.745	2.54	1316000	0.00	2000	
U	238	1	No Gas	0.000	0.000	399.52	30	0.00	2000	
Ca	43	2	He	5042.815	5042.815	3.76	6205	81.27	200000	
Sb	121	2	He	50.401	50.401	0.75	221737	0.02	2000	
Ti	47	2	He	52.515	52.515	7.29	6552	0.80	2000	
Cu	63	1	No Gas	49.676	49.676	0.71	375288	0.01	2000	
Zn	66	1	No Gas	52.830	52.830	1.02	108377	0.05	2000	
Se	82	1	No Gas	56.320	56.320	8.49	6067	0.93	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	793580	2.63	750115	105.79	70	120	
Ge	72	2	He	444992	0.98	418374	106.36	70	120	
Ge	72	1	No Gas	1455126	1.02	1402911	103.72	70	120	
In	115	1	No Gas	1773989	0.51	1746412	101.58	70	120	

Sample Report

Bi	209	1	No Gas	1798853	2.63	1670245	107.70	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	030_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:27:55-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	103.061	1.520	906731	0.57	100	103.1	90	110	
Be	9	1	No Gas	101.114	2.326	184275	1.47	100	101.1	90	110	
V	51	2	He	99.753	0.571	317793	0.37	100	99.8	90	110	
Cr	52	2	He	100.416	1.005	376782	0.28	100	100.4	90	110	
Fe	56	2	He	10297.588	1.327	34747348	0.86	10000	103.0	90	110	
Se	78	2	He	104.868	0.358	4952	0.51	100	104.9	90	110	
As	75	2	He	103.563	0.612	53232	0.42	100	103.6	90	110	
Ca	44	2	He	10179.424	1.125	193509	0.32	10000	101.8	90	110	
Na	23	2	He	10276.587	1.552	6095195	1.12	10000	102.8	90	110	
Mg	24	2	He	10346.150	0.877	3500721	0.08	10000	103.5	90	110	
K	39	2	He	10407.331	1.491	3761668	1.11	10000	104.1	90	110	
Mn	55	2	He	102.294	1.140	268749	0.30	100	102.3	90	110	
Co	59	2	He	98.152	0.677	586887	0.35	100	98.2	90	110	
Ni	60	2	He	101.366	0.834	149995	1.24	100	101.4	90	110	
Cu	63	2	He	100.455	1.238	409248	0.60	100	100.5	90	110	
Zn	66	2	He	104.086	0.907	79033	0.18	100	104.1	90	110	
Al	27	2	He	106.294	3.123	20021	3.43	100	106.3	90	110	
B	11	1	No Gas	517.396	2.453	462803	2.16	500	103.5	90	110	
Al	27	1	No Gas	108.577	3.469	893141	2.32	100	108.6	90	110	
Si	28	1	No Gas	587.174	2.387	2262225	0.86	5000	11.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.685	0.531	877032	0.43	100	102.7	90	110	
Cd	111	1	No Gas	102.345	0.485	178613	0.70	100	102.3	90	110	
Sr	88	1	No Gas	103.551	0.236	1705521	0.44	100	103.6	90	110	
Mo	95	1	No Gas	101.794	1.364	319288	1.18	100	101.8	90	110	
Sn	118	1	No Gas	105.870	0.741	537078	0.73	100	105.9	90	110	
Sb	121	1	No Gas	99.839	2.122	729474	0.83	100	99.8	90	110	
Ba	137	1	No Gas	100.733	0.664	264551	0.58	100	100.7	90	110	
Tl	205	1	No Gas	101.880	1.057	1938269	1.46	100	101.9	90	110	
Tl	203	1	No Gas	93.896	0.888	733269	1.22	100	93.9	90	110	
Pb	208	1	No Gas	102.145	0.523	2553308	0.96	100	102.1	90	110	
U	238	1	No Gas	102.255	0.339	2826155	0.75	100	102.3	90	110	
Ca	43	2	He	10283.889	2.526	11325	2.21	10000	102.8	90	110	
Sb	121	2	He	103.288	0.656	406735	0.59	100	103.3	90	110	
Ti	47	2	He	100.567	1.135	11238	1.13	100	100.6	90	110	
Cu	63	1	No Gas	97.503	1.581	655508	0.73	100	97.5	90	110	
Se	82	1	No Gas	103.615	1.922	10026	1.44	100	103.6	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	698272	0.88	750115	93.09	70	120	
Ge	72	2	He	398653	0.83	418374	95.29	70	120	
Ge	72	1	No Gas	1298470	1.30	1402911	92.56	70	120	
In	115	1	No Gas	1613642	0.21	1746412	92.40	70	120	
Bi	209	1	No Gas	1597653	0.77	1670245	95.65	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	031_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:29:44-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	0.192	47.2	39759	1.2	0.5	
Be	9	1	No Gas	-0.010	-44.1	18	41.7	0.5	
V	51	2	He	-0.331	-0.8	520	2.2	2.5	
Cr	52	2	He	-0.038	-111.5	1687	8.9	2.5	
Fe	56	2	He	-0.371	-16.8	18666	1.5	100	
Se	78	2	He	-0.237	-301.1	161	20.5	2	
As	75	2	He	-0.057	-24.8	44	15.6	2.5	
Ca	44	2	He	-7.443	-49.7	260	26.6	100	
Na	23	2	He	1.303	196.1	99768	0.5	100	
Mg	24	2	He	-0.399	-21.3	310	9.7	100	
K	39	2	He	7.399	40.3	58437	1.3	100	
Mn	55	2	He	0.109	7.0	807	2.6	2.5	
Co	59	2	He	0.002	308.9	67	60.6	2.5	
Ni	60	2	He	-0.039	-11.6	107	5.4	2.5	
Cu	63	2	He	-0.016	-232.4	1027	15.4	2	
Zn	66	2	He	-0.280	-20.6	380	11.5	2.5	
Al	27	2	He	-1.818	-29.3	410	23.5	5	
B	11	1	No Gas	21.311	16.8	28623	11.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.420	-5.4	16153	1.0	5	
Si	28	1	No Gas	-4.866	-47.9	228249	0.9	10	
Ag	107	1	No Gas	-0.023	-5.6	550	1.8	2.5	
Cd	111	1	No Gas	-0.001	-432.3	10	100.0	1	
Sr	88	1	No Gas	-0.028	-3.3	620	3.2	2.5	
Mo	95	1	No Gas	-0.034	-71.7	110	68.6	2.5	
Sn	118	1	No Gas	-0.036	-41.3	1407	5.3	5	
Sb	121	1	No Gas	0.009	92.0	613	9.8	2.5	
Ba	137	1	No Gas	-0.036	-101.9	280	34.4	2.5	
Tl	205	1	No Gas	0.172	41.1	3507	38.6	1	
Tl	203	1	No Gas	0.179	32.3	1480	30.8	1	
Pb	208	1	No Gas	-0.022	-10.9	973	6.2	2.5	
U	238	1	No Gas	0.006	4.0	183	3.1	2.5	
Ca	43	2	He	-5.571	-96.0	3	173.2	100	
Sb	121	2	He	-0.003	-390.2	330	10.9	2.5	
Ti	47	2	He	0.003	3623.8	7	173.2	2.5	
Cu	63	1	No Gas	0.006	160.0	1870	4.2	2.5	
Se	82	1	No Gas	0.458	431.0	-35	-567.7	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	697961	0.76	750115	93.05	70	120	
Ge	72	2	He	395150	0.98	418374	94.45	70	120	
Ge	72	1	No Gas	1311172	2.89	1402911	93.46	70	120	
In	115	1	No Gas	1623420	1.09	1746412	92.96	70	120	
Bi	209	1	No Gas	1628151	0.32	1670245	97.48	70	120	

Sample Report

Sample Table

Sample Name	HS22100782-03SD
Data File Name	033SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:34:15-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 185275
ISTD Ref FileName	004CALB.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	0.017	0.087	475.68	39888	0.00	2000	
Be	9	1	No Gas	-0.010	-0.050	-101.77	18	-0.05	2000	
V	51	2	He	-0.242	-1.211	-9.52	838	-0.03	2000	
Cr	52	2	He	0.099	0.496	41.08	2300	0.00	2000	
Fe	56	2	He	745.435	3727.173	0.32	2629735	0.03	200000	
Se	78	2	He	-0.198	-0.988	-303.49	171	-0.12	2000	
As	75	2	He	0.713	3.565	11.69	457	0.16	2000	
Ca	44	2	He	8257.429	41287.147	0.71	162986	5.07	200000	
Na	23	2	He	6165.829	30829.143	1.74	3836720	0.16	200000	
Mg	24	2	He	1185.477	5927.384	0.48	416688	0.28	200000	
K	39	2	He	1051.619	5258.094	0.60	447015	0.24	200000	
Mn	55	2	He	35.430	177.152	1.03	96962	0.04	2000	
Co	59	2	He	0.051	0.253	22.34	370	0.01	2000	
Ni	60	2	He	0.119	0.593	31.41	353	0.03	2000	
Cu	63	2	He	0.094	0.469	39.35	1537	0.01	2000	
Zn	66	2	He	3.782	18.910	4.12	3574	0.11	2000	
Al	27	2	He	3.765	18.824	13.86	1480	0.25	2000	
B	11	1	No Gas	18.748	93.740	2.58	27479	0.07	2000	
Al	27	1	No Gas	3.922	19.611	1.47	61165	0.01	2000	
Si	28	1	No Gas	357.371	1786.854	1.00	1536060	0.02	2000	
Ag	107	1	No Gas	-0.031	-0.157	-19.71	493	-0.01	2000	
Cd	111	1	No Gas	-0.005	-0.026	-59.71	3	-0.16	2000	
Sr	88	1	No Gas	26.370	131.850	1.34	450677	0.01	2000	
Mo	95	1	No Gas	-0.011	-0.053	-86.27	190	-0.01	2000	
Sn	118	1	No Gas	-0.034	-0.168	-44.51	1460	0.00	2000	
Sb	121	1	No Gas	0.038	0.191	36.05	857	0.00	2000	
Ba	137	1	No Gas	15.097	75.486	1.18	41396	0.04	2000	
Tl	205	1	No Gas	0.005	0.027	69.76	287	0.00	2000	
Tl	203	1	No Gas	0.007	0.034	79.96	110	0.01	2000	
Pb	208	1	No Gas	0.122	0.610	4.28	4644	0.00	2000	
U	238	1	No Gas	0.001	0.004	30.75	43	0.00	2000	
Ca	43	2	He	8394.803	41974.015	2.85	9597	87.47	200000	
Sb	121	2	He	0.026	0.131	54.36	463	0.01	2000	
Ti	47	2	He	0.145	0.725	91.86	23	0.62	2000	
Cu	63	1	No Gas	0.173	0.863	14.75	3097	0.01	2000	
Zn	66	1	No Gas	3.689	18.447	4.38	8326	0.04	2000	
Se	82	1	No Gas	1.911	9.556	50.28	116	1.65	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	727101	0.71	750115	96.93	70	120	
Ge	72	2	He	413694	0.54	418374	98.88	70	120	
Ge	72	1	No Gas	1354838	0.58	1402911	96.57	70	120	
In	115	1	No Gas	1671551	1.59	1746412	95.71	70	120	

Sample Report

Bi	209	1	No Gas	1630928	1.43	1670245	97.65	70	120	

Sample Report

Sample Table

Sample Name	HS22100782-03MS
Data File Name	034SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:36:07-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 185275
ISTD Ref FileName	004CALB.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	0.045	0.045	147.53	43454	0.00	2000	
Be	9	1	No Gas	50.400	50.400	0.87	103593	0.05	2000	
V	51	2	He	49.741	49.741	0.87	171546	0.03	2000	
Cr	52	2	He	49.171	49.171	1.21	199757	0.02	2000	
Fe	56	2	He	8503.216	8503.216	0.40	30912755	0.03	200000	
Se	78	2	He	53.113	53.113	1.58	2794	1.90	2000	
As	75	2	He	54.457	54.457	0.90	30190	0.18	2000	
Ca	44	2	He	49651.624	49651.624	0.90	1015072	4.89	200000	
Na	23	2	He	35239.052	35239.052	0.27	22254102	0.16	200000	
Mg	24	2	He	10878.364	10878.364	0.89	3965354	0.27	200000	
K	39	2	He	10350.665	10350.665	0.20	4030542	0.26	200000	
Mn	55	2	He	226.281	226.281	0.56	639721	0.04	2000	
Co	59	2	He	48.498	48.498	0.88	312409	0.02	2000	
Ni	60	2	He	49.487	49.487	0.87	78968	0.06	2000	
Cu	63	2	He	50.177	50.177	0.51	220804	0.02	2000	
Zn	66	2	He	69.763	69.763	1.18	57274	0.12	2000	
Al	27	2	He	118.328	118.328	4.44	23921	0.49	2000	
B	11	1	No Gas	60.927	60.927	3.39	71368	0.09	2000	
Al	27	1	No Gas	120.989	120.989	1.22	1092717	0.01	2000	
Si	28	1	No Gas	1689.185	1689.185	0.12	6665396	0.03	2000	
Ag	107	1	No Gas	49.275	49.275	1.44	456091	0.01	2000	
Cd	111	1	No Gas	49.599	49.599	0.85	93742	0.05	2000	
Sr	88	1	No Gas	140.630	140.630	2.92	2506909	0.01	2000	
Mo	95	1	No Gas	50.090	50.090	2.43	170206	0.03	2000	
Sn	118	1	No Gas	0.034	0.034	66.48	1897	0.00	2000	
Sb	121	1	No Gas	47.491	47.491	1.82	382436	0.01	2000	
Ba	137	1	No Gas	124.982	124.982	1.89	355262	0.04	2000	
Tl	205	1	No Gas	42.350	42.350	1.68	876289	0.00	2000	
Tl	203	1	No Gas	43.758	43.758	1.32	371667	0.01	2000	
Pb	208	1	No Gas	47.148	47.148	2.04	1282495	0.00	2000	
U	238	1	No Gas	0.002	0.002	20.46	97	0.00	2000	
Ca	43	2	He	46712.250	46712.250	0.45	55381	84.35	200000	
Sb	121	2	He	50.152	50.152	1.53	212927	0.02	2000	
Ti	47	2	He	50.357	50.357	1.61	6065	0.83	2000	
Cu	63	1	No Gas	48.598	48.598	1.02	360794	0.01	2000	
Zn	66	1	No Gas	68.704	68.704	1.92	138046	0.05	2000	
Se	82	1	No Gas	50.853	50.853	3.97	5376	0.95	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	787301	1.09	750115	104.96	70	120	
Ge	72	2	He	429432	0.85	418374	102.64	70	120	
Ge	72	1	No Gas	1429784	0.60	1402911	101.92	70	120	
In	115	1	No Gas	1747382	1.83	1746412	100.06	70	120	

Sample Report

Bi	209	1	No Gas	1737773	1.94	1670245	104.04	70	120	

Sample Report

Sample Table

Sample Name	HS22100782-03MSD
Data File Name	035SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:37:58-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 185275
ISTD Ref FileName	004CALB.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	-0.039	-0.039	-61.35	42561	0.00	2000	
Be	9	1	No Gas	50.673	50.673	0.40	103929	0.05	2000	
V	51	2	He	50.897	50.897	0.92	175069	0.03	2000	
Cr	52	2	He	50.691	50.691	0.33	205379	0.02	2000	
Fe	56	2	He	8878.543	8878.543	0.58	32197255	0.03	200000	
Se	78	2	He	54.989	54.989	4.98	2878	1.91	2000	
As	75	2	He	56.156	56.156	1.56	31053	0.18	2000	
Ca	44	2	He	50147.104	50147.104	1.04	1022760	4.90	200000	
Na	23	2	He	36057.514	36057.514	1.35	22712044	0.16	200000	
Mg	24	2	He	11158.252	11158.252	1.39	4057136	0.28	200000	
K	39	2	He	10574.691	10574.691	0.33	4106426	0.26	200000	
Mn	55	2	He	232.200	232.200	0.70	654837	0.04	2000	
Co	59	2	He	49.472	49.472	0.93	317902	0.02	2000	
Ni	60	2	He	51.806	51.806	0.31	82462	0.06	2000	
Cu	63	2	He	51.347	51.347	1.17	225370	0.02	2000	
Zn	66	2	He	71.440	71.440	1.75	58489	0.12	2000	
Al	27	2	He	126.144	126.144	2.57	25383	0.50	2000	
B	11	1	No Gas	63.653	63.653	0.17	73908	0.09	2000	
Al	27	1	No Gas	128.037	128.037	1.32	1144808	0.01	2000	
Si	28	1	No Gas	1747.406	1747.406	1.55	6827209	0.03	2000	
Ag	107	1	No Gas	50.551	50.551	1.09	467156	0.01	2000	
Cd	111	1	No Gas	51.641	51.641	1.71	97434	0.05	2000	
Sr	88	1	No Gas	142.469	142.469	1.33	2536151	0.01	2000	
Mo	95	1	No Gas	51.009	51.009	1.15	173079	0.03	2000	
Sn	118	1	No Gas	-0.006	-0.006	-394.44	1677	0.00	2000	
Sb	121	1	No Gas	48.801	48.801	1.69	389636	0.01	2000	
Ba	137	1	No Gas	127.467	127.467	1.16	361780	0.04	2000	
Tl	205	1	No Gas	45.658	45.658	0.60	935213	0.00	2000	
Tl	203	1	No Gas	46.683	46.683	0.68	392496	0.01	2000	
Pb	208	1	No Gas	48.691	48.691	0.91	1311102	0.00	2000	
U	238	1	No Gas	0.002	0.002	8.47	93	0.00	2000	
Ca	43	2	He	46802.759	46802.759	2.04	55348	84.56	200000	
Sb	121	2	He	51.164	51.164	0.89	216687	0.02	2000	
Ti	47	2	He	52.252	52.252	5.95	6278	0.83	2000	
Cu	63	1	No Gas	50.043	50.043	1.18	368316	0.01	2000	
Zn	66	1	No Gas	70.876	70.876	1.77	141158	0.05	2000	
Se	82	1	No Gas	54.185	54.185	1.24	5687	0.95	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	785577	0.31	750115	104.73	70	120	
Ge	72	2	He	428380	0.49	418374	102.39	70	120	
Ge	72	1	No Gas	1417797	1.57	1402911	101.06	70	120	
In	115	1	No Gas	1744561	1.29	1746412	99.89	70	120	

Sample Report

Bi	209	1	No Gas	1719898	0.32	1670245	102.97	70	120	

Sample Report

Sample Table

Sample Name	HS22100890-01
Data File Name	039SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:52:37-05:00
Sample Type	Sample
Dilution	20
Comment	DOD TW 185275
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.395	107.894	2.51	90721	0.01	2000	
Be	9	1	No Gas	0.335	6.693	9.57	700	0.05	2000	
V	51	2	He	-0.288	-5.769	-1.17	684	-0.04	2000	
Cr	52	2	He	12.899	257.975	0.83	51855	0.02	2000	
Fe	56	2	He	1806.117	36122.344	0.92	6336591	0.03	200000	
Se	78	2	He	0.117	2.335	140.40	185	0.06	2000	
As	75	2	He	0.004	0.079	808.87	79	0.00	2000	
Ca	44	2	He	1385.869	27717.375	1.96	27682	5.01	200000	
Na	23	2	He	21317.907	426358.137	1.14	12999221	0.16	200000	
Mg	24	2	He	2147.038	42940.759	1.19	753636	0.28	200000	
K	39	2	He	141.237	2824.746	4.89	110533	0.13	200000	
Mn	55	2	He	350.548	7010.960	0.88	953635	0.04	2000	
Co	59	2	He	12.757	255.139	1.53	79139	0.02	2000	
Ni	60	2	He	39.753	795.068	1.61	61093	0.07	2000	
Cu	63	2	He	0.112	2.249	18.36	1613	0.01	2000	
Zn	66	2	He	17.090	341.792	1.84	13971	0.12	2000	
Al	27	2	He	130.337	2606.732	0.67	25280	0.52	2000	
B	11	1	No Gas	0.693	13.866	22.58	11486	0.01	2000	
Al	27	1	No Gas	131.921	2638.427	1.03	1138081	0.01	2000	
Si	28	1	No Gas	1378.698	27573.964	1.60	5255071	0.03	2000	
Ag	107	1	No Gas	-0.034	-0.687	-23.29	463	-0.01	2000	
Cd	111	1	No Gas	0.026	0.526	54.36	60	0.04	2000	
Sr	88	1	No Gas	29.015	580.297	1.29	491672	0.01	2000	
Mo	95	1	No Gas	-0.024	-0.487	-74.20	143	-0.02	2000	
Sn	118	1	No Gas	-0.033	-0.663	-80.47	1450	0.00	2000	
Sb	121	1	No Gas	0.172	3.430	18.04	1890	0.01	2000	
Ba	137	1	No Gas	0.275	5.505	13.99	1127	0.02	2000	
Tl	205	1	No Gas	0.008	0.170	43.17	353	0.00	2000	
Tl	203	1	No Gas	0.017	0.345	18.81	197	0.01	2000	
Pb	208	1	No Gas	0.007	0.141	43.67	1747	0.00	2000	
U	238	1	No Gas	0.031	0.619	8.43	913	0.00	2000	
Ca	43	2	He	1434.880	28697.602	9.36	1647	87.13	200000	
Sb	121	2	He	0.135	2.697	14.08	907	0.01	2000	
Ti	47	2	He	0.030	0.600	291.13	10	0.30	2000	
Cu	63	1	No Gas	0.252	5.030	7.53	3687	0.01	2000	
Zn	66	1	No Gas	17.300	346.005	3.40	34330	0.05	2000	
Se	82	1	No Gas	-0.163	-3.266	-555.35	-96	0.17	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	757512	0.94	750115	100.99	70	120	
Ge	72	2	He	413364	0.93	418374	98.80	70	120	
Ge	72	1	No Gas	1368930	1.49	1402911	97.58	70	120	
In	115	1	No Gas	1657824	2.10	1746412	94.93	70	120	

Sample Report

Bi	209	1	No Gas	1663028	1.24	1670245	99.57	70	120	

Sample Report

Sample Table

Sample Name	HS22100782-03PDS
Data File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:54:30-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 185275
ISTD Ref FileName	004CALB.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	0.104	0.104	23.83	44167	0.00	2000	
Be	9	1	No Gas	84.705	84.705	1.27	174679	0.05	2000	
V	51	2	He	84.995	84.995	1.21	301157	0.03	2000	
Cr	52	2	He	84.739	84.739	1.00	353669	0.02	2000	
Fe	56	2	He	12554.935	12554.935	1.15	47073544	0.03	200000	
Se	78	2	He	91.667	91.667	3.75	4835	1.90	2000	
As	75	2	He	93.722	93.722	0.39	53543	0.18	2000	
Ca	44	2	He	50500.401	50500.401	0.84	1065076	4.74	200000	
Na	23	2	He	36430.008	36430.008	0.88	23729431	0.15	200000	
Mg	24	2	He	13908.028	13908.028	0.96	5229607	0.27	200000	
K	39	2	He	13630.517	13630.517	1.49	5455526	0.25	200000	
Mn	55	2	He	250.415	250.415	0.51	730289	0.03	2000	
Co	59	2	He	82.208	82.208	0.71	546268	0.02	2000	
Ni	60	2	He	84.767	84.767	1.42	139411	0.06	2000	
Cu	63	2	He	85.569	85.569	0.86	387590	0.02	2000	
Zn	66	2	He	103.835	103.835	0.64	87618	0.12	2000	
Al	27	2	He	114.242	114.242	0.67	23851	0.48	2000	
B	11	1	No Gas	50.968	50.968	3.82	61768	0.08	2000	
Al	27	1	No Gas	112.238	112.238	2.30	1035842	0.01	2000	
Si	28	1	No Gas	1601.491	1601.491	0.40	6458467	0.02	2000	
Ag	107	1	No Gas	85.722	85.722	0.88	809828	0.01	2000	
Cd	111	1	No Gas	85.107	85.107	0.85	164259	0.05	2000	
Sr	88	1	No Gas	131.777	131.777	0.92	2399864	0.01	2000	
Mo	95	1	No Gas	85.584	85.584	0.40	296914	0.03	2000	
Sn	118	1	No Gas	-0.018	-0.018	-152.78	1647	0.00	2000	
Sb	121	1	No Gas	78.789	78.789	1.15	646656	0.01	2000	
Ba	137	1	No Gas	154.786	154.786	0.51	449333	0.03	2000	
Tl	205	1	No Gas	83.940	83.940	1.53	1759449	0.00	2000	
Tl	203	1	No Gas	76.785	76.785	1.19	660637	0.01	2000	
Pb	208	1	No Gas	79.712	79.712	1.17	2195522	0.00	2000	
U	238	1	No Gas	0.002	0.002	23.71	100	0.00	2000	
Ca	43	2	He	47860.147	47860.147	0.68	58535	81.76	200000	
Sb	121	2	He	82.965	82.965	1.67	363117	0.02	2000	
Ti	47	2	He	87.024	87.024	1.67	10808	0.81	2000	
Cu	63	1	No Gas	82.822	82.822	0.65	625628	0.01	2000	
Zn	66	1	No Gas	102.776	102.776	1.11	209863	0.05	2000	
Se	82	1	No Gas	90.383	90.383	3.84	9809	0.92	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	790053	0.78	750115	105.32	70	120	
Ge	72	2	He	443018	0.94	418374	105.89	70	120	
Ge	72	1	No Gas	1458082	0.93	1402911	103.93	70	120	
In	115	1	No Gas	1784510	0.39	1746412	102.18	70	120	

Sample Report

Bi	209	1	No Gas	1760212	0.96	1670245	105.39	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	042_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T11:58:41-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	105.291	1.068	939156	1.97	100	105.3	90	110	
Be	9	1	No Gas	102.387	1.586	189320	0.57	100	102.4	90	110	
V	51	2	He	101.009	0.675	333528	0.88	100	101.0	90	110	
Cr	52	2	He	101.134	1.331	393333	1.53	100	101.1	90	110	
Fe	56	2	He	10343.408	0.777	36177475	0.92	10000	103.4	90	110	
Se	78	2	He	105.390	1.909	5157	1.88	100	105.4	90	110	
As	75	2	He	104.143	0.262	55485	0.46	100	104.1	90	110	
Ca	44	2	He	10379.535	1.048	204519	1.25	10000	103.8	90	110	
Na	23	2	He	10335.088	0.243	6353354	0.56	10000	103.4	90	110	
Mg	24	2	He	10387.560	1.339	3643246	1.66	10000	103.9	90	110	
K	39	2	He	10636.372	1.662	3983782	1.96	10000	106.4	90	110	
Mn	55	2	He	102.951	0.810	280363	1.13	100	103.0	90	110	
Co	59	2	He	98.424	0.266	610002	0.09	100	98.4	90	110	
Ni	60	2	He	101.642	1.011	155887	0.74	100	101.6	90	110	
Cu	63	2	He	101.798	0.204	429862	0.25	100	101.8	90	110	
Zn	66	2	He	103.763	1.031	81668	1.22	100	103.8	90	110	
Al	27	2	He	107.565	0.488	20989	0.48	100	107.6	90	110	
B	11	1	No Gas	523.512	4.144	474880	3.06	500	104.7	90	110	
Al	27	1	No Gas	109.642	1.073	935986	1.41	100	109.6	90	110	
Si	28	1	No Gas	584.490	2.830	2338220	1.34	5000	11.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.543	0.520	899896	1.15	100	102.5	90	110	
Cd	111	1	No Gas	102.527	1.811	183830	1.28	100	102.5	90	110	
Sr	88	1	No Gas	104.345	1.199	1765665	0.28	100	104.3	90	110	
Mo	95	1	No Gas	101.780	0.418	328016	0.75	100	101.8	90	110	
Sn	118	1	No Gas	105.894	0.578	551942	0.38	100	105.9	90	110	
Sb	121	1	No Gas	99.463	0.198	754355	0.99	100	99.5	90	110	
Ba	137	1	No Gas	101.553	0.907	274035	1.53	100	101.6	90	110	
Tl	205	1	No Gas	101.395	1.569	1980032	0.24	100	101.4	90	110	
Tl	203	1	No Gas	93.887	0.193	752691	1.26	100	93.9	90	110	
Pb	208	1	No Gas	102.215	0.699	2622862	0.92	100	102.2	90	110	
U	238	1	No Gas	100.103	0.758	2840385	1.90	100	100.1	90	110	
Ca	43	2	He	10475.787	3.959	11959	4.26	10000	104.8	90	110	
Sb	121	2	He	104.432	0.435	426248	0.35	100	104.4	90	110	
Ti	47	2	He	106.768	2.428	12366	2.19	100	106.8	90	110	
Cu	63	1	No Gas	98.011	0.198	683922	1.01	100	98.0	90	110	
Se	82	1	No Gas	100.903	1.300	10132	1.48	100	100.9	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	708456	1.08	750115	94.45	70	120	
Ge	72	2	He	413197	0.33	418374	98.76	70	120	
Ge	72	1	No Gas	1347609	1.19	1402911	96.06	70	120	
In	115	1	No Gas	1657982	0.95	1746412	94.94	70	120	
Bi	209	1	No Gas	1640155	1.44	1670245	98.20	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	043_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\102722B.b
Acq Date Time	2022-10-27T12:00:30-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.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	0.181	0.8	39520	1.4	0.5	
Be	9	1	No Gas	-0.004	-298.1	28	73.5	0.5	
V	51	2	He	-0.332	-7.7	530	16.1	2.5	
Cr	52	2	He	-0.005	-961.9	1857	10.7	2.5	
Fe	56	2	He	-0.286	-47.8	19431	2.9	100	
Se	78	2	He	-0.523	-98.2	152	15.2	2	
As	75	2	He	-0.053	-46.5	48	26.4	2.5	
Ca	44	2	He	-6.400	-33.1	287	14.1	100	
Na	23	2	He	-2.089	-69.4	100288	1.4	100	
Mg	24	2	He	-0.306	-8.3	350	2.9	100	
K	39	2	He	9.647	30.3	60730	1.8	100	
Mn	55	2	He	0.146	40.1	923	16.3	2.5	
Co	59	2	He	-0.001	-187.7	47	32.7	2.5	
Ni	60	2	He	-0.067	-28.4	67	43.3	2.5	
Cu	63	2	He	-0.047	-8.6	923	2.3	2	
Zn	66	2	He	-0.166	-90.4	477	23.9	2.5	
Al	27	2	He	-1.928	-7.2	400	6.6	5	
B	11	1	No Gas	17.550	16.7	25258	11.5	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.469	-5.6	16293	3.9	5	
Si	28	1	No Gas	-7.910	-8.3	225041	1.2	10	
Ag	107	1	No Gas	-0.022	-42.3	570	15.3	2.5	
Cd	111	1	No Gas	-0.003	-97.5	7	86.6	1	
Sr	88	1	No Gas	-0.031	-10.5	570	9.8	2.5	
Mo	95	1	No Gas	-0.025	-33.8	140	18.9	2.5	
Sn	118	1	No Gas	-0.022	-29.4	1497	2.8	5	
Sb	121	1	No Gas	0.054	20.2	973	7.8	2.5	
Ba	137	1	No Gas	-0.015	-19.2	340	2.9	2.5	
Tl	205	1	No Gas	0.170	43.8	3487	40.2	1	
Tl	203	1	No Gas	0.165	36.1	1373	33.2	1	
Pb	208	1	No Gas	-0.005	-225.0	1407	21.8	2.5	
U	238	1	No Gas	0.005	41.4	163	34.8	2.5	
Ca	43	2	He	3.252	157.0	13	43.3	100	
Sb	121	2	He	0.058	34.2	580	13.8	2.5	
Ti	47	2	He	0.002	4469.8	7	173.2	2.5	
Cu	63	1	No Gas	0.025	120.0	2064	9.8	2.5	
Se	82	1	No Gas	0.668	251.3	-12	-1474.3	2	

QC ISTD Table

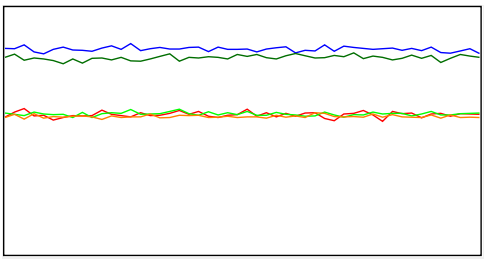
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	695314	1.38	750115	92.69	70	120	
Ge	72	2	He	405126	0.55	418374	96.83	70	120	
Ge	72	1	No Gas	1354574	0.66	1402911	96.55	70	120	
In	115	1	No Gas	1644811	1.61	1746412	94.18	70	120	
Bi	209	1	No Gas	1635564	1.25	1670245	97.92	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\102722A.b
Acq. Date-Time	10/27/2022 09:26:16
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	2830	28302.63		
24	20000	11385	113845.53		
59	20000	16638	166380.95		
115	50000	27928	279279.22		
208	20000	15946	159455.10		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	1.942	5.000	
24	1.267	5.000	
59	1.108	5.000	
115	1.041	5.000	
208	1.251	5.000	

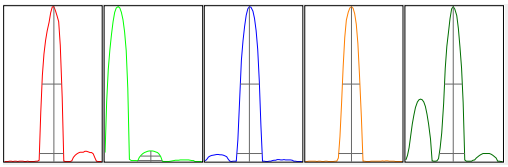
Mass	Background	Background (Required)	Background (Flag)
9	0.700		
24	0.500		
59	0.400		
115	1.100		
208	1.900		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.474 %
Doubly Charged	70 / 140 18.023 %

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	2874.77	9.05	8.90 - 9.10	
24	11595.08	23.95	23.90 - 24.10	
59	17314.25	58.90	58.90 - 59.10	
115	28090.61	114.95	114.90 - 115.10	
208	16071.04	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.737		
24	0.60	0.739		
59	0.59	0.772		
115	0.53	0.731		
208	0.54	0.770		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.76 L/min	Dilution Gas	0.30 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	10.8 V	Deflect	13.2 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-35 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	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-3.0 V
Mass Offset	127	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	0.2 mm	Torch V	-0.1 mm

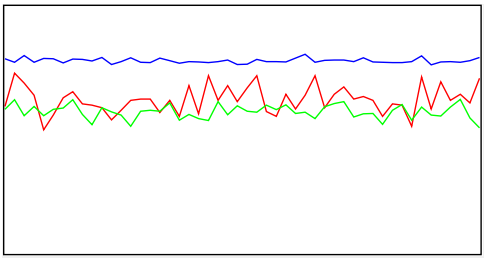
EM

Discriminator	4.4 mV	Analog HV	2135 V	Pulse HV	1137 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	125	1246.66		
24	1000	573	5734.77		
59	10000	7805	78053.26		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	8.869	5.000	Fail
24	4.948	5.000	
59	1.230	5.000	

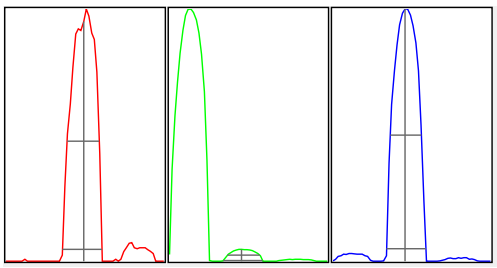
Mass	Background	Background (Required)	Background (Flag)
9	0.100		
24	0.100		
59	0.100		

Oxide/Doubly Charged Ratio

Oxide 156 / 140 0.282 %

Doubly Charged 70 / 140 0.847 %

Resolution/Axis



Integration Time [sec] 0.1

Acquisition Time [sec] 22.24

Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	119.51	9.00	8.90 - 9.10	
24	572.39	23.90	23.90 - 24.10	
59	7906.53	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.740		
24	0.60	0.740		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.58	0.736		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.76 L/min	Dilution Gas	0.30 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	9.9 V	Deflect	0.6 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-15.0 V
Mass Offset	127	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	0.2 mm	Torch V	-0.1 mm

EM

Discriminator	4.4 mV	Analog HV	2135 V	Pulse HV	1137 V

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WorkOrder: HS23010982

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

16-Feb-2023

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ALS WO# HS23010982

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February 03, 2023

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS23010982**

Laboratory Results for: **LHAAP 16 January 2023**

Dear Vicki Graves ,

ALS Environmental received 6 sample(s) on Jan 20, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL
Dane J. Wacasey

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23010982

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23010982-01	16WW48-230119	Groundwater		19-Jan-2023 08:25	20-Jan-2023 10:10	☐
HS23010982-02	16RW04-230119	Groundwater		19-Jan-2023 09:10	20-Jan-2023 10:10	☐
HS23010982-03	16IW09-230119	Groundwater		19-Jan-2023 09:55	20-Jan-2023 10:10	☐
HS23010982-04	16IW20-230119	Groundwater		19-Jan-2023 10:45	20-Jan-2023 10:10	☐
HS23010982-05	16EW02-230119	Groundwater		19-Jan-2023 11:35	20-Jan-2023 10:10	☐
HS23010982-06	16EW03-230119	Groundwater		19-Jan-2023 12:35	20-Jan-2023 10:10	☐

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23010982

Work Order Comments

- The analysis for CO2 by RSK175 was subcontracted to Eurofins in Lancaster, PA. The final report is appended.
- The analysis for Perchlorate was performed by ALS Houston Specialty Lab. The final report is appended.

Work Order Comments

- Receiving notes:
  All NO3 received in neat bottles - pH 5. Due to instrument failure and lack of local subcontract option to meet holding time, a split was preserved for NO3/NO2.
  Preserved with 1ml H2SO4 (1-9) (Lot 3100607012) 1/20/23 @ 14:00. Final pH (1) for all.
  16EW02: 1 of 6 vials for TOC received empty. Ample volume remains for analysis.

GC Semivolatiles by Method RSK-175

Batch ID: R426956

Sample ID: 16EW02-230119 (HS23010982-05MS)

- The recovery of the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) associated with this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS/MSD may be due to sample matrix interference. (Ethene)
- The MS and/or MSD recoveries were outside the control limits for Ethene and Methane due to possible matrix interference; however, the result in the parent sample is greater than 4x the spike amount

Sample ID: HS23010986-05MS

- MS and MSD are for an unrelated sample

GCMS Volatiles by Method SW8260

Batch ID: R426320

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

Batch ID: R426355

Sample ID: HS23010986-05MS

- MS and MSD are for an unrelated sample

Sample ID: 16EW02-230119 (HS23010982-05MS)

- The recovery of the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) associated with this analyte was outside of the established control limits. ; however, the result in the parent sample is greater than 4x the spike amount cis-1,2-Dichloroethene, Vinyl chloride

Batch ID: R426481

Sample ID: 16RW04-230119 (HS23010982-02MS)

- The recovery of the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) associated with this analyte was outside of the established control limit due to suspect matrix effect

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23010982

Wet Chemistry by Method SW9056

Batch ID: R426893

Sample ID: HS23010986-05MS

- MS/MSD was performed on an unrelated sample.

WetChemistry by Method SM5310B

Batch ID: R427019,R427278

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

WetChemistry by Method SW9056

Batch ID: R426640

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

Batch ID: R426893

Sample ID: 16EW02-230119 (HS23010982-05)

- The reporting limit is elevated due to dilution for high concentrations of non-target analytes. (Nitrogen, Nitrate (As N),Nitrogen, Nitrate-Nitrite,Nitrogen, Nitrite (As N))

Sample ID: 16EW02-230119 (HS23010982-05MS)

- The recovery of the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) associated with this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS/MSD may be due to sample matrix interference. (Nitrogen, Nitrate-Nitrite)

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW48-230119
Collection Date: 19-Jan-2023 08:25

ANALYTICAL REPORT
WorkOrder:HS23010982
Lab ID:HS23010982-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	23-Jan-2023 21:05
1,1-Dichloroethene	**60**	J	**20**	**100**	**100**	**ug/L**	100	23-Jan-2023 21:05
1,2-Dichloroethane	**50**	J	**20**	**100**	**100**	**ug/L**	100	23-Jan-2023 21:05
cis-1,2-Dichloroethene	**23,000**		**200**	**1000**	**1000**	**ug/L**	1000	23-Jan-2023 21:26
Methylene chloride	100	U	40	100	200	ug/L	100	23-Jan-2023 21:05
Trichloroethene	**13,000**		**20**	**100**	**100**	**ug/L**	100	23-Jan-2023 21:05
Vinyl chloride	**180**		**20**	**100**	**100**	**ug/L**	100	23-Jan-2023 21:05
Surr: 1,2-Dichloroethane-d4	*98.1*			**0**	*81-118*	*%REC*	*100*	*23-Jan-2023 21:05*
Surr: 1,2-Dichloroethane-d4	*101*			**0**	*81-118*	*%REC*	*1000*	*23-Jan-2023 21:26*
Surr: 4-Bromofluorobenzene	*97.3*			**0**	*85-114*	*%REC*	*100*	*23-Jan-2023 21:05*
Surr: 4-Bromofluorobenzene	*98.8*			**0**	*85-114*	*%REC*	*1000*	*23-Jan-2023 21:26*
Surr: Dibromofluoromethane	*93.1*			**0**	*80-119*	*%REC*	*100*	*23-Jan-2023 21:05*
Surr: Dibromofluoromethane	*94.8*			**0**	*80-119*	*%REC*	*1000*	*23-Jan-2023 21:26*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1000*	*23-Jan-2023 21:26*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*100*	*23-Jan-2023 21:05*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 09:45
Ethene	**0.0156**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 09:45
Methane	**0.0258**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	27-Jan-2023 09:45
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**2,380**		**20.0**	**25.0**	**50.0**	**mg/L**	100	26-Jan-2023 18:43
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	30-Jan-2023 23:12
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 08:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 10:08

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

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW04-230119
Collection Date: 19-Jan-2023 09:10

ANALYTICAL REPORT
WorkOrder:HS23010982
Lab ID:HS23010982-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jan-2023 16:38
1,1-Dichloroethene	**3.5**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 16:38
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 16:38
cis-1,2-Dichloroethene	**160**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 16:38
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jan-2023 16:38
Trichloroethene	**3,300**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2023 10:06
Vinyl chloride	**6.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 16:38
Surr: 1,2-Dichloroethane-d4	*98.6*			**0**	*81-118*	*%REC*	*1*	*24-Jan-2023 16:38*
Surr: 1,2-Dichloroethane-d4	*97.5*			**0**	*81-118*	*%REC*	*100*	*25-Jan-2023 10:06*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*24-Jan-2023 16:38*
Surr: 4-Bromofluorobenzene	*98.2*			**0**	*85-114*	*%REC*	*100*	*25-Jan-2023 10:06*
Surr: Dibromofluoromethane	*92.0*			**0**	*80-119*	*%REC*	*1*	*24-Jan-2023 16:38*
Surr: Dibromofluoromethane	*89.7*			**0**	*80-119*	*%REC*	*100*	*25-Jan-2023 10:06*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*24-Jan-2023 16:38*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*100*	*25-Jan-2023 10:06*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.00186**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 09:53
Ethene	**0.00170**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 09:53
Methane	**0.101**		**0.000535**	**0.00250**	**0.00250**	**mg/L**	5	27-Jan-2023 12:29
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 08:54

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

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16IW09-230119
Collection Date: 19-Jan-2023 09:55

ANALYTICAL REPORT
WorkOrder:HS23010982
Lab ID:HS23010982-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	23-Jan-2023 20:23
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	23-Jan-2023 20:23
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	23-Jan-2023 20:23
cis-1,2-Dichloroethene	**1.9**		**0.20**	**1.0**	**1.0**	**ug/L**	1	23-Jan-2023 20:23
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	23-Jan-2023 20:23
Trichloroethene	**1.6**		**0.20**	**1.0**	**1.0**	**ug/L**	1	23-Jan-2023 20:23
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	23-Jan-2023 20:23
Surr: 1,2-Dichloroethane-d4	*98.9*			**0**	*81-118*	*%REC*	*1*	*23-Jan-2023 20:23*
Surr: 4-Bromofluorobenzene	*100*			**0**	*85-114*	*%REC*	*1*	*23-Jan-2023 20:23*
Surr: Dibromofluoromethane	*94.5*			**0**	*80-119*	*%REC*	*1*	*23-Jan-2023 20:23*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*23-Jan-2023 20:23*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 10:03
Ethene	0.000500	U	0.000234	0.000500	0.00100	mg/L	1	27-Jan-2023 10:03
Methane	**9.72**		**0.0535**	**0.250**	**0.250**	**mg/L**	500	27-Jan-2023 13:02
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**103**		**5.00**	**10.0**	**10.0**	**mg/L**	10	03-Feb-2023 13:22
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**0.241**	J	**0.200**	**0.250**	**0.500**	**mg/L**	1	26-Jan-2023 18:49
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	30-Jan-2023 23:17
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 08:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 10:08

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

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16IW20-230119
Collection Date: 19-Jan-2023 10:45

ANALYTICAL REPORT
WorkOrder:HS23010982
Lab ID:HS23010982-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	23-Jan-2023 20:44
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	23-Jan-2023 20:44
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	23-Jan-2023 20:44
cis-1,2-Dichloroethene	**7.8**		**0.20**	**1.0**	**1.0**	**ug/L**	1	23-Jan-2023 20:44
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	23-Jan-2023 20:44
Trichloroethene	**2.5**		**0.20**	**1.0**	**1.0**	**ug/L**	1	23-Jan-2023 20:44
Vinyl chloride	**18**		**0.20**	**1.0**	**1.0**	**ug/L**	1	23-Jan-2023 20:44
Surr: 1,2-Dichloroethane-d4	*99.2*			**0**	*81-118*	*%REC*	*1*	*23-Jan-2023 20:44*
Surr: 4-Bromofluorobenzene	*98.1*			**0**	*85-114*	*%REC*	*1*	*23-Jan-2023 20:44*
Surr: Dibromofluoromethane	*93.6*			**0**	*80-119*	*%REC*	*1*	*23-Jan-2023 20:44*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*23-Jan-2023 20:44*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 10:11
Ethene	**0.0336**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 10:11
Methane	**6.27**		**0.0535**	**0.250**	**0.250**	**mg/L**	500	27-Jan-2023 13:10
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**9.00**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 18:23
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**190**		**1.00**	**1.25**	**2.50**	**mg/L**	5	26-Jan-2023 18:55
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	30-Jan-2023 23:58
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 08:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 10:08

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

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16EW02-230119
Collection Date: 19-Jan-2023 11:35

ANALYTICAL REPORT
WorkOrder:HS23010982
Lab ID:HS23010982-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	**120**		**30**	**100**	**100**	**ug/L**	100	24-Jan-2023 09:58
1,1-Dichloroethene	**2,800**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 09:58
1,2-Dichloroethane	**950**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 09:58
cis-1,2-Dichloroethene	**39,000**		**40**	**200**	**200**	**ug/L**	200	23-Jan-2023 16:11
Methylene chloride	100	U	40	100	200	ug/L	100	24-Jan-2023 09:58
Trichloroethene	**32,000**		**40**	**200**	**200**	**ug/L**	200	23-Jan-2023 16:11
Vinyl chloride	**1,100**		**40**	**200**	**200**	**ug/L**	200	23-Jan-2023 16:11
Surr: 1,2-Dichloroethane-d4	*99.3*			**0**	*81-118*	*%REC*	*200*	*23-Jan-2023 16:11*
Surr: 1,2-Dichloroethane-d4	*101*			**0**	*81-118*	*%REC*	*100*	*24-Jan-2023 09:58*
Surr: 4-Bromofluorobenzene	*97.7*			**0**	*85-114*	*%REC*	*200*	*23-Jan-2023 16:11*
Surr: 4-Bromofluorobenzene	*99.8*			**0**	*85-114*	*%REC*	*100*	*24-Jan-2023 09:58*
Surr: Dibromofluoromethane	*93.4*			**0**	*80-119*	*%REC*	*200*	*23-Jan-2023 16:11*
Surr: Dibromofluoromethane	*94.9*			**0**	*80-119*	*%REC*	*100*	*24-Jan-2023 09:58*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*200*	*23-Jan-2023 16:11*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*100*	*24-Jan-2023 09:58*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 10:22
Ethene	**0.436**		**0.00585**	**0.0125**	**0.0250**	**mg/L**	25	27-Jan-2023 13:19
Methane	**0.437**		**0.00268**	**0.0125**	**0.0125**	**mg/L**	25	27-Jan-2023 13:19
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**10.9**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 18:37
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**2,770**		**20.0**	**25.0**	**50.0**	**mg/L**	100	26-Jan-2023 19:01
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	31-Jan-2023 00:09
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 08:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 10:08

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

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16EW03-230119
Collection Date: 19-Jan-2023 12:35

ANALYTICAL REPORT
WorkOrder:HS23010982
Lab ID:HS23010982-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jan-2023 17:20
1,1-Dichloroethene	**6.6**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 17:20
1,2-Dichloroethane	**1.1**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 17:20
cis-1,2-Dichloroethene	**1,200**		**4.0**	**20**	**20**	**ug/L**	20	25-Jan-2023 11:09
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jan-2023 17:20
Trichloroethene	**420**		**4.0**	**20**	**20**	**ug/L**	20	25-Jan-2023 11:09
Vinyl chloride	**630**		**4.0**	**20**	**20**	**ug/L**	20	25-Jan-2023 11:09
Surr: 1,2-Dichloroethane-d4	*98.0*			**0**	*81-118*	*%REC*	*1*	*24-Jan-2023 17:20*
Surr: 1,2-Dichloroethane-d4	*98.6*			**0**	*81-118*	*%REC*	*20*	*25-Jan-2023 11:09*
Surr: 4-Bromofluorobenzene	*98.9*			**0**	*85-114*	*%REC*	*1*	*24-Jan-2023 17:20*
Surr: 4-Bromofluorobenzene	*99.1*			**0**	*85-114*	*%REC*	*20*	*25-Jan-2023 11:09*
Surr: Dibromofluoromethane	*92.1*			**0**	*80-119*	*%REC*	*1*	*24-Jan-2023 17:20*
Surr: Dibromofluoromethane	*90.3*			**0**	*80-119*	*%REC*	*20*	*25-Jan-2023 11:09*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1*	*24-Jan-2023 17:20*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*20*	*25-Jan-2023 11:09*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 11:00
Ethene	**0.354**		**0.0234**	**0.0500**	**0.100**	**mg/L**	100	27-Jan-2023 13:28
Methane	**2.16**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	27-Jan-2023 13:28
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**15.7**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 19:06
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**2,270**		**10.0**	**12.5**	**25.0**	**mg/L**	50	26-Jan-2023 19:06
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	31-Jan-2023 00:04
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 08:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2023 10:08

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

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R426320 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23010982-01	16WW48-230119	19 Jan 2023 08:25			23 Jan 2023 21:26	1000
HS23010982-01	16WW48-230119	19 Jan 2023 08:25			23 Jan 2023 21:05	100
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			23 Jan 2023 20:23	1
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			23 Jan 2023 20:44	1
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			23 Jan 2023 16:11	200
Batch ID: R426355 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23010982-02	16RW04-230119	19 Jan 2023 09:10			24 Jan 2023 16:38	1
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			24 Jan 2023 09:58	100
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			24 Jan 2023 17:20	1
Batch ID: R426481 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23010982-02	16RW04-230119	19 Jan 2023 09:10			25 Jan 2023 10:06	100
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			25 Jan 2023 11:09	20
Batch ID: R426640 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS23010982-01	16WW48-230119	19 Jan 2023 08:25			26 Jan 2023 18:43	100
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			26 Jan 2023 18:49	1
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			26 Jan 2023 18:55	5
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			26 Jan 2023 19:01	100
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			26 Jan 2023 19:06	50
Batch ID: R426786 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23010982-01	16WW48-230119	19 Jan 2023 08:25			30 Jan 2023 08:54	1
HS23010982-02	16RW04-230119	19 Jan 2023 09:10			30 Jan 2023 08:54	1
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			30 Jan 2023 08:54	1
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			30 Jan 2023 08:54	1
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			30 Jan 2023 08:54	1
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			30 Jan 2023 08:54	1
Batch ID: R426805 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Groundwater	
HS23010982-01	16WW48-230119	19 Jan 2023 08:25			30 Jan 2023 10:08	1
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			30 Jan 2023 10:08	1
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			30 Jan 2023 10:08	1
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			30 Jan 2023 10:08	1
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			30 Jan 2023 10:08	1
Batch ID: R426893 (0)	**Test Name :** NITRATE/NITRITE BY IC BY SW9056A				**Matrix:** Groundwater	
HS23010982-01	16WW48-230119	19 Jan 2023 08:25			30 Jan 2023 23:12	5
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			30 Jan 2023 23:17	5
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			30 Jan 2023 23:58	5
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			31 Jan 2023 00:09	5
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			31 Jan 2023 00:04	5

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023 **DATES REPORT**
WorkOrder: HS23010982

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R426956 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS23010982-01	16WW48-230119	19 Jan 2023 08:25			27 Jan 2023 09:45	1
HS23010982-02	16RW04-230119	19 Jan 2023 09:10			27 Jan 2023 12:29	5
HS23010982-02	16RW04-230119	19 Jan 2023 09:10			27 Jan 2023 09:53	1
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			27 Jan 2023 13:02	500
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			27 Jan 2023 10:03	1
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			27 Jan 2023 13:10	500
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			27 Jan 2023 10:11	1
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			27 Jan 2023 13:19	25
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			27 Jan 2023 10:22	1
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			27 Jan 2023 13:28	100
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			27 Jan 2023 11:00	1
Batch ID: R427019 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS23010982-04	16IW20-230119	19 Jan 2023 10:45			30 Jan 2023 18:23	1
HS23010982-05	16EW02-230119	19 Jan 2023 11:35			30 Jan 2023 18:37	1
HS23010982-06	16EW03-230119	19 Jan 2023 12:35			30 Jan 2023 19:06	1
Batch ID: R427278 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS23010982-03	16IW09-230119	19 Jan 2023 09:55			03 Feb 2023 13:22	10

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426956 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-230127** Units: **mg/L** Analysis Date: **27-Jan-2023 09:29**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098926** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100								U
Ethene	0.000500	0.00100								U
Methane	0.000500	0.000500								U

LCS Sample ID: **LCS-230127** Units: **mg/L** Analysis Date: **27-Jan-2023 09:37**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098927** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0203	0.00100	0.01804	0	112	75 - 125				
Ethene	0.0194	0.00100	0.0168	0	116	75 - 125				
Methane	0.00914	0.000500	0.009647	0	94.8	75 - 125				

MS Sample ID: **HS23010986-05MS** Units: **mg/L** Analysis Date: **27-Jan-2023 11:47**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098940** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0287	0.00100	0.01804	0	159	75 - 125				S
Ethene	0.0282	0.00100	0.0168	0.007751	122	75 - 125				
Methane	0.0610	0.000500	0.009647	0.06470	-38.6	75 - 125				SEO

MS Sample ID: **HS23010982-05MS** Units: **mg/L** Analysis Date: **27-Jan-2023 10:31**
Client ID: **16EW02-230119** Run ID: **FID-4_426956** SeqNo: **7098933** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0458	0.00100	0.01804	0	254	75 - 125				S
Ethene	0.451	0.00100	0.0168	0.4701	-116	75 - 125				SEO
Methane	0.394	0.000500	0.009647	0.4134	-198	75 - 125				SEO

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426956 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MSD Sample ID: **HS23010986-05MSD** Units: **mg/L** Analysis Date: **27-Jan-2023 11:56**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098941** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0274	0.00100	0.01804	0	152	75 - 125	0.02871	4.51	30	S
Ethene	0.0288	0.00100	0.0168	0.007751	125	75 - 125	0.02821	1.92	30	S
Methane	0.0604	0.000500	0.009647	0.06470	-44.3	75 - 125	0.06097	0.904	30	SEO

MSD Sample ID: **HS23010982-05MSD** Units: **mg/L** Analysis Date: **27-Jan-2023 10:40**
Client ID: **16EW02-230119** Run ID: **FID-4_426956** SeqNo: **7098934** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0418	0.00100	0.01804	0	232	75 - 125	0.04578	9.02	30	S
Ethene	0.450	0.00100	0.0168	0.4701	-117	75 - 125	0.4506	0.0421	30	SEO
Methane	0.391	0.000500	0.009647	0.4134	-229	75 - 125	0.3943	0.758	30	SEO

The following samples were analyzed in this batch: HS23010982-01 HS23010982-02 HS23010982-03 HS23010982-04 HS23010982-05 HS23010982-06

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426320 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230123** Units: **ug/L** Analysis Date: **23-Jan-2023 13:22**
Client ID: Run ID: **VOA6_426320** SeqNo: **7084047** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*49.84*	*1.0*	*50*	*0*	*99.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.23*	*1.0*	*50*	*0*	*100*	*85 - 114*				
Surr: Dibromofluoromethane	*46.52*	*1.0*	*50*	*0*	*93.0*	*80 - 119*				
Surr: Toluene-d8	*52.64*	*1.0*	*50*	*0*	*105*	*89 - 112*				

LCS Sample ID: **VLCSW-233120** Units: **ug/L** Analysis Date: **23-Jan-2023 12:40**
Client ID: Run ID: **VOA6_426320** SeqNo: **7084046** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.37	1.0	20	0	102	80 - 119				
1,1-Dichloroethene	21.61	1.0	20	0	108	71 - 131				
1,2-Dichloroethane	23.17	1.0	20	0	116	73 - 128				
cis-1,2-Dichloroethene	20.59	1.0	20	0	103	78 - 123				
Methylene chloride	20.48	2.0	20	0	102	74 - 124				
Trichloroethene	21.86	1.0	20	0	109	79 - 123				
Vinyl chloride	20.85	1.0	20	0	104	58 - 137				
Surr: 1,2-Dichloroethane-d4	*55.96*	*1.0*	*50*	*0*	*112*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.76*	*1.0*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*50.19*	*1.0*	*50*	*0*	*100*	*80 - 119*				
Surr: Toluene-d8	*49.52*	*1.0*	*50*	*0*	*99.0*	*89 - 112*				

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426320 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23010982-05MS** Units: **ug/L** Analysis Date: **23-Jan-2023 17:35**
Client ID: **16EW02-230119** Run ID: **VOA6_426320** SeqNo: **7084059** PrepDate: DF: **2000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	39330	2000	40000	0	98.3	80 - 119				
1,1-Dichloroethene	40510	2000	40000	0	101	71 - 131				
1,2-Dichloroethane	40730	2000	40000	0	102	73 - 128				
cis-1,2-Dichloroethene	75870	2000	40000	39010	92.1	78 - 123				
Methylene chloride	35340	4000	40000	0	88.4	74 - 124				
Trichloroethene	75470	2000	40000	31950	109	79 - 123				
Vinyl chloride	40100	2000	40000	1012	97.7	58 - 137				
Surr: 1,2-Dichloroethane-d4	*98270*	*2000*	*100000*	*0*	*98.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*102700*	*2000*	*100000*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*90860*	*2000*	*100000*	*0*	*90.9*	*80 - 119*				
Surr: Toluene-d8	*104500*	*2000*	*100000*	*0*	*104*	*89 - 112*				

MSD Sample ID: **HS23010982-05MSD** Units: **ug/L** Analysis Date: **23-Jan-2023 17:56**
Client ID: **16EW02-230119** Run ID: **VOA6_426320** SeqNo: **7084060** PrepDate: DF: **2000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	39070	2000	40000	0	97.7	80 - 119	39330	0.675	20	
1,1-Dichloroethene	39400	2000	40000	0	98.5	71 - 131	40510	2.76	20	
1,2-Dichloroethane	41710	2000	40000	0	104	73 - 128	40730	2.38	20	
cis-1,2-Dichloroethene	74150	2000	40000	39010	87.9	78 - 123	75870	2.29	20	
Methylene chloride	34660	4000	40000	0	86.7	74 - 124	35340	1.95	20	
Trichloroethene	70940	2000	40000	31950	97.5	79 - 123	75470	6.19	20	
Vinyl chloride	37340	2000	40000	1012	90.8	58 - 137	40100	7.12	20	
Surr: 1,2-Dichloroethane-d4	*99630*	*2000*	*100000*	*0*	*99.6*	*81 - 118*	*98270*	*1.37*	*20*	
Surr: 4-Bromofluorobenzene	*102600*	*2000*	*100000*	*0*	*103*	*85 - 114*	*102700*	*0.111*	*20*	
Surr: Dibromofluoromethane	*92490*	*2000*	*100000*	*0*	*92.5*	*80 - 119*	*90860*	*1.78*	*20*	
Surr: Toluene-d8	*104100*	*2000*	*100000*	*0*	*104*	*89 - 112*	*104500*	*0.316*	*20*	

The following samples were analyzed in this batch: HS23010982-01 HS23010982-03 HS23010982-04 HS23010982-05

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426355 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230124** Units: **ug/L** Analysis Date: **24-Jan-2023 09:37**
Client ID: Run ID: **VOA6_426355** SeqNo: **7084871** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*49.27*	*1.0*	*50*	*0*	*98.5*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.18*	*1.0*	*50*	*0*	*100*	*85 - 114*				
Surr: Dibromofluoromethane	*46.97*	*1.0*	*50*	*0*	*93.9*	*80 - 119*				
Surr: Toluene-d8	*52.83*	*1.0*	*50*	*0*	*106*	*89 - 112*				

LCS Sample ID: **VLCSW-230124** Units: **ug/L** Analysis Date: **24-Jan-2023 08:55**
Client ID: Run ID: **VOA6_426355** SeqNo: **7084870** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.79	1.0	20	0	98.9	80 - 119				
1,1-Dichloroethene	21.1	1.0	20	0	106	71 - 131				
1,2-Dichloroethane	22.96	1.0	20	0	115	73 - 128				
cis-1,2-Dichloroethene	20.41	1.0	20	0	102	78 - 123				
Methylene chloride	20.26	2.0	20	0	101	74 - 124				
Vinyl chloride	20.07	1.0	20	0	100	58 - 137				
Surr: 1,2-Dichloroethane-d4	*55.08*	*1.0*	*50*	*0*	*110*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*49.99*	*1.0*	*50*	*0*	*100.0*	*80 - 119*				
Surr: Toluene-d8	*49.61*	*1.0*	*50*	*0*	*99.2*	*89 - 112*				

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426355 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23010986-05MS** Units: **ug/L** Analysis Date: **24-Jan-2023 18:23**
Client ID: Run ID: **VOA6_426355** SeqNo: **7086553** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1596	100	2000	0	79.8	80 - 119				S
1,1-Dichloroethene	1730	100	2000	149.1	79.1	71 - 131				
1,2-Dichloroethane	1728	100	2000	0	86.4	73 - 128				
cis-1,2-Dichloroethene	9563	100	2000	8811	37.6	78 - 123				SO
Methylene chloride	1374	200	2000	0	68.7	74 - 124				S
Vinyl chloride	1622	100	2000	119.2	75.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*4981*	*100*	*5000*	*0*	*99.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*5111*	*100*	*5000*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*4544*	*100*	*5000*	*0*	*90.9*	*80 - 119*				
Surr: Toluene-d8	*5173*	*100*	*5000*	*0*	*103*	*89 - 112*				

MS Sample ID: **HS23010982-05MS** Units: **ug/L** Analysis Date: **24-Jan-2023 11:01**
Client ID: **16EW02-230119** Run ID: **VOA6_426355** SeqNo: **7085373** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1946	100	2000	120.3	91.3	80 - 119				
1,1-Dichloroethene	4826	100	2000	2800	101	71 - 131				
1,2-Dichloroethane	2896	100	2000	945.1	97.6	73 - 128				
cis-1,2-Dichloroethene	480800	100	2000	469000	590	78 - 123				SEO
Methylene chloride	1568	200	2000	0	78.4	74 - 124				
Vinyl chloride	23960	100	2000	21960	99.9	58 - 137				EO
Surr: 1,2-Dichloroethane-d4	*5000*	*100*	*5000*	*0*	*100.0*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*5184*	*100*	*5000*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*4698*	*100*	*5000*	*0*	*94.0*	*80 - 119*				
Surr: Toluene-d8	*5138*	*100*	*5000*	*0*	*103*	*89 - 112*				

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426355 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23010986-05MSD** Units: **ug/L** Analysis Date: **24-Jan-2023 18:44**
Client ID: Run ID: **VOA6_426355** SeqNo: **7102544** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1488	100	2000	0	74.4	80 - 119	1596	6.98	20	S
1,1-Dichloroethene	1567	100	2000	149.1	70.9	71 - 131	1730	9.91	20	S
1,2-Dichloroethane	1684	100	2000	0	84.2	73 - 128	1728	2.6	20	
cis-1,2-Dichloroethene	9234	100	2000	8811	21.1	78 - 123	9563	3.5	20	SO
Methylene chloride	1318	200	2000	0	65.9	74 - 124	1374	4.19	20	S
Vinyl chloride	1462	100	2000	119.2	67.1	58 - 137	1622	10.4	20	
Surr: 1,2-Dichloroethane-d4	*4925*	*100*	*5000*	*0*	*98.5*	*81 - 118*	*4981*	*1.13*	*20*	
Surr: 4-Bromofluorobenzene	*5115*	*100*	*5000*	*0*	*102*	*85 - 114*	*5111*	*0.0871*	*20*	
Surr: Dibromofluoromethane	*4507*	*100*	*5000*	*0*	*90.1*	*80 - 119*	*4544*	*0.815*	*20*	
Surr: Toluene-d8	*5153*	*100*	*5000*	*0*	*103*	*89 - 112*	*5173*	*0.394*	*20*	

MSD Sample ID: **HS23010982-05MSD** Units: **ug/L** Analysis Date: **24-Jan-2023 11:22**
Client ID: **16EW02-230119** Run ID: **VOA6_426355** SeqNo: **7085374** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1872	100	2000	120.3	87.6	80 - 119	1946	3.83	20	
1,1-Dichloroethene	4530	100	2000	2800	86.5	71 - 131	4826	6.33	20	
1,2-Dichloroethane	2828	100	2000	945.1	94.1	73 - 128	2896	2.38	20	
cis-1,2-Dichloroethene	470700	100	2000	469000	85.0	78 - 123	480800	2.12	20	EO
Methylene chloride	1502	200	2000	0	75.1	74 - 124	1568	4.35	20	
Vinyl chloride	22580	100	2000	21960	30.6	58 - 137	23960	5.96	20	SEO
Surr: 1,2-Dichloroethane-d4	*5037*	*100*	*5000*	*0*	*101*	*81 - 118*	*5000*	*0.739*	*20*	
Surr: 4-Bromofluorobenzene	*5146*	*100*	*5000*	*0*	*103*	*85 - 114*	*5184*	*0.745*	*20*	
Surr: Dibromofluoromethane	*4688*	*100*	*5000*	*0*	*93.8*	*80 - 119*	*4698*	*0.207*	*20*	
Surr: Toluene-d8	*5132*	*100*	*5000*	*0*	*103*	*89 - 112*	*5138*	*0.11*	*20*	

The following samples were analyzed in this batch: HS23010982-02 HS23010982-05 HS23010982-06

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426481 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230125** Units: **ug/L** Analysis Date: **25-Jan-2023 09:24**
Client ID: Run ID: **VOA6_426481** SeqNo: **7087539** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	1.0	1.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*48.66*	*1.0*	*50*	*0*	*97.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.26*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*45.56*	*1.0*	*50*	*0*	*91.1*	*80 - 119*				
Surr: Toluene-d8	*52.59*	*1.0*	*50*	*0*	*105*	*89 - 112*				

LCS Sample ID: **VLCSW-230125** Units: **ug/L** Analysis Date: **25-Jan-2023 08:42**
Client ID: Run ID: **VOA6_426481** SeqNo: **7087538** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	17.55	1.0	20	0	87.8	78 - 123				
Trichloroethene	20.24	1.0	20	0	101	79 - 123				
Vinyl chloride	18.47	1.0	20	0	92.4	58 - 137				
Surr: 1,2-Dichloroethane-d4	*57.18*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*53.58*	*1.0*	*50*	*0*	*107*	*85 - 114*				
Surr: Dibromofluoromethane	*50.07*	*1.0*	*50*	*0*	*100*	*80 - 119*				
Surr: Toluene-d8	*51.82*	*1.0*	*50*	*0*	*104*	*89 - 112*				

MS Sample ID: **HS23010982-02MS** Units: **ug/L** Analysis Date: **25-Jan-2023 10:27**
Client ID: **16RW04-230119** Run ID: **VOA6_426481** SeqNo: **7087542** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	1610	100	2000	145.3	73.2	78 - 123				S
Trichloroethene	5232	100	2000	3310	96.1	79 - 123				
Vinyl chloride	1548	100	2000	0	77.4	58 - 137				
Surr: 1,2-Dichloroethane-d4	*4875*	*100*	*5000*	*0*	*97.5*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*5159*	*100*	*5000*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*4446*	*100*	*5000*	*0*	*88.9*	*80 - 119*				
Surr: Toluene-d8	*5207*	*100*	*5000*	*0*	*104*	*89 - 112*				

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426481 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23010982-02MSD** Units: **ug/L** Analysis Date: **25-Jan-2023 10:48**
Client ID: **16RW04-230119** Run ID: **VOA6_426481** SeqNo: **7087543** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	1504	100	2000	145.3	67.9	78 - 123	1610	6.8	20	S
Trichloroethene	4875	100	2000	3310	78.3	79 - 123	5232	7.05	20	S
Vinyl chloride	1360	100	2000	0	68.0	58 - 137	1548	12.9	20	
Surr: 1,2-Dichloroethane-d4	*4839*	*100*	*5000*	*0*	*96.8*	*81 - 118*	*4875*	*0.755*	*20*	
Surr: 4-Bromofluorobenzene	*5099*	*100*	*5000*	*0*	*102*	*85 - 114*	*5159*	*1.18*	*20*	
Surr: Dibromofluoromethane	*4465*	*100*	*5000*	*0*	*89.3*	*80 - 119*	*4446*	*0.446*	*20*	
Surr: Toluene-d8	*5214*	*100*	*5000*	*0*	*104*	*89 - 112*	*5207*	*0.12*	*20*	

The following samples were analyzed in this batch: HS23010982-02 HS23010982-06

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426640 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY SW9056A**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **26-Jan-2023 15:43**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091194** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	0.250	0.500								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **26-Jan-2023 15:49**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091195** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	20.35	0.500	20	0	102	80 - 120				

MS Sample ID: **HS23011253-02MS** Units: **mg/L** Analysis Date: **26-Jan-2023 16:01**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091197** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	25.15	0.500	10	15.93	92.2	80 - 120				

MSD Sample ID: **HS23011253-02MSD** Units: **mg/L** Analysis Date: **26-Jan-2023 16:07**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091198** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	24.38	0.500	10	15.93	84.4	80 - 120	25.15	3.11	20	

The following samples were analyzed in this batch: HS23010982-01 HS23010982-03 HS23010982-04 HS23010982-05 HS23010982-06

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R426893 (0) **Instrument: ICS-Integrion** **Method: NITRATE/NITRITE BY IC BY SW9056A**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **30-Jan-2023 22:25**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097679** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	0.100	0.200								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **30-Jan-2023 22:54**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097680** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	8.356	0.200	8	0	104	90 - 110				

MS Sample ID: **HS23010986-05MS** Units: **mg/L** Analysis Date: **31-Jan-2023 00:44**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097693** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	7.607	1.00	20	0	38.0	80 - 120				S

MS Sample ID: **HS23010982-05MS** Units: **mg/L** Analysis Date: **31-Jan-2023 00:15**
Client ID: **16EW02-230119** Run ID: **ICS-Integrion_426893** SeqNo: **7097688** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	12.21	1.00	20	0	61.0	80 - 120				S

MSD Sample ID: **HS23010986-05MSD** Units: **mg/L** Analysis Date: **31-Jan-2023 00:50**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097694** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	7.599	1.00	20	0	38.0	80 - 120	7.607	0.105	20	S

MSD Sample ID: **HS23010982-05MSD** Units: **mg/L** Analysis Date: **31-Jan-2023 00:21**
Client ID: **16EW02-230119** Run ID: **ICS-Integrion_426893** SeqNo: **7097689** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	12.44	1.00	20	0	62.2	80 - 120	12.21	1.85	20	S

The following samples were analyzed in this batch: HS23010982-01 HS23010982-03 HS23010982-04 HS23010982-05 HS23010982-06

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R427019 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 15:37**
Client ID: Run ID: **TOC_05_427019** SeqNo: **7100654** PrepDate: DF: **1**

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

LCS Sample ID: **LCS-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 15:51**
Client ID: Run ID: **TOC_05_427019** SeqNo: **7100655** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.44	1.00	10	0	104	85 - 115				

LCSD Sample ID: **LCSD-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 16:05**
Client ID: Run ID: **TOC_05_427019** SeqNo: **7100656** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.41	1.00	10	0	104	85 - 115	10.44	0.288	20	

MS Sample ID: **HS23010982-05MS** Units: **mg/L** Analysis Date: **30-Jan-2023 18:52**
Client ID: **16EW02-230119** Run ID: **TOC_05_427019** SeqNo: **7100668** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	22.11	1.00	10	10.94	112	80 - 120				

The following samples were analyzed in this batch: HS23010982-04 HS23010982-05 HS23010982-06

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010982

QC BATCH REPORT

Batch ID: R427278 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-02032023** Units: **mg/L** Analysis Date: **03-Feb-2023 12:40**
Client ID: Run ID: **TOC_04_427278** SeqNo: **7107279** PrepDate: DF: **1**

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

LCS Sample ID: **LCS-02032023** Units: **mg/L** Analysis Date: **03-Feb-2023 12:54**
Client ID: Run ID: **TOC_04_427278** SeqNo: **7107280** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.16	1.00	10	0	102	85 - 115				

LCSD Sample ID: **LCSD-02032023** Units: **mg/L** Analysis Date: **03-Feb-2023 13:08**
Client ID: Run ID: **TOC_04_427278** SeqNo: **7107281** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.35	1.00	10	0	104	85 - 115	10.16	1.85	20	

MS Sample ID: **HS23011461-14MS** Units: **mg/L** Analysis Date: **03-Feb-2023 13:48**
Client ID: Run ID: **TOC_04_427278** SeqNo: **7107284** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.42	1.00	10	0.4261	99.9	80 - 120				

The following samples were analyzed in this batch: HS23010982-03

ALS Houston, US Date: 03-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23010982**

QUALIFIERS, ACRONYMS, UNITS

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

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

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	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	624-2023	31-Dec-2023
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: 03-Feb-23

Sample Receipt Checklist

Work Order ID: HS23010982 **Date/Time Received:** 20-Jan-2023 10:10

Client Name: CBI-Houston **Received by:** Malcolm Burleson

Completed By: /S/ Paresh M. Giga (eSignature) 20-Jan-2023 14:35 (Date/Time) **Reviewed by:** /S/ Dane J. Wacasey (eSignature) 30-Jan-2023 10:26 (Date/Time)

Matrices: GW Carrier name: FedEx Priority Overnight

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:none
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	2.0C/1.5C U/C	IR31
Cooler(s)/Kit(s):	49212	
Date/Time sample(s) sent to storage:	1/20/23 14:55	

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:	Paresh M. Giga		

Login Notes: NO3 rec'd in neat bottles=pH 5. Due to instrument failure and lack of local subcontract option to meet holding time, a split was preserved for NO3/NO2.
Preserved 1ml H2SO4 (Lot 3100607012) 1/20/23@14:00. Final pH (1).
16EW02: 1 of 6 vials rec'd empty.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

REVISED

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stanchiff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

HS23010982

Aptim Environmental & Infrastucture, Inc.
Longhorn Army Ammunition Plant 16 January 2023

Project: APTIM LONGHORN ARMY AMMN. PLANT (LHAAP) GROUNDWATER TREATMENT PLANT (GWTP) KARNACK, TEXAS	Project No. 501032
Job: **LHAAP 16 January 2023**	
Prepared By: Scott Beesinger	P.O. Number

Field Sample I.D. Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Manganese				Remarks (Preservatives, etc.)	Lab I.D.#
16WW48-230119	WG	1/19/23 0825		11	X	X	X	X	X	X						
16RW04-230119	WG	1/19/23 0910		9	X		X			X						
16IW09-230119	WG	1/19/23 0955		13	X	X	X	X	X	X						
16IW20-230119	WG	1/19/23 1045		13	X	X	X	X	X	X						
16EW02-230119	WG	1/19/23 1135		13	X	X	X	X	X	X						
16EW02-230119-MS	WG	1/19/23 1135		13	X	X	X	X	X	X						
16EW02-230119-MSD	WG	1/19/23 1135		13	X	X	X	X	X	X						
16EW03-230119	WG	1/19/23 1235		13	X	X	X	X	X	X						

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	1/19/23	1430									

For Lab Use Only

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

Remarks:

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

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

Project No. 501032

Job: **LHAAP 16 January 2023**

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Manganese by SW6020A				Remarks (Preservatives, etc.)	Lab I.D.#
					Analyses											
16WW48-230119	WG	1/19/23 0825		11	X	SB	X	X	X	X						
16RW04-230119	WG	1/19/23 0910		7	X		X			X						
16IW09-230119	WG	1/19/23 0955		13	X	X	X	X	X	X						
16IW20-230119	WG	1/19/23 1045		13	X	X	X	X	X	X						
16EW02-230119	WG	1/19/23 1135														
16EW02-230119-MS	WG	1/19/23 1135														
16EW02-230119-MSD	WG	1/19/23 1135														
16EW03-230119	WG	1/19/23 1235														

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	1/19/23	1430								1/20/23	12:10

For Lab Use Only

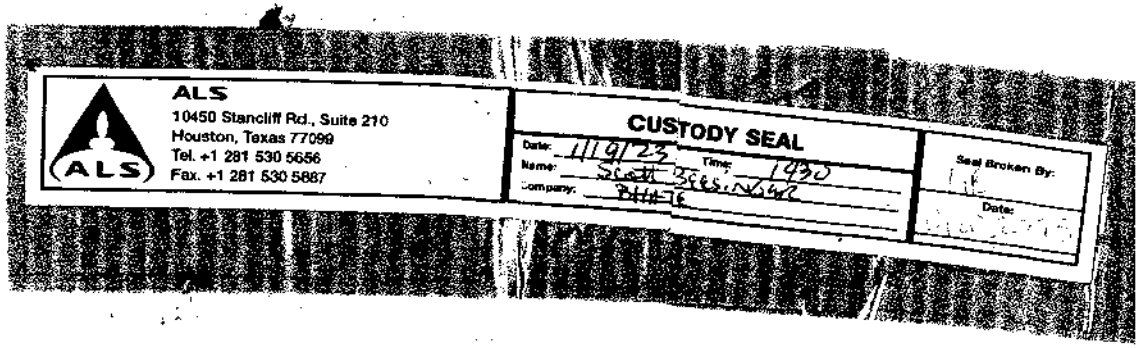
Received At Lab By:	Date	Time	Temp of Container	Seal No.	Condition
			4.9 2.2		1631 2.0 u2 -0.5c.

Remarks:

HS23010982

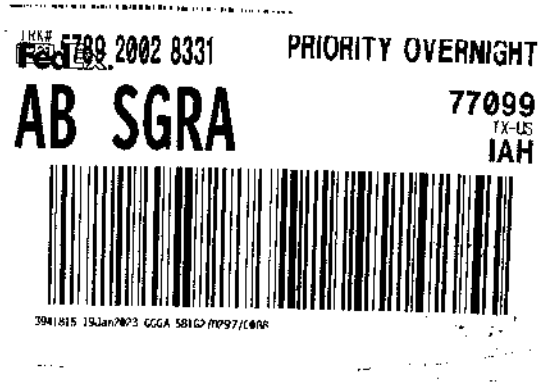
Aptim Environmental & Infrastucture, Inc.
Longhorn Army Ammunition Plant 16 January 2023

(Word) S:\U-ces\Forms\Chain of Custody - BiWeekly



ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5667

CUSTODY SEAL
Date: 11/9/23 Time: 1430
Name: Scott Sides
Company: ALS
Seal Broken By:
Date:



TRK# 5789 2002 8331 PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

3941815 19Jan2023 CGGA 5810/ff97/E0AR

January 27, 2023 Service Request No:E2300056

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23010982

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 23, 2023
For your reference, these analyses have been assigned our service request number **E2300056.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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.:**	E2300056
Project:	HS23010982	**Date Received:**	01/23/23
Sample Matrix:	Ground 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

Six samples were received for analysis at ALS Environmental in Houston on 01/23/23.

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:

EQ2300026: 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 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:**E2300056
Project: HS23010982

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300056-001	16WW48-230119	1/19/2023	0825
E2300056-002	16RW04-230119	1/19/2023	0910
E2300056-003	16IW09-230119	1/19/2023	0955
E2300056-004	16IW20-230119	1/19/2023	1045
E2300056-005	16EW02-230119	1/19/2023	1135
E2300056-006	16EW03-230119	1/19/2023	1235

Service Request Summary

Folder #: **E2300056**
Client Name: ALS Environmental - US
Project Name: HS23010982
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 01/23/23
Internal Due Date: 2/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23010982
EDD: EQUIS
EFWEDD_LHAAP

8 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300056-001	16WW48-230119	Ground Water	01/19/23 0825	**IV**
E2300056-002	16RW04-230119	Ground Water	01/19/23 0910	**IV**
E2300056-003	16IW09-230119	Ground Water	01/19/23 0955	**IV**
E2300056-004	16IW20-230119	Ground Water	01/19/23 1045	**IV**
E2300056-005	16EW02-230119	Ground Water	01/19/23 1135	**IV**
E2300056-006	16EW03-230119	Ground Water	01/19/23 1235	**IV**

Service Request Summary

Folder #: **E2300056**
Client Name: ALS Environmental - US
Project Name: HS23010982
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 01/23/23
Internal Due Date: 2/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23010982
EDD: EQUIS
EFWEDD_LHAAP

8 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	5	IV Due 2/10
Semivoa GCMS	ClO4 DOD/6850	1	MS/MSD

Data Qualifiers

Lab Standard

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

Data Qualifiers

Lab Standard

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

ALS Laboratory Group

Acronyms

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

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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	LA028-2023	12/31/2023
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	2368363	12/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

Chain of Custody

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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 20790**

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:	HS23010982
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	HS23010982-01	**16WW48-230119**	**Groundwater**	**19 Jan 2023 08:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
2.	HS23010982-02	**16RW04-230119**	**Groundwater**	**19 Jan 2023 09:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
3.	HS23010982-03	**16IW09-230119**	**Groundwater**	**19 Jan 2023 09:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
4.	HS23010982-04	**16IW20-230119**	**Groundwater**	**19 Jan 2023 10:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
5.	HS23010982-05	**16EW02-230119**	**Groundwater**	**19 Jan 2023 11:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
6.	HS23010982-06	**16EW03-230119**	**Groundwater**	**19 Jan 2023 12:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS23010982-05 = ms/msd

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20790**

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 1-25-23 1200

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist JH

Client/Project ALS

Thermometer ID IR31

Date/Time Received: 1-23-23 Initials: CG

Date/Time Logged in: 1-23-23 Initials CG

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

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

3. Were custody seals on coolers? ○ Yes ⊗ No

If yes, how many and where?

Were they intact? ○ Yes ○ No ⊗ N/A

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

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

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

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		1-23-23	1200	CG	3.7	☑
						☐
						☐
						☐

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:

HS-HRMSCoolerReceipt R1.0

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SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

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Phone (713)266-1599 Fax (713)266-0130
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Preparation Information Benchsheet

Prep Run#: 413582 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/26/23 08:50

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300053-001	16WW41-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300053-002	16RW06-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300053-003	16RW07-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300053-004	16WW55-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300053-005	16WW35-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300053-006	16WW16-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300053-007	16WW16-230119-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300056-001	16WW48-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300056-002	16RW04-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300056-003	16IW09-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300056-004	16IW20-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300056-005	16EW02-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300056-006	16EW03-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300080-001	LH18/24-SP650_012523_AIX	.01	6850/ClO4 DOD			Water	10mL	
15	E2300080-002	LH18/24-SP650_012523_BIX	.01	6850/ClO4 DOD			Water	10mL	
16	EQ2300026-01	MB		6850/ClO4 DOD			Liquid	10mL	
17	EQ2300026-02	LCS		6850/ClO4 DOD			Liquid	10mL	
18	EQ2300026-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
19	EQ2300026-04	16EW02-230119 MS	.01	6850/ClO4 DOD			Liquid	10mL	
20	EQ2300026-05	16EW02-230119 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
21	EQ2300026-06	16WW35-230119 MS	.01	6850/ClO4 DOD			Liquid	10mL	
22	EQ2300026-07	16WW35-230119 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
23	R2300316-004	2301091027A BLM-17-550	.01	6850/ClO4			Water	10mL	
24	R2300316-009	2301091456A BLM-15-305	.01	6850/ClO4			Water	10mL	
25	R2300316-014	2301101352Y PL-6-1195	.01	6850/ClO4			Water	10mL	
26	R2300519-005	2301170958A BLM-18-430	.01	6850/ClO4			Water	10mL	
27	R2300519-010	2301171442A 400-A-151	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 226778 Logbook Ref: Perchlorate Internal Standard Expires On: 05/31/2023

E2300053-001	100.00µL	E2300053-002	100.00µL	E2300053-003	100.00µL	E2300053-004	100.00µL	E2300053-005	100.00µL	E2300053-006	100.00µL
E2300053-007	100.00µL	E2300056-001	100.00µL	E2300056-002	100.00µL	E2300056-003	100.00µL	E2300056-004	100.00µL	E2300056-005	100.00µL
E2300056-006	100.00µL	E2300080-001	100.00µL	E2300080-002	100.00µL	EQ2300026-01	100.00µL	EQ2300026-01	100.00µL	EQ2300026-02	1.00µL
EQ2300026-02	1.00µL	EQ2300026-03	1.00µL	EQ2300026-03	1.00µL	EQ2300026-04	1.00µL	EQ2300026-05	1.00µL	EQ2300026-06	1.00µL

Preparation Information Benchsheet

Prep Run#: 413582 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/26/23 08:50

EQ2300026-07	1.00µL	R2300316-004	100.00µL	R2300316-009	100.00µL	R2300316-014	100.00µL	R2300519-005	100.00µL	R2300519-010	100.00µL

Name: Perchlorate Intermediate Stock1 Inventory ID 227236 Logbook Ref: Perchlorate (1st Source) Expires On: 07/31/2023

EQ2300026-02	100.00µL	EQ2300026-02	100.00µL	EQ2300026-03	100.00µL	EQ2300026-03	100.00µL	EQ2300026-04	100.00µL	EQ2300026-05	100.00µL
EQ2300026-06	100.00µL	EQ2300026-07	100.00µL								

Preparation Materials

Water HPLC Grade	01/04/2023 Water (226857)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (224414)
6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)	6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)		

Preparation Steps

Step: Preparation
Started: 1/26/23 08:50
Finished: 1/26/23 09:50
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 01/26/23

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 0825
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW48-230119	**Units:**	µg/L
Lab Code:	E2300056-001	**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	**2.35**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:18	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 0910
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16RW04-230119	**Units:**	µg/L
Lab Code:	E2300056-002	**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	1/26/23	1/26/23 15:23	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 0955
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16IW09-230119	**Units:**	µg/L
Lab Code:	E2300056-003	**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	ND	U	0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:29	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1045
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16IW20-230119	**Units:**	µg/L
Lab Code:	E2300056-004	**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	ND	U	0.100	0.0500	0.0250	1	1/26/23	1/26/23 16:08	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1135
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	E2300056-005	**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	1/26/23	1/27/23 09:23	413582	792835	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1235
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW03-230119	**Units:**	µg/L
Lab Code:	E2300056-006	**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	**0.0379**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 16:02	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300026-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:44	413582	792728	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982
Sample Matrix: Ground Water

Service Request: E2300056
Date Analyzed: 1/26/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 413582

	Lab Control Sample EQ2300026-02			Duplicate Lab Control Sample EQ2300026-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0868	0.100	87	0.0936	0.100	94	84 - 119	8	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:**	E2300056
Project:	HS23010982	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300026-02	**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	**0.0868**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:50	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300026-03	**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	**0.0936**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:55	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
		Date Analyzed:	1/26/23

Matrix Spike Summary

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

Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	E2300056-005	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16EW02-230119MS			16EW02-230119DMS					
		Matrix Spike			**Duplicate Matrix Spike**					
		EQ2300026-04			EQ2300026-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.102	0.100	102	0.105	0.100	105	84 - 119	3	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:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1135
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	EQ2300026-04	**Basis:**	NA
Run Type:	Matrix Spike		

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:45	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1135
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	EQ2300026-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.105**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:50	413582	792728	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dane Wacasey
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston, Texas 77099

Generated 1/26/2023 6:32:47 AM

JOB DESCRIPTION

HS23010982

JOB NUMBER

410-113149-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

my EOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
1/26/2023 6:32:47 AM

Authorized for release by
Kelly Bauer, Project Manager
Kelly.Bauer@et.eurofinsus.com
(717)556-7262

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Definitions/Glossary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
cn	Refer to Case Narrative for further detail
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Job ID: 410-113149-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-113149-1

Receipt
The samples were received on 1/24/2023 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC VOA
Method RSK_175_CO2_D5: The continuing calibration verification (CCV) associated with batch 410-338435 recovered outside the 15% difference limit for Carbon dioxide. The CCV was confirmed 2 times and were within the control limits ; therefore, the data has been reported. The following items are affected: HS23010982-01 (410-113149-1), HS23010982-03 (410-113149-2), HS23010982-04 (410-113149-3), HS23010982-05 (410-113149-4) and HS23010982-06 (410-113149-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Client Sample ID: HS23010982-01 — Lab Sample ID: 410-113149-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M Q cn	12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-03 — Lab Sample ID: 410-113149-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	150000	M Q cn	12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-04 — Lab Sample ID: 410-113149-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	130000	Q cn	12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-05 — Lab Sample ID: 410-113149-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M J1 Q cn	12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-06 — Lab Sample ID: 410-113149-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M Q cn	12000	2600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Client Sample ID: HS23010982-01
Lab Sample ID: 410-113149-1

Date Collected: 01/19/23 08:25
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	170000	M Q cn	12000	2600	ug/L		01/25/23 08:22	01/25/23 10:06	1

Client Sample ID: HS23010982-03
Lab Sample ID: 410-113149-2

Date Collected: 01/19/23 09:55
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	150000	M Q cn	12000	2600	ug/L		01/25/23 08:22	01/25/23 10:14	1

Client Sample ID: HS23010982-04
Lab Sample ID: 410-113149-3

Date Collected: 01/19/23 10:45
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	130000	Q cn	12000	2600	ug/L		01/25/23 08:22	01/25/23 10:22	1

Client Sample ID: HS23010982-05
Lab Sample ID: 410-113149-4

Date Collected: 01/19/23 11:35
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	170000	M J1 Q cn	12000	2600	ug/L		01/25/23 08:22	01/25/23 10:30	1

Client Sample ID: HS23010982-06
Lab Sample ID: 410-113149-5

Date Collected: 01/19/23 12:35
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	170000	M Q cn	12000	2600	ug/L		01/25/23 08:22	01/25/23 10:53	1

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-338469/1-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 338469

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	2600	U	12000	2600	ug/L		01/25/23 08:22	01/25/23 08:34	1

Lab Sample ID: LCS 410-338469/2-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 338469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide			35800	32400		ug/L		90	80 - 122		

Lab Sample ID: 410-113149-4 MS
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010982-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide	170000	M J1 Q cn	35800	208000	M J1 4	ug/L		118	80 - 122		

Lab Sample ID: 410-113149-4 MSD
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010982-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	170000	M J1 Q cn	35800	213000	M J1 4	ug/L		133	80 - 122	3	30

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

GC VOA

Analysis Batch: 338435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113149-1	HS23010982-01	Total/NA	Water	RSK-175	338469
410-113149-2	HS23010982-03	Total/NA	Water	RSK-175	338469
410-113149-3	HS23010982-04	Total/NA	Water	RSK-175	338469
410-113149-4	HS23010982-05	Total/NA	Water	RSK-175	338469
410-113149-5	HS23010982-06	Total/NA	Water	RSK-175	338469
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	338469
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	338469
410-113149-4 MS	HS23010982-05	Total/NA	Water	RSK-175	338469
410-113149-4 MSD	HS23010982-05	Total/NA	Water	RSK-175	338469

Prep Batch: 338469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113149-1	HS23010982-01	Total/NA	Water	RSK-175	
410-113149-2	HS23010982-03	Total/NA	Water	RSK-175	
410-113149-3	HS23010982-04	Total/NA	Water	RSK-175	
410-113149-4	HS23010982-05	Total/NA	Water	RSK-175	
410-113149-5	HS23010982-06	Total/NA	Water	RSK-175	
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-113149-4 MS	HS23010982-05	Total/NA	Water	RSK-175	
410-113149-4 MSD	HS23010982-05	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Client Sample ID: HS23010982-01
Lab Sample ID: 410-113149-1
Date Collected: 01/19/23 08:25
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:06

Client Sample ID: HS23010982-03
Lab Sample ID: 410-113149-2
Date Collected: 01/19/23 09:55
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:14

Client Sample ID: HS23010982-04
Lab Sample ID: 410-113149-3
Date Collected: 01/19/23 10:45
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:22

Client Sample ID: HS23010982-05
Lab Sample ID: 410-113149-4
Date Collected: 01/19/23 11:35
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:30

Client Sample ID: HS23010982-06
Lab Sample ID: 410-113149-5
Date Collected: 01/19/23 12:35
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:53

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	ELLE
RSK-175	Dissolved Gases Prep	RSK	ELLE

Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique , RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

Laboratory References:

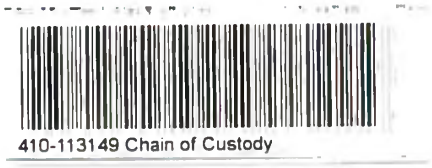
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-113149-1	HS23010982-01	Water	01/19/23 08:25	01/24/23 10:20
410-113149-2	HS23010982-03	Water	01/19/23 09:55	01/24/23 10:20
410-113149-3	HS23010982-04	Water	01/19/23 10:45	01/24/23 10:20
410-113149-4	HS23010982-05	Water	01/19/23 11:35	01/24/23 10:20
410-113149-5	HS23010982-06	Water	01/19/23 12:35	01/24/23 10:20



10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20789**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	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:	HS23010982
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23010982-01**	**16WW48-230119**	**Groundwater**	**19 Jan 2023 08:25**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
2.	**HS23010982-03**	**16IW09-230119**	**Groundwater**	**19 Jan 2023 09:55**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
3.	**HS23010982-04**	**16IW20-230119**	**Groundwater**	**19 Jan 2023 10:45**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
4.	**HS23010982-05**	**16EW02-230119**	**Groundwater**	**19 Jan 2023 11:35**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
5.	**HS23010982-06**	**16EW03-230119**	**Groundwater**	**19 Jan 2023 12:35**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS23010982-05 = ms/msd

QC Level: DOD IV (DoD Data Package)

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense

COC ID: 20789

Relinquished By: CONEY G

Date/Time: 1-24-23 1806

Received By:

Date/Time: 1/24/23 10:20

Cooler ID(s):

Temperature(s): 2.5

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Purchase Order

PO: HS23010982

VENDOR:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

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:	20789
TSR:	Ron Martino

	Item	Catalog No	Unit Price	Quantity	Ext Price
1.	RSK - CO2; Level II & IV, LHAAP EQUIS EDD	NA	$95.00	5	$475.00

Order Total: $475.00

RIGHT SOLUTIONS | RIGHT PARTNER

20 Jan 2023

Page 1 of 1

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-113149-1

Login Number: 113149
List Number: 1
Creator: McBeth, Jessica

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

HS23010982-MSVOA-SW8260

ALS WO# HS23010982

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

HS23010982-01				Collected	Received	Matrix	Basis
16WW48-230119				01/19/23 08:25	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	100	U	30	100	100	100	01/23/23 21:05	VOA6_426320	X012329
1,1-Dichloroethene	ug/L	60	J	20	100	100	100	01/23/23 21:05	VOA6_426320	X012329
1,2-Dichloroethane	ug/L	50	J	20	100	100	100	01/23/23 21:05	VOA6_426320	X012329
cis-1,2-Dichloroethene	ug/L	23,000		200	1000	1000	1000	01/23/23 21:26	VOA6_426320	X012330
Methylene chloride	ug/L	200	U	40	200	200	100	01/23/23 21:05	VOA6_426320	X012329
Trichloroethene	ug/L	13,000		20	100	100	100	01/23/23 21:05	VOA6_426320	X012329
Vinyl chloride	ug/L	180		20	100	100	100	01/23/23 21:05	VOA6_426320	X012329

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

HS23010982-02	Collected	Received	Matrix	Basis
16RW04-230119	01/19/23 09:10	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 16:38	VOA6_426355	X012426
1,1-Dichloroethene	ug/L	3.5		0.20	1.0	1.0	1	01/24/23 16:38	VOA6_426355	X012426
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 16:38	VOA6_426355	X012426
cis-1,2-Dichloroethene	ug/L	160		0.20	1.0	1.0	1	01/24/23 16:38	VOA6_426355	X012426
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 16:38	VOA6_426355	X012426
Trichloroethene	ug/L	3,300		20	100	100	100	01/25/23 10:06	VOA6_426481	X012508
Vinyl chloride	ug/L	6.2		0.20	1.0	1.0	1	01/24/23 16:38	VOA6_426355	X012426

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

HS23010982-03

Collected	Received	Matrix	Basis
01/19/23 09:55	01/20/23 10:10	Groundwater	Wet

16IW09-230119

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/23/23 20:23	VOA6_426320	X012327
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 20:23	VOA6_426320	X012327
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 20:23	VOA6_426320	X012327
cis-1,2-Dichloroethene	ug/L	1.9		0.20	1.0	1.0	1	01/23/23 20:23	VOA6_426320	X012327
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/23/23 20:23	VOA6_426320	X012327
Trichloroethene	ug/L	1.6		0.20	1.0	1.0	1	01/23/23 20:23	VOA6_426320	X012327
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 20:23	VOA6_426320	X012327

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

HS23010982-04				Collected	Received	Matrix	Basis
16IW20-230119				01/19/23 10:45	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/23/23 20:44	VOA6_426320	X012328
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 20:44	VOA6_426320	X012328
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 20:44	VOA6_426320	X012328
cis-1,2-Dichloroethene	ug/L	7.8		0.20	1.0	1.0	1	01/23/23 20:44	VOA6_426320	X012328
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/23/23 20:44	VOA6_426320	X012328
Trichloroethene	ug/L	2.5		0.20	1.0	1.0	1	01/23/23 20:44	VOA6_426320	X012328
Vinyl chloride	ug/L	18		0.20	1.0	1.0	1	01/23/23 20:44	VOA6_426320	X012328

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

HS23010982-05	Collected	Received	Matrix	Basis
16EW02-230119	01/19/23 11:35	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	120		30	100	100	100	01/24/23 09:58	VOA6_426355	X012407
1,1-Dichloroethene	ug/L	2,800		20	100	100	100	01/24/23 09:58	VOA6_426355	X012407
1,2-Dichloroethane	ug/L	950		20	100	100	100	01/24/23 09:58	VOA6_426355	X012407
cis-1,2-Dichloroethene	ug/L	39,000		40	200	200	200	01/23/23 16:11	VOA6_426320	X012315
Methylene chloride	ug/L	200	U	40	200	200	100	01/24/23 09:58	VOA6_426355	X012407
Trichloroethene	ug/L	32,000		40	200	200	200	01/23/23 16:11	VOA6_426320	X012315
Vinyl chloride	ug/L	1,100		40	200	200	200	01/23/23 16:11	VOA6_426320	X012315

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

HS23010982-06	Collected	Received	Matrix	Basis
16EW03-230119	01/19/23 12:35	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 17:20	VOA6_426355	X012428
1,1-Dichloroethene	ug/L	6.6		0.20	1.0	1.0	1	01/24/23 17:20	VOA6_426355	X012428
1,2-Dichloroethane	ug/L	1.1		0.20	1.0	1.0	1	01/24/23 17:20	VOA6_426355	X012428
cis-1,2-Dichloroethene	ug/L	1,200		4.0	20	20	20	01/25/23 11:09	VOA6_426481	X012511
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 17:20	VOA6_426355	X012428
Trichloroethene	ug/L	420		4.0	20	20	20	01/25/23 11:09	VOA6_426481	X012511
Vinyl chloride	ug/L	630		4.0	20	20	20	01/25/23 11:09	VOA6_426481	X012511

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

VBLKW-230123	Collected	Received	Matrix	Basis
VBLKW-230123	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/23/23 13:22	VOA6_426320	X012307
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 13:22	VOA6_426320	X012307
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 13:22	VOA6_426320	X012307
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 13:22	VOA6_426320	X012307
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/23/23 13:22	VOA6_426320	X012307
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 13:22	VOA6_426320	X012307
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/23/23 13:22	VOA6_426320	X012307

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

VBLKW-230124	Collected	Received	Matrix	Basis
VBLKW-230124	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 09:37	VOA6_426355	X012406
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

VBLKW-230125	Collected	Received	Matrix	Basis
VBLKW-230125	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/23 09:24	VOA6_426481	X012506
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/23 09:24	VOA6_426481	X012506
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/23 09:24	VOA6_426481	X012506

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Form 2

System Monitoring Compound Recovery

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426320

Volatiles by EPA 8260

CCV	Analyzed 01/23/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	53.58	50	107	80-120	
4-Bromofluorobenzene	54.11	50	108	80-120	
Dibromofluoromethane	49.92	50	99.8	80-120	
Toluene-d8	50.96	50	102	80-120	

CCB	Analyzed 01/23/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.73	50	99.5	80-120	
4-Bromofluorobenzene	50.92	50	102	80-120	
Dibromofluoromethane	46.43	50	92.9	80-120	
Toluene-d8	52.56	50	105	80-120	

VLCSW-233120	Analyzed 01/23/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	55.96	50	112	81-118	
4-Bromofluorobenzene	51.76	50	104	85-114	
Dibromofluoromethane	50.19	50	100	80-119	
Toluene-d8	49.52	50	99.0	89-112	

VBLKW-230123	Analyzed 01/23/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.84	50	99.7	81-118	
4-Bromofluorobenzene	50.23	50	100	85-114	
Dibromofluoromethane	46.52	50	93.0	80-119	
Toluene-d8	52.64	50	105	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426320

Volatiles by EPA 8260

HS23010982-05	Analyzed 01/23/23		Conc Units µg/L		DF 200
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	9,900	10000	99.3	81-118	
4-Bromofluorobenzene	9,800	10000	97.7	85-114	
Dibromofluoromethane	9,300	10000	93.4	80-119	
Toluene-d8	11,000	10000	105	89-112	

HS23010982-05MS	Analyzed 01/23/23		Conc Units µg/L		DF 2000
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	98270	100000	98.3	81-118	
4-Bromofluorobenzene	102700	100000	103	85-114	
Dibromofluoromethane	90860	100000	90.9	80-119	
Toluene-d8	104500	100000	104	89-112	

HS23010982-05MSD	Analyzed 01/23/23		Conc Units µg/L		DF 2000
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	99630	100000	99.6	81-118	
4-Bromofluorobenzene	102600	100000	103	85-114	
Dibromofluoromethane	92490	100000	92.5	80-119	
Toluene-d8	104100	100000	104	89-112	

HS23010982-03	Analyzed 01/23/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	98.9	81-118	
4-Bromofluorobenzene	50	50	100	85-114	
Dibromofluoromethane	47	50	94.5	80-119	
Toluene-d8	53	50	105	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426320

Volatiles by EPA 8260

HS23010982-04	Analyzed 01/23/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50	50	99.2	81-118	
4-Bromofluorobenzene	49	50	98.1	85-114	
Dibromofluoromethane	47	50	93.6	80-119	
Toluene-d8	52	50	105	89-112	

HS23010982-01	Analyzed 01/23/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4,900	5000	98.1	81-118	
4-Bromofluorobenzene	4,900	5000	97.3	85-114	
Dibromofluoromethane	4,700	5000	93.1	80-119	
Toluene-d8	5,300	5000	106	89-112	
1,2-Dichloroethane-d4	50,000	50000	101	81-118	
4-Bromofluorobenzene	49,000	50000	98.8	85-114	
Dibromofluoromethane	47,000	50000	94.8	80-119	
Toluene-d8	53,000	50000	106	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426355

Volatiles by EPA 8260

CCV	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	54.93	50	110	80-120	
4-Bromofluorobenzene	53.31	50	107	80-120	
Dibromofluoromethane	50.54	50	101	80-120	
Toluene-d8	50.21	50	100	80-120	

VLCSW-230124	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	55.08	50	110	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	49.99	50	100.0	80-119	
Toluene-d8	49.61	50	99.2	89-112	

VBLKW-230124	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.27	50	98.5	81-118	
4-Bromofluorobenzene	50.18	50	100	85-114	
Dibromofluoromethane	46.97	50	93.9	80-119	
Toluene-d8	52.83	50	106	89-112	

HS23010982-05	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	5,000	5000	101	81-118	
4-Bromofluorobenzene	5,000	5000	99.8	85-114	
Dibromofluoromethane	4,700	5000	94.9	80-119	
Toluene-d8	5,200	5000	103	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426355

Volatiles by EPA 8260

HS23010982-05MS	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	5000	5000	100.0	81-118	
4-Bromofluorobenzene	5184	5000	104	85-114	
Dibromofluoromethane	4698	5000	94.0	80-119	
Toluene-d8	5138	5000	103	89-112	

HS23010982-05MSD	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	5037	5000	101	81-118	
4-Bromofluorobenzene	5146	5000	103	85-114	
Dibromofluoromethane	4688	5000	93.8	80-119	
Toluene-d8	5132	5000	103	89-112	

HS23010982-02	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	98.6	81-118	
4-Bromofluorobenzene	50	50	101	85-114	
Dibromofluoromethane	46	50	92.0	80-119	
Toluene-d8	53	50	106	89-112	

HS23010982-06	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	98.0	81-118	
4-Bromofluorobenzene	49	50	98.9	85-114	
Dibromofluoromethane	46	50	92.1	80-119	
Toluene-d8	53	50	107	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426355

Volatiles by EPA 8260

HS23010986-05MS	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4981	5000	99.6	81-118	
4-Bromofluorobenzene	5111	5000	102	85-114	
Dibromofluoromethane	4544	5000	90.9	80-119	
Toluene-d8	5173	5000	103	89-112	

HS23010986-05MSD	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4925	5000	98.5	81-118	
4-Bromofluorobenzene	5115	5000	102	85-114	
Dibromofluoromethane	4507	5000	90.1	80-119	
Toluene-d8	5153	5000	103	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426481

Volatiles by EPA 8260

CCV	Analyzed 01/25/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	52.7	50	105	80-120	
4-Bromofluorobenzene	52.42	50	105	80-120	
Dibromofluoromethane	48.88	50	97.8	80-120	
Toluene-d8	49.61	50	99.2	80-120	

VLCSW-230125	Analyzed 01/25/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	57.18	50	114	81-118	
4-Bromofluorobenzene	53.58	50	107	85-114	
Dibromofluoromethane	50.07	50	100	80-119	
Toluene-d8	51.82	50	104	89-112	

VBLKW-230125	Analyzed 01/25/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.66	50	97.3	81-118	
4-Bromofluorobenzene	50.26	50	101	85-114	
Dibromofluoromethane	45.56	50	91.1	80-119	
Toluene-d8	52.59	50	105	89-112	

HS23010982-02	Analyzed 01/25/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4,900	5000	97.5	81-118	
4-Bromofluorobenzene	4,900	5000	98.2	85-114	
Dibromofluoromethane	4,500	5000	89.7	80-119	
Toluene-d8	5,300	5000	106	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426481

Volatiles by EPA 8260

HS23010982-02MS	Analyzed 01/25/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4875	5000	97.5	81-118	
4-Bromofluorobenzene	5159	5000	103	85-114	
Dibromofluoromethane	4446	5000	88.9	80-119	
Toluene-d8	5207	5000	104	89-112	

HS23010982-02MSD	Analyzed 01/25/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4839	5000	96.8	81-118	
4-Bromofluorobenzene	5099	5000	102	85-114	
Dibromofluoromethane	4465	5000	89.3	80-119	
Toluene-d8	5214	5000	104	89-112	

HS23010982-06	Analyzed 01/25/23		Conc Units µg/L		DF 20
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	990	1000	98.6	81-118	
4-Bromofluorobenzene	990	1000	99.1	85-114	
Dibromofluoromethane	900	1000	90.3	80-119	
Toluene-d8	1,000	1000	105	89-112	

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

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
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www.alsglobal.com

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

16EW02-230119		HS23010982-05		HS23010982-05MS				HS23010982-05MSD						
Sample Matrix	Aqueous	**Run Date**	01/23/23	01/23/23				01/23/23						
Units	µg/L	**Run Time**	16:32	17:35				17:56						
		Data File	X012316.D	X012319.D				X012320.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	2000	0	39330	40000	98		39070	40000	98		20	0.700	
1,1-Dichloroethene	71-131	2000	0	40510	40000	101		39400	40000	99		20	2.80	
1,2-Dichloroethane	73-128	2000	0	40730	40000	102		41710	40000	104		20	2.40	
cis-1,2-Dichloroethene	78-123	2000	39010	75870	40000	92		74150	40000	88		20	2.30	
Methylene chloride	74-124	2000	0	35340	40000	88		34660	40000	87		20	1.90	
Trichloroethene	79-123	2000	31950	75470	40000	109		70940	40000	98		20	6.20	
Vinyl chloride	58-137	2000	1012	40100	40000	98		37340	40000	91		20	7.10	

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

16EW02-230119		HS23010982-05		HS23010982-05MS				HS23010982-05MSD						
Sample Matrix	Aqueous	**Run Date**	01/24/23	01/24/23				01/24/23						
Units	µg/L	**Run Time**	09:58	11:01				11:22						
		Data File	X012407.D	X012410.D				X012411.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	100	120.3	1946	2000	91		1872	2000	88		20	3.80	
1,1-Dichloroethene	71-131	100	2800	4826	2000	101		4530	2000	87		20	6.30	
1,2-Dichloroethane	73-128	100	945.1	2896	2000	98		2828	2000	94		20	2.40	
cis-1,2-Dichloroethene	78-123	100	469000	480800	2000	590	*	470700	2000	85		20	2.10	
Methylene chloride	74-124	100	0	1568	2000	78		1502	2000	75		20	4.30	
Vinyl chloride	58-137	100	21960	23960	2000	100		22580	2000	31	*	20	6.00	

		HS23010986-05		HS23010986-05MS				HS23010986-05MSD						
Sample Matrix	Aqueous	**Run Date**	01/24/23	01/24/23				01/24/23						
Units	µg/L	**Run Time**	18:02	18:23				18:44						
		Data File	X012430.D	X012431.D				X012432.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	100	0	1596	2000	80	*	1488	2000	74	*	20	7.00	
1,1-Dichloroethene	71-131	100	149.1	1730	2000	79		1567	2000	71	*	20	9.90	
1,2-Dichloroethane	73-128	100	0	1728	2000	86		1684	2000	84		20	2.60	
cis-1,2-Dichloroethene	78-123	100	8811	9563	2000	38	*	9234	2000	21	*	20	3.50	
Methylene chloride	74-124	100	0	1374	2000	69	*	1318	2000	66	*	20	4.20	
Vinyl chloride	58-137	100	119.2	1622	2000	75		1462	2000	67		20	10.4	

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

16RW04-230119		HS23010982-02		HS23010982-02MS				HS23010982-02MSD						
Sample Matrix	Aqueous	**Run Date**	01/25/23	01/25/23				01/25/23						
Units	µg/L	**Run Time**	10:06	10:27				10:48						
		Data File	X012508.D	X012509.D				X012510.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
cis-1,2-Dichloroethene	78-123	100	145.3	1610	2000	73	*	1504	2000	68	*	20	6.80	
Trichloroethene	79-123	100	3310	5232	2000	96		4875	2000	78	*	20	7.10	
Vinyl chloride	58-137	100	0	1548	2000	77		1360	2000	68		20	12.9	

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

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Form 3B

Laboratory Control Sample Recovery

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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www.alsglobal.com

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

VOA6_426320		QC ID	VLCSW-233120			
QC Matrix Aqueous	Units	Run Date	01/23/23			
	ug/L	Run Time	12:40			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	20.37	102		
1,1-Dichloroethene	71-131	20	21.61	108		
1,2-Dichloroethane	73-128	20	23.17	116		
1,2-Dichloroethane-d4	81-118	50	55.96	112		
4-Bromofluorobenzene	85-114	50	51.76	104		
cis-1,2-Dichloroethene	78-123	20	20.59	103		
Dibromofluoromethane	80-119	50	50.19	100		
Methylene chloride	74-124	20	20.48	102		
Toluene-d8	89-112	50	49.52	99		
Trichloroethene	79-123	20	21.86	109		
Vinyl chloride	58-137	20	20.85	104		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

VOA6_426355		QC ID	VLCSW-230124			
QC Matrix Aqueous	Units	Run Date	01/24/23			
	ug/L	Run Time	08:55			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	19.79	99		
1,1-Dichloroethene	71-131	20	21.1	106		
1,2-Dichloroethane	73-128	20	22.96	115		
1,2-Dichloroethane-d4	81-118	50	55.08	110		
4-Bromofluorobenzene	85-114	50	51	102		
cis-1,2-Dichloroethene	78-123	20	20.41	102		
Dibromofluoromethane	80-119	50	49.99	100		
Methylene chloride	74-124	20	20.26	101		
Toluene-d8	89-112	50	49.61	99		
Vinyl chloride	58-137	20	20.07	100		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

VOA6_426481		QC ID	VLCSW-230125			
QC Matrix Aqueous	Units %REC	Run Date Run Time	01/25/23 08:42			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,2-Dichloroethane-d4	81-118	50	57.18	114		
4-Bromofluorobenzene	85-114	50	53.58	107		
cis-1,2-Dichloroethene	78-123	20	17.55	88		
Dibromofluoromethane	80-119	50	50.07	100		
Toluene-d8	89-112	50	51.82	104		
Trichloroethene	79-123	20	20.24	101		
Vinyl chloride	58-137	20	18.47	92		

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

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Form 4

Method Blank Summary

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230123	X012307.D	01/23/23 13:22	VOA6_426320
VLCSW-233120	LCS	VLCSW-233120	X012305.D	01/23/23 12:40	VOA6_426320
16EW02-230119	SAMP	HS23010982-05	X012315.D	01/23/23 16:11	VOA6_426320
16EW02-230119	MS	HS23010982-05MS	X012319.D	01/23/23 17:35	VOA6_426320
16EW02-230119	MSD	HS23010982-05MSD	X012320.D	01/23/23 17:56	VOA6_426320
16IW09-230119	SAMP	HS23010982-03	X012327.D	01/23/23 20:23	VOA6_426320
16IW20-230119	SAMP	HS23010982-04	X012328.D	01/23/23 20:44	VOA6_426320
16WW48-230119	SAMP	HS23010982-01	X012329.D	01/23/23 21:05	VOA6_426320
16WW48-230119	SAMP	HS23010982-01	X012330.D	01/23/23 21:26	VOA6_426320

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	**MBLK**	**VBLKW-230124**	**X012406.D**	**01/24/23 09:37**	**VOA6_426355**
VLCSW-230124	LCS	VLCSW-230124	X012404.D	01/24/23 08:55	VOA6_426355
16EW02-230119	SAMP	HS23010982-05	X012407.D	01/24/23 09:58	VOA6_426355
16EW02-230119	MS	HS23010982-05MS	X012410.D	01/24/23 11:01	VOA6_426355
16EW02-230119	MSD	HS23010982-05MSD	X012411.D	01/24/23 11:22	VOA6_426355
16RW04-230119	SAMP	HS23010982-02	X012426.D	01/24/23 16:38	VOA6_426355
16EW03-230119	SAMP	HS23010982-06	X012428.D	01/24/23 17:20	VOA6_426355
BatchQC	MS	HS23010986-05MS	X012431.D	01/24/23 18:23	VOA6_426355
BatchQC	MSD	HS23010986-05MSD	X012432.D	01/24/23 18:44	VOA6_426355

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230125	X012506.D	01/25/23 09:24	VOA6_426481
VLCSW-230125	LCS	VLCSW-230125	X012504.D	01/25/23 08:42	VOA6_426481
16RW04-230119	SAMP	HS23010982-02	X012508.D	01/25/23 10:06	VOA6_426481
16RW04-230119	MS	HS23010982-02MS	X012509.D	01/25/23 10:27	VOA6_426481
16RW04-230119	MSD	HS23010982-02MSD	X012510.D	01/25/23 10:48	VOA6_426481
16EW03-230119	SAMP	HS23010982-06	X012511.D	01/25/23 11:09	VOA6_426481

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Form 5

Instrument Performance Check

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_424237

Tune File X121601.D 12/16/22 11:17

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	18.3 (18.4)
75	30.0 - 60.0% of mass 95	46.1 (46.1)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.2 (7.16)
173	Less than 2.0% of mass 174	0.8 (0.897) 1
174	50.0 - 120.0% of mass 95	89 (89)
175	4.0 - 9.0% of mass 174	7 (7.82) 1
176	93.0 - 101.0% of mass 174	87.4 (98.2) 1
177	5.0 - 9.0% of mass 176	5.8 (6.59) 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	12/16/22 11:38	X121602	VSTD000.25
2	ICAL2	12/16/22 12:20	X121603	VSTD000.5
3	ICAL3	12/16/22 12:41	X121604	VSTD001
4	ICAL4	12/16/22 13:02	X121605	VSTD002
5	ICAL5	12/16/22 13:23	X121606	VSTD005
6	ICAL6	12/16/22 13:43	X121607	VSTD020
7	ICAL7	12/16/22 14:04	X121608	VSTD050
8	ICAL8	12/16/22 14:25	X121609	VSTD100
9	ICAL9	12/16/22 14:46	X121610	VSTD150
10	ICAL	12/16/22 15:07	X121611	VSTD200
11	ICV	12/16/22 15:49	X121613	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426320

Tune File X012301.D 01/23/23 11:16

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	23.8 (23.8)
75	30.0 - 60.0% of mass 95	48.6 (48.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	8.3 (8.27)
173	Less than 2.0% of mass 174	0.4 (0.48) 1
174	50.0 - 120.0% of mass 95	87 (87)
175	4.0 - 9.0% of mass 174	6.8 (7.77) 1
176	93.0 - 101.0% of mass 174	85.6 (98.4) 1
177	5.0 - 9.0% of mass 176	5 (5.83) 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	01/23/23 11:58	X012303	CCV
2	CCB	01/23/23 12:19	X012304	CCB
3	LCS	01/23/23 12:40	X012305	VLCSW-233120
4	MBLK	01/23/23 13:22	X012307	VBLKW-230123
5	SAMP	01/23/23 16:11	X012315	16EW02-230119
6	SAMP	01/23/23 16:32	X012316	16EW02-230119
7	MS	01/23/23 17:35	X012319	HS23010982-05MS
8	MSD	01/23/23 17:56	X012320	HS23010982-05MSD
9	SAMP	01/23/23 20:23	X012327	16IW09-230119
10	SAMP	01/23/23 20:44	X012328	16IW20-230119
11	SAMP	01/23/23 21:05	X012329	16WW48-230119
12	SAMP	01/23/23 21:26	X012330	16WW48-230119
13	CCV_EN	01/23/23 21:47	X012331	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426355

Tune File X012401.D 01/24/23 07:31

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	19.3 (19.3)
75	30.0 - 60.0% of mass 95	50 (50)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7 (7.04)
173	Less than 2.0% of mass 174	0.7 (0.819) 1
174	50.0 - 120.0% of mass 95	86.8 (86.8)
175	4.0 - 9.0% of mass 174	6.1 (7.05) 1
176	93.0 - 101.0% of mass 174	83.5 (96.2) 1
177	5.0 - 9.0% of mass 176	5.8 (6.91) 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	01/24/23 07:52	X012402	CCV
2	LCS	01/24/23 08:55	X012404	VLCSW-230124
3	MBLK	01/24/23 09:37	X012406	VBLKW-230124
4	SAMP	01/24/23 09:58	X012407	16EW02-230119
5	MS	01/24/23 11:01	X012410	HS23010982-05MS
6	MSD	01/24/23 11:22	X012411	HS23010982-05MSD
7	SAMP	01/24/23 16:38	X012426	16RW04-230119
8	SAMP	01/24/23 17:20	X012428	16EW03-230119
9	MS	01/24/23 18:23	X012431	ZZZZZZMS
10	MSD	01/24/23 18:44	X012432	ZZZZZZMSD
11	CCV_EN	01/24/23 19:05	X012433	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426481

Tune File X012501.D 01/25/23 07:18

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	19.1 (19.1)
75	30.0 - 60.0% of mass 95	50.9 (50.9)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.3 (7.3)
173	Less than 2.0% of mass 174	0.8 (0.922) 1
174	50.0 - 120.0% of mass 95	84.4 (84.4)
175	4.0 - 9.0% of mass 174	6.1 (7.23) 1
176	93.0 - 101.0% of mass 174	82.3 (97.6) 1
177	5.0 - 9.0% of mass 176	5.3 (6.48) 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	CCV	01/25/23 07:39	X012502	CCV
2	LCS	01/25/23 08:42	X012504	VLCSW-230125
3	MBLK	01/25/23 09:24	X012506	VBLKW-230125
4	SAMP	01/25/23 10:06	X012508	16RW04-230119
5	MS	01/25/23 10:27	X012509	HS23010982-02MS
6	MSD	01/25/23 10:48	X012510	HS23010982-02MSD
7	SAMP	01/25/23 11:09	X012511	16EW03-230119
8	CCV_EN	01/25/23 15:00	X012522	CCV-END

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Form 6

Initial Calibration Data

Volatiles by by EPA 8260

Workorder

HS23010982

Client

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Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138
ICAL End Date 16-DEC-2022 1507

Calibration Files

Level 1 ..voa6.i\X221216.b\X121602.D
Level 2 ..voa6.i\X221216.b\X121603.D
Level 3 ..voa6.i\X221216.b\X121604.D
Level 4 ..voa6.i\X221216.b\X121605.D
Level 5 ..voa6.i\X221216.b\X121606.D
Level 6 ..voa6.i\X221216.b\X121607.D
Level 7 ..voa6.i\X221216.b\X121608.D
Level 8 ..voa6.i\X221216.b\X121609.D
Level 9 ..voa6.i\X221216.b\X121610.D
Level 10 ..voa6.i\X221216.b\X121611.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 160392	1990 309019	2911 476130	6239 635808	15008	63382	LINR	0.00786	0.35247		0.99971	
Chloromethane	NE 192710	2466 388163	3670 621048	8057 865151	19623	72324	LINR	0.04423	0.47332		0.99747	
Propionitrile	NE 0.04851	0.06018 0.04917	0.05265 0.05178	0.04739 0.05178	0.05114	0.04656	AVRG		0.05102		7.91502	
Vinyl Chloride	NE 0.44103	0.52268 0.42953	0.40472 0.44923	0.39786 0.45909	0.42164	0.40520	AVRG		0.43678		8.81916	
Bromomethane	NE 139689	1893 284165	3293 470318	5996 NE	15112	52034	LINR	0.03529	0.34244		0.99519	
Chloroethane	NE 0.29447	0.35820 0.28714	0.27936 0.30494	0.31044 0.30410	0.31436	0.28309	AVRG		0.30401		7.80750	
Trichlorofluoromethane	NE 0.60756	0.71207 0.59817	0.54474 0.64605	0.57316 0.65074	0.59068	0.57785	AVRG		0.61122		8.28859	
Acrolein	NE 27445	440 60756	761 96139	1317 125874	2699	12279	LINR	0.05644	0.03519		0.99833	
Acetone	NE 124798	2669 243517	4787 373504	7041 514105	17632	50987	LINR	-0.00069	0.14025		0.99910	
1,1-Dichloroethene	NE 0.36912	0.44142 0.36226	0.35953 0.38517	0.37590 0.39076	0.37389	0.35725	AVRG		0.37948		6.80558	

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Isobutyl Alcohol	NE 0.05462	0.05610 0.05559	0.05239 0.05946	0.05650 0.05952	0.05728	0.05469	AVRG		0.05624		4.10209	
Acetonitrile	NE 0.04430	0.04776 0.04552	0.04645 0.04791	0.04253 0.04736	0.04357	0.04417	AVRG		0.04551		4.32823	
Allyl Chloride	NE 0.81324	0.99118 0.83169	0.95202 0.86799	0.81682 0.86396	0.84304	0.82034	AVRG		0.86670		7.30464	
Iodomethane	NE 455792	2397 958603	3865 1554547	8702 2193685	26708	143457	QUAD	0.06641	2.01333	-0.08031	0.99956	
Acrylonitrile	NE 0.12970	0.12113 0.12956	0.12536 0.13857	0.12482 0.13997	0.12256	0.12666	AVRG		0.12870		5.15060	
Methylene Chloride	NE 0.49311	0.63666 0.46611	0.59459 0.48892	0.50364 0.47907	0.50885	0.51372	AVRG		0.52052		10.92514	
Methyl tert-butyl ether	NE 1.16844	1.26574 1.18584	1.39027 1.23813	1.27259 1.24075	1.24993	1.16729	AVRG		1.24211		5.52745	
Carbon Disulfide	NE 0.97542	1.07494 0.97088	1.00609 1.02392	0.95722 1.06178	0.94769	0.91773	AVRG		0.99285		5.32584	
trans-1,2-Dichloroethene	NE 0.41851	0.48064 0.41454	0.42427 0.43221	0.38965 0.43554	0.42173	0.40526	AVRG		0.42470		5.92187	
Vinyl Acetate	NE 1.07506	1.09845 1.07519	0.99054 1.16529	1.06368 1.16741	1.12321	1.05445	AVRG		1.09037		5.13969	
1,1-Dichloroethane	NE 0.72125	0.83949 0.70504	0.80145 0.74074	0.69997 0.74459	0.75023	0.70550	AVRG		0.74536		6.34771	
Chloroprene	NE 0.16145	0.19503 0.16116	0.18721 0.16823	0.17124 0.17481	0.15874	0.15219	AVRG		0.17001		8.17551	

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2-Butanone	NE 130179	1292 264221	2498 407629	5418 555896	11771	47830	LINR	0.06050	0.15346		0.99924	
Methacrylonitrile	NE 0.32328	0.44770 0.32565	0.36475 0.34081	0.34993 0.34351	0.34840	0.34235	AVRG		0.35404		10.52608	
2,2-Dichloropropane	NE 0.62063	0.70167 0.61027	0.65466 0.64008	0.60521 0.65162	0.61866	0.59289	AVRG		0.63286		5.25207	
cis-1,2-Dichloroethene	NE 0.49985	0.61803 0.48778	0.49622 0.51710	0.52999 0.51455	0.50446	0.48374	AVRG		0.51686		7.86616	
Chloroform	NE 0.81023	0.87547 0.78725	0.86252 0.84612	0.85352 0.84457	0.84666	0.79238	AVRG		0.83541		3.73708	
Bromochloromethane	NE 0.26364	0.32093 0.26287	0.29857 0.28290	0.28124 0.28282	0.29319	0.26077	AVRG		0.28299		6.91423	
1,1,1-Trichloroethane	NE 0.65703	0.76105 0.64156	0.65666 0.67604	0.60049 0.69720	0.64387	0.63152	AVRG		0.66283		6.90392	
1,1-Dichloropropene	NE 0.37084	0.35889 0.35979	0.34245 0.36734	0.33027 0.37324	0.34789	0.34406	AVRG		0.35497		4.12237	
1,2-Dichloroethane	NE 0.39909	0.45501 0.40154	0.40587 0.41082	0.39492 0.41030	0.41104	0.39842	AVRG		0.40967		4.39762	
Carbon Tetrachloride	NE 0.36348	0.40179 0.35355	0.45347 0.36349	0.40515 0.37429	0.35265	0.34370	AVRG		0.37906		9.25223	
Benzene	NE 1.17241	1.34410 1.15323	1.19304 1.17461	1.18322 1.18197	1.19608	1.14722	AVRG		1.19399		4.90945	
Trichloroethene	NE 0.33750	0.37562 0.33140	0.31723 0.33891	0.33885 0.34649	0.33109	0.33079	AVRG		0.33865		4.73809	

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Bromodichloromethane	NE 0.42913	0.53078 0.42602	0.45893 0.44706	0.43689 0.45009	0.42833	0.42563	AVRG		0.44810		7.41292	
Methyl Methacrylate	NE 0.32238	0.38746 0.32465	0.34921 0.34726	0.33881 0.35704	0.33548	0.30606	AVRG		0.34093		6.87301	
2-Chloroethylvinyl ether	NE 0.13057	0.13531 0.12541	0.11670 0.12799	0.12141 0.12973	0.12912	0.13108	AVRG		0.12748		4.37734	
1,2-Dichloropropane	NE 0.31044	0.35613 0.30521	0.33560 0.31542	0.29692 0.31856	0.31629	0.30391	AVRG		0.31761		5.71516	
2-Nitropropane	NE 0.73644	1.05598 0.73807	0.76159 0.78445	0.80915 0.80253	0.77468	0.75211	AVRG		0.80167		12.32619	
Dibromomethane	NE 0.20672	0.25085 0.20317	0.21183 0.21324	0.22317 0.21357	0.21081	0.20954	AVRG		0.21588		6.58330	
4-Methyl-2-Pentanone	NE 0.25814	0.28987 0.25156	0.26418 0.26114	0.28502 0.26166	0.26684	0.26684	AVRG		0.26725		4.64865	
cis-1,3-Dichloropropene	NE 0.52860	0.53732 0.53368	0.47650 0.55605	0.50179 0.56353	0.51804	0.52075	AVRG		0.52625		5.04185	
Ethyl Methacrylate	NE 0.20804	0.28138 0.22619	0.24077 0.24786	0.23910 0.26163	0.20135	0.21276	AVRG		0.23545		11.14205	
Toluene	NE 1.36202	1.60765 1.32088	1.37997 1.35198	1.37463 1.35870	1.36957	1.31273	AVRG		1.38201		6.34459	
trans-1,3-Dichloropropene	NE 0.44682	0.44236 0.44877	0.39493 0.47075	0.40065 0.48573	0.41433	0.42619	AVRG		0.43673		7.01005	
2-Hexanone	NE 0.17839	0.19991 0.17192	0.17409 0.18312	0.17972 0.18566	0.18386	0.17978	AVRG		0.18183		4.45920	

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1,1,2-Trichloroethane	NE 0.26479	0.32419 0.25654	0.26954 0.26825	0.29087 0.26649	0.28491	0.26973	AVRG		0.27726		7.37510	
1,3-Dichloropropane	NE 0.53007	0.62065 0.51166	0.55587 0.53587	0.54217 0.53590	0.54663	0.53274	AVRG		0.54573		5.60982	
Dibromochloromethane	NE 0.39906	0.43810 0.39075	0.38701 0.40792	0.39402 0.40793	0.38762	0.38903	AVRG		0.40016		4.08851	
Tetrachloroethene	NE 0.29836	0.33024 0.28012	0.25660 0.28506	0.28292 0.28889	0.26322	0.28810	AVRG		0.28594		7.36821	
1,2-Dibromoethane	NE 0.35151	0.36263 0.33998	0.33509 0.35512	0.32714 0.35096	0.35422	0.34322	AVRG		0.34665		3.22017	
1-Chlorohexane	NE 0.24556	0.26597 0.23682	0.22998 0.25047	0.21386 0.26558	0.22191	0.24457	AVRG		0.24163		7.44215	
Chlorobenzene	NE 0.95622	1.20054 0.92158	0.96715 0.96470	0.94773 0.97511	0.95913	0.93014	AVRG		0.98026		8.61127	
1,1,1,2-Tetrachloroethane	NE 0.36060	0.42477 0.35457	0.34549 0.36940	0.36191 0.37188	0.34596	0.34861	AVRG		0.36480		6.70616	
Ethylbenzene	NE 0.47797	0.47482 0.45902	0.43893 0.46986	0.45503 0.47447	0.45171	0.45394	AVRG		0.46175		2.86128	
m,p-Xylenes	NE 0.60205	0.69860 0.58346	0.55710 0.60071	0.56286 0.61493	0.56012	0.57743	AVRG		0.59525		7.35638	
o-Xylene	NE 0.59049	0.68372 0.57562	0.51381 0.60058	0.56977 0.61516	0.56849	0.56994	AVRG		0.58751		7.79066	
Styrene	NE 1.03116	1.02806 1.01266	0.79991 1.07651	0.88633 1.09594	0.95404	0.97800	AVRG		0.98473		9.52837	

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Bromoform	NE	0.31195	0.25221	0.26817	0.25683	0.26696						
	0.27805	0.27584	0.29222	0.29278			AVRG		0.27722		6.87336	
Isopropylbenzene	NE	1.35706	1.16805	1.25967	1.30607	1.32939						
	1.41077	1.36357	1.42773	1.45784			AVRG		1.34224		6.69875	
1,1,2,2-Tetrachloroethane	NE	0.91828	0.84470	0.83187	0.83648	0.79018						
	0.74007	0.71754	0.75363	0.73962			AVRG		0.79693		8.24435	
1,2,3-Trichloropropane	NE	0.58047	0.56626	0.53238	0.58048	0.54015						
	0.53505	0.52761	0.60583	0.53897			AVRG		0.55636		4.97536	
trans-1,4-Dichloro-2-butene	NE	0.12274	0.09213	0.10381	0.10162	0.10094						
	0.10800	0.10845	0.11623	0.11751			AVRG		0.10794		8.88299	
n-Propylbenzene	NE	3.20938	2.13608	2.47845	2.73904	2.83806						
	2.90611	2.78733	2.90643	2.92515			AVRG		2.76956		11.03336	
Bromobenzene	NE	0.90477	0.79060	0.83045	0.81066	0.82521						
	0.80056	0.78064	0.82147	0.81857			AVRG		0.82033		4.35370	
1,3,5-Trimethylbenzene	NE	2.06484	1.68256	1.97796	2.03460	2.07048						
	2.12398	2.07652	2.18148	2.20122			AVRG		2.04596		7.47801	
2-Chlorotoluene	NE	1.93144	1.77508	1.90257	1.85141	1.80074						
	1.79455	1.71779	1.79669	1.78644			AVRG		1.81741		3.65582	
4-Chlorotoluene	NE	2.19766	1.72811	1.99610	2.10678	2.06499						
	2.09570	2.05624	2.19099	2.20989			AVRG		2.07183		7.13984	
tert-Butylbenzene	NE	1.83685	1.33195	1.56610	1.66625	1.69957						
	1.74647	1.66742	1.77236	1.78580			AVRG		1.67475		9.03914	
1,2,4-Trimethylbenzene	NE	2.44261	1.84882	2.01055	2.12502	2.14371						
	2.18278	2.12445	2.25368	2.24326			AVRG		2.15277		7.66012	

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sec-Butylbenzene	NE 2.38144	2.28219 2.30322	1.76441 2.43114	1.95855 2.46321	2.17705	2.29365	AVRG		2.22832		10.32115	
p-Isopropyltoluene	NE 2.16946	2.11113 2.07989	1.42476 2.19272	1.76888 2.20460	1.95504	2.06459	AVRG		1.99679		12.72950	
1,3-Dichlorobenzene	NE 1.39279	1.34465 1.34586	1.21323 1.42324	1.32549 1.42237	1.40186	1.38449	AVRG		1.36155		4.82043	
1,4-Dichlorobenzene	NE 1.45712	1.63128 1.44362	1.40441 1.52301	1.45614 1.52190	1.47766	1.45673	AVRG		1.48576		4.44368	
Benzyl Chloride	NE 472387	3642 1009234	4632 1650494	12783 2286488	35254	163895	LINR	0.05387	0.82700		0.99832	
n-Butylbenzene	NE 696355	5149 1425779	8459 2293126	19853 3216534	54831	248190	LINR	0.03551	1.99525		0.99890	
1,2-Dichlorobenzene	NE 1.39065	1.58241 1.36532	1.22790 1.44207	1.34058 1.43128	1.42827	1.41177	AVRG		1.40225		6.73504	
1,2-Dibromo-3-Chloropropane	NE 48660	441 94321	778 149691	1619 205063	4911	18635	LINR	0.00184	0.12764		0.99948	
1,2,4-Trichlorobenzene	NE 0.95146	0.91627 0.90293	0.65608 0.94400	0.83350 0.95022	0.89445	0.91558	AVRG		0.88494		10.53488	
Hexachlorobutadiene	NE 155390	1477 299042	1928 466452	3970 654615	13454	55912	QUAD	-0.00107	2.58308	-0.07816	0.99966	
Naphthalene	NE 2.14094	2.01970 2.06230	1.60683 2.15450	1.85985 2.12714	2.04153	2.10842	AVRG		2.01347		8.78393	
1,2,3-Trichlorobenzene	NE 0.85880	1.02696 0.83163	0.68341 0.85478	0.79977 0.84995	0.84958	0.87304	AVRG		0.84755		10.42886	

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Ethyl Acetate	NE 0.37280	0.44748 0.34980	0.34909 0.38488	0.40657 0.39192	0.39985	0.40902	AVRG		0.39016		7.92750	
Methyl Acrylate	NE 0.33014	0.38247 0.33914	0.34243 0.35741	0.29817 0.35867	0.33173	0.31494	AVRG		0.33946		7.36740	
n-Butanol	NE 54418	622 124057	1171 210842	2004 297334	4891	15012	QUAD	0.80435	158	-58.97368	0.99813	*
Ethyl Acrylate	NE 420886	NE 862071	NE 1358300	9825 1836030	26414	172044	LINR	0.05859	1.02468		0.99901	*
Cyclohexanone	NE 0.01934	0.07093 0.01945	0.03374 0.01993	0.02556 0.01966	0.01884	0.01912	AVRG		0.02740		62.21369	*
1,4-Dioxane	0.00463 0.00443	0.00501 0.00442	0.00455 0.00480	0.00386 0.00497	0.00466	0.00438	AVRG		0.00457		7.29408	
n-Hexane	NE 0.39852	0.41368 0.36338	0.26016 0.39788	0.32309 0.40267	0.32437	0.35631	AVRG		0.36001		13.97418	
Freon TF	NE 0.37622	0.40111 0.36030	0.37263 0.38547	0.33005 0.39624	0.32940	0.35185	AVRG		0.36703		7.16337	
Methyl Acetate	NE 0.21071	0.27499 0.21615	0.23617 0.22455	0.22728 0.22667	0.19900	0.20937	AVRG		0.22499		9.73149	
Methylcyclohexane	NE 0.60749	0.69525 0.62521	0.49917 0.65111	0.58500 0.65095	0.56389	0.63030	AVRG		0.61204		9.36456	
Isopropyl alcohol	NE 0.01716	0.02240 0.01767	0.01652 0.01919	0.01536 0.01934	0.01833	0.01677	AVRG		0.01808		11.41496	
Amyl alcohol	NE 0.00433	NE 0.00498	NE 0.00582	NE 0.00605	0.00196	0.00315	AVRG		0.00438		36.19033	*

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138 **ICAL End Date** 16-DEC-2022 1507

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 0.01993	0.03347 0.01817	0.01301 0.01989	0.01615 0.02013	0.01622	0.01782	AVRG		0.01942		29.60962	*
4-Methyl-2-pentanol	NE 0.04191	0.13977 0.04448	0.06768 0.05120	0.05740 0.05444	0.04467	0.04137	AVRG		0.06032		51.38639	*
Tert-butyl alcohol	NE 0.03307	0.04145 0.03257	0.03359 0.03586	0.03291 0.03628	0.03387	0.03199	AVRG		0.03462		8.48705	
Diethyl ether	NE 0.30968	0.40393 0.31674	0.33122 0.33062	0.34807 0.33029	0.33548	0.30080	AVRG		0.33409		8.92652	
1,3-Butadiene	NE 0.33288	0.38854 0.32994	0.38107 0.34951	0.31405 0.35836	0.31693	0.31715	AVRG		0.34316		8.15203	
Cyclohexane	NE 237699	2803 432198	4003 682728	7375 943314	19859	84355	LINR	0.02522	0.51703		0.99847	
Tetrahydrofuran	NE 58181	900 109518	1361 162133	2867 219995	7598	28221	LINR	-0.06333	0.06025		0.99942	
alpha-Methylstyrene	NE 1.13399	1.35155 1.10993	0.85865 1.16502	1.02359 1.17184	1.06165	1.09458	AVRG		1.10787		11.89593	
Diisopropyl ether	NE 1.21127	1.41201 1.25239	1.35074 1.32366	1.30436 1.33324	1.25459	1.23114	AVRG		1.29704		5.00179	
Dichlorofluoromethane	NE 0.05734	NE 0.05842	NE 0.06234	NE 0.06214	0.06484	0.06089	AVRG		0.06099		4.51209	*
Propylene oxide	NE 0.03071	NE 0.03174	0.05613 0.03407	0.03062 0.03228	0.03687	0.02961	AVRG		0.03525		24.79698	*
3-Methyl-1-butanol	NE 0.00489	NE 0.00483	NE 0.00601	NE 0.00612	0.00211	0.00438	AVRG		0.00472		30.80128	*

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138 **ICAL End Date** 16-DEC-2022 1507

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
Butyl acrylate	NE 0.63698	0.73114 0.67566	0.58907 0.72950	0.57945 0.74630	0.58578	0.60437	AVRG		0.65314		10.52624	
1,2,3-Trimethylbenzene	NE 2.21302	2.76749 2.29498	2.61167 2.36627	2.52848 2.30685	2.25428	2.32678	AVRG		2.40776		7.74526	
Ethanol	NE 29714	458 56794	787 87890	1703 117751	3072	12594	LINR	-0.06594	0.00325		0.99956	
1-Propanol	NE 0.00727	0.00862 0.00784	0.00964 0.00802	0.00852 0.00816	0.00825	0.00721	AVRG		0.00817		9.04495	
tert-Butyl formate	NE 0.24908	NE 0.25521	NE 0.29218	0.25634 0.29283	0.33766	0.24706	AVRG		0.27577		12.14219	*
3,3-Dimethyl-1-butanol	NE 0.02235	NE 0.02388	NE 0.02628	NE 0.02679	0.01912	0.02169	AVRG		0.02335		12.46791	*
tert-Amyl methyl ether	NE 1.32775	2.53777 1.35994	1.82297 1.44272	1.67155 1.43312	1.55575	1.35887	AVRG		1.61227		23.79383	*
tert-Butyl ethyl ether	NE 1.27589	1.81984 1.30743	1.44501 1.37993	1.35004 1.39745	1.35223	1.28319	AVRG		1.40122		11.86386	
tert-Amyl alcohol	NE 0.02491	0.03129 0.02552	0.02457 0.02922	0.02972 0.02928	0.03377	0.02471	AVRG		0.02811		11.82574	
Epichlorohydrin	NE 58515	926 126478	1242 183469	2483 257397	5941	23842	LINR	0.04999	0.02268		0.99921	
Isoprene	NE 0.13550	0.20890 0.13652	0.10782 0.14294	0.12769 0.14612	0.14811	0.13210	AVRG		0.14286		19.27805	*
n-Amyl acetate	NE 0.52035	NE 0.54240	NE 0.59479	NE 0.61078	NE	0.53118	AVRG		0.55990		7.20069	*

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138 **ICAL End Date** 16-DEC-2022 1507

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
Isopropyl acetate	NE 0.72227	1.34716 0.73275	0.78367 0.76494	0.79130 0.76466	0.77391	0.74796	AVRG		0.82540		23.86221	*
n-Butyl acetate	NE 0.19856	0.47947 0.20815	0.28533 0.21762	0.15799 0.22438	0.22627	0.22783	AVRG		0.24729		37.68114	*
Acetaldehyde	NE 67188	NE 107798	3384 161053	5661 205547	6161	32393	LINR	-0.46573	0.02837		0.99553	
Methyl Amyl Ketone	NE 0.62641	1.24254 0.65992	0.68451 0.69377	0.63815 0.71197	0.57607	0.60726	AVRG		0.71562		28.26825	*
Dimethyl Disulfide	NE 0.67210	0.79855 0.68414	0.63899 0.70500	0.61608 0.69777	0.61366	0.66406	AVRG		0.67671		8.32695	
1,2-Dichloroethylene (total)	NE 0.45918	0.54933 0.45116	0.46024 0.47466	0.45982 0.47504	0.46309	0.44450	AVRG		0.47078		6.59168	
Xylenes (total)	NE 0.56357	0.65089 0.56191	0.51351 0.58028	0.53491 0.60523	0.53725	0.54549	AVRG		0.56589		7.37687	
Dibromofluoromethane	NE 211939	2321 438954	4769 652724	9050 856027	24255	90108	LINR	-0.00333	0.47851		0.99972	
1,2-Dichloroethane-d4	NE 222293	2849 455890	5559 686218	9783 919752	24938	92990	LINR	0.00543	0.50950		0.99982	
Toluene-d8	NE 1.18347	1.47608 1.20166	1.31472 1.16429	1.20749 1.10711	1.24798	1.21701	AVRG		1.23554		8.62469	
4-Bromofluorobenzene	NE 292753	3870 615584	7790 936681	13631 1277239	32501	116878	LINR	0.00128	0.46242		0.99992	

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_424237

Volatiles by by EPA 8260

Instrument ID voa6.i ICAL Date 16-DEC-2022
Lab File ID X121613.D ICAL Time 2249
?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	48.61	97.24	80-120	
1,1,1-Trichloroeth	50.00	50.16	100.33	80-120	
1,1,2,2-Tetrachlor	50.00	46.75	93.50	80-120	
Freon TF	50.00	52.90	105.81	80-120	
Methyl Acetate	50.00	48.17	96.35	80-120	
Cyclohexane	50.00	51.73	103.47	80-120	
Methylcyclohexane	50.00	50.89	101.79	80-120	
Carbon Disulfide	100.00	98.50	98.50	80-120	
2-Hexanone	100.00	96.73	96.74	80-120	
1,1,2-Trichloroeth	50.00	47.91	95.83	80-120	
1,1-Dichloroethane	50.00	48.19	96.39	80-120	
1,1-Dichloroethene	50.00	49.34	98.68	80-120	
1,1-Dichloropropen	50.00	52.11	104.24	80-120	
1,2,3-Trichloroben	50.00	52.79	105.58	80-120	
1,2,3-Trichloropro	50.00	48.07	96.16	80-120	
1,2,4-Trichloroben	50.00	54.66	109.32	80-120	
1,2,4-Trimethylben	50.00	51.32	102.65	80-120	
1,2-Dibromo-3-Chlo	50.00	50.53	101.07	80-120	
1,2-Dibromoethane	50.00	50.24	100.49	80-120	
Acrolein	100.00	95.06	95.07	80-120	
Acrylonitrile	100.00	101.42	101.43	80-120	
1,2-Dichlorobenzen	50.00	49.52	99.05	80-120	
1,2-Dichloroethane	50.00	49.52	99.05	80-120	
1,2-Dichloropropan	50.00	49.60	99.22	80-120	
1,3,5-Trimethylben	50.00	52.30	104.61	80-120	
1,3-Dichlorobenzen	50.00	51.21	102.43	80-120	
1,3-Dichloropropan	50.00	47.82	95.66	80-120	
1,4-Dichlorobenzen	50.00	49.71	99.44	80-120	
1-Chlorohexane	50.00	51.98	103.97	80-120	
2,2-Dichloropropan	50.00	50.98	101.98	80-120	
2-Butanone	100.00	97.74	97.74	80-120	
2-Chloroethylvinyl	100.00	104.19	104.19	80-120	
2-Chlorotoluene	50.00	49.94	99.89	80-120	
4-Chlorotoluene	50.00	51.25	102.51	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_424237

Volatiles by by EPA 8260

Instrument ID voa6.i ICAL Date 16-DEC-2022
Lab File ID X121613.D ICAL Time 2249
?VAL? ?VAL? Conc Units ug/L
Analysis Type VOA Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	54.75	109.51	80-120	
4-Methyl-2-Pentano	100.00	94.03	94.03	80-120	
Acetone	100.00	101.89	101.90	80-120	
Acetonitrile	500.00	475.59	95.12	80-120	
Allyl Chloride	50.00	47.31	94.63	80-120	
Benzene	50.00	50.29	100.58	80-120	
Bromobenzene	50.00	49.62	99.25	80-120	
Bromochloromethane	50.00	47.25	94.51	80-120	
Bromodichlorometha	50.00	49.22	98.45	80-120	
Bromoform	50.00	49.33	98.66	80-120	
Bromomethane	50.00	50.78	101.58	80-120	
Carbon Tetrachlori	50.00	49.06	98.12	80-120	
Chlorobenzene	50.00	48.34	96.68	80-120	
Chloroethane	50.00	48.32	96.64	80-120	
Chloroform	50.00	48.45	96.91	80-120	
Chloromethane	50.00	50.17	100.35	80-120	
Chloroprene	50.00	47.74	95.50	80-120	
cis-1,2-Dichloroet	50.00	48.25	96.51	80-120	
cis-1,3-Dichloropr	50.00	52.11	104.22	80-120	
Dibromochlorometha	50.00	49.50	99.02	80-120	
Dibromomethane	50.00	49.19	98.38	80-120	
Dichlorodifluorome	50.00	52.19	104.38	80-120	
Ethylbenzene	50.00	51.31	102.63	80-120	
Ethyl Methacrylate	50.00	44.07	88.15	80-120	
Iodomethane	100.00	96.48	96.49	80-120	
Isobutyl Alcohol	1000.00	982.15	98.22	70-130	
Propionitrile	500.00	486.89	97.38	70-130	
Hexachlorobutadien	50.00	57.73	115.48	80-120	
Isopropylbenzene	50.00	52.09	104.19	80-120	
m,p-Xylenes	100.00	100.17	100.17	80-120	
Methyl tert-butyl	50.00	48.12	96.25	80-120	
Methylene Chloride	50.00	47.56	95.14	80-120	
Methacrylonitrile	50.00	46.73	93.48	80-120	
Methyl Methacrylat	50.00	47.71	95.43	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_424237

Volatiles by by EPA 8260

Instrument ID voa6.i ICAL Date 16-DEC-2022
Lab File ID X121613.D ICAL Time 2249
?VAL? ?VAL? Conc Units ug/L
Analysis Type VOA Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	50.66	101.33	80-120	
n-Propylbenzene	50.00	52.67	105.35	80-120	
Naphthalene	50.00	52.67	105.35	80-120	
o-Xylene	50.00	49.75	99.51	80-120	
sec-Butylbenzene	50.00	54.16	108.34	80-120	
Styrene	50.00	52.09	104.20	80-120	
tert-Butylbenzene	50.00	52.83	105.67	80-120	
Tetrachloroethene	50.00	50.99	101.99	80-120	
Toluene	50.00	49.20	98.42	80-120	
trans-1,2-Dichloro	50.00	49.99	99.98	80-120	
trans-1,3-Dichloro	50.00	52.50	105.01	80-120	
trans-1,4-Dichloro	50.00	49.73	99.47	80-120	
Trichloroethene	50.00	51.28	102.56	80-120	
Trichlorofluoromet	50.00	51.00	102.02	80-120	
Vinyl Acetate	100.00	104.75	104.76	80-120	
Vinyl Chloride	50.00	50.57	101.15	80-120	
1,2-Dichloroethyle	100.00	98.24	98.25	80-120	
Xylenes (total)	150.00	149.92	99.95	80-120	
1,4-Dioxane	1000.00	1021.76	102.18	80-120	
Dibromofluorometha	50.00	50.91	101.84	71-125	
1,2-Dichloroethane	50.00	50.36	100.73	70-125	
Toluene-d8	50.00	49.50	99.00	75-125	
4-Bromofluorobenze	50.00	49.98	99.97	72-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426320

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 23-JAN-2023 1158
Lab File ID X012303.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	RRF / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00457	0.00505	0.00505	0.001	-10.49147	20.0	Averaged	
1,3-Butadiene	0.34316	0.34818	0.34818	0.100	-1.46355	20.0	Averaged	
Methacrylonitrile	0.35404	0.36667	0.36667	0.100	-3.56579	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06377	0.06377	0.005	-13.39904	20.0	Averaged	
Acetonitrile	0.04551	0.04951	0.04951	0.005	-8.80136	20.0	Averaged	
Allyl Chloride	0.86670	0.89571	0.89571	0.100	-3.34791	20.0	Averaged	
Propionitrile	0.05102	0.05133	0.05133	0.010	-0.62064	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12345	0.12345	0.050	-14.36868	20.0	Averaged	
Acetaldehyde	200	199	0.03147	0.001	0.71921	20.0	Linear	
Chloroprene	0.17001	0.17102	0.17102	0.100	-0.59453	20.0	Averaged	
Methyl Methacrylate	0.34093	0.37177	0.37177	0.100	-9.04673	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.25887	0.25887	0.100	-9.94645	20.0	Averaged	
Methyl Acrylate	0.33946	0.44490	0.44490	0.100	-31.06261	20.0	Averaged	<-
Tetrahydrofuran	100	103	0.06410	0.001	-3.21461	20.0	Linear	
alpha-Methylstyrene	1.10787	1.15049	1.15049	0.100	-3.84763	20.0	Averaged	
Diisopropyl ether	1.29704	1.31677	1.31677	0.100	-1.52107	20.0	Averaged	
Epichlorohydrin	200	210	0.02358	0.001	-5.24322	20.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.31173	2.31173	0.100	3.98798	20.0	Averaged	
Dichlorodifluoromethane	50.0	57.08991	0.39968	0.100	-14.17981	20.0	Linear	
Chloromethane	50.0	52.67899	0.47774	0.100	-5.35798	20.0	Linear	
Vinyl Chloride	0.43678	0.46086	0.46086	0.100	-5.51363	20.0	Averaged	
Bromomethane	50.0	49.22760	0.32507	0.100	1.54480	20.0	Linear	
Chloroethane	0.30401	0.28905	0.28905	0.100	4.92275	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.68982	0.68982	0.100	-12.85943	20.0	Averaged	
Acrolein	100	94.59177	0.03229	0.010	5.40823	20.0	Linear	
Acetone	100	112	0.15735	0.100	-12.15738	20.0	Linear	
1,1-Dichloroethene	0.37948	0.39169	0.39169	0.100	-3.21760	20.0	Averaged	
Iodomethane	100	104	0.52265	0.100	-4.15938	20.0	Quadratic	
Acrylonitrile	0.12870	0.13921	0.13921	0.050	-8.16556	20.0	Averaged	
Methylene Chloride	0.52052	0.47860	0.47860	0.100	8.05268	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.24735	1.24735	0.100	-0.42164	20.0	Averaged	
Carbon Disulfide	0.99285	1.03089	1.03089	0.100	-3.83088	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.43144	0.43144	0.100	-1.58657	20.0	Averaged	
Vinyl Acetate	1.09037	1.24066	1.24066	0.010	-13.78413	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426320

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 23-JAN-2023 1158
Lab File ID X012303.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,1-Dichloroethane	0.74536	0.75327	0.75327	0.200	-1.06142	20.0	Averaged	
2-Butanone	100	114	0.17014	0.100	-13.89601	20.0	Linear	
2,2-Dichloropropane	0.63286	0.72017	0.72017	0.100	-13.79667	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.49960	0.49960	0.100	3.33903	20.0	Averaged	
Chloroform	0.83541	0.84699	0.84699	0.200	-1.38551	20.0	Averaged	
Bromochloromethane	0.28299	0.26448	0.26448	0.100	6.54301	20.0	Averaged	
Dibromofluoromethane	50.0	49.92048	0.47934	0.100	0.15904	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.73601	0.73601	0.100	-11.04145	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.42074	0.42074	0.100	-18.52542	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.45585	0.45585	0.100	-11.27212	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.41755	0.41755	0.100	-10.15321	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	53.57850	0.54320	0.100	-7.15700	20.0	Linear	
Benzene	1.19399	1.24043	1.24043	0.500	-3.88960	20.0	Averaged	
Trichloroethene	0.33865	0.35378	0.35378	0.200	-4.46809	20.0	Averaged	
Bromodichloromethane	0.44810	0.45944	0.45944	0.200	-2.53160	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.16483	0.16483	0.001	-29.29666	20.0	Averaged	<-
1,2-Dichloropropane	0.31761	0.32602	0.32602	0.100	-2.65000	20.0	Averaged	
Dibromomethane	0.21588	0.21420	0.21420	0.100	0.77829	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.30090	0.30090	0.100	-12.59285	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.56679	0.56679	0.200	-7.70399	20.0	Averaged	
Toluene-d8	1.23554	1.25924	1.25924	0.100	-1.91881	20.0	Averaged	
Toluene	1.38201	1.45494	1.45494	0.400	-5.27656	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.49472	0.49472	0.100	-13.28025	20.0	Averaged	
2-Hexanone	0.18183	0.21427	0.21427	0.100	-17.84287	20.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.27712	0.27712	0.100	0.05054	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.56085	0.56085	0.100	-2.77168	20.0	Averaged	
Dibromochloromethane	0.40016	0.41139	0.41139	0.100	-2.80662	20.0	Averaged	
Tetrachloroethene	0.28594	0.31579	0.31579	0.200	-10.43683	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.36356	0.36356	0.100	-4.87733	20.0	Averaged	
1-Chlorohexane	0.24163	0.29112	0.29112	0.100	-20.48086	20.0	Averaged	<-
Chlorobenzene	0.98026	0.99925	0.99925	0.500	-1.93817	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.38335	0.38335	0.100	-5.08415	20.0	Averaged	
Ethylbenzene	0.46175	0.50888	0.50888	0.100	-10.20682	20.0	Averaged	
m,p-Xylenes	0.59525	0.64686	0.64686	0.100	-8.67017	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426320

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 23-JAN-2023 1158
Lab File ID X012303.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
o-Xylene	0.58751	0.61571	0.61571	0.300	-4.80022	20.0	Averaged	
Styrene	0.98473	1.08887	1.08887	0.300	-10.57527	20.0	Averaged	
Bromoform	0.27722	0.29817	0.29817	0.100	-7.55468	20.0	Averaged	
Isopropylbenzene	1.34224	1.57290	1.57290	0.100	-17.18489	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.80786	0.80786	0.300	-1.37135	20.0	Averaged	
4-Bromofluorobenzene	50.0	54.11359	0.49987	0.100	-8.22718	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.61934	0.61934	0.100	-11.32046	20.0	Averaged	
n-Propylbenzene	2.76956	3.29769	3.29769	0.100	-19.06904	20.0	Averaged	
Bromobenzene	0.82033	0.83444	0.83444	0.100	-1.72113	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.38745	2.38745	0.100	-16.69117	20.0	Averaged	
2-Chlorotoluene	1.81741	2.02344	2.02344	0.100	-11.33648	20.0	Averaged	
4-Chlorotoluene	2.07183	2.39141	2.39141	0.100	-15.42530	20.0	Averaged	
tert-Butylbenzene	1.67475	1.99746	1.99746	0.100	-19.26890	20.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.44161	2.44161	0.100	-13.41738	20.0	Averaged	
sec-Butylbenzene	2.22832	2.80419	2.80419	0.100	-25.84361	20.0	Averaged	<-
p-Isopropyltoluene	1.99679	2.49985	2.49985	0.100	-25.19371	20.0	Averaged	<-
1,3-Dichlorobenzene	1.36155	1.48258	1.48258	0.600	-8.88907	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.57555	1.57555	0.400	-6.04316	20.0	Averaged	
n-Butylbenzene	50.0	58.29302	2.25533	0.500	-16.58603	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.48930	1.48930	0.400	-6.20770	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	54.58068	0.13910	0.040	-9.16136	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.04104	1.04104	0.100	-17.63938	20.0	Averaged	
Hexachlorobutadiene	50.0	60.45124	0.47530	0.100	-20.90247	20.0	Quadratic	<-
Naphthalene	2.01347	2.35396	2.35396	0.200	-16.91077	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.96214	0.96214	0.010	-13.52093	20.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.46552	0.46552	0.200	1.11727	20.0	Averaged	
Xylenes (total)	0.56589	0.60831	0.60831	0.100	-7.49564	20.0	Averaged	
Cyclohexane	50.0	58.83325	0.59533	0.100	-17.66649	20.0	Linear	
Freon TF	0.36703	0.39987	0.39987	0.100	-8.94752	20.0	Averaged	
Methylcyclohexane	0.61204	0.69701	0.69701	0.100	-13.88285	20.0	Averaged	
Methyl Acetate	0.22499	0.23708	0.23708	0.100	-5.37612	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.03979	0.03979	0.005	-14.92555	20.0	Averaged	
Isopropyl alcohol	0.01808	0.02173	0.02173	0.005	-20.16479	20.0	Averaged	<-

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426320

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 23-JAN-2023 2147
Lab File ID X012331.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
1,4-Dioxane	0.00457	0.00522	0.00522	0.001	-14.15009	50.0	Averaged	
1,3-Butadiene	0.34316	0.32395	0.32395	0.100	5.59636	50.0	Averaged	
Methacrylonitrile	0.35404	0.37037	0.37037	0.100	-4.61104	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06130	0.06130	0.005	-9.00526	50.0	Averaged	
Acetonitrile	0.04551	0.04689	0.04689	0.005	-3.04927	50.0	Averaged	
Allyl Chloride	0.86670	0.85096	0.85096	0.100	1.81568	50.0	Averaged	
Propionitrile	0.05102	0.05399	0.05399	0.010	-5.82918	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11119	0.11119	0.050	-3.01539	50.0	Averaged	
Acetaldehyde	200	308	0.04701	0.001	-54.05144	50.0	Linear	
Chloroprene	0.17001	0.16025	0.16025	0.100	5.74058	50.0	Averaged	
Methyl Methacrylate	0.34093	0.37645	0.37645	0.100	-10.41836	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.25252	0.25252	0.100	-7.24700	50.0	Averaged	
Methyl Acrylate	0.33946	0.39436	0.39436	0.100	-16.17453	50.0	Averaged	
Tetrahydrofuran	100	104	0.06471	0.001	-4.23487	50.0	Linear	
alpha-Methylstyrene	1.10787	1.08863	1.08863	0.100	1.73648	50.0	Averaged	
Diisopropyl ether	1.29704	1.27807	1.27807	0.100	1.46320	50.0	Averaged	
Epichlorohydrin	200	208	0.02328	0.001	-3.92090	50.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.31822	2.31822	0.100	3.71845	50.0	Averaged	
Dichlorodifluoromethane	50.0	42.11733	0.29414	0.100	15.76533	50.0	Linear	
Chloromethane	50.0	44.30505	0.39847	0.100	11.38990	50.0	Linear	
Vinyl Chloride	0.43678	0.41822	0.41822	0.100	4.24882	50.0	Averaged	
Bromomethane	50.0	44.59479	0.29334	0.100	10.81043	50.0	Linear	
Chloroethane	0.30401	0.28451	0.28451	0.100	6.41438	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.64895	0.64895	0.100	-6.17148	50.0	Averaged	
Acrolein	100	79.99609	0.02716	0.010	20.00391	50.0	Linear	
Acetone	100	87.89892	0.12332	0.100	12.10108	50.0	Linear	
1,1-Dichloroethene	0.37948	0.37678	0.37678	0.100	0.71015	50.0	Averaged	
Iodomethane	100	94.47972	0.47043	0.100	5.52028	50.0	Quadratic	
Acrylonitrile	0.12870	0.14069	0.14069	0.050	-9.31415	50.0	Averaged	
Methylene Chloride	0.52052	0.48150	0.48150	0.100	7.49590	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.20828	1.20828	0.100	2.72354	50.0	Averaged	
Carbon Disulfide	0.99285	0.99570	0.99570	0.100	-0.28701	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.42362	0.42362	0.100	0.25440	50.0	Averaged	
Vinyl Acetate	1.09037	0.95940	0.95940	0.010	12.01110	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426320

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 23-JAN-2023 2147
Lab File ID X012331.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
1,1-Dichloroethane	0.74536	0.74655	0.74655	0.200	-0.15892	50.0	Averaged	
2-Butanone	100	103	0.15359	0.100	-3.11175	50.0	Linear	
2,2-Dichloropropane	0.63286	0.59596	0.59596	0.100	5.83059	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.50934	0.50934	0.100	1.45484	50.0	Averaged	
Chloroform	0.83541	0.85855	0.85855	0.200	-2.76940	50.0	Averaged	
Bromochloromethane	0.28299	0.26975	0.26975	0.100	4.67740	50.0	Averaged	
Dibromofluoromethane	50.0	49.40394	0.47439	0.100	1.19213	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.71230	0.71230	0.100	-7.46348	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.38382	0.38382	0.100	-8.12486	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.43530	0.43530	0.100	-6.25649	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.38497	0.38497	0.100	-1.55911	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	53.63368	0.54376	0.100	-7.26735	50.0	Linear	
Benzene	1.19399	1.18660	1.18660	0.500	0.61871	50.0	Averaged	
Trichloroethene	0.33865	0.35326	0.35326	0.200	-4.31229	50.0	Averaged	
Bromodichloromethane	0.44810	0.43953	0.43953	0.200	1.91033	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.14063	0.14063	0.001	-10.31362	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.30945	0.30945	0.100	2.56905	50.0	Averaged	
Dibromomethane	0.21588	0.21059	0.21059	0.100	2.44952	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.27898	0.27898	0.100	-4.38820	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.51412	0.51412	0.200	2.30491	50.0	Averaged	
Toluene-d8	1.23554	1.18729	1.18729	0.100	3.90490	50.0	Averaged	
Toluene	1.38201	1.36561	1.36561	0.400	1.18735	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.44851	0.44851	0.100	-2.69805	50.0	Averaged	
2-Hexanone	0.18183	0.19207	0.19207	0.100	-5.63344	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.26448	0.26448	0.100	4.60715	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.53111	0.53111	0.100	2.67872	50.0	Averaged	
Dibromochloromethane	0.40016	0.39120	0.39120	0.100	2.23821	50.0	Averaged	
Tetrachloroethene	0.28594	0.29271	0.29271	0.200	-2.36595	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.34926	0.34926	0.100	-0.75298	50.0	Averaged	
1-Chlorohexane	0.24163	0.26176	0.26176	0.100	-8.32905	50.0	Averaged	
Chlorobenzene	0.98026	0.95228	0.95228	0.500	2.85393	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.36374	0.36374	0.100	0.28992	50.0	Averaged	
Ethylbenzene	0.46175	0.47907	0.47907	0.100	-3.75014	50.0	Averaged	
m,p-Xylenes	0.59525	0.60892	0.60892	0.100	-2.29577	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426320

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 23-JAN-2023 2147
Lab File ID X012331.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
o-Xylene	0.58751	0.58930	0.58930	0.300	-0.30570	50.0	Averaged	
Styrene	0.98473	1.03863	1.03863	0.300	-5.47293	50.0	Averaged	
Bromoform	0.27722	0.27452	0.27452	0.100	0.97384	50.0	Averaged	
Isopropylbenzene	1.34224	1.48640	1.48640	0.100	-10.74069	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.70822	0.70822	0.300	11.13138	50.0	Averaged	
4-Bromofluorobenzene	50.0	51.44330	0.47517	0.100	-2.88660	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.55759	0.55759	0.100	-0.22120	50.0	Averaged	
n-Propylbenzene	2.76956	2.99158	2.99158	0.100	-8.01632	50.0	Averaged	
Bromobenzene	0.82033	0.79241	0.79241	0.100	3.40283	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.21456	2.21456	0.100	-8.24067	50.0	Averaged	
2-Chlorotoluene	1.81741	1.85203	1.85203	0.100	-1.90502	50.0	Averaged	
4-Chlorotoluene	2.07183	2.16731	2.16731	0.100	-4.60878	50.0	Averaged	
tert-Butylbenzene	1.67475	1.84584	1.84584	0.100	-10.21567	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.26554	2.26554	0.100	-5.23880	50.0	Averaged	
sec-Butylbenzene	2.22832	2.56760	2.56760	0.100	-15.22589	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.27090	2.27090	0.100	-13.72803	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.38790	1.38790	0.600	-1.93487	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.45878	1.45878	0.400	1.81640	50.0	Averaged	
n-Butylbenzene	50.0	51.42462	1.98125	0.500	-2.84923	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.40135	1.40135	0.400	0.06437	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	49.91238	0.12719	0.040	0.17525	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	0.94079	0.94079	0.100	-6.31053	50.0	Averaged	
Hexachlorobutadiene	50.0	50.40790	0.39544	0.100	-0.81580	50.0	Quadratic	
Naphthalene	2.01347	2.14566	2.14566	0.200	-6.56555	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.87842	0.87842	0.010	-3.64247	50.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.46648	0.46648	0.200	0.91337	50.0	Averaged	
Xylenes (total)	0.56589	0.58347	0.58347	0.100	-3.10599	50.0	Averaged	
Cyclohexane	50.0	55.44221	0.56027	0.100	-10.88441	50.0	Linear	
Freon TF	0.36703	0.37192	0.37192	0.100	-1.33132	50.0	Averaged	
Methylcyclohexane	0.61204	0.63618	0.63618	0.100	-3.94431	50.0	Averaged	
Methyl Acetate	0.22499	0.24418	0.24418	0.100	-8.52774	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.03856	0.03856	0.005	-11.38872	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02077	0.02077	0.005	-14.89667	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	50.0	43.46372	0.30363	0.100	13.07255	20.0	Linear	
Chloromethane	50.0	47.04171	0.42438	0.100	5.91658	20.0	Linear	
Propionitrile	0.05102	0.05658	0.05658	0.010	-10.89928	20.0	Averaged	
Vinyl Chloride	0.43678	0.42536	0.42536	0.100	2.61473	20.0	Averaged	
Bromomethane	50.0	46.37703	0.30555	0.100	7.24594	20.0	Linear	
Chloroethane	0.30401	0.28704	0.28704	0.100	5.58124	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.66678	0.66678	0.100	-9.08910	20.0	Averaged	
Acrolein	100	103	0.03516	0.010	-2.74295	20.0	Linear	
Acetone	100	110	0.15370	0.100	-9.55416	20.0	Linear	
1,1-Dichloroethene	0.37948	0.38027	0.38027	0.100	-0.20880	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06598	0.06598	0.005	-17.31786	20.0	Averaged	
Acetonitrile	0.04551	0.05401	0.05401	0.005	-18.67808	20.0	Averaged	
Allyl Chloride	0.86670	0.96166	0.96166	0.100	-10.95676	20.0	Averaged	
Iodomethane	100	102	0.51250	0.100	-2.28565	20.0	Quadratic	
Acrylonitrile	0.12870	0.14847	0.14847	0.050	-15.35984	20.0	Averaged	
Methylene Chloride	0.52052	0.48596	0.48596	0.100	6.64028	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.33368	1.33368	0.100	-7.37258	20.0	Averaged	
Carbon Disulfide	0.99285	1.05102	1.05102	0.100	-5.85845	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.43863	0.43863	0.100	-3.27902	20.0	Averaged	
Vinyl Acetate	1.09037	1.27201	1.27201	0.010	-16.65922	20.0	Averaged	
1,1-Dichloroethane	0.74536	0.76741	0.76741	0.200	-2.95779	20.0	Averaged	
Chloroprene	0.17001	0.16396	0.16396	0.100	3.55956	20.0	Averaged	
2-Butanone	100	111	0.16565	0.100	-10.97028	20.0	Linear	
Methacrylonitrile	0.35404	0.39326	0.39326	0.100	-11.07804	20.0	Averaged	
2,2-Dichloropropane	0.63286	0.73773	0.73773	0.100	-16.57210	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.50541	0.50541	0.100	2.21463	20.0	Averaged	
Chloroform	0.83541	0.85884	0.85884	0.200	-2.80386	20.0	Averaged	
Bromochloromethane	0.28299	0.26476	0.26476	0.100	6.44309	20.0	Averaged	
Dibromofluoromethane	50.0	50.54201	0.48529	0.100	-1.08402	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.75141	0.75141	0.100	-13.36404	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.42083	0.42083	0.100	-18.55297	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.45623	0.45623	0.100	-11.36502	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.41971	0.41971	0.100	-10.72407	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	54.92946	0.55697	0.100	-9.85893	20.0	Linear	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Benzene	1.19399	1.23242	1.23242	0.500	-3.21892	20.0	Averaged	
Trichloroethene	0.33865	0.35892	0.35892	0.200	-5.98441	20.0	Averaged	
Bromodichloromethane	0.44810	0.45546	0.45546	0.200	-1.64355	20.0	Averaged	
Methyl Methacrylate	0.34093	0.39915	0.39915	0.100	-17.07916	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.14872	0.14872	0.001	-16.66371	20.0	Averaged	
1,2-Dichloropropane	0.31761	0.32073	0.32073	0.100	-0.98342	20.0	Averaged	
2-Nitropropane	0.12626	0.15726	0.15726	0.000	-24.54847	20.0	Averaged	<-
Dibromomethane	0.21588	0.21656	0.21656	0.100	-0.31458	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.29611	0.29611	0.100	-10.79742	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.56177	0.56177	0.200	-6.74973	20.0	Averaged	
Toluene-d8	1.23554	1.24078	1.24078	0.100	-0.42453	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.26783	0.26783	0.100	-13.75030	20.0	Averaged	
Toluene	1.38201	1.43737	1.43737	0.400	-4.00528	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.49161	0.49161	0.100	-12.56715	20.0	Averaged	
2-Hexanone	0.18183	0.20842	0.20842	0.100	-14.62209	20.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.27255	0.27255	0.100	1.69756	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.55948	0.55948	0.100	-2.51948	20.0	Averaged	
Dibromochloromethane	0.40016	0.40703	0.40703	0.100	-1.71720	20.0	Averaged	
Tetrachloroethene	0.28594	0.32100	0.32100	0.200	-12.26115	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.36165	0.36165	0.100	-4.32772	20.0	Averaged	
1-Chlorohexane	0.24163	0.29701	0.29701	0.100	-22.91612	20.0	Averaged	<-
Chlorobenzene	0.98026	0.98352	0.98352	0.500	-0.33302	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37500	0.37500	0.100	-2.79473	20.0	Averaged	
Ethylbenzene	0.46175	0.50775	0.50775	0.100	-9.96066	20.0	Averaged	
m,p-Xylenes	0.59525	0.64741	0.64741	0.100	-8.76315	20.0	Averaged	
o-Xylene	0.58751	0.61524	0.61524	0.300	-4.71985	20.0	Averaged	
Styrene	0.98473	1.07182	1.07182	0.300	-8.84350	20.0	Averaged	
Bromoform	0.27722	0.28569	0.28569	0.100	-3.05500	20.0	Averaged	
Isopropylbenzene	1.34224	1.59205	1.59205	0.100	-18.61159	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.77429	0.77429	0.300	2.84050	20.0	Averaged	
4-Bromofluorobenzene	50.0	53.31448	0.49248	0.100	-6.62895	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.59000	0.59000	0.100	-6.04687	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12369	0.12369	0.050	-14.59072	20.0	Averaged	
n-Propylbenzene	2.76956	3.29232	3.29232	0.100	-18.87513	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.82033	0.81343	0.81343	0.100	0.84012	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.38751	2.38751	0.100	-16.69398	20.0	Averaged	
2-Chlorotoluene	1.81741	1.99202	1.99202	0.100	-9.60752	20.0	Averaged	
4-Chlorotoluene	2.07183	2.33540	2.33540	0.100	-12.72184	20.0	Averaged	
tert-Butylbenzene	1.67475	1.99053	1.99053	0.100	-18.85498	20.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.42500	2.42500	0.100	-12.64559	20.0	Averaged	
sec-Butylbenzene	2.22832	2.82484	2.82484	0.100	-26.77019	20.0	Averaged	<-
p-Isopropyltoluene	1.99679	2.52320	2.52320	0.100	-26.36316	20.0	Averaged	<-
1,3-Dichlorobenzene	1.36155	1.46731	1.46731	0.600	-7.76740	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.54667	1.54667	0.400	-4.09957	20.0	Averaged	
Benzyl Chloride	50.0	54.78916	0.86167	0.010	-9.57833	20.0	Linear	
n-Butylbenzene	50.0	59.29315	2.29524	0.500	-18.58631	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.45055	1.45055	0.400	-3.44437	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	52.85755	0.13470	0.040	-5.71510	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.05472	1.05472	0.100	-19.18461	20.0	Averaged	
Hexachlorobutadiene	50.0	59.03119	0.46399	0.100	-18.06237	20.0	Quadratic	
Naphthalene	2.01347	2.25857	2.25857	0.200	-12.17325	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.95851	0.95851	0.010	-13.09219	20.0	Averaged	
Methyl Acetate	0.22499	0.25699	0.25699	0.100	-14.22206	20.0	Averaged	
Freon TF	0.36703	0.39383	0.39383	0.100	-7.30111	20.0	Averaged	
Cyclohexane	50.0	59.83489	0.60569	0.100	-19.66977	20.0	Linear	
Tetrahydrofuran	100	106	0.06566	0.001	-5.80765	20.0	Linear	
Methylcyclohexane	0.61204	0.78046	0.78046	0.100	-27.51713	20.0	Averaged	<-
1,4-Dioxane	0.00457	0.00510	0.00510	0.001	-11.52102	20.0	Averaged	
n-Butanol	1000	1170	0.00760	0.005	-17.02338	20.0	Quadratic	
Methyl Acrylate	0.33946	0.43700	0.43700	0.100	-28.73507	20.0	Averaged	<-
Ethyl Acrylate	50.0	59.78295	1.17864	0.100	-19.56589	20.0	Linear	
n-Hexane	0.36001	0.46688	0.46688	0.100	-29.68804	20.0	Averaged	<-
Diethyl ether	0.33409	0.31783	0.31783	0.100	4.86841	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.04084	0.04084	0.005	-17.96123	20.0	Averaged	
Isopropyl alcohol	0.01808	0.02197	0.02197	0.005	-21.48986	20.0	Averaged	<-
Diisopropyl ether	1.29704	1.41121	1.41121	0.100	-8.80228	20.0	Averaged	
2-Methylnaphthalene	0.97007	1.07108	1.07108	0.100	-10.41266	20.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.64258	2.64258	0.100	-9.75280	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Ethanol	1000	1107	0.00361	0.001	-10.72715	20.0	Linear	
tert-Butyl formate	0.26532	0.32117	0.32117	0.100	-21.05122	20.0	Averaged	<-
3,3-Dimethyl-1-butanol	0.02366	0.02865	0.02865	0.005	-21.12182	20.0	Averaged	<-
tert-Amyl methyl ether	1.44127	1.51435	1.51435	0.005	-5.07027	20.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.47876	1.47876	0.100	-7.29422	20.0	Averaged	
tert-Amyl alcohol	0.02685	0.03212	0.03212	0.005	-19.59981	20.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.05704	0.05704	0.005	-20.52985	20.0	Averaged	<-
1-Methylnaphthalene	++++	1.07108	1.07108	0.100	++++	20.0	Averaged	<-
1,3-Butadiene	0.34316	0.33346	0.33346	0.100	2.82619	20.0	Averaged	
Amyl alcohol	0.00494	0.00589	0.00589	0.005	-19.14178	20.0	Averaged	<-
Dichlorofluoromethane	0.06474	0.06267	0.06267	0.100	3.20266	20.0	Averaged	<-
Propylene oxide	0.03144	0.03211	0.03211	0.005	-2.12099	20.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00631	0.00631	0.005	-27.71454	20.0	Averaged	<-
Butyl acrylate	0.65314	0.75966	0.75966	0.100	-16.30897	20.0	Averaged	
Epichlorohydrin	200	229	0.02563	0.001	-14.25972	20.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.47202	0.47202	0.200	-0.26335	20.0	Averaged	
Xylenes (total)	0.56589	0.61191	0.61191	0.100	-8.13163	20.0	Averaged	
alpha-Methylstyrene	1.10787	1.15502	1.15502	0.100	-4.25589	20.0	Averaged	
Ethyl Acetate	0.39016	0.44813	0.44813	0.100	-14.85875	20.0	Averaged	
Cyclohexanone	0.02086	0.02700	0.02700	0.005	-29.44332	20.0	Averaged	<-
Isoprene	0.13320	0.15062	0.15062	0.100	-13.07944	20.0	Averaged	
Isopentane	++++	0.28776	0.28776	0.100	++++	20.0	Averaged	<-
Isopropyl acetate	0.77682	0.87677	0.87677	0.100	-12.86716	20.0	Averaged	
n-Amyl acetate	0.58303	0.61633	0.61633	0.100	-5.71021	20.0	Averaged	
n-Butyl acetate	0.42951	0.50880	0.50880	0.100	-18.46056	20.0	Averaged	
Allyl alcohol	0.01838	0.02334	0.02334	0.004	-27.02397	20.0	Averaged	<-
Acetaldehyde	200	200	0.03174	0.001	-0.24429	20.0	Linear	
Methyl Amyl Ketone	0.66478	0.75219	0.75219	0.100	-13.14967	20.0	Averaged	
Dimethyl Disulfide	0.67671	0.72740	0.72740	0.100	-7.49196	20.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00043	0.00043	0.001	++++	20.0	Averaged	<-
Isobutylene	0.05199	++++	3.846e+67	0.100	++++	20.0	Averaged	<-
1-Propanol	0.00817	0.00814	0.00814	0.005	0.33380	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Dichlorodifluoromethane	50.0	44.20299	0.30884	0.100	11.59403	50.0	Linear	
Chloromethane	50.0	46.23524	0.41674	0.100	7.52953	50.0	Linear	
Propionitrile	0.05102	0.05441	0.05441	0.010	-6.64296	50.0	Averaged	
Vinyl Chloride	0.43678	0.42390	0.42390	0.100	2.94848	50.0	Averaged	
Bromomethane	50.0	46.13258	0.30387	0.100	7.73485	50.0	Linear	
Chloroethane	0.30401	0.27943	0.27943	0.100	8.08480	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.67463	0.67463	0.100	-10.37300	50.0	Averaged	
Acrolein	100	97.99542	0.03349	0.010	2.00458	50.0	Linear	
Acetone	100	98.66267	0.13842	0.100	1.33733	50.0	Linear	
1,1-Dichloroethene	0.37948	0.37843	0.37843	0.100	0.27518	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06380	0.06380	0.005	-13.44571	50.0	Averaged	
Acetonitrile	0.04551	0.05249	0.05249	0.005	-15.34840	50.0	Averaged	
Allyl Chloride	0.86670	0.93269	0.93269	0.100	-7.61392	50.0	Averaged	
Iodomethane	100	97.51495	0.48676	0.100	2.48505	50.0	Quadratic	
Acrylonitrile	0.12870	0.14471	0.14471	0.050	-12.43992	50.0	Averaged	
Methylene Chloride	0.52052	0.47850	0.47850	0.100	8.07330	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.29397	1.29397	0.100	-4.17520	50.0	Averaged	
Carbon Disulfide	0.99285	1.00873	1.00873	0.100	-1.59948	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.43227	0.43227	0.100	-1.78107	50.0	Averaged	
Vinyl Acetate	1.09037	1.08738	1.08738	0.010	0.27416	50.0	Averaged	
1,1-Dichloroethane	0.74536	0.74037	0.74037	0.200	0.66988	50.0	Averaged	
Chloroprene	0.17001	0.16600	0.16600	0.100	2.35763	50.0	Averaged	
2-Butanone	100	105	0.15695	0.100	-5.30296	50.0	Linear	
Methacrylonitrile	0.35404	0.38024	0.38024	0.100	-7.39903	50.0	Averaged	
2,2-Dichloropropane	0.63286	0.61886	0.61886	0.100	2.21067	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.50503	0.50503	0.100	2.28889	50.0	Averaged	
Chloroform	0.83541	0.85432	0.85432	0.200	-2.26317	50.0	Averaged	
Bromochloromethane	0.28299	0.26408	0.26408	0.100	6.68179	50.0	Averaged	
Dibromofluoromethane	50.0	49.86951	0.47885	0.100	0.26097	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.74089	0.74089	0.100	-11.77757	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.40205	0.40205	0.100	-13.26124	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.43433	0.43433	0.100	-6.02098	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.40734	0.40734	0.100	-7.45914	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	54.20416	0.54958	0.100	-8.40832	50.0	Linear	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Benzene	1.19399	1.18956	1.18956	0.500	0.37087	50.0	Averaged	
Trichloroethene	0.33865	0.36140	0.36140	0.200	-6.71707	50.0	Averaged	
Bromodichloromethane	0.44810	0.43377	0.43377	0.200	3.19673	50.0	Averaged	
Methyl Methacrylate	0.34093	0.39866	0.39866	0.100	-16.93538	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.13925	0.13925	0.001	-9.22960	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.30487	0.30487	0.100	4.00990	50.0	Averaged	
2-Nitropropane	0.12626	0.14417	0.14417	0.000	-14.18583	50.0	Averaged	
Dibromomethane	0.21588	0.20762	0.20762	0.100	3.82665	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.27449	0.27449	0.100	-2.70870	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.51722	0.51722	0.200	1.71626	50.0	Averaged	
Toluene-d8	1.23554	1.19404	1.19404	0.100	3.35833	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.25638	0.25638	0.100	-8.88994	50.0	Averaged	
Toluene	1.38201	1.38367	1.38367	0.400	-0.11953	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.44637	0.44637	0.100	-2.20819	50.0	Averaged	
2-Hexanone	0.18183	0.19178	0.19178	0.100	-5.47393	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.26245	0.26245	0.100	5.34071	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.52759	0.52759	0.100	3.32336	50.0	Averaged	
Dibromochloromethane	0.40016	0.38615	0.38615	0.100	3.50141	50.0	Averaged	
Tetrachloroethene	0.28594	0.30755	0.30755	0.200	-7.55720	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.34155	0.34155	0.100	1.47091	50.0	Averaged	
1-Chlorohexane	0.24163	0.28221	0.28221	0.100	-16.79346	50.0	Averaged	
Chlorobenzene	0.98026	0.94171	0.94171	0.500	3.93259	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.36005	0.36005	0.100	1.30184	50.0	Averaged	
Ethylbenzene	0.46175	0.49252	0.49252	0.100	-6.66381	50.0	Averaged	
m,p-Xylenes	0.59525	0.62084	0.62084	0.100	-4.29909	50.0	Averaged	
o-Xylene	0.58751	0.59325	0.59325	0.300	-0.97727	50.0	Averaged	
Styrene	0.98473	1.02837	1.02837	0.300	-4.43166	50.0	Averaged	
Bromoform	0.27722	0.26961	0.26961	0.100	2.74681	50.0	Averaged	
Isopropylbenzene	1.34224	1.55110	1.55110	0.100	-15.56075	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.71408	0.71408	0.300	10.39606	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.80001	0.46922	0.100	-1.60002	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.78918	0.78918	0.100	-41.84810	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11160	0.11160	0.050	-3.39650	50.0	Averaged	
n-Propylbenzene	2.76956	3.12247	3.12247	0.100	-12.74261	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Bromobenzene	0.82033	0.78323	0.78323	0.100	4.52243	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.29698	2.29698	0.100	-12.26916	50.0	Averaged	
2-Chlorotoluene	1.81741	1.89793	1.89793	0.100	-4.43056	50.0	Averaged	
4-Chlorotoluene	2.07183	2.22504	2.22504	0.100	-7.39496	50.0	Averaged	
tert-Butylbenzene	1.67475	1.92910	1.92910	0.100	-15.18700	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.31173	2.31173	0.100	-7.38425	50.0	Averaged	
sec-Butylbenzene	2.22832	2.70982	2.70982	0.100	-21.60857	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.39627	2.39627	0.100	-20.00646	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.38856	1.38856	0.600	-1.98339	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.46983	1.46983	0.400	1.07223	50.0	Averaged	
Benzyl Chloride	50.0	38.96922	0.60000	0.010	22.06156	50.0	Linear	
n-Butylbenzene	50.0	54.53251	2.10527	0.500	-9.06503	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.39341	1.39341	0.400	0.63050	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	48.73652	0.12418	0.040	2.52697	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	0.97030	0.97030	0.100	-9.64490	50.0	Averaged	
Hexachlorobutadiene	50.0	54.33295	0.42660	0.100	-8.66589	50.0	Quadratic	
Naphthalene	2.01347	2.11971	2.11971	0.200	-5.27688	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.90268	0.90268	0.010	-6.50485	50.0	Averaged	
Methyl Acetate	0.22499	0.24138	0.24138	0.100	-7.28376	50.0	Averaged	
Freon TF	0.36703	0.39662	0.39662	0.100	-8.06055	50.0	Averaged	
Cyclohexane	50.0	60.20402	0.60951	0.100	-20.40805	50.0	Linear	
Tetrahydrofuran	100	107	0.06666	0.001	-7.46791	50.0	Linear	
Methylcyclohexane	0.61204	0.73485	0.73485	0.100	-20.06496	50.0	Averaged	
1,4-Dioxane	0.00457	0.00541	0.00541	0.001	-18.41020	50.0	Averaged	
n-Butanol	1000	1056	0.00679	0.005	-5.58483	50.0	Quadratic	
Methyl Acrylate	0.33946	0.46148	0.46148	0.100	-35.94624	50.0	Averaged	
Ethyl Acrylate	50.0	57.83779	1.13908	0.100	-15.67558	50.0	Linear	
n-Hexane	0.36001	0.40991	0.40991	0.100	-13.86200	50.0	Averaged	
Diethyl ether	0.33409	0.31236	0.31236	0.100	6.50394	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.03851	0.03851	0.005	-11.22766	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02083	0.02083	0.005	-15.18430	50.0	Averaged	
Diisopropyl ether	1.29704	1.37638	1.37638	0.100	-6.11674	50.0	Averaged	
2-Methylnaphthalene	0.97007	0.99426	0.99426	0.100	-2.49348	50.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.55834	2.55834	0.100	-6.25425	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Ethanol	1000	1080	0.00352	0.001	-8.01081	50.0	Linear	
tert-Butyl formate	0.26532	0.29963	0.29963	0.100	-12.93457	50.0	Averaged	
3,3-Dimethyl-1-butanol	0.02366	0.02575	0.02575	0.005	-8.83588	50.0	Averaged	
tert-Amyl methyl ether	1.44127	1.50899	1.50899	0.005	-4.69854	50.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.44124	1.44124	0.100	-4.57222	50.0	Averaged	
tert-Amyl alcohol	0.02685	0.02996	0.02996	0.005	-11.58048	50.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.04725	0.04725	0.005	0.16450	50.0	Averaged	
1-Methylnaphthalene	++++	0.99426	0.99426	0.100	++++	50.0	Averaged	<-
1,3-Butadiene	0.34316	0.32793	0.32793	0.100	4.43746	50.0	Averaged	
Amyl alcohol	0.00494	0.00536	0.00536	0.005	-8.32029	50.0	Averaged	
Dichlorofluoromethane	0.06474	0.06574	0.06574	0.100	-1.53841	50.0	Averaged	
Propylene oxide	0.03144	0.03068	0.03068	0.005	2.42736	50.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00546	0.00546	0.005	-10.44766	50.0	Averaged	
Butyl acrylate	0.65314	0.70970	0.70970	0.100	-8.66014	50.0	Averaged	
Epichlorohydrin	200	211	0.02364	0.001	-5.50350	50.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.46865	0.46865	0.200	0.45308	50.0	Averaged	
Xylenes (total)	0.56589	0.58878	0.58878	0.100	-4.04357	50.0	Averaged	
alpha-Methylstyrene	1.10787	1.08841	1.08841	0.100	1.75630	50.0	Averaged	
Ethyl Acetate	0.39016	0.41815	0.41815	0.100	-7.17357	50.0	Averaged	
Cyclohexanone	0.02086	0.02491	0.02491	0.005	-19.43320	50.0	Averaged	
Isoprene	0.13320	0.14475	0.14475	0.100	-8.66806	50.0	Averaged	
Isopentane	++++	0.25846	0.25846	0.100	++++	50.0	Averaged	<-
Isopropyl acetate	0.77682	0.82319	0.82319	0.100	-5.96915	50.0	Averaged	
n-Amyl acetate	0.58303	0.57571	0.57571	0.100	1.25623	50.0	Averaged	
n-Butyl acetate	0.42951	0.48161	0.48161	0.100	-12.12905	50.0	Averaged	
Allyl alcohol	0.01838	0.02050	0.02050	0.004	-11.52303	50.0	Averaged	
Acetaldehyde	200	255	0.03953	0.001	-27.68724	50.0	Linear	
Methyl Amyl Ketone	0.66478	0.69860	0.69860	0.100	-5.08739	50.0	Averaged	
Dimethyl Disulfide	0.67671	0.69265	0.69265	0.100	-2.35634	50.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00041	0.00041	0.001	++++	50.0	Averaged	<-
Isobutylene	0.05199	++++	3.846e+67	0.100	++++	50.0	Averaged	<-
1-Propanol	0.00817	0.00795	0.00795	0.005	2.74312	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	50.0	42.94017	0.29994	0.100	14.11967	20.0	Linear	
Chloromethane	50.0	43.94037	0.39502	0.100	12.11927	20.0	Linear	
Propionitrile	0.05102	0.05054	0.05054	0.010	0.94574	20.0	Averaged	
Vinyl Chloride	0.43678	0.40969	0.40969	0.100	6.20259	20.0	Averaged	
Bromomethane	50.0	42.55394	0.27936	0.100	14.89212	20.0	Linear	
Chloroethane	0.30401	0.26660	0.26660	0.100	12.30500	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.66633	0.66633	0.100	-9.01551	20.0	Averaged	
Acrolein	100	96.94529	0.03312	0.010	3.05471	20.0	Linear	
Acetone	100	93.98292	0.13186	0.100	6.01708	20.0	Linear	
1,1-Dichloroethene	0.37948	0.37087	0.37087	0.100	2.26928	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06049	0.06049	0.005	-7.56610	20.0	Averaged	
Acetonitrile	0.04551	0.05056	0.05056	0.005	-11.10759	20.0	Averaged	
Allyl Chloride	0.86670	0.87296	0.87296	0.100	-0.72299	20.0	Averaged	
Iodomethane	100	97.52577	0.48681	0.100	2.47423	20.0	Quadratic	
Acrylonitrile	0.12870	0.13624	0.13624	0.050	-5.85506	20.0	Averaged	
Methylene Chloride	0.52052	0.46108	0.46108	0.100	11.41993	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.20628	1.20628	0.100	2.88453	20.0	Averaged	
Carbon Disulfide	0.99285	1.00276	1.00276	0.100	-0.99816	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.42585	0.42585	0.100	-0.27020	20.0	Averaged	
Vinyl Acetate	1.09037	1.16994	1.16994	0.010	-7.29743	20.0	Averaged	
1,1-Dichloroethane	0.74536	0.72542	0.72542	0.200	2.67573	20.0	Averaged	
Chloroprene	0.17001	0.16191	0.16191	0.100	4.76104	20.0	Averaged	
2-Butanone	100	102	0.15201	0.100	-2.08341	20.0	Linear	
Methacrylonitrile	0.35404	0.35218	0.35218	0.100	0.52474	20.0	Averaged	
2,2-Dichloropropane	0.63286	0.69770	0.69770	0.100	-10.24635	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.49013	0.49013	0.100	5.17118	20.0	Averaged	
Chloroform	0.83541	0.83191	0.83191	0.200	0.41905	20.0	Averaged	
Bromochloromethane	0.28299	0.25354	0.25354	0.100	10.40840	20.0	Averaged	
Dibromofluoromethane	50.0	48.88030	0.46938	0.100	2.23939	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.72976	0.72976	0.100	-10.09786	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.41724	0.41724	0.100	-17.54060	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.44375	0.44375	0.100	-8.32039	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.42419	0.42419	0.100	-11.90565	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	52.69913	0.53424	0.100	-5.39826	20.0	Linear	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Benzene	1.19399	1.22740	1.22740	0.500	-2.79810	20.0	Averaged	
Trichloroethene	0.33865	0.36324	0.36324	0.200	-7.25914	20.0	Averaged	
Bromodichloromethane	0.44810	0.44597	0.44597	0.200	0.47499	20.0	Averaged	
Methyl Methacrylate	0.34093	0.36494	0.36494	0.100	-7.04448	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.14192	0.14192	0.001	-11.32375	20.0	Averaged	
1,2-Dichloropropane	0.31761	0.31157	0.31157	0.100	1.90004	20.0	Averaged	
2-Nitropropane	0.12626	0.13514	0.13514	0.000	-7.02835	20.0	Averaged	
Dibromomethane	0.21588	0.21030	0.21030	0.100	2.58559	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.27848	0.27848	0.100	-4.20204	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.54533	0.54533	0.200	-3.62519	20.0	Averaged	
Toluene-d8	1.23554	1.22580	1.22580	0.100	0.78807	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.24336	0.24336	0.100	-3.35899	20.0	Averaged	
Toluene	1.38201	1.41845	1.41845	0.400	-2.63662	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.47263	0.47263	0.100	-8.22138	20.0	Averaged	
2-Hexanone	0.18183	0.19301	0.19301	0.100	-6.14741	20.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.26668	0.26668	0.100	3.81508	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.54056	0.54056	0.100	0.94722	20.0	Averaged	
Dibromochloromethane	0.40016	0.39502	0.39502	0.100	1.28443	20.0	Averaged	
Tetrachloroethene	0.28594	0.32583	0.32583	0.200	-13.94737	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.35049	0.35049	0.100	-1.10808	20.0	Averaged	
1-Chlorohexane	0.24163	0.28460	0.28460	0.100	-17.78186	20.0	Averaged	
Chlorobenzene	0.98026	0.97639	0.97639	0.500	0.39464	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37055	0.37055	0.100	-1.57739	20.0	Averaged	
Ethylbenzene	0.46175	0.51103	0.51103	0.100	-10.67167	20.0	Averaged	
m,p-Xylenes	0.59525	0.64386	0.64386	0.100	-8.16552	20.0	Averaged	
o-Xylene	0.58751	0.61350	0.61350	0.300	-4.42356	20.0	Averaged	
Styrene	0.98473	1.06380	1.06380	0.300	-8.02907	20.0	Averaged	
Bromoform	0.27722	0.27421	0.27421	0.100	1.08603	20.0	Averaged	
Isopropylbenzene	1.34224	1.60202	1.60202	0.100	-19.35461	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.75416	0.75416	0.300	5.36642	20.0	Averaged	
4-Bromofluorobenzene	50.0	52.41920	0.48420	0.100	-4.83841	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.57029	0.57029	0.100	-2.50508	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11796	0.11796	0.050	-9.28110	20.0	Averaged	
n-Propylbenzene	2.76956	3.31463	3.31463	0.100	-19.68095	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.82033	0.81789	0.81789	0.100	0.29660	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.40823	2.40823	0.100	-17.70682	20.0	Averaged	
2-Chlorotoluene	1.81741	1.99939	1.99939	0.100	-10.01276	20.0	Averaged	
4-Chlorotoluene	2.07183	2.33071	2.33071	0.100	-12.49548	20.0	Averaged	
tert-Butylbenzene	1.67475	2.02737	2.02737	0.100	-21.05485	20.0	Averaged	<-
1,2,4-Trimethylbenzene	2.15277	2.43774	2.43774	0.100	-13.23748	20.0	Averaged	
sec-Butylbenzene	2.22832	2.88310	2.88310	0.100	-29.38453	20.0	Averaged	<-
p-Isopropyltoluene	1.99679	2.55236	2.55236	0.100	-27.82324	20.0	Averaged	<-
1,3-Dichlorobenzene	1.36155	1.45687	1.45687	0.600	-7.00077	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.54570	1.54570	0.400	-4.03430	20.0	Averaged	
Benzyl Chloride	50.0	50.28936	0.78724	0.010	-0.57872	20.0	Linear	
n-Butylbenzene	50.0	59.35307	2.29763	0.500	-18.70615	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.43850	1.43850	0.400	-2.58491	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	50.62783	0.12901	0.040	-1.25566	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.04369	1.04369	0.100	-17.93847	20.0	Averaged	
Hexachlorobutadiene	50.0	62.29313	0.48999	0.100	-24.58626	20.0	Quadratic	<-
Naphthalene	2.01347	2.20027	2.20027	0.200	-9.27753	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.93294	0.93294	0.010	-10.07569	20.0	Averaged	
Methyl Acetate	0.22499	0.22497	0.22497	0.100	0.00627	20.0	Averaged	
Freon TF	0.36703	0.40197	0.40197	0.100	-9.51882	20.0	Averaged	
Cyclohexane	50.0	59.69943	0.60429	0.100	-19.39886	20.0	Linear	
Tetrahydrofuran	100	93.40801	0.05819	0.001	6.59199	20.0	Linear	
Methylcyclohexane	0.61204	0.72726	0.72726	0.100	-18.82572	20.0	Averaged	
1,4-Dioxane	0.00457	0.00494	0.00494	0.001	-8.18125	20.0	Averaged	
n-Butanol	1000	1006	0.00644	0.005	-0.60632	20.0	Quadratic	
Methyl Acrylate	0.33946	0.42900	0.42900	0.100	-26.37960	20.0	Averaged	<-
Ethyl Acrylate	50.0	55.77932	1.09721	0.100	-11.55865	20.0	Linear	
n-Hexane	0.36001	0.47714	0.47714	0.100	-32.53734	20.0	Averaged	<-
Diethyl ether	0.33409	0.28575	0.28575	0.100	14.46830	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.03645	0.03645	0.005	-5.27078	20.0	Averaged	
Isopropyl alcohol	0.01808	0.01973	0.01973	0.005	-9.11564	20.0	Averaged	
Diisopropyl ether	1.29704	1.29126	1.29126	0.100	0.44617	20.0	Averaged	
2-Methylnaphthalene	0.97007	1.02001	1.02001	0.100	-5.14844	20.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.56385	2.56385	0.100	-6.48314	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Ethanol	1000	1007	0.00328	0.001	-0.72838	20.0	Linear	
tert-Butyl formate	0.26532	0.28579	0.28579	0.100	-7.71853	20.0	Averaged	
3,3-Dimethyl-1-butanol	0.02366	0.02494	0.02494	0.005	-5.41990	20.0	Averaged	
tert-Amyl methyl ether	1.44127	1.39324	1.39324	0.005	3.33273	20.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.35600	1.35600	0.100	1.61264	20.0	Averaged	
tert-Amyl alcohol	0.02685	0.02858	0.02858	0.005	-6.42698	20.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.05008	0.05008	0.005	-5.83268	20.0	Averaged	
1-Methylnaphthalene	++++	1.02001	1.02001	0.100	++++	20.0	Averaged	<-
1,3-Butadiene	0.34316	0.33019	0.33019	0.100	3.78013	20.0	Averaged	
Amyl alcohol	0.00494	0.00510	0.00510	0.005	-3.05976	20.0	Averaged	<-
Dichlorofluoromethane	0.06474	0.05600	0.05600	0.100	13.49876	20.0	Averaged	<-
Propylene oxide	0.03144	0.02922	0.02922	0.005	7.06551	20.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00556	0.00556	0.005	-12.51591	20.0	Averaged	<-
Butyl acrylate	0.65314	0.70132	0.70132	0.100	-7.37756	20.0	Averaged	
Epichlorohydrin	200	211	0.02364	0.001	-5.50467	20.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.45799	0.45799	0.200	2.71678	20.0	Averaged	
Xylenes (total)	0.56589	0.61132	0.61132	0.100	-8.02675	20.0	Averaged	
alpha-Methylstyrene	1.10787	1.14713	1.14713	0.100	-3.54415	20.0	Averaged	
Ethyl Acetate	0.39016	0.39139	0.39139	0.100	-0.31559	20.0	Averaged	
Cyclohexanone	0.02086	0.02473	0.02473	0.005	-18.55217	20.0	Averaged	
Isoprene	0.13320	0.13989	0.13989	0.100	-5.02463	20.0	Averaged	
Isopentane	++++	0.26266	0.26266	0.100	++++	20.0	Averaged	<-
Isopropyl acetate	0.77682	0.82473	0.82473	0.100	-6.16825	20.0	Averaged	
n-Amyl acetate	0.58303	0.59270	0.59270	0.100	-1.65717	20.0	Averaged	
n-Butyl acetate	0.42951	0.47919	0.47919	0.100	-11.56593	20.0	Averaged	
Allyl alcohol	0.01838	0.02386	0.02386	0.004	-29.81474	20.0	Averaged	<-
Acetaldehyde	200	178	0.02854	0.001	11.04492	20.0	Linear	
Methyl Amyl Ketone	0.66478	0.68236	0.68236	0.100	-2.64571	20.0	Averaged	
Dimethyl Disulfide	0.67671	0.67380	0.67380	0.100	0.42870	20.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00048	0.00048	0.001	++++	20.0	Averaged	<-
Isobutylene	0.05199	++++	5.923e+59	0.100	++++	20.0	Averaged	<-
1-Propanol	0.00817	0.00751	0.00751	0.005	8.09206	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Dichlorodifluoromethane	50.0	42.55407	0.29721	0.100	14.89187	50.0	Linear	
Chloromethane	50.0	43.51269	0.39097	0.100	12.97461	50.0	Linear	
Propionitrile	0.05102	0.05154	0.05154	0.010	-1.01486	50.0	Averaged	
Vinyl Chloride	0.43678	0.41405	0.41405	0.100	5.20455	50.0	Averaged	
Bromomethane	50.0	45.74369	0.30121	0.100	8.51262	50.0	Linear	
Chloroethane	0.30401	0.26717	0.26717	0.100	12.11669	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.64252	0.64252	0.100	-5.11971	50.0	Averaged	
Acrolein	100	88.92443	0.03030	0.010	11.07557	50.0	Linear	
Acetone	100	88.00826	0.12348	0.100	11.99174	50.0	Linear	
1,1-Dichloroethene	0.37948	0.35954	0.35954	0.100	5.25320	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06200	0.06200	0.005	-10.24009	50.0	Averaged	
Acetonitrile	0.04551	0.04867	0.04867	0.005	-6.95600	50.0	Averaged	
Allyl Chloride	0.86670	0.86616	0.86616	0.100	0.06154	50.0	Averaged	
Iodomethane	100	91.44282	0.45415	0.100	8.55718	50.0	Quadratic	
Acrylonitrile	0.12870	0.13711	0.13711	0.050	-6.53054	50.0	Averaged	
Methylene Chloride	0.52052	0.46701	0.46701	0.100	10.27922	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.20402	1.20402	0.100	3.06655	50.0	Averaged	
Carbon Disulfide	0.99285	0.97715	0.97715	0.100	1.58154	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.41492	0.41492	0.100	2.30352	50.0	Averaged	
Vinyl Acetate	1.09037	1.11169	1.11169	0.010	-1.95572	50.0	Averaged	
1,1-Dichloroethane	0.74536	0.70676	0.70676	0.200	5.17866	50.0	Averaged	
Chloroprene	0.17001	0.15715	0.15715	0.100	7.56348	50.0	Averaged	
2-Butanone	100	100	0.14873	0.100	0.05435	50.0	Linear	
Methacrylonitrile	0.35404	0.36464	0.36464	0.100	-2.99202	50.0	Averaged	
2,2-Dichloropropane	0.63286	0.63147	0.63147	0.100	0.21835	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.47542	0.47542	0.100	8.01745	50.0	Averaged	
Chloroform	0.83541	0.81347	0.81347	0.200	2.62691	50.0	Averaged	
Bromochloromethane	0.28299	0.25373	0.25373	0.100	10.33897	50.0	Averaged	
Dibromofluoromethane	50.0	47.28488	0.45411	0.100	5.43024	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.72268	0.72268	0.100	-9.02950	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.41299	0.41299	0.100	-16.34412	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.43354	0.43354	0.100	-5.82775	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.40990	0.40990	0.100	-8.13415	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	52.07942	0.52793	0.100	-4.15885	50.0	Linear	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Benzene	1.19399	1.21073	1.21073	0.500	-1.40210	50.0	Averaged	
Trichloroethene	0.33865	0.35917	0.35917	0.200	-6.05906	50.0	Averaged	
Bromodichloromethane	0.44810	0.44150	0.44150	0.200	1.47104	50.0	Averaged	
Methyl Methacrylate	0.34093	0.37488	0.37488	0.100	-9.95795	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.14171	0.14171	0.001	-11.16356	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.30613	0.30613	0.100	3.61324	50.0	Averaged	
2-Nitropropane	0.12626	0.13481	0.13481	0.000	-6.76700	50.0	Averaged	
Dibromomethane	0.21588	0.20618	0.20618	0.100	4.49382	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.28037	0.28037	0.100	-4.90854	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.52717	0.52717	0.200	-0.17453	50.0	Averaged	
Toluene-d8	1.23554	1.19389	1.19389	0.100	3.37052	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.25534	0.25534	0.100	-8.44544	50.0	Averaged	
Toluene	1.38201	1.40751	1.40751	0.400	-1.84490	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.45573	0.45573	0.100	-4.35116	50.0	Averaged	
2-Hexanone	0.18183	0.19478	0.19478	0.100	-7.12446	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.26499	0.26499	0.100	4.42505	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.53112	0.53112	0.100	2.67686	50.0	Averaged	
Dibromochloromethane	0.40016	0.39207	0.39207	0.100	2.02053	50.0	Averaged	
Tetrachloroethene	0.28594	0.31766	0.31766	0.200	-11.09334	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.34891	0.34891	0.100	-0.65024	50.0	Averaged	
1-Chlorohexane	0.24163	0.30084	0.30084	0.100	-24.50223	50.0	Averaged	
Chlorobenzene	0.98026	0.96409	0.96409	0.500	1.64941	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.36867	0.36867	0.100	-1.06044	50.0	Averaged	
Ethylbenzene	0.46175	0.49914	0.49914	0.100	-8.09753	50.0	Averaged	
m,p-Xylenes	0.59525	0.63668	0.63668	0.100	-6.96059	50.0	Averaged	
o-Xylene	0.58751	0.60433	0.60433	0.300	-2.86410	50.0	Averaged	
Styrene	0.98473	1.04640	1.04640	0.300	-6.26203	50.0	Averaged	
Bromoform	0.27722	0.27482	0.27482	0.100	0.86545	50.0	Averaged	
Isopropylbenzene	1.34224	1.58513	1.58513	0.100	-18.09591	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.73487	0.73487	0.300	7.78753	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.99162	0.47100	0.100	-1.98325	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.81153	0.81153	0.100	-45.86546	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11652	0.11652	0.050	-7.95382	50.0	Averaged	
n-Propylbenzene	2.76956	3.19533	3.19533	0.100	-15.37322	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Bromobenzene	0.82033	0.79943	0.79943	0.100	2.54710	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.33869	2.33869	0.100	-14.30786	50.0	Averaged	
2-Chlorotoluene	1.81741	1.92649	1.92649	0.100	-6.00190	50.0	Averaged	
4-Chlorotoluene	2.07183	2.26708	2.26708	0.100	-9.42434	50.0	Averaged	
tert-Butylbenzene	1.67475	1.97537	1.97537	0.100	-17.95030	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.35788	2.35788	0.100	-9.52788	50.0	Averaged	
sec-Butylbenzene	2.22832	2.78791	2.78791	0.100	-25.11301	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.46875	2.46875	0.100	-23.63640	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.42075	1.42075	0.600	-4.34804	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.48497	1.48497	0.400	0.05340	50.0	Averaged	
Benzyl Chloride	50.0	44.33656	0.68878	0.010	11.32689	50.0	Linear	
n-Butylbenzene	50.0	56.35085	2.17783	0.500	-12.70169	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.40978	1.40978	0.400	-0.53664	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	50.63512	0.12903	0.040	-1.27024	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	0.99778	0.99778	0.100	-12.75082	50.0	Averaged	
Hexachlorobutadiene	50.0	57.37873	0.45083	0.100	-14.75745	50.0	Quadratic	
Naphthalene	2.01347	2.18456	2.18456	0.200	-8.49754	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.90862	0.90862	0.010	-7.20535	50.0	Averaged	
Methyl Acetate	0.22499	0.23243	0.23243	0.100	-3.30837	50.0	Averaged	
Freon TF	0.36703	0.38104	0.38104	0.100	-3.81573	50.0	Averaged	
Cyclohexane	50.0	58.82577	0.59526	0.100	-17.65155	50.0	Linear	
Tetrahydrofuran	100	95.64069	0.05953	0.001	4.35931	50.0	Linear	
Methylcyclohexane	0.61204	0.73804	0.73804	0.100	-20.58657	50.0	Averaged	
1,4-Dioxane	0.00457	0.00495	0.00495	0.001	-8.31484	50.0	Averaged	
n-Butanol	1000	1013	0.00649	0.005	-1.31806	50.0	Quadratic	
Methyl Acrylate	0.33946	0.43501	0.43501	0.100	-28.15027	50.0	Averaged	
Ethyl Acrylate	50.0	55.93940	1.10047	0.100	-11.87880	50.0	Linear	
n-Hexane	0.36001	0.43980	0.43980	0.100	-22.16460	50.0	Averaged	
Diethyl ether	0.33409	0.28594	0.28594	0.100	14.41256	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.03810	0.03810	0.005	-10.04850	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02053	0.02053	0.005	-13.56394	50.0	Averaged	
Diisopropyl ether	1.29704	1.29060	1.29060	0.100	0.49717	50.0	Averaged	
2-Methylnaphthalene	0.97007	0.99379	0.99379	0.100	-2.44523	50.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.49497	2.49497	0.100	-3.62205	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Ethanol	1000	1067	0.00347	0.001	-6.69503	50.0	Linear	
tert-Butyl formate	0.26532	0.29803	0.29803	0.100	-12.32887	50.0	Averaged	
3,3-Dimethyl-1-butanol	0.02366	0.02457	0.02457	0.005	-3.87142	50.0	Averaged	
tert-Amyl methyl ether	1.44127	1.41184	1.41184	0.005	2.04190	50.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.35617	1.35617	0.100	1.60071	50.0	Averaged	
tert-Amyl alcohol	0.02685	0.02980	0.02980	0.005	-10.98204	50.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.05125	0.05125	0.005	-8.30006	50.0	Averaged	
1-Methylnaphthalene	++++	0.99379	0.99379	0.100	++++	50.0	Averaged	<-
1,3-Butadiene	0.34316	0.31601	0.31601	0.100	7.91020	50.0	Averaged	
Amyl alcohol	0.00494	0.00534	0.00534	0.005	-7.90640	50.0	Averaged	
Dichlorofluoromethane	0.06474	0.05780	0.05780	0.100	10.71467	50.0	Averaged	
Propylene oxide	0.03144	0.02982	0.02982	0.005	5.14355	50.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00558	0.00558	0.005	-12.88255	50.0	Averaged	
Butyl acrylate	0.65314	0.69339	0.69339	0.100	-6.16285	50.0	Averaged	
Epichlorohydrin	200	216	0.02425	0.001	-8.18238	50.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.44517	0.44517	0.200	5.44010	50.0	Averaged	
Xylenes (total)	0.56589	0.60790	0.60790	0.100	-7.42221	50.0	Averaged	
alpha-Methylstyrene	1.10787	1.11388	1.11388	0.100	-0.54279	50.0	Averaged	
Ethyl Acetate	0.39016	0.42840	0.42840	0.100	-9.80120	50.0	Averaged	
Cyclohexanone	0.02086	0.02306	0.02306	0.005	-10.57111	50.0	Averaged	
Isoprene	0.13320	0.13818	0.13818	0.100	-3.73648	50.0	Averaged	
Isopentane	++++	0.24298	0.24298	0.100	++++	50.0	Averaged	<-
Isopropyl acetate	0.77682	0.83340	0.83340	0.100	-7.28345	50.0	Averaged	
n-Amyl acetate	0.58303	0.58946	0.58946	0.100	-1.10206	50.0	Averaged	
n-Butyl acetate	0.42951	0.48167	0.48167	0.100	-12.14347	50.0	Averaged	
Allyl alcohol	0.01838	0.02199	0.02199	0.004	-19.65508	50.0	Averaged	
Acetaldehyde	200	210	0.03307	0.001	-4.93122	50.0	Linear	
Methyl Amyl Ketone	0.66478	0.67365	0.67365	0.100	-1.33472	50.0	Averaged	
Dimethyl Disulfide	0.67671	0.66883	0.66883	0.100	1.16367	50.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00038	0.00038	0.001	++++	50.0	Averaged	<-
Isobutylene	0.05199	++++	5.923e+59	0.100	++++	50.0	Averaged	<-
1-Propanol	0.00817	0.00742	0.00742	0.005	9.14792	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426320

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X012303	516521	#	4.17	#	773798	#	4.97	#	739557	#	7.67	#	423283	#	9.66	#
CCB	X012304	581391		4.18		834048		4.96		751359		7.67		387886		9.66	
VLCSW-233120	X012305	497251		4.18		752142		4.96		718965		7.67		409890		9.66	
VBLKW-230123	X012307	570496		4.18		819696		4.96		736361		7.67		383647		9.66	
HS23010982-05	X012315	555856		4.17		796654		4.96		703453		7.67		357166		9.66	
HS23010982-05	X012316	565180		4.18		808382		4.97		718046		7.67		371980		9.66	
HS23010982-05MS	X012319	572145		4.18		812038		4.96		736303		7.67		406015		9.66	
HS23010982-05MSD	X012320	575104		4.17		829960		4.97		757057		7.67		419641		9.66	
HS23010982-03	X012327	557769		4.18		800910		4.97		724710		7.67		408373		9.66	
HS23010982-04	X012328	557323		4.17		805585		4.96		722615		7.67		373590		9.66	
HS23010982-01	X012329	560629		4.17		807860		4.97		720668		7.67		365845		9.66	
HS23010982-01	X012330	559122		4.17		802861		4.96		711580		7.67		364279		9.66	
CCV-END	X012331	481163		4.18		752129		4.97		728521		7.67		426275		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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426355

		IS1		IS2		IS3		IS4	
Sample ID	File ID	Area	RT	Area	RT	Area	RT	Area	RT
12-HOUR STD (CCV)	X012402	507505 #	4.18 #	766430 #	4.96 #	736604 #	7.67 #	425473 #	9.66 #
VLCSW-230124	X012404	506288	4.18	768279	4.97	730061	7.67	416844	9.66
VBLKW-230124	X012406	599102	4.17	853587	4.97	761276	7.67	394519	9.66
HS23010982-05	X012407	620904	4.17	904596	4.96	819512	7.67	422766	9.66
HS23010982-05MS	X012410	607736	4.17	875321	4.97	808850	7.67	449514	9.66
HS23010982-05MSD	X012411	616157	4.18	883093	4.96	815509	7.67	448260	9.66
HS23010982-02	X012426	590320	4.18	849688	4.96	740347	7.67	388357	9.66
HS23010982-06	X012428	584141	4.18	825867	4.96	729328	7.67	367590	9.66
ZZZZZZMS	X012431	609595	4.18	862181	4.96	792242	7.67	441556	9.66
ZZZZZZMSD	X012432	615830	4.17	871402	4.97	797088	7.67	441078	9.66
CCV-END	X012433	503782	4.18	780908	4.96	751713	7.67	437932	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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426356

		IS1		IS2		IS3		IS4	
Sample ID	File ID	Area	RT	Area	RT	Area	RT	Area	RT
VBLKM-230124	X012405	612506	4.18	872168	4.96	784246	7.67	388737	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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426481

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X012502	518521	#	4.18	#	760669	#	4.96	#	733760	#	7.67	#	423046	#	9.66	#
VLCSW-230125	X012504	500560		4.17		748036		4.96		704985		7.67		403871		9.66	
VBLKW-230125	X012506	637607		4.17		893865		4.96		802467		7.67		420093		9.66	
HS23010982-02	X012508	624585		4.17		878662		4.96		772893		7.67		387821		9.66	
HS23010982-02MS	X012509	626410		4.17		872602		4.96		797697		7.67		445771		9.66	
HS23010982-02MSD	X012510	632455		4.18		884706		4.96		806161		7.67		440623		9.66	
HS23010982-06	X012511	634410		4.18		889005		4.96		793076		7.67		417256		9.66	
CCV-END	X012522	525517		4.17		783584		4.96		761044		7.67		443732		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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

RunID
VOA6_426482

		IS1		IS2		IS3		IS4	
Sample ID	File ID	Area	RT	Area	RT	Area	RT	Area	RT
VBLKM-230125	X012505	639737	4.17	901391	4.96	809045	7.67	416787	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

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Analysis Run Log

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

MSVOA06 -Logbook

Batch: 52417 **Analyst:** Presenta Cabascango

Date: 12-16-2022 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	12-16-2022 11:17 am	1.00	50 mL	50 mL	X121601.D	Liquid	Y	NA
2	VSTD000.25	ICAL1	12-16-2022 11:38 am	1.00	50 mL	50 mL	X121602.D	Liquid	Y	NA
3	VSTD000.5	ICAL2	12-16-2022 12:20 pm	1.00	50 mL	50 mL	X121603.D	Liquid	Y	NA
4	VSTD001	ICAL3	12-16-2022 12:41 pm	1.00	50 mL	50 mL	X121604.D	Liquid	Y	NA
5	VSTD002	ICAL4	12-16-2022 01:02 pm	1.00	50 mL	50 mL	X121605.D	Liquid	Y	NA
6	VSTD005	ICAL5	12-16-2022 01:23 pm	1.00	50 mL	50 mL	X121606.D	Liquid	Y	NA
7	VSTD020	ICAL6	12-16-2022 01:43 pm	1.00	50 mL	50 mL	X121607.D	Liquid	Y	NA
8	VSTD050	ICAL7	12-16-2022 02:04 pm	1.00	50 mL	50 mL	X121608.D	Liquid	Y	NA
9	VSTD100	ICAL8	12-16-2022 02:25 pm	1.00	50 mL	50 mL	X121609.D	Liquid	Y	NA
10	VSTD150	ICAL9	12-16-2022 02:46 pm	1.00	50 mL	50 mL	X121610.D	Liquid	Y	NA
11	VSTD200	ICAL	12-16-2022 03:07 pm	1.00	50 mL	50 mL	X121611.D	Liquid	Y	NA
12	BLANK	SAMP	12-16-2022 03:28 pm	1.00	50 mL	50 mL	X121612.D	Liquid	Y	NA
13	CCV	CCV	12-16-2022 03:49 pm	1.00	50 mL	50 mL	X121613.D	Liquid	Y	NA
14	BLANK	SAMP	12-16-2022 04:10 pm	1.00	50 mL	50 mL	X121614.D	Liquid	Y	NA
15	CCB	SAMP	12-16-2022 04:31 pm	1.00	50 mL	50 mL	X121615.D	Liquid	Y	NA
16	VLCSW-221216	LCS	12-16-2022 04:52 pm	1.00	50 mL	50 mL	X121616.D	Liquid	Y	NA
17	BLANK	SAMP	12-16-2022 05:13 pm	1.00	50 mL	50 mL	X121617.D	Liquid	Y	NA
18	VBLKW-221216	MBLK	12-16-2022 05:34 pm	1.00	50 mL	50 mL	X121618.D	Liquid	Y	NA
19	HS22120648-05	SAMP	12-16-2022 05:55 pm	1.00	50 mL	50 mL	X121619.D	Liquid	Y	NA
20	HS22120648-09	SAMP	12-16-2022 06:16 pm	1.00	50 mL	50 mL	X121620.D	Liquid	Y	NA
21	HS22120648-01	SAMP	12-16-2022 06:37 pm	1.00	50 mL	50 mL	X121621.D	Liquid	Y	NA
22	HS22120648-02	SAMP	12-16-2022 06:58 pm	1.00	50 mL	50 mL	X121622.D	Liquid	Y	NA
23	HS22120648-03	SAMP	12-16-2022 07:19 pm	1.00	50 mL	50 mL	X121623.D	Liquid	Y	NA
24	HS22120648-04	SAMP	12-16-2022 07:40 pm	1.00	50 mL	50 mL	X121624.D	Liquid	Y	NA
25	HS22120648-06	SAMP	12-16-2022 08:01 pm	1.00	50 mL	50 mL	X121625.D	Liquid	Y	NA
26	HS22120648-07	SAMP	12-16-2022 08:22 pm	1.00	50 mL	50 mL	X121626.D	Liquid	Y	NA
27	HS22120648-08	SAMP	12-16-2022 08:43 pm	1.00	50 mL	50 mL	X121627.D	Liquid	Y	NA
28	HS22120648-06MS	MS	12-16-2022 09:04 pm	1.00	50 mL	50 mL	X121628.D	Liquid	Y	NA
29	HS22120648-06MSD	MSD	12-16-2022 09:25 pm	1.00	50 mL	50 mL	X121629.D	Liquid	Y	NA
30	CCV-END	CCV	12-16-2022 09:46 pm	1.00	50 mL	50 mL	X121630.D	Liquid	Y	NA
31	BFB	TUNE	12-16-2022 10:07 pm	1.00	50 mL	50 mL	Y121601.D	Liquid	Y	NA
32	CCV	CCV	12-16-2022 10:28 pm	1.00	50 mL	50 mL	Y121602a.D	Liquid	Y	NA
33	CCV	CCV	12-16-2022 10:49 pm	1.00	50 mL	50 mL	Y121603.D	Liquid	Y	NA
34	CCB	SAMP	12-16-2022 11:10 pm	1.00	50 mL	50 mL	Y121604.D	Liquid	Y	NA
35	VLCSW-221215	LCS	12-16-2022 11:31 pm	1.00	50 mL	50 mL	Y121605.D	Liquid	Y	NA
36	BLANK	SAMP	12-16-2022 11:52 pm	1.00	50 mL	50 mL	Y121606.D	Liquid	Y	NA
37	VBLKW-221215	MBLK	12-17-2022 12:13 am	1.00	50 mL	50 mL	Y121607.D	Liquid	Y	NA
38	HS22120974-13	SAMP	12-17-2022 12:34 am	1.00	50 mL	50 mL	Y121608.D	Liquid	Y	NA
39	HS22120974-01	SAMP	12-17-2022 12:55 am	1.00	50 mL	50 mL	Y121609.D	Liquid	Y	NA
40	HS22120974-01MS	MS	12-17-2022 01:16 am	1.00	50 mL	50 mL	Y121610.D	Liquid	Y	NA
41	HS22120974-01MSD	MSD	12-17-2022 01:38 am	1.00	50 mL	50 mL	Y121611.D	Liquid	Y	NA

MSVOA06 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	BLANK	SAMP	12-17-2022 01:59 am	1.00	50 mL	50 mL	Y121612.D	Liquid	Y	NA
43	HS22120974-02	SAMP	12-17-2022 02:20 am	1.00	50 mL	50 mL	Y121613.D	Liquid	Y	NA
44	HS22120974-03	SAMP	12-17-2022 02:41 am	1.00	50 mL	50 mL	Y121614.D	Liquid	Y	NA
45	HS22120974-04	SAMP	12-17-2022 03:02 am	1.00	50 mL	50 mL	Y121615.D	Liquid	Y	NA
46	HS22120974-05	SAMP	12-17-2022 03:23 am	1.00	50 mL	50 mL	Y121616.D	Liquid	Y	NA
47	HS22120974-06	SAMP	12-17-2022 03:44 am	1.00	50 mL	50 mL	Y121617.D	Liquid	Y	NA
48	HS22120974-07	SAMP	12-17-2022 04:05 am	1.00	50 mL	50 mL	Y121618.D	Liquid	Y	NA
49	HS22120974-08	SAMP	12-17-2022 04:26 am	1.00	50 mL	50 mL	Y121619.D	Liquid	Y	NA
50	HS22120974-09	SAMP	12-17-2022 04:47 am	1.00	50 mL	50 mL	Y121620.D	Liquid	Y	NA
51	HS22120974-10	SAMP	12-17-2022 05:08 am	1.00	50 mL	50 mL	Y121621.D	Liquid	Y	NA
52	HS22120974-11	SAMP	12-17-2022 05:29 am	1.00	50 mL	50 mL	Y121622.D	Liquid	Y	NA
53	HS22120974-12	SAMP	12-17-2022 05:50 am	1.00	50 mL	50 mL	Y121623.D	Liquid	Y	NA
54	HS22120974-14	SAMP	12-17-2022 06:11 am	1.00	50 mL	50 mL	Y121624.D	Liquid	Y	NA
55	HS22120974-15	SAMP	12-17-2022 06:32 am	1.00	50 mL	50 mL	Y121625.D	Liquid	Y	NA
56	HS22120574-15	SAMP	12-17-2022 06:53 am	5.00	10 mL	50 mL	Y121626.D	Liquid	Y	NA
57	HS22120574-17	SAMP	12-17-2022 07:14 am	5.00	10 mL	50 mL	Y121627.D	Liquid	Y	NA
58	HS22120770-07	SAMP	12-17-2022 07:36 am	10.00	5 mL	50 mL	Y121628.D	Liquid	Y	NA
59	HS22120770-07	SAMP	12-17-2022 07:57 am	100.0(	500 µL	50 mL	Y121629.D	Liquid	Y	NA
60	HS22120770-10	SAMP	12-17-2022 08:18 am	5.00	10 mL	50 mL	Y121630.D	Liquid	Y	NA
61	BLANK	SAMP	12-17-2022 08:39 am	1.00	50 mL	50 mL	Y121631.D	Liquid	Y	NA

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

RUNID
VOA6_426320

Run ID VOA6_426320 **Start Date** 01/23/23 **EndDate** 01/23/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X012303.D	01/23/23 11:58	1
CCB	CCB	CCB	X012304.D	01/23/23 12:19	1
VLCSW-233120	LCS	VLCSW-233120	X012305.D	01/23/23 12:40	1
VBLKW-230123	MBLK	VBLKW-230123	X012307.D	01/23/23 13:22	1
16EW02-230119	SAMP	HS23010982-05	X012315.D	01/23/23 16:11	200
16EW02-230119	MS	HS23010982-05MS	X012319.D	01/23/23 17:35	2000
16EW02-230119	MSD	HS23010982-05MSD	X012320.D	01/23/23 17:56	2000
16IW09-230119	SAMP	HS23010982-03	X012327.D	01/23/23 20:23	1
16IW20-230119	SAMP	HS23010982-04	X012328.D	01/23/23 20:44	1
16WW48-230119	SAMP	HS23010982-01	X012329.D	01/23/23 21:05	100
16WW48-230119	SAMP	HS23010982-01	X012330.D	01/23/23 21:26	1000

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

RUNID
VOA6_426355

Run ID VOA6_426355 **Start Date** 01/24/23 **EndDate** 01/24/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X012402.D	01/24/23 07:52	1
VLCSW-230124	LCS	VLCSW-230124	X012404.D	01/24/23 08:55	1
VBLKW-230124	MBLK	VBLKW-230124	X012406.D	01/24/23 09:37	1
16EW02-230119	SAMP	HS23010982-05	X012407.D	01/24/23 09:58	100
16EW02-230119	MS	HS23010982-05MS	X012410.D	01/24/23 11:01	100
16EW02-230119	MSD	HS23010982-05MSD	X012411.D	01/24/23 11:22	100
16RW04-230119	SAMP	HS23010982-02	X012426.D	01/24/23 16:38	1
16EW03-230119	SAMP	HS23010982-06	X012428.D	01/24/23 17:20	1
BatchQC	MS	HS23010986-05MS	X012431.D	01/24/23 18:23	100
BatchQC	MSD	HS23010986-05MSD	X012432.D	01/24/23 18:44	100

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Volatiles by EPA 8260

RUNID
VOA6_426481

Run ID VOA6_426481 **Start Date** 01/25/23 **EndDate** 01/25/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X012502.D	01/25/23 07:39	1
VLCSW-230125	LCS	VLCSW-230125	X012504.D	01/25/23 08:42	1
VBLKW-230125	MBLK	VBLKW-230125	X012506.D	01/25/23 09:24	1
16RW04-230119	SAMP	HS23010982-02	X012508.D	01/25/23 10:06	100
16RW04-230119	MS	HS23010982-02MS	X012509.D	01/25/23 10:27	100
16RW04-230119	MSD	HS23010982-02MSD	X012510.D	01/25/23 10:48	100
16EW03-230119	SAMP	HS23010982-06	X012511.D	01/25/23 11:09	20

right solutions.
right partner.

Raw Data VOA6 424237

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\x221216.b\X121601.D Page 1
Report Date: 16-Dec-2022 12:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\x221216.b\X121601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 16-DEC-2022 11:17
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\x221216.b\bfb.m
Meth Date : 01-Dec-2022 12:59 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	72328			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	13272			15.00- 40.00	18.35
8.691	8.889	(0.000)	75	33368			30.00- 60.00	46.13
8.691	8.889	(0.000)	96	5178			5.00- 9.00	7.16
8.691	8.889	(0.000)	173	577			0.00- 2.00	0.90
8.691	8.889	(0.000)	174	64360			50.00- 0.00	88.98
8.691	8.889	(0.000)	175	5033			5.00- 9.00	7.82
8.691	8.889	(0.000)	176	63184			95.00- 101.00	98.17
8.691	8.889	(0.000)	177	4164			5.00- 9.00	6.59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.35
75	30.00 - 60.00% of mass 95	46.13
96	5.00 - 9.00% of mass 95	7.16
173	Less than 2.00% of mass 174	0.80 (0.90)
174	Greater than 50.00% of mass 95	88.98
175	5.00 - 9.00% of mass 174	6.96 (7.82)
176	95.00 - 101.00% of mass 174	87.36 (98.17)
177	5.00 - 9.00% of mass 176	5.76 (6.59)

Data File: X121601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	686	63.00	2521	93.00	2705	136.90	215
37.00	3051	64.10	316	94.00	9587	140.90	735
38.00	2957	66.90	155	95.00	72328	141.70	91
39.00	1321	67.90	6274	96.00	5178	142.80	683
39.90	1146	69.00	6990	96.90	213	145.60	119
42.00	114	69.90	604	103.00	58	148.00	107
42.90	301	71.80	385	104.00	313	149.80	105
44.00	1509	72.90	2986	104.70	125	153.80	54
45.00	716	74.00	11163	105.10	132	154.80	169
46.80	723	75.00	33368	105.90	451	156.80	155
48.00	503	76.00	3228	110.60	54	160.80	71
49.00	3278	76.90	395	113.00	74	171.60	83
50.00	13272	77.80	187	114.80	159	172.80	577
51.00	3648	78.90	2224	115.80	342	173.90	64360
52.10	365	79.80	718	116.90	386	174.90	5033
54.00	52	80.90	2158	117.90	425	175.90	63184
54.90	278	81.80	420	118.80	260	176.90	4164
56.00	1513	83.00	51	127.90	191	178.00	133
57.00	1763	86.90	2878	128.90	172		
59.90	665	87.80	2342	129.80	237		
61.00	3173	91.00	516	130.80	156		
62.00	3572	92.00	2006	134.70	222		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121601.D Page 1

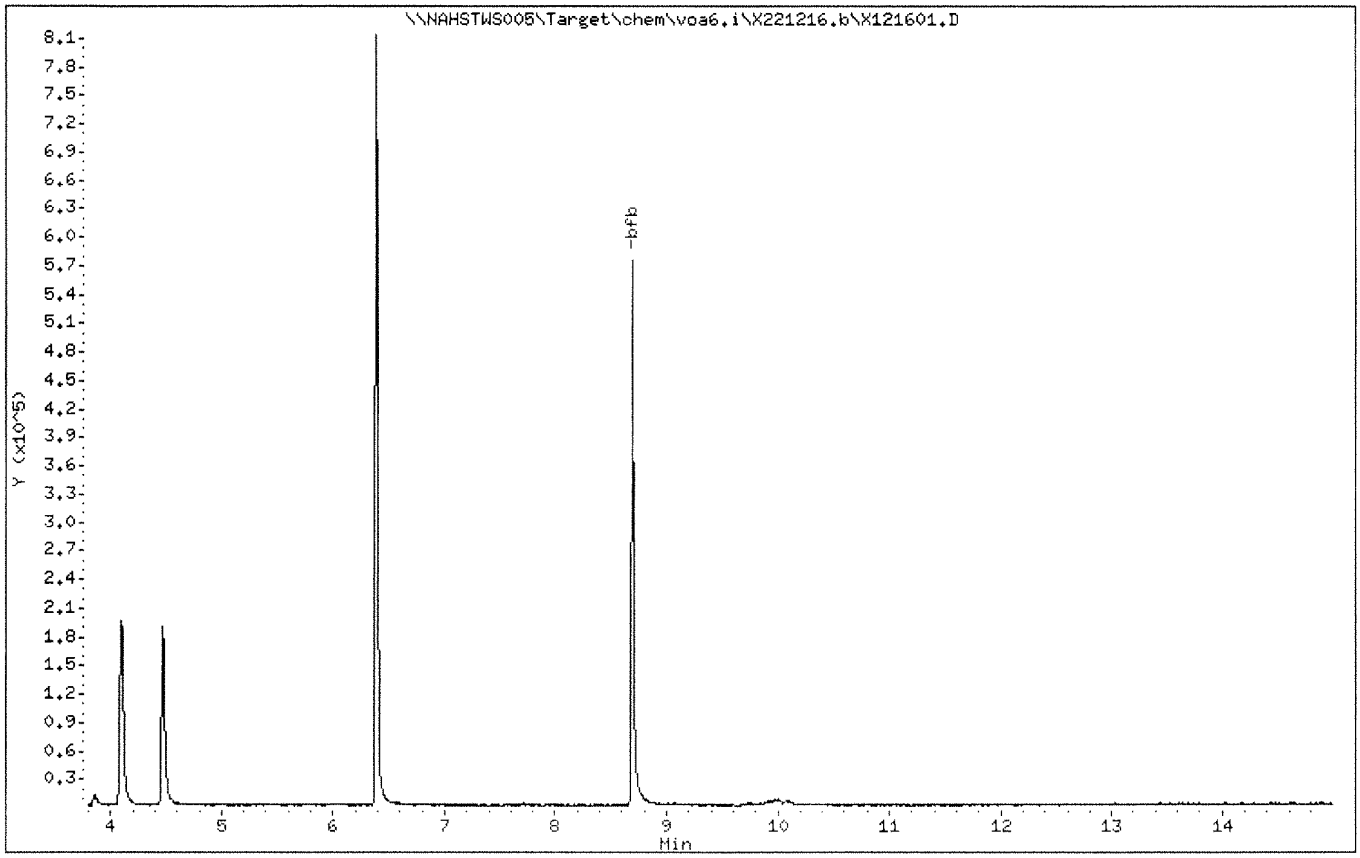
Date : 16-DEC-2022 11:17

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\X221216.b\X121601.D Page 2

Date : 16-DEC-2022 11:17

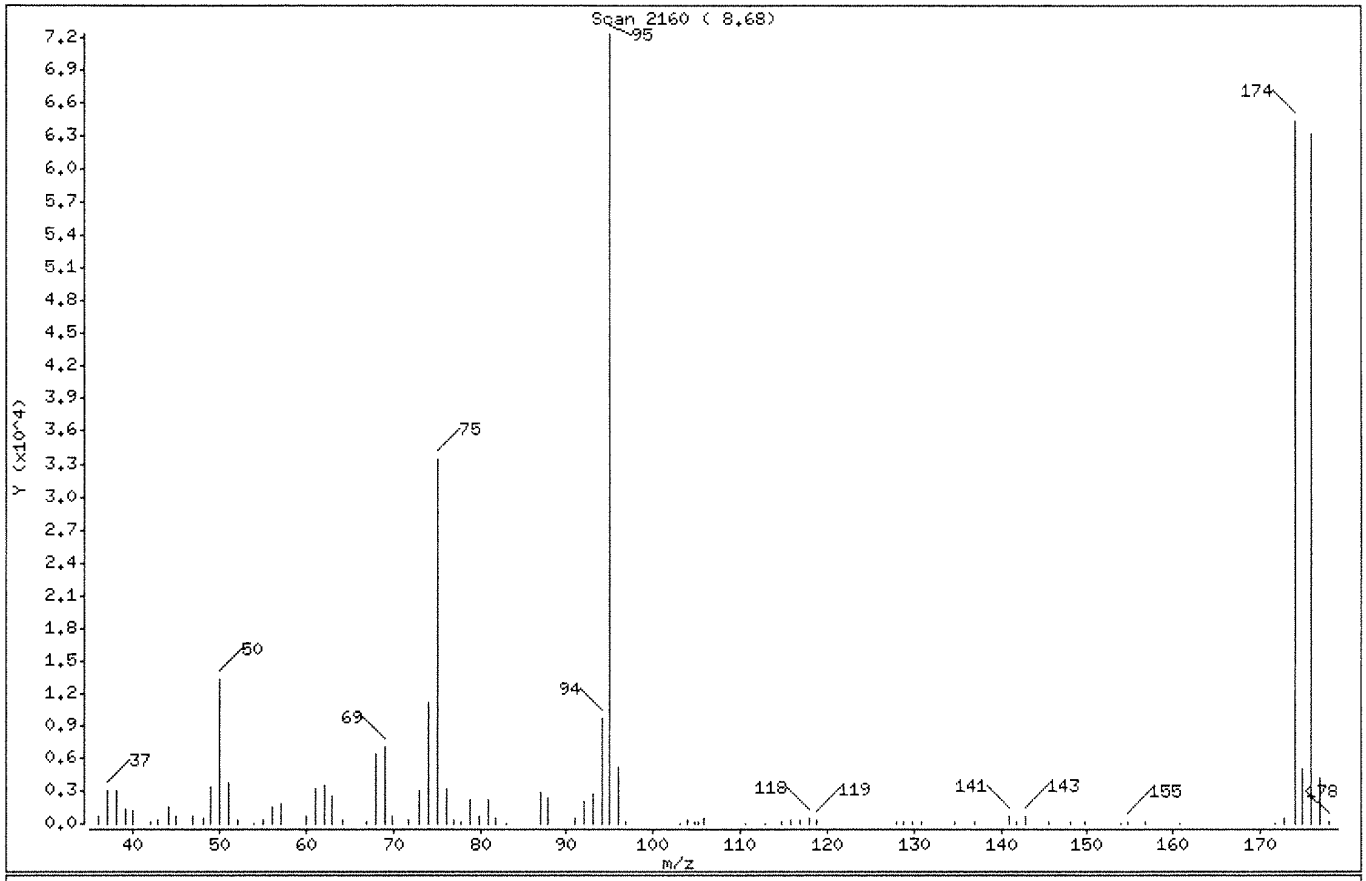
Client ID: BFB Instrument: voa6.i

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	18.35
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173	Less than 2.00% of mass 174	0.80 (0.90)
174	Greater than 50.00% of mass 95	88.98
175	5.00 - 9.00% of mass 174	6.96 (7.82)
176	95.00 - 101.00% of mass 174	87.36 (98.17)
177	5.00 - 9.00% of mass 176	5.76 (6.59)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121601.D

Date : 16-DEC-2022 11:17

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: X121601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	686	63.00	2521	93.00	2705	136.90	215
37.00	3051	64.10	316	94.00	9587	140.90	735
38.00	2957	66.90	155	95.00	72328	141.70	91
39.00	1321	67.90	6274	96.00	5178	142.80	683
39.90	1146	69.00	6990	96.90	213	145.60	119
42.00	114	69.90	604	103.00	58	148.00	107
42.90	301	71.80	385	104.00	313	149.80	105
44.00	1509	72.90	2986	104.70	125	153.80	54
45.00	716	74.00	11163	105.10	132	154.80	169
46.80	723	75.00	33368	105.90	451	156.80	155
48.00	503	76.00	3228	110.60	54	160.80	71
49.00	3278	76.90	395	113.00	74	171.60	83
50.00	13272	77.80	187	114.80	159	172.80	577
51.00	3648	78.90	2224	115.80	342	173.90	64360
52.10	365	79.80	718	116.90	386	174.90	5033
54.00	52	80.90	2158	117.90	425	175.90	63184
54.90	278	81.80	420	118.80	260	176.90	4164
56.00	1513	83.00	51	127.90	191	178.00	133
57.00	1763	86.90	2878	128.90	172		
59.90	665	87.80	2342	129.80	237		
61.00	3173	91.00	516	130.80	156		
62.00	3572	92.00	2006	134.70	222		

Data File : \\NAHSTWS005\Target\chem\voa6.i\x221216.b\X121601.D
Inj Date : 16-DEC-2022 11:17
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 16-DEC-2022 11:38
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	461807	50.0000	
135	1,4-Dioxane	88	5.625	5.625	(1.346)	214	5.00000	5.06(M)
140	1,3-Butadiene	54	1.164	1.164	(0.279)	1172	0.25000	0.36
25	Methacrylonitrile	41	3.855	3.855	(0.923)	5876	0.25000	1.79
12	Isobutyl Alcohol	43	4.687	4.687	(1.122)	2537	5.00000	4.88(TM)
13	Acetonitrile	39	2.202	2.202	(0.527)	730	2.50000	1.73
14	Allyl Chloride	41	2.206	2.206	(0.528)	1591	0.25000	0.19
4	Propionitrile	54	3.702	3.702	(0.886)	1165	2.50000	2.47(M)
72	trans-1,4-Dichloro-2-butene	53	8.931	8.931	(1.164)	280	0.25000	0.19(M)
145	alpha-Methylstyrene	118	9.268	9.268	(0.959)	2322	0.25000	0.30
200	Dimethyl Disulfide	94	6.213	6.213	(0.810)	1870	0.25000	0.21
139	Diethyl ether	59	1.760	1.760	(0.421)	687	0.25000	0.22
49	Ethyl Methacrylate	69	6.738	6.738	(1.357)	625	0.25000	0.19
142	Tetrahydrofuran	42	3.836	3.836	(0.918)	358	0.50000	(M)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	4360	0.25000	0.25
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	801	0.25000	0.63(M)
3	Chloromethane	50	1.077	1.077	(0.258)	1420	0.25000	2.53
5	Vinyl Chloride	62	1.141	1.141	(0.273)	1134	0.25000	0.28(M)
6	Bromomethane	94	1.340	1.340	(0.321)	1009	0.25000	2.08(M)
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	1468	0.25000	0.26

10 Acetone	43	1.977	1.977 (0.473)	2727	0.50000	2.07
11 1,1-Dichloroethene	96	1.910	1.910 (0.457)	1010	0.25000	0.28(M)

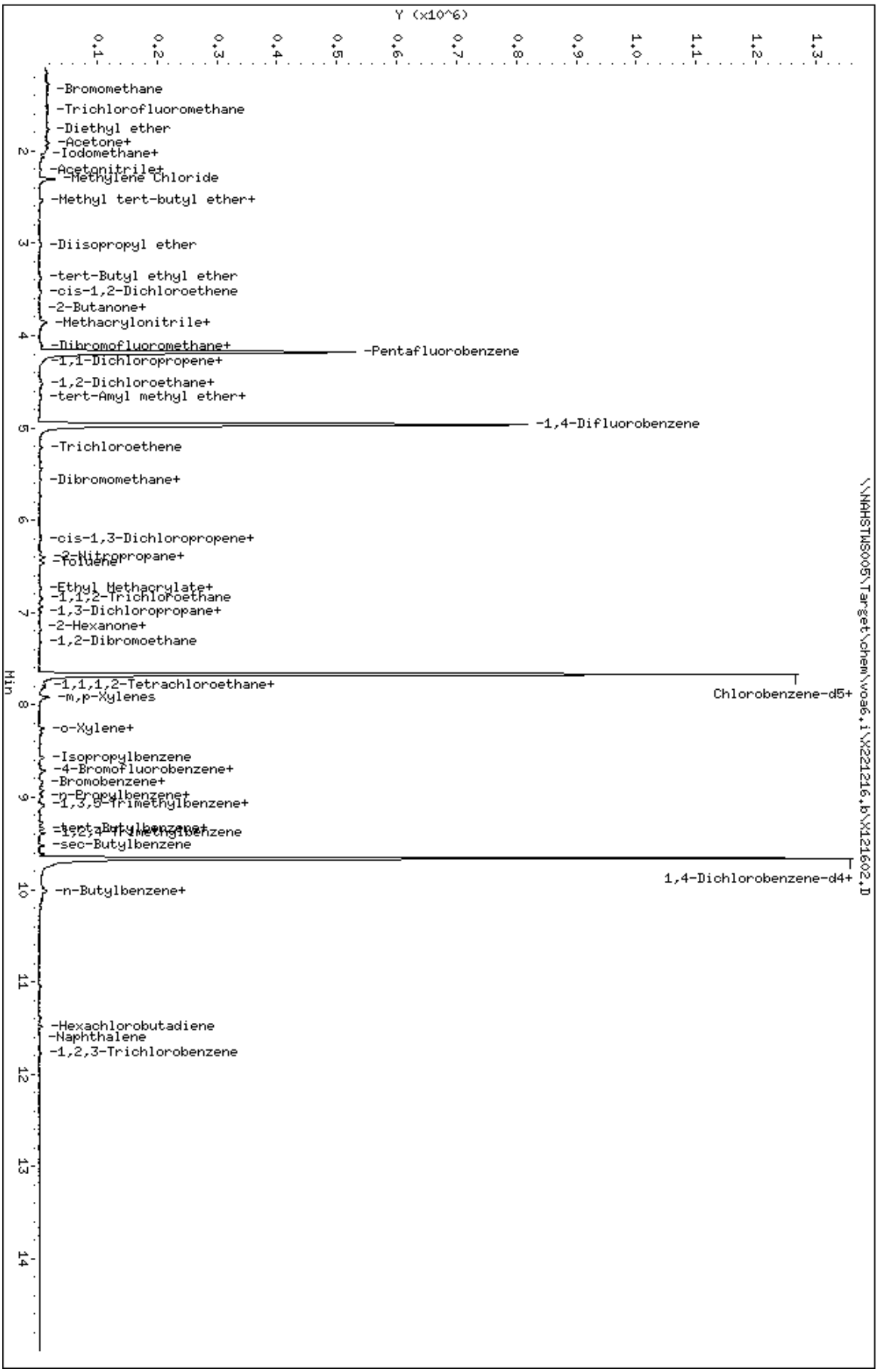
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	15 Iodomethane	142	2.026	2.026	(0.485)	1106	0.50000	3.56(T)
	17 Methylene Chloride	84	2.292	2.292	(0.549)	1436	0.25000	0.29(M)
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	2787	0.25000	0.24
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	5999	0.50000	0.65
	20 trans-1,2-Dichloroethene	96	2.539	2.539	(0.608)	1302	0.25000	0.33
	24 2-Butanone	43	3.698	3.698	(0.885)	1014	0.50000	3.74
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.846)	1402	0.25000	0.29
	28 Chloroform	83	3.908	3.908	(0.935)	2553	0.25000	0.33
	29 Bromochloromethane	128	3.799	3.799	(0.909)	802	0.25000	0.30(M)
$	30 Dibromofluoromethane	113	4.103	4.103	(0.982)	1706	0.25000	0.21
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	1648	0.25000	0.26
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	2114	0.25000	0.43
	33 1,2-Dichloroethane	62	4.571	4.571	(0.921)	2167	0.25000	0.38
	34 Carbon Tetrachloride	117	4.256	4.256	(0.857)	1685	0.25000	0.32(M)
$	35 1,2-Dichloroethane-d4	65	4.481	4.481	(1.073)	2260	0.25000	0.75(T)
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	690224	50.0000	
	37 Benzene	78	4.522	4.522	(0.911)	5768	0.25000	0.34
	38 Trichloroethene	130	5.212	5.212	(1.050)	1544	0.25000	0.33
	44 Dibromomethane	93	5.565	5.565	(1.121)	1046	0.25000	0.35
	45 4-Methyl-2-Pentanone	43	6.352	6.352	(0.828)	2297	0.50000	0.65
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	1839	0.25000	0.25
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	653787	50.0000	
$	48 Toluene-d8	98	6.401	6.401	(0.834)	6828	0.25000	0.42(T)
	50 Toluene	91	6.457	6.457	(0.842)	6778	0.25000	0.37
	52 2-Hexanone	43	7.150	7.150	(0.932)	974	0.50000	0.40(T)
	53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	1098	0.25000	0.30
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	2278	0.25000	0.31
	55 Dibromochloromethane	129	7.184	7.184	(0.936)	1732	0.25000	0.33
	56 Tetrachloroethene	164	6.933	6.933	(0.904)	1051	0.25000	0.28
	57 1,2-Dibromoethane	107	7.278	7.278	(0.949)	1100	0.25000	0.24
	58 1-Chlorohexane	55	7.668	7.668	(1.544)	6570	0.25000	1.96
	59 Chlorobenzene	112	7.694	7.694	(1.003)	3981	0.25000	0.31
	60 1,1,1,2-Tetrachloroethane	131	7.780	7.780	(1.014)	1245	0.25000	0.26
	61 Ethylbenzene	106	7.810	7.810	(1.018)	1854	0.25000	0.30
	62 m,p-Xylenes	106	7.915	7.915	(1.032)	5083	0.50000	0.65
	63 o-Xylene	106	8.252	8.252	(1.076)	2471	0.25000	0.32
	64 Styrene	104	8.297	8.297	(1.082)	3214	0.25000	0.24
	67 Isopropylbenzene	105	8.575	8.575	(1.118)	5495	0.25000	0.31
$	69 4-Bromofluorobenzene	95	8.706	8.706	(1.135)	4271	0.25000	0.77
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	348702	50.0000	
	71 1,2,3-Trichloropropane	75	8.875	8.875	(0.919)	766	0.25000	0.19(M)
	73 n-Propylbenzene	91	8.931	8.931	(0.924)	5570	0.25000	0.28
	74 Bromobenzene	156	8.826	8.826	(0.913)	1517	0.25000	0.26
	75 1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	4893	0.25000	0.34
	76 2-Chlorotoluene	91	8.991	8.991	(0.931)	4890	0.25000	0.38
	77 4-Chlorotoluene	91	9.107	9.107	(0.943)	3881	0.25000	0.26
	78 tert-Butylbenzene	119	9.343	9.343	(0.967)	4059	0.25000	0.34
	79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	5202	0.25000	0.34
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	4818	0.25000	0.31
	82 p-Isopropyltoluene	119	9.662	9.662	(1.000)	4406	0.25000	0.31
	83 1,3-Dichlorobenzene	146	9.621	9.621	(0.996)	3005	0.25000	0.31
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	3674	0.25000	0.35

87	n-Butylbenzene	91	10.033	10.033 (1.038)	1595	0.25000	1.89
88	1,2-Dichlorobenzene	146	10.010	10.010 (1.036)	2937	0.25000	0.30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.484	11.484	(1.189)	726	0.25000	0.21(M)
	92 Naphthalene	128	11.607	11.607	(1.201)	1969	0.25000	0.14
	93 1,2,3-Trichlorobenzene	180	11.769	11.769	(1.218)	1816	0.25000	0.30(M)
M	94 1,2-Dichloroethylene (total)	96				2704	0.50000	
M	95 Xylenes (total)	106				7554	0.75000	
	141 Cyclohexane	56	4.125	4.125	(0.987)	1235	0.25000	1.51(M)
	138 Freon TF	101	1.917	1.917	(0.459)	765	0.25000	0.22(M)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Date : 16-DEC-2022 11:38
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;
Purge Volume: 5.0
Column phase: DB624

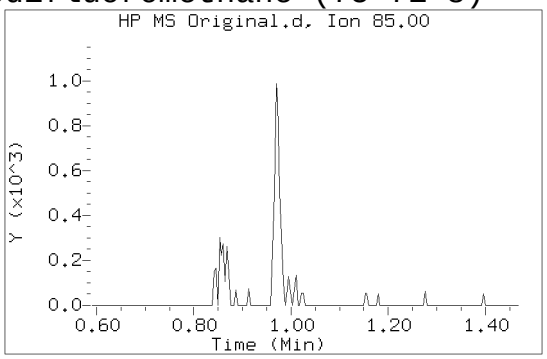
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Dichlorodifluoromethane (75-71-8)

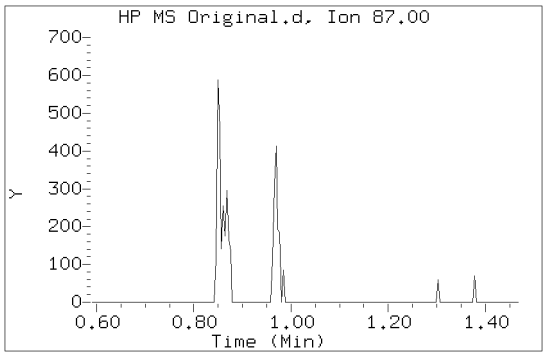
BEFORE

MASS
50
AREA
1420
HEIGHT
1809
16-Dec-2022
11:54
ALSHS
Server



BEFORE

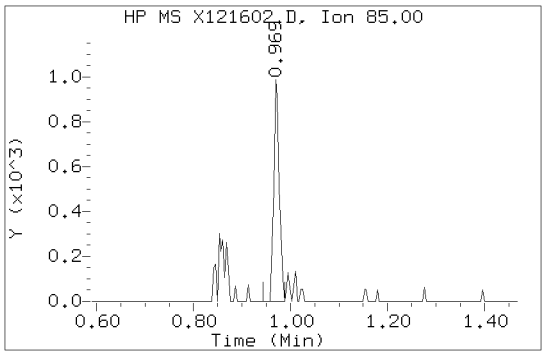
MASS
52
AREA
731
HEIGHT
740
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

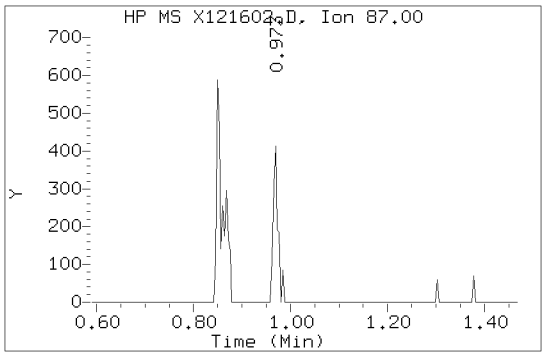
AFTER

MASS
85
AREA
801
HEIGHT
987
27-Dec-2022
16:07
ALSHS
Ser



AFTER

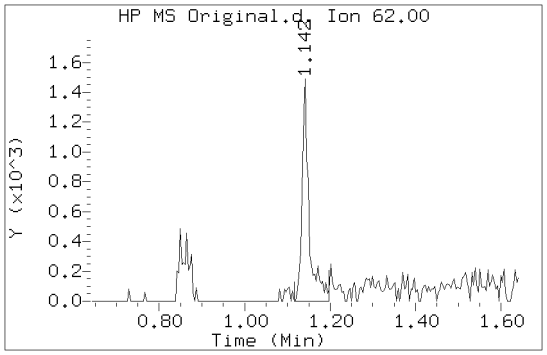
MASS
87
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Vinyl Chloride (75-01-4)

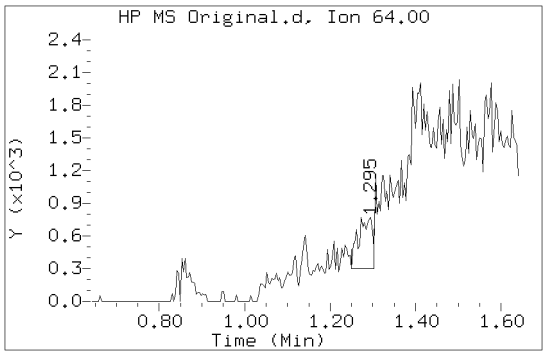
BEFORE

MASS
94
AREA
1572
HEIGHT
983
16-Dec-2022
11:54
ALSHS
Server



BEFORE

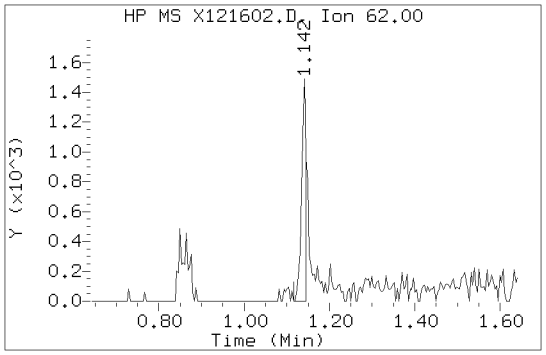
MASS
96
AREA
1330
HEIGHT
961
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

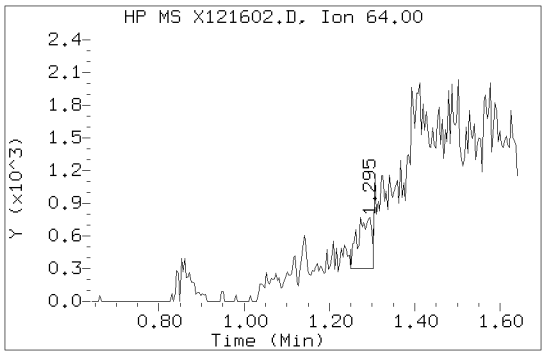
AFTER

MASS
62
AREA
1134
HEIGHT
1490
27-Dec-2022
16:07
ALSHS
Ser



AFTER

MASS
64
AREA
1053
HEIGHT
470
27-Dec-2022
16:07
ALSHS
Ser



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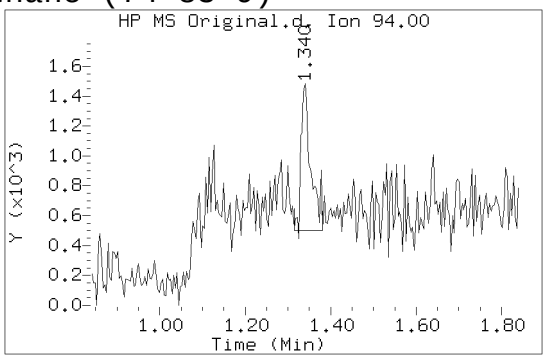
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Bromomethane (74-83-9)

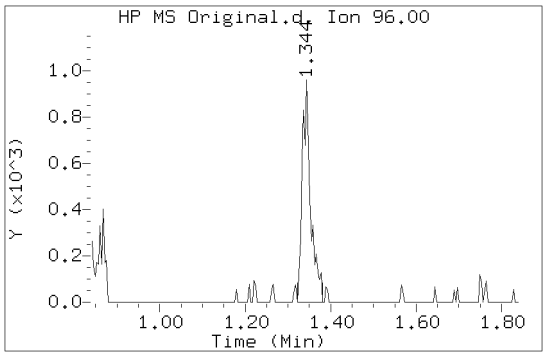
BEFORE

MASS
64
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



BEFORE

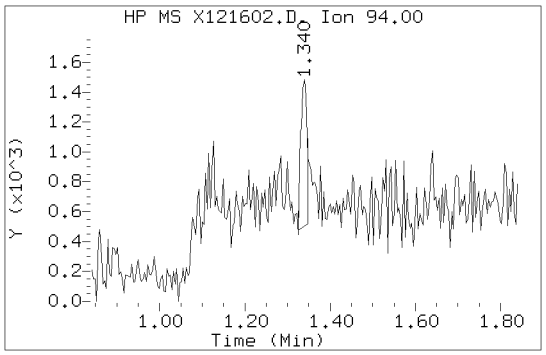
MASS
66
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

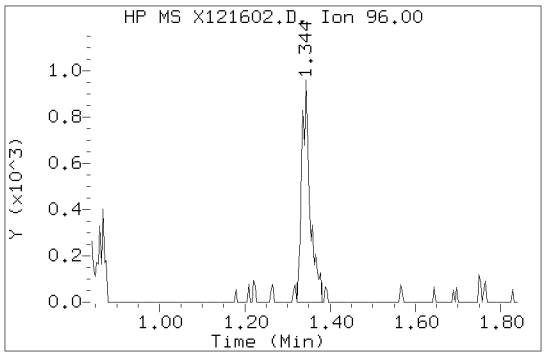
AFTER

MASS
94
AREA
1009
HEIGHT
977
27-Dec-2022
16:07
ALSHS
Ser



AFTER

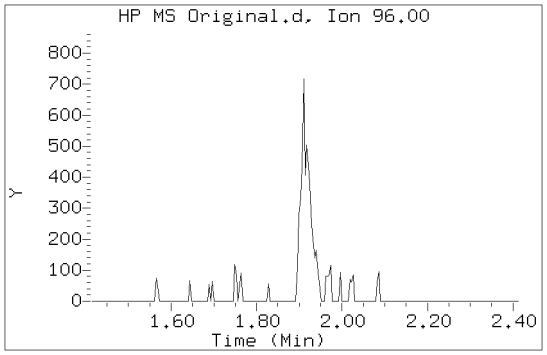
MASS
96
AREA
1330
HEIGHT
961
27-Dec-2022
16:07
ALSHS
Ser



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

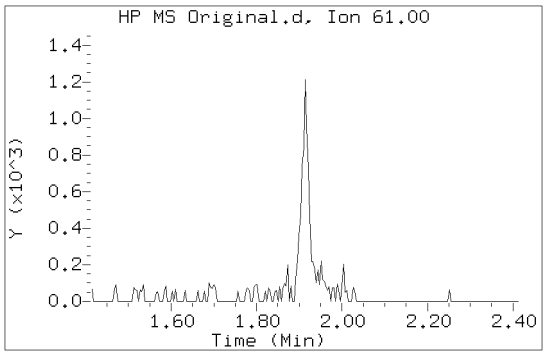
BEFORE

MASS
142
AREA
1106
HEIGHT
699
16-Dec-2022
11:54
ALSHS
Server



BEFORE

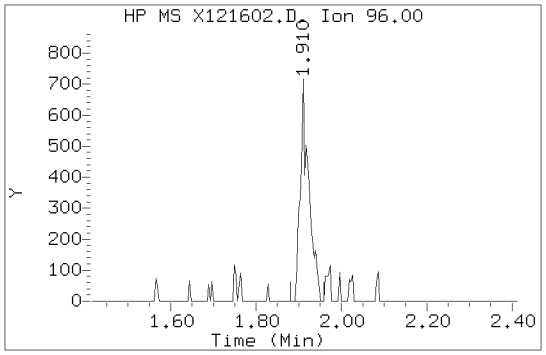
MASS
127
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

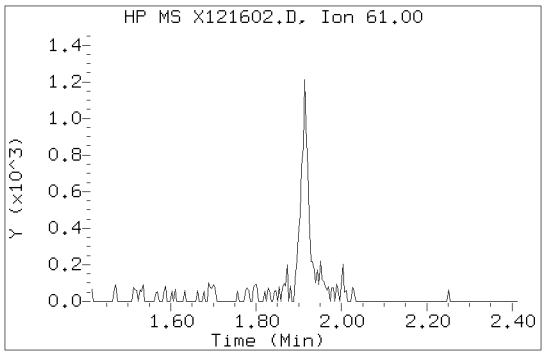
AFTER

MASS
96
AREA
1010
HEIGHT
717
27-Dec-2022
16:07
ALSHS
Ser



AFTER

MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



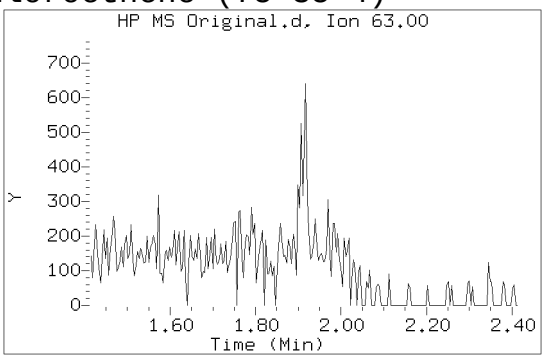
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

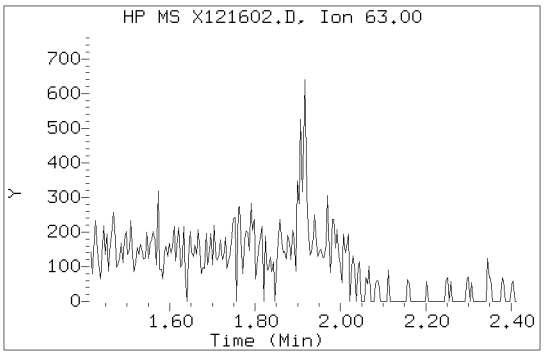
BEFORE

MASS
141
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

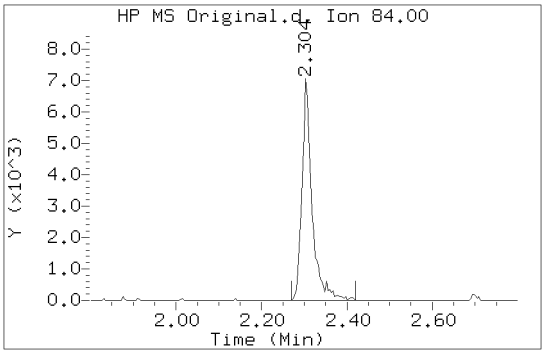


Methylene Chloride (75-09-2)

Reason Code:

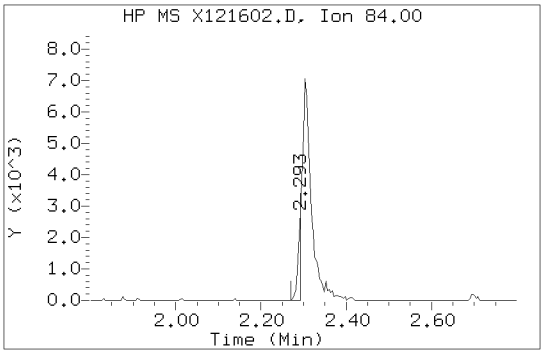
BEFORE

MASS
84
AREA
11777
HEIGHT
7057
16-Dec-2022
11:54
ALSHS
Server



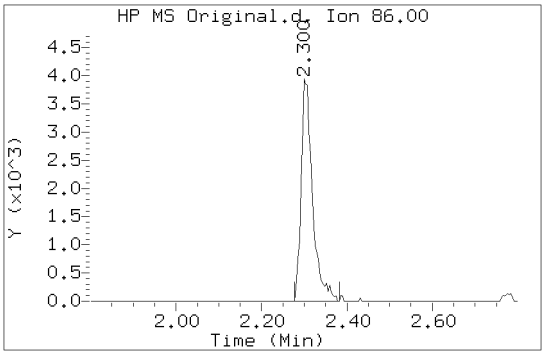
AFTER

MASS
84
AREA
1436
HEIGHT
2786
27-Dec-2022
16:07
ALSHS
Ser



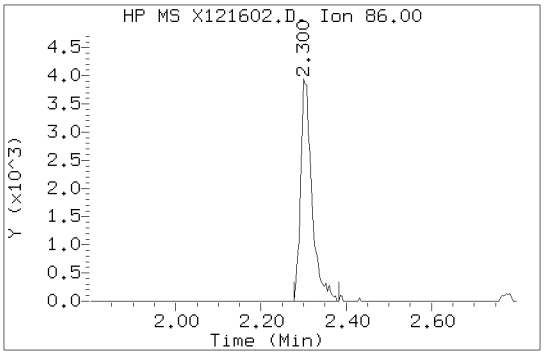
BEFORE

MASS
86
AREA
7453
HEIGHT
3944
16-Dec-2022
11:54
ALSHS
Server



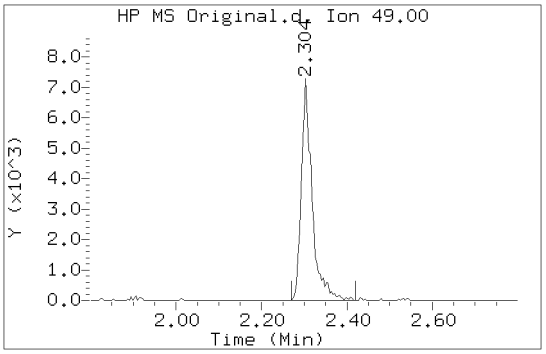
AFTER

MASS
86
AREA
7453
HEIGHT
3944
27-Dec-2022
16:07
ALSHS
Ser



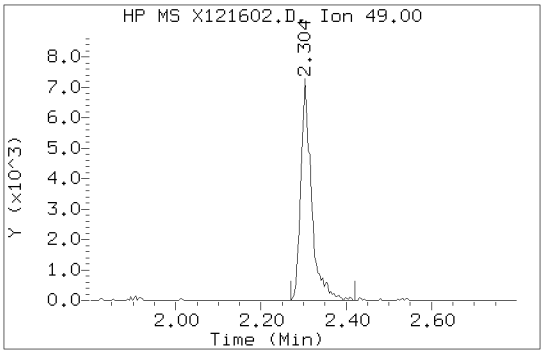
BEFORE

MASS
49
AREA
12974
HEIGHT
7289
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
49
AREA
12974
HEIGHT
7289
27-Dec-2022
16:07
ALSHS
Ser



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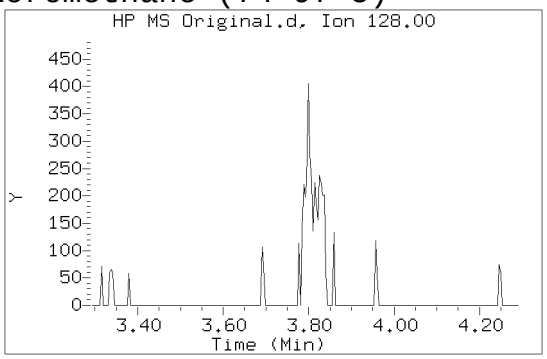
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

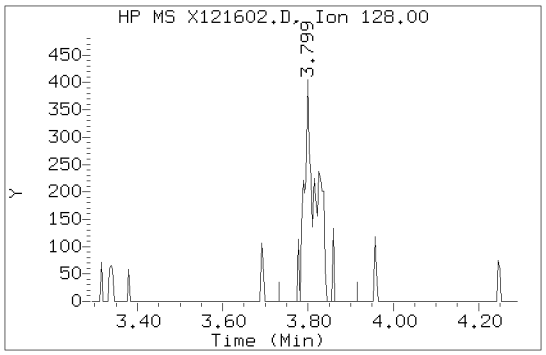
Bromochloromethane (74-97-5)

Reason Code:

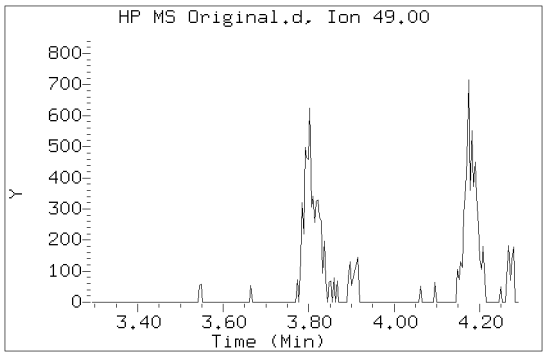
BEFORE
MASS
96
AREA
1402
HEIGHT
854
16-Dec-2022
11:54
ALSHS
Server



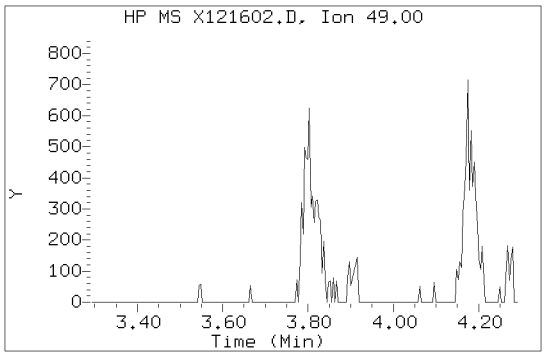
AFTER
MASS
128
AREA
802
HEIGHT
405
27-Dec-2022
16:07
ALSHS
Ser



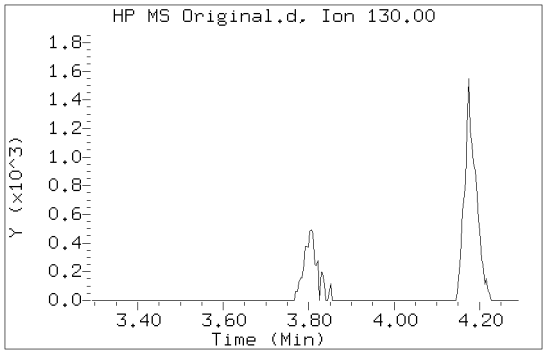
BEFORE
MASS
61
AREA
1975
HEIGHT
828
16-Dec-2022
11:54
ALSHS
Server



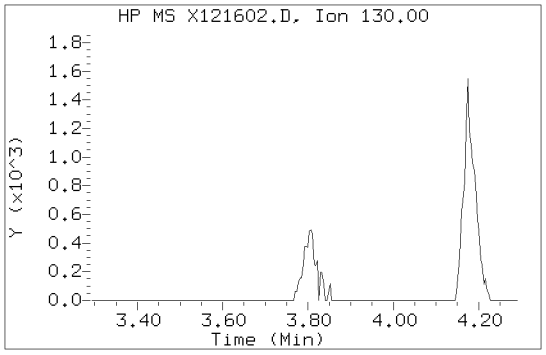
AFTER
MASS
49
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
98
AREA
1027
HEIGHT
608
16-Dec-2022
11:54
ALSHS
Server



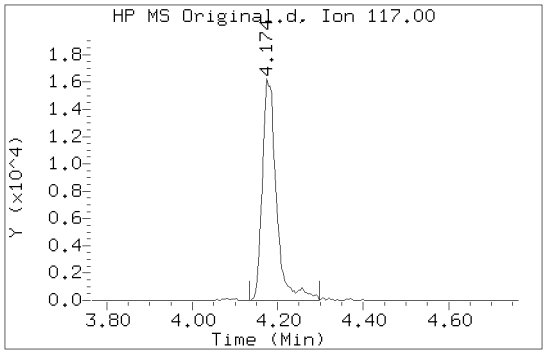
AFTER
MASS
130
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



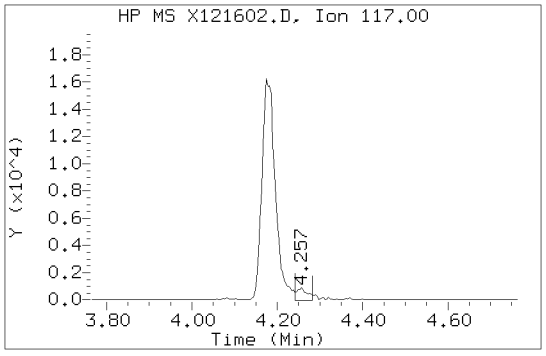
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
97
AREA
1700
HEIGHT
1016
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
117
AREA
1685
HEIGHT
944
27-Dec-2022
16:07
ALSHS
Ser



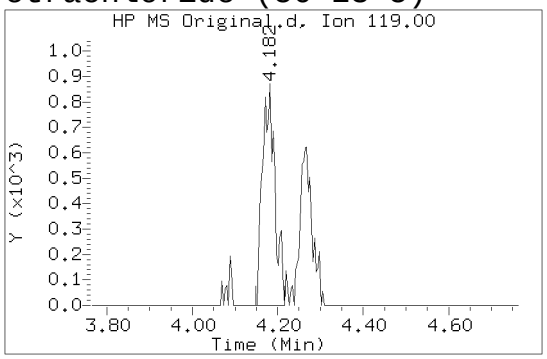
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Carbon Tetrachloride (56-23-5)

Reason Code:

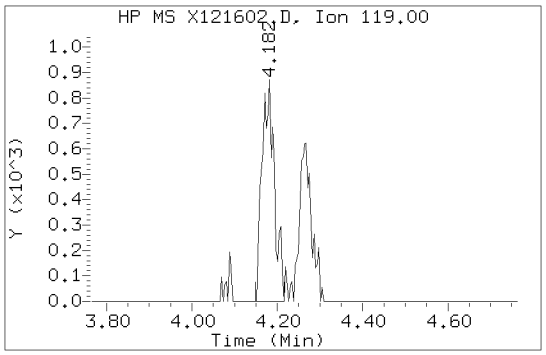
BEFORE

MASS
99
AREA
207130
HEIGHT
91368
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
119
AREA
1748
HEIGHT
872
27-Dec-2022
16:07
ALSHS
Ser

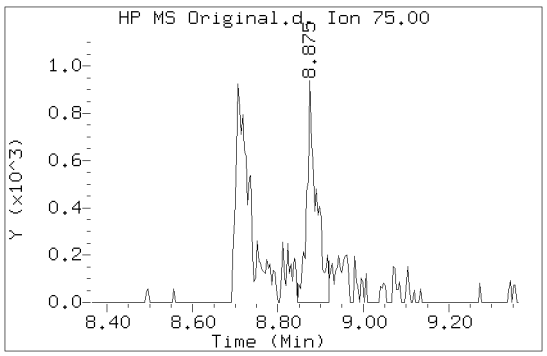


1,2,3-Trichloropropane (96-18-4)

Reason Code:

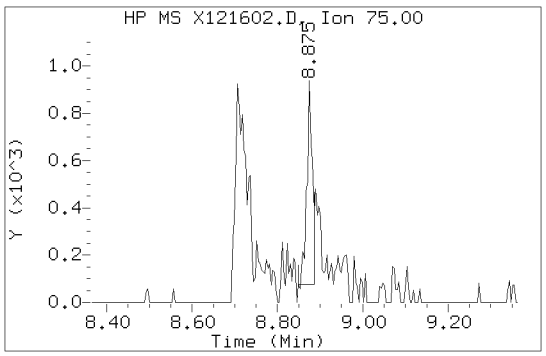
BEFORE

MASS
152
AREA
348702
HEIGHT
242350
16-Dec-2022
11:54
ALSHS
Server



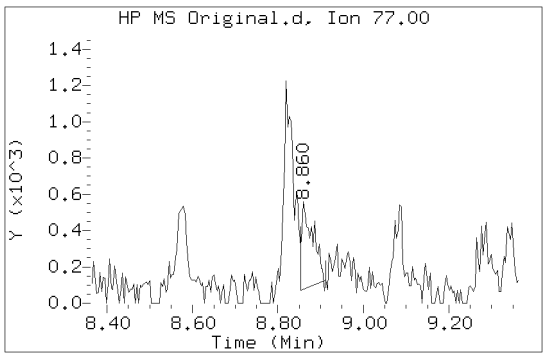
AFTER

MASS
75
AREA
766
HEIGHT
862
27-Dec-2022
16:07
ALSHS
Ser



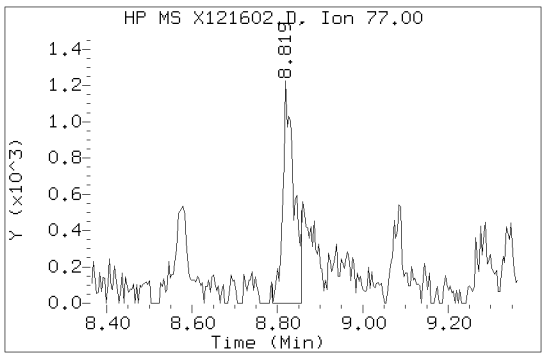
BEFORE

MASS
115
AREA
184413
HEIGHT
133835
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
77
AREA
2223
HEIGHT
1225
27-Dec-2022
16:07
ALSHS
Ser

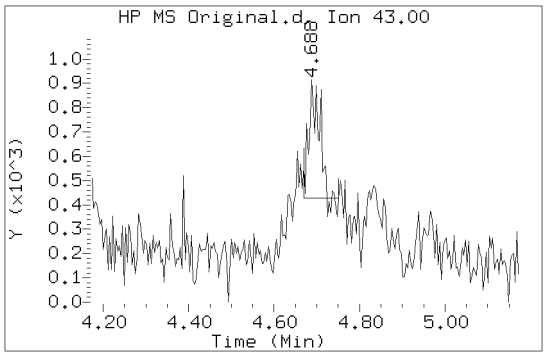


Isobutyl Alcohol (78-83-1)

Reason Code:

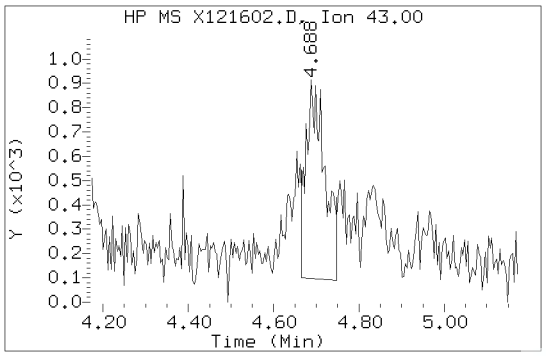
BEFORE

MASS
75
AREA
1475
HEIGHT
938
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
43
AREA
2537
HEIGHT
816
27-Dec-2022
16:07
ALSHS
Ser

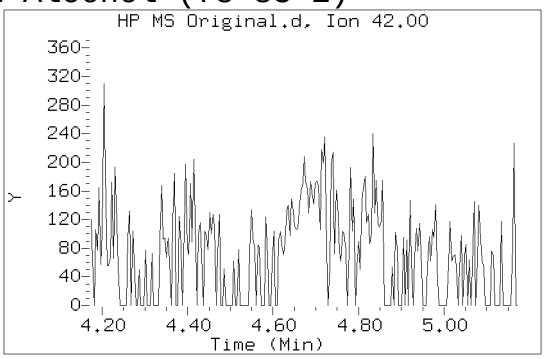


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Isobutyl Alcohol (78-83-1)

BEFORE

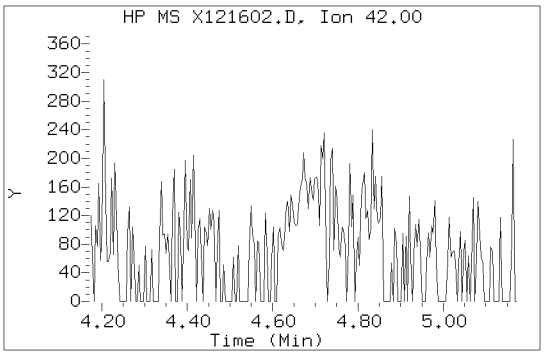
MASS
77
AREA
888
HEIGHT
483
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

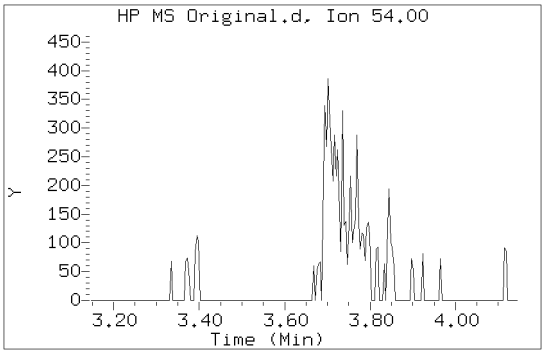
MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Propionitrile (107-12-0)

BEFORE

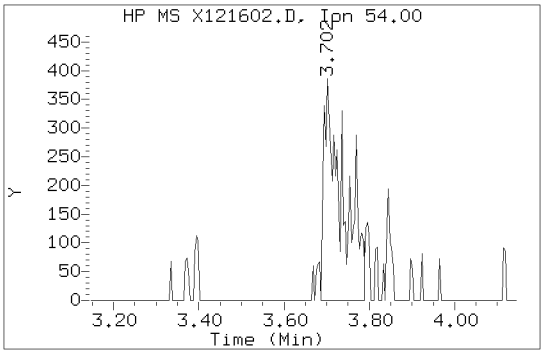
MASS
91
AREA
3881
HEIGHT
1822
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

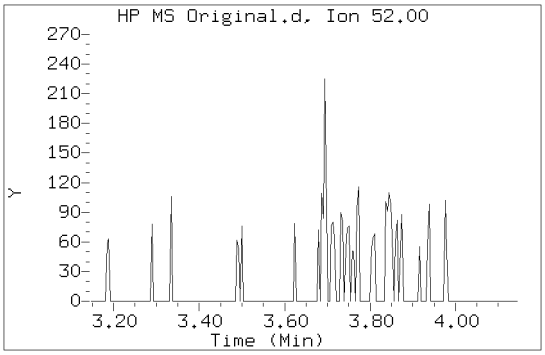
AFTER

MASS
54
AREA
1165
HEIGHT
386
27-Dec-2022
16:07
ALSHS
Ser



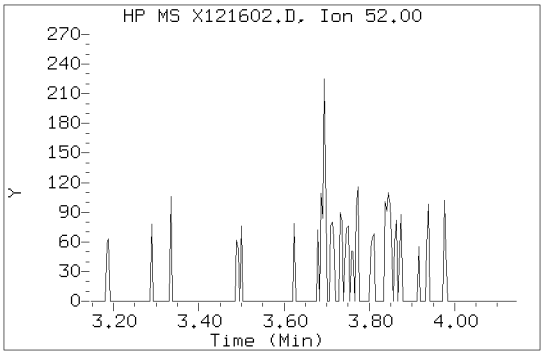
BEFORE

MASS
126
AREA
1511
HEIGHT
914
16-Dec-2022
11:54
ALSHS
Server



AFTER

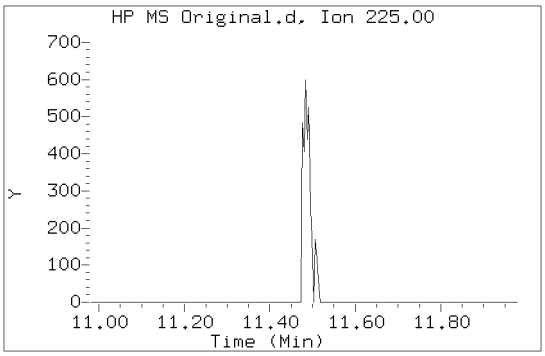
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Hexachlorobutadiene (87-68-3)

BEFORE

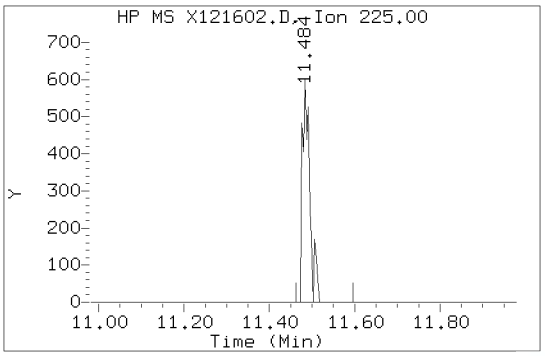
MASS
155
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

MASS
225
AREA
726
HEIGHT
599
27-Dec-2022
16:07
ALSHS
Ser

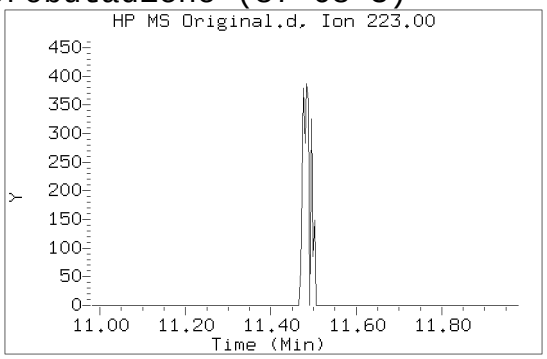


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

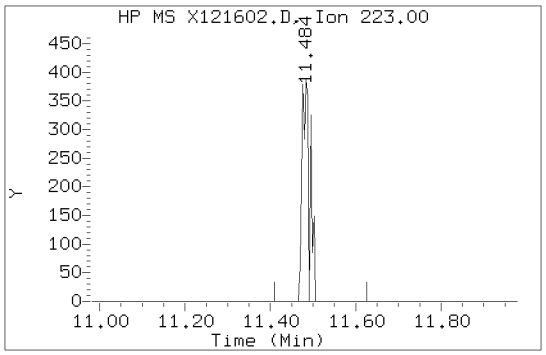
Hexachlorobutadiene (87-68-3)

Reason Code:

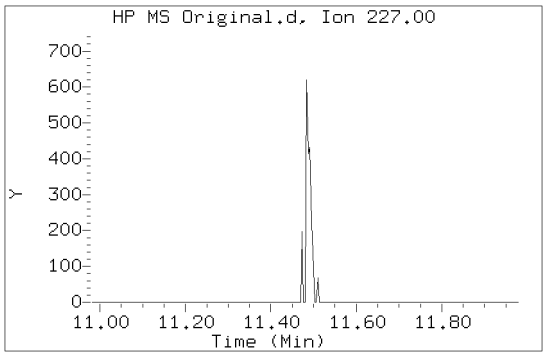
BEFORE
MASS
157
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



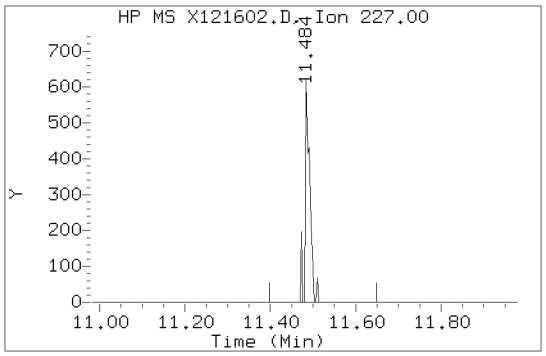
AFTER
MASS
223
AREA
502
HEIGHT
387
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
75
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



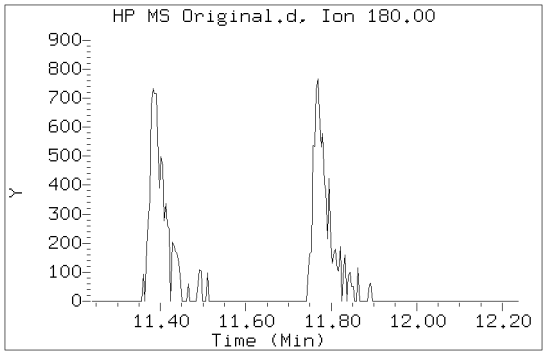
AFTER
MASS
227
AREA
469
HEIGHT
620
27-Dec-2022
16:07
ALSHS
Ser



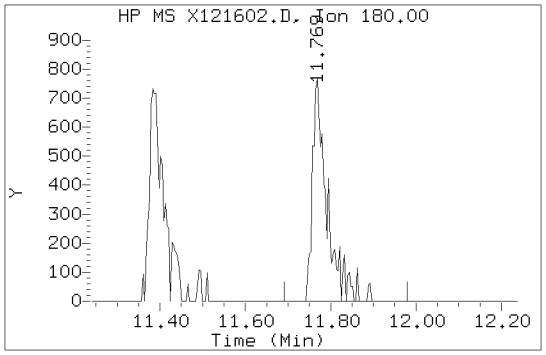
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

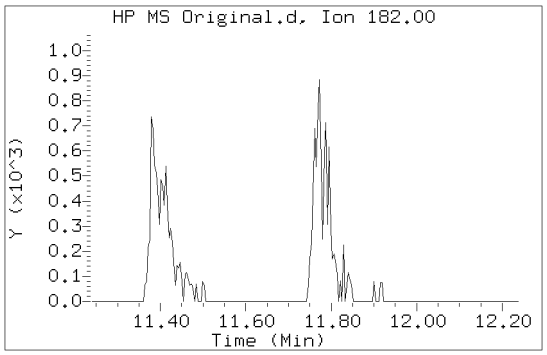
BEFORE
MASS
225
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



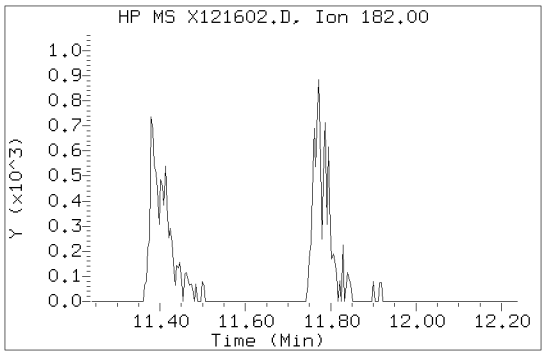
AFTER
MASS
180
AREA
1816
HEIGHT
766
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
223
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
182
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



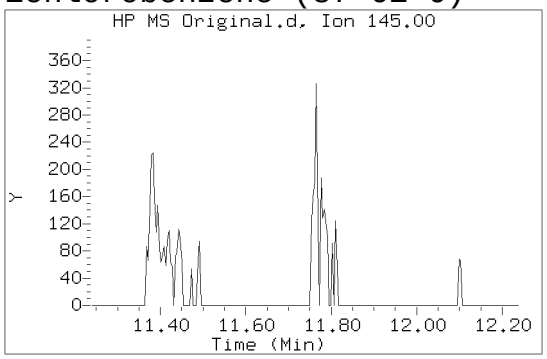
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

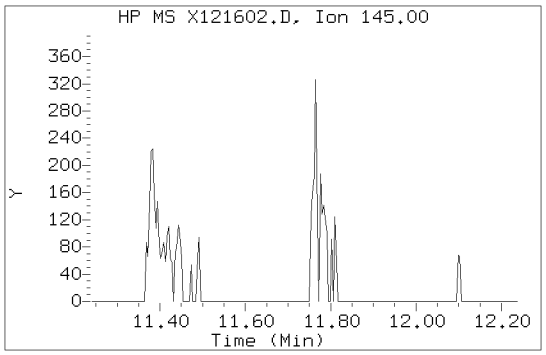
BEFORE

MASS
227
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
145
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

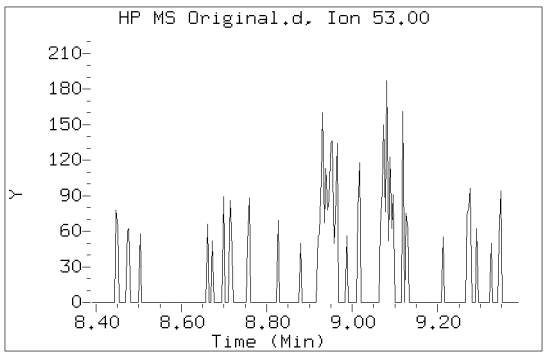


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

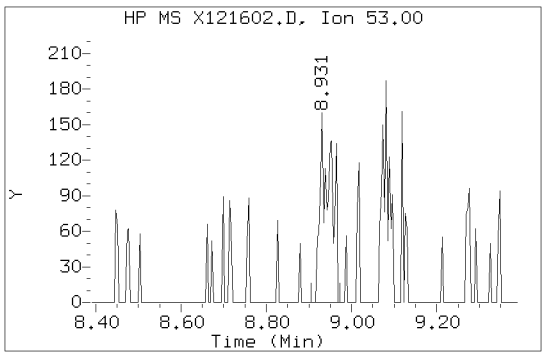
BEFORE

MASS
53
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



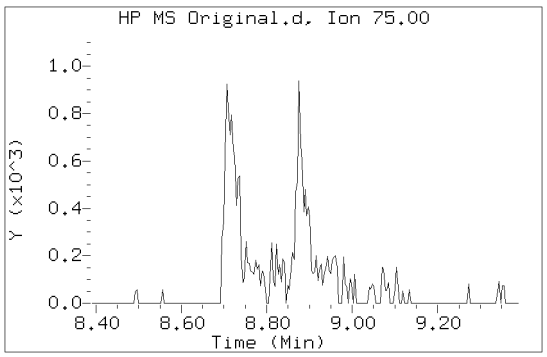
AFTER

MASS
53
AREA
280
HEIGHT
160
27-Dec-2022
16:07
ALSHS
Ser



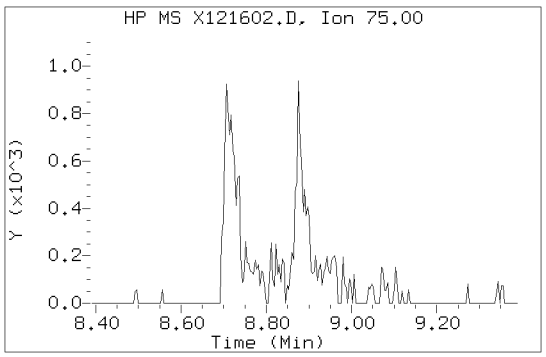
BEFORE

MASS
88
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

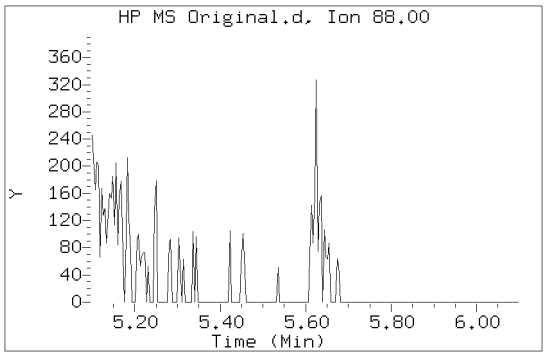


1,4-Dioxane ()

Reason Code:

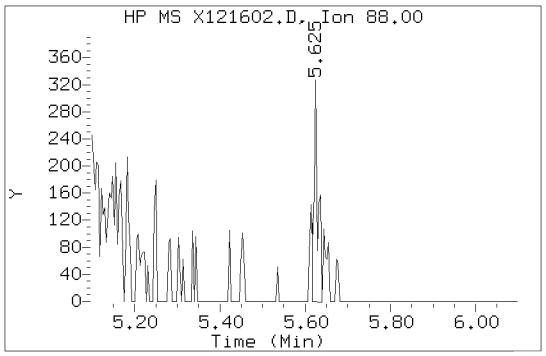
BEFORE

MASS
57
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
88
AREA
214
HEIGHT
327
27-Dec-2022
16:07
ALSHS
Ser



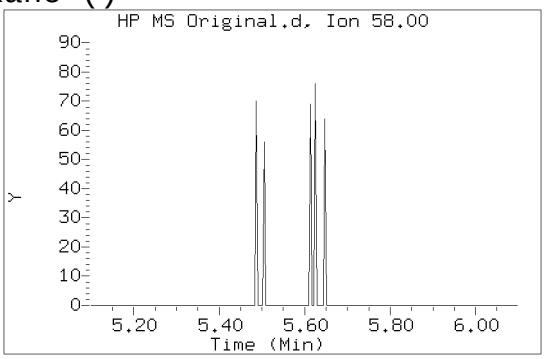
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

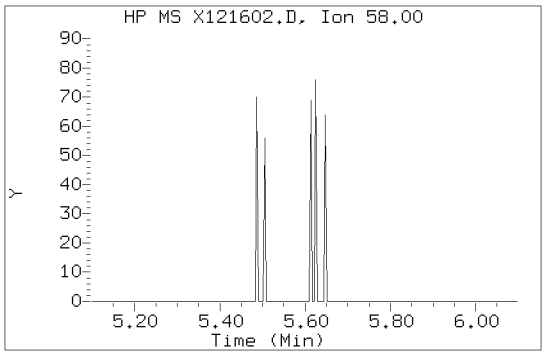
BEFORE

MASS
41
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

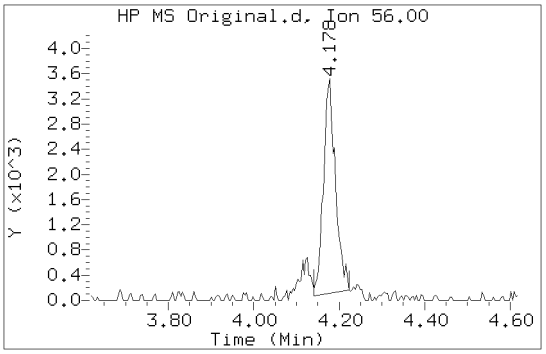


Cyclohexane (110-82-7)

Reason Code:

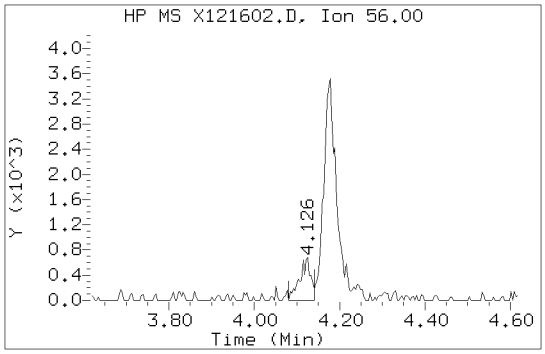
BEFORE

MASS
42
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



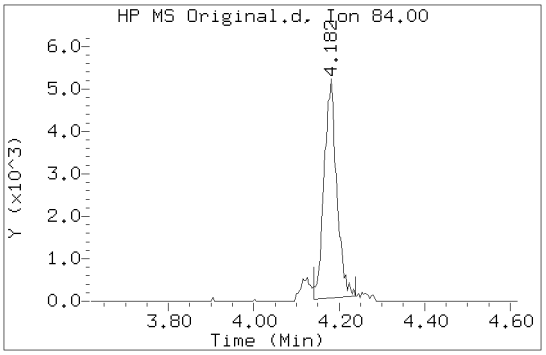
AFTER

MASS
56
AREA
1235
HEIGHT
682
27-Dec-2022
16:07
ALSHS
Ser



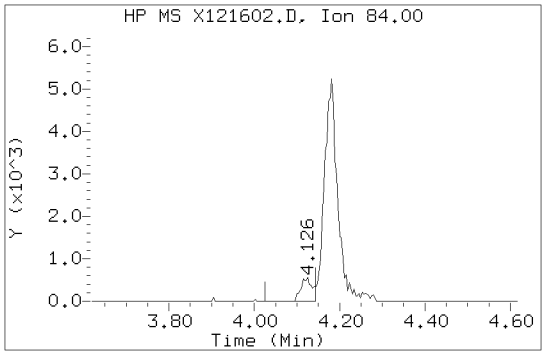
BEFORE

MASS
71
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
84
AREA
1062
HEIGHT
557
27-Dec-2022
16:07
ALSHS
Ser

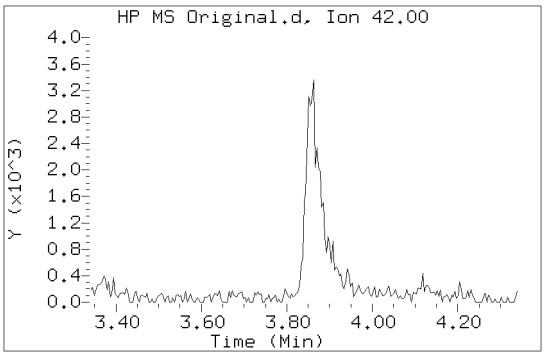


Tetrahydrofuran (109-99-9)

Reason Code:

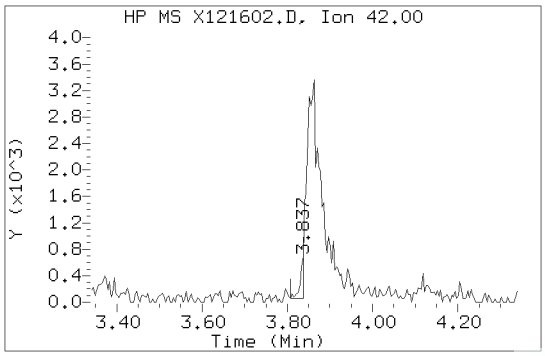
BEFORE

MASS
101
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
42
AREA
358
HEIGHT
628
27-Dec-2022
16:07
ALSHS
Ser



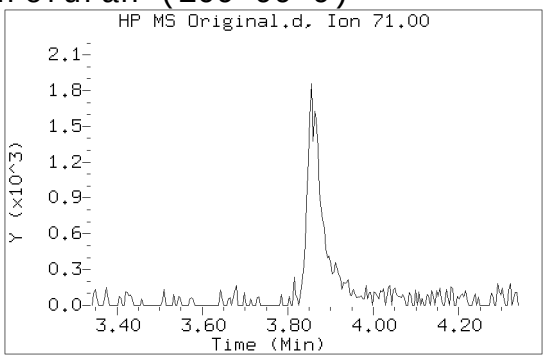
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Tetrahydrofuran (109-99-9)

Reason Code:

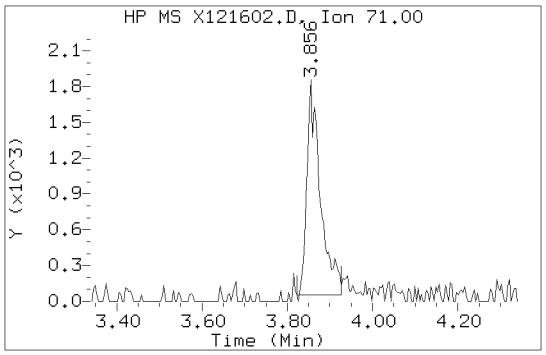
BEFORE

MASS
151
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
71
AREA
3962
HEIGHT
1803
27-Dec-2022
16:07
ALSHS
Ser

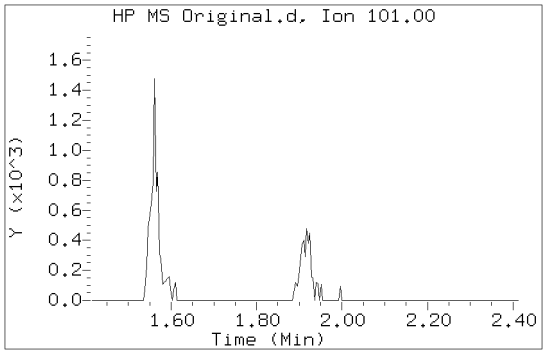


Freon TF (76-13-1)

Reason Code:

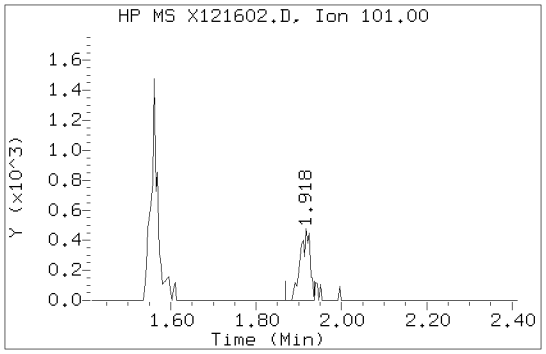
BEFORE

MASS
118
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



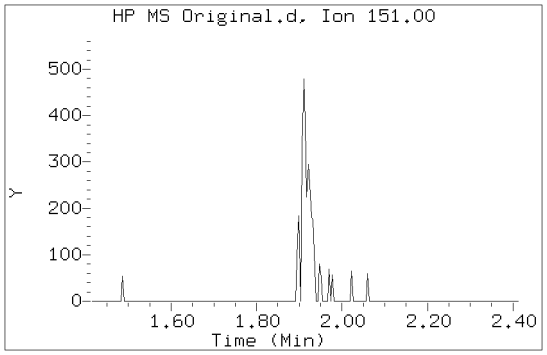
AFTER

MASS
101
AREA
765
HEIGHT
479
27-Dec-2022
16:07
ALSHS
Ser



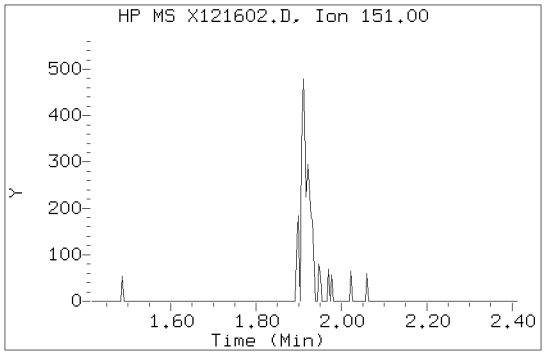
BEFORE

MASS
103
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
151
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 16-DEC-2022 12:20
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 11:38 Cal File: X121602.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	461469	50.0000	
135 1,4-Dioxane	88	5.625	5.625	(1.346)	462	10.0000	10.95(M)
140 1,3-Butadiene	54	1.164	1.164	(0.279)	1793	0.50000	0.56(M)
25 Methacrylonitrile	41	3.848	3.848	(0.921)	2066	0.50000	0.63(M)
12 Isobutyl Alcohol	43	4.695	4.695	(1.124)	5178	10.0000	9.97(M)
13 Acetonitrile	39	2.210	2.210	(0.529)	2204	5.00000	5.24(M)
14 Allyl Chloride	41	2.206	2.206	(0.528)	4574	0.50000	0.57(M)
4 Propionitrile	54	3.686	3.686	(0.882)	2777	5.00000	5.89(M)
136 n-Hexane	57	2.772	2.772	(0.664)	1909	0.50000	0.57(M)
72 trans-1,4-Dichloro-2-butene	53	8.931	8.931	(1.165)	792	0.50000	0.56(M)
23 Chloroprene	53	1.771	1.771	(0.424)	900	0.50000	0.57(M)
145 alpha-Methylstyrene	118	9.272	9.272	(0.960)	4701	0.50000	0.60
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	5153	0.50000	0.59(M)
139 Diethyl ether	59	1.760	1.760	(0.421)	1864	0.50000	0.60
130 Ethyl Acetate	43	3.679	3.679	(0.881)	2065	0.50000	0.57(M)
40 Methyl Methacrylate	41	5.628	5.628	(1.347)	1788	0.50000	0.56(M)
49 Ethyl Methacrylate	69	6.727	6.727	(1.355)	1935	0.50000	0.59(M)
132 n-Butanol	56	5.291	5.291	(1.266)	622	10.0000	50.83(M)
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	900	1.00000	(M)
150 Allyl alcohol	57	2.772	2.772	(0.664)	3089	10.0000	17.23

166 1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	9626	0.50000	0.57(M)
131 Methyl Acrylate	55	3.743	3.743 (0.896)	1765	0.50000	0.56(M)

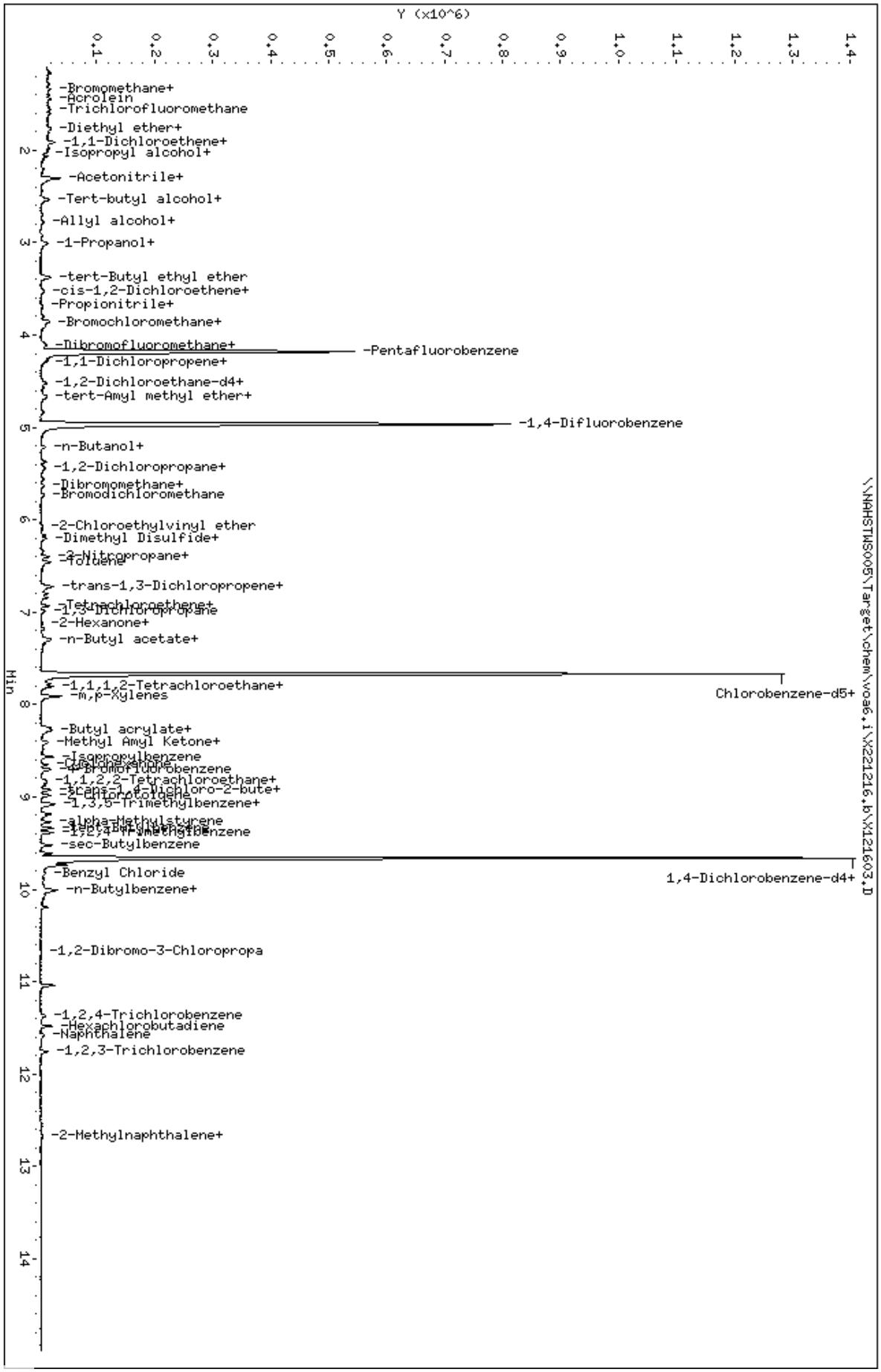
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	162	Butyl acrylate	55	8.271	8.271	(1.079)	4718	0.50000	0.55(M)
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1990	0.50000	1.00(M)
	3	Chloromethane	50	1.077	1.077	(0.258)	2466	0.50000	2.77(M)
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	2412	0.50000	0.59(M)
	6	Bromomethane	94	1.336	1.336	(0.320)	1893	0.50000	2.36(M)
	7	Chloroethane	64	1.407	1.407	(0.337)	1653	0.50000	0.58(M)
	8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	3286	0.50000	0.58(M)
	9	Acrolein	56	1.441	1.441	(0.345)	440	1.00000	4.17(M)
	10	Acetone	43	1.977	1.977	(0.473)	2669	1.00000	2.02(M)
	11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	2037	0.50000	0.58(M)
	15	Iodomethane	142	2.026	2.026	(0.485)	2397	1.00000	3.84(TM)
	16	Acrylonitrile	53	2.566	2.566	(0.614)	1118	1.00000	0.94(M)
	17	Methylene Chloride	84	2.296	2.296	(0.550)	2938	0.50000	0.61(M)
	18	Methyl tert-butyl ether	73	2.536	2.536	(0.607)	5841	0.50000	0.50(M)
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	9921	1.00000	1.08(M)
	20	trans-1,2-Dichloroethene	96	2.543	2.543	(0.609)	2218	0.50000	0.56(M)
	21	Vinyl Acetate	43	3.023	3.023	(0.724)	10138	1.00000	1.00(M)
	22	1,1-Dichloroethane	63	2.926	2.926	(0.700)	3874	0.50000	0.56(M)
	24	2-Butanone	43	3.649	3.649	(0.873)	1292	1.00000	3.93(M)
	26	2,2-Dichloropropane	77	3.514	3.514	(0.841)	3238	0.50000	0.55(M)
	27	cis-1,2-Dichloroethene	96	3.544	3.544	(0.848)	2852	0.50000	0.59
	28	Chloroform	83	3.908	3.908	(0.935)	4040	0.50000	0.52(M)
	29	Bromochloromethane	128	3.799	3.799	(0.909)	1481	0.50000	0.56
$	30	Dibromofluoromethane	113	4.110	4.110	(0.984)	2321	0.50000	0.35
	31	1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	3512	0.50000	0.57(M)
	32	1,1-Dichloropropene	75	4.290	4.290	(0.864)	2468	0.50000	0.50(M)
	33	1,2-Dichloroethane	62	4.567	4.567	(0.920)	3129	0.50000	0.55(M)
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	2763	0.50000	0.52(MH)
$	35	1,2-Dichloroethane-d4	65	4.481	4.481	(1.073)	2849	0.50000	0.87(T)
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	687671	50.0000	
	37	Benzene	78	4.519	4.519	(0.910)	9243	0.50000	0.56
	38	Trichloroethene	130	5.216	5.216	(1.051)	2583	0.50000	0.55(M)
	39	Bromodichloromethane	83	5.730	5.730	(1.154)	3650	0.50000	0.59(M)
	41	2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	1861	1.00000	1.06(M)
	42	1,2-Dichloropropane	63	5.441	5.441	(1.096)	2449	0.50000	0.56(M)
	44	Dibromomethane	93	5.557	5.557	(1.119)	1725	0.50000	0.58
	45	4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	3741	1.00000	1.08(M)
	46	cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	3695	0.50000	0.51(M)
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	645291	50.0000	
$	48	Toluene-d8	98	6.401	6.401	(0.835)	9525	0.50000	0.59
	50	Toluene	91	6.460	6.460	(0.843)	10374	0.50000	0.58(M)
	51	trans-1,3-Dichloropropene	75	6.697	6.697	(1.349)	3042	0.50000	0.50
	52	2-Hexanone	43	7.117	7.117	(0.928)	2580	1.00000	1.09
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	2092	0.50000	0.58(M)
	54	1,3-Dichloropropane	76	6.993	6.993	(0.912)	4005	0.50000	0.56(M)
	55	Dibromochloromethane	129	7.180	7.180	(0.936)	2827	0.50000	0.54
	56	Tetrachloroethene	164	6.933	6.933	(0.904)	2131	0.50000	0.57(M)
	57	1,2-Dibromoethane	107	7.270	7.270	(0.948)	2340	0.50000	0.52(M)
	58	1-Chlorohexane	55	7.705	7.705	(1.552)	1829	0.50000	0.55(MH)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	7747	0.50000	0.61
	60	1,1,1,2-Tetrachloroethane	131	7.784	7.784	(1.015)	2741	0.50000	0.58(M)
	61	Ethylbenzene	106	7.806	7.806	(1.018)	3064	0.50000	0.51(M)

62 m,p-Xylenes	106	7.911	7.911 (1.032)	9016	1.00000	1.17(M)
63 o-Xylene	106	8.252	8.252 (1.076)	4412	0.50000	0.58(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	64 Styrene	104	8.286	8.286	(1.081)	6634	0.50000	0.52(M)
	66 Bromoform	173	8.421	8.421	(1.098)	2013	0.50000	0.56(TM)
	67 Isopropylbenzene	105	8.567	8.567	(1.117)	8757	0.50000	0.50(M)
	68 1,1,2,2-Tetrachloroethane	83	8.845	8.845	(0.915)	3194	0.50000	0.57(M)
$	69 4-Bromofluorobenzene	95	8.706	8.706	(1.135)	3870	0.50000	0.71(M)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	347824	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2019	0.50000	0.52(M)
	73 n-Propylbenzene	91	8.923	8.923	(0.924)	11163	0.50000	0.57(M)
	74 Bromobenzene	156	8.818	8.818	(0.913)	3147	0.50000	0.55(M)
	75 1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	7182	0.50000	0.50(M)
	76 2-Chlorotoluene	91	8.983	8.983	(0.930)	6718	0.50000	0.53(M)
	77 4-Chlorotoluene	91	9.088	9.088	(0.941)	7644	0.50000	0.53(M)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	6389	0.50000	0.54(M)
	79 1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	8496	0.50000	0.56(M)
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	7938	0.50000	0.51(M)
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	7343	0.50000	0.52(M)
	83 1,3-Dichlorobenzene	146	9.613	9.613	(0.995)	4677	0.50000	0.49(M)
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	5674	0.50000	0.54(M)
	86 Benzyl Chloride	91	9.831	9.831	(1.282)	3642	0.50000	3.03
	87 n-Butylbenzene	91	10.014	10.014	(1.036)	5149	0.50000	2.14(M)
	88 1,2-Dichlorobenzene	146	10.010	10.010	(1.036)	5504	0.50000	0.56(M)
	89 1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	441	0.50000	0.58(M)
	90 1,2,4-Trichlorobenzene	180	11.364	11.364	(1.176)	3187	0.50000	0.51(M)
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	1477	0.50000	0.49(M)
	92 Naphthalene	128	11.581	11.581	(1.199)	7025	0.50000	0.50
	93 1,2,3-Trichlorobenzene	180	11.765	11.765	(1.218)	3572	0.50000	0.60(M)
M	94 1,2-Dichloroethylene (total)	96				5070	1.00000	
M	95 Xylenes (total)	106				13428	1.50000	
	141 Cyclohexane	56	4.114	4.114	(0.985)	2803	0.50000	1.84(M)
	138 Freon TF	101	1.917	1.917	(0.459)	1851	0.50000	0.54(M)
	147 Methylcyclohexane	55	5.415	5.415	(1.091)	4781	0.50000	0.56(M)
	146 Methyl Acetate	43	2.240	2.240	(0.536)	1269	0.50000	0.61(M)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Column phase: DB624

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

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m,p-Xylenes ()

Reason Code:

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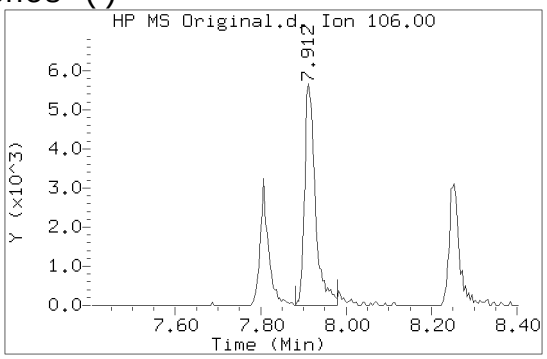

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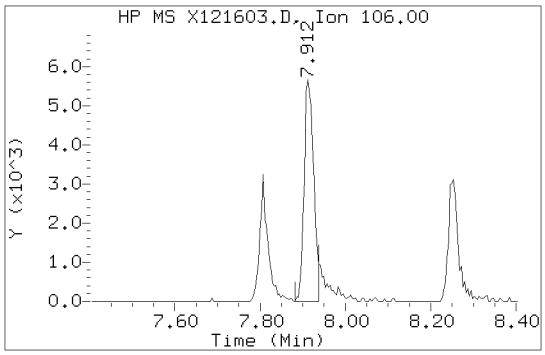

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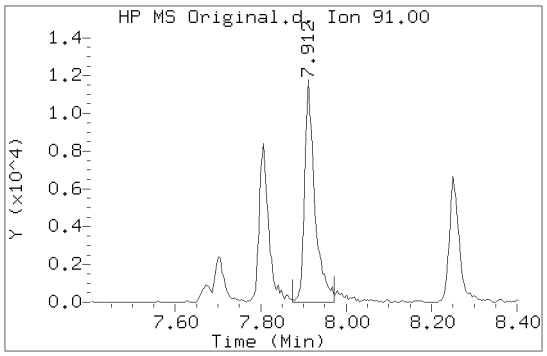

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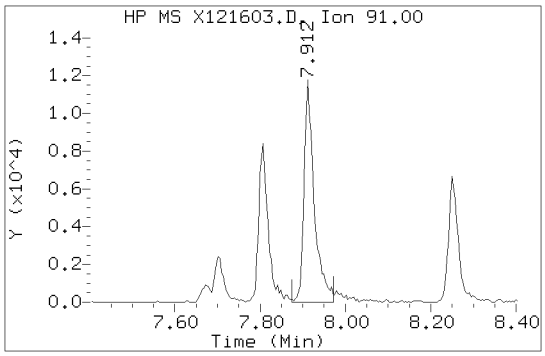

Dichlorodifluoromethane (75-71-8)

Reason Code:

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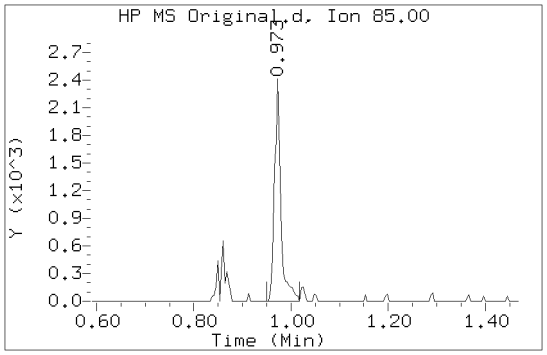

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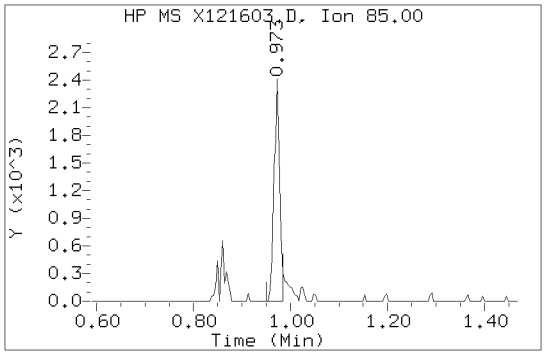

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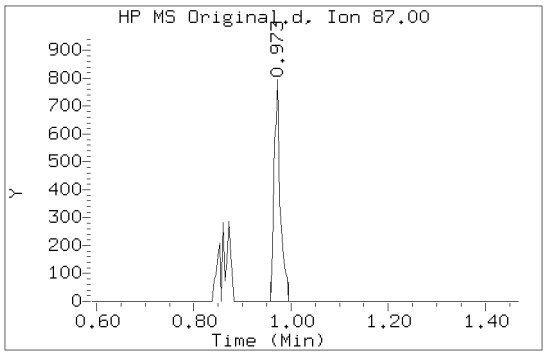

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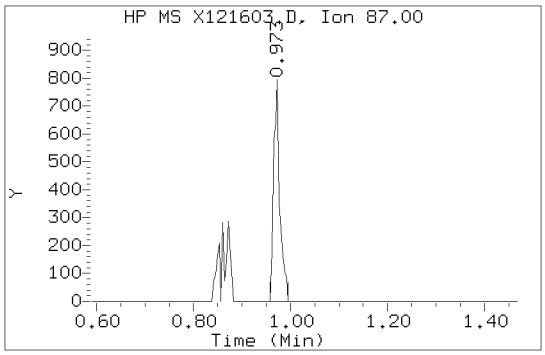

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LabSampID : VSTD000.5

Chloromethane (74-87-3)

BEFORE

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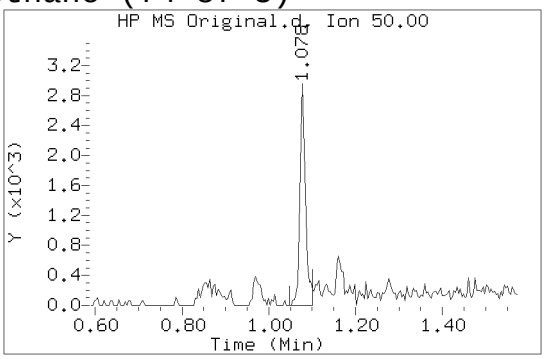

BEFORE

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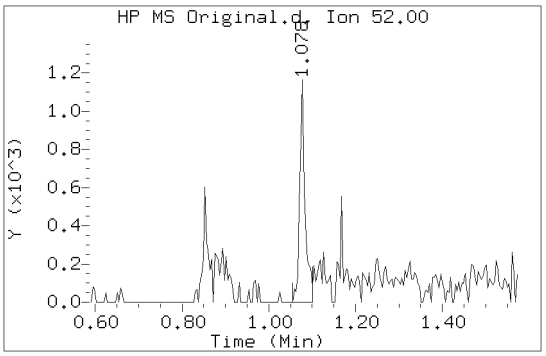

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AFTER

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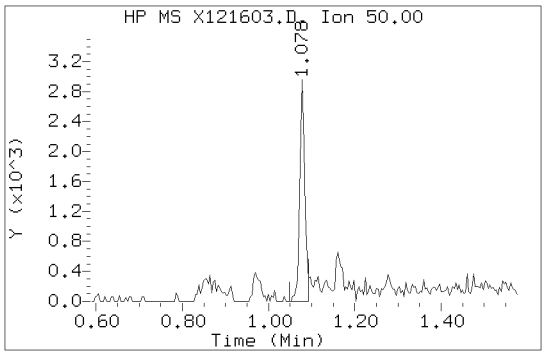

AFTER

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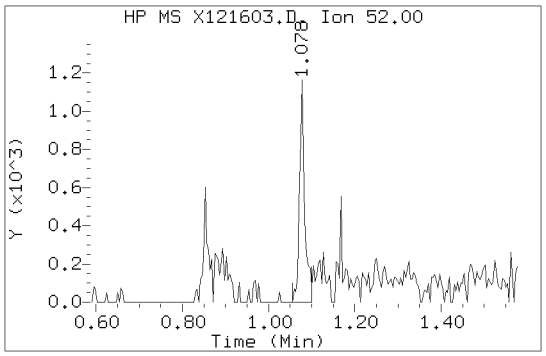

Vinyl Chloride (75-01-4)

BEFORE

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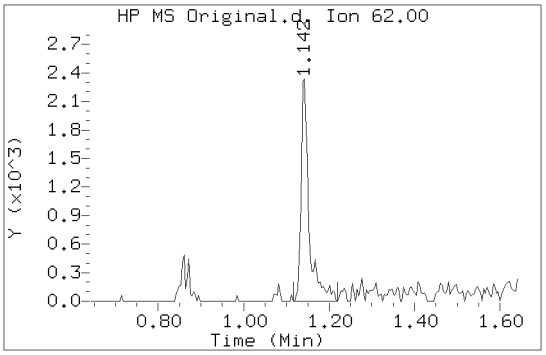

BEFORE

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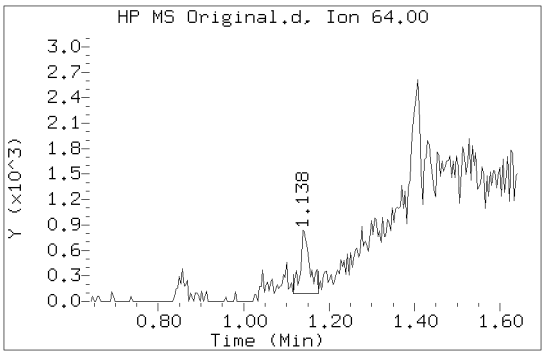

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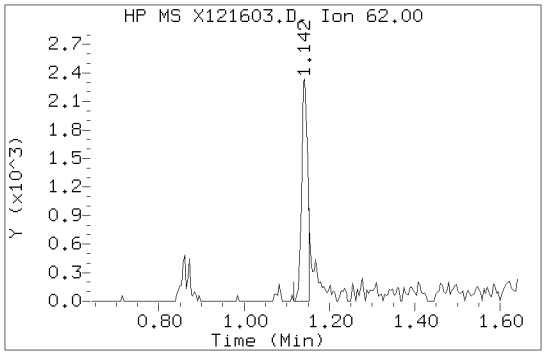

AFTER

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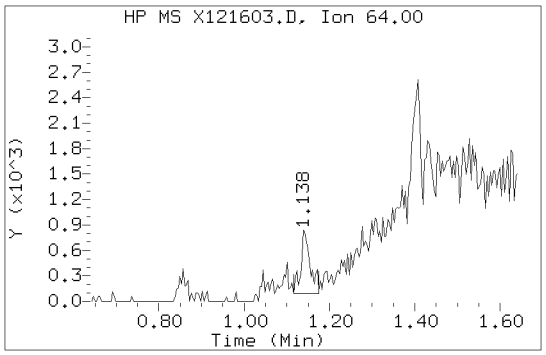

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LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE

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AREA
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27-Dec-2022
16:03
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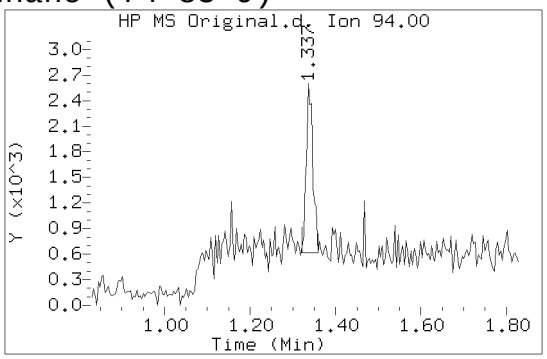

AFTER

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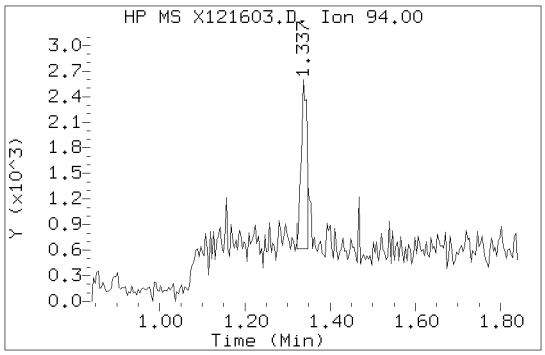

BEFORE

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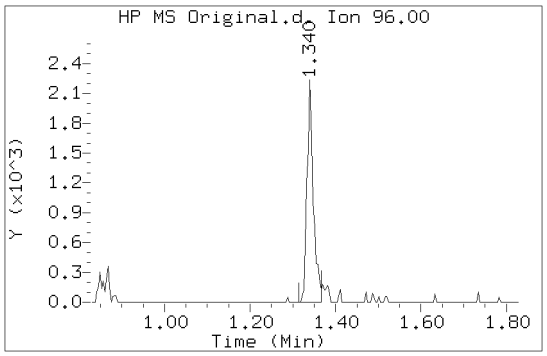

AFTER

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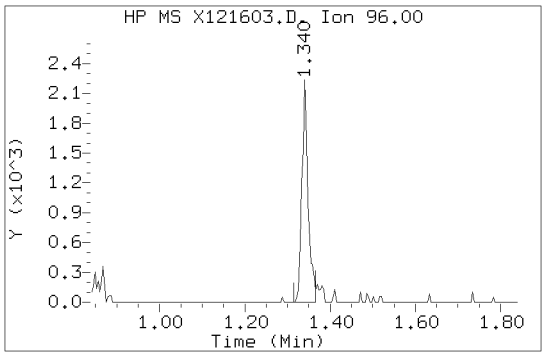
linh
pham

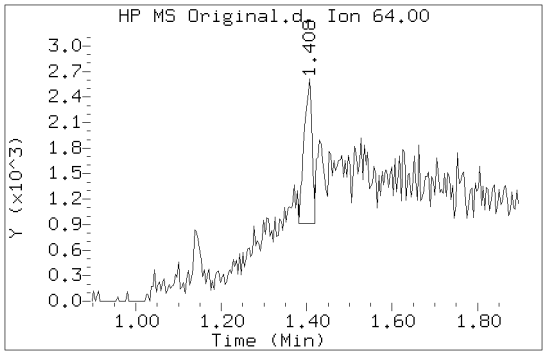


Chloroethane (75-00-3)

Reason Code:

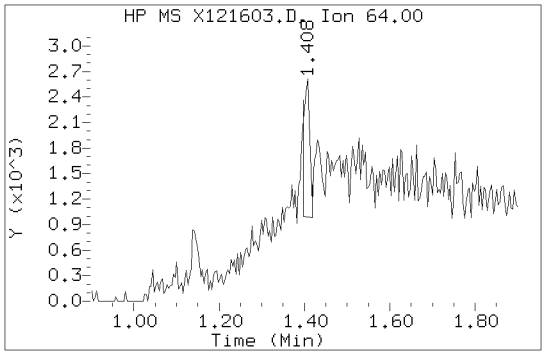
BEFORE

MASS
64
AREA
2196
HEIGHT
1702
27-Dec-2022
16:03
linh
pham



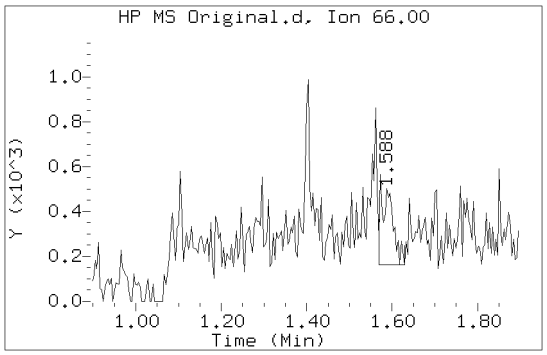
AFTER

MASS
64
AREA
1653
HEIGHT
1624
27-Dec-2022
16:07
linh
pham



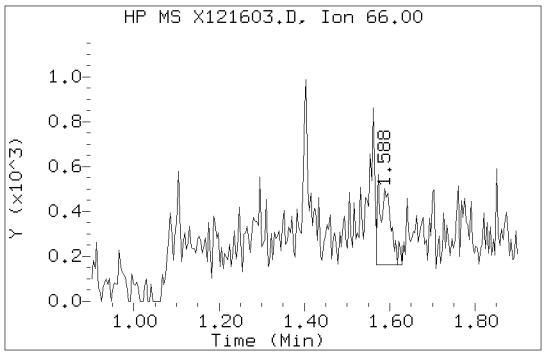
BEFORE

MASS
66
AREA
677
HEIGHT
340
27-Dec-2022
16:03
linh
pham



AFTER

MASS
66
AREA
677
HEIGHT
340
27-Dec-2022
16:07
linh
pham



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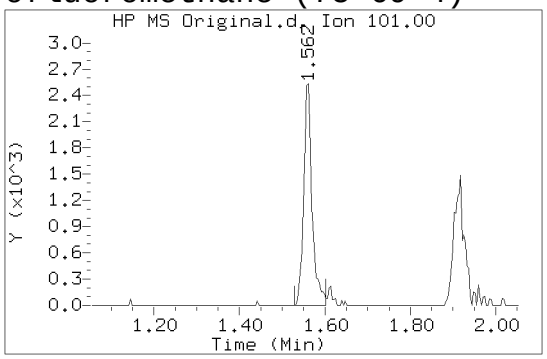
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Trichlorofluoromethane (75-69-4)

Reason Code:

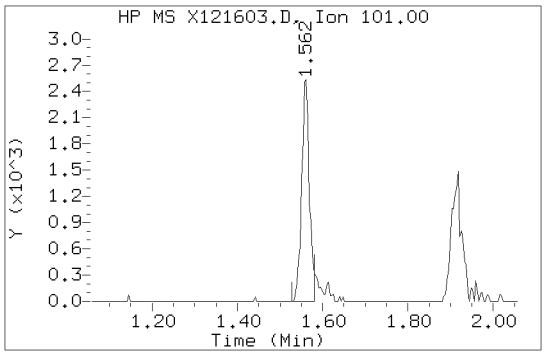
BEFORE

MASS
101
AREA
3530
HEIGHT
2534
27-Dec-2022
16:03
linh
pham



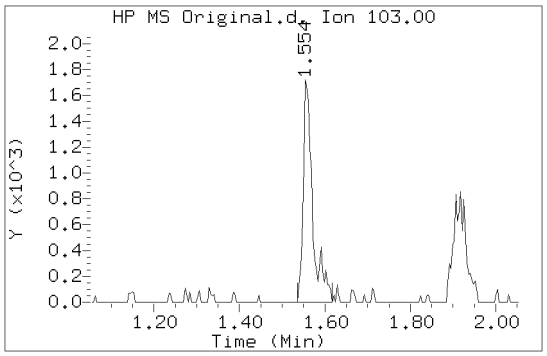
AFTER

MASS
101
AREA
3286
HEIGHT
2534
27-Dec-2022
16:07
linh
pham



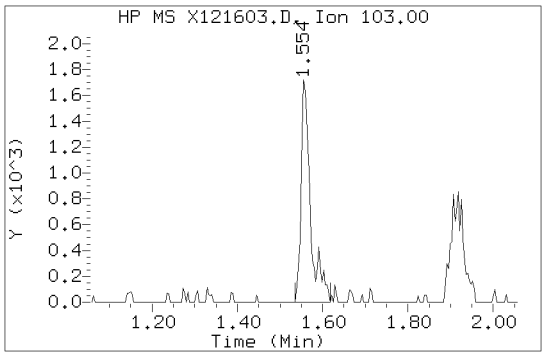
BEFORE

MASS
103
AREA
2708
HEIGHT
1720
27-Dec-2022
16:03
linh
pham



AFTER

MASS
103
AREA
2708
HEIGHT
1720
27-Dec-2022
16:07
linh
pham

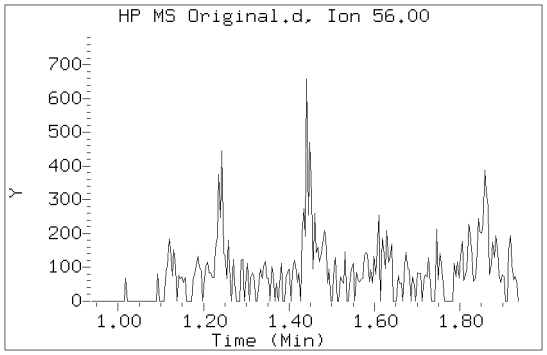


Acrolein (107-02-8)

Reason Code:

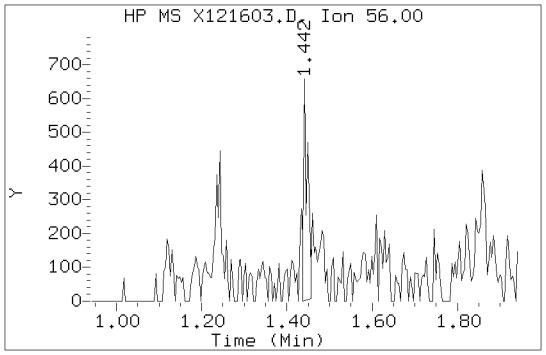
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



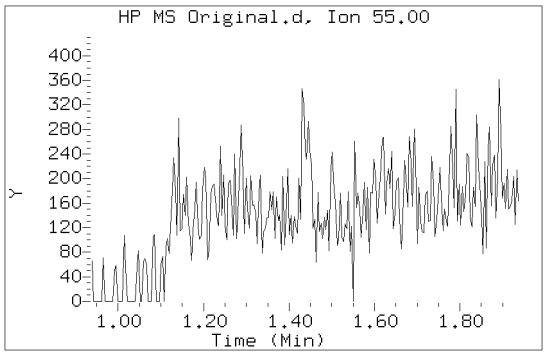
AFTER

MASS
56
AREA
440
HEIGHT
656
27-Dec-2022
16:07
linh
pham



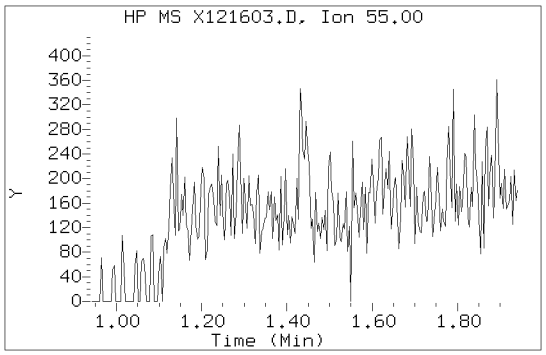
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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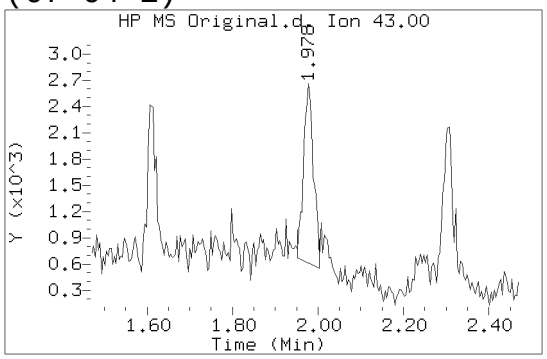
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acetone (67-64-1)

Reason Code:

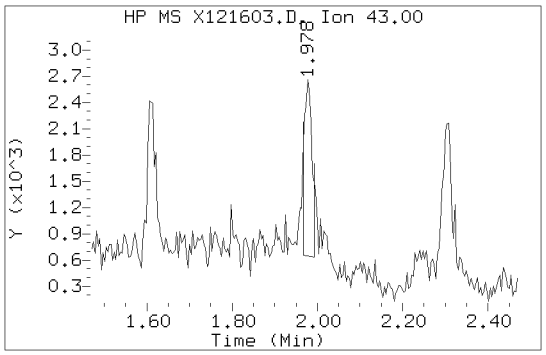
BEFORE

MASS
43
AREA
3388
HEIGHT
2046
27-Dec-2022
16:03
linh
pham



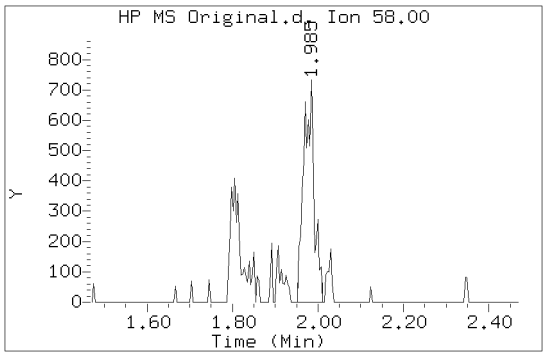
AFTER

MASS
43
AREA
2669
HEIGHT
2015
27-Dec-2022
16:07
linh
pham



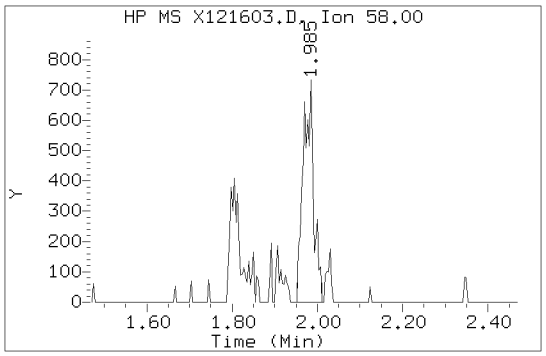
BEFORE

MASS
58
AREA
1264
HEIGHT
733
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
1264
HEIGHT
733
27-Dec-2022
16:07
linh
pham

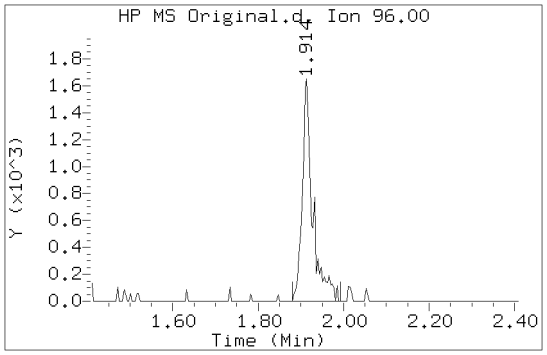


1,1-Dichloroethene (75-35-4)

Reason Code:

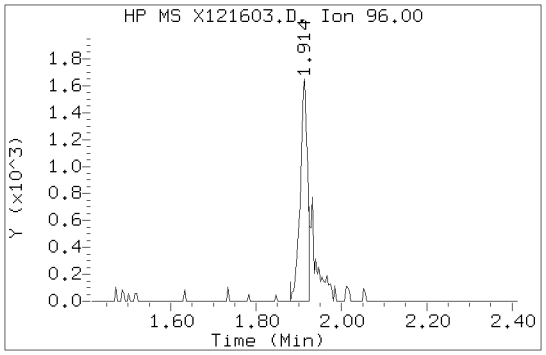
BEFORE

MASS
96
AREA
2836
HEIGHT
1651
27-Dec-2022
16:03
linh
pham



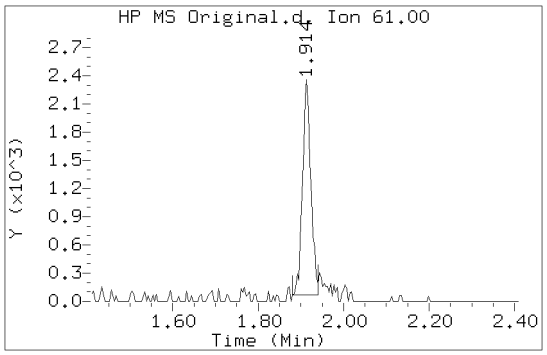
AFTER

MASS
96
AREA
2037
HEIGHT
1651
27-Dec-2022
16:07
linh
pham



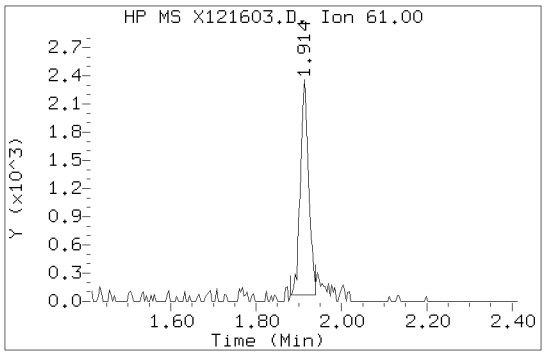
BEFORE

MASS
61
AREA
3197
HEIGHT
2293
27-Dec-2022
16:03
linh
pham



AFTER

MASS
61
AREA
3197
HEIGHT
2293
27-Dec-2022
16:07
linh
pham

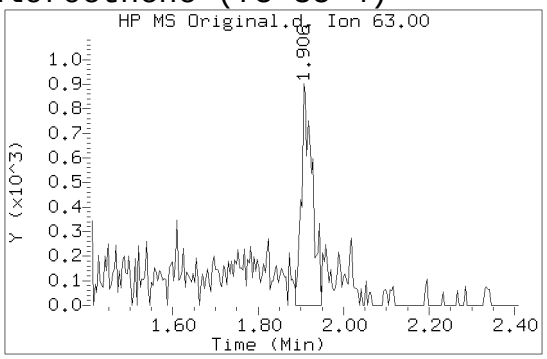


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

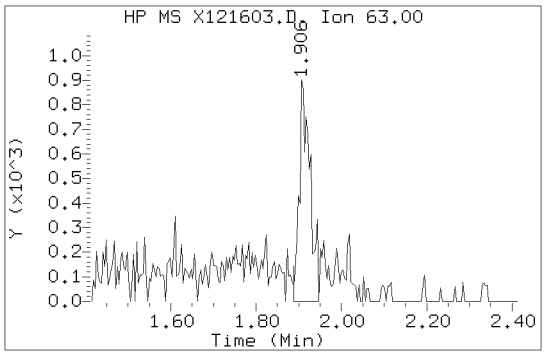
1,1-Dichloroethene (75-35-4)

Reason Code:

BEFORE
MASS
63
AREA
1607
HEIGHT
902
27-Dec-2022
16:03
linh
pham



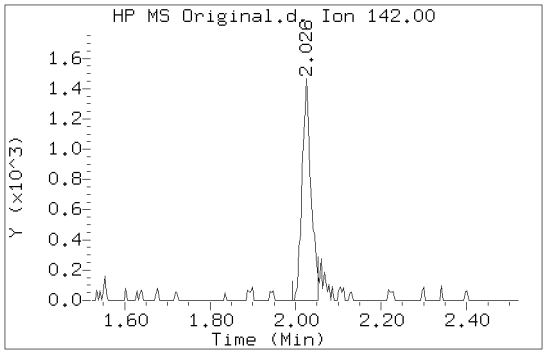
AFTER
MASS
63
AREA
1607
HEIGHT
902
27-Dec-2022
16:07
linh
pham



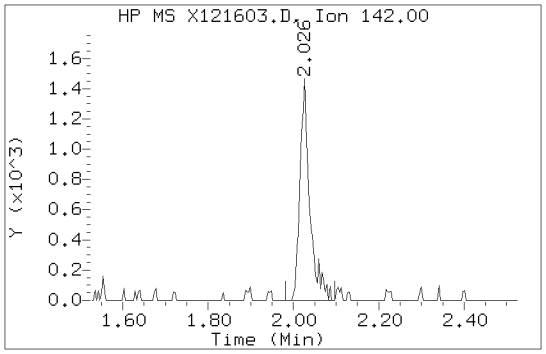
Iodomethane (74-88-4)

Reason Code:

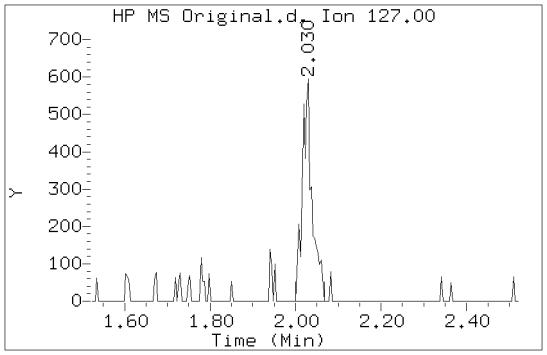
BEFORE
MASS
142
AREA
2166
HEIGHT
1466
27-Dec-2022
16:03
linh
pham



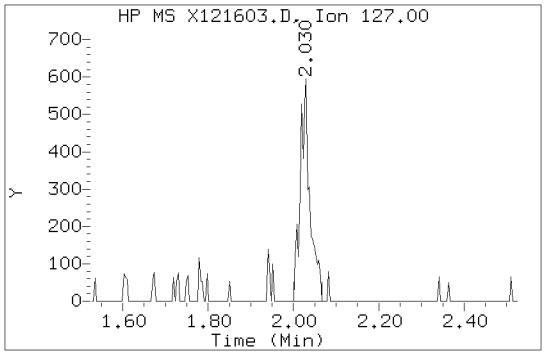
AFTER
MASS
142
AREA
2397
HEIGHT
1466
27-Dec-2022
16:07
linh
pham



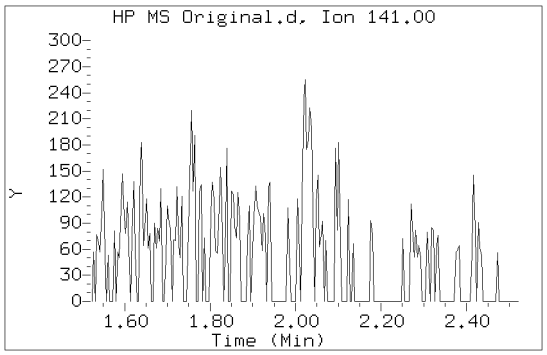
BEFORE
MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:03
linh
pham



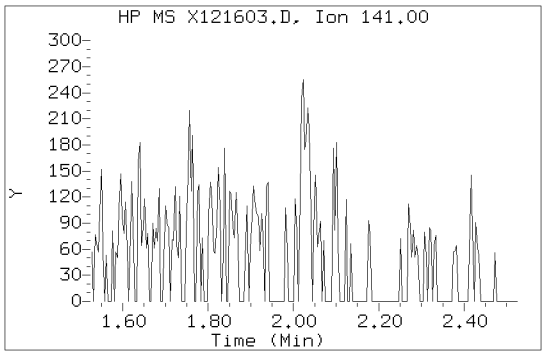
AFTER
MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



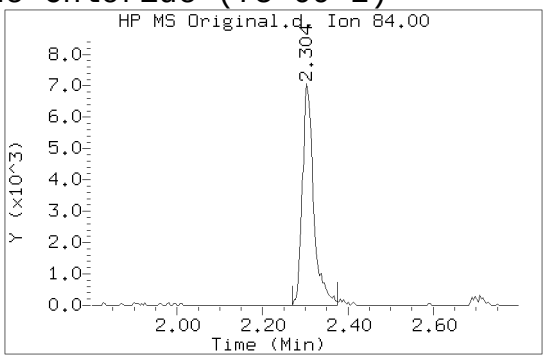
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

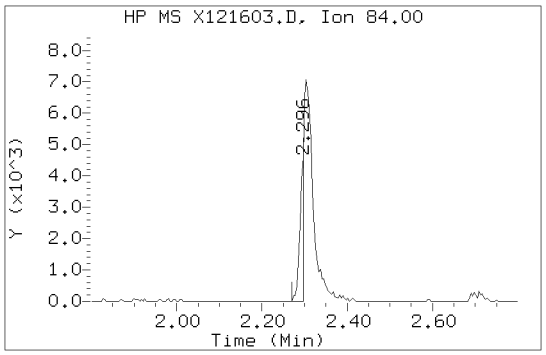
BEFORE

MASS
84
AREA
13307
HEIGHT
7067
27-Dec-2022
16:03
linh
pham



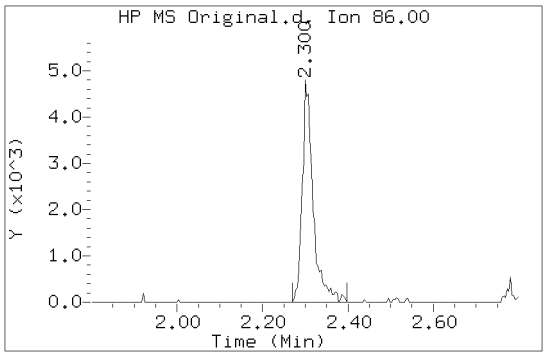
AFTER

MASS
84
AREA
2938
HEIGHT
4595
27-Dec-2022
16:07
linh
pham



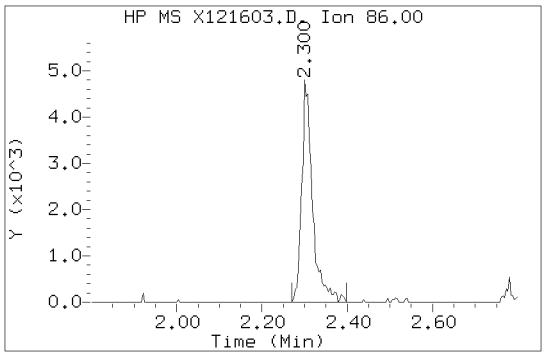
BEFORE

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:03
linh
pham



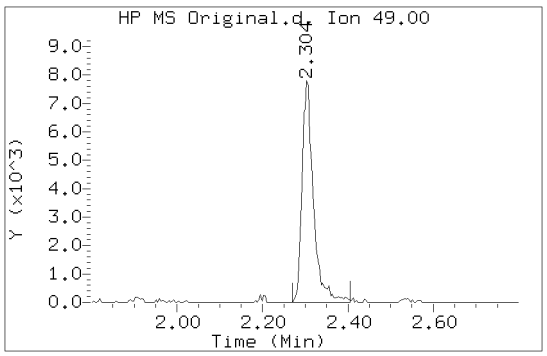
AFTER

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:07
linh
pham



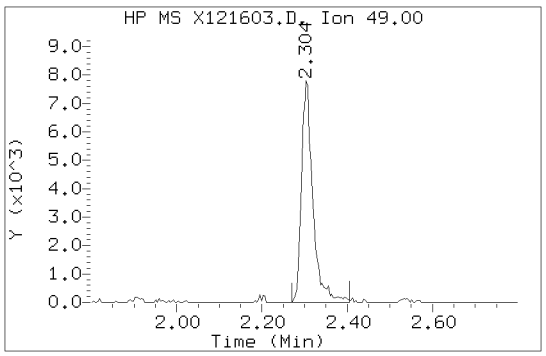
BEFORE

MASS
49
AREA
14733
HEIGHT
7803
27-Dec-2022
16:03
linh
pham



AFTER

MASS
49
AREA
14733
HEIGHT
7803
27-Dec-2022
16:07
linh
pham

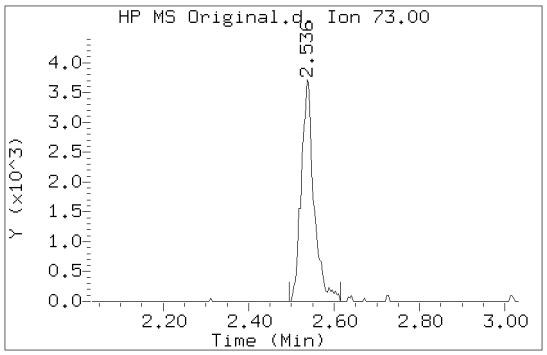


Methyl tert-butyl ether (1634-04-4)

Reason Code:

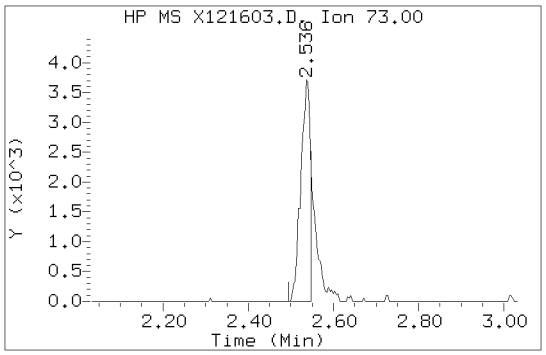
BEFORE

MASS
73
AREA
7826
HEIGHT
3716
27-Dec-2022
16:03
linh
pham



AFTER

MASS
73
AREA
5841
HEIGHT
3716
27-Dec-2022
16:07
linh
pham

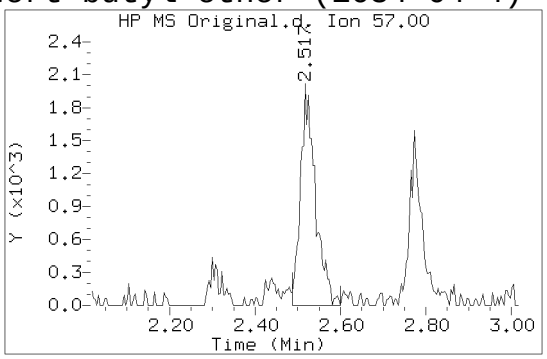


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl tert-butyl ether (1634-04-4)

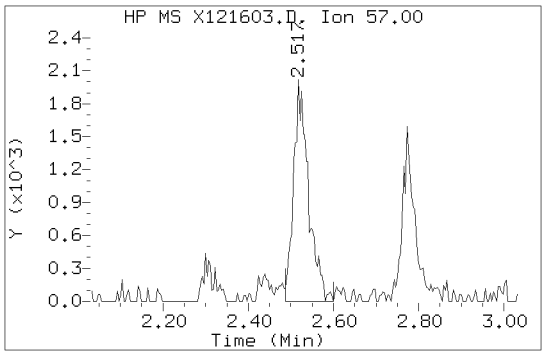
BEFORE

MASS
57
AREA
4915
HEIGHT
2019
27-Dec-2022
16:03
linh
pham



AFTER

MASS
57
AREA
4915
HEIGHT
2019
27-Dec-2022
16:07
linh
pham

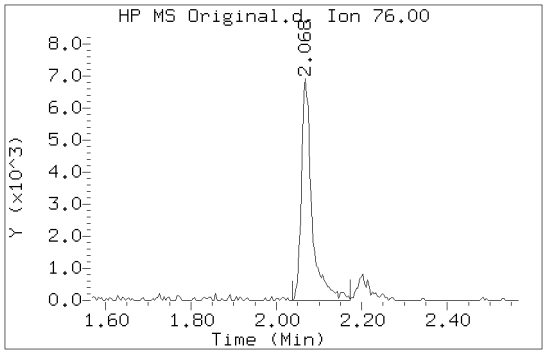


Reason Code:

Carbon Disulfide (75-15-0)

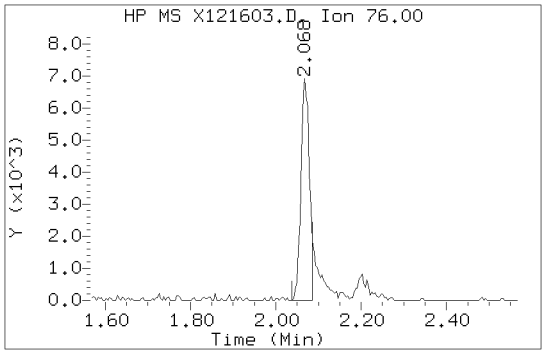
BEFORE

MASS
76
AREA
12313
HEIGHT
6923
27-Dec-2022
16:03
linh
pham



AFTER

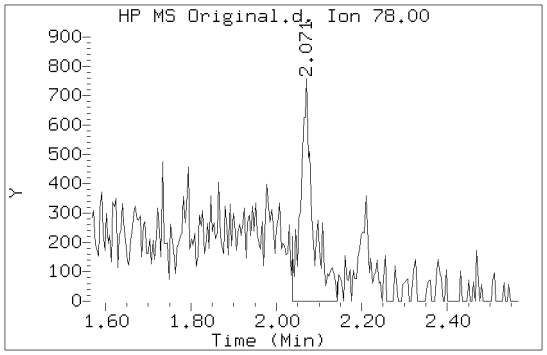
MASS
76
AREA
9921
HEIGHT
6923
27-Dec-2022
16:07
linh
pham



Reason Code:

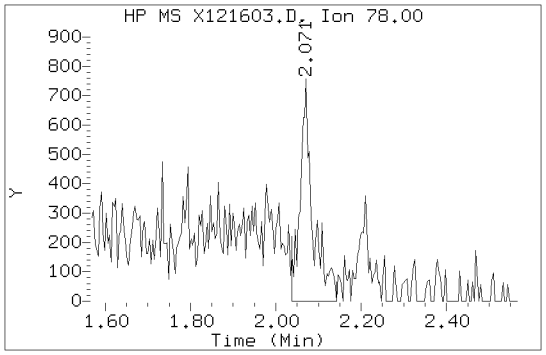
BEFORE

MASS
78
AREA
1586
HEIGHT
757
27-Dec-2022
16:03
linh
pham



AFTER

MASS
78
AREA
1586
HEIGHT
757
27-Dec-2022
16:07
linh
pham

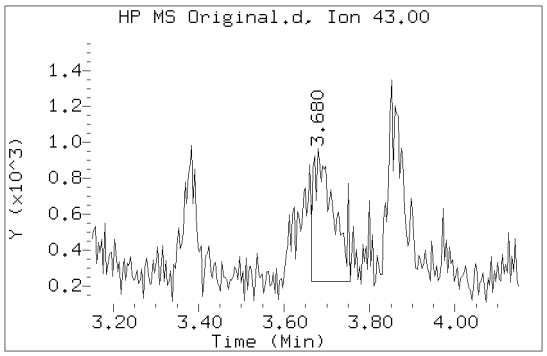


Reason Code:

2-Butanone (78-93-3)

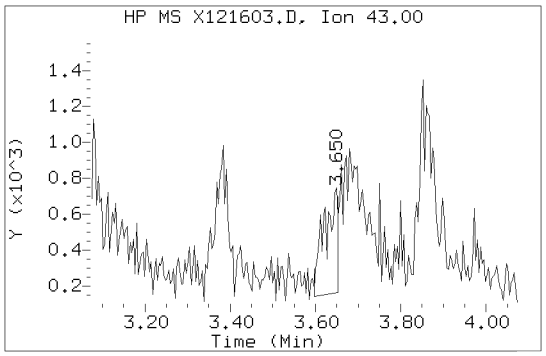
BEFORE

MASS
43
AREA
2415
HEIGHT
742
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
1292
HEIGHT
587
27-Dec-2022
16:07
linh
pham



Reason Code:

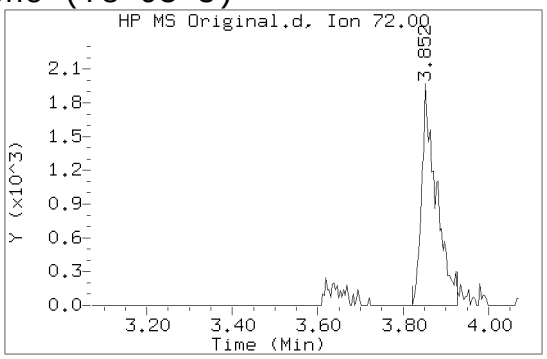
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

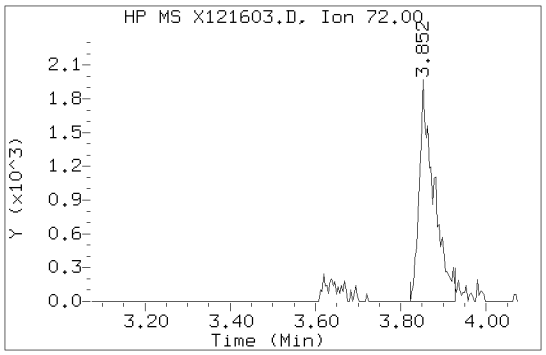
BEFORE

MASS
72
AREA
4698
HEIGHT
1970
27-Dec-2022
16:03
linh
pham



AFTER

MASS
72
AREA
4698
HEIGHT
1970
27-Dec-2022
16:07
linh
pham

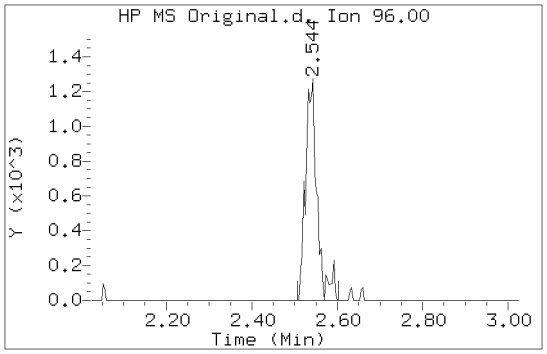


trans-1,2-Dichloroethene (156-60-5)

Reason Code:

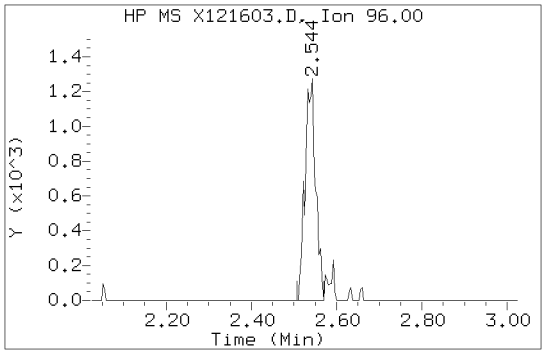
BEFORE

MASS
96
AREA
2404
HEIGHT
1274
27-Dec-2022
16:03
linh
pham



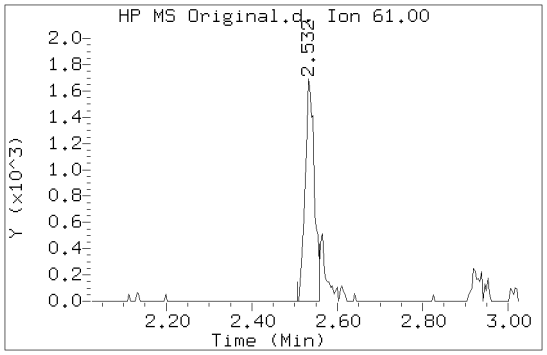
AFTER

MASS
96
AREA
2218
HEIGHT
1274
27-Dec-2022
16:07
linh
pham



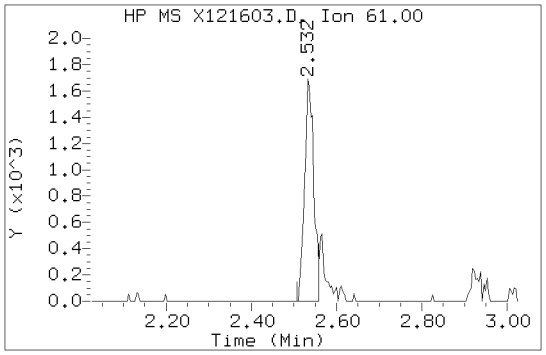
BEFORE

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:03
linh
pham



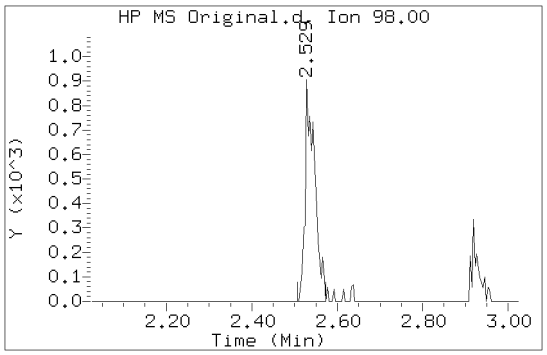
AFTER

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:07
linh
pham



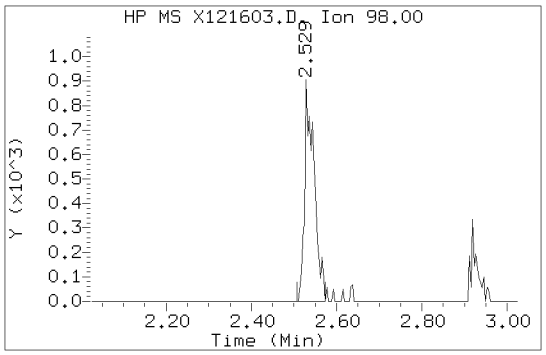
BEFORE

MASS
98
AREA
1412
HEIGHT
906
27-Dec-2022
16:03
linh
pham



AFTER

MASS
98
AREA
1412
HEIGHT
906
27-Dec-2022
16:07
linh
pham



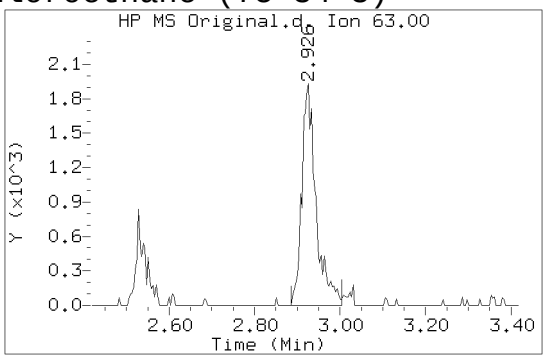
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

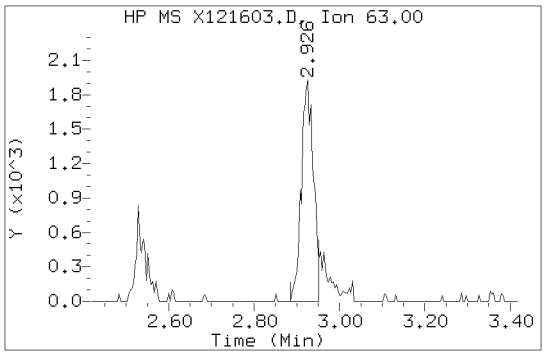
BEFORE

MASS
63
AREA
4504
HEIGHT
1931
27-Dec-2022
16:03
linh
pham



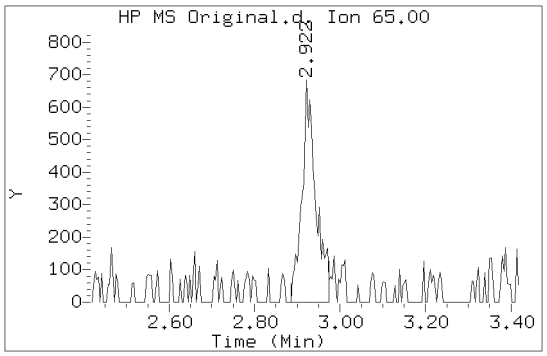
AFTER

MASS
63
AREA
3874
HEIGHT
1931
27-Dec-2022
16:07
linh
pham



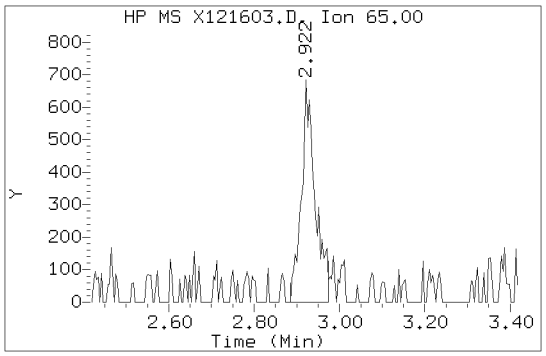
BEFORE

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:03
linh
pham



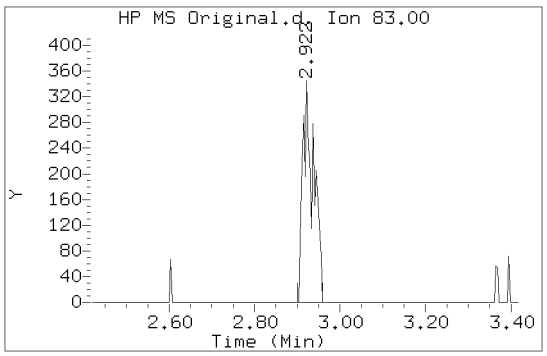
AFTER

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:07
linh
pham



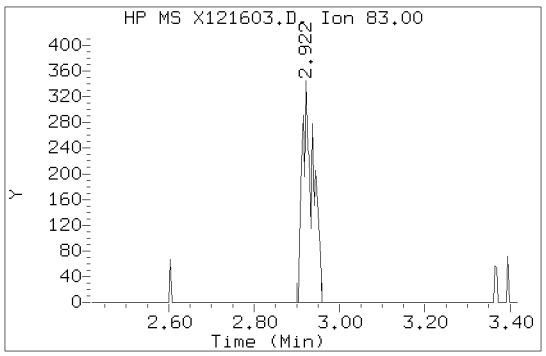
BEFORE

MASS
83
AREA
618
HEIGHT
345
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
618
HEIGHT
345
27-Dec-2022
16:07
linh
pham

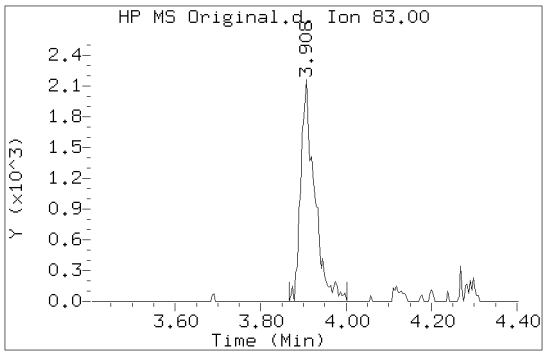


Chloroform (67-66-3)

Reason Code:

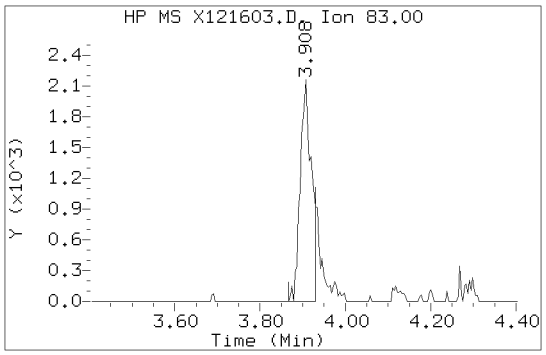
BEFORE

MASS
83
AREA
4949
HEIGHT
2160
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
4040
HEIGHT
2160
27-Dec-2022
16:07
linh
pham



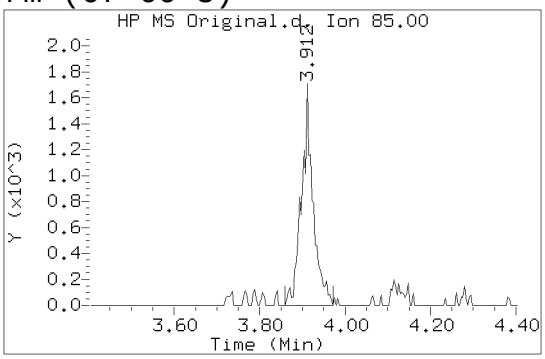
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroform (67-66-3)

Reason Code:

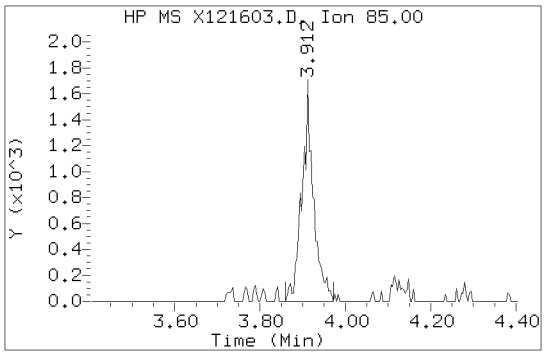
BEFORE

MASS
85
AREA
3222
HEIGHT
1709
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
3222
HEIGHT
1709
27-Dec-2022
16:07
linh
pham

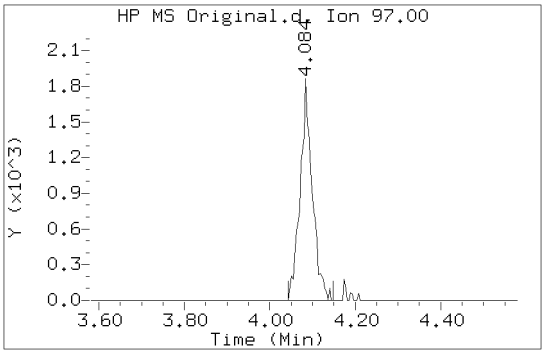


1,1,1-Trichloroethane (71-55-6)

Reason Code:

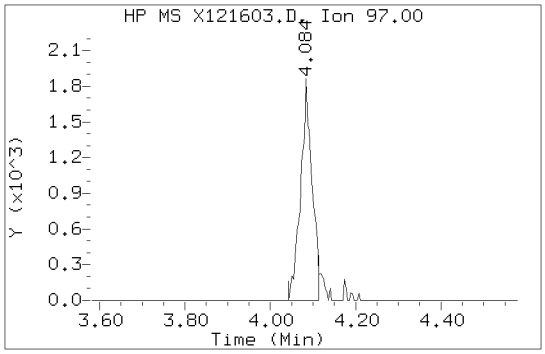
BEFORE

MASS
97
AREA
3710
HEIGHT
1863
27-Dec-2022
16:03
linh
pham



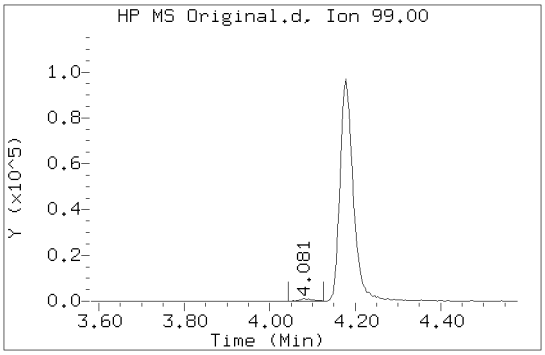
AFTER

MASS
97
AREA
3512
HEIGHT
1863
27-Dec-2022
16:07
linh
pham



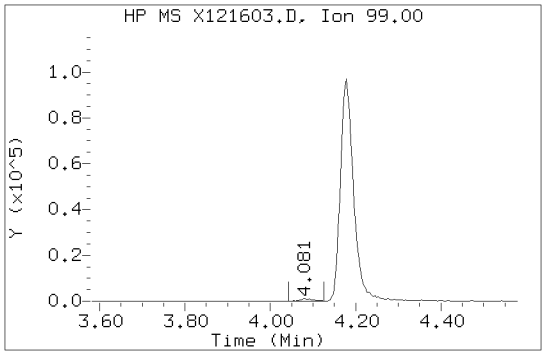
BEFORE

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:03
linh
pham



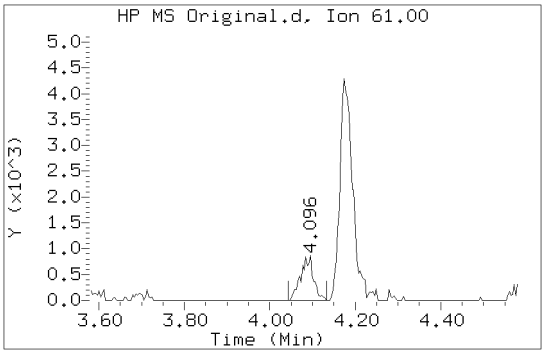
AFTER

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:07
linh
pham



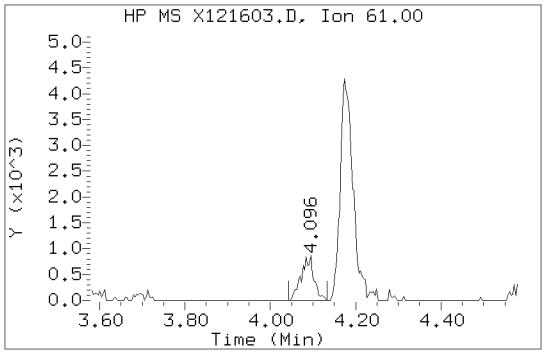
BEFORE

MASS
61
AREA
1801
HEIGHT
872
27-Dec-2022
16:03
linh
pham



AFTER

MASS
61
AREA
1801
HEIGHT
872
27-Dec-2022
16:07
linh
pham



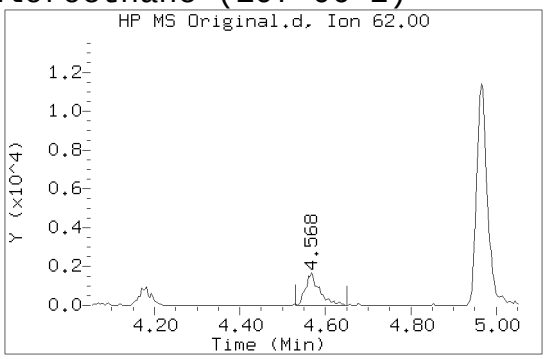
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

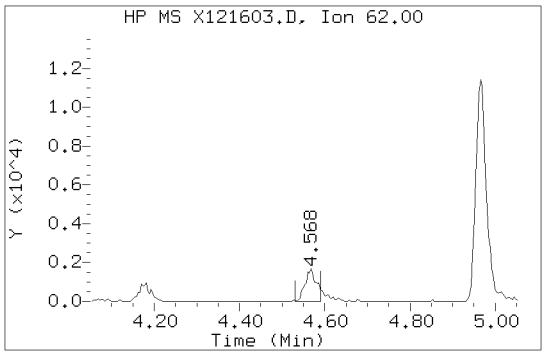
BEFORE

MASS
62
AREA
3822
HEIGHT
1678
27-Dec-2022
16:03
linh
pham



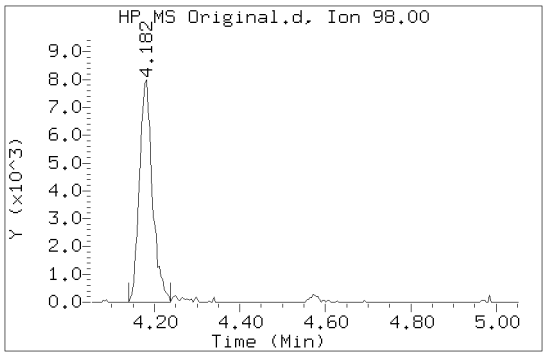
AFTER

MASS
62
AREA
3129
HEIGHT
1678
27-Dec-2022
16:07
linh
pham



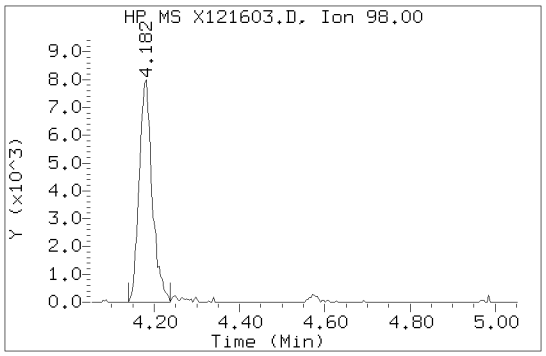
BEFORE

MASS
98
AREA
16918
HEIGHT
7987
27-Dec-2022
16:03
linh
pham



AFTER

MASS
98
AREA
16918
HEIGHT
7987
27-Dec-2022
16:07
linh
pham

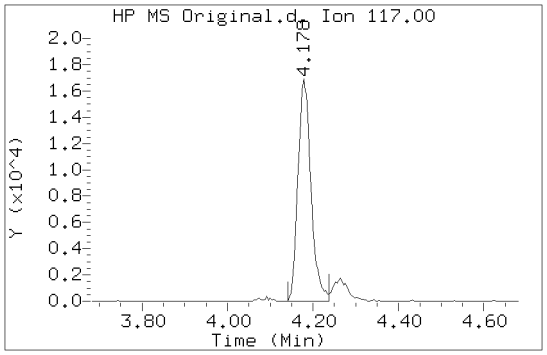


Carbon Tetrachloride (56-23-5)

Reason Code:

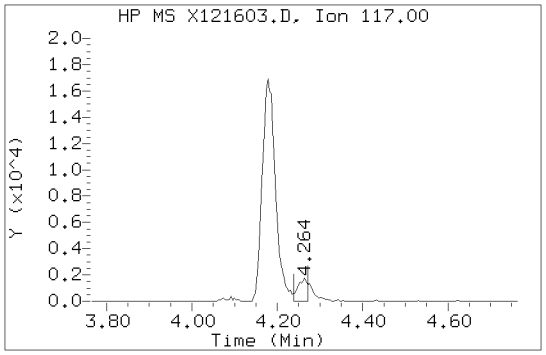
BEFORE

MASS
117
AREA
36559
HEIGHT
16920
27-Dec-2022
16:03
linh
pham



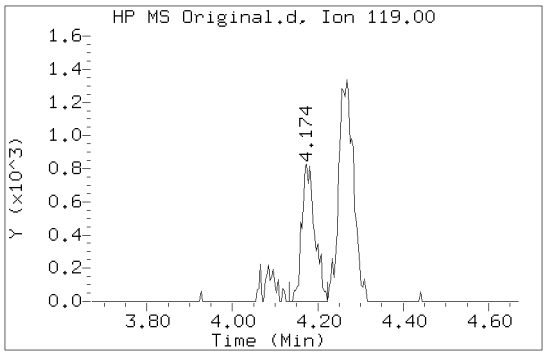
AFTER

MASS
117
AREA
2763
HEIGHT
1744
27-Dec-2022
16:07
linh
pham



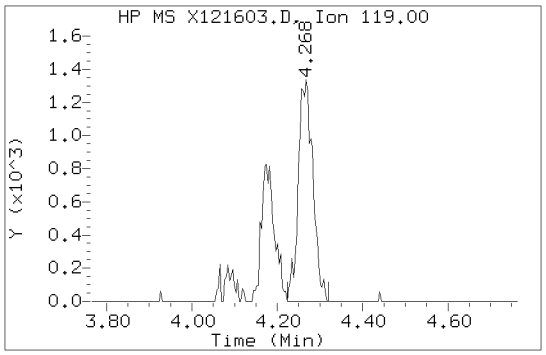
BEFORE

MASS
119
AREA
1780
HEIGHT
826
27-Dec-2022
16:03
linh
pham



AFTER

MASS
119
AREA
3227
HEIGHT
1337
27-Dec-2022
16:07
linh
pham

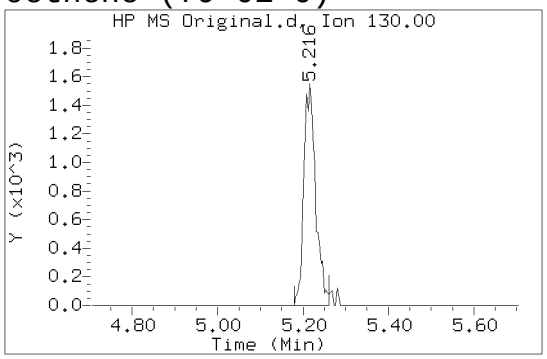


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

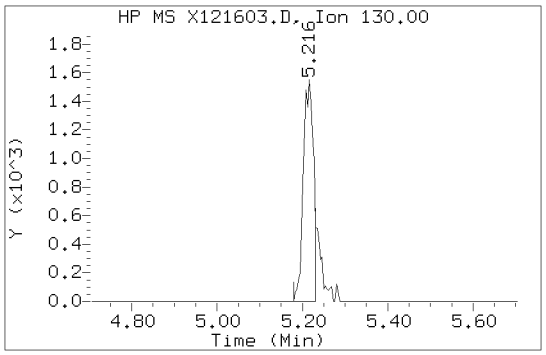
Trichloroethene (79-01-6)

Reason Code:

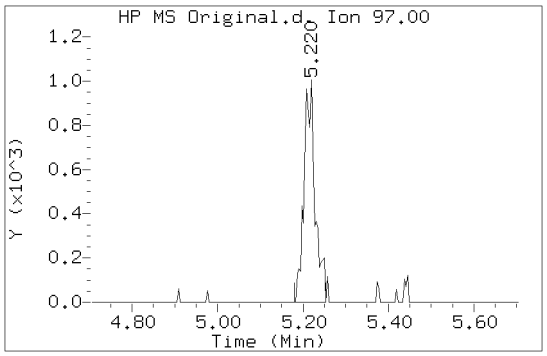
BEFORE
MASS
130
AREA
3011
HEIGHT
1551
27-Dec-2022
16:03
linh
pham



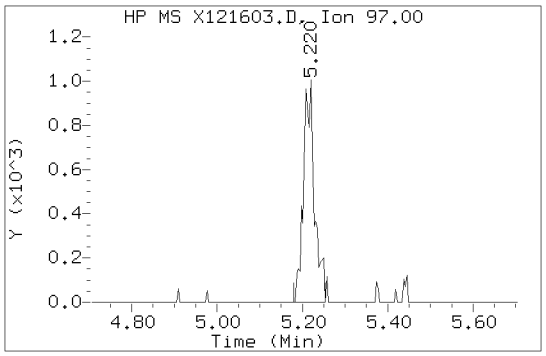
AFTER
MASS
130
AREA
2583
HEIGHT
1551
27-Dec-2022
16:07
linh
pham



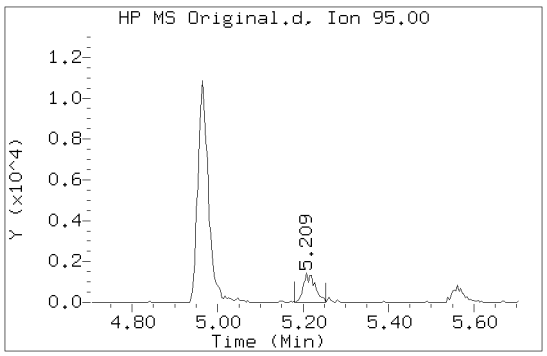
BEFORE
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:03
linh
pham



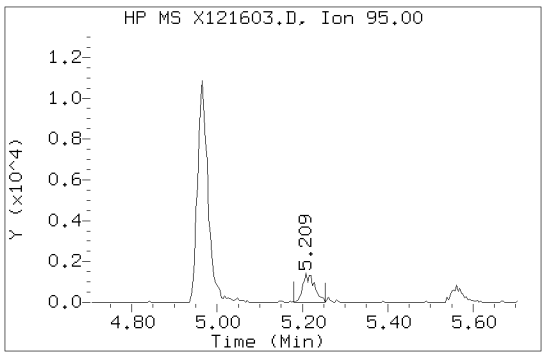
AFTER
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:03
linh
pham



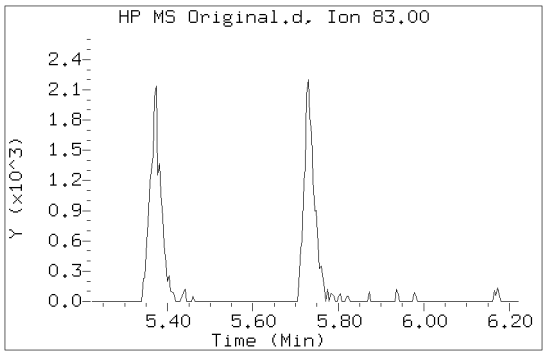
AFTER
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:07
linh
pham



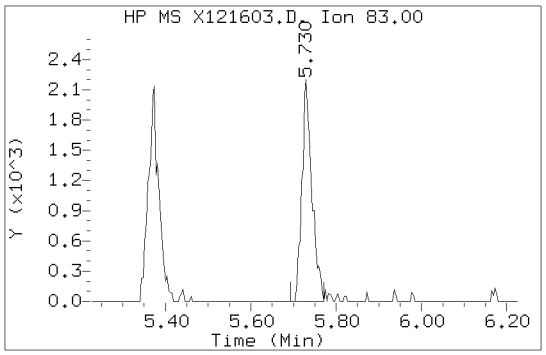
Bromodichloromethane (75-27-4)

Reason Code:

BEFORE
MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
83
AREA
3650
HEIGHT
2201
27-Dec-2022
16:07
linh
pham

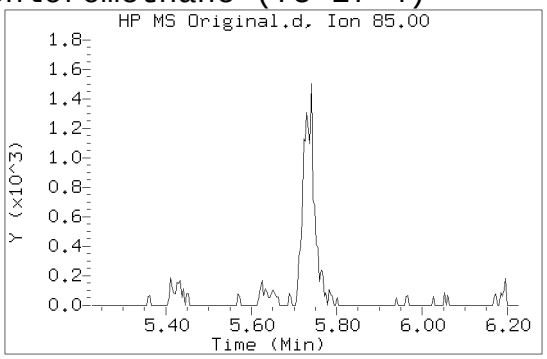


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

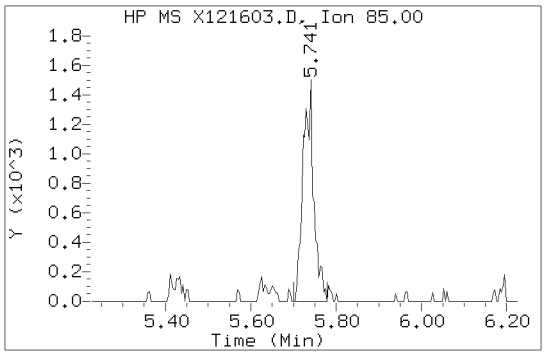
Bromodichloromethane (75-27-4)

Reason Code:

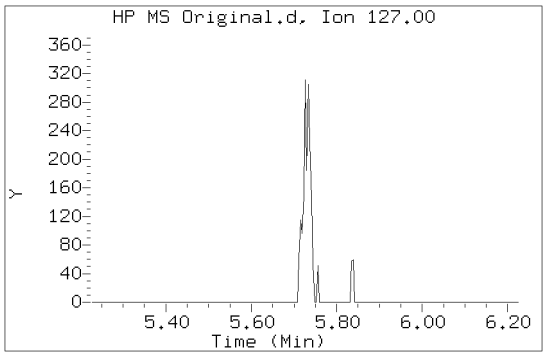
BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



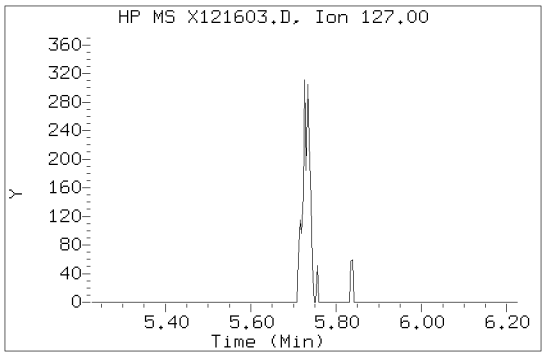
AFTER
MASS
85
AREA
2639
HEIGHT
1503
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



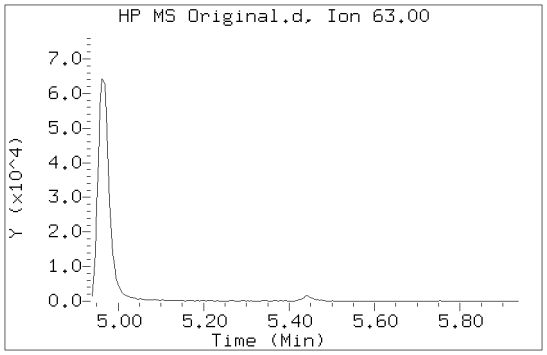
AFTER
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



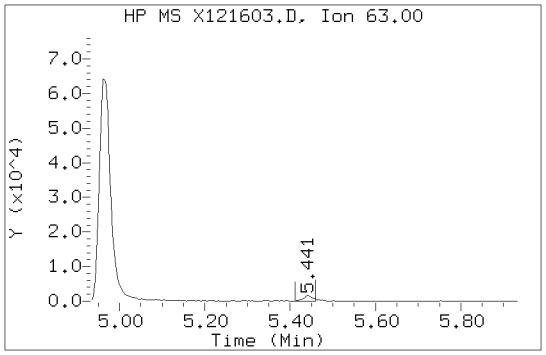
1,2-Dichloropropane (78-87-5)

Reason Code:

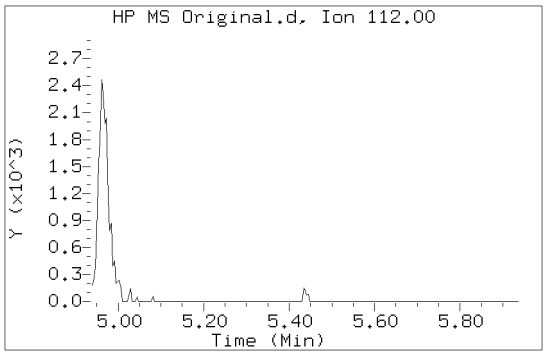
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



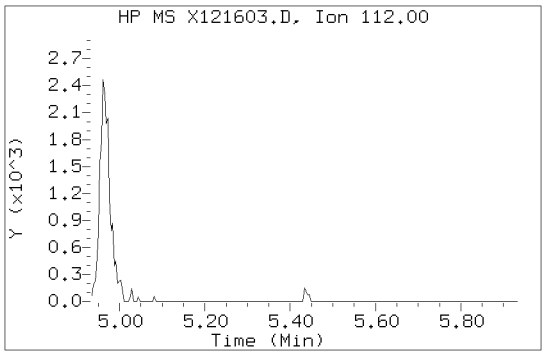
AFTER
MASS
63
AREA
2449
HEIGHT
1587
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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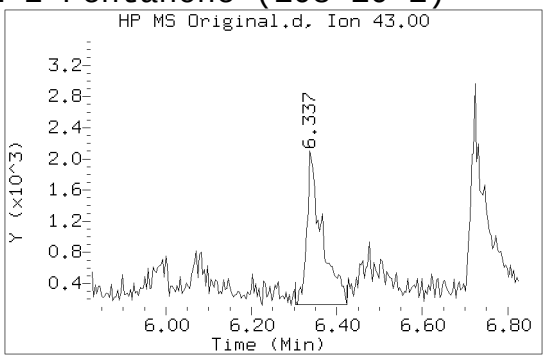
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

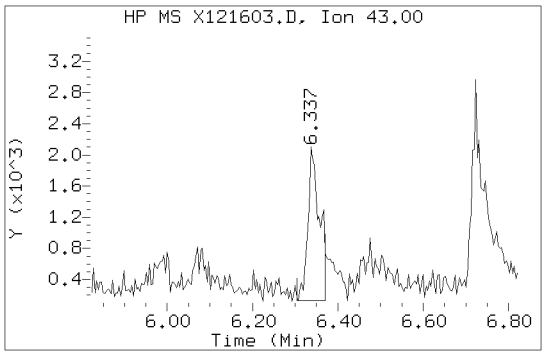
BEFORE

MASS
43
AREA
4873
HEIGHT
1970
27-Dec-2022
16:03
linh
pham



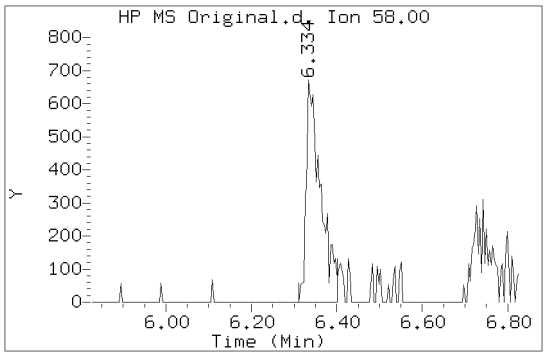
AFTER

MASS
43
AREA
3741
HEIGHT
1970
27-Dec-2022
16:07
linh
pham



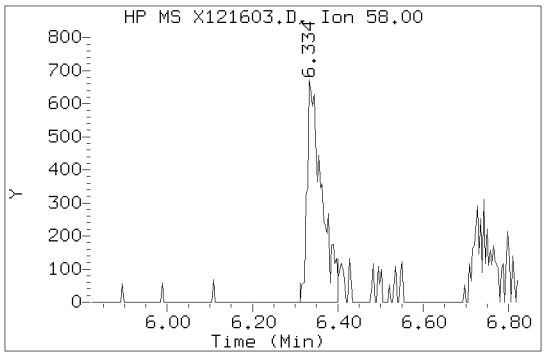
BEFORE

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:03
linh
pham



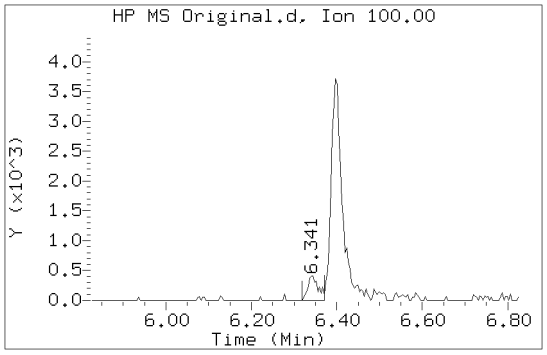
AFTER

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:07
linh
pham



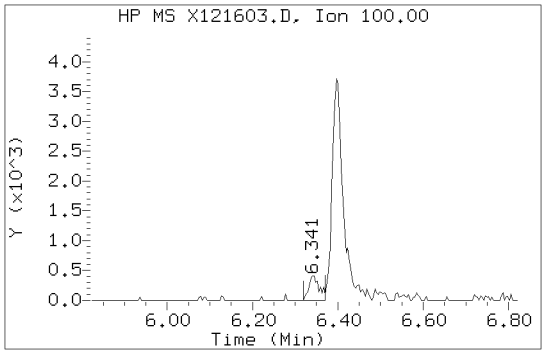
BEFORE

MASS
100
AREA
714
HEIGHT
412
27-Dec-2022
16:03
linh
pham



AFTER

MASS
100
AREA
714
HEIGHT
412
27-Dec-2022
16:07
linh
pham

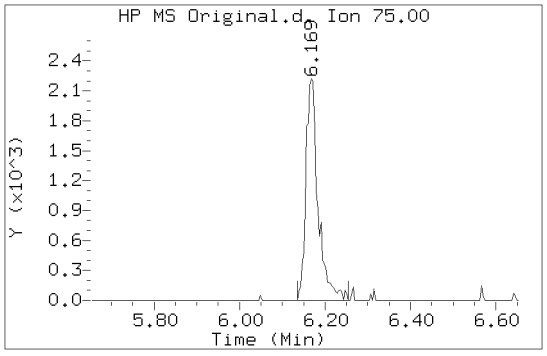


cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

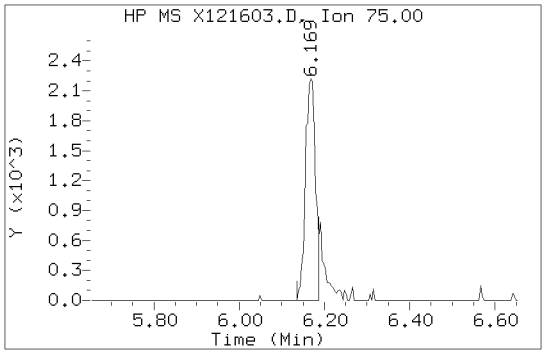
BEFORE

MASS
75
AREA
4432
HEIGHT
2222
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
3695
HEIGHT
2222
27-Dec-2022
16:07
linh
pham



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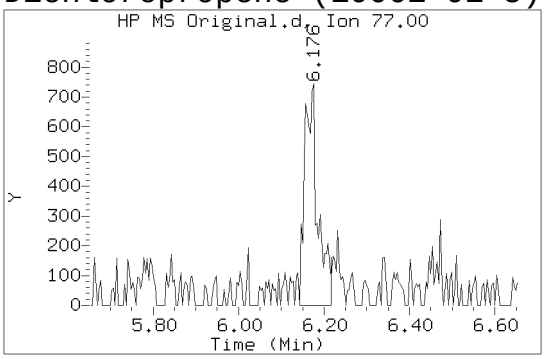
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

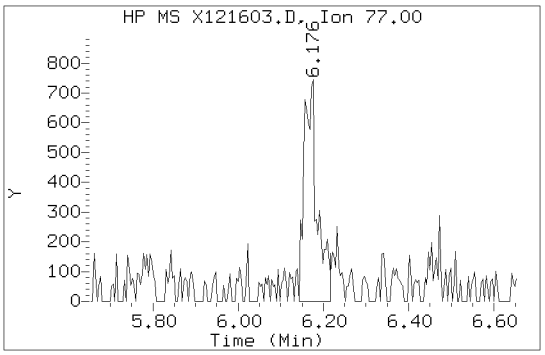
BEFORE

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:03
linh
pham



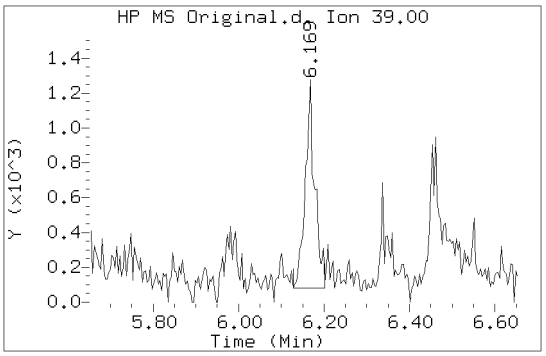
AFTER

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:07
linh
pham



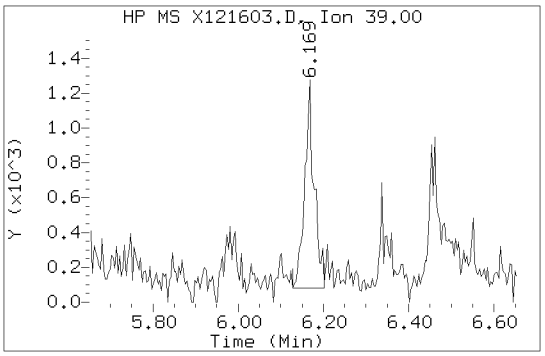
BEFORE

MASS
39
AREA
1836
HEIGHT
1193
27-Dec-2022
16:03
linh
pham



AFTER

MASS
39
AREA
1836
HEIGHT
1193
27-Dec-2022
16:07
linh
pham

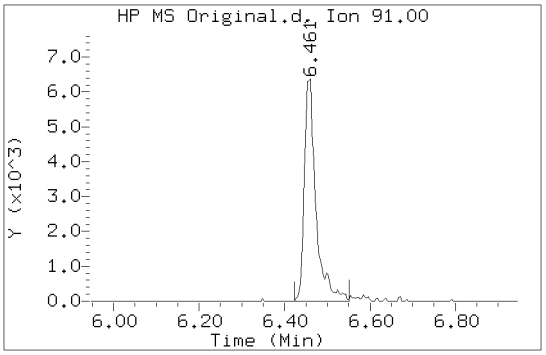


Toluene (108-88-3)

Reason Code:

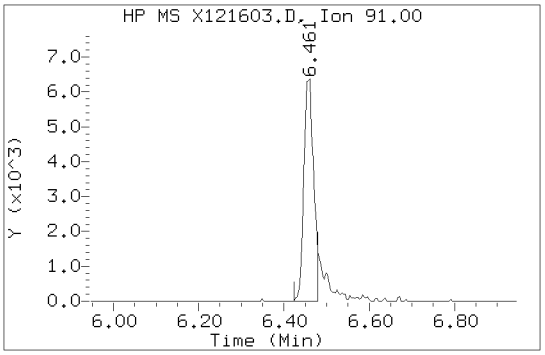
BEFORE

MASS
91
AREA
12225
HEIGHT
6374
27-Dec-2022
16:03
linh
pham



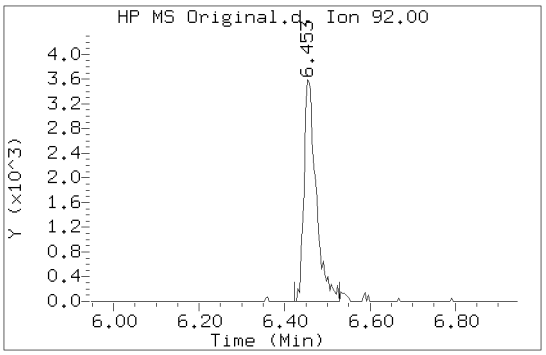
AFTER

MASS
91
AREA
10374
HEIGHT
6374
27-Dec-2022
16:07
linh
pham



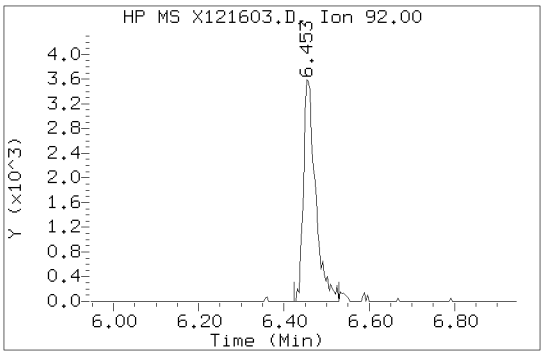
BEFORE

MASS
92
AREA
7180
HEIGHT
3591
27-Dec-2022
16:03
linh
pham



AFTER

MASS
92
AREA
7180
HEIGHT
3591
27-Dec-2022
16:07
linh
pham



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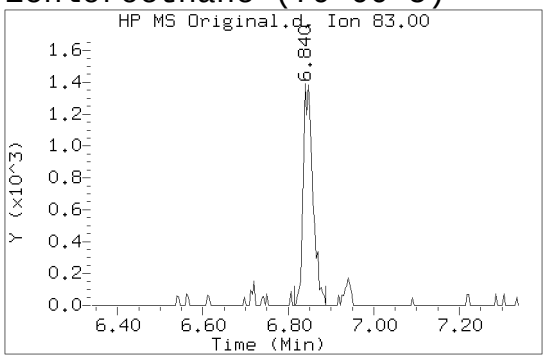
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2-Trichloroethane (79-00-5)

Reason Code:

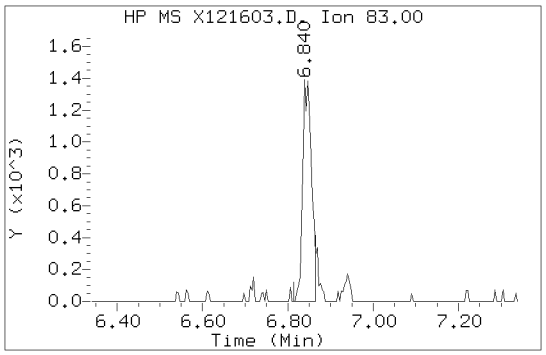
BEFORE

MASS
83
AREA
2247
HEIGHT
1391
27-Dec-2022
16:03
linh
pham



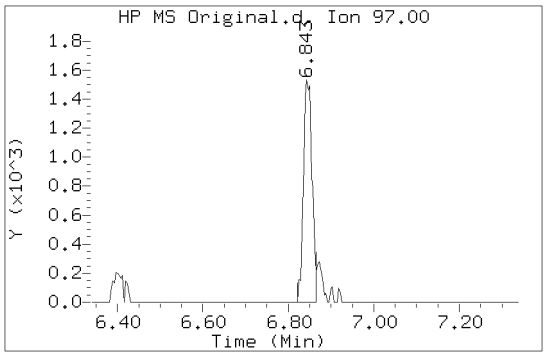
AFTER

MASS
83
AREA
2092
HEIGHT
1391
27-Dec-2022
16:07
linh
pham



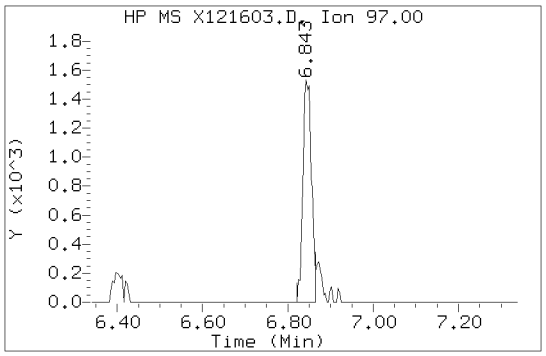
BEFORE

MASS
97
AREA
2224
HEIGHT
1532
27-Dec-2022
16:03
linh
pham



AFTER

MASS
97
AREA
2224
HEIGHT
1532
27-Dec-2022
16:07
linh
pham

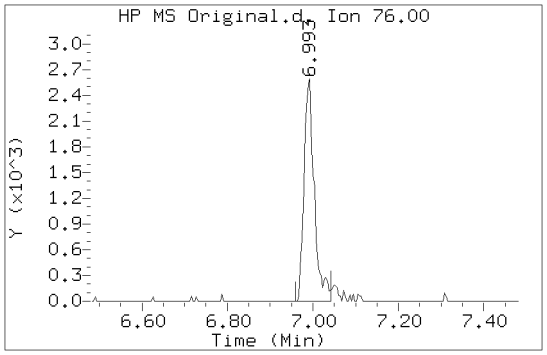


1,3-Dichloropropane (142-28-9)

Reason Code:

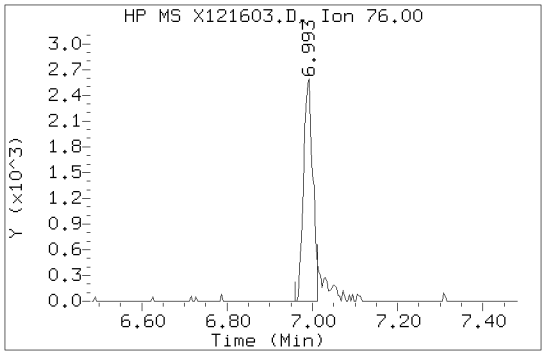
BEFORE

MASS
76
AREA
4415
HEIGHT
2592
27-Dec-2022
16:03
linh
pham



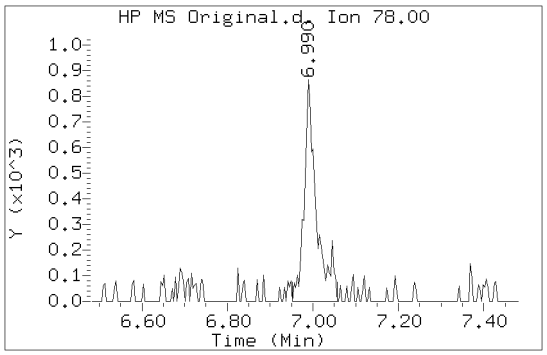
AFTER

MASS
76
AREA
4005
HEIGHT
2592
27-Dec-2022
16:07
linh
pham



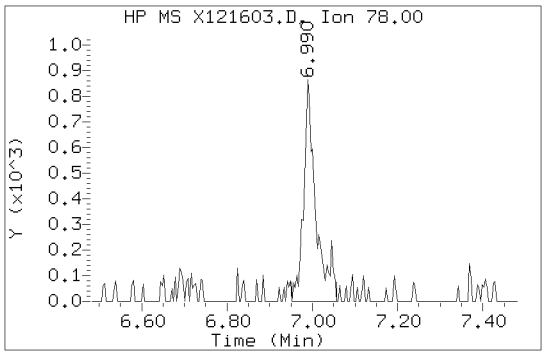
BEFORE

MASS
78
AREA
1727
HEIGHT
864
27-Dec-2022
16:03
linh
pham



AFTER

MASS
78
AREA
1727
HEIGHT
864
27-Dec-2022
16:07
linh
pham



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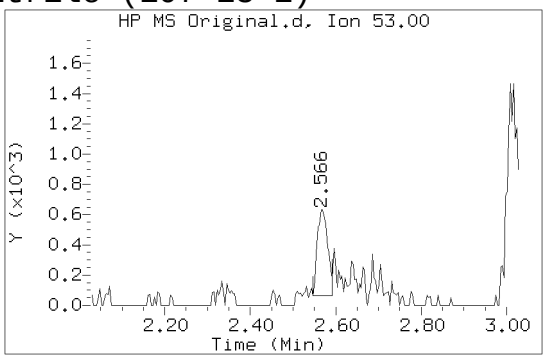
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

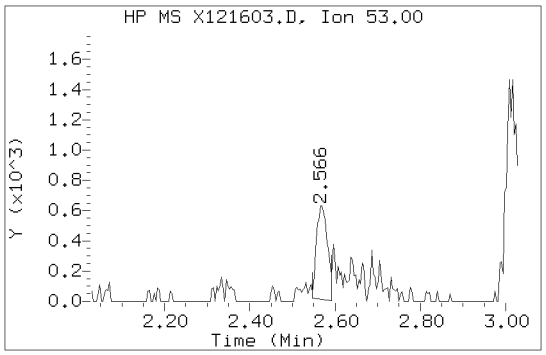
Acrylonitrile (107-13-1)

Reason Code:

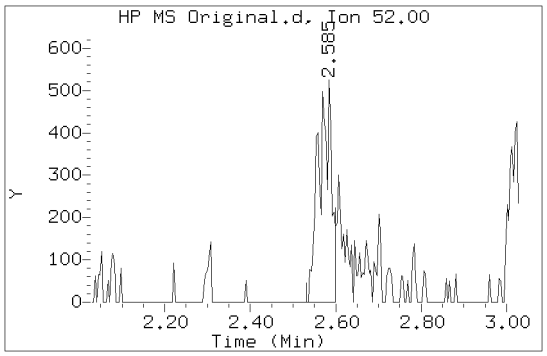
BEFORE
MASS
53
AREA
975
HEIGHT
571
27-Dec-2022
16:03
linh
pham



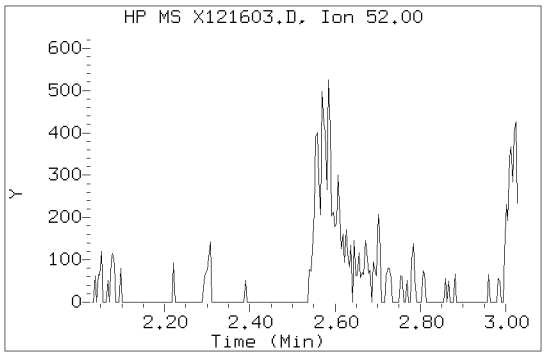
AFTER
MASS
53
AREA
1118
HEIGHT
618
27-Dec-2022
16:07
linh
pham



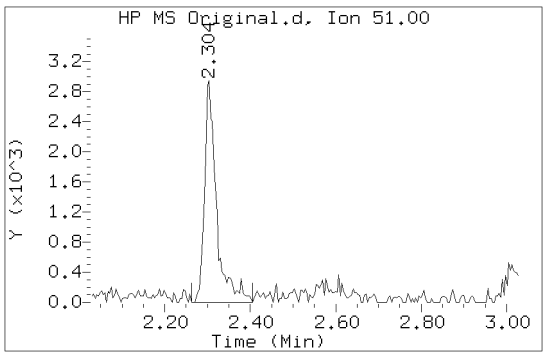
BEFORE
MASS
52
AREA
1100
HEIGHT
525
27-Dec-2022
16:03
linh
pham



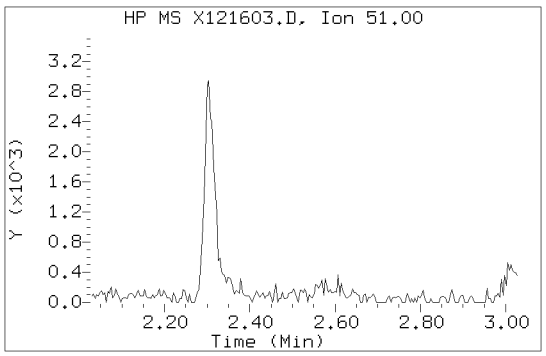
AFTER
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
51
AREA
5708
HEIGHT
2946
27-Dec-2022
16:03
linh
pham



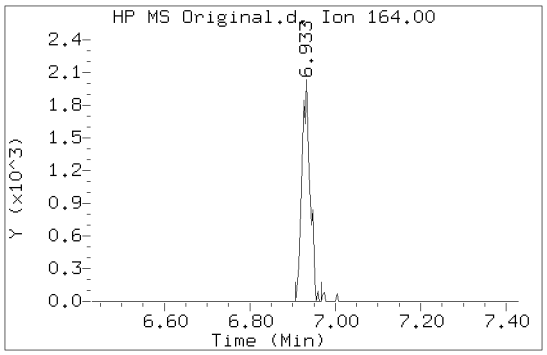
AFTER
MASS
51
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



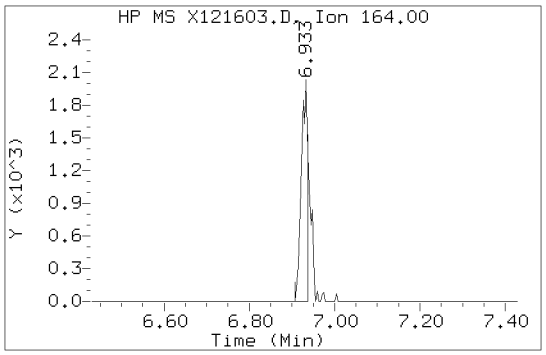
Tetrachloroethene (127-18-4)

Reason Code:

BEFORE
MASS
164
AREA
2777
HEIGHT
2036
27-Dec-2022
16:03
linh
pham



AFTER
MASS
164
AREA
2131
HEIGHT
2036
27-Dec-2022
16:07
linh
pham



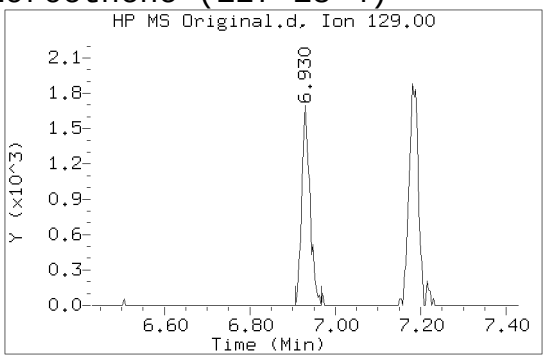
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrachloroethene (127-18-4)

Reason Code:

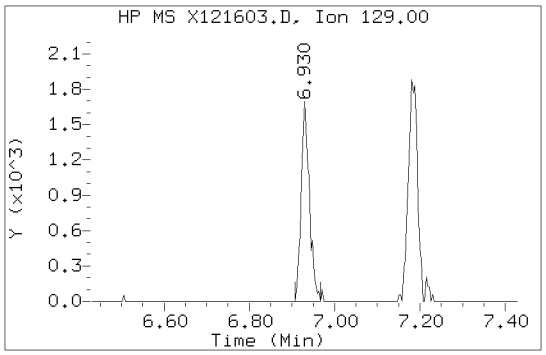
BEFORE

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:03
linh
pham



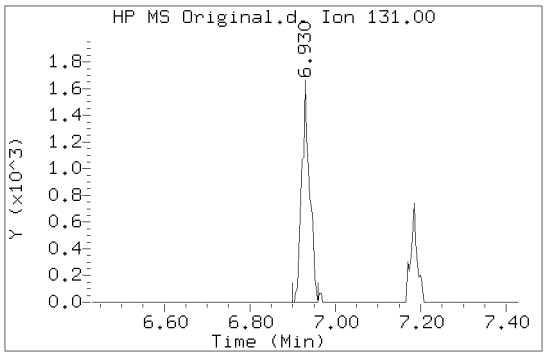
AFTER

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:07
linh
pham



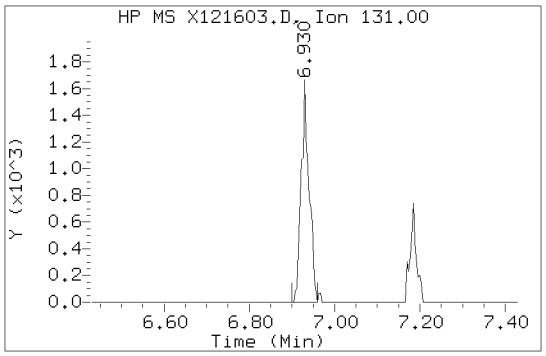
BEFORE

MASS
131
AREA
2193
HEIGHT
1665
27-Dec-2022
16:03
linh
pham



AFTER

MASS
131
AREA
2193
HEIGHT
1665
27-Dec-2022
16:07
linh
pham

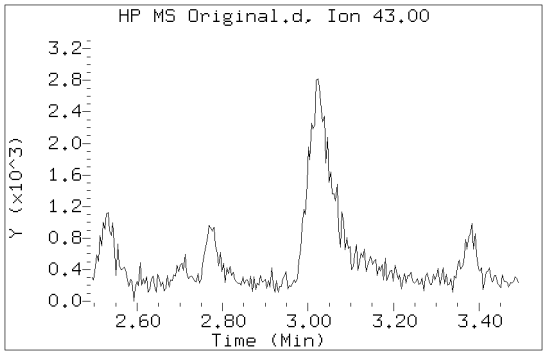


Vinyl Acetate (108-05-4)

Reason Code:

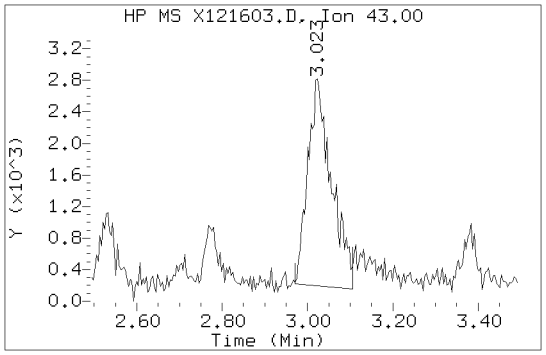
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



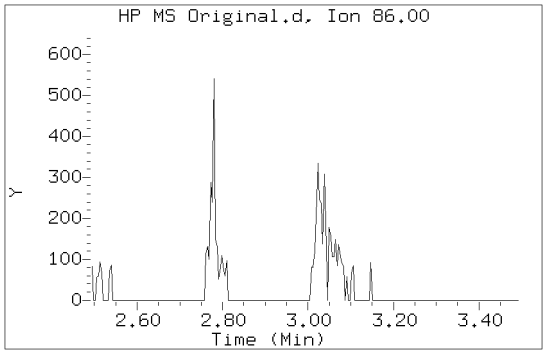
AFTER

MASS
43
AREA
10138
HEIGHT
2622
27-Dec-2022
16:07
linh
pham



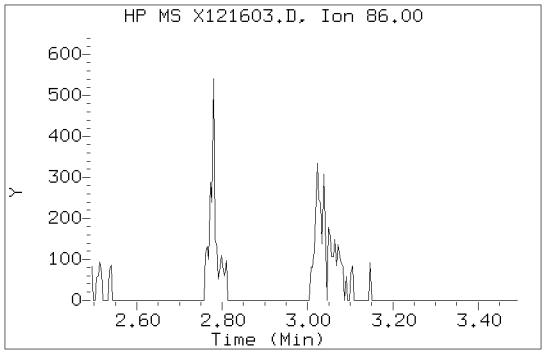
BEFORE

MASS
86
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
86
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

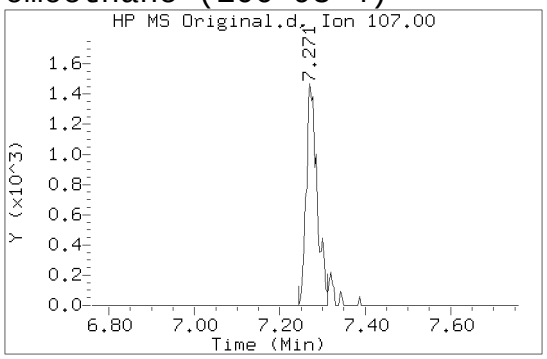


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

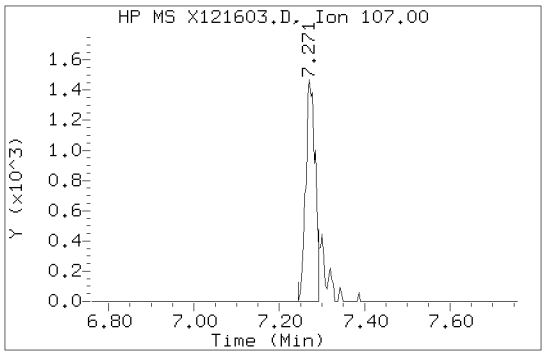
1,2-Dibromoethane (106-93-4)

Reason Code:

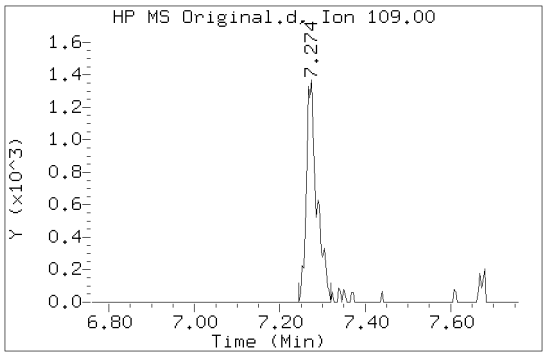
BEFORE
MASS
107
AREA
2627
HEIGHT
1469
27-Dec-2022
16:03
linh
pham



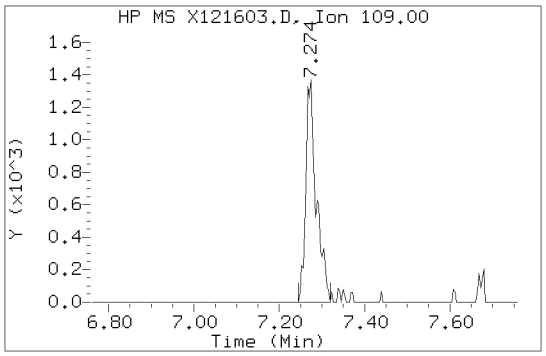
AFTER
MASS
107
AREA
2340
HEIGHT
1469
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:03
linh
pham



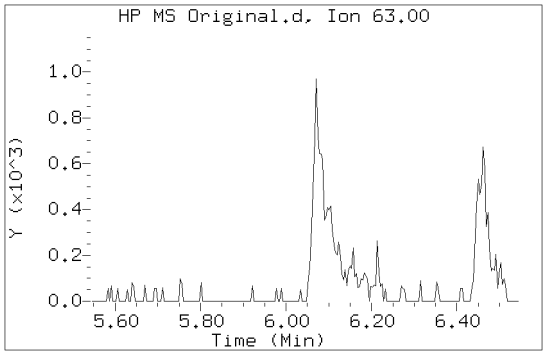
AFTER
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:07
linh
pham



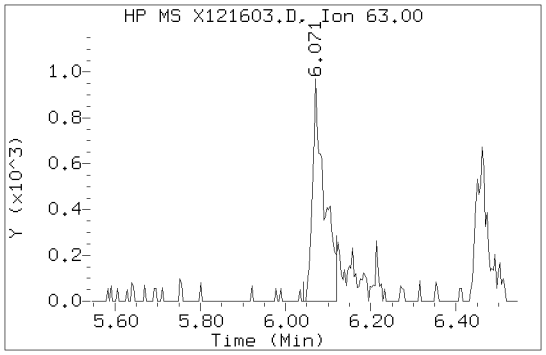
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

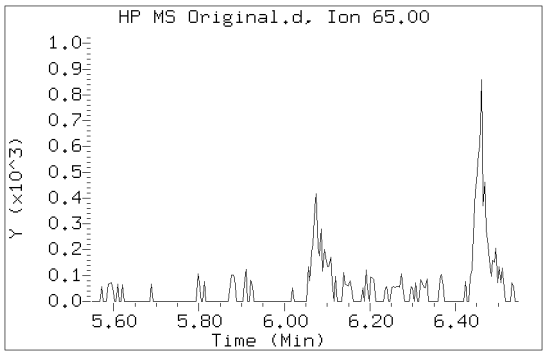
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



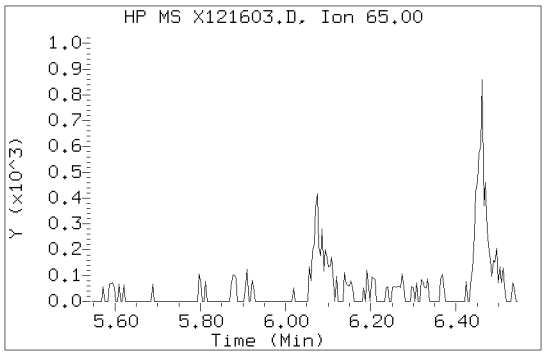
AFTER
MASS
63
AREA
1861
HEIGHT
970
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
65
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
65
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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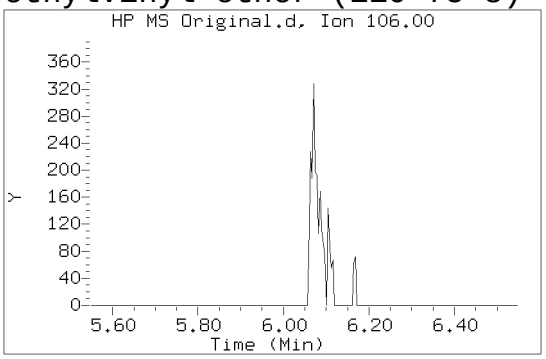
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

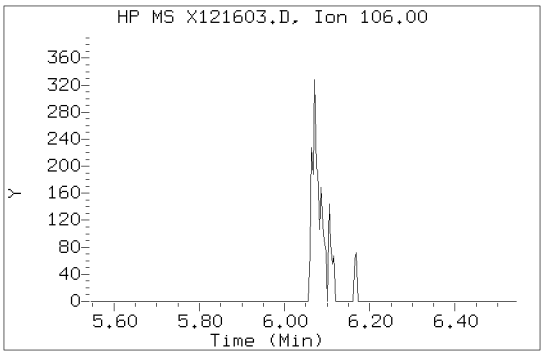
BEFORE

MASS
106
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
106
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

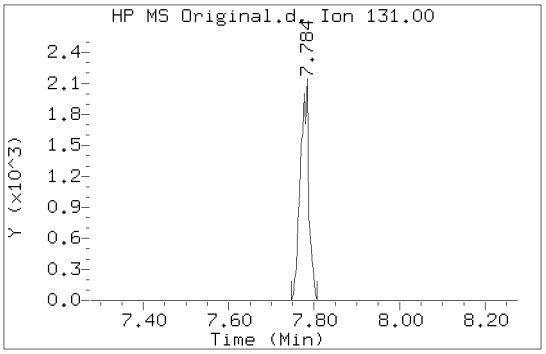


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

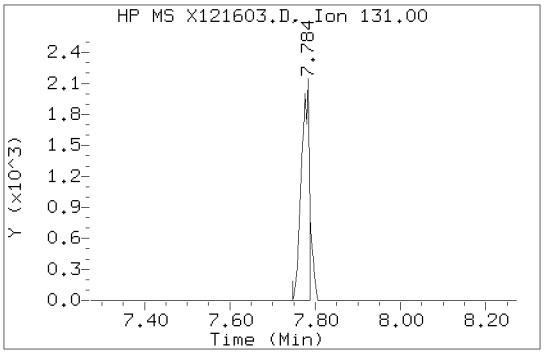
BEFORE

MASS
131
AREA
3036
HEIGHT
2146
27-Dec-2022
16:03
linh
pham



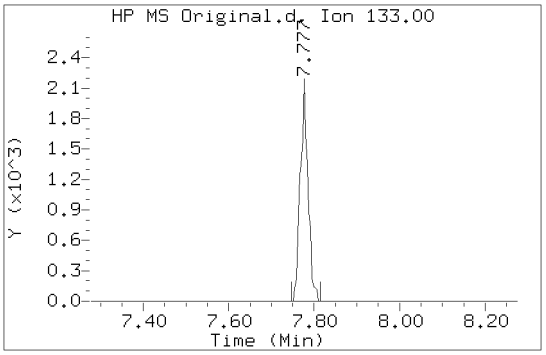
AFTER

MASS
131
AREA
2741
HEIGHT
2146
27-Dec-2022
16:07
linh
pham



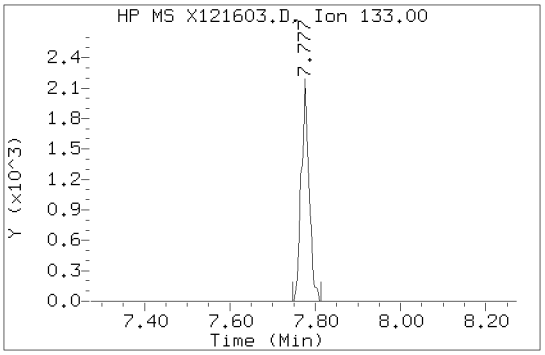
BEFORE

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:03
linh
pham



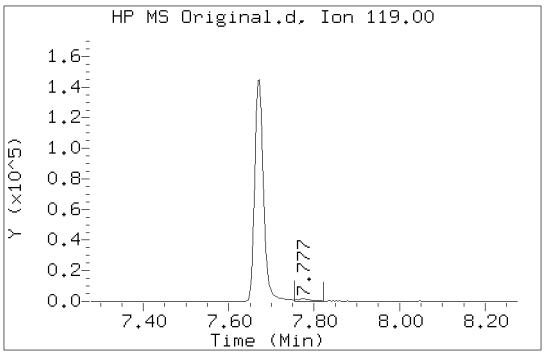
AFTER

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:07
linh
pham



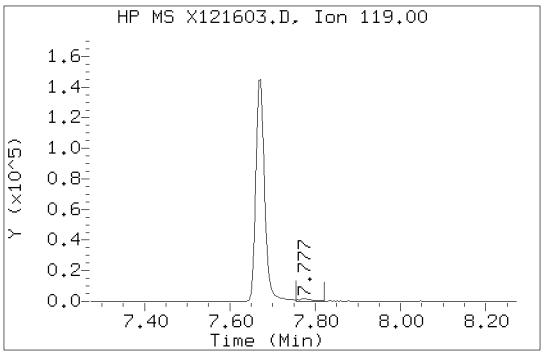
BEFORE

MASS
119
AREA
2971
HEIGHT
1971
27-Dec-2022
16:03
linh
pham



AFTER

MASS
119
AREA
2971
HEIGHT
1971
27-Dec-2022
16:07
linh
pham



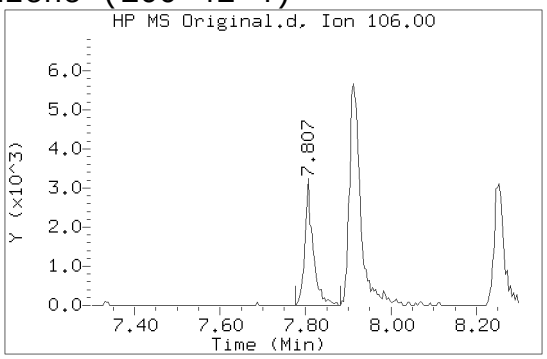
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

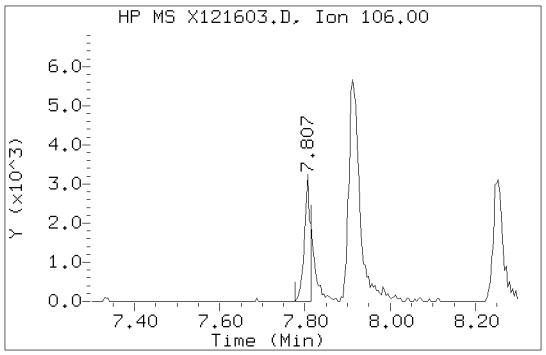
BEFORE

MASS
106
AREA
4331
HEIGHT
3242
27-Dec-2022
16:03
linh
pham



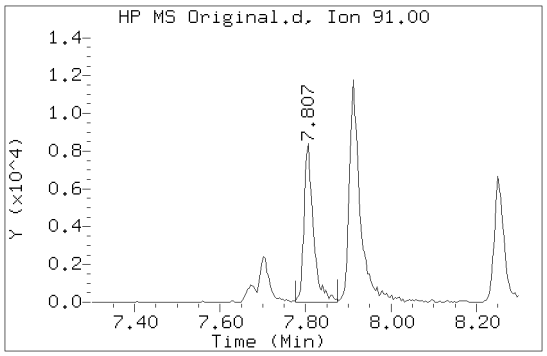
AFTER

MASS
106
AREA
3064
HEIGHT
3242
27-Dec-2022
16:07
linh
pham



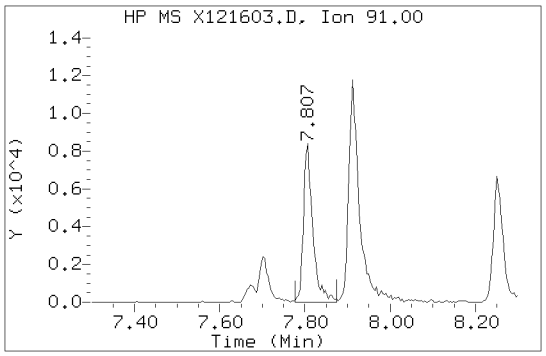
BEFORE

MASS
91
AREA
13136
HEIGHT
8410
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
13136
HEIGHT
8410
27-Dec-2022
16:07
linh
pham

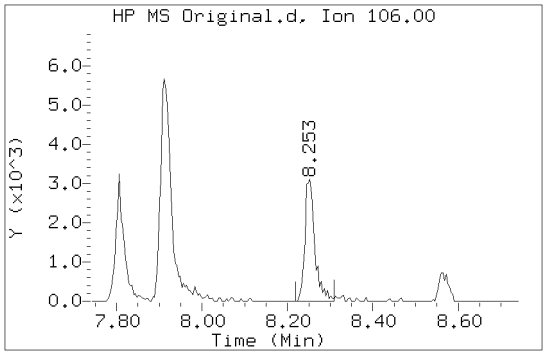


o-Xylene (95-47-6)

Reason Code:

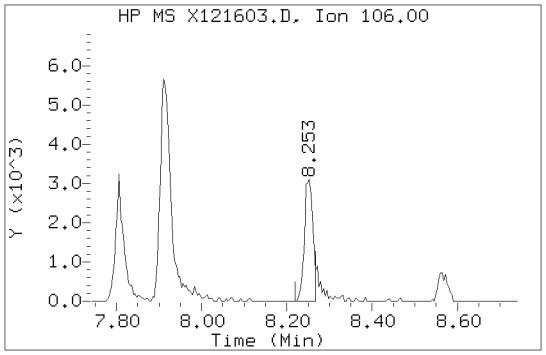
BEFORE

MASS
106
AREA
5100
HEIGHT
3111
27-Dec-2022
16:03
linh
pham



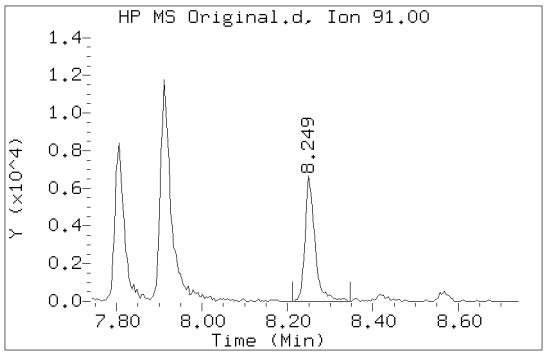
AFTER

MASS
106
AREA
4412
HEIGHT
3111
27-Dec-2022
16:07
linh
pham



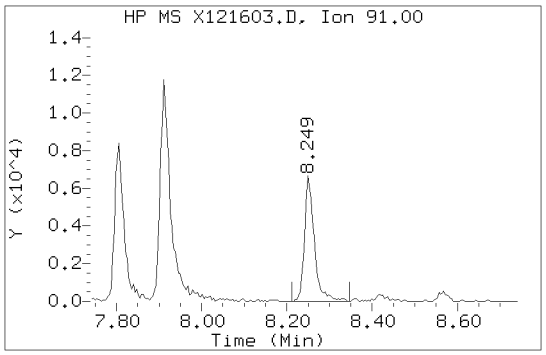
BEFORE

MASS
91
AREA
10808
HEIGHT
6665
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
10808
HEIGHT
6665
27-Dec-2022
16:07
linh
pham



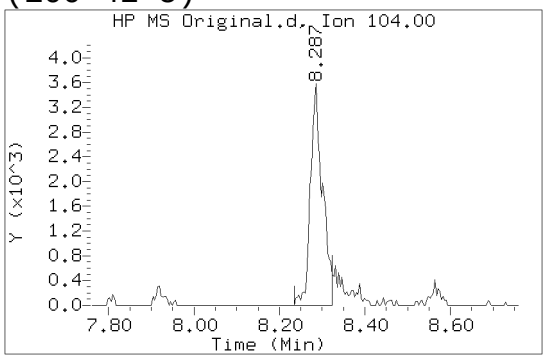
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Styrene (100-42-5)

Reason Code:

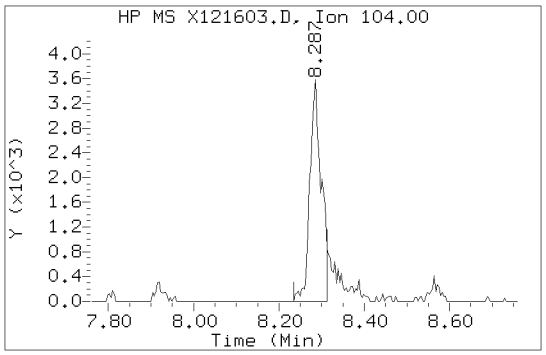
BEFORE

MASS
104
AREA
7074
HEIGHT
3581
27-Dec-2022
16:03
linh
pham



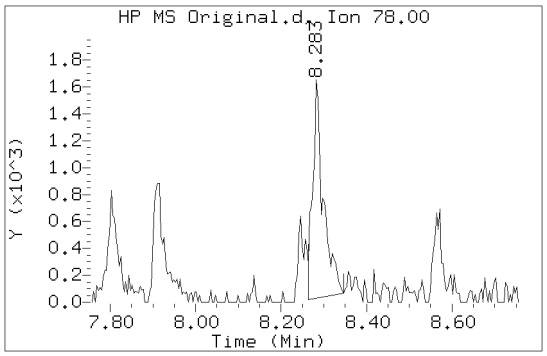
AFTER

MASS
104
AREA
6634
HEIGHT
3581
27-Dec-2022
16:07
linh
pham



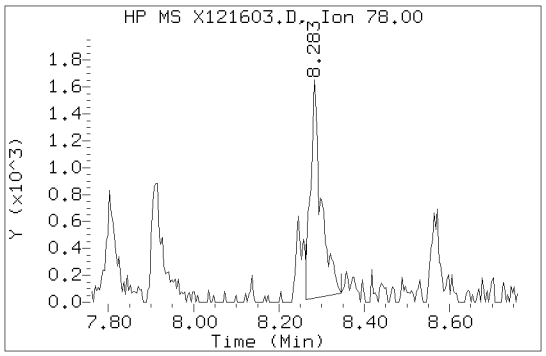
BEFORE

MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:03
linh
pham



AFTER

MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:07
linh
pham

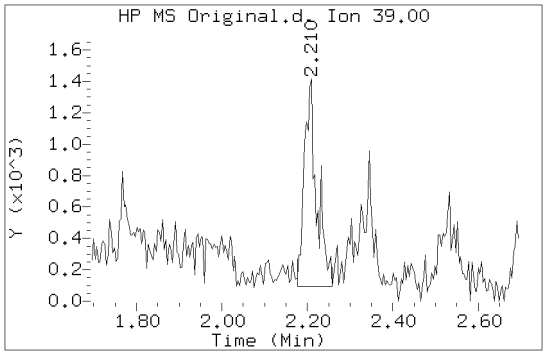


Acetonitrile (75-05-8)

Reason Code:

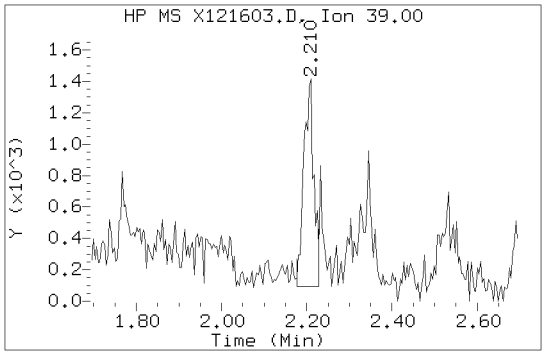
BEFORE

MASS
39
AREA
2674
HEIGHT
1321
27-Dec-2022
16:03
linh
pham



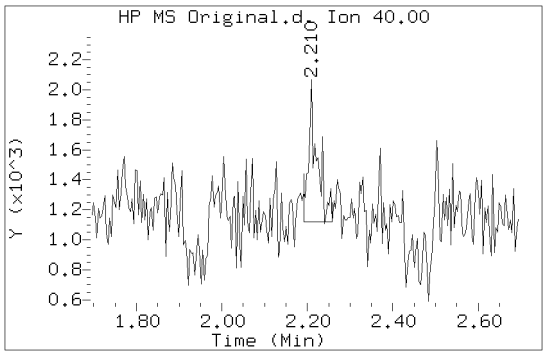
AFTER

MASS
39
AREA
2204
HEIGHT
1321
27-Dec-2022
16:07
linh
pham



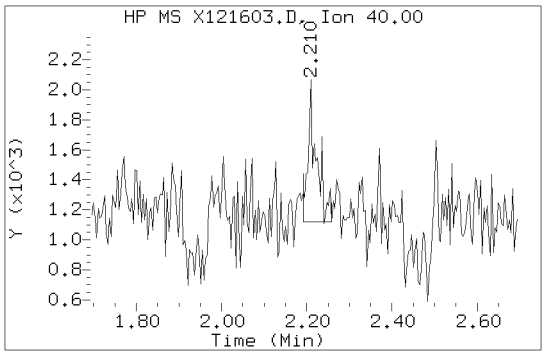
BEFORE

MASS
40
AREA
1296
HEIGHT
946
27-Dec-2022
16:03
linh
pham



AFTER

MASS
40
AREA
1296
HEIGHT
946
27-Dec-2022
16:07
linh
pham



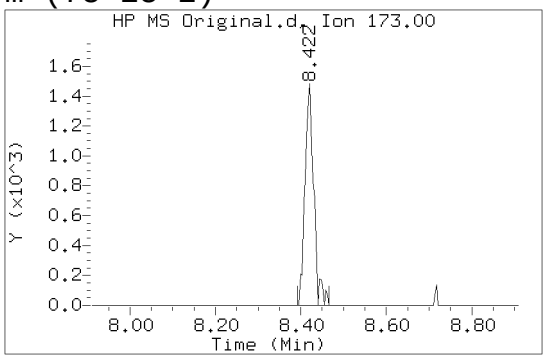
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromoform (75-25-2)

Reason Code:

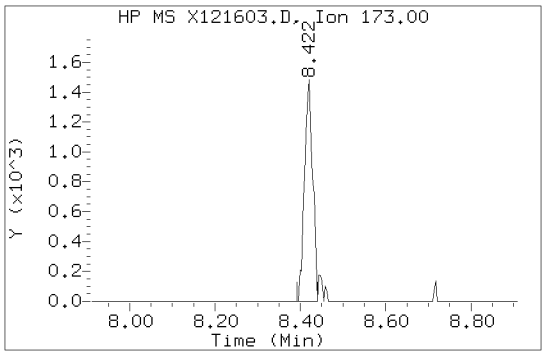
BEFORE

MASS
173
AREA
2158
HEIGHT
1483
27-Dec-2022
16:03
linh
pham



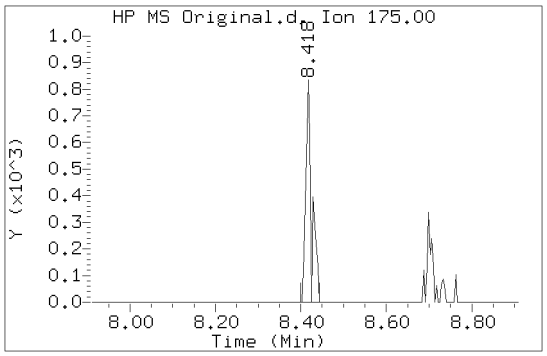
AFTER

MASS
173
AREA
2013
HEIGHT
1483
27-Dec-2022
16:07
linh
pham



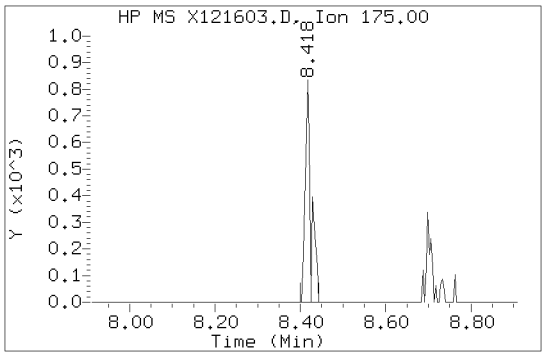
BEFORE

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:03
linh
pham



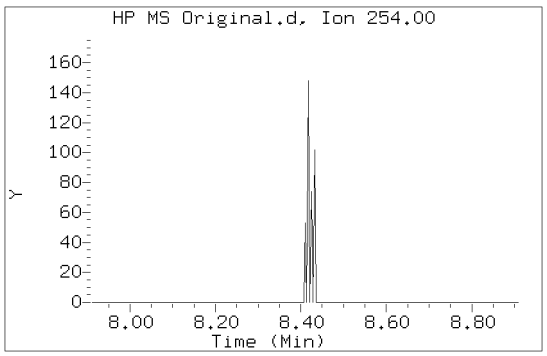
AFTER

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:07
linh
pham



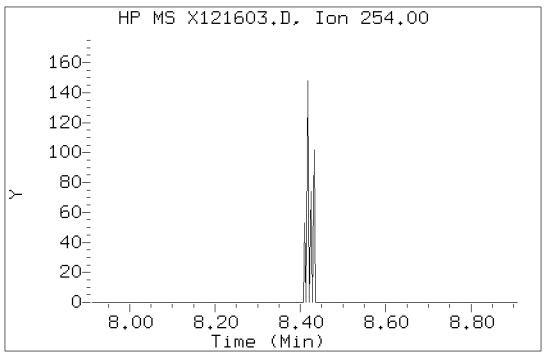
BEFORE

MASS
254
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
254
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

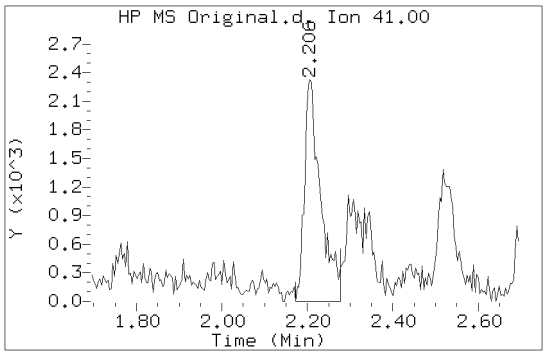


Allyl Chloride (107-05-1)

Reason Code:

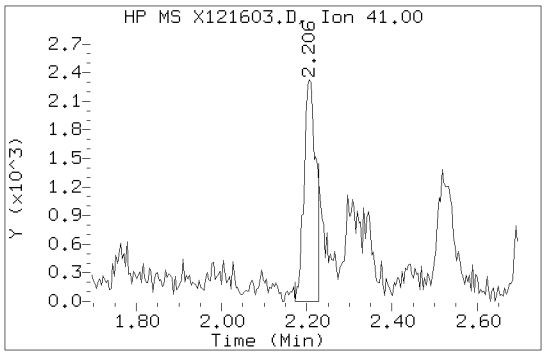
BEFORE

MASS
41
AREA
6169
HEIGHT
2326
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
4574
HEIGHT
2326
27-Dec-2022
16:07
linh
pham



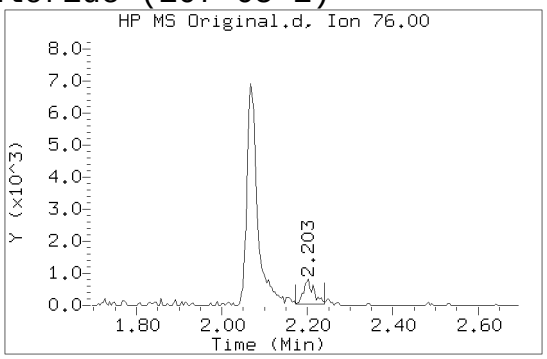
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Allyl Chloride (107-05-1)

Reason Code:

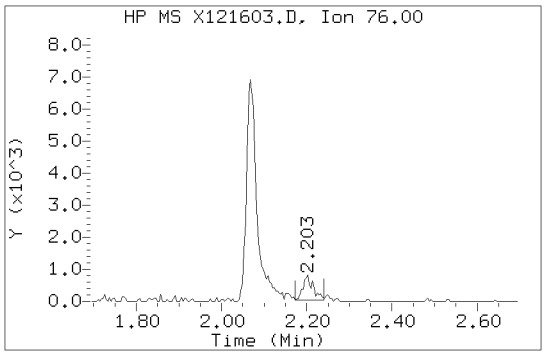
BEFORE

MASS
76
AREA
1254
HEIGHT
763
27-Dec-2022
16:03
linh
pham



AFTER

MASS
76
AREA
1254
HEIGHT
763
27-Dec-2022
16:07
linh
pham

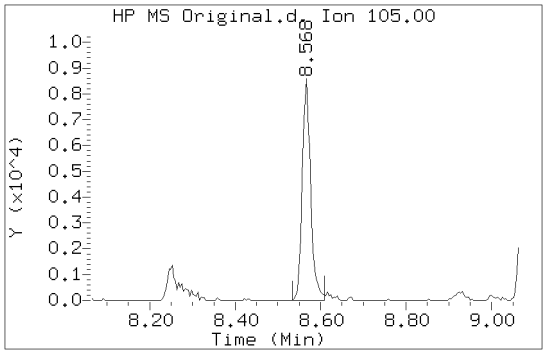


Isopropylbenzene (98-82-8)

Reason Code:

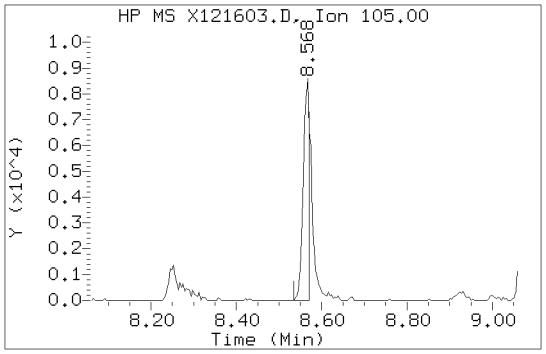
BEFORE

MASS
105
AREA
12091
HEIGHT
8588
27-Dec-2022
16:03
linh
pham



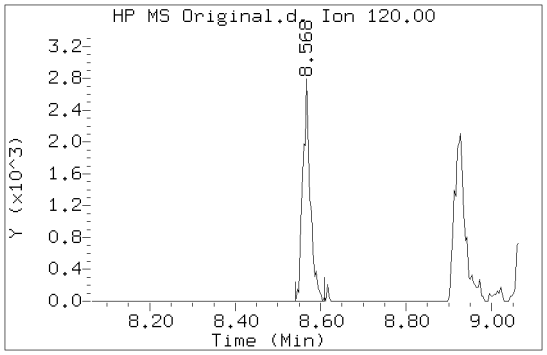
AFTER

MASS
105
AREA
8757
HEIGHT
8588
27-Dec-2022
16:07
linh
pham



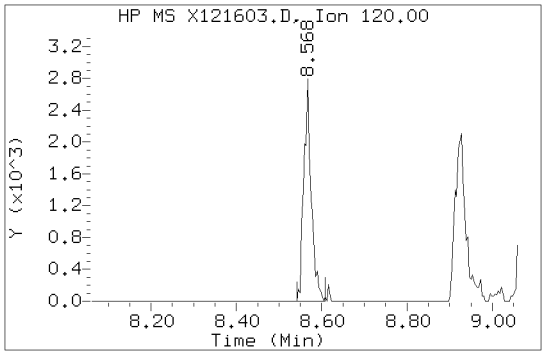
BEFORE

MASS
120
AREA
3462
HEIGHT
2793
27-Dec-2022
16:03
linh
pham



AFTER

MASS
120
AREA
3462
HEIGHT
2793
27-Dec-2022
16:07
linh
pham

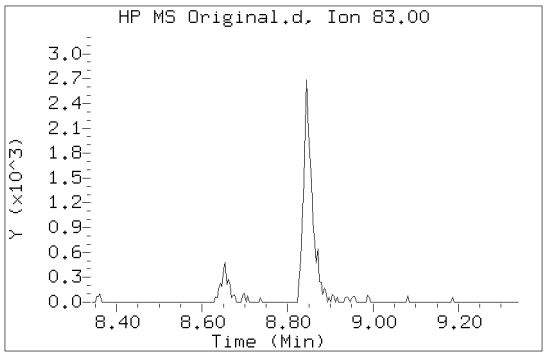


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

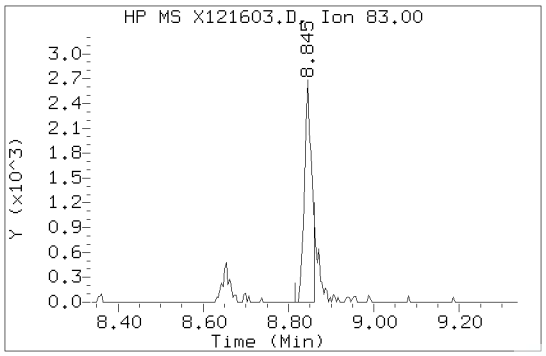
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
3194
HEIGHT
2685
27-Dec-2022
16:07
linh
pham



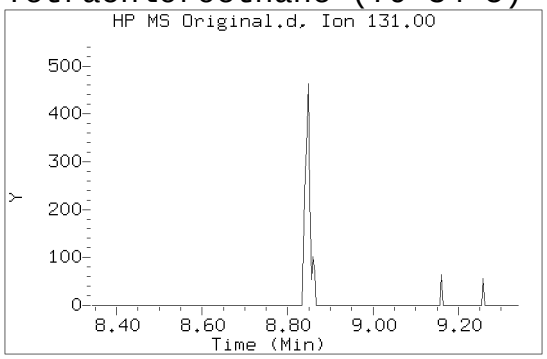
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

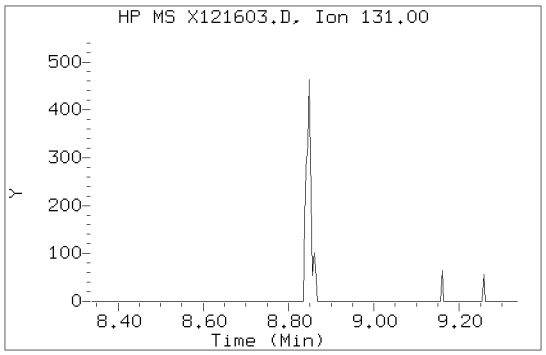
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



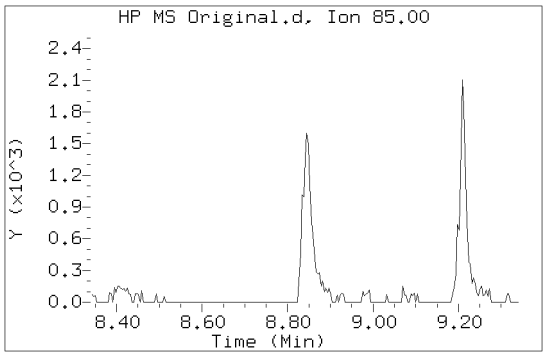
AFTER

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



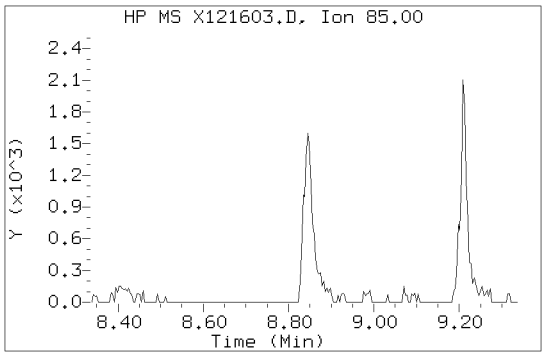
BEFORE

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

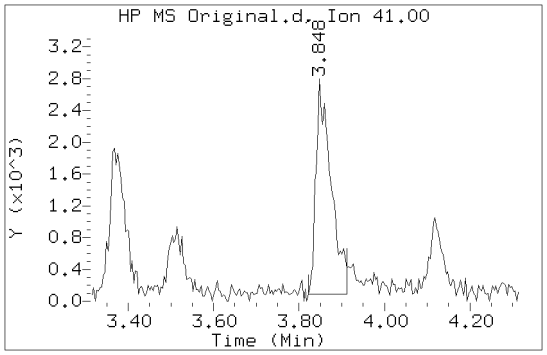


Methacrylonitrile (126-98-7)

Reason Code:

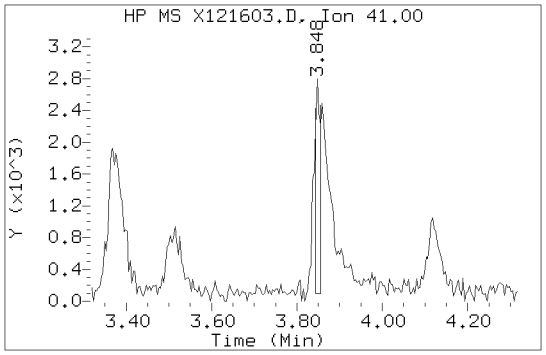
BEFORE

MASS
41
AREA
6587
HEIGHT
2708
27-Dec-2022
16:03
linh
pham



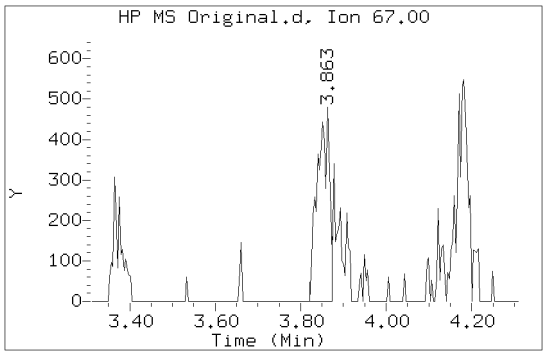
AFTER

MASS
41
AREA
2066
HEIGHT
2701
27-Dec-2022
16:07
linh
pham



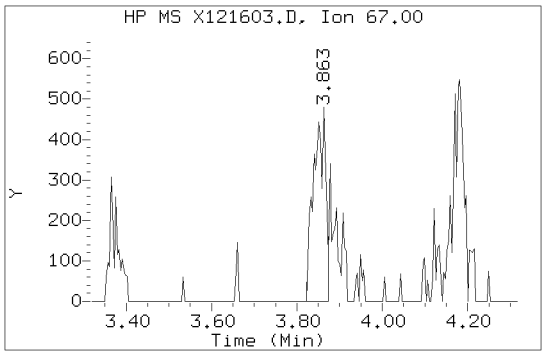
BEFORE

MASS
67
AREA
937
HEIGHT
480
27-Dec-2022
16:03
linh
pham



AFTER

MASS
67
AREA
937
HEIGHT
480
27-Dec-2022
16:07
linh
pham



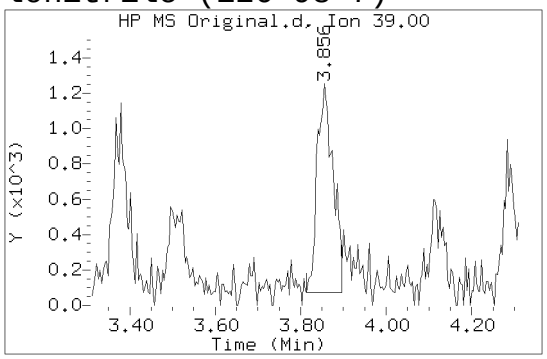
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methacrylonitrile (126-98-7)

Reason Code:

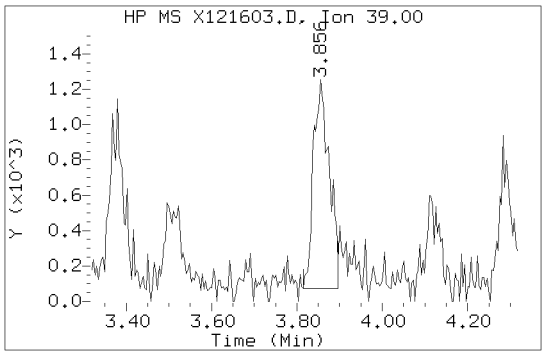
BEFORE

MASS
39
AREA
3048
HEIGHT
1181
27-Dec-2022
16:03
linh
pham



AFTER

MASS
39
AREA
3048
HEIGHT
1181
27-Dec-2022
16:07
linh
pham

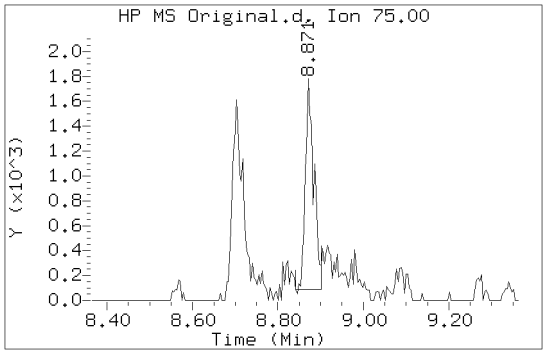


1,2,3-Trichloropropane (96-18-4)

Reason Code:

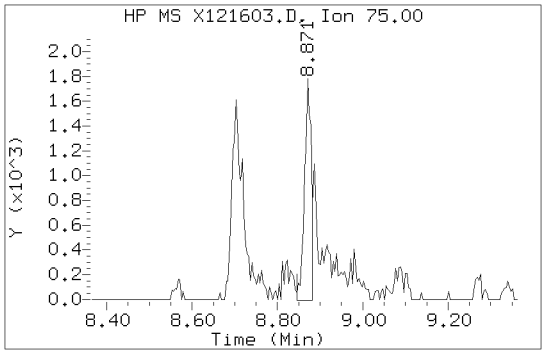
BEFORE

MASS
75
AREA
2351
HEIGHT
1693
27-Dec-2022
16:03
linh
pham



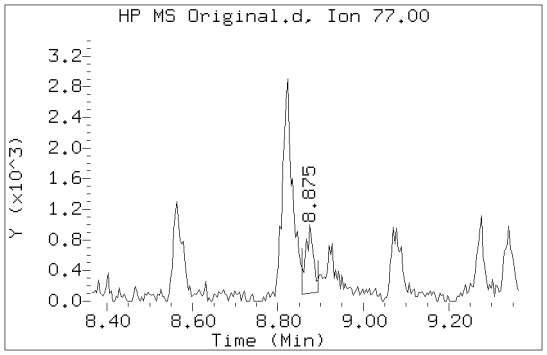
AFTER

MASS
75
AREA
2019
HEIGHT
1788
27-Dec-2022
16:07
linh
pham



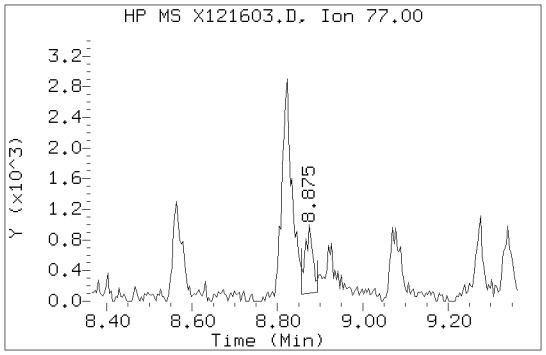
BEFORE

MASS
77
AREA
1161
HEIGHT
895
27-Dec-2022
16:03
linh
pham



AFTER

MASS
77
AREA
1161
HEIGHT
895
27-Dec-2022
16:07
linh
pham

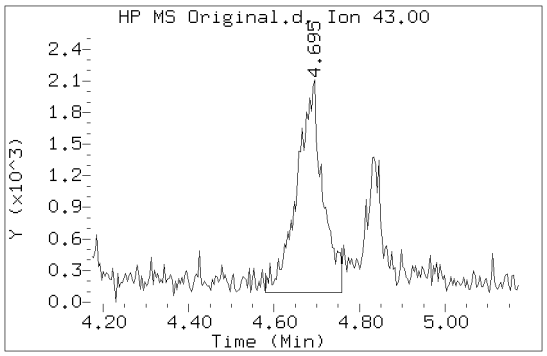


Isobutyl Alcohol (78-83-1)

Reason Code:

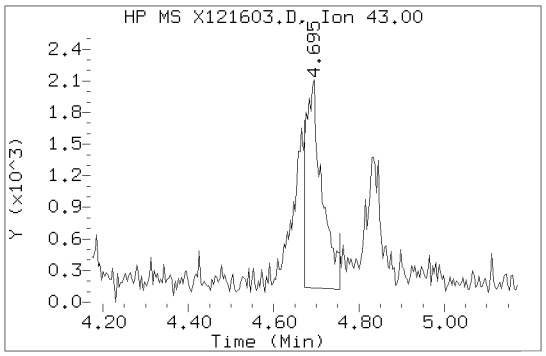
BEFORE

MASS
43
AREA
8478
HEIGHT
2018
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
5178
HEIGHT
1973
27-Dec-2022
16:07
linh
pham



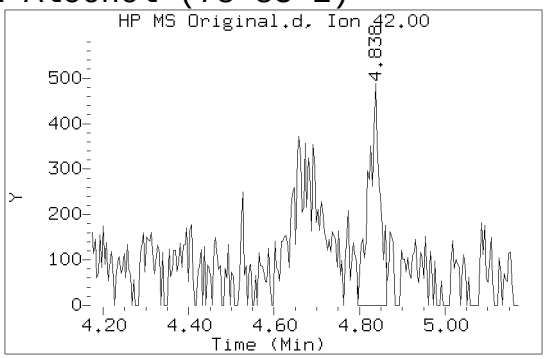
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutyl Alcohol (78-83-1)

Reason Code:

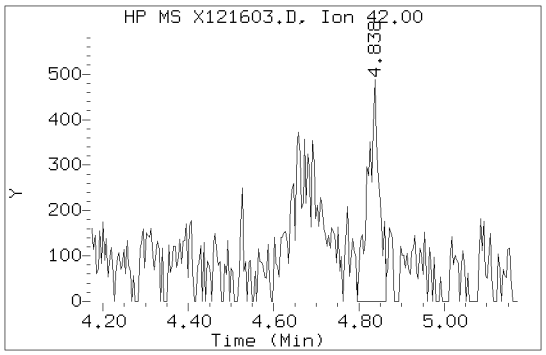
BEFORE

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:03
linh
pham



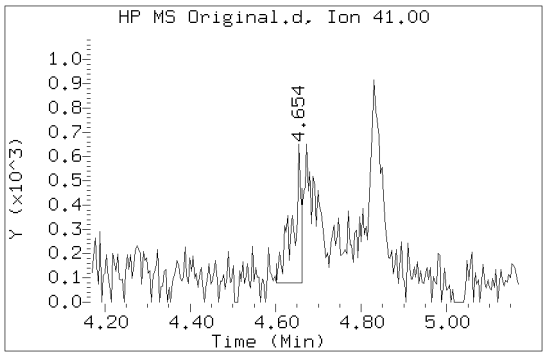
AFTER

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:07
linh
pham



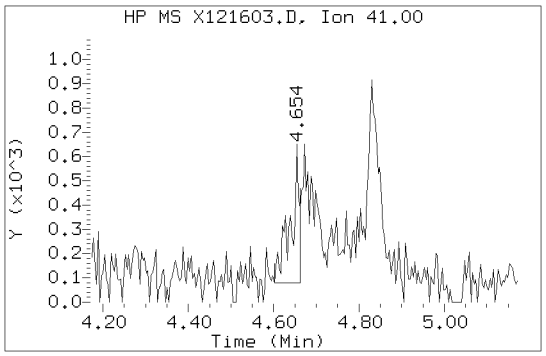
BEFORE

MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:07
linh
pham

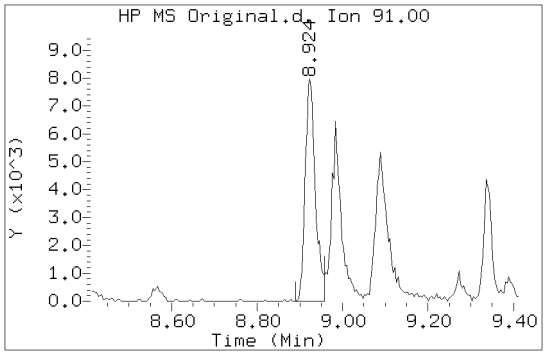


n-Propylbenzene (106-65-1)

Reason Code:

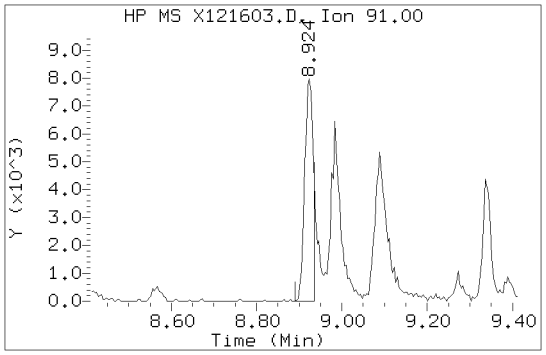
BEFORE

MASS
91
AREA
13496
HEIGHT
7972
27-Dec-2022
16:03
linh
pham



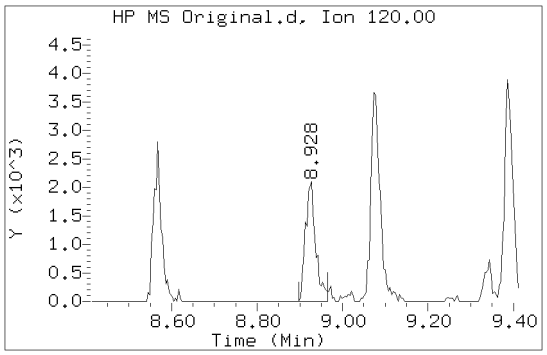
AFTER

MASS
91
AREA
11163
HEIGHT
7972
27-Dec-2022
16:07
linh
pham



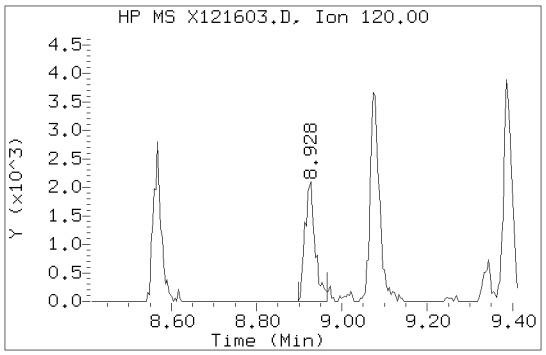
BEFORE

MASS
120
AREA
3559
HEIGHT
2104
27-Dec-2022
16:03
linh
pham



AFTER

MASS
120
AREA
3559
HEIGHT
2104
27-Dec-2022
16:07
linh
pham

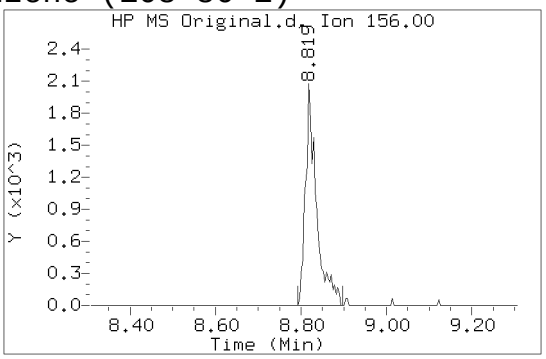


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

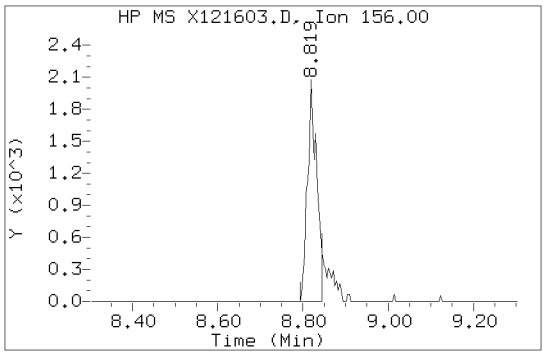
Bromobenzene (108-86-1)

Reason Code:

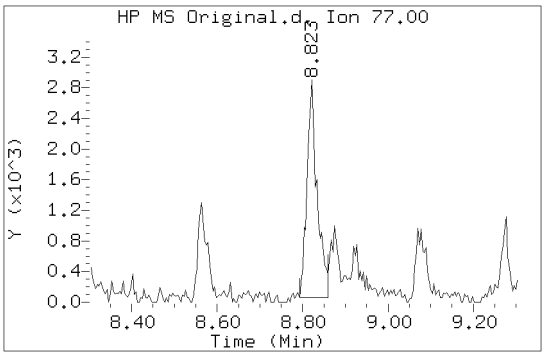
BEFORE
MASS
156
AREA
3747
HEIGHT
2077
27-Dec-2022
16:03
linh
pham



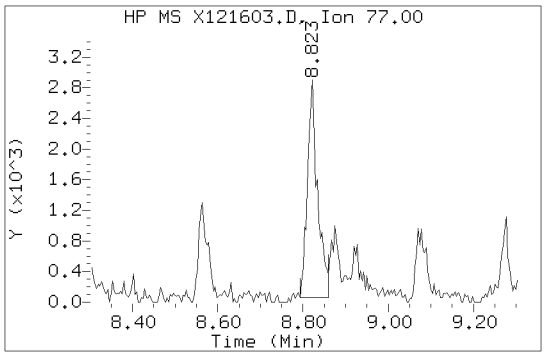
AFTER
MASS
156
AREA
3147
HEIGHT
2077
27-Dec-2022
16:07
linh
pham



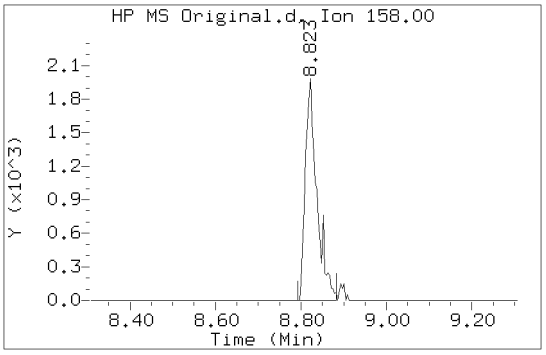
BEFORE
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:03
linh
pham



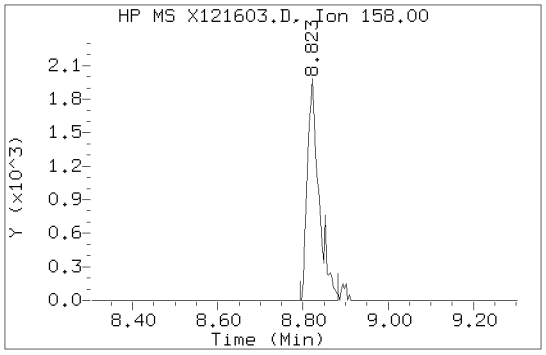
AFTER
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



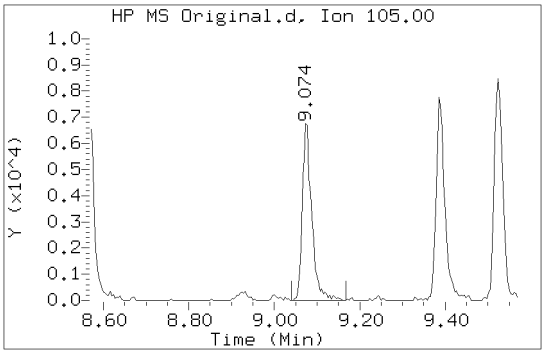
AFTER
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:07
linh
pham



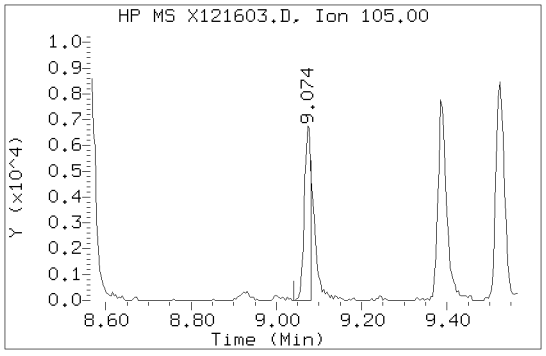
1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

BEFORE
MASS
105
AREA
10555
HEIGHT
6758
27-Dec-2022
16:03
linh
pham



AFTER
MASS
105
AREA
7182
HEIGHT
6758
27-Dec-2022
16:07
linh
pham



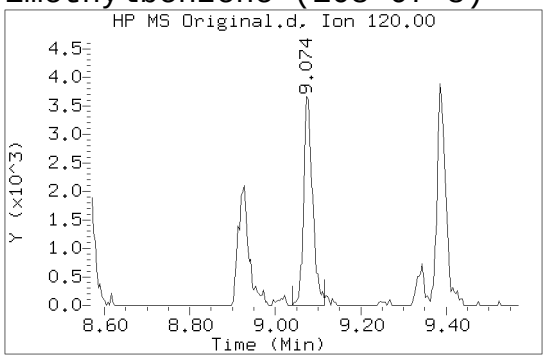
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

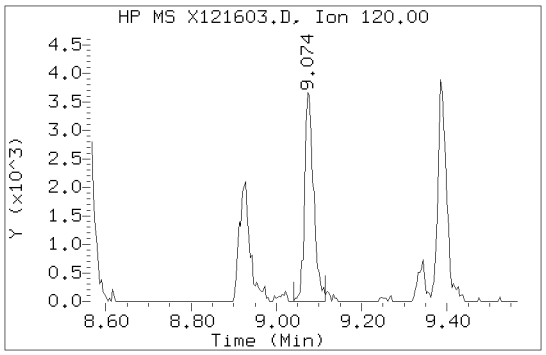
BEFORE

MASS
120
AREA
5450
HEIGHT
3663
27-Dec-2022
16:03
linh
pham



AFTER

MASS
120
AREA
5450
HEIGHT
3663
27-Dec-2022
16:07
linh
pham

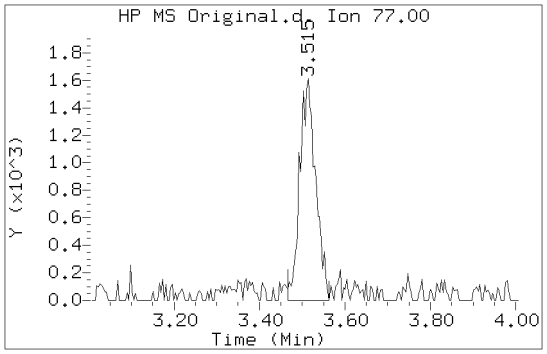


2,2-Dichloropropane (594-20-7)

Reason Code:

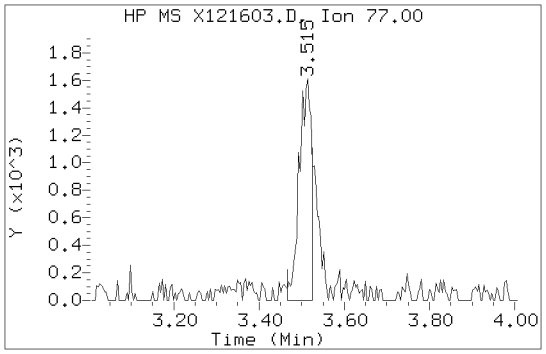
BEFORE

MASS
77
AREA
4217
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



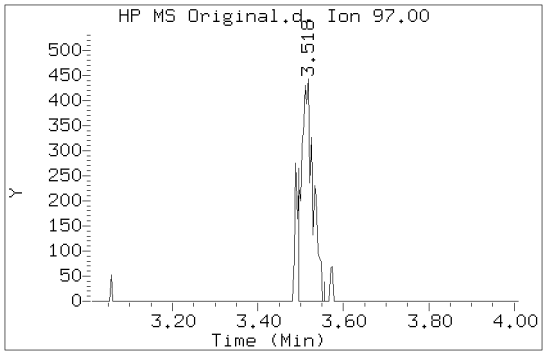
AFTER

MASS
77
AREA
3238
HEIGHT
1612
27-Dec-2022
16:07
linh
pham



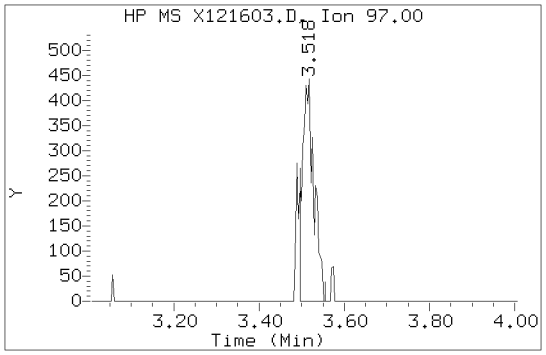
BEFORE

MASS
97
AREA
843
HEIGHT
443
27-Dec-2022
16:03
linh
pham



AFTER

MASS
97
AREA
843
HEIGHT
443
27-Dec-2022
16:07
linh
pham

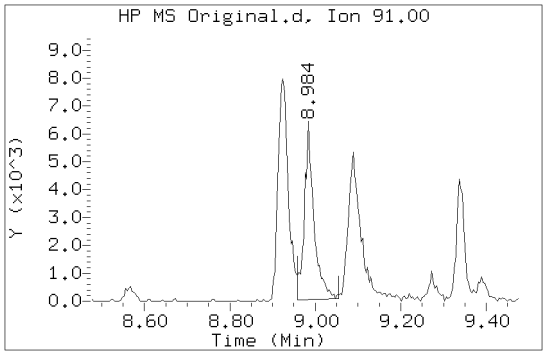


2-Chlorotoluene (95-49-8)

Reason Code:

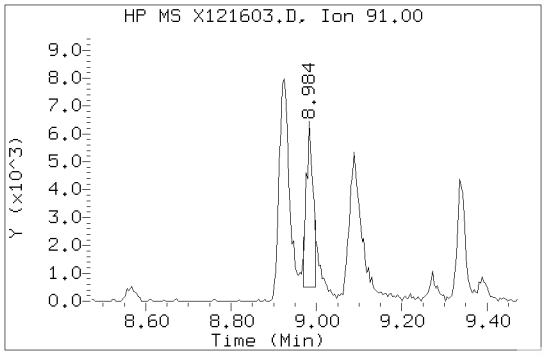
BEFORE

MASS
91
AREA
10128
HEIGHT
6401
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
6718
HEIGHT
5942
27-Dec-2022
16:07
linh
pham



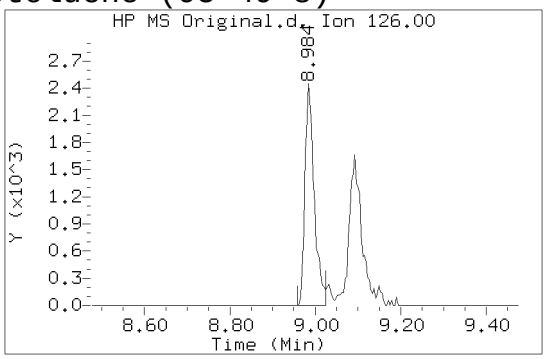
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

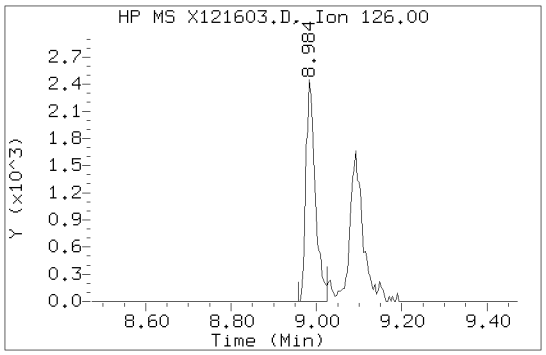
BEFORE

MASS
126
AREA
3761
HEIGHT
2450
27-Dec-2022
16:03
linh
pham



AFTER

MASS
126
AREA
3761
HEIGHT
2450
27-Dec-2022
16:07
linh
pham

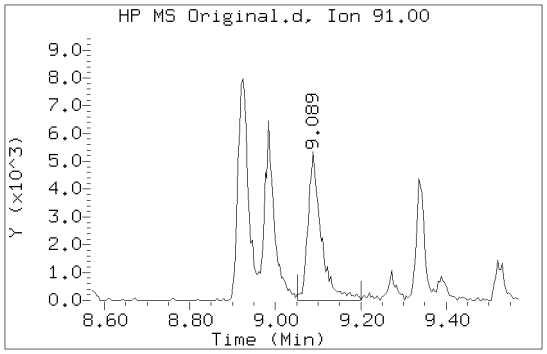


4-Chlorotoluene (106-43-4)

Reason Code:

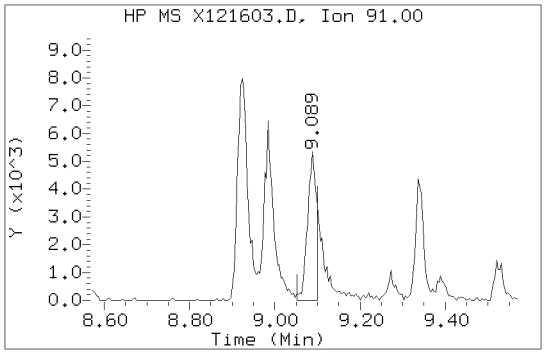
BEFORE

MASS
91
AREA
11481
HEIGHT
5337
27-Dec-2022
16:03
linh
pham



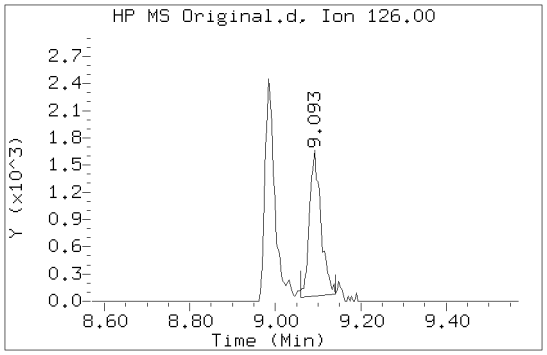
AFTER

MASS
91
AREA
7644
HEIGHT
5337
27-Dec-2022
16:07
linh
pham



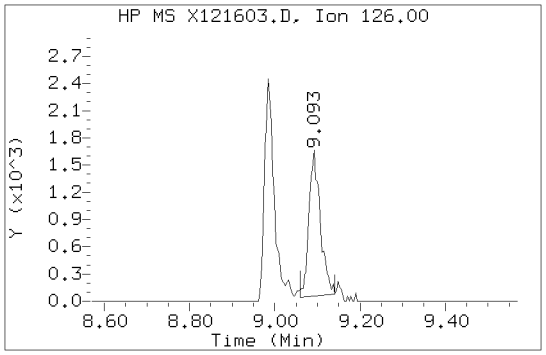
BEFORE

MASS
126
AREA
3008
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



AFTER

MASS
126
AREA
3008
HEIGHT
1612
27-Dec-2022
16:07
linh
pham

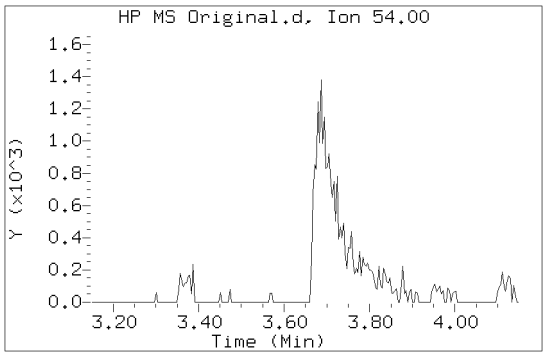


Propionitrile (107-12-0)

Reason Code:

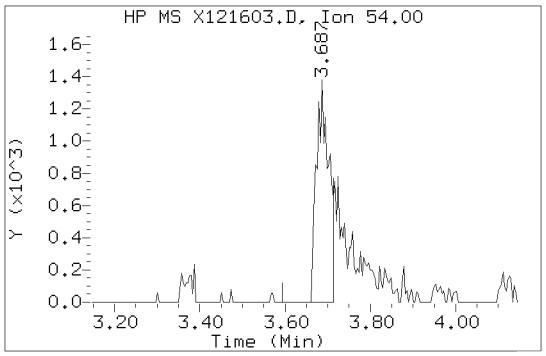
BEFORE

MASS
54
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
54
AREA
2777
HEIGHT
1380
27-Dec-2022
16:07
linh
pham



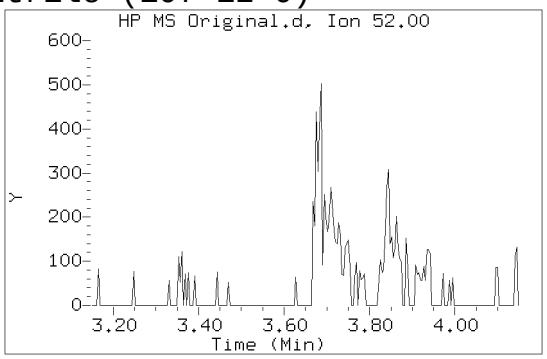
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Propionitrile (107-12-0)

Reason Code:

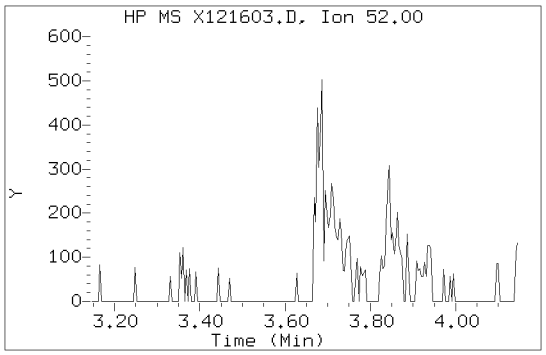
BEFORE

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



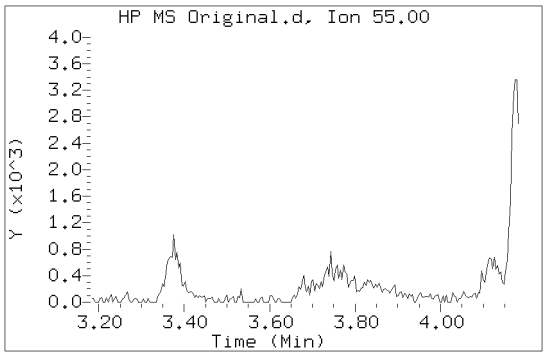
AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



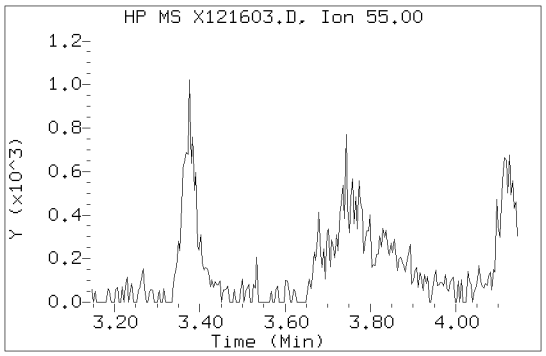
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

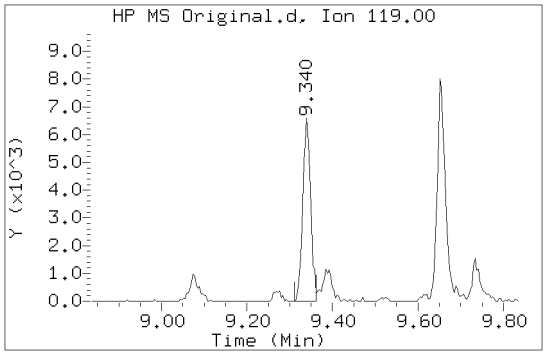


tert-Butylbenzene (98-06-6)

Reason Code:

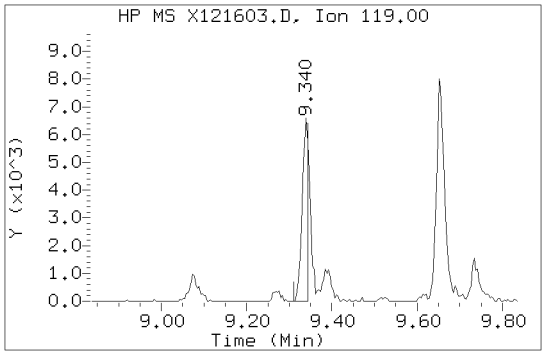
BEFORE

MASS
119
AREA
8660
HEIGHT
6598
27-Dec-2022
16:03
linh
pham



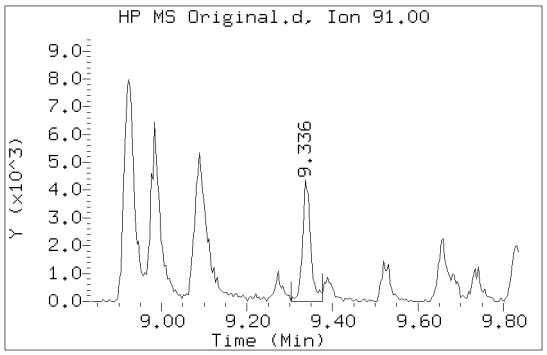
AFTER

MASS
119
AREA
6389
HEIGHT
6598
27-Dec-2022
16:07
linh
pham



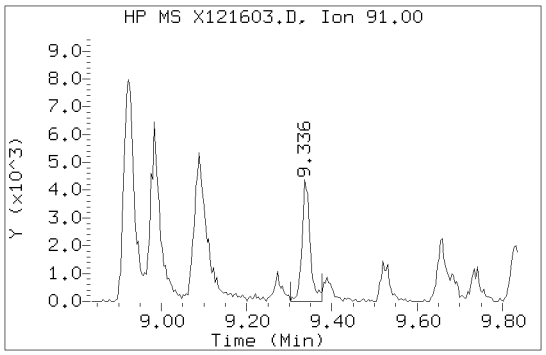
BEFORE

MASS
91
AREA
6013
HEIGHT
4378
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
6013
HEIGHT
4378
27-Dec-2022
16:07
linh
pham



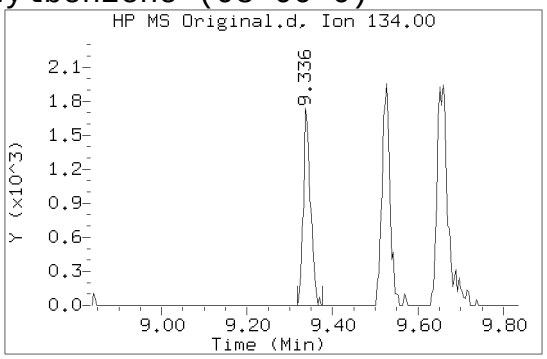
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butylbenzene (98-06-6)

Reason Code:

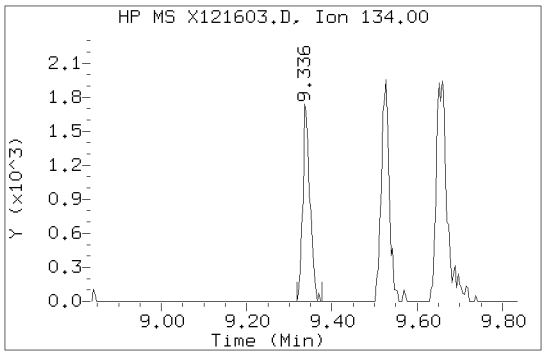
BEFORE

MASS
134
AREA
2112
HEIGHT
1740
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
2112
HEIGHT
1740
27-Dec-2022
16:07
linh
pham

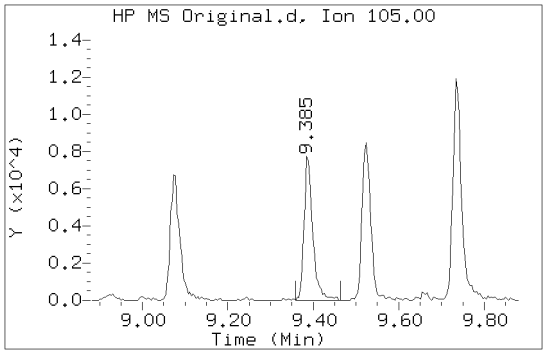


1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

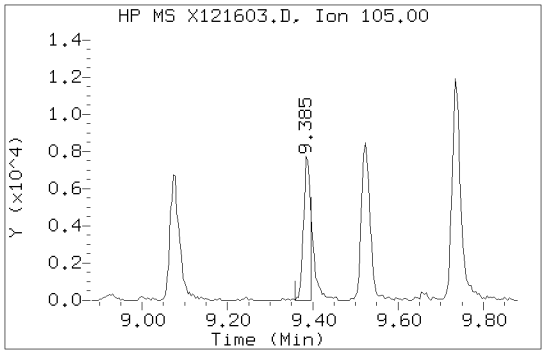
BEFORE

MASS
105
AREA
11065
HEIGHT
7775
27-Dec-2022
16:03
linh
pham



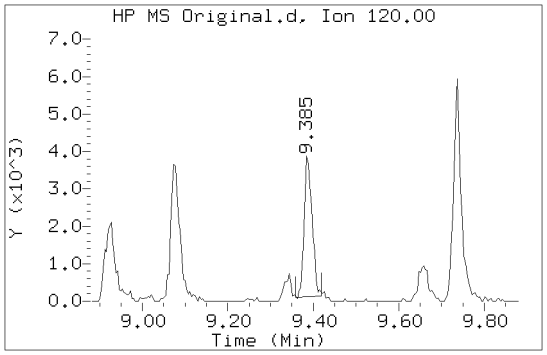
AFTER

MASS
105
AREA
8496
HEIGHT
7775
27-Dec-2022
16:07
linh
pham



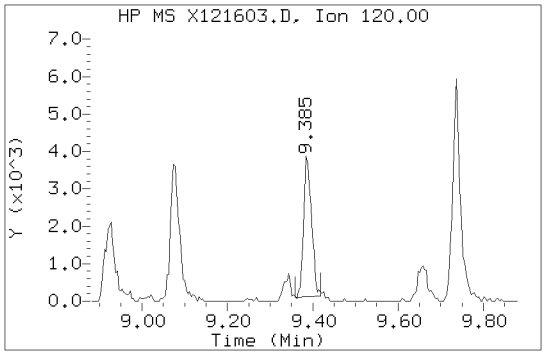
BEFORE

MASS
120
AREA
4898
HEIGHT
3773
27-Dec-2022
16:03
linh
pham



AFTER

MASS
120
AREA
4898
HEIGHT
3773
27-Dec-2022
16:07
linh
pham

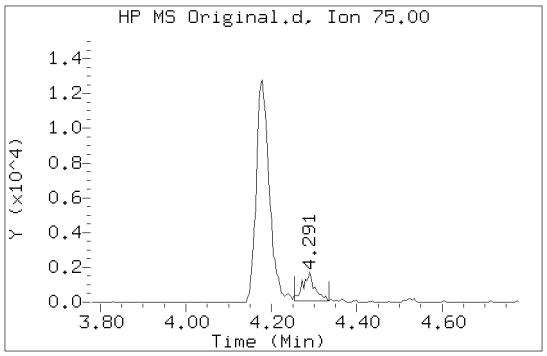


1,1-Dichloropropene (563-58-6)

Reason Code:

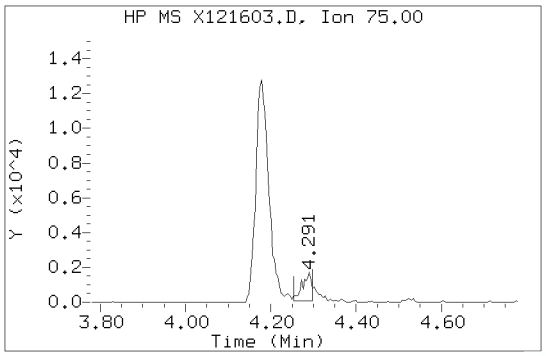
BEFORE

MASS
75
AREA
3235
HEIGHT
1674
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
2468
HEIGHT
1674
27-Dec-2022
16:07
linh
pham



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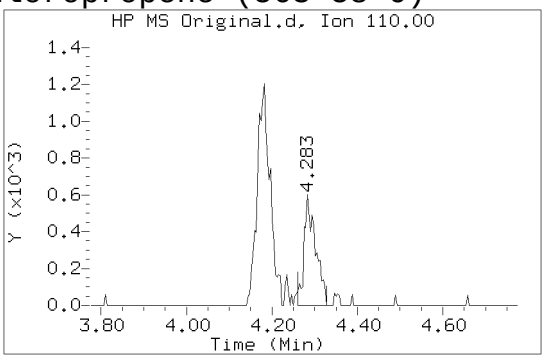
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

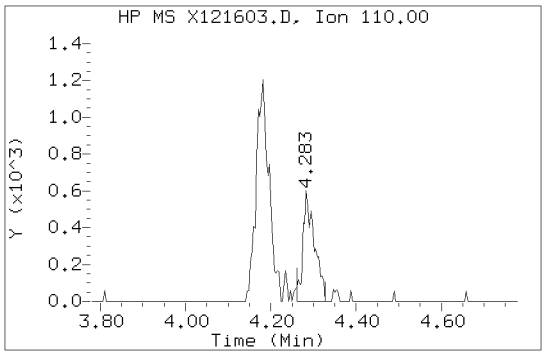
BEFORE

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:03
linh
pham



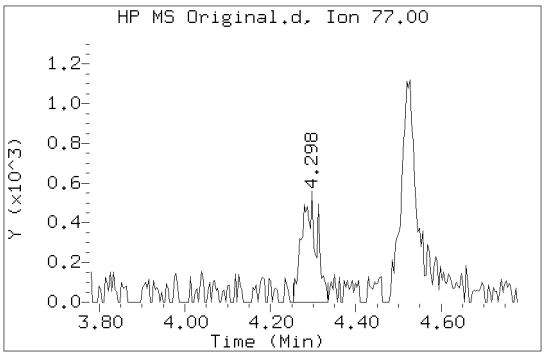
AFTER

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:07
linh
pham



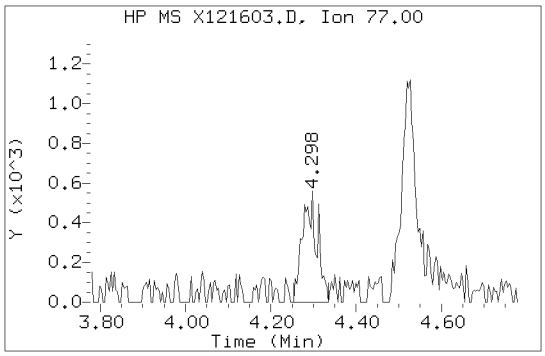
BEFORE

MASS
77
AREA
1342
HEIGHT
559
27-Dec-2022
16:03
linh
pham



AFTER

MASS
77
AREA
1342
HEIGHT
559
27-Dec-2022
16:07
linh
pham

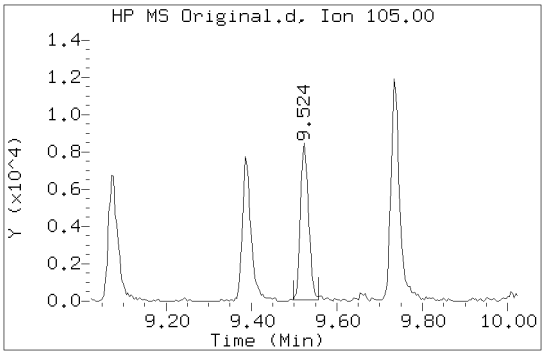


sec-Butylbenzene (135-98-8)

Reason Code:

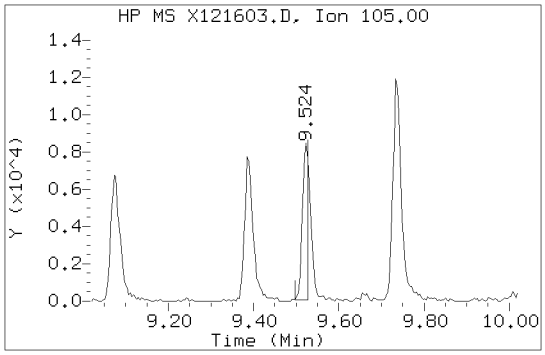
BEFORE

MASS
105
AREA
11512
HEIGHT
8394
27-Dec-2022
16:03
linh
pham



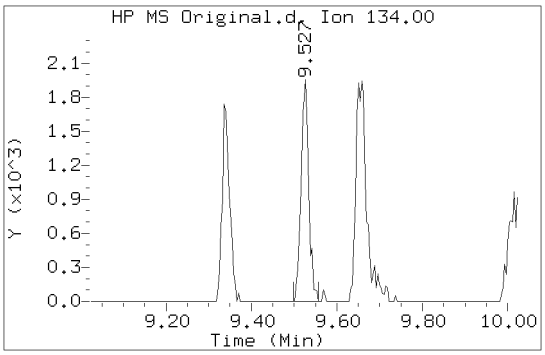
AFTER

MASS
105
AREA
7938
HEIGHT
8394
27-Dec-2022
16:07
linh
pham



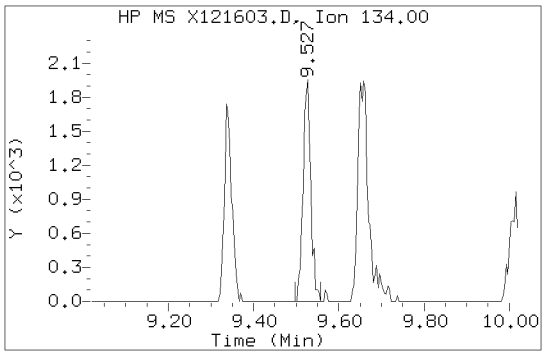
BEFORE

MASS
134
AREA
2519
HEIGHT
1955
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
2519
HEIGHT
1955
27-Dec-2022
16:07
linh
pham



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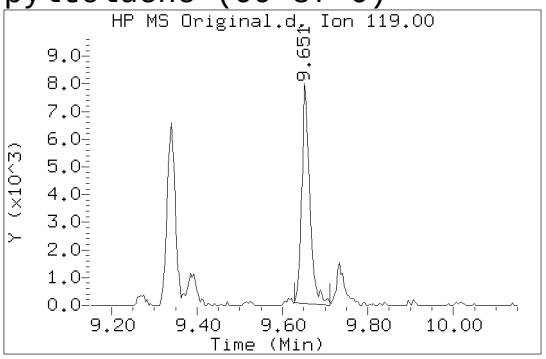
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

Reason Code:

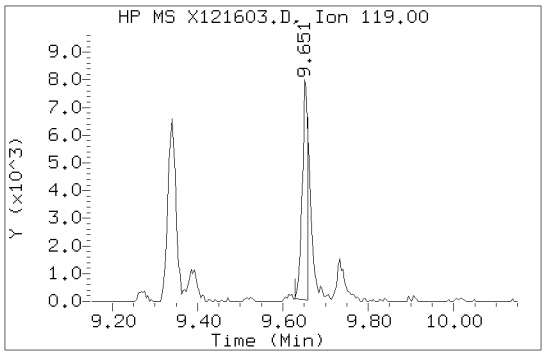
BEFORE

MASS
119
AREA
10660
HEIGHT
7944
27-Dec-2022
16:03
linh
pham



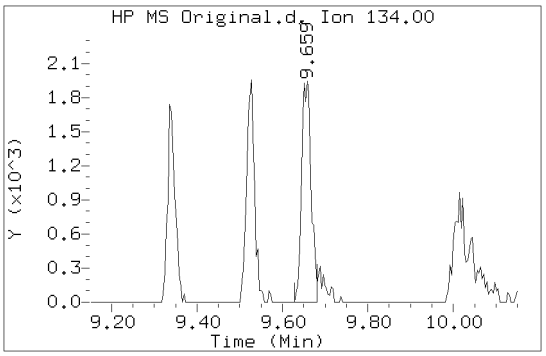
AFTER

MASS
119
AREA
7343
HEIGHT
7944
27-Dec-2022
16:07
linh
pham



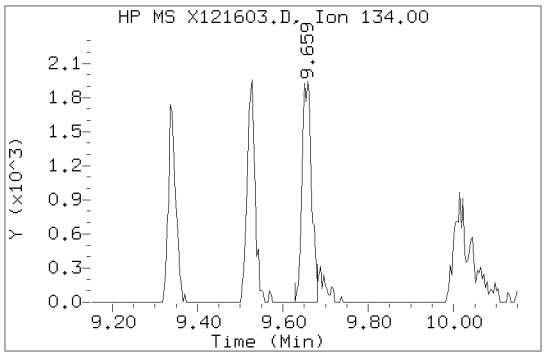
BEFORE

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:03
linh
pham



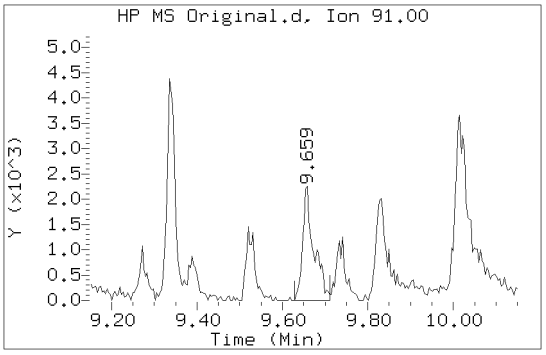
AFTER

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:07
linh
pham



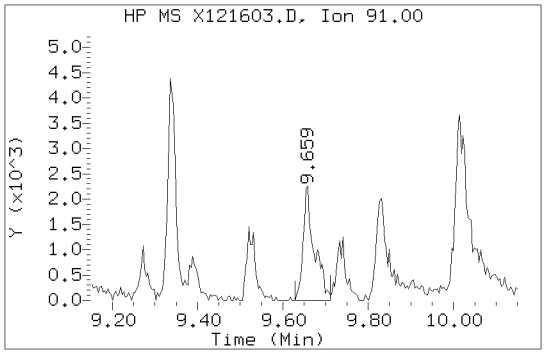
BEFORE

MASS
91
AREA
4191
HEIGHT
2256
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
4191
HEIGHT
2256
27-Dec-2022
16:07
linh
pham

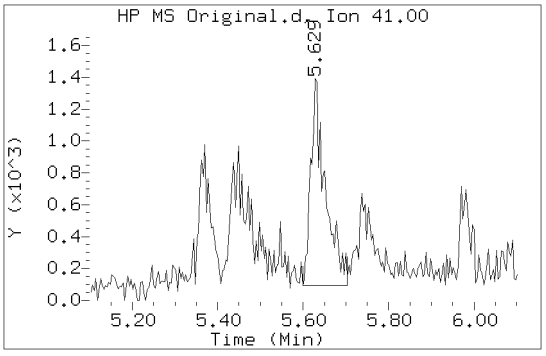


Methyl Methacrylate (80-62-6)

Reason Code:

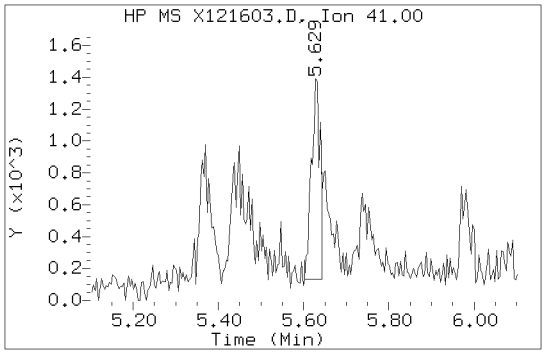
BEFORE

MASS
41
AREA
3067
HEIGHT
1299
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
1788
HEIGHT
1257
27-Dec-2022
16:07
linh
pham



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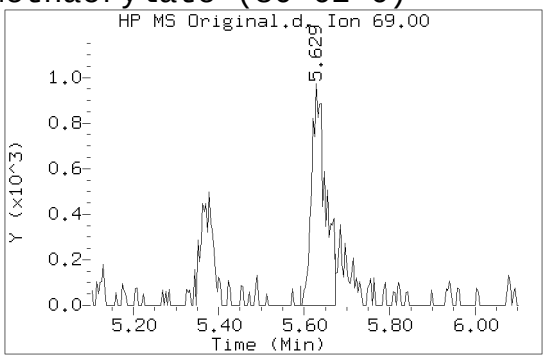
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

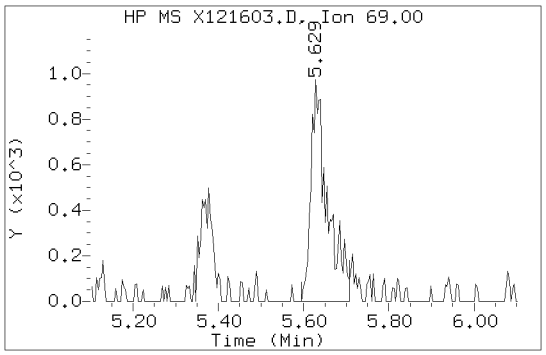
Methyl Methacrylate (80-62-6)

Reason Code:

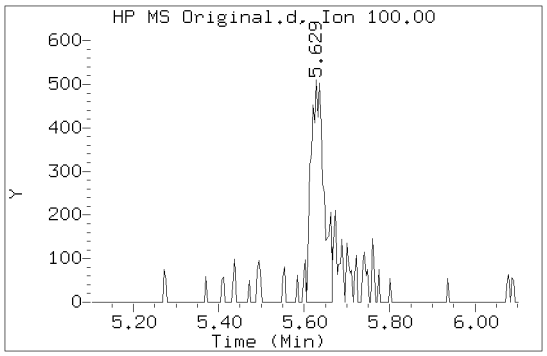
BEFORE
MASS
69
AREA
2216
HEIGHT
973
27-Dec-2022
16:03
linh
pham



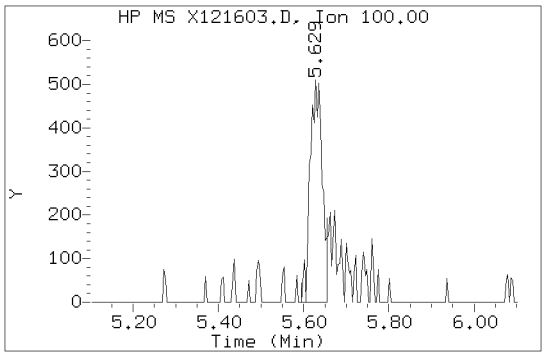
AFTER
MASS
69
AREA
2595
HEIGHT
973
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
100
AREA
1074
HEIGHT
510
27-Dec-2022
16:03
linh
pham



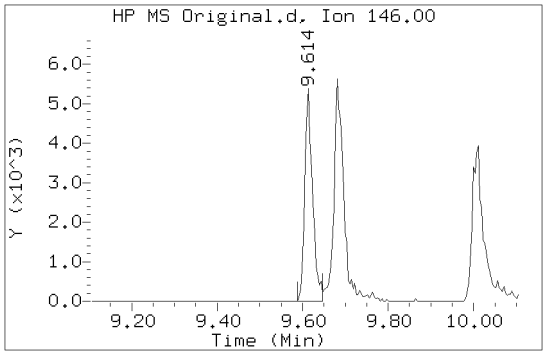
AFTER
MASS
100
AREA
1011
HEIGHT
510
27-Dec-2022
16:07
linh
pham



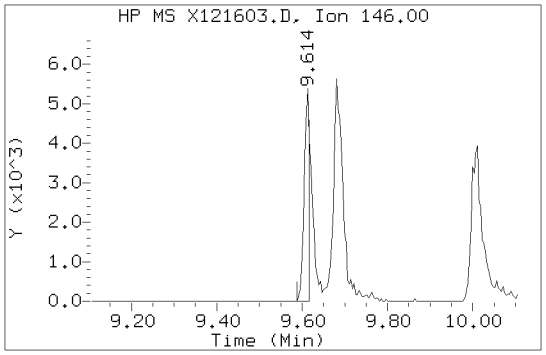
1,3-Dichlorobenzene (541-73-1)

Reason Code:

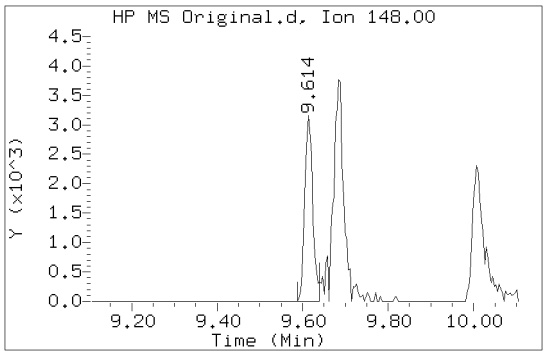
BEFORE
MASS
146
AREA
6964
HEIGHT
5387
27-Dec-2022
16:03
linh
pham



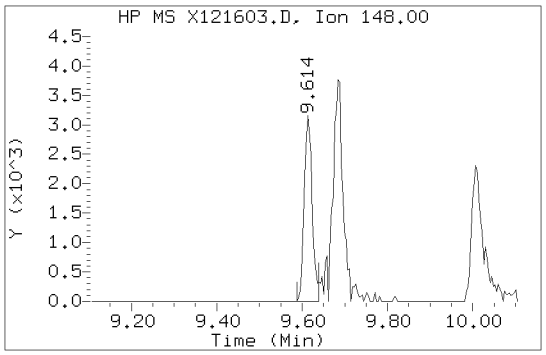
AFTER
MASS
146
AREA
4677
HEIGHT
5387
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
148
AREA
4216
HEIGHT
3157
27-Dec-2022
16:03
linh
pham



AFTER
MASS
148
AREA
4216
HEIGHT
3157
27-Dec-2022
16:07
linh
pham



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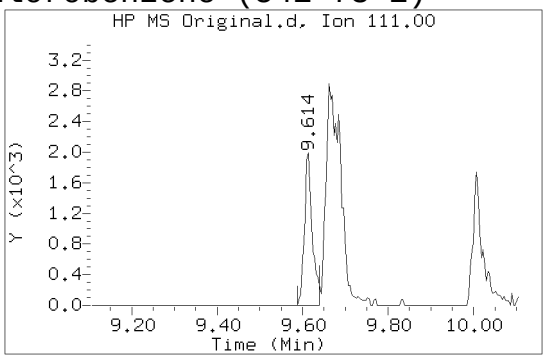
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,3-Dichlorobenzene (541-73-1)

Reason Code:

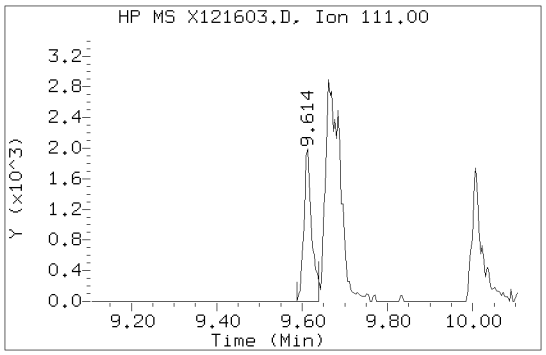
BEFORE

MASS
111
AREA
2596
HEIGHT
1995
27-Dec-2022
16:03
linh
pham



AFTER

MASS
111
AREA
2596
HEIGHT
1995
27-Dec-2022
16:07
linh
pham

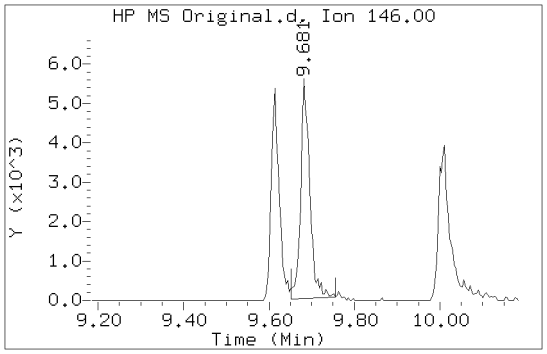


1,4-Dichlorobenzene (106-46-7)

Reason Code:

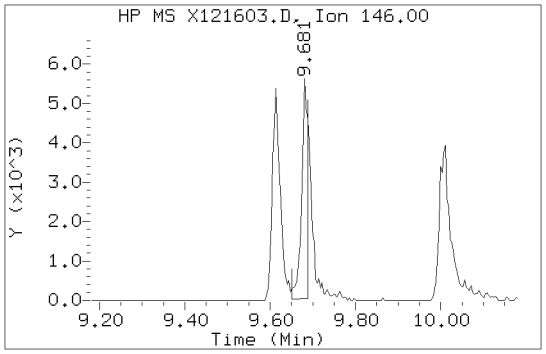
BEFORE

MASS
146
AREA
8510
HEIGHT
5586
27-Dec-2022
16:03
linh
pham



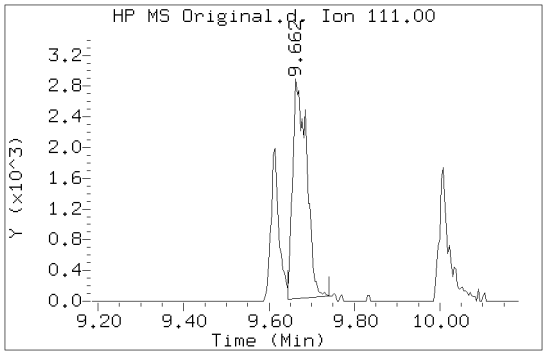
AFTER

MASS
146
AREA
5674
HEIGHT
5587
27-Dec-2022
16:07
linh
pham



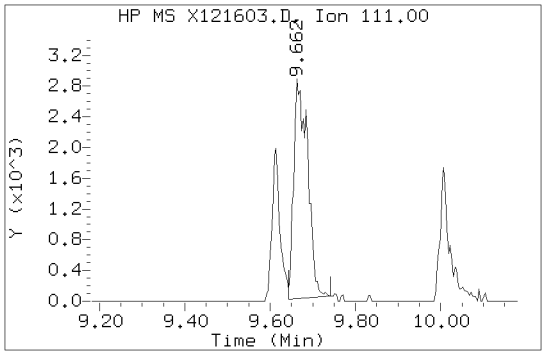
BEFORE

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:03
linh
pham



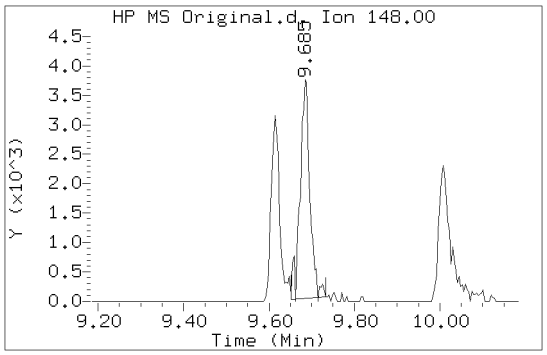
AFTER

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:07
linh
pham



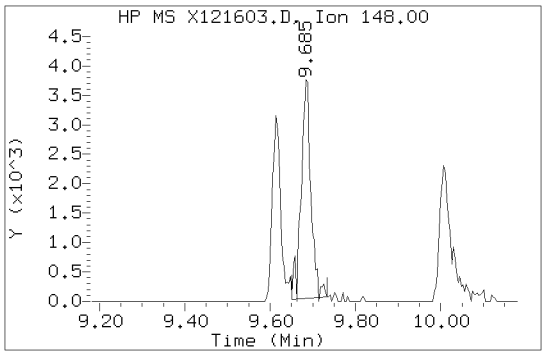
BEFORE

MASS
148
AREA
6083
HEIGHT
3714
27-Dec-2022
16:03
linh
pham



AFTER

MASS
148
AREA
6083
HEIGHT
3714
27-Dec-2022
16:07
linh
pham



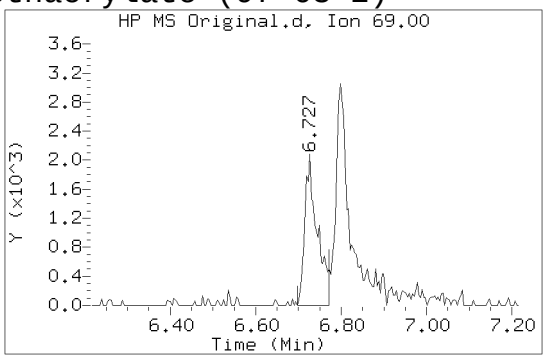
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

Reason Code:

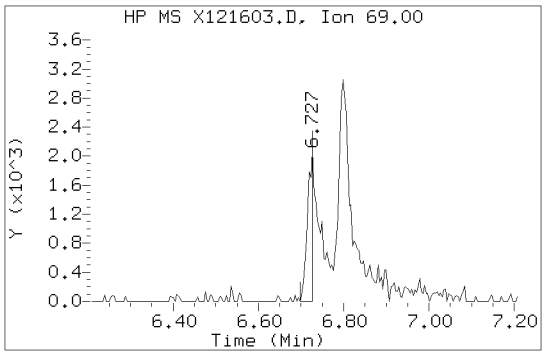
BEFORE

MASS
69
AREA
4283
HEIGHT
2083
27-Dec-2022
16:03
linh
pham



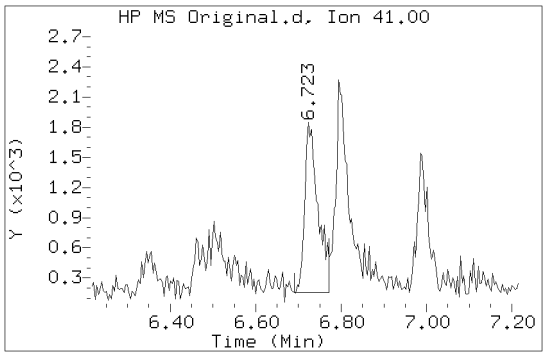
AFTER

MASS
69
AREA
1935
HEIGHT
2083
27-Dec-2022
16:07
linh
pham



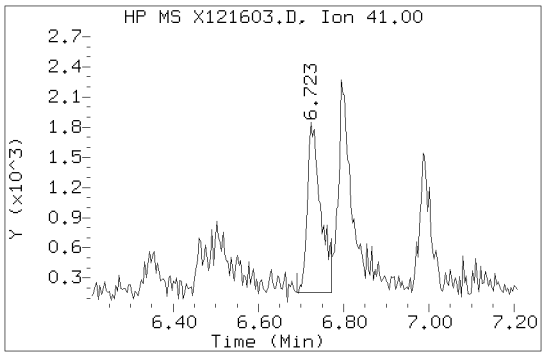
BEFORE

MASS
41
AREA
3701
HEIGHT
1688
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
3701
HEIGHT
1688
27-Dec-2022
16:07
linh
pham

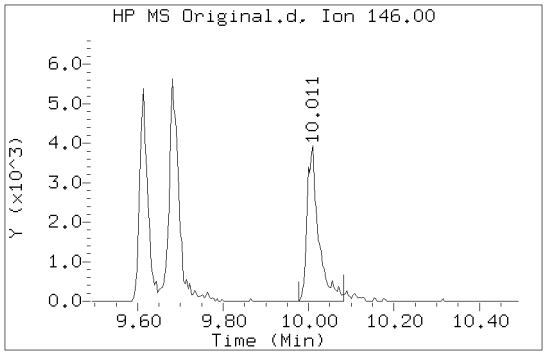


1,2-Dichlorobenzene (95-50-1)

Reason Code:

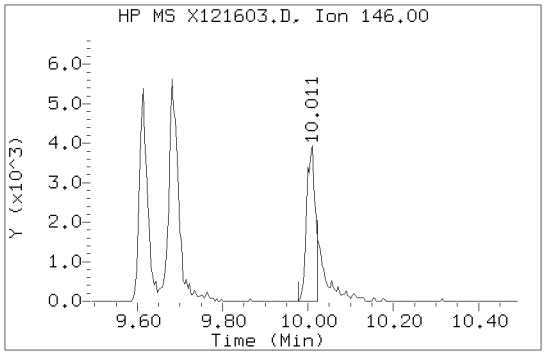
BEFORE

MASS
146
AREA
7400
HEIGHT
3934
27-Dec-2022
16:03
linh
pham



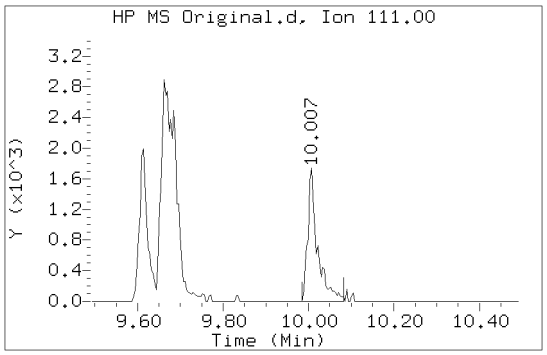
AFTER

MASS
146
AREA
5504
HEIGHT
3934
27-Dec-2022
16:07
linh
pham



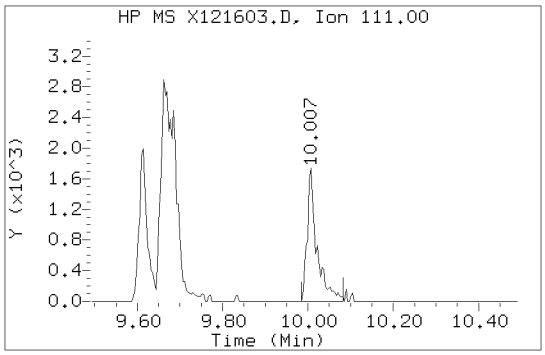
BEFORE

MASS
111
AREA
2768
HEIGHT
1741
27-Dec-2022
16:03
linh
pham



AFTER

MASS
111
AREA
2768
HEIGHT
1741
27-Dec-2022
16:07
linh
pham



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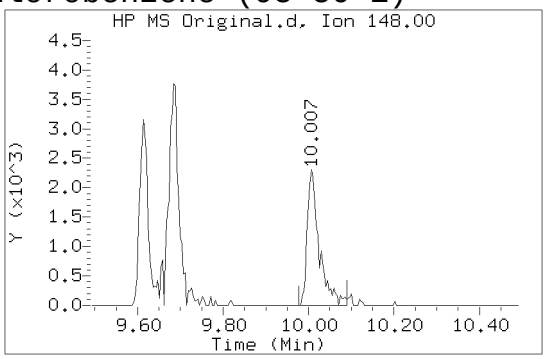
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

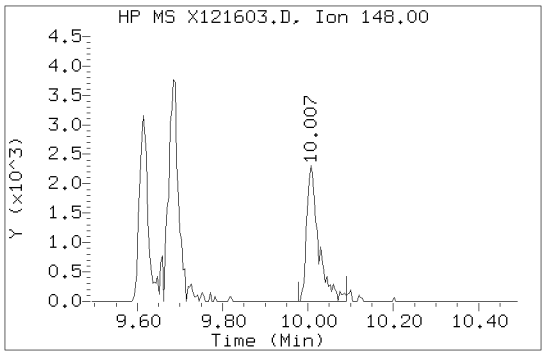
BEFORE

MASS
148
AREA
4515
HEIGHT
2306
27-Dec-2022
16:03
linh
pham



AFTER

MASS
148
AREA
4515
HEIGHT
2306
27-Dec-2022
16:07
linh
pham

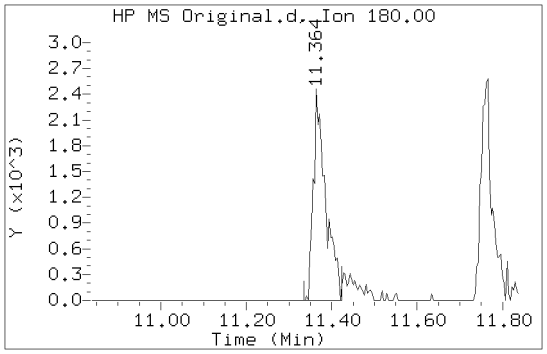


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

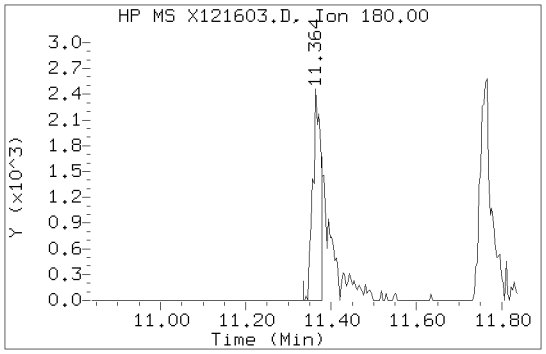
BEFORE

MASS
180
AREA
4912
HEIGHT
2459
27-Dec-2022
16:03
linh
pham



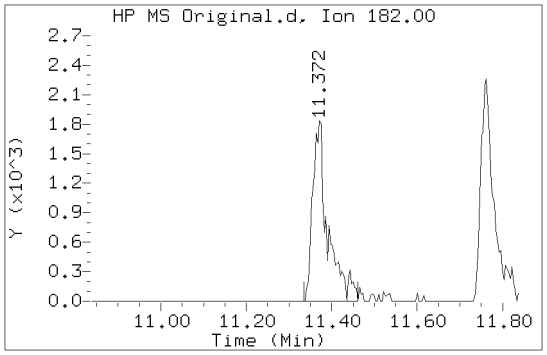
AFTER

MASS
180
AREA
3187
HEIGHT
2459
27-Dec-2022
16:07
linh
pham



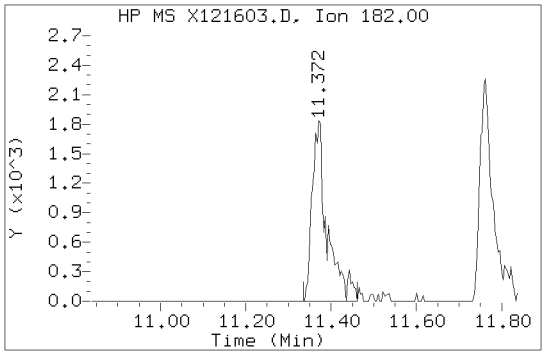
BEFORE

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:03
linh
pham



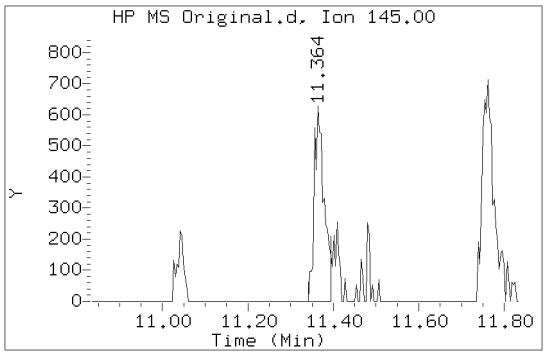
AFTER

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:07
linh
pham



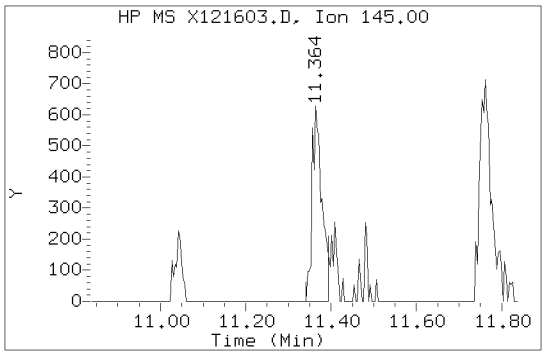
BEFORE

MASS
145
AREA
1003
HEIGHT
629
27-Dec-2022
16:03
linh
pham



AFTER

MASS
145
AREA
1003
HEIGHT
629
27-Dec-2022
16:07
linh
pham



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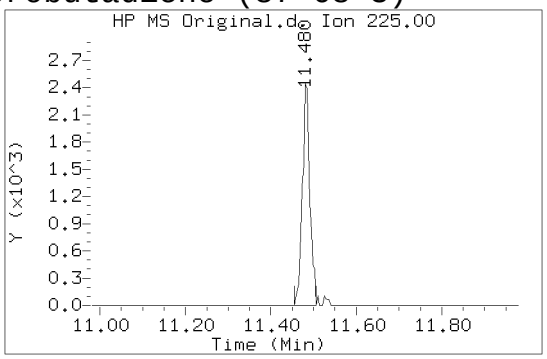
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

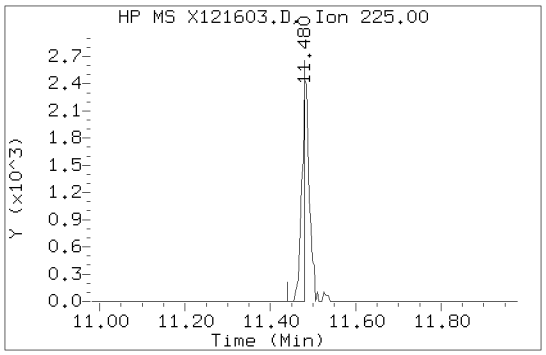
Hexachlorobutadiene (87-68-3)

Reason Code:

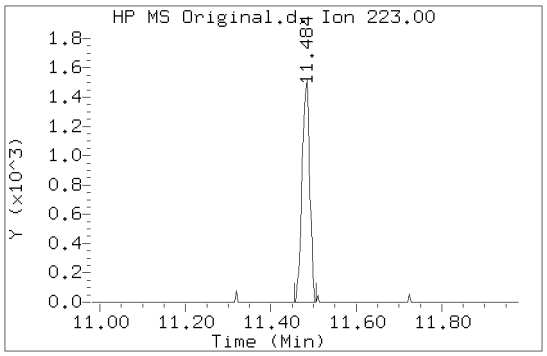
BEFORE
MASS
225
AREA
3038
HEIGHT
2444
27-Dec-2022
16:03
linh
pham



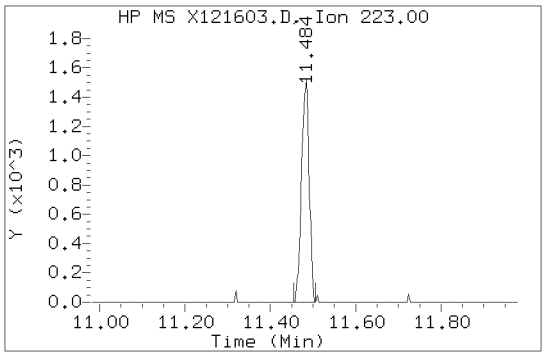
AFTER
MASS
225
AREA
1477
HEIGHT
2444
27-Dec-2022
16:07
linh
pham



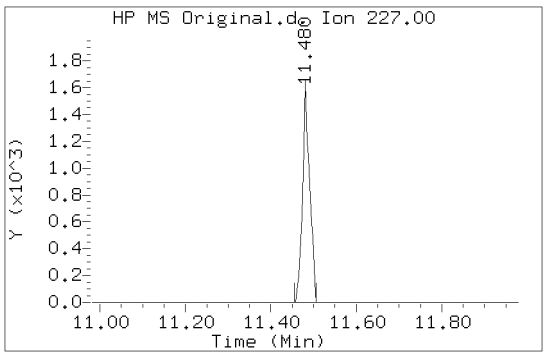
BEFORE
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:03
linh
pham



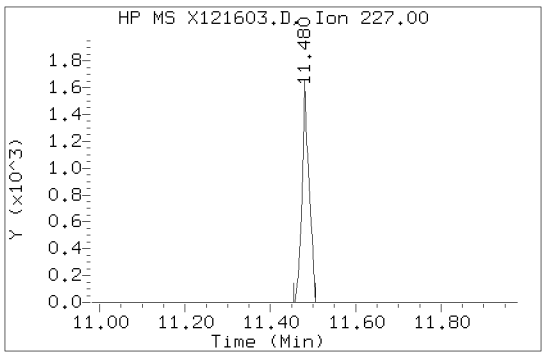
AFTER
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:03
linh
pham



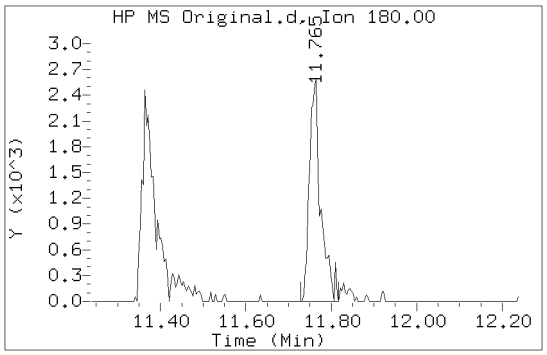
AFTER
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:07
linh
pham



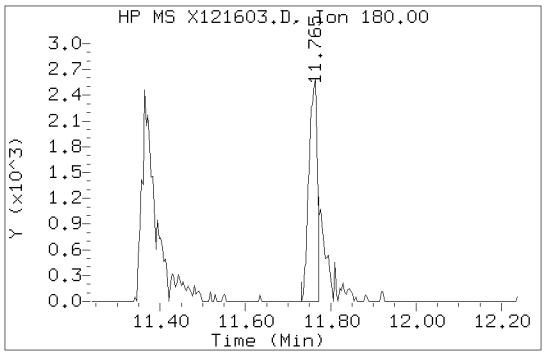
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
180
AREA
4741
HEIGHT
2580
27-Dec-2022
16:03
linh
pham



AFTER
MASS
180
AREA
3572
HEIGHT
2580
27-Dec-2022
16:07
linh
pham



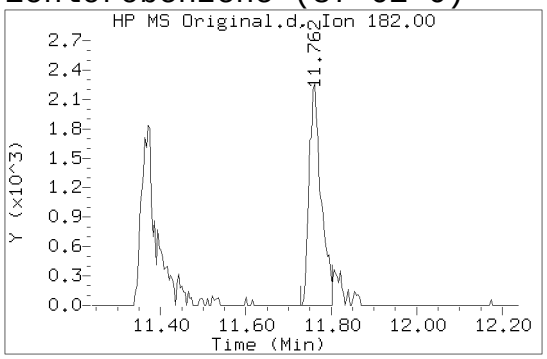
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

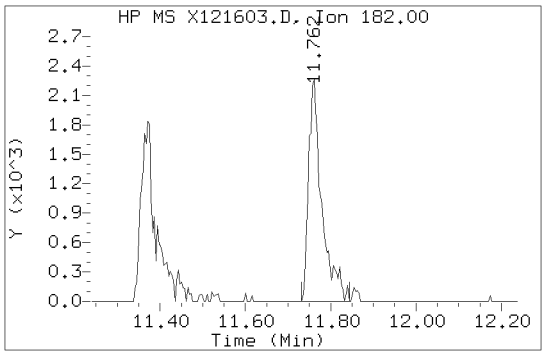
BEFORE

MASS
182
AREA
4404
HEIGHT
2261
27-Dec-2022
16:03
linh
pham



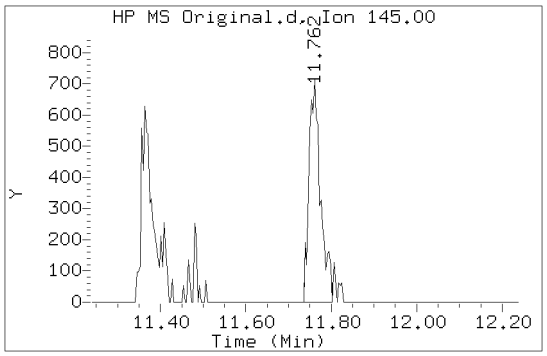
AFTER

MASS
182
AREA
4881
HEIGHT
2261
27-Dec-2022
16:07
linh
pham



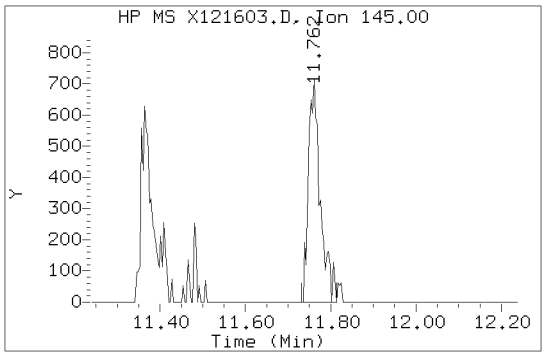
BEFORE

MASS
145
AREA
1338
HEIGHT
713
27-Dec-2022
16:03
linh
pham



AFTER

MASS
145
AREA
1384
HEIGHT
713
27-Dec-2022
16:07
linh
pham

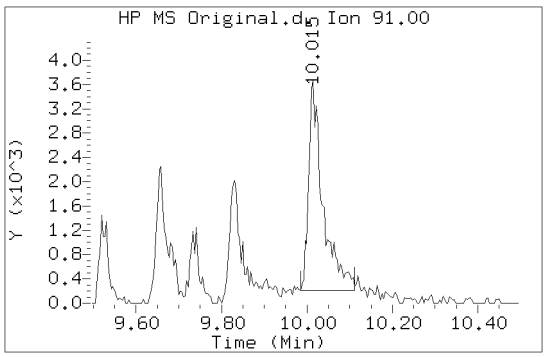


n-Butylbenzene (104-51-8)

Reason Code:

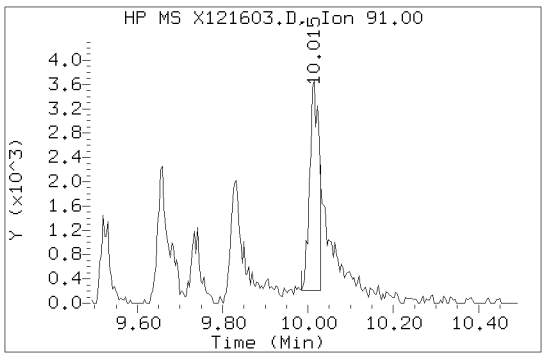
BEFORE

MASS
91
AREA
8005
HEIGHT
3451
27-Dec-2022
16:03
linh
pham



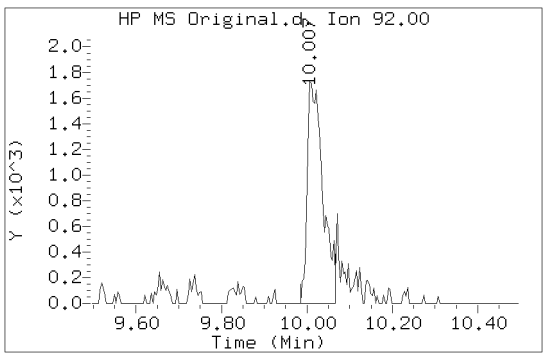
AFTER

MASS
91
AREA
5149
HEIGHT
3451
27-Dec-2022
16:07
linh
pham



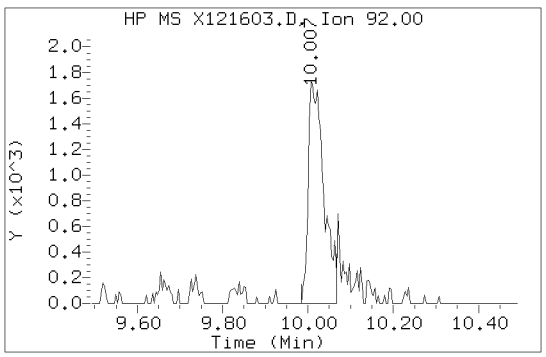
BEFORE

MASS
92
AREA
4404
HEIGHT
1727
27-Dec-2022
16:03
linh
pham



AFTER

MASS
92
AREA
4404
HEIGHT
1727
27-Dec-2022
16:07
linh
pham



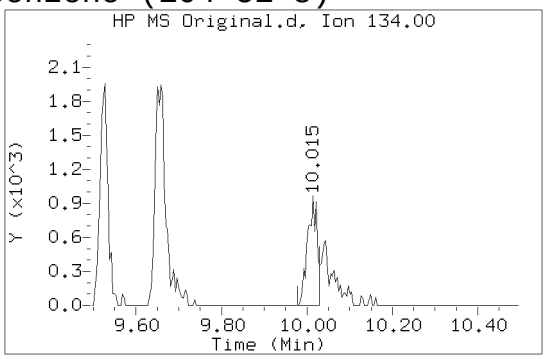
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

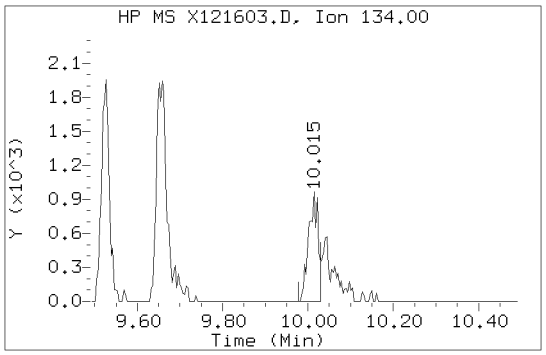
BEFORE

MASS
134
AREA
1502
HEIGHT
969
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
1502
HEIGHT
969
27-Dec-2022
16:07
linh
pham

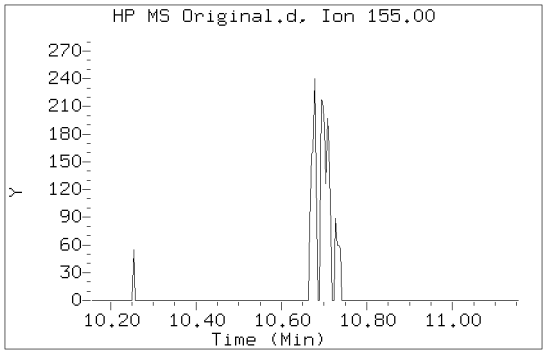


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

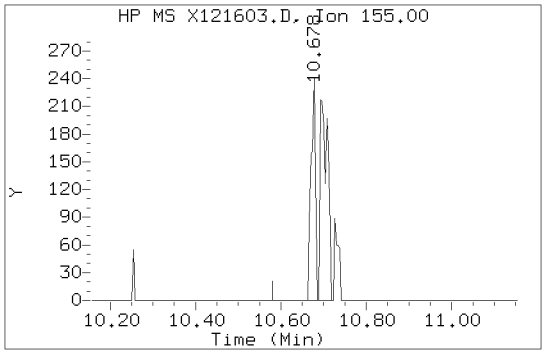
BEFORE

MASS
155
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



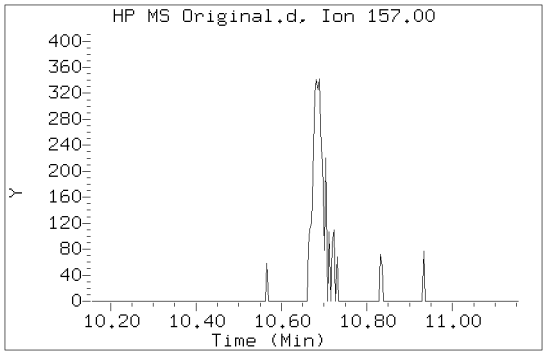
AFTER

MASS
155
AREA
441
HEIGHT
240
27-Dec-2022
16:07
linh
pham



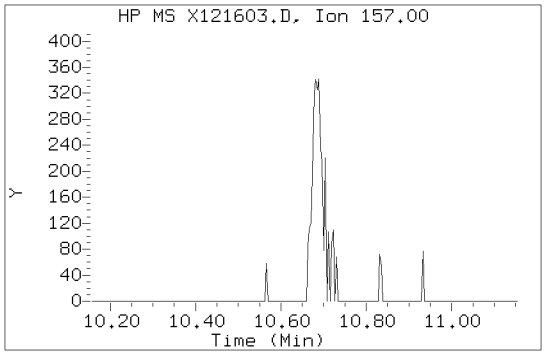
BEFORE

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



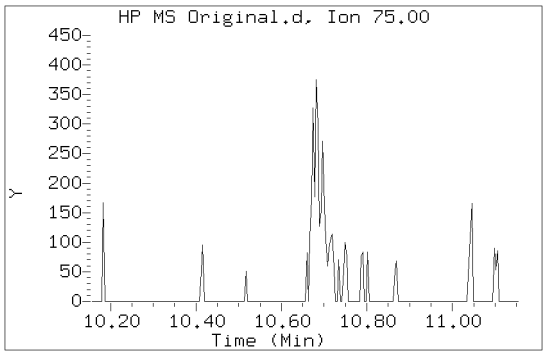
AFTER

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



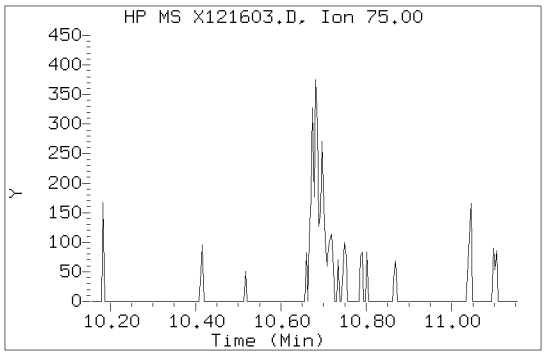
BEFORE

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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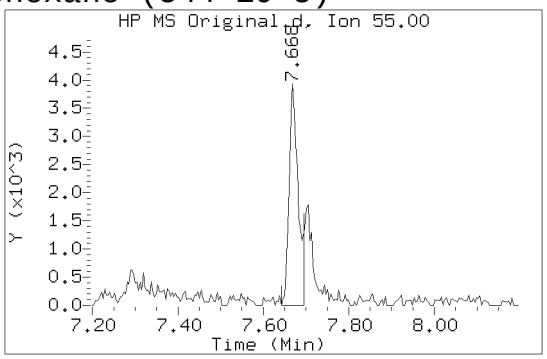
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

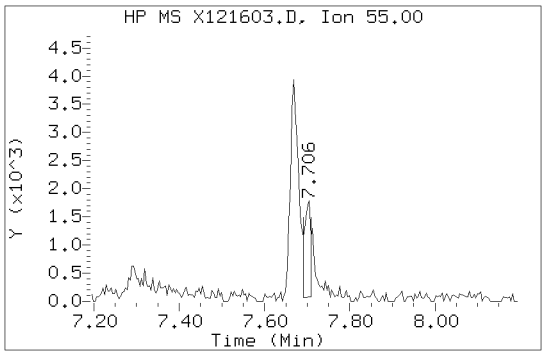
1-Chlorohexane (544-10-5)

Reason Code:

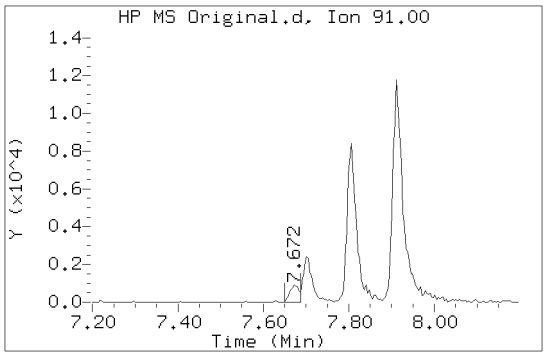
BEFORE
MASS
55
AREA
5785
HEIGHT
3936
27-Dec-2022
16:03
linh
pham



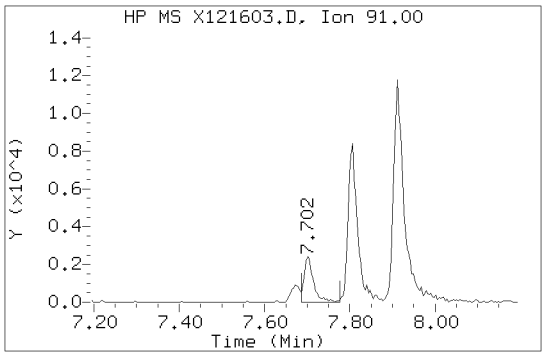
AFTER
MASS
55
AREA
1829
HEIGHT
1707
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
91
AREA
1355
HEIGHT
933
27-Dec-2022
16:03
linh
pham



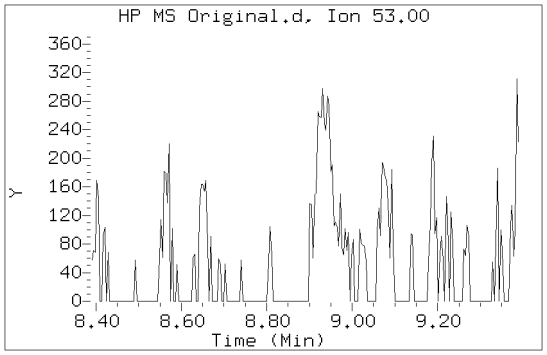
AFTER
MASS
91
AREA
3802
HEIGHT
2430
27-Dec-2022
16:07
linh
pham



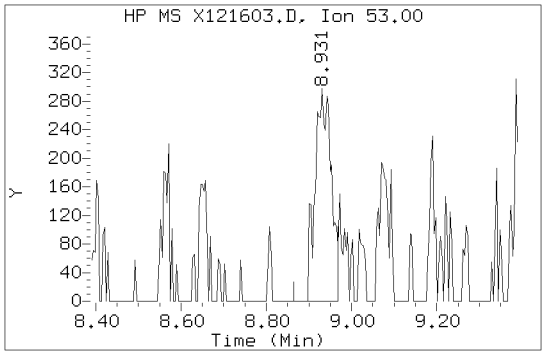
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

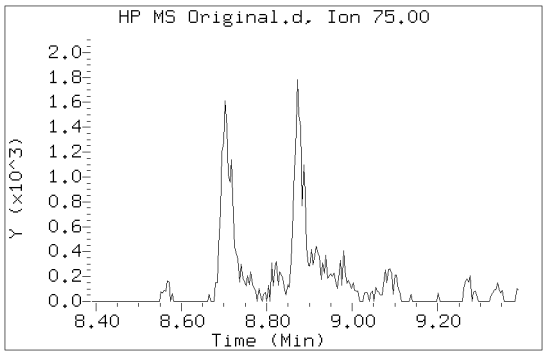
BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



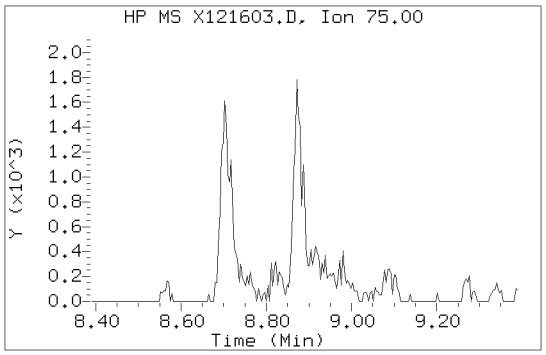
AFTER
MASS
53
AREA
792
HEIGHT
298
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

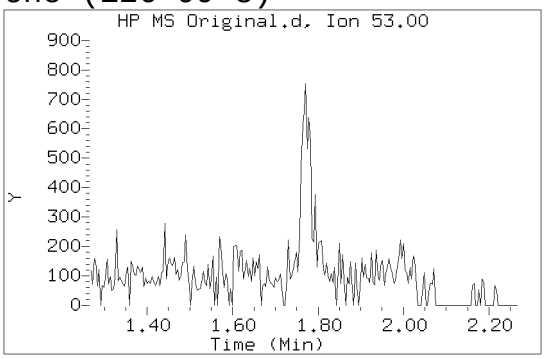


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

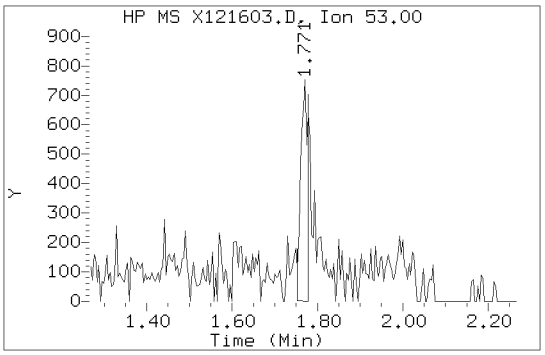
Chloroprene (126-99-8)

Reason Code:

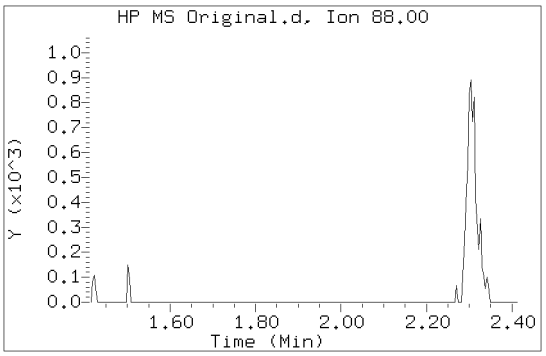
BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



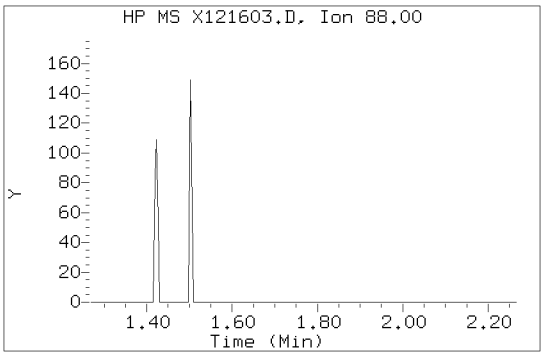
AFTER
MASS
53
AREA
900
HEIGHT
751
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



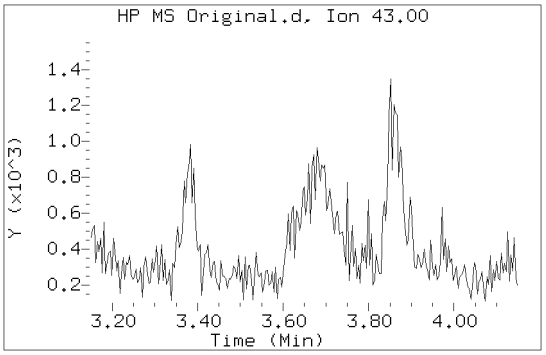
AFTER
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



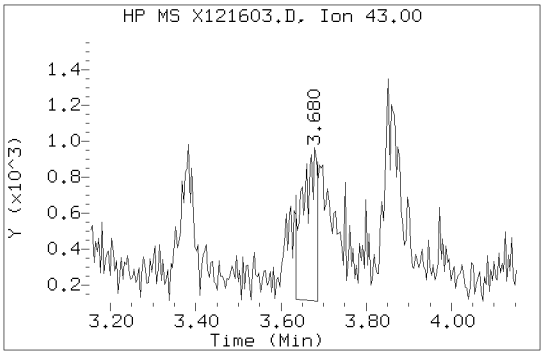
Ethyl Acetate (141-78-6)

Reason Code:

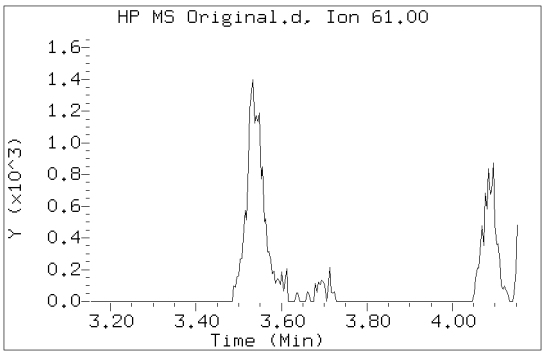
BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



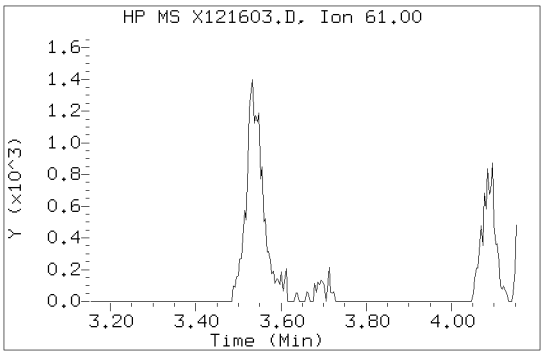
AFTER
MASS
43
AREA
2065
HEIGHT
853
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

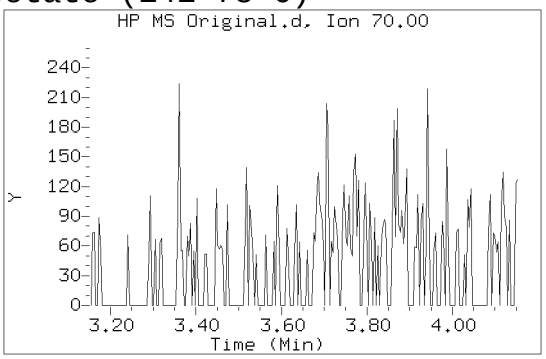


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Acetate (141-78-6)

BEFORE

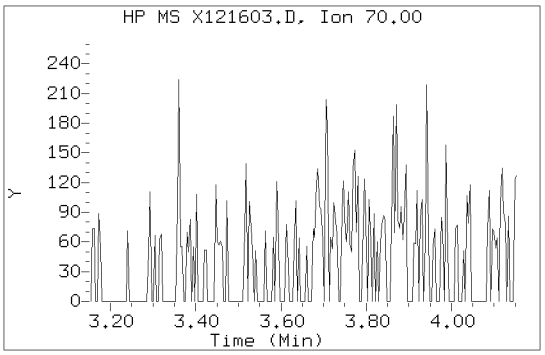
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

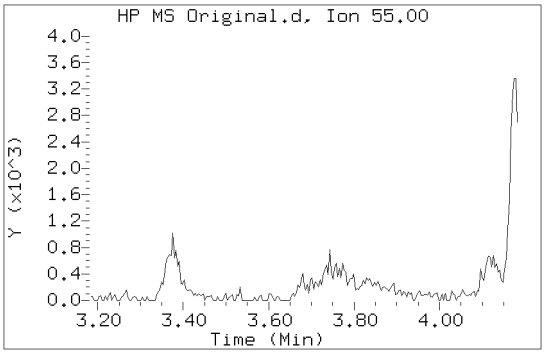
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Methyl Acrylate (96-33-3)

BEFORE

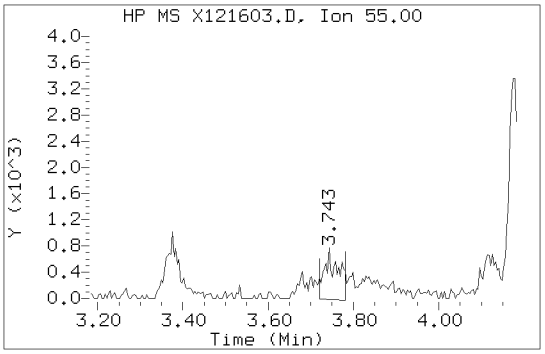
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

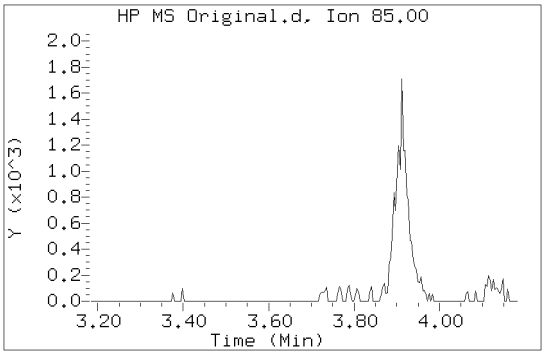
AFTER

MASS
55
AREA
1765
HEIGHT
787
27-Dec-2022
16:07
linh
pham



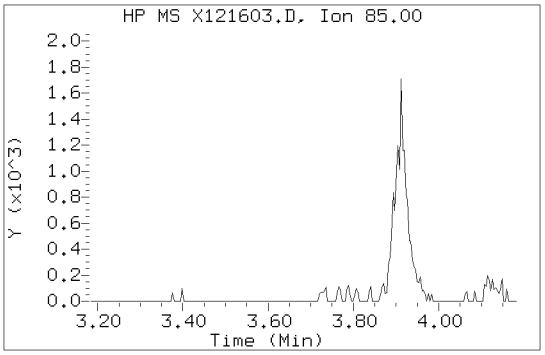
BEFORE

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

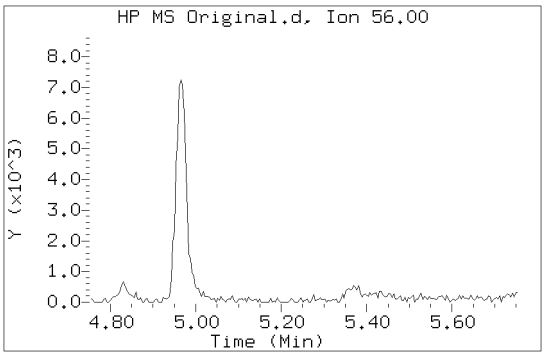
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



n-Butanol (71-36-3)

BEFORE

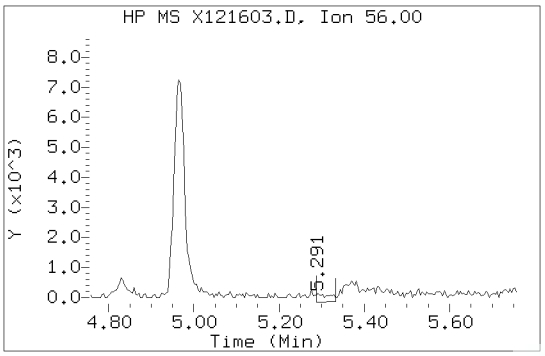
MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
56
AREA
622
HEIGHT
300
27-Dec-2022
16:07
linh
pham



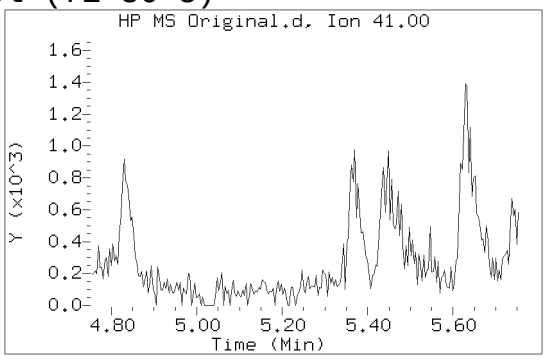
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butanol (71-36-3)

Reason Code:

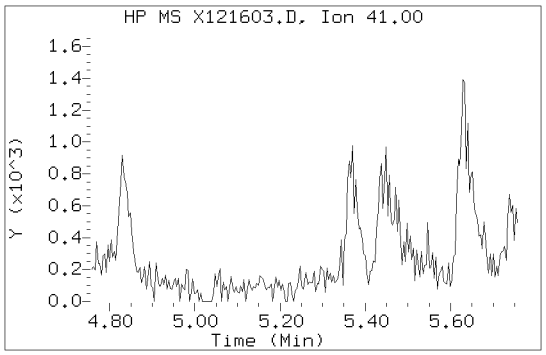
BEFORE

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

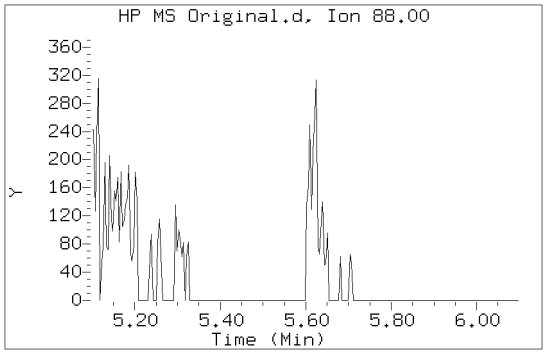


1,4-Dioxane ()

Reason Code:

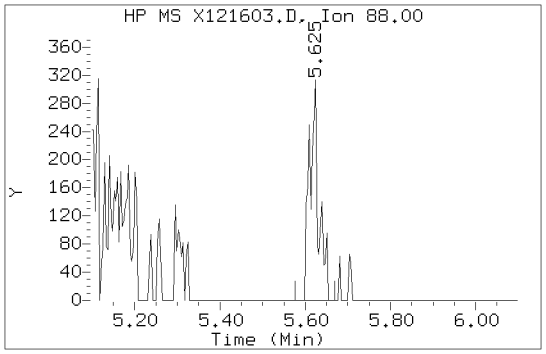
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



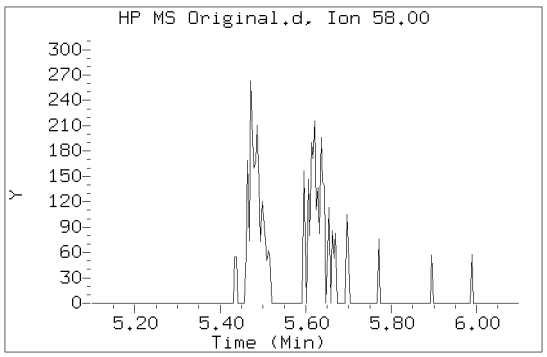
AFTER

MASS
88
AREA
462
HEIGHT
313
27-Dec-2022
16:07
linh
pham



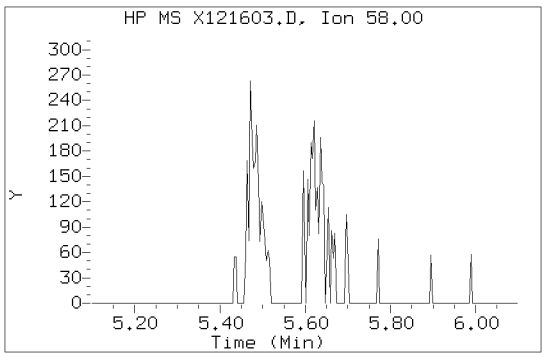
BEFORE

MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

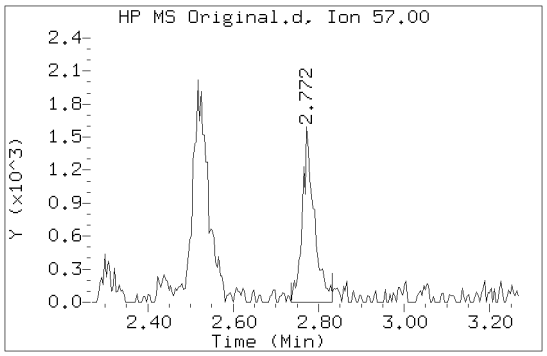


n-Hexane (110-54-3)

Reason Code:

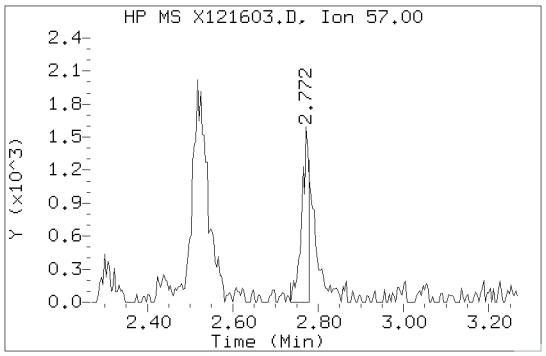
BEFORE

MASS
57
AREA
3089
HEIGHT
1591
27-Dec-2022
16:03
linh
pham



AFTER

MASS
57
AREA
1909
HEIGHT
1591
27-Dec-2022
16:07
linh
pham



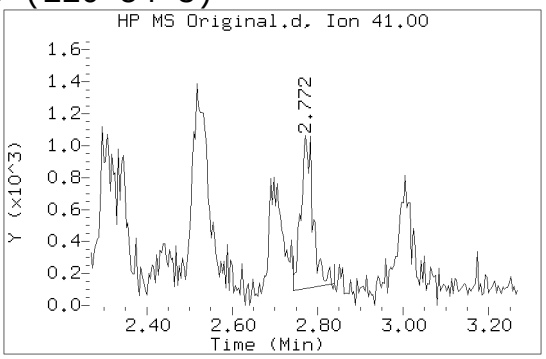
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Hexane (110-54-3)

Reason Code:

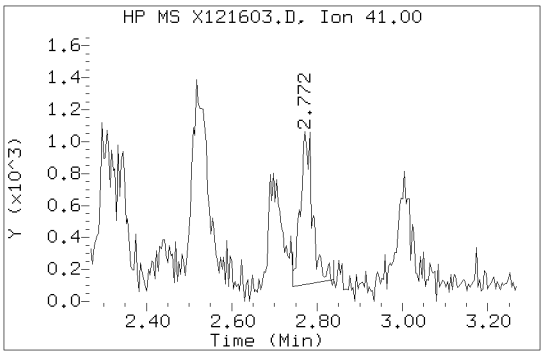
BEFORE

MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:03
linh
pham



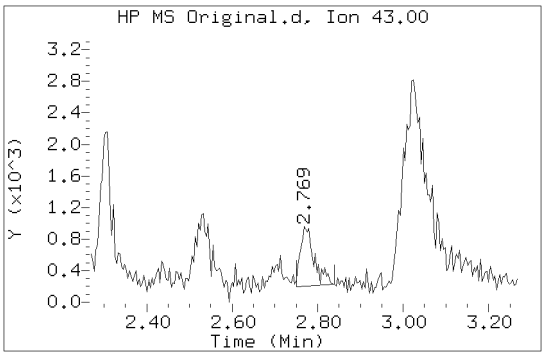
AFTER

MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:07
linh
pham



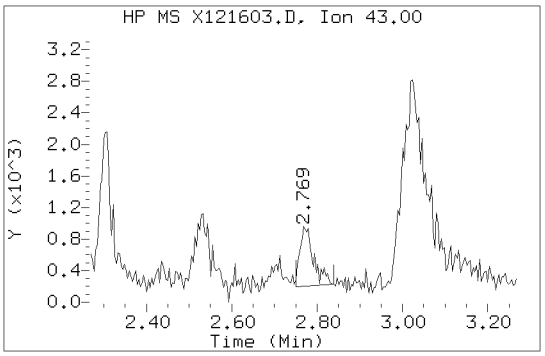
BEFORE

MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:07
linh
pham

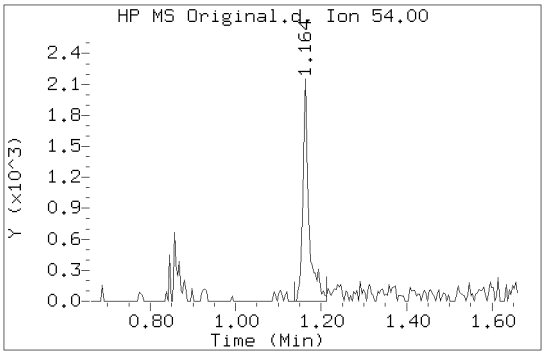


1,3-Butadiene (106-99-0)

Reason Code:

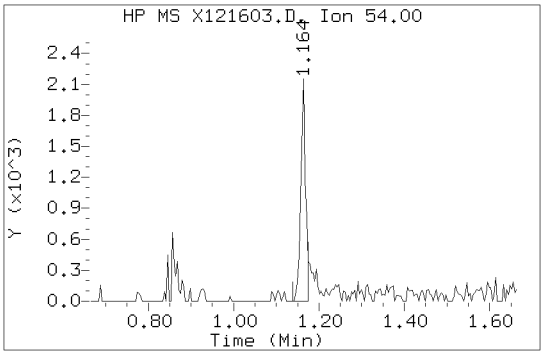
BEFORE

MASS
54
AREA
2206
HEIGHT
2153
27-Dec-2022
16:03
linh
pham



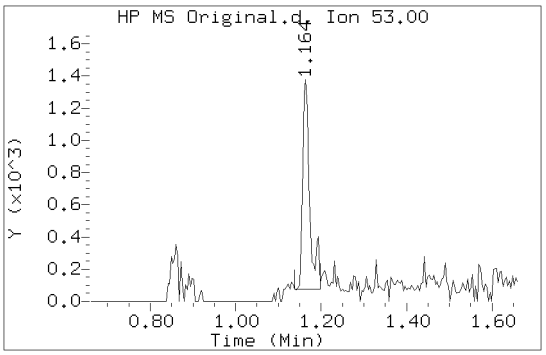
AFTER

MASS
54
AREA
1793
HEIGHT
2153
27-Dec-2022
16:07
linh
pham



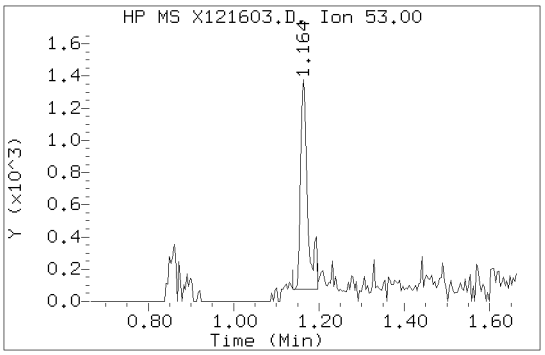
BEFORE

MASS
53
AREA
1535
HEIGHT
1301
27-Dec-2022
16:03
linh
pham



AFTER

MASS
53
AREA
1535
HEIGHT
1301
27-Dec-2022
16:07
linh
pham

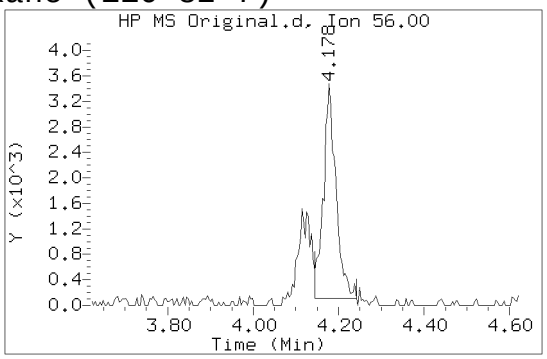


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

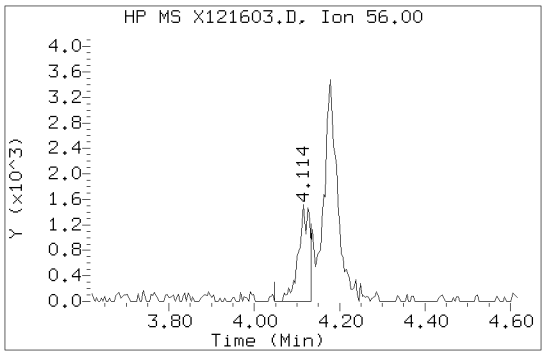
Cyclohexane (110-82-7)

Reason Code:

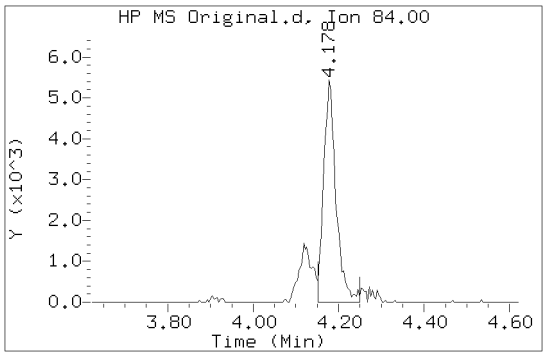
BEFORE
MASS
56
AREA
6884
HEIGHT
3363
27-Dec-2022
16:03
linh
pham



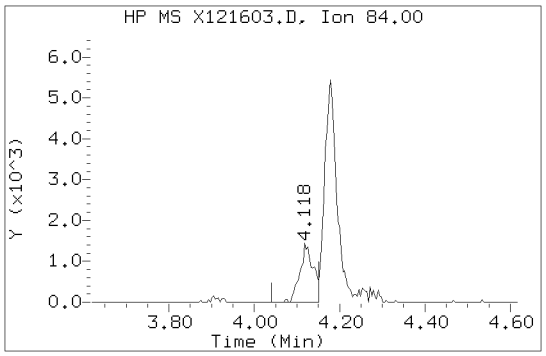
AFTER
MASS
56
AREA
2803
HEIGHT
1514
27-Dec-2022
16:07
linh
pham



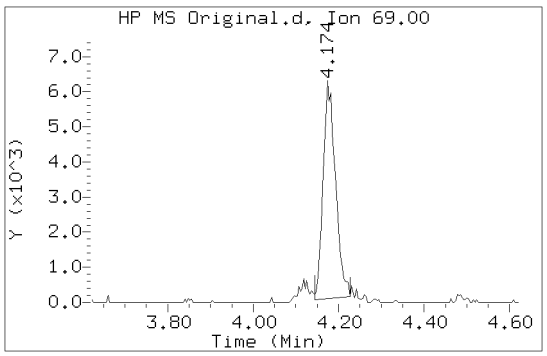
BEFORE
MASS
84
AREA
10951
HEIGHT
5440
27-Dec-2022
16:03
linh
pham



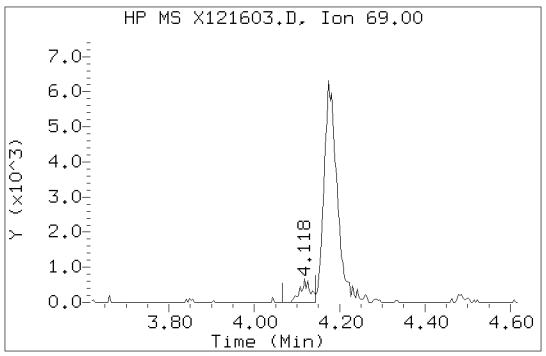
AFTER
MASS
84
AREA
3197
HEIGHT
1443
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
69
AREA
12449
HEIGHT
6206
27-Dec-2022
16:03
linh
pham



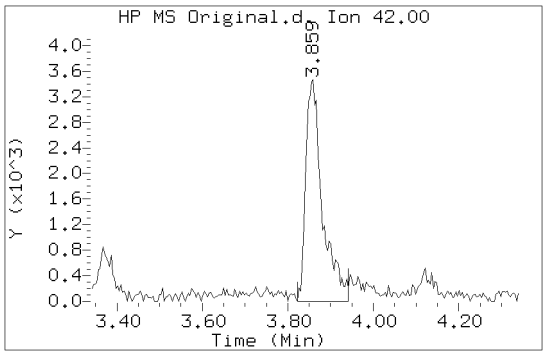
AFTER
MASS
69
AREA
1108
HEIGHT
681
27-Dec-2022
16:07
linh
pham



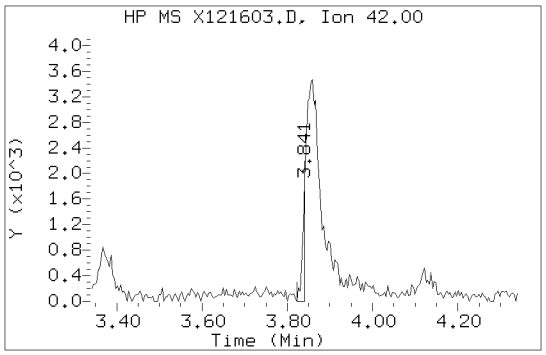
Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE
MASS
42
AREA
9468
HEIGHT
3467
27-Dec-2022
16:03
linh
pham



AFTER
MASS
42
AREA
900
HEIGHT
1891
27-Dec-2022
16:07
linh
pham



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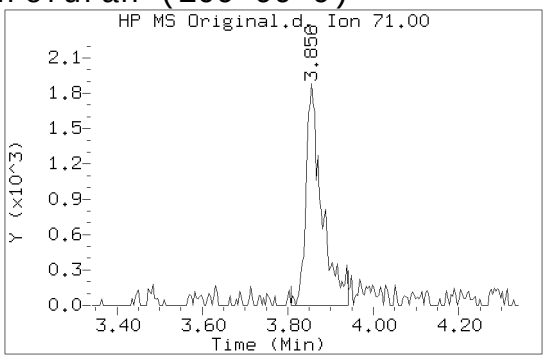
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrahydrofuran (109-99-9)

BEFORE

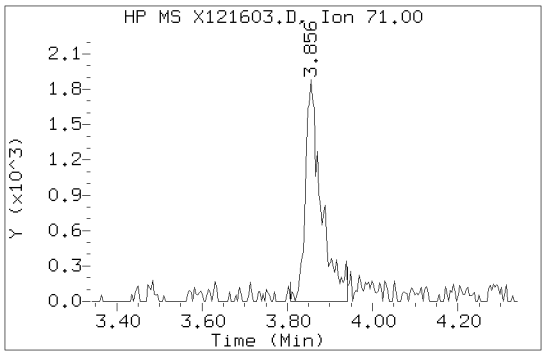
MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

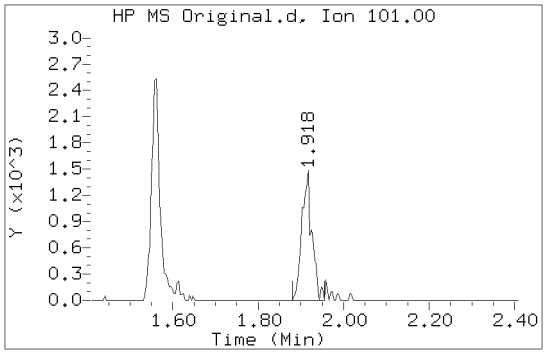
MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:07
linh
pham



Freon TF (76-13-1)

BEFORE

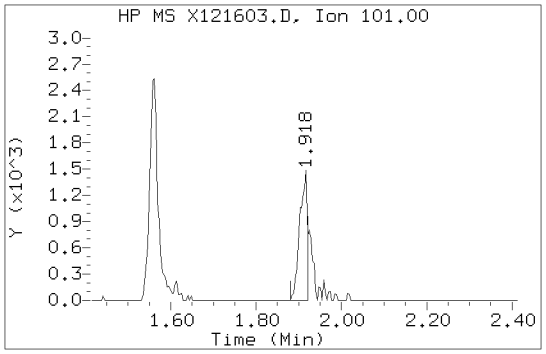
MASS
101
AREA
2478
HEIGHT
1484
27-Dec-2022
16:03
linh
pham



Reason Code:

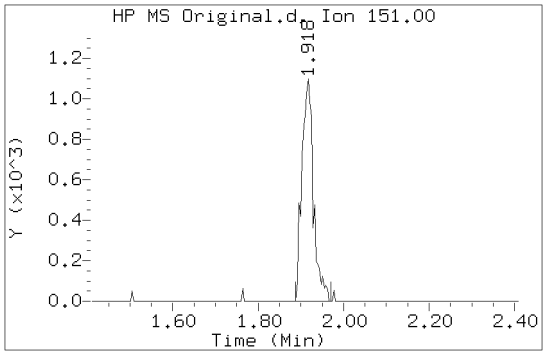
AFTER

MASS
101
AREA
1851
HEIGHT
1484
27-Dec-2022
16:07
linh
pham



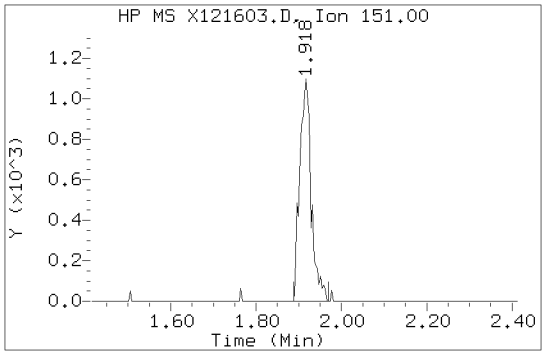
BEFORE

MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:03
linh
pham



AFTER

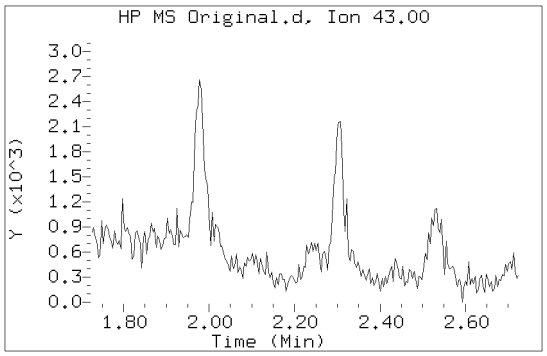
MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:07
linh
pham



Methyl Acetate (79-20-9)

BEFORE

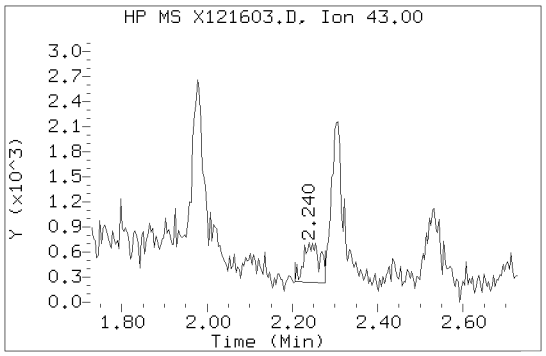
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
43
AREA
1269
HEIGHT
477
27-Dec-2022
16:07
linh
pham



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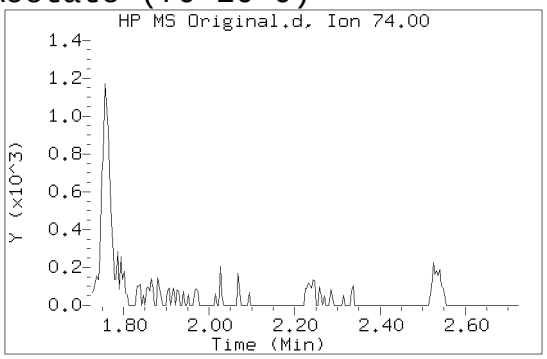
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Acetate (79-20-9)

BEFORE

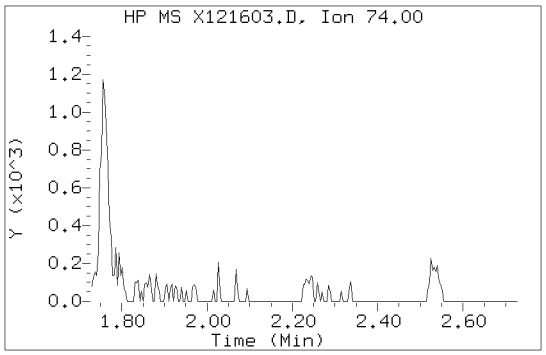
MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

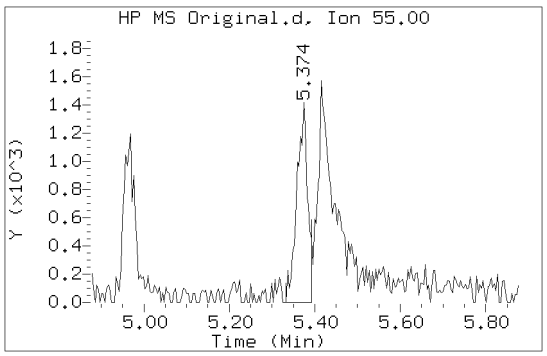
MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Methylcyclohexane (108-87-2)

BEFORE

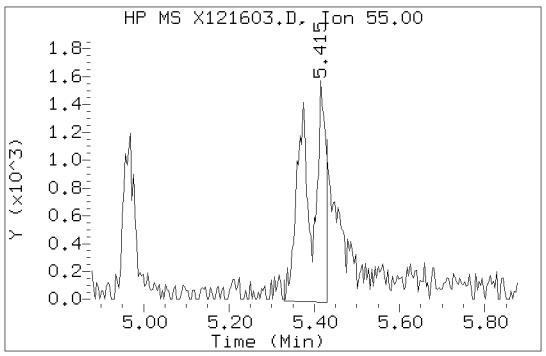
MASS
55
AREA
2505
HEIGHT
1416
27-Dec-2022
16:03
linh
pham



Reason Code:

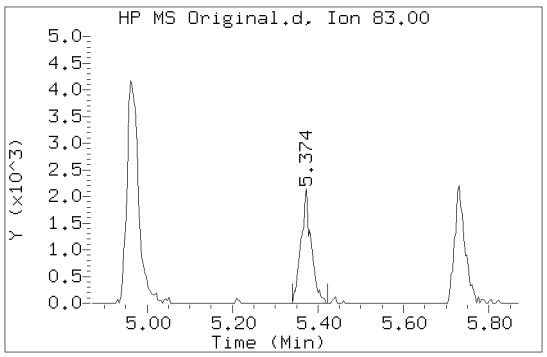
AFTER

MASS
55
AREA
4781
HEIGHT
1590
27-Dec-2022
16:07
linh
pham



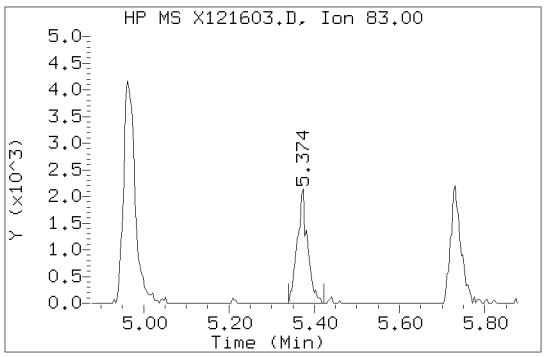
BEFORE

MASS
83
AREA
3627
HEIGHT
2141
27-Dec-2022
16:03
linh
pham



AFTER

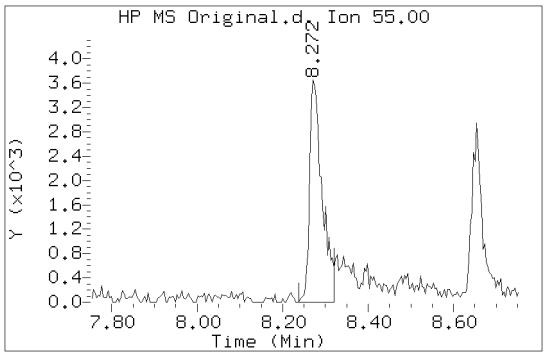
MASS
83
AREA
3627
HEIGHT
2141
27-Dec-2022
16:07
linh
pham



Butyl acrylate (141-32-2)

BEFORE

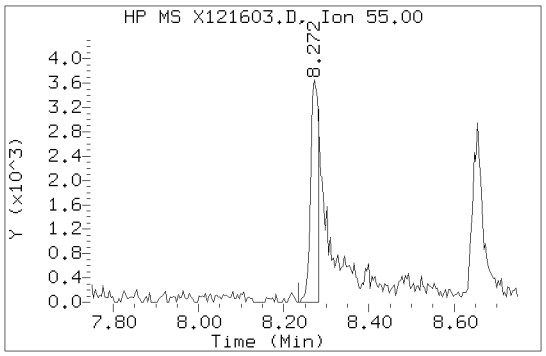
MASS
55
AREA
7480
HEIGHT
3653
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
55
AREA
4718
HEIGHT
3653
27-Dec-2022
16:07
linh
pham



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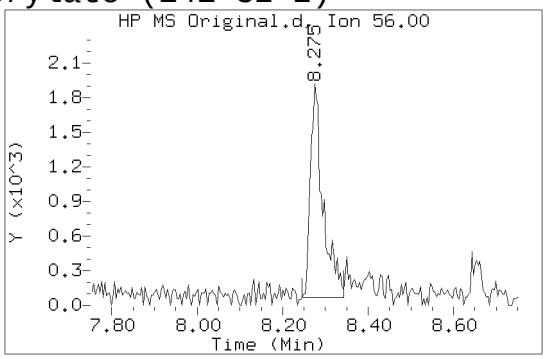
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl acrylate (141-32-2)

Reason Code:

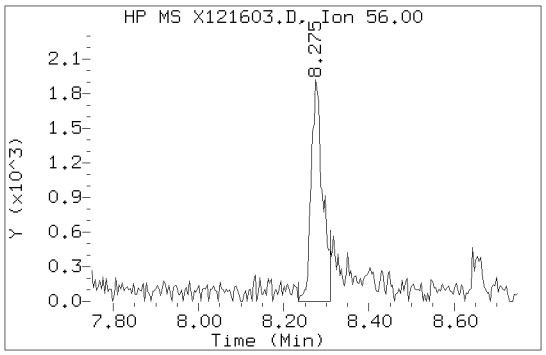
BEFORE

MASS
56
AREA
3795
HEIGHT
1858
27-Dec-2022
16:03
linh
pham



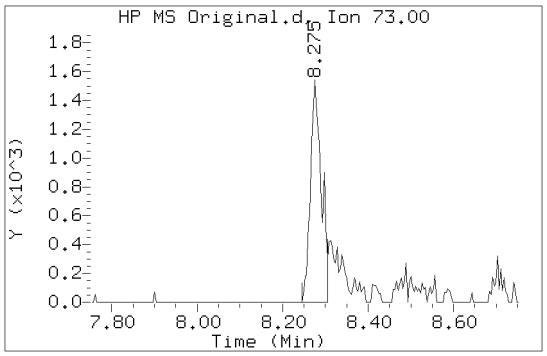
AFTER

MASS
56
AREA
3566
HEIGHT
1923
27-Dec-2022
16:07
linh
pham



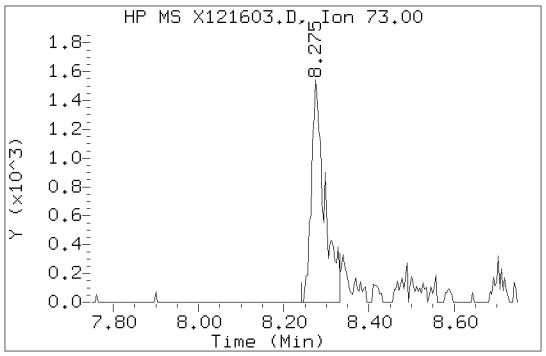
BEFORE

MASS
73
AREA
2742
HEIGHT
1542
27-Dec-2022
16:03
linh
pham



AFTER

MASS
73
AREA
3276
HEIGHT
1542
27-Dec-2022
16:07
linh
pham

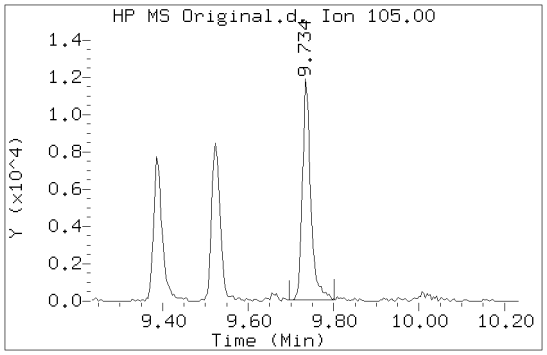


1,2,3-Trimethylbenzene (526-73-8)

Reason Code:

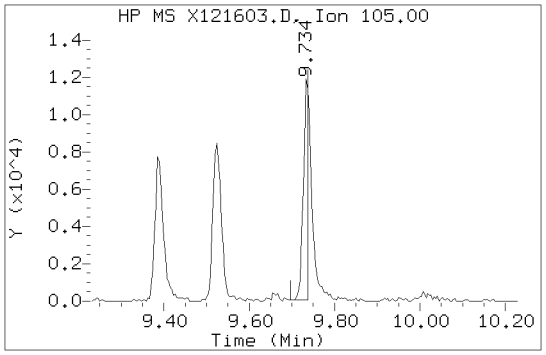
BEFORE

MASS
105
AREA
16642
HEIGHT
11860
27-Dec-2022
16:03
linh
pham



AFTER

MASS
105
AREA
9626
HEIGHT
11860
27-Dec-2022
16:07
linh
pham

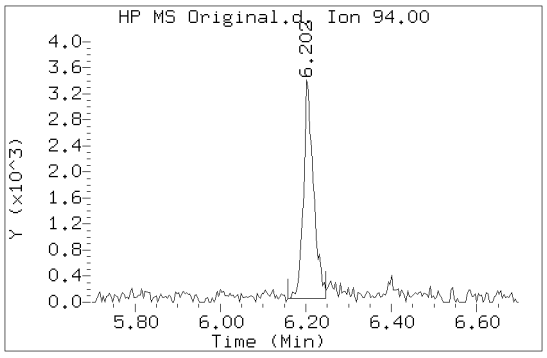


Dimethyl Disulfide (624-92-0)

Reason Code:

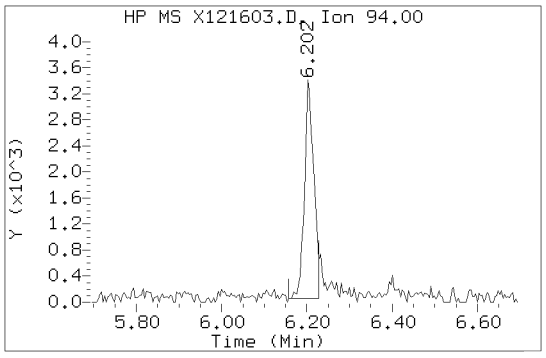
BEFORE

MASS
94
AREA
5523
HEIGHT
3352
27-Dec-2022
16:03
linh
pham



AFTER

MASS
94
AREA
5153
HEIGHT
3352
27-Dec-2022
16:07
linh
pham



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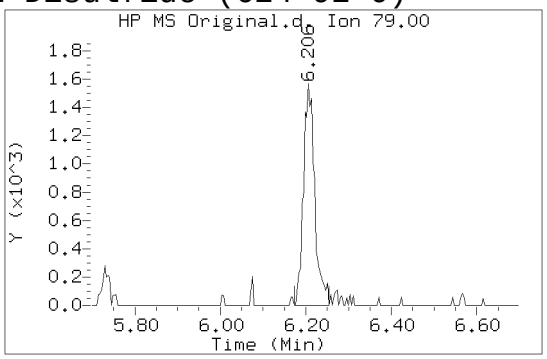
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

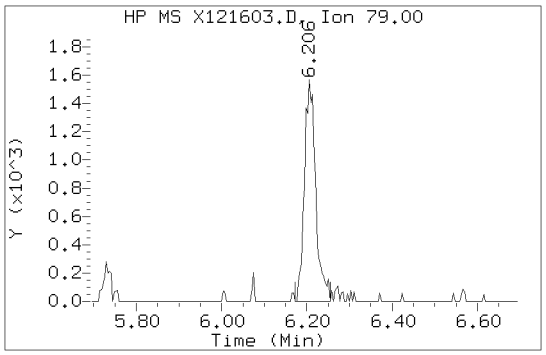
Dimethyl Disulfide (624-92-0)

Reason Code:

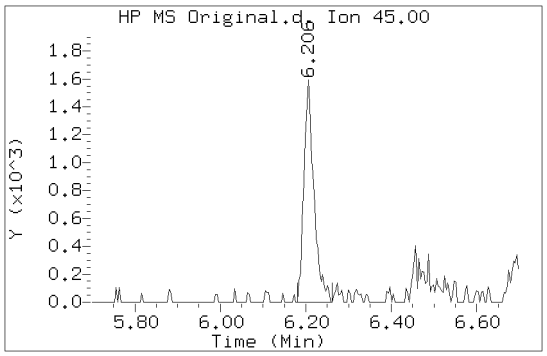
BEFORE
MASS
79
AREA
2905
HEIGHT
1568
27-Dec-2022
16:03
linh
pham



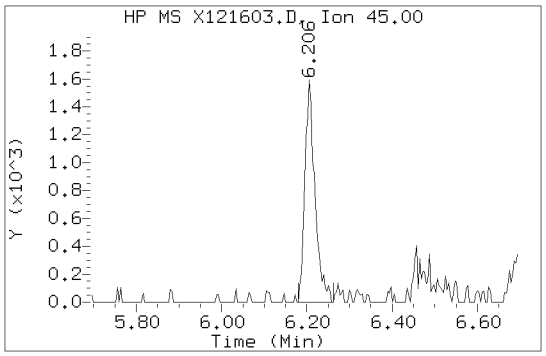
AFTER
MASS
79
AREA
2905
HEIGHT
1568
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
45
AREA
2647
HEIGHT
1593
27-Dec-2022
16:03
linh
pham



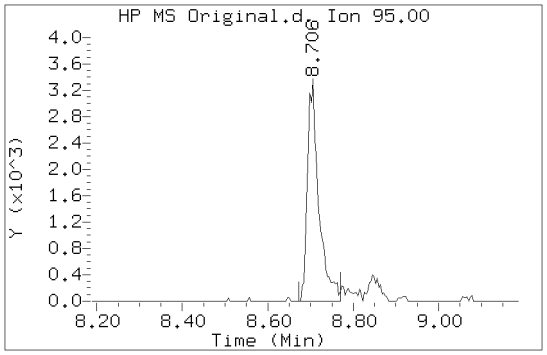
AFTER
MASS
45
AREA
2647
HEIGHT
1593
27-Dec-2022
16:07
linh
pham



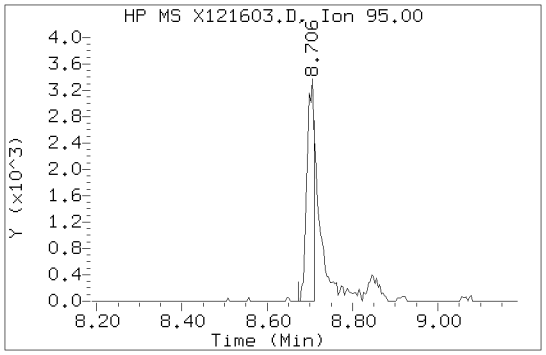
4-Bromofluorobenzene (460-00-4)

Reason Code:

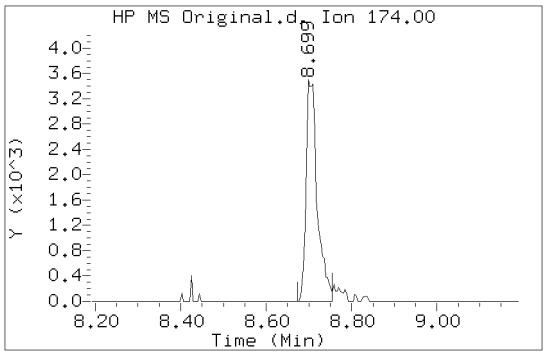
BEFORE
MASS
95
AREA
6240
HEIGHT
3372
27-Dec-2022
16:03
linh
pham



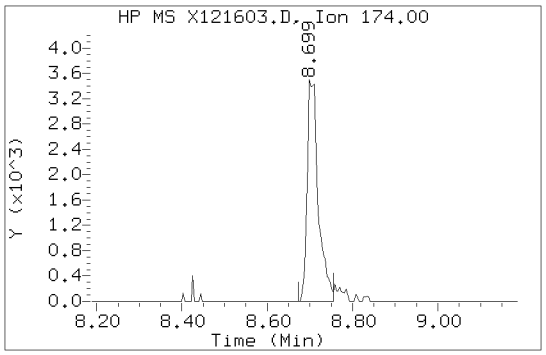
AFTER
MASS
95
AREA
3870
HEIGHT
3372
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
174
AREA
6370
HEIGHT
3502
27-Dec-2022
16:03
linh
pham



AFTER
MASS
174
AREA
6370
HEIGHT
3502
27-Dec-2022
16:07
linh
pham



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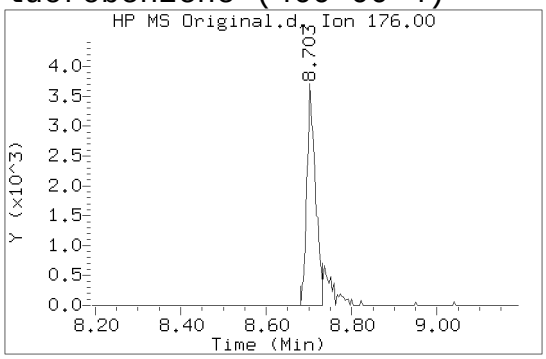
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

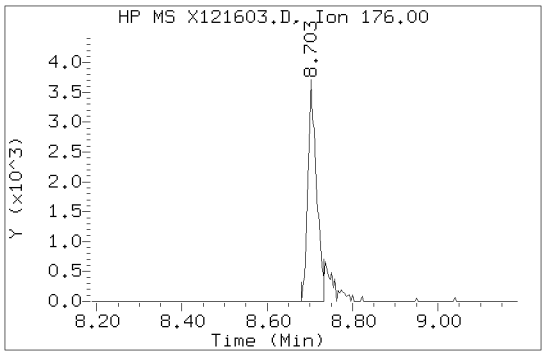
BEFORE

MASS
176
AREA
5204
HEIGHT
3711
27-Dec-2022
16:03
linh
pham



AFTER

MASS
176
AREA
5204
HEIGHT
3711
27-Dec-2022
16:07
linh
pham



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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
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Inj Date : 16-DEC-2022 12:41
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 12:20 Cal File: X121603.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	450308	50.0000	
135	1,4-Dioxane	88	5.610	5.610	(1.343)	820	20.0000	19.92(M)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	3432	1.00000	1.11
25	Methacrylonitrile	41	3.852	3.852	(0.922)	3285	1.00000	1.03(M)
12	Isobutyl Alcohol	43	4.695	4.695	(1.124)	9436	20.0000	18.62(M)
13	Acetonitrile	39	2.198	2.198	(0.526)	4183	10.0000	10.20
14	Allyl Chloride	41	2.202	2.202	(0.527)	8574	1.00000	1.09
4	Propionitrile	54	3.687	3.687	(0.882)	4742	10.0000	10.32(M)
136	n-Hexane	57	2.776	2.776	(0.664)	2343	1.00000	0.72
72	trans-1,4-Dichloro-2-butene	53	8.920	8.920	(1.163)	1196	1.00000	0.85(M)
194	Acetaldehyde	44	1.212	1.212	(0.290)	3384	4.00000	(M)
23	Chloroprene	53	1.767	1.767	(0.423)	1686	1.00000	1.10(M)
145	alpha-Methylstyrene	118	9.272	9.272	(0.960)	6032	1.00000	0.77
200	Dimethyl Disulfide	94	6.206	6.206	(0.809)	8295	1.00000	0.94
139	Diethyl ether	59	1.760	1.760	(0.421)	2983	1.00000	0.99
130	Ethyl Acetate	43	3.675	3.675	(0.880)	3144	1.00000	0.89(M)
40	Methyl Methacrylate	41	5.628	5.628	(1.347)	3145	1.00000	1.02
49	Ethyl Methacrylate	69	6.727	6.727	(1.355)	3303	1.00000	1.02(M)
132	n-Butanol	56	5.239	5.239	(1.254)	1171	20.0000	60.69(M)
142	Tetrahydrofuran	42	3.844	3.844	(0.920)	1361	2.00000	(M)

150	Allyl alcohol	57	2.776	2.776 (0.664)	2343	20.0000	13.39
166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	18347	1.00000	1.08

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D Page 2
Report Date: 27-Dec-2022 16:07

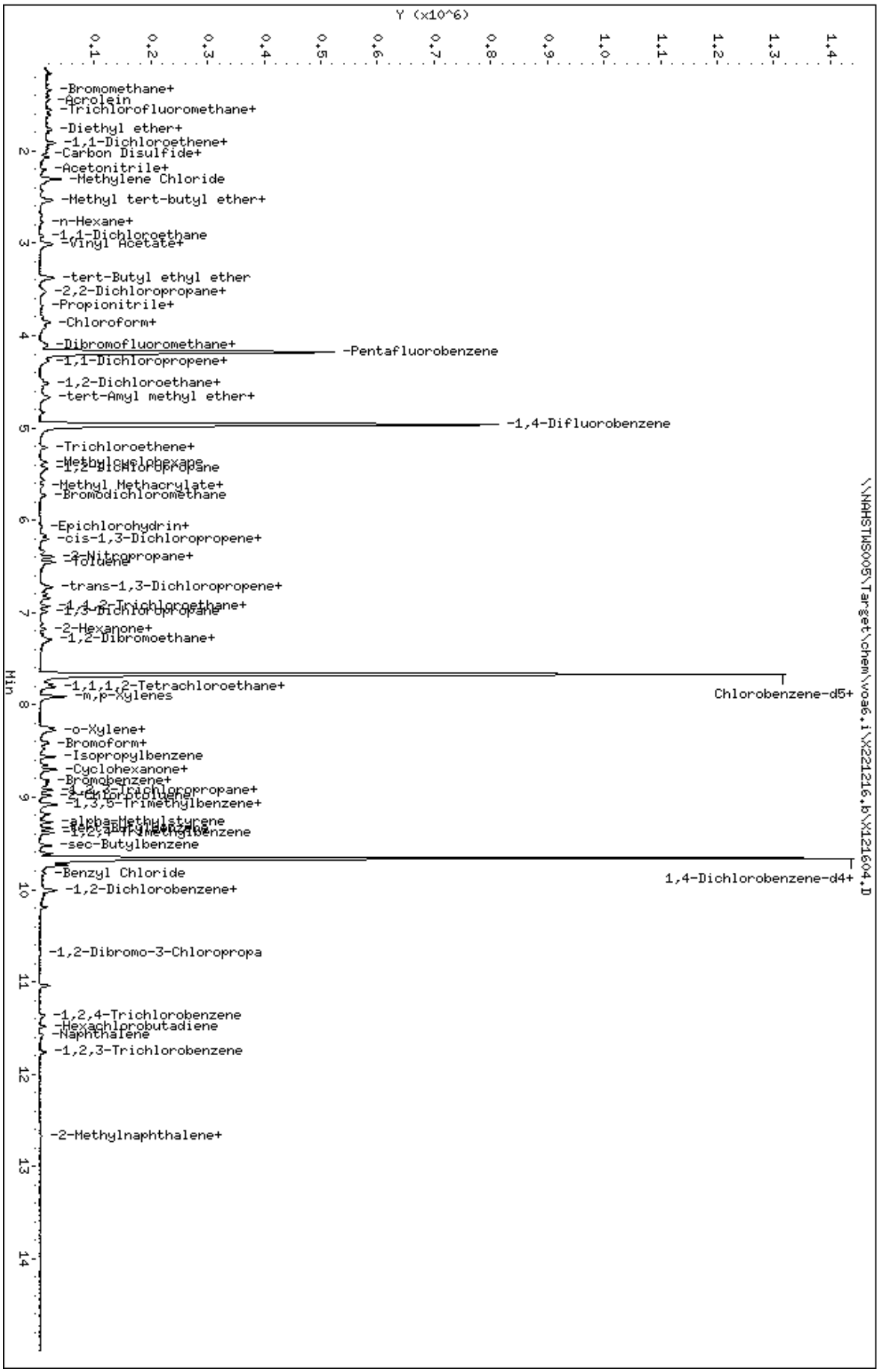
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.743	3.743	(0.896)	3084	1.00000	1.00(M)
	162	Butyl acrylate	55	8.271	8.271	(1.078)	7647	1.00000	0.90
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	2911	1.00000	1.30
	3	Chloromethane	50	1.078	1.078	(0.258)	3670	1.00000	3.07
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	3645	1.00000	0.92
	6	Bromomethane	94	1.340	1.340	(0.321)	3293	1.00000	2.83
	7	Chloroethane	64	1.400	1.400	(0.335)	2516	1.00000	0.91(M)
	8	Trichlorofluoromethane	101	1.554	1.554	(0.372)	4906	1.00000	0.89
	9	Acrolein	56	1.452	1.452	(0.348)	761	2.00000	5.22(M)
	10	Acetone	43	1.977	1.977	(0.473)	4787	2.00000	3.75(M)
	11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	3238	1.00000	0.94
	15	Iodomethane	142	2.026	2.026	(0.485)	3865	2.00000	4.18(TM)
	16	Acrylonitrile	53	2.554	2.554	(0.612)	2258	2.00000	1.94(M)
	17	Methylene Chloride	84	2.300	2.300	(0.550)	5355	1.00000	1.14(M)
	18	Methyl tert-butyl ether	73	2.536	2.536	(0.607)	12521	1.00000	1.11
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	18122	2.00000	2.02
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	3821	1.00000	0.99
	21	Vinyl Acetate	43	3.012	3.012	(0.721)	17842	2.00000	1.81
	22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	7218	1.00000	1.07
	24	2-Butanone	43	3.619	3.619	(0.866)	2498	2.00000	4.83(M)
	26	2,2-Dichloropropane	77	3.514	3.514	(0.841)	5896	1.00000	1.03
	27	cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	4469	1.00000	0.96
	28	Chloroform	83	3.908	3.908	(0.935)	7768	1.00000	1.03
	29	Bromochloromethane	128	3.803	3.803	(0.910)	2689	1.00000	1.05
$	30	Dibromofluoromethane	113	4.103	4.103	(0.982)	4769	1.00000	0.94
	31	1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	5914	1.00000	0.99
	32	1,1-Dichloropropene	75	4.286	4.286	(0.863)	4698	1.00000	0.96
	33	1,2-Dichloroethane	62	4.564	4.564	(0.919)	5568	1.00000	0.99
	34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	6221	1.00000	1.19
$	35	1,2-Dichloroethane-d4	65	4.485	4.485	(1.074)	5559	1.00000	1.48
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	685937	50.0000	
	37	Benzene	78	4.515	4.515	(0.909)	16367	1.00000	0.99
	38	Trichloroethene	130	5.216	5.216	(1.051)	4352	1.00000	0.93
	39	Bromodichloromethane	83	5.730	5.730	(1.154)	6296	1.00000	1.02(M)
	41	2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	3202	2.00000	1.83(M)
	42	1,2-Dichloropropane	63	5.445	5.445	(1.097)	4604	1.00000	1.05(M)
	44	Dibromomethane	93	5.557	5.557	(1.119)	2906	1.00000	0.98
	45	4-Methyl-2-Pentanone	43	6.341	6.341	(0.827)	6859	2.00000	1.97
	46	cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	6537	1.00000	0.90
*	47	Chlorobenzene-d5	117	7.671	7.671	(1.000)	649074	50.0000	
$	48	Toluene-d8	98	6.401	6.401	(0.834)	17067	1.00000	1.06
	50	Toluene	91	6.457	6.457	(0.842)	17914	1.00000	0.99
	51	trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	5418	1.00000	0.90
	52	2-Hexanone	43	7.109	7.109	(0.927)	4520	2.00000	1.91
	53	1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	3499	1.00000	0.97
	54	1,3-Dichloropropane	76	6.989	6.989	(0.911)	7216	1.00000	1.01
	55	Dibromochloromethane	129	7.177	7.177	(0.936)	5024	1.00000	0.96
	56	Tetrachloroethene	164	6.933	6.933	(0.904)	3331	1.00000	0.89
	57	1,2-Dibromoethane	107	7.270	7.270	(0.948)	4350	1.00000	0.96
	58	1-Chlorohexane	55	7.705	7.705	(1.552)	3155	1.00000	0.95(MH)
	59	Chlorobenzene	112	7.698	7.698	(1.003)	12555	1.00000	0.98
	60	1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	4485	1.00000	0.94

61 Ethylbenzene	106	7.806	7.806 (1.018)	5698	1.00000	0.95
62 m,p-Xylenes	106	7.911	7.911 (1.031)	14464	2.00000	1.87

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.249	8.249	(1.075)	6670	1.00000	0.87
	64 Styrene	104	8.282	8.282	(1.080)	10384	1.00000	0.81
	66 Bromoform	173	8.417	8.417	(1.097)	3274	1.00000	0.90(T)
	67 Isopropylbenzene	105	8.564	8.564	(1.116)	15163	1.00000	0.87
	68 1,1,2,2-Tetrachloroethane	83	8.845	8.845	(0.915)	5934	1.00000	1.05(M)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	7790	1.00000	1.36(M)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	351251	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	3978	1.00000	1.01
	73 n-Propylbenzene	91	8.923	8.923	(0.924)	15006	1.00000	0.77
	74 Bromobenzene	156	8.818	8.818	(0.913)	5554	1.00000	0.96
	75 1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	11820	1.00000	0.82
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	12470	1.00000	0.97
	77 4-Chlorotoluene	91	9.085	9.085	(0.940)	12140	1.00000	0.83
	78 tert-Butylbenzene	119	9.340	9.340	(0.967)	9357	1.00000	0.79
	79 1,2,4-Trimethylbenzene	105	9.385	9.385	(0.971)	12988	1.00000	0.85
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	12395	1.00000	0.79
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	10009	1.00000	0.71
	83 1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	8523	1.00000	0.89
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	9866	1.00000	0.94
	86 Benzyl Chloride	91	9.823	9.823	(1.280)	4632	1.00000	3.12
	87 n-Butylbenzene	91	10.014	10.014	(1.036)	8459	1.00000	2.37(M)
	88 1,2-Dichlorobenzene	146	10.007	10.007	(1.036)	8626	1.00000	0.87
	89 1,2-Dibromo-3-Chloropropane	155	10.689	10.689	(1.106)	778	1.00000	0.95(M)
	90 1,2,4-Trichlorobenzene	180	11.371	11.371	(1.177)	4609	1.00000	0.74
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	1928	1.00000	0.65
	92 Naphthalene	128	11.574	11.574	(1.198)	11288	1.00000	0.79(M)
	93 1,2,3-Trichlorobenzene	180	11.754	11.754	(1.216)	4801	1.00000	0.80
M	94 1,2-Dichloroethylene (total)	96				8290	2.00000	
M	95 Xylenes (total)	106				21134	3.00000	
	141 Cyclohexane	56	4.125	4.125	(0.987)	4003	1.00000	2.12(H)
	138 Freon TF	101	1.906	1.906	(0.456)	3356	1.00000	1.01
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	6848	1.00000	0.81(M)
	146 Methyl Acetate	43	2.236	2.236	(0.535)	2127	1.00000	1.04(M)
	148 Tert-Butyl alcohol	59	2.438	2.438	(0.584)	6051	20.0000	19.40(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Chloroethane (75-00-3)

Reason Code:

BEFORE

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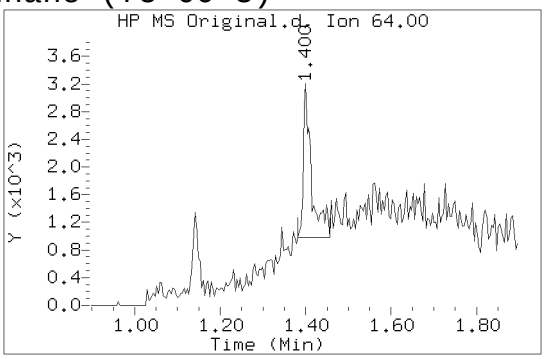

AFTER

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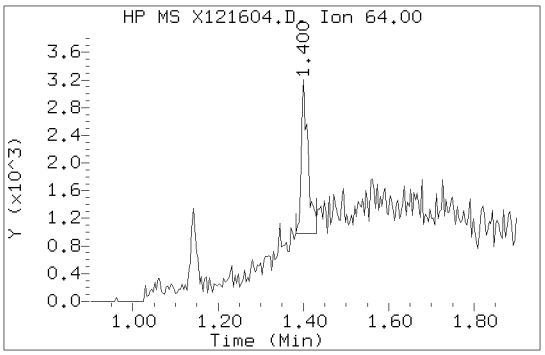

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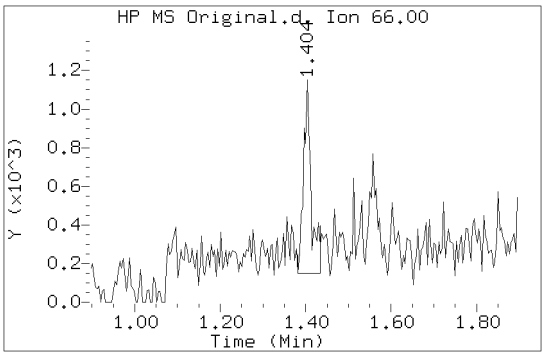

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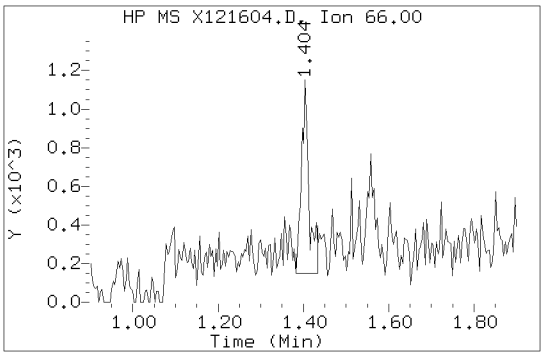

Acrolein (107-02-8)

Reason Code:

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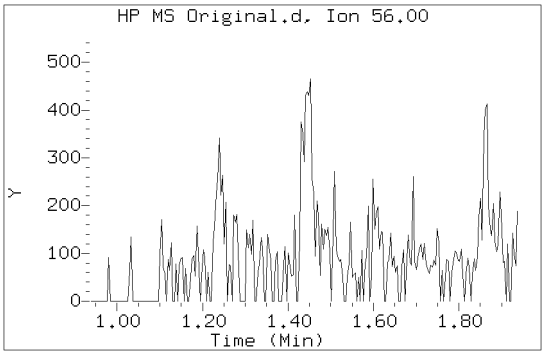

AFTER

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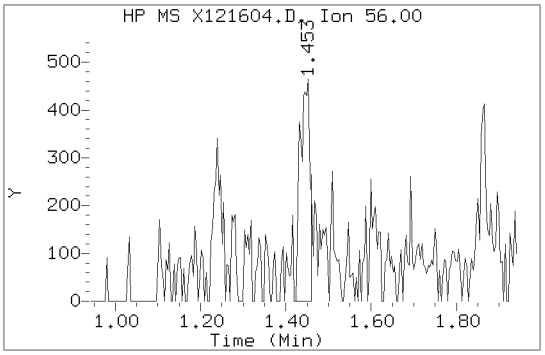

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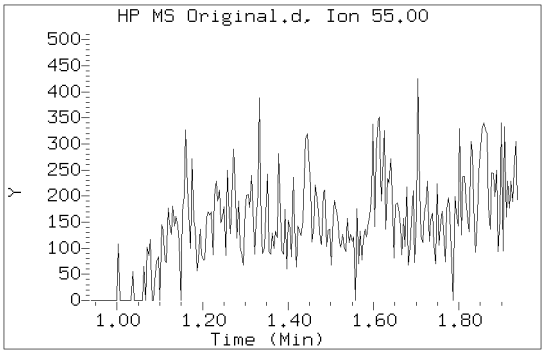

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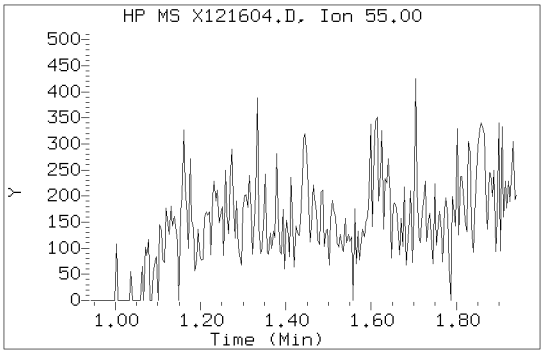

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InstruID : voa6.i
LabSampID : VSTD001

Acetone (67-64-1)

Reason Code:

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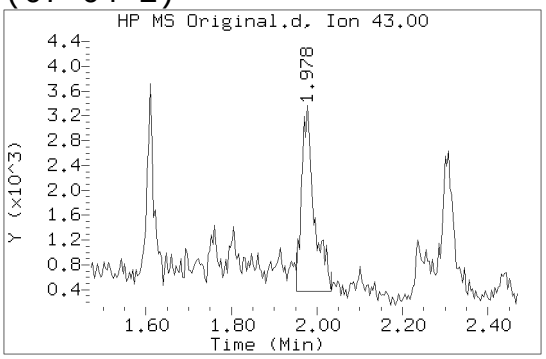

AFTER
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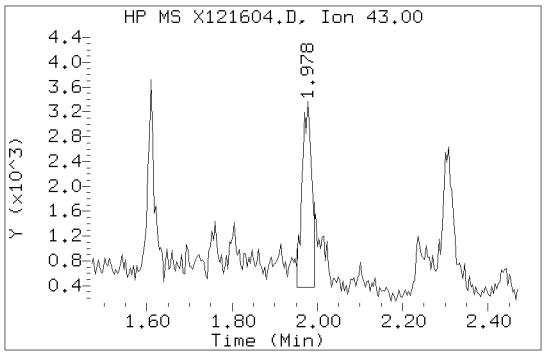

BEFORE
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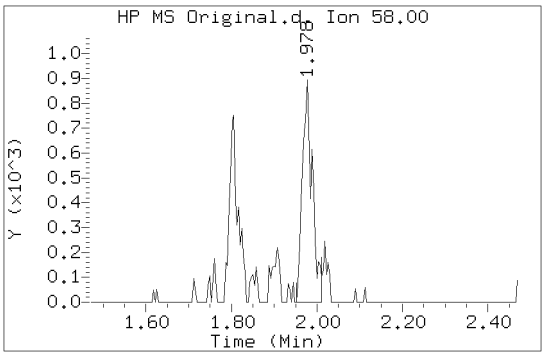

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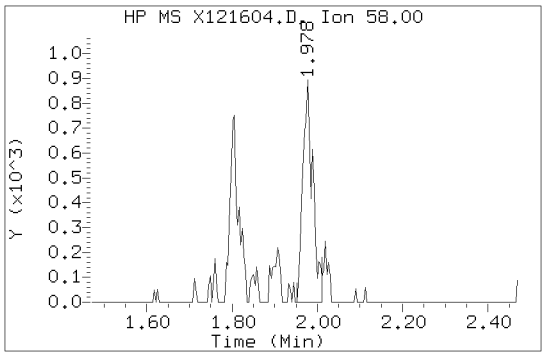

Iodomethane (74-88-4)

Reason Code:

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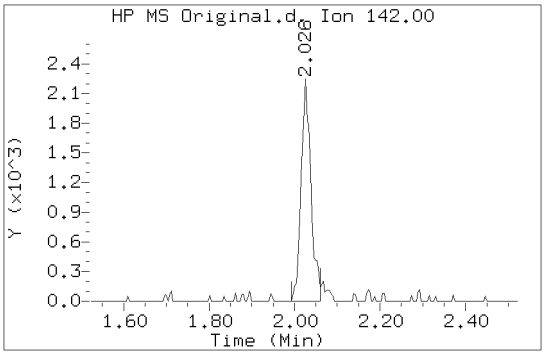

AFTER
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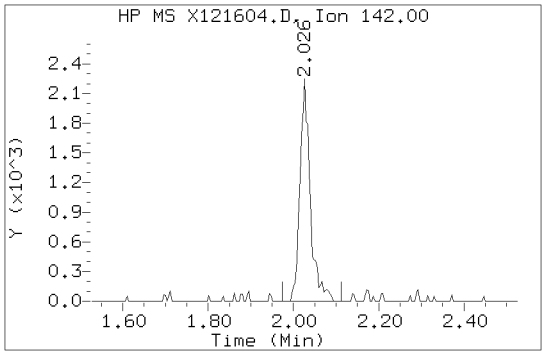

BEFORE
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AREA
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HEIGHT
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16:03
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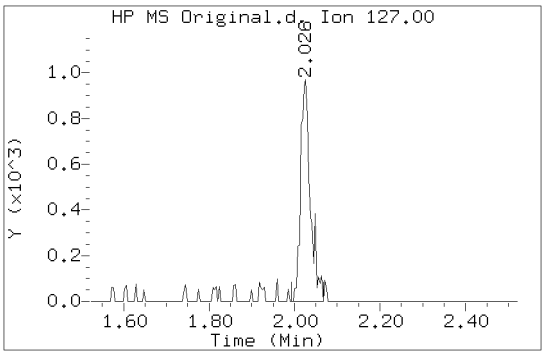

AFTER
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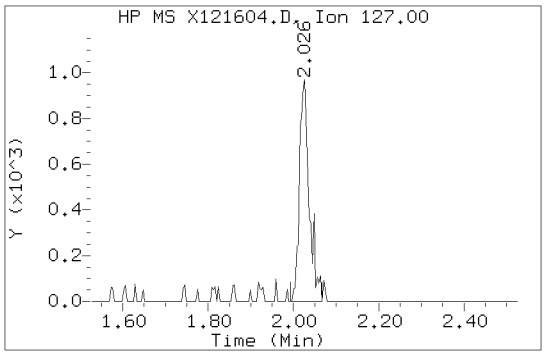

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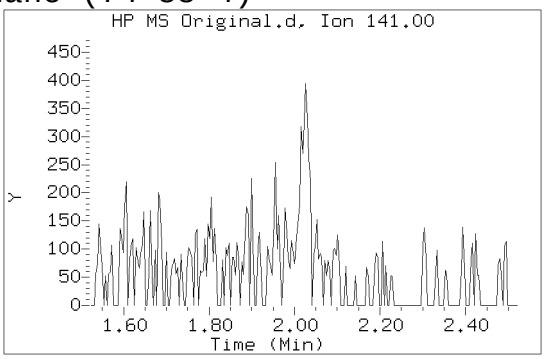
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Iodomethane (74-88-4)

Reason Code:

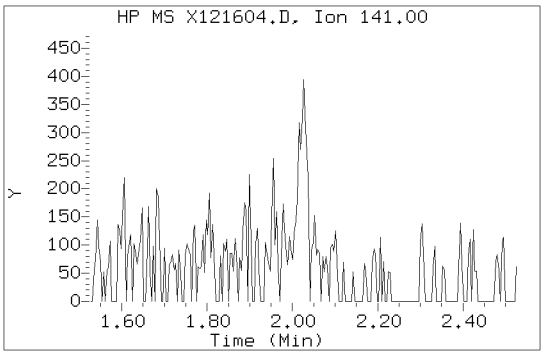
BEFORE

MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

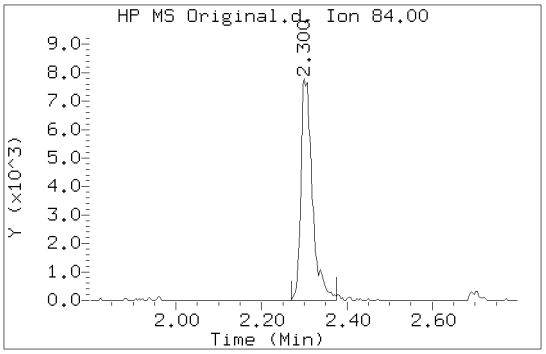


Methylene Chloride (75-09-2)

Reason Code:

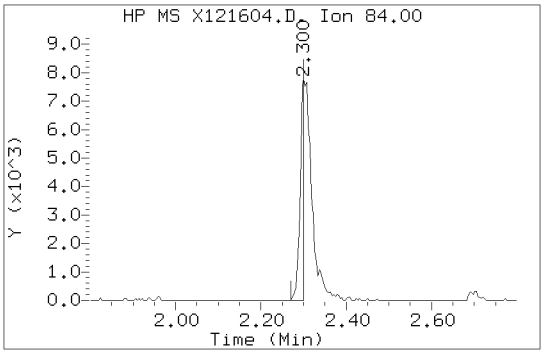
BEFORE

MASS
84
AREA
14864
HEIGHT
7788
27-Dec-2022
16:03
linh
pham



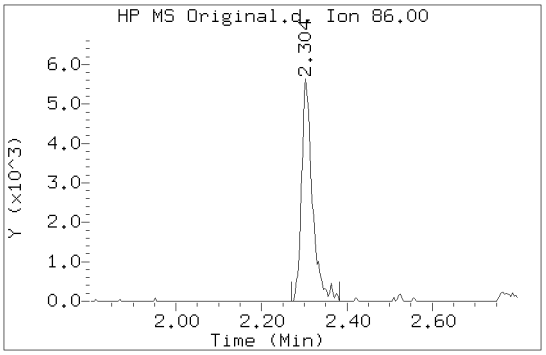
AFTER

MASS
84
AREA
5355
HEIGHT
7788
27-Dec-2022
16:07
linh
pham



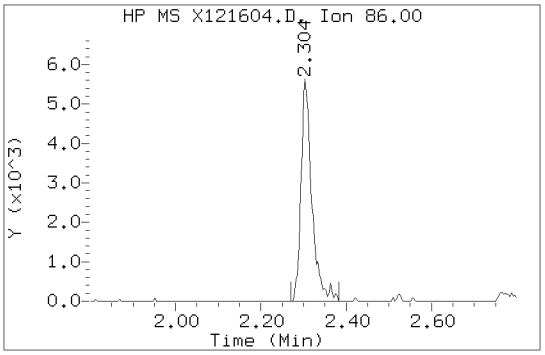
BEFORE

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:03
linh
pham



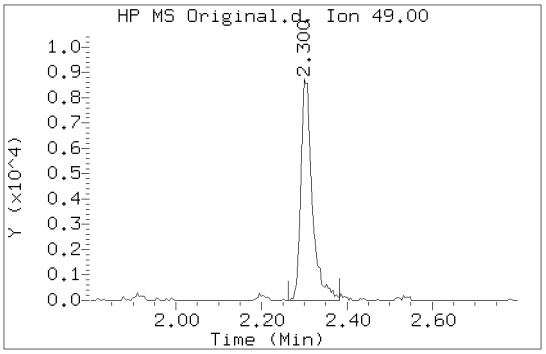
AFTER

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:07
linh
pham



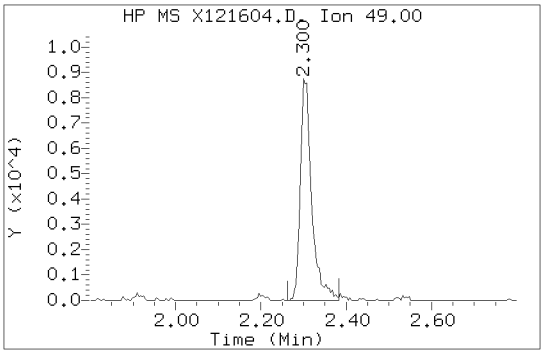
BEFORE

MASS
49
AREA
16641
HEIGHT
8752
27-Dec-2022
16:03
linh
pham



AFTER

MASS
49
AREA
16641
HEIGHT
8752
27-Dec-2022
16:07
linh
pham

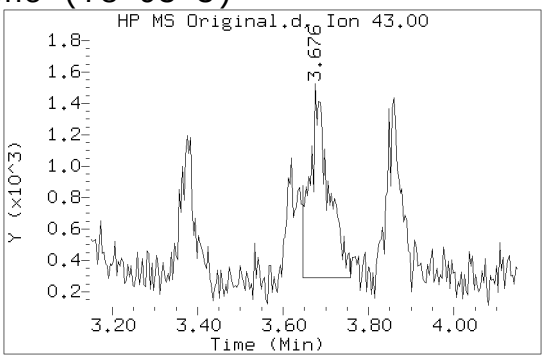


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Butanone (78-93-3)

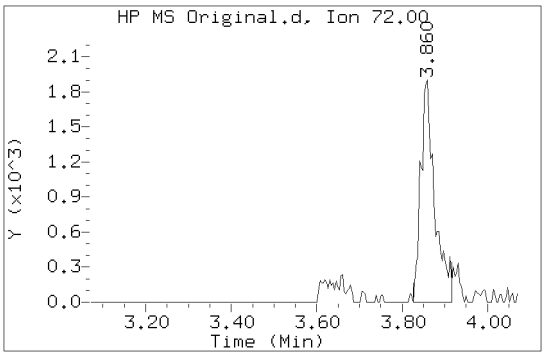
BEFORE

MASS
43
AREA
3758
HEIGHT
1236
27-Dec-2022
16:03
linh
pham



BEFORE

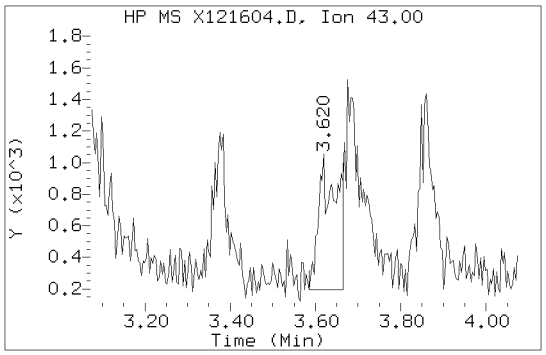
MASS
72
AREA
4320
HEIGHT
1902
27-Dec-2022
16:03
linh
pham



Reason Code:

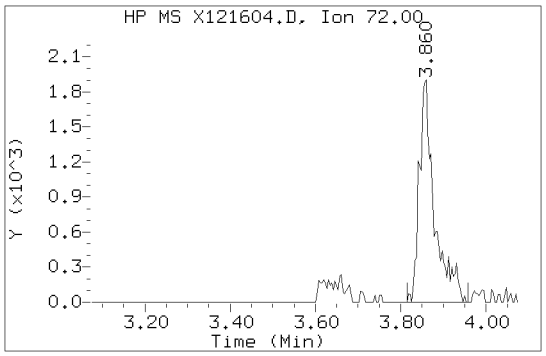
AFTER

MASS
43
AREA
2498
HEIGHT
859
27-Dec-2022
16:07
linh
pham



AFTER

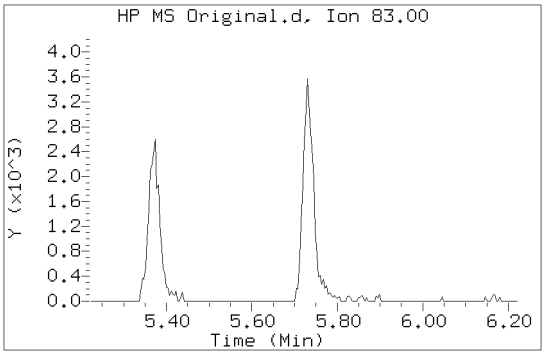
MASS
72
AREA
4690
HEIGHT
1902
27-Dec-2022
16:07
linh
pham



Bromodichloromethane (75-27-4)

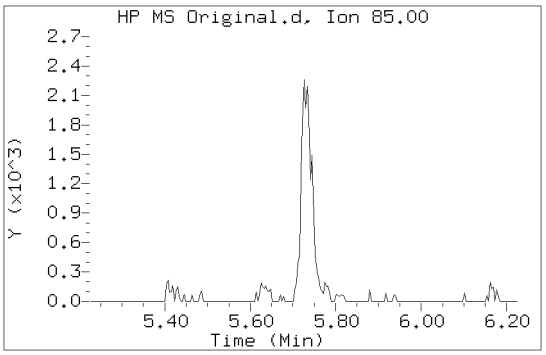
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

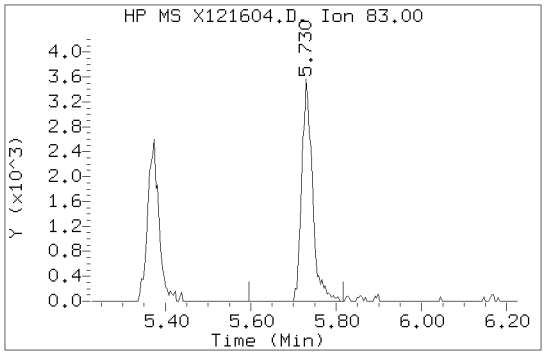
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

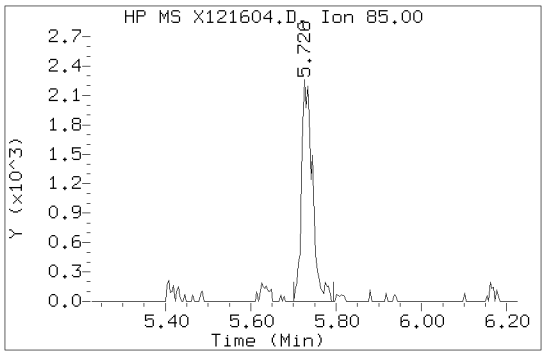
AFTER

MASS
83
AREA
6296
HEIGHT
3568
27-Dec-2022
16:07
linh
pham



AFTER

MASS
85
AREA
4084
HEIGHT
2261
27-Dec-2022
16:07
linh
pham



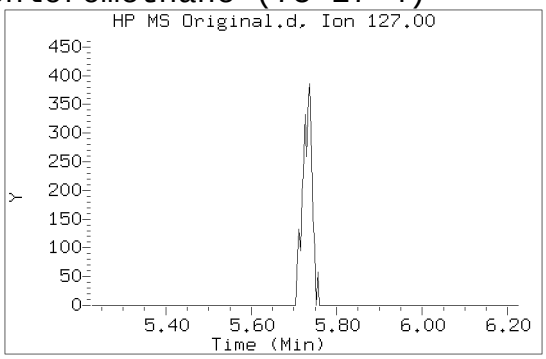
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Bromodichloromethane (75-27-4)

Reason Code:

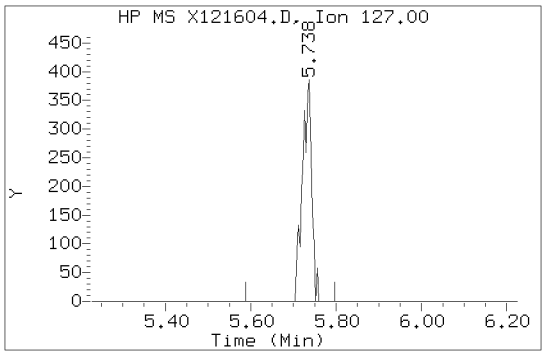
BEFORE

MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
127
AREA
595
HEIGHT
386
27-Dec-2022
16:07
linh
pham

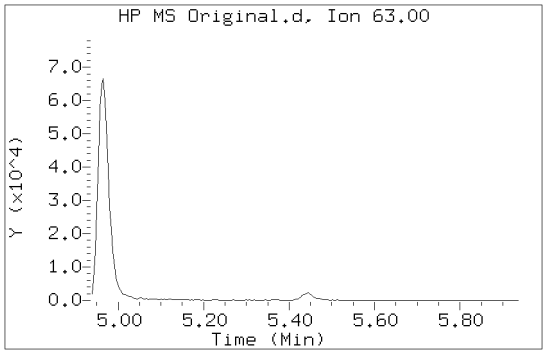


1,2-Dichloropropane (78-87-5)

Reason Code:

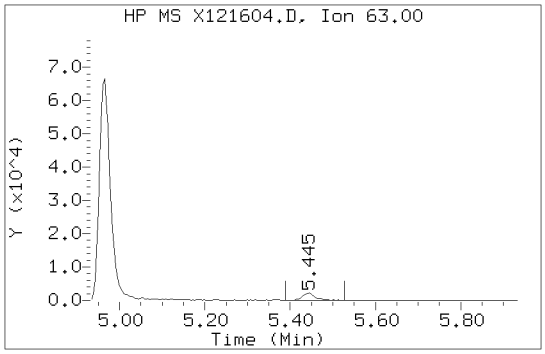
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



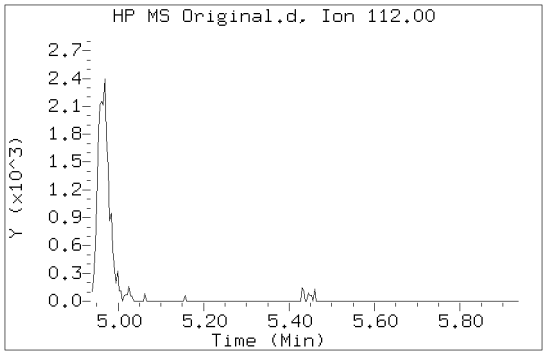
AFTER

MASS
63
AREA
4604
HEIGHT
2381
27-Dec-2022
16:07
linh
pham



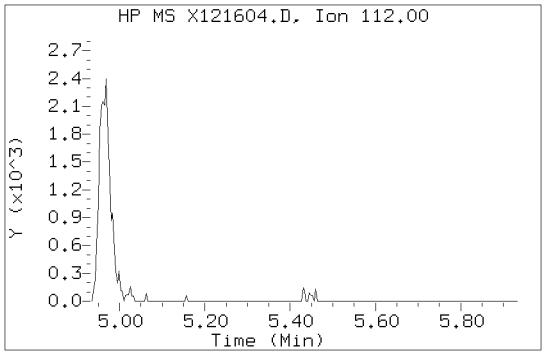
BEFORE

MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

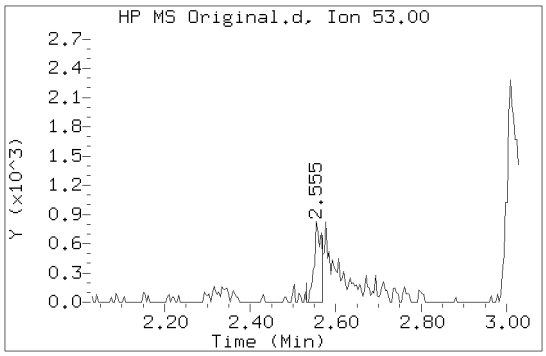


Acrylonitrile (107-13-1)

Reason Code:

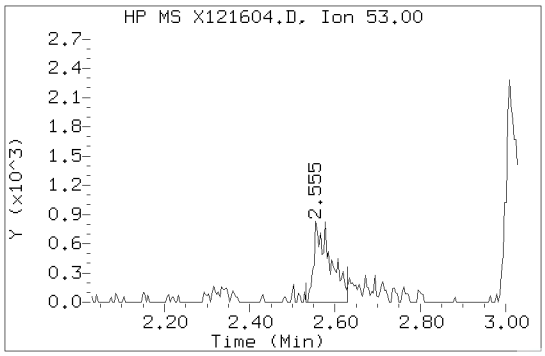
BEFORE

MASS
53
AREA
967
HEIGHT
834
27-Dec-2022
16:03
linh
pham



AFTER

MASS
53
AREA
2258
HEIGHT
834
27-Dec-2022
16:07
linh
pham



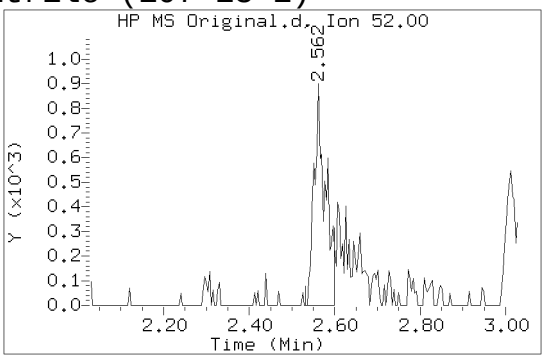
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

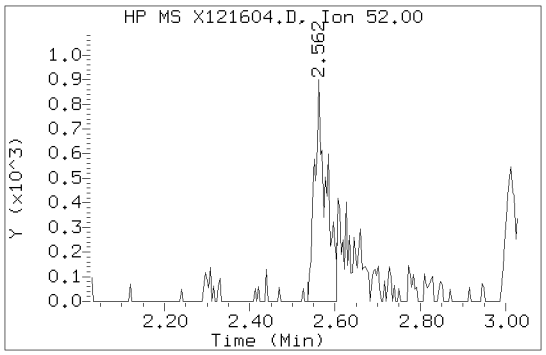
BEFORE

MASS
52
AREA
1657
HEIGHT
900
27-Dec-2022
16:03
linh
pham



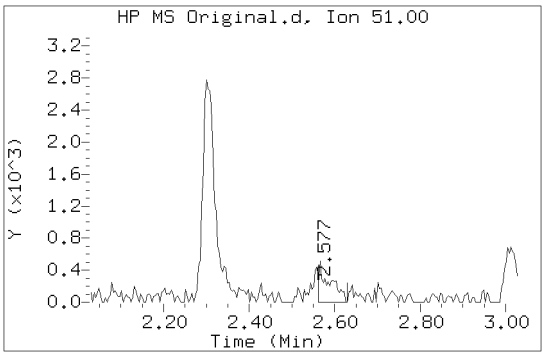
AFTER

MASS
52
AREA
1692
HEIGHT
900
27-Dec-2022
16:07
linh
pham



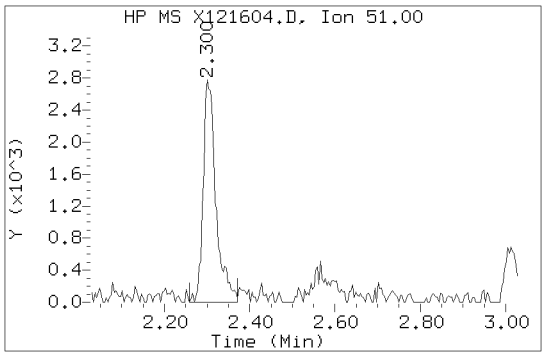
BEFORE

MASS
51
AREA
901
HEIGHT
301
27-Dec-2022
16:03
linh
pham



AFTER

MASS
51
AREA
5757
HEIGHT
2777
27-Dec-2022
16:07
linh
pham

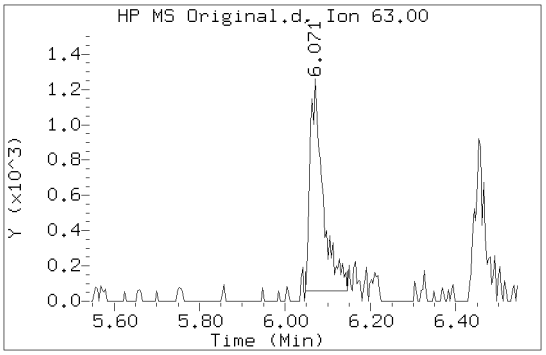


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

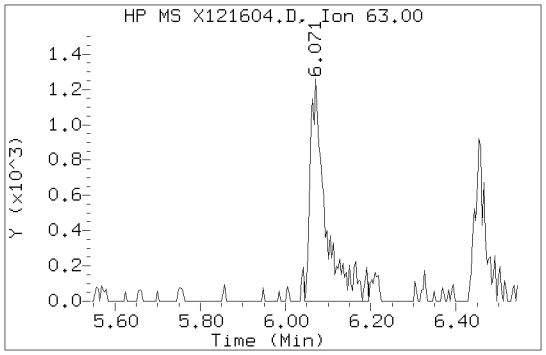
BEFORE

MASS
63
AREA
2513
HEIGHT
1202
27-Dec-2022
16:03
linh
pham



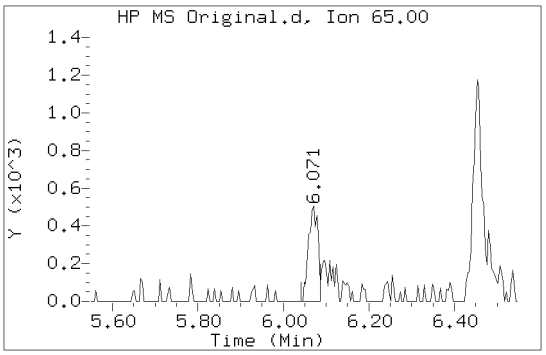
AFTER

MASS
63
AREA
3202
HEIGHT
1260
27-Dec-2022
16:07
linh
pham



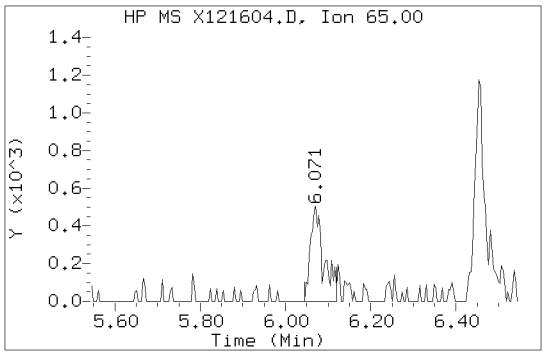
BEFORE

MASS
65
AREA
775
HEIGHT
507
27-Dec-2022
16:03
linh
pham



AFTER

MASS
65
AREA
1093
HEIGHT
507
27-Dec-2022
16:07
linh
pham



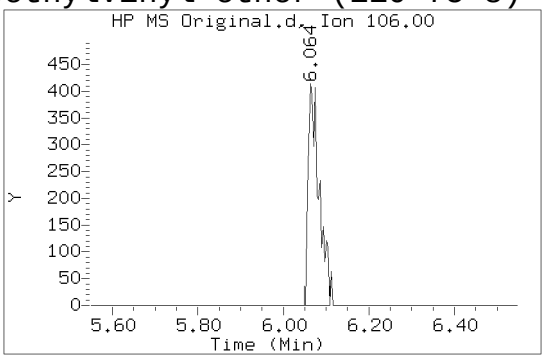
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

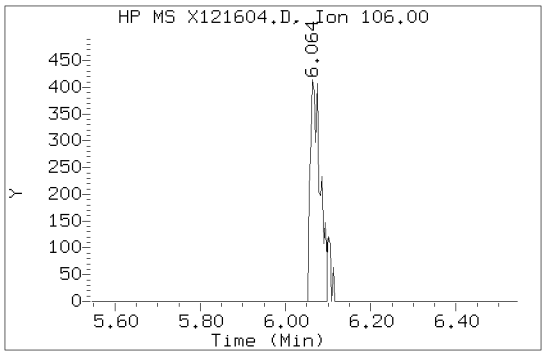
BEFORE

MASS
106
AREA
725
HEIGHT
414
27-Dec-2022
16:03
linh
pham



AFTER

MASS
106
AREA
673
HEIGHT
414
27-Dec-2022
16:07
linh
pham

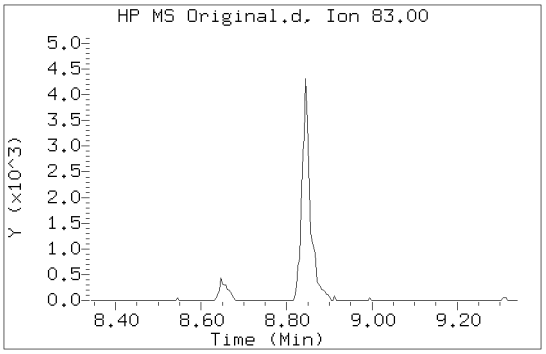


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

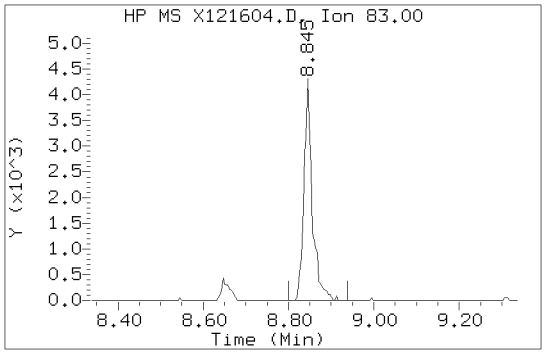
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



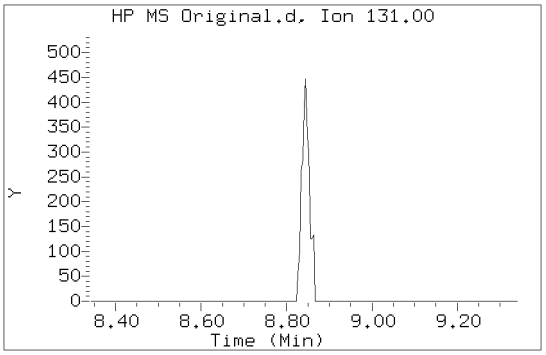
AFTER

MASS
83
AREA
5934
HEIGHT
4312
27-Dec-2022
16:07
linh
pham



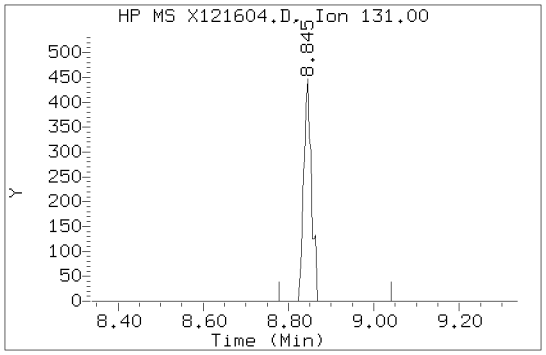
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



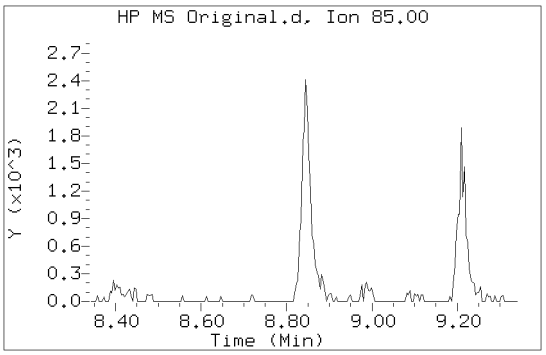
AFTER

MASS
131
AREA
574
HEIGHT
447
27-Dec-2022
16:07
linh
pham



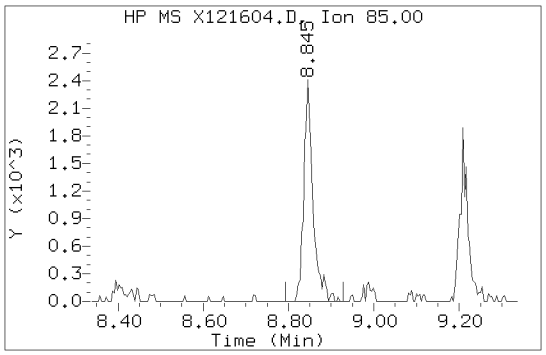
BEFORE

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
3682
HEIGHT
2411
27-Dec-2022
16:07
linh
pham



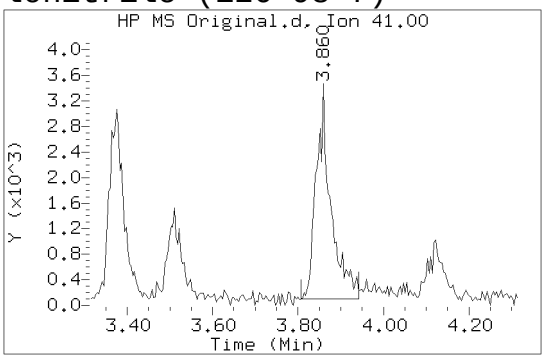
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methacrylonitrile (126-98-7)

Reason Code:

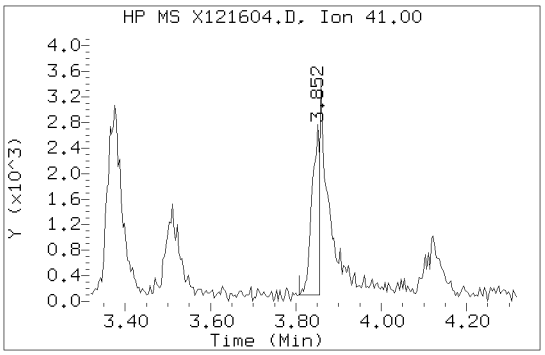
BEFORE

MASS
41
AREA
7966
HEIGHT
3370
27-Dec-2022
16:03
linh
pham



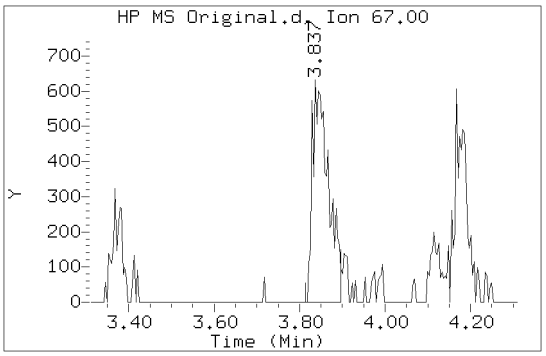
AFTER

MASS
41
AREA
3285
HEIGHT
2668
27-Dec-2022
16:07
linh
pham



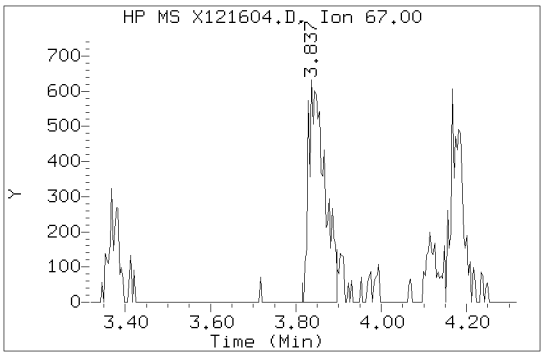
BEFORE

MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:03
linh
pham



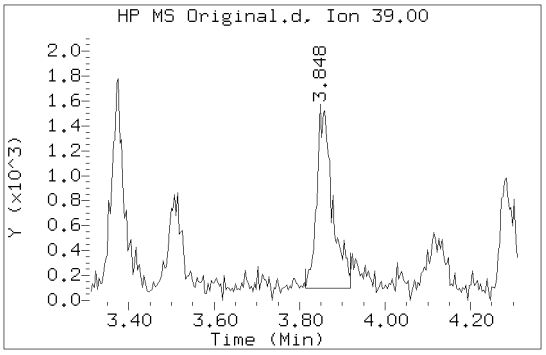
AFTER

MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:07
linh
pham



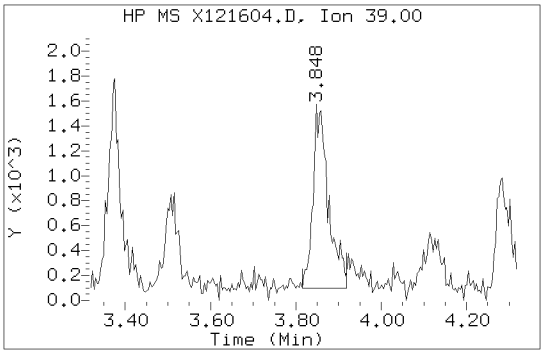
BEFORE

MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:03
linh
pham



AFTER

MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:07
linh
pham

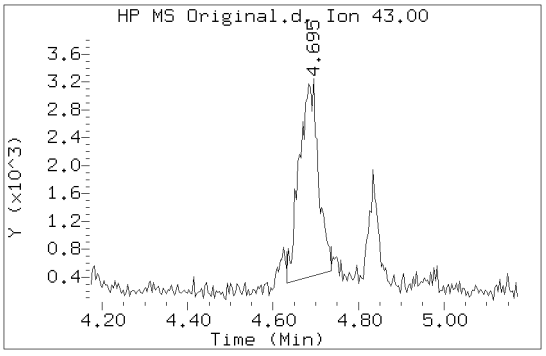


Isobutyl Alcohol (78-83-1)

Reason Code:

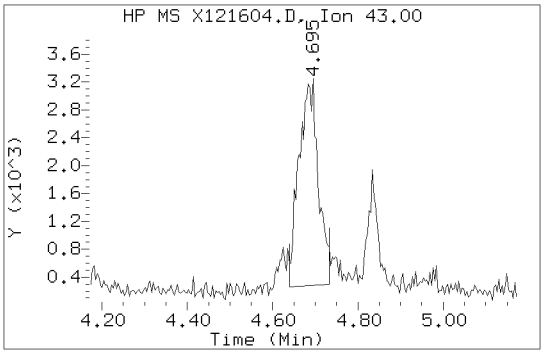
BEFORE

MASS
43
AREA
8847
HEIGHT
2826
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
9436
HEIGHT
2966
27-Dec-2022
16:07
linh
pham



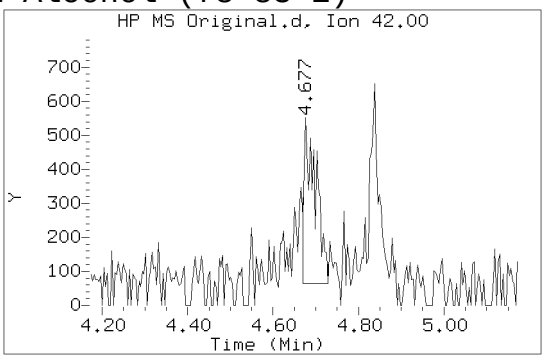
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Isobutyl Alcohol (78-83-1)

Reason Code:

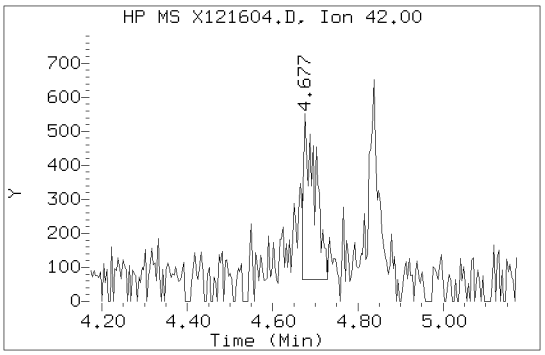
BEFORE

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:03
linh
pham



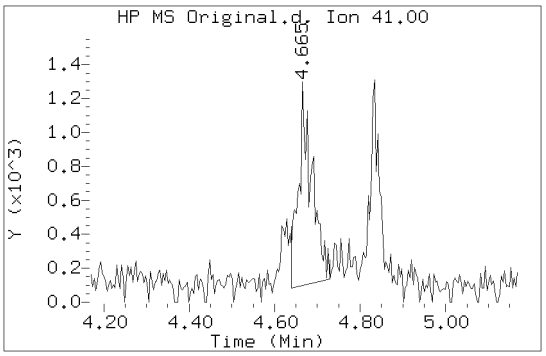
AFTER

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:07
linh
pham



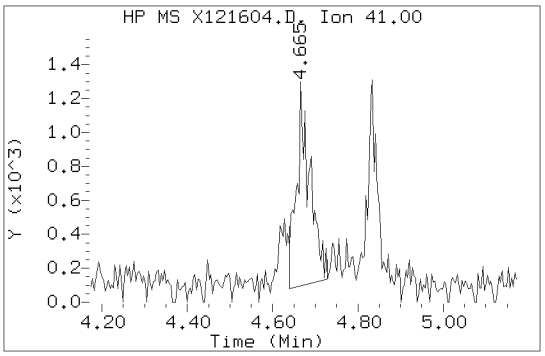
BEFORE

MASS
41
AREA
2650
HEIGHT
1200
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
2656
HEIGHT
1201
27-Dec-2022
16:07
linh
pham

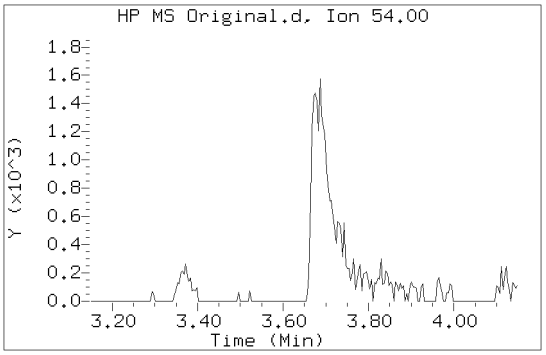


Propionitrile (107-12-0)

Reason Code:

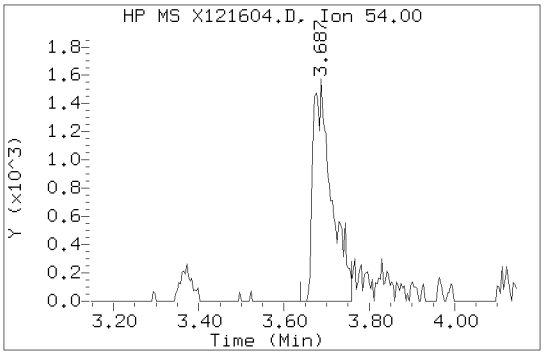
BEFORE

MASS
54
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



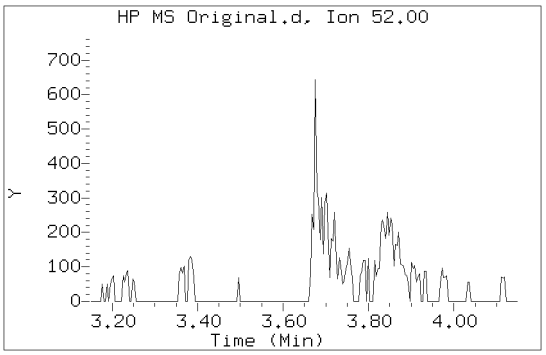
AFTER

MASS
54
AREA
4742
HEIGHT
1574
27-Dec-2022
16:07
linh
pham



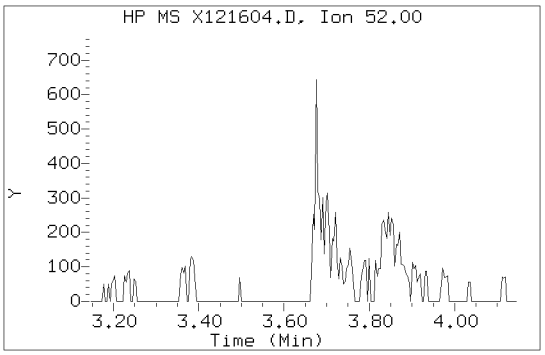
BEFORE

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



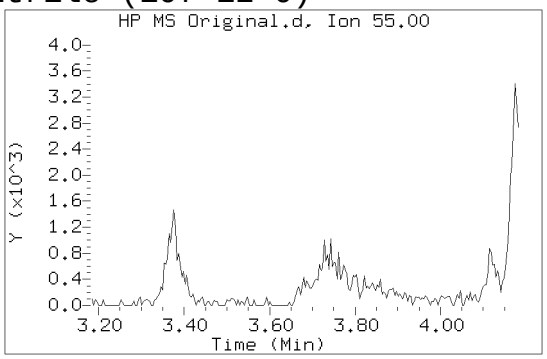
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Propionitrile (107-12-0)

Reason Code:

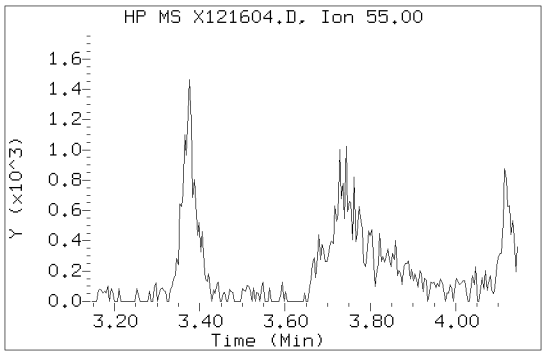
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

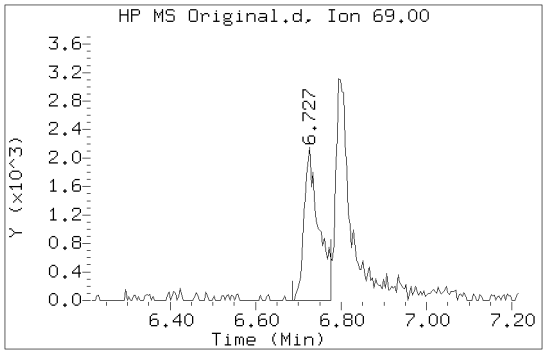


Ethyl Methacrylate (97-63-2)

Reason Code:

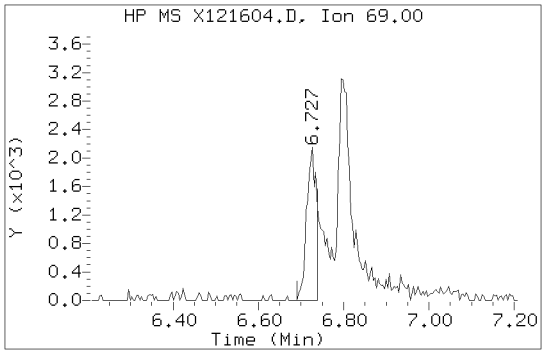
BEFORE

MASS
69
AREA
5177
HEIGHT
2156
27-Dec-2022
16:03
linh
pham



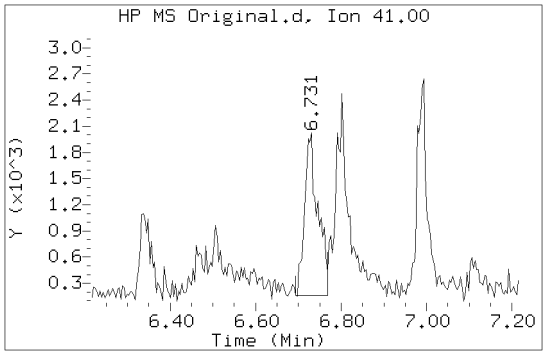
AFTER

MASS
69
AREA
3303
HEIGHT
2156
27-Dec-2022
16:07
linh
pham



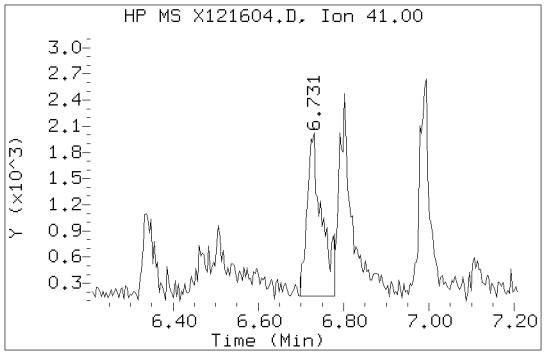
BEFORE

MASS
41
AREA
4059
HEIGHT
1867
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
4485
HEIGHT
1872
27-Dec-2022
16:07
linh
pham

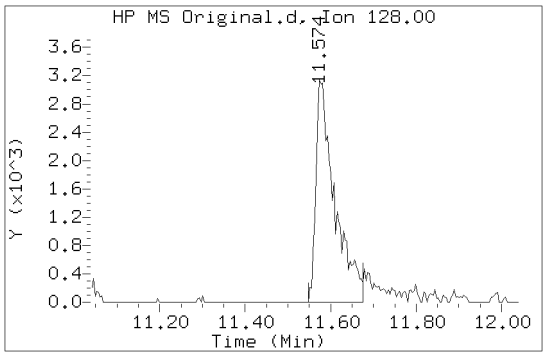


Naphthalene (91-20-3)

Reason Code:

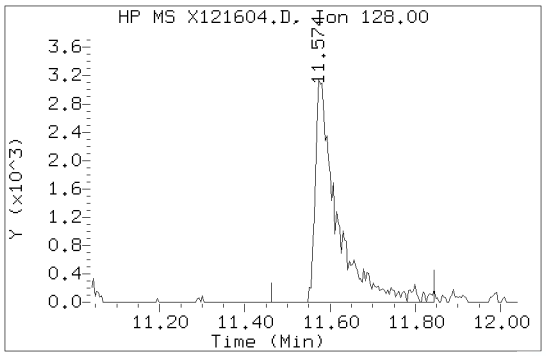
BEFORE

MASS
128
AREA
9627
HEIGHT
3139
27-Dec-2022
16:03
linh
pham



AFTER

MASS
128
AREA
11288
HEIGHT
3139
27-Dec-2022
16:07
linh
pham



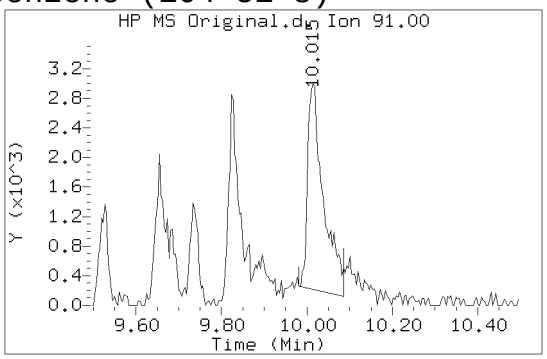
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

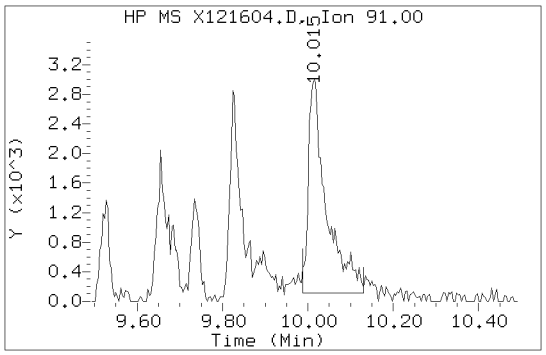
BEFORE

MASS
91
AREA
7194
HEIGHT
2783
27-Dec-2022
16:03
linh
pham



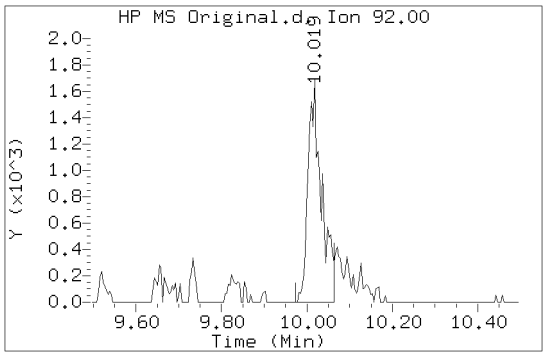
AFTER

MASS
91
AREA
8459
HEIGHT
2887
27-Dec-2022
16:07
linh
pham



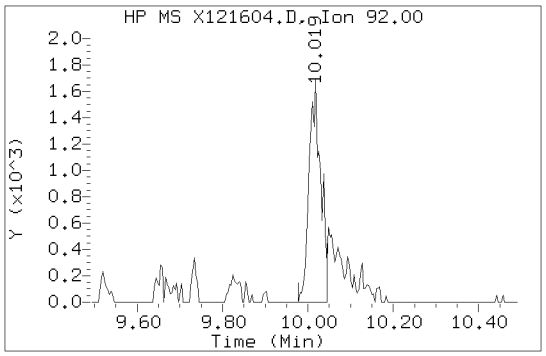
BEFORE

MASS
92
AREA
3696
HEIGHT
1686
27-Dec-2022
16:03
linh
pham



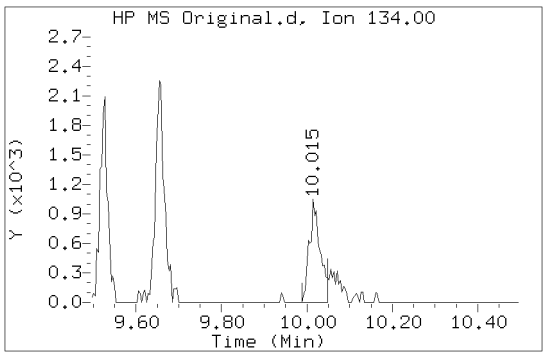
AFTER

MASS
92
AREA
3188
HEIGHT
1686
27-Dec-2022
16:07
linh
pham



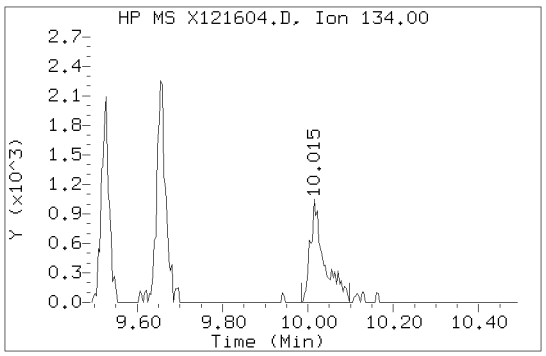
BEFORE

MASS
134
AREA
1829
HEIGHT
1051
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
2397
HEIGHT
1051
27-Dec-2022
16:07
linh
pham

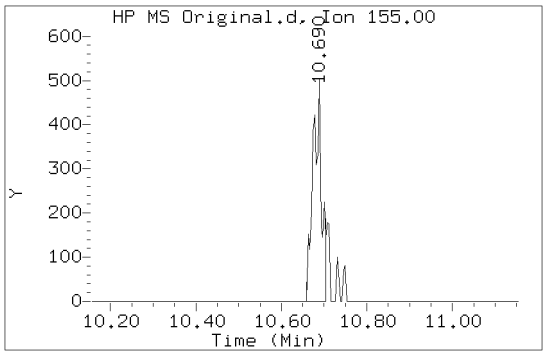


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

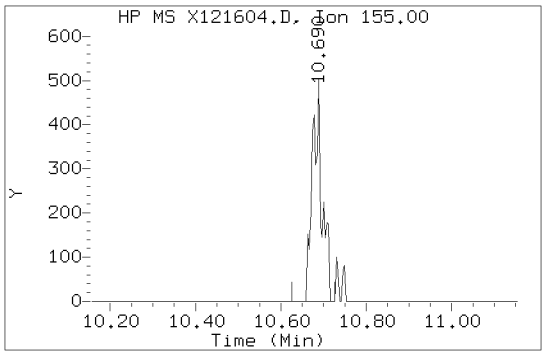
BEFORE

MASS
155
AREA
699
HEIGHT
502
27-Dec-2022
16:03
linh
pham



AFTER

MASS
155
AREA
778
HEIGHT
502
27-Dec-2022
16:07
linh
pham



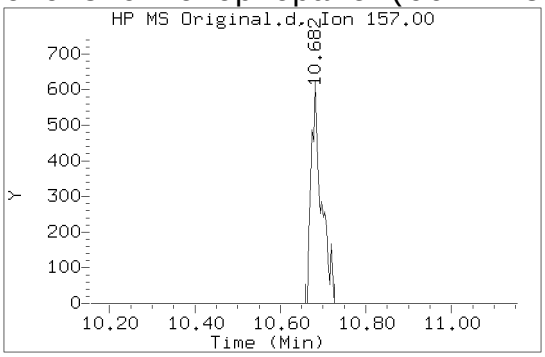
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

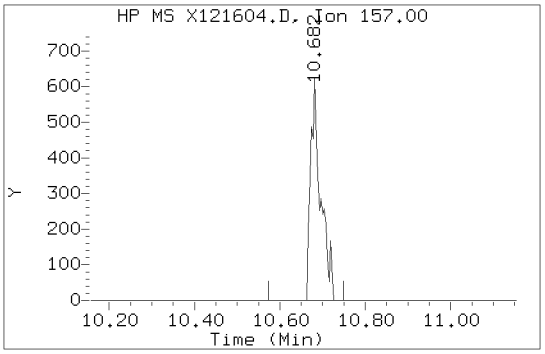
BEFORE

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:03
linh
pham



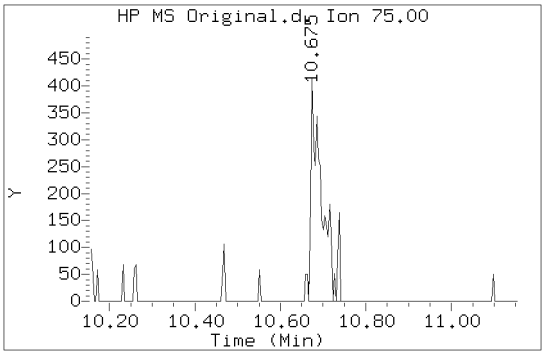
AFTER

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:07
linh
pham



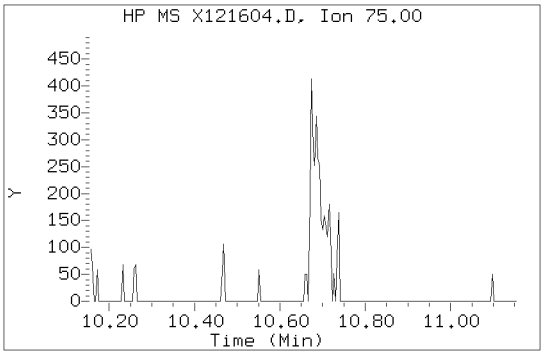
BEFORE

MASS
75
AREA
742
HEIGHT
413
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

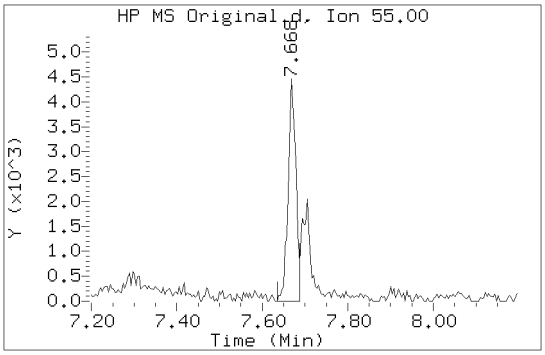


1-Chlorohexane (544-10-5)

Reason Code:

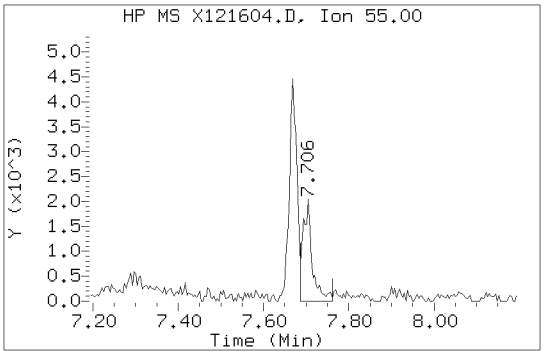
BEFORE

MASS
55
AREA
5660
HEIGHT
4460
27-Dec-2022
16:03
linh
pham



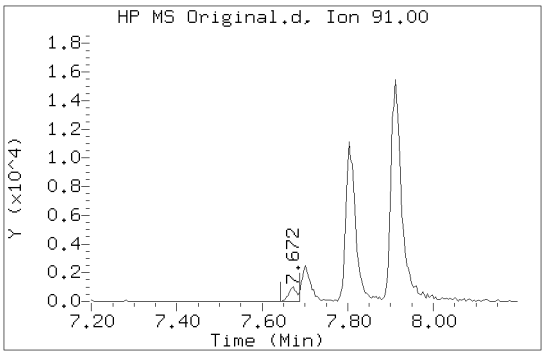
AFTER

MASS
55
AREA
3155
HEIGHT
2048
27-Dec-2022
16:07
linh
pham



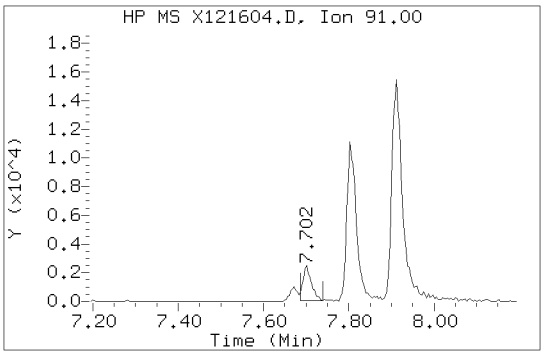
BEFORE

MASS
91
AREA
1392
HEIGHT
1029
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
3448
HEIGHT
2478
27-Dec-2022
16:07
linh
pham



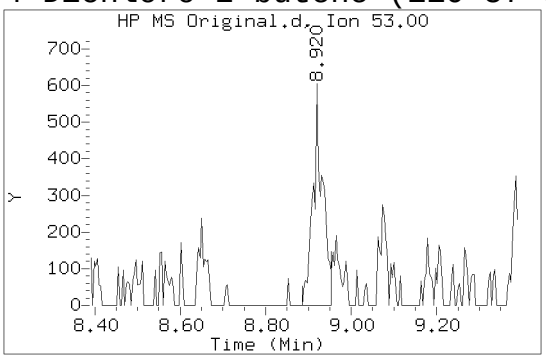
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

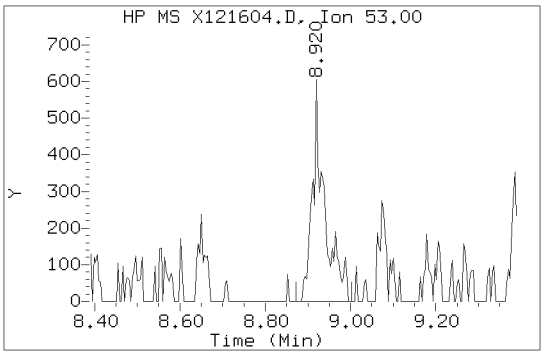
BEFORE

MASS
53
AREA
956
HEIGHT
605
27-Dec-2022
16:03
linh
pham



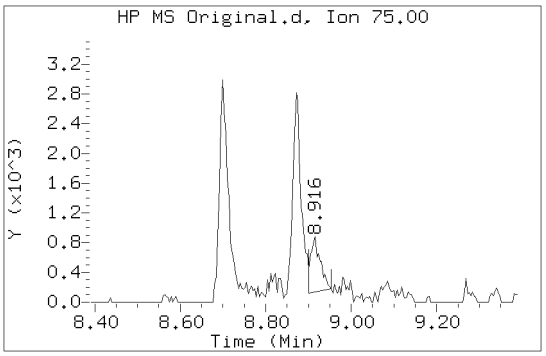
AFTER

MASS
53
AREA
1196
HEIGHT
605
27-Dec-2022
16:07
linh
pham



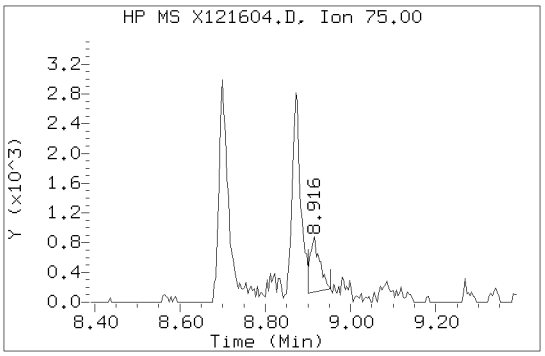
BEFORE

MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:07
linh
pham

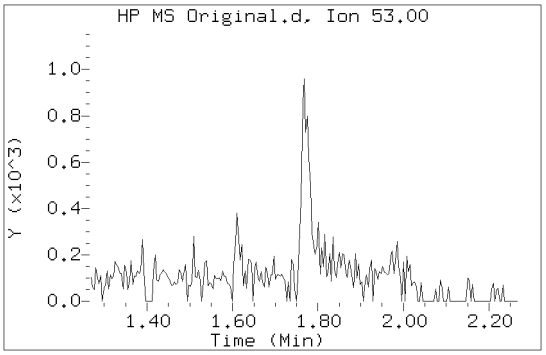


Chloroprene (126-99-8)

Reason Code:

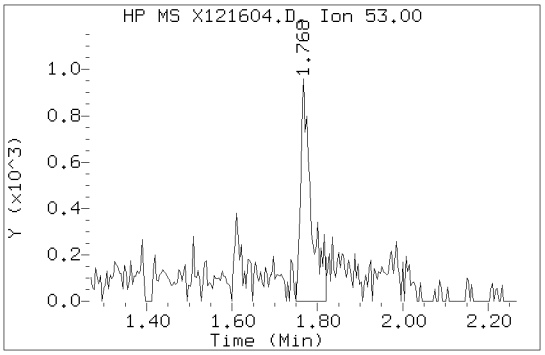
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



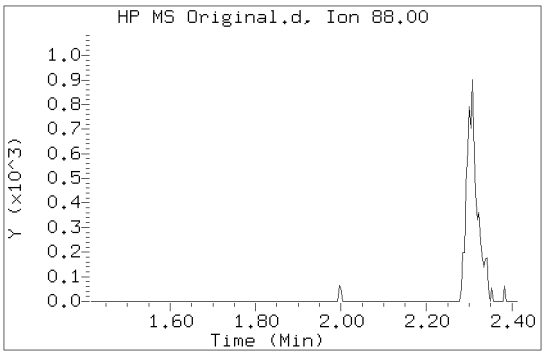
AFTER

MASS
53
AREA
1686
HEIGHT
959
27-Dec-2022
16:07
linh
pham



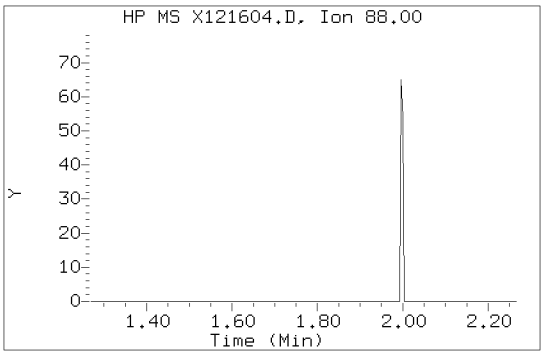
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



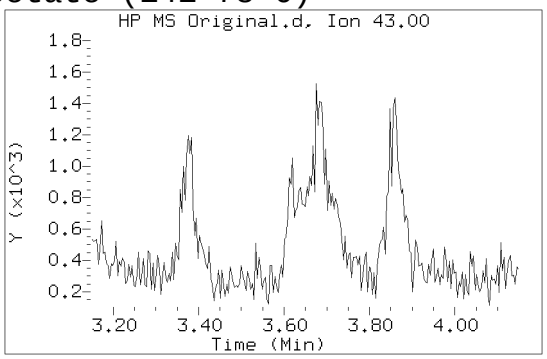
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

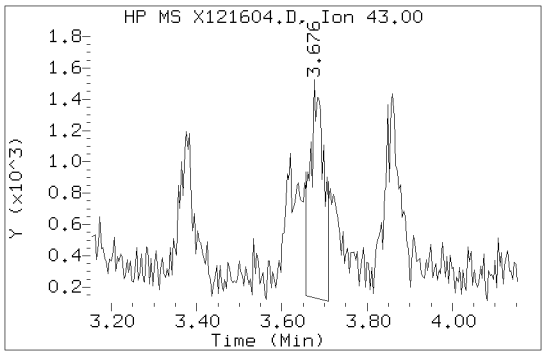
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



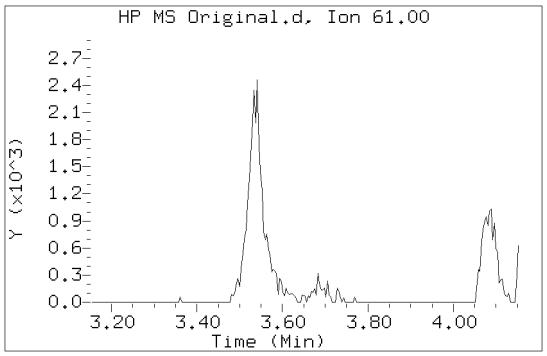
AFTER

MASS
43
AREA
3144
HEIGHT
1392
27-Dec-2022
16:07
linh
pham



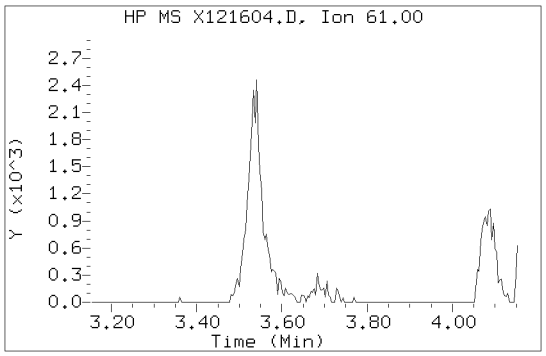
BEFORE

MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



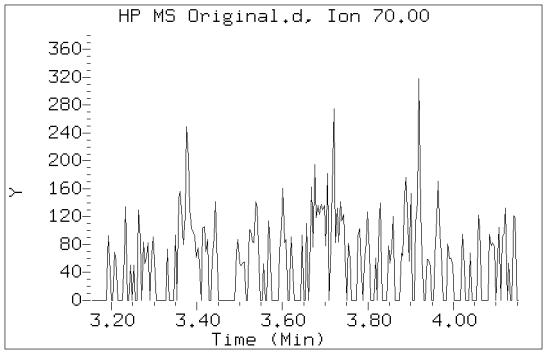
AFTER

MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



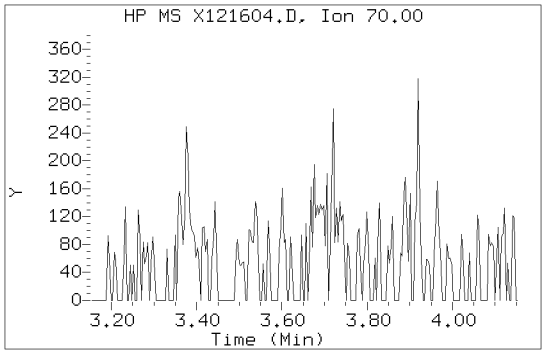
BEFORE

MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

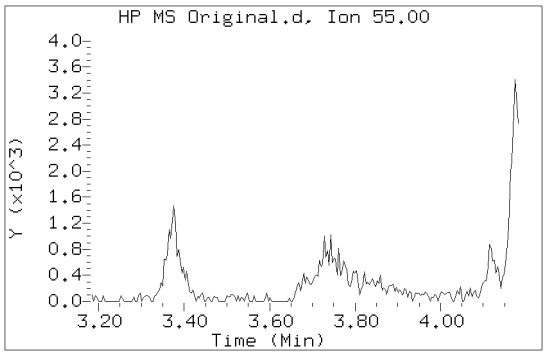


Methyl Acrylate (96-33-3)

Reason Code:

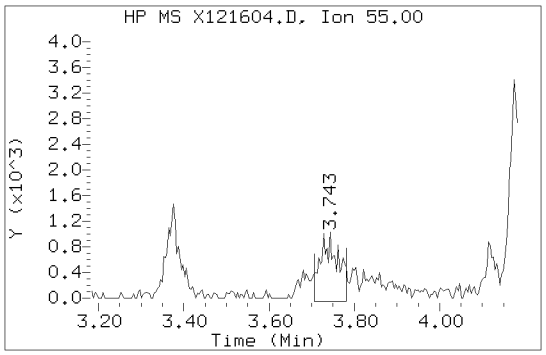
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
3084
HEIGHT
1078
27-Dec-2022
16:07
linh
pham



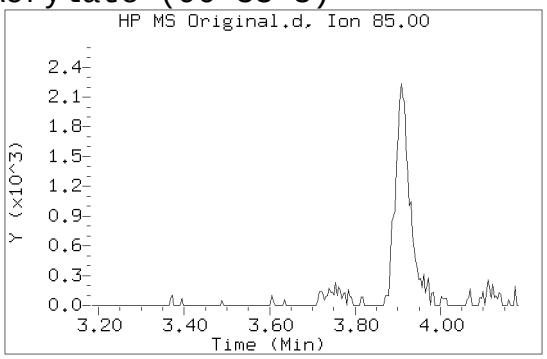
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acrylate (96-33-3)

Reason Code:

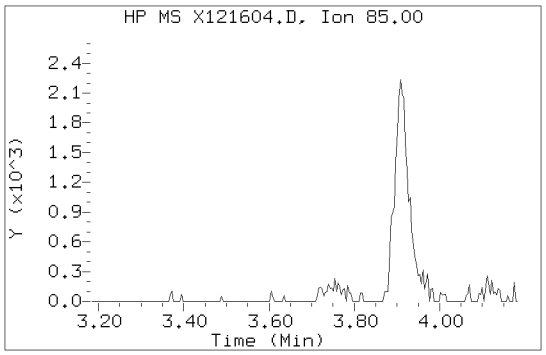
BEFORE

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

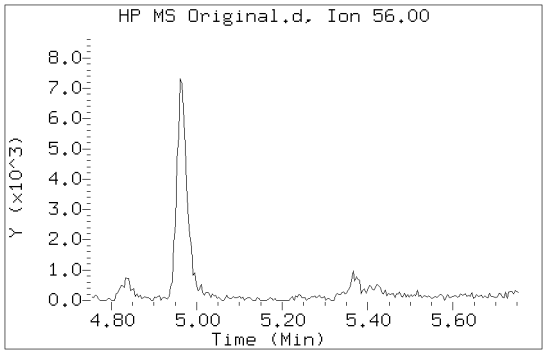


n-Butanol (71-36-3)

Reason Code:

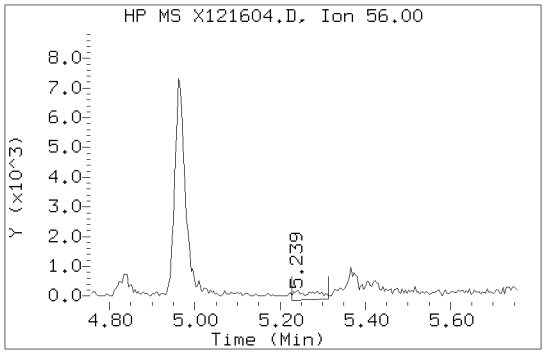
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



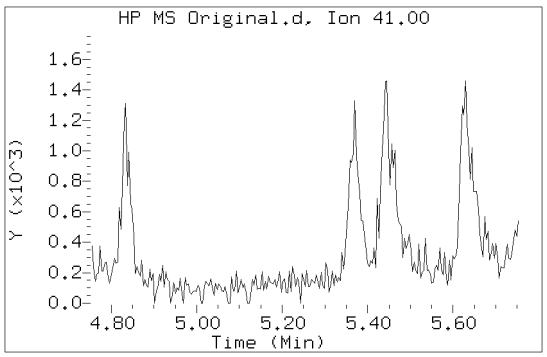
AFTER

MASS
56
AREA
1171
HEIGHT
317
27-Dec-2022
16:07
linh
pham



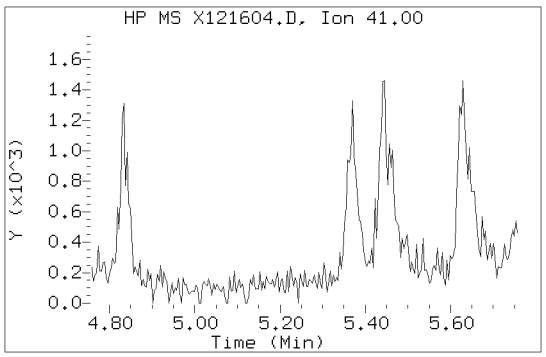
BEFORE

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

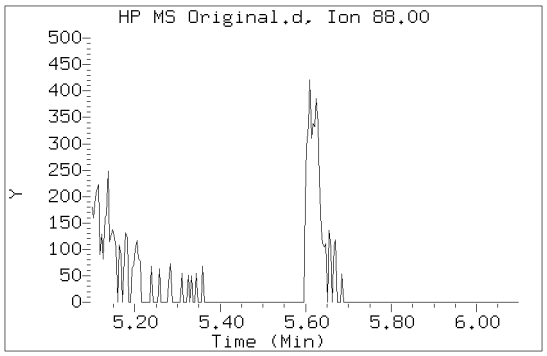


1,4-Dioxane ()

Reason Code:

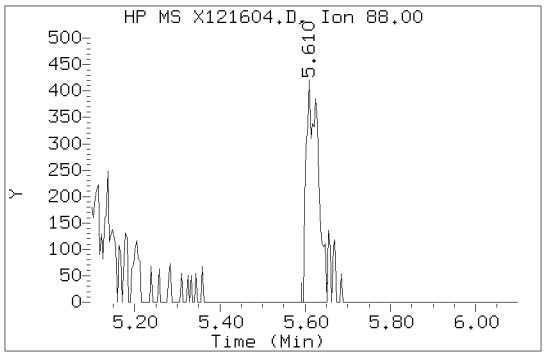
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
88
AREA
820
HEIGHT
421
27-Dec-2022
16:07
linh
pham



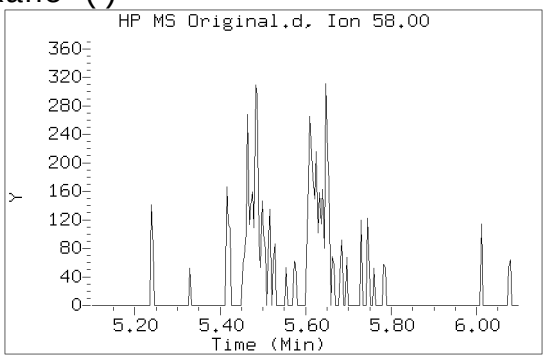
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

1,4-Dioxane ()

Reason Code:

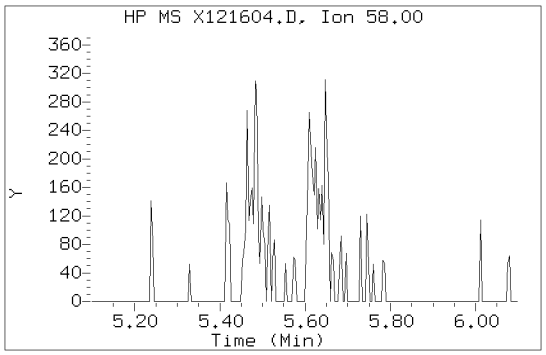
BEFORE

MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

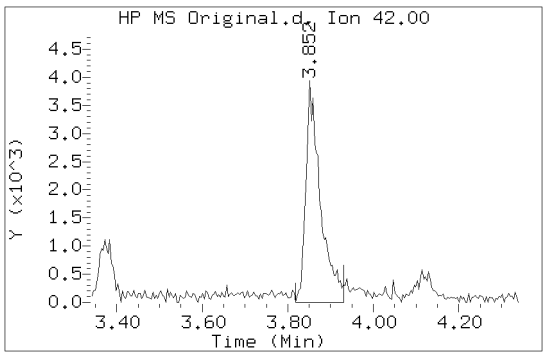


Tetrahydrofuran (109-99-9)

Reason Code:

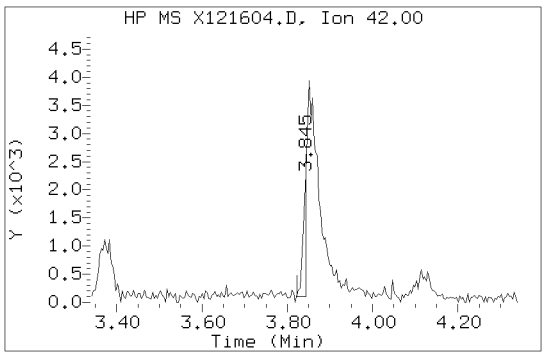
BEFORE

MASS
42
AREA
9396
HEIGHT
3939
27-Dec-2022
16:03
linh
pham



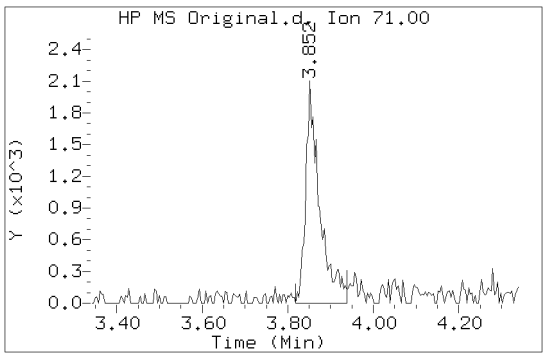
AFTER

MASS
42
AREA
1361
HEIGHT
2190
27-Dec-2022
16:07
linh
pham



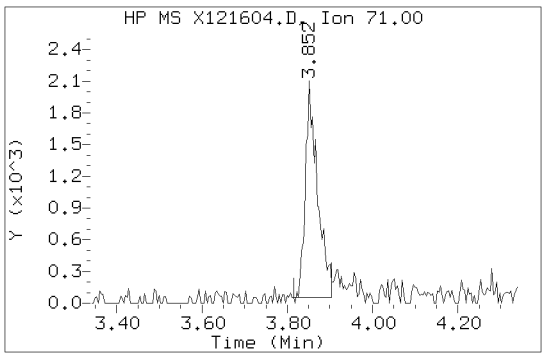
BEFORE

MASS
71
AREA
4781
HEIGHT
2103
27-Dec-2022
16:03
linh
pham



AFTER

MASS
71
AREA
4046
HEIGHT
2046
27-Dec-2022
16:07
linh
pham

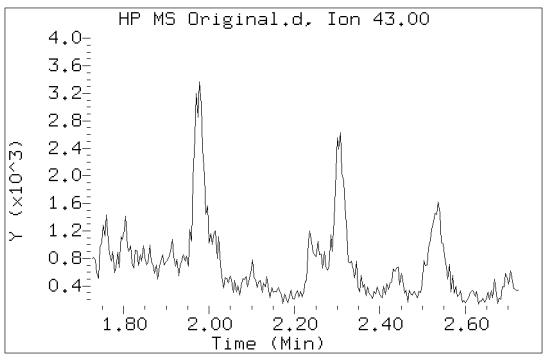


Methyl Acetate (79-20-9)

Reason Code:

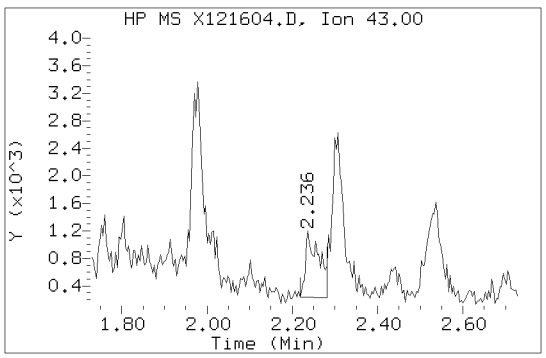
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
2127
HEIGHT
968
27-Dec-2022
16:07
linh
pham



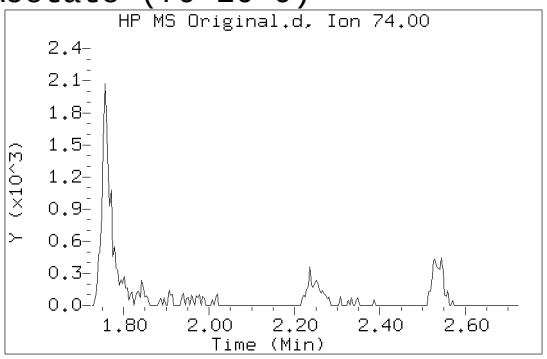
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acetate (79-20-9)

Reason Code:

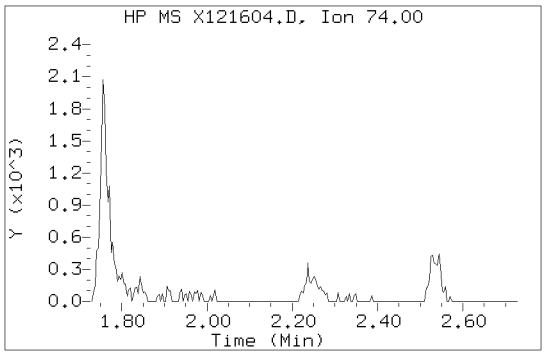
BEFORE

MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

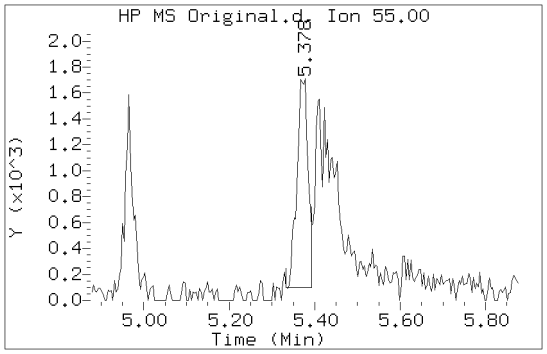


Methylcyclohexane (108-87-2)

Reason Code:

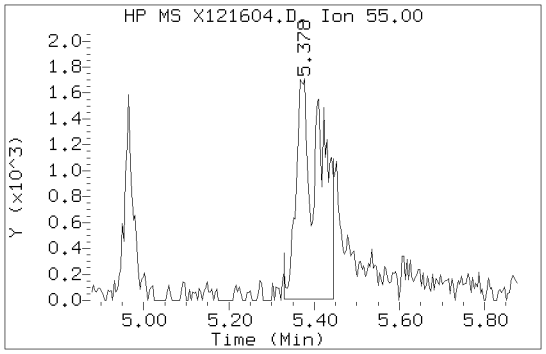
BEFORE

MASS
55
AREA
2998
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



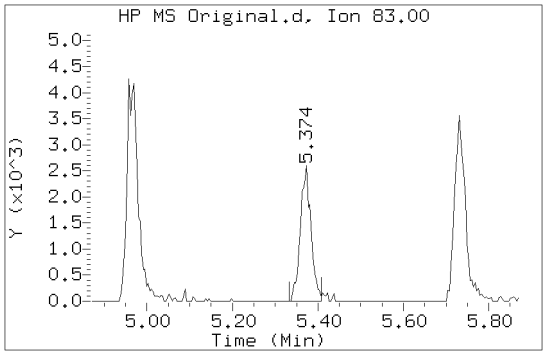
AFTER

MASS
55
AREA
6848
HEIGHT
1699
27-Dec-2022
16:07
linh
pham



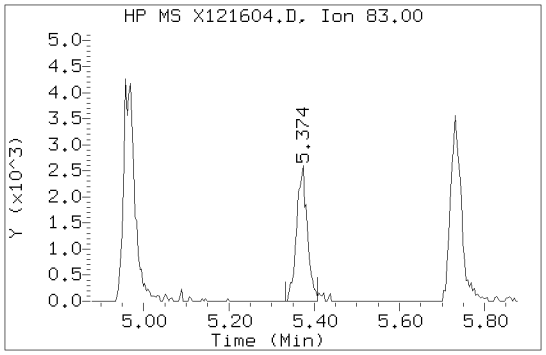
BEFORE

MASS
83
AREA
4577
HEIGHT
2601
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
4577
HEIGHT
2601
27-Dec-2022
16:07
linh
pham

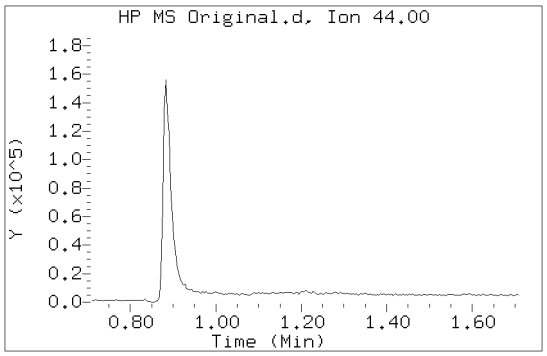


Acetaldehyde (75-07-0)

Reason Code:

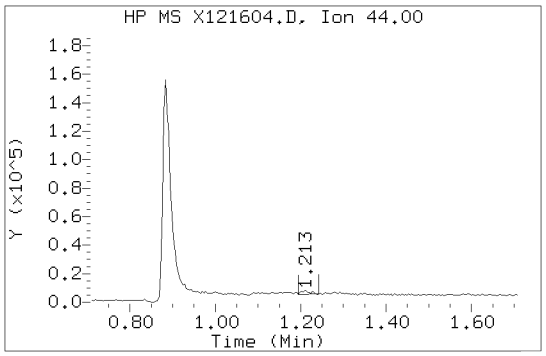
BEFORE

MASS
44
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
44
AREA
3384
HEIGHT
2655
27-Dec-2022
16:07
linh
pham

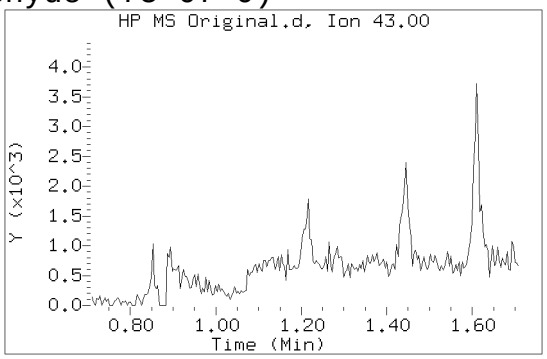


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

Reason Code:

BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



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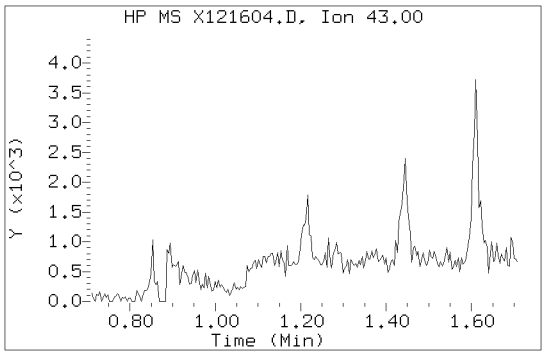

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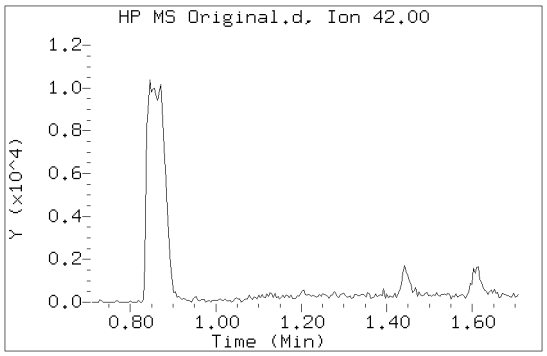

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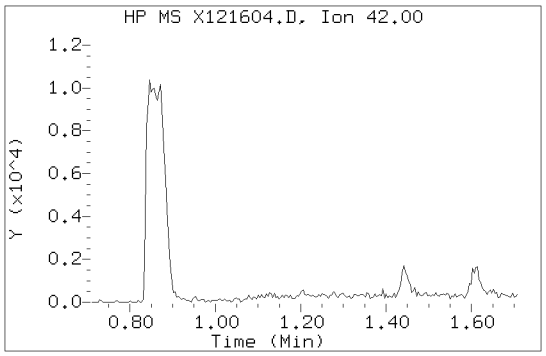

4-Bromofluorobenzene (460-00-4)

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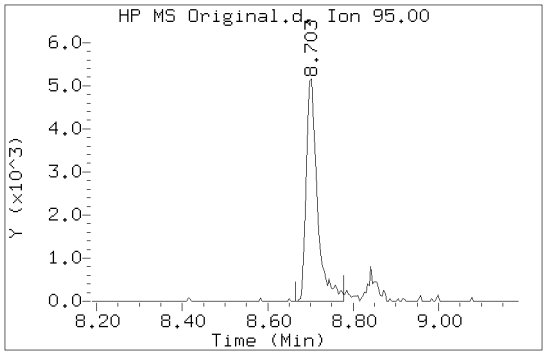

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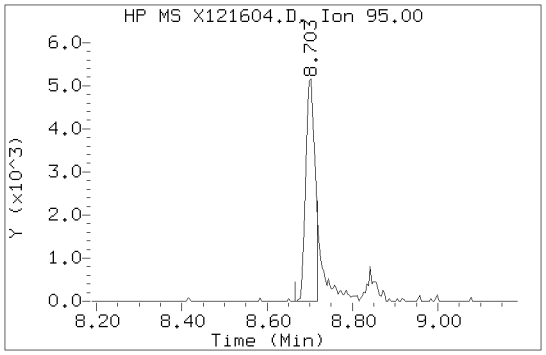

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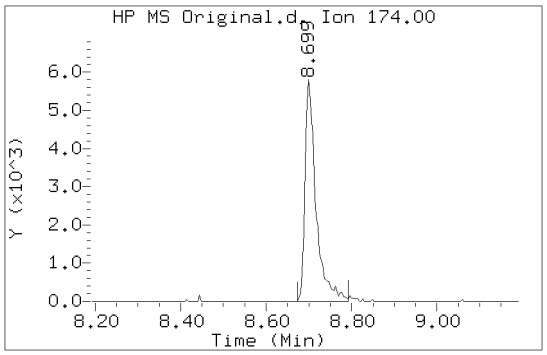

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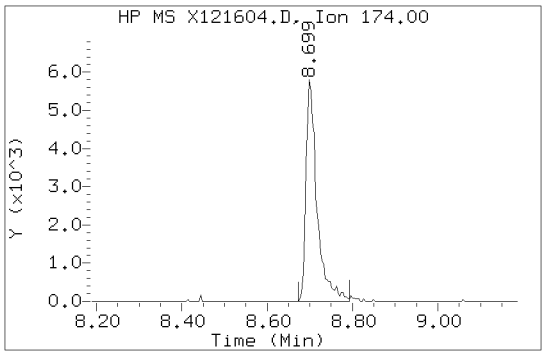

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

4-Bromofluorobenzene (460-00-4)

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BEFORE

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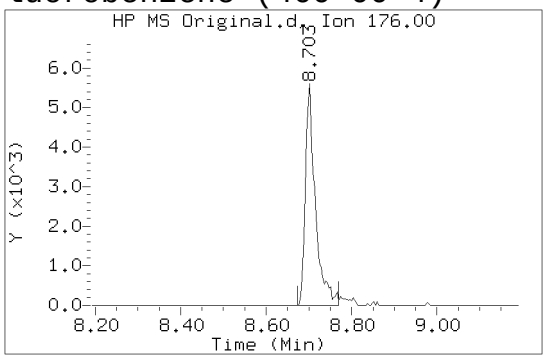

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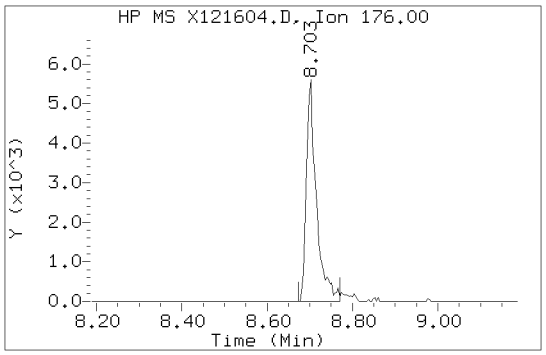

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
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Inj Date : 16-DEC-2022 13:02
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 12:41 Cal File: X121604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	456374	50.0000	
135 1,4-Dioxane	88	5.610	5.610	(1.343)	1409	40.0000	33.77(M)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	5733	2.00000	1.83
25 Methacrylonitrile	41	3.859	3.859	(0.924)	6388	2.00000	1.97(M)
12 Isobutyl Alcohol	43	4.684	4.684	(1.121)	20629	40.0000	40.18(M)
13 Acetonitrile	39	2.198	2.198	(0.526)	7764	20.0000	18.69
14 Allyl Chloride	41	2.206	2.206	(0.528)	14911	2.00000	1.88
4 Propionitrile	54	3.675	3.675	(0.880)	8651	20.0000	18.57
136 n-Hexane	57	2.768	2.768	(0.663)	5898	2.00000	1.79
72 trans-1,4-Dichloro-2-butene	53	8.920	8.920	(1.163)	2690	2.00000	1.92(M)
194 Acetaldehyde	44	1.212	1.212	(0.290)	5661	8.00000	(M)
23 Chloroprene	53	1.771	1.771	(0.424)	3126	2.00000	2.01(M)
145 alpha-Methylstyrene	118	9.268	9.268	(0.959)	14447	2.00000	1.84
200 Dimethyl Disulfide	94	6.202	6.202	(0.808)	15964	2.00000	1.82
139 Diethyl ether	59	1.756	1.756	(0.420)	6354	2.00000	2.08
130 Ethyl Acetate	43	3.675	3.675	(0.880)	7422	2.00000	2.08(M)
40 Methyl Methacrylate	41	5.617	5.617	(1.345)	6185	2.00000	1.98
49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	6546	2.00000	2.03
132 n-Butanol	56	5.343	5.343	(1.279)	2004	40.0000	74.77(TM)
142 Tetrahydrofuran	42	3.848	3.848	(0.921)	2867	4.00000	2.04(M)

150	Allyl alcohol	57	2.768	2.768 (0.663)	5898	40.0000	33.27
166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	35687	2.00000	2.10

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D Page 2
Report Date: 27-Dec-2022 16:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.720	3.720	(0.891)	5443	2.00000	1.75(M)
	162 Butyl acrylate	55	8.267	8.267	(1.078)	15015	2.00000	1.77
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	6239	2.00000	2.33
	3 Chloromethane	50	1.077	1.077	(0.258)	8057	2.00000	4.07
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	7263	2.00000	1.82
	6 Bromomethane	94	1.340	1.340	(0.321)	5996	2.00000	3.68(M)
	7 Chloroethane	64	1.400	1.400	(0.335)	5667	2.00000	2.04(M)
	8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	10463	2.00000	1.87
	9 Acrolein	56	1.441	1.441	(0.345)	1317	4.00000	6.92(M)
	10 Acetone	43	1.973	1.973	(0.472)	7041	4.00000	5.46(M)
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	6862	2.00000	1.98
	15 Iodomethane	142	2.022	2.022	(0.484)	8702	4.00000	5.23
	16 Acrylonitrile	53	2.554	2.554	(0.611)	4557	4.00000	3.87(M)
	17 Methylene Chloride	84	2.303	2.303	(0.551)	9194	2.00000	1.93(M)
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	23231	2.00000	2.04
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	34948	4.00000	3.85
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	7113	2.00000	1.83
	21 Vinyl Acetate	43	3.008	3.008	(0.720)	38835	4.00000	3.90
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	12778	2.00000	1.87
	24 2-Butanone	43	3.604	3.604	(0.863)	5418	4.00000	6.89(M)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	11048	2.00000	1.91
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.845)	9675	2.00000	2.05
	28 Chloroform	83	3.908	3.908	(0.935)	15581	2.00000	2.04
	29 Bromochloromethane	128	3.803	3.803	(0.910)	5134	2.00000	1.98
$	30 Dibromofluoromethane	113	4.106	4.106	(0.983)	9050	2.00000	1.90
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	10962	2.00000	1.81
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	9042	2.00000	1.86
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	10812	2.00000	1.92
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	11092	2.00000	2.13(M)
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	9783	2.00000	2.37
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	684444	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	32394	2.00000	1.98
	38 Trichloroethene	130	5.216	5.216	(1.051)	9277	2.00000	2.00
	39 Bromodichloromethane	83	5.733	5.733	(1.155)	11961	2.00000	1.94
	41 2-Chloroethylvinyl ether	63	6.059	6.059	(1.220)	6648	4.00000	3.80
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	8129	2.00000	1.86(M)
	44 Dibromomethane	93	5.553	5.553	(1.119)	6110	2.00000	2.06
	45 4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	14771	4.00000	4.26
	46 cis-1,3-Dichloropropene	75	6.161	6.161	(1.241)	13738	2.00000	1.90
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	647809	50.0000	
$	48 Toluene-d8	98	6.393	6.393	(0.833)	31289	2.00000	1.95
	50 Toluene	91	6.453	6.453	(0.841)	35620	2.00000	1.98
	51 trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	10969	2.00000	1.83
	52 2-Hexanone	43	7.105	7.105	(0.926)	9314	4.00000	3.95
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	7537	2.00000	2.09
	54 1,3-Dichloropropane	76	6.989	6.989	(0.911)	14049	2.00000	1.98
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	10210	2.00000	1.96
	56 Tetrachloroethene	164	6.929	6.929	(0.903)	7331	2.00000	1.97
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	8477	2.00000	1.88
	58 1-Chlorohexane	55	7.697	7.697	(1.550)	5855	2.00000	1.77(MH)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	24558	2.00000	1.93
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.013)	9378	2.00000	1.98

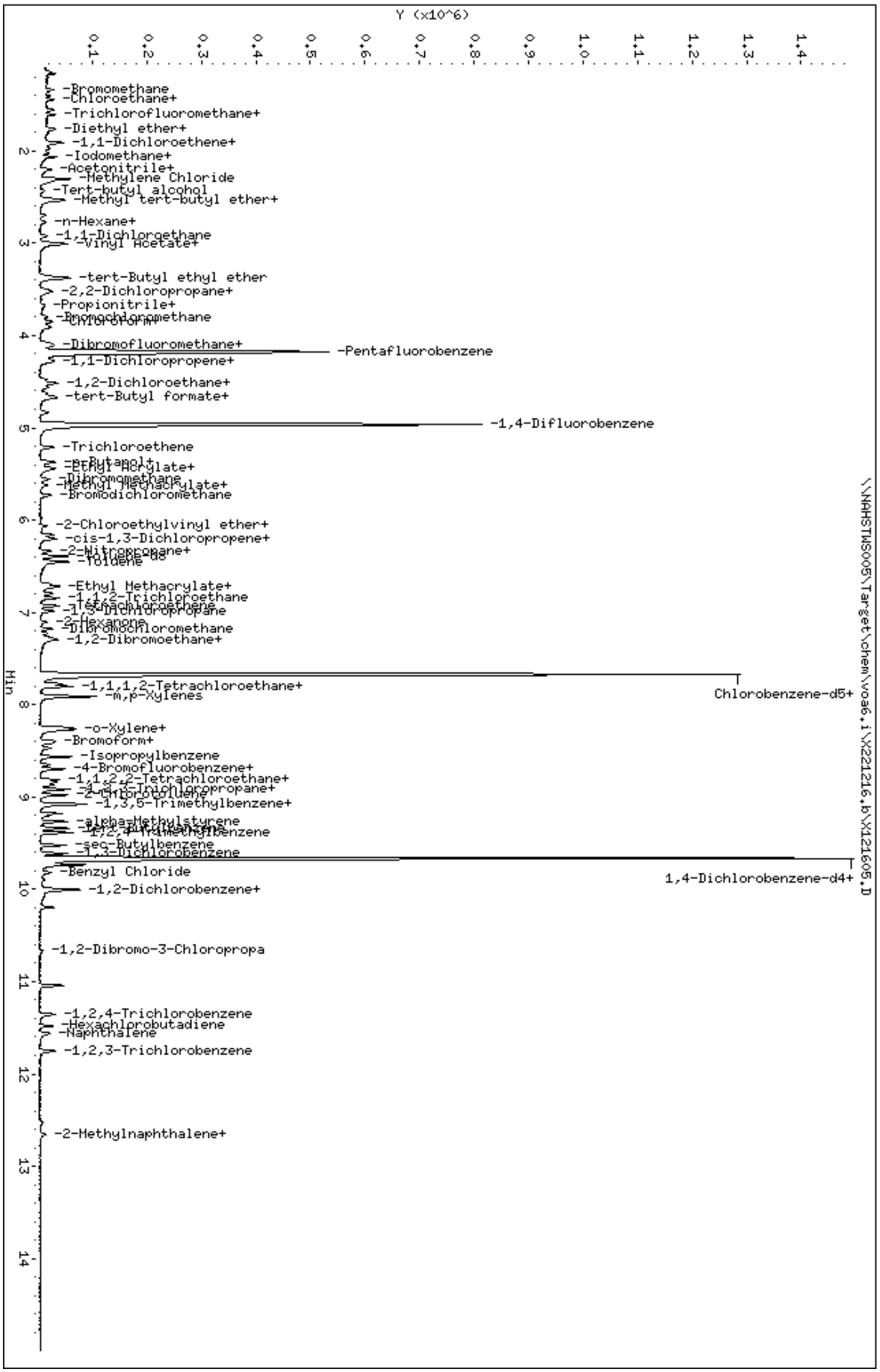
61 Ethylbenzene	106	7.802	7.802 (1.017)	11791	2.00000	1.97
62 m,p-Xylenes	106	7.911	7.911 (1.031)	29170	4.00000	3.78

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D Page 3
Report Date: 27-Dec-2022 16:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.249	8.249	(1.075)	14764	2.00000	1.93
	64 Styrene	104	8.271	8.271	(1.078)	22967	2.00000	1.80
	66 Bromoform	173	8.417	8.417	(1.097)	6949	2.00000	1.93(T)
	67 Isopropylbenzene	105	8.563	8.563	(1.116)	32641	2.00000	1.87
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	11741	2.00000	2.08
$	69 4-Bromofluorobenzene	95	8.698	8.698	(1.134)	13631	2.00000	2.33
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	352851	50.0000	
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	7514	2.00000	1.91
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	34981	2.00000	1.78
	74 Bromobenzene	156	8.815	8.815	(0.912)	11721	2.00000	2.02
	75 1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	27917	2.00000	1.93
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	26853	2.00000	2.09
	77 4-Chlorotoluene	91	9.077	9.077	(0.939)	28173	2.00000	1.92
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	22104	2.00000	1.87
	79 1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	28377	2.00000	1.86
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	27643	2.00000	1.75
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	24966	2.00000	1.77
	83 1,3-Dichlorobenzene	146	9.613	9.613	(0.995)	18708	2.00000	1.94
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	20552	2.00000	1.96
	86 Benzyl Chloride	91	9.819	9.819	(1.280)	12783	2.00000	3.88
	87 n-Butylbenzene	91	10.003	10.003	(1.035)	19853	2.00000	3.18(M)
	88 1,2-Dichlorobenzene	146	9.999	9.999	(1.035)	18921	2.00000	1.91
	89 1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	1619	2.00000	1.88(M)
	90 1,2,4-Trichlorobenzene	180	11.352	11.352	(1.175)	11764	2.00000	1.88(M)
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	3970	2.00000	1.39
	92 Naphthalene	128	11.559	11.559	(1.196)	26250	2.00000	1.84(M)
	93 1,2,3-Trichlorobenzene	180	11.750	11.750	(1.216)	11288	2.00000	1.88
M	94 1,2-Dichloroethylene (total)	96				16788	4.00000	
M	95 Xylenes (total)	106				43934	6.00000	
	141 Cyclohexane	56	4.125	4.125	(0.987)	7375	2.00000	2.82(H)
	138 Freon TF	101	1.917	1.917	(0.459)	6025	2.00000	1.79
	147 Methylcyclohexane	55	5.373	5.373	(1.082)	16016	2.00000	1.91(M)
	146 Methyl Acetate	43	2.247	2.247	(0.538)	4149	2.00000	2.02
	148 Tert-Butyl alcohol	59	2.434	2.434	(0.583)	12015	40.0000	38.02(a)
	149 Isopropyl Alcohol	45	2.101	2.101	(0.503)	5607	40.0000	33.97

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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

\\NAHSTMS005\Target\chem\voa6.i\X221216.b\X121605.D

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Bromomethane (74-83-9)

BEFORE
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94
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HEIGHT
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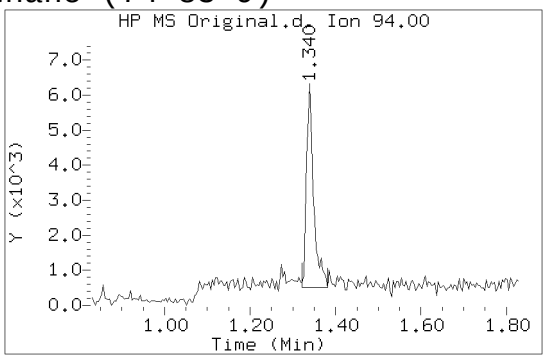
27-Dec-2022
16:03
linh
pham



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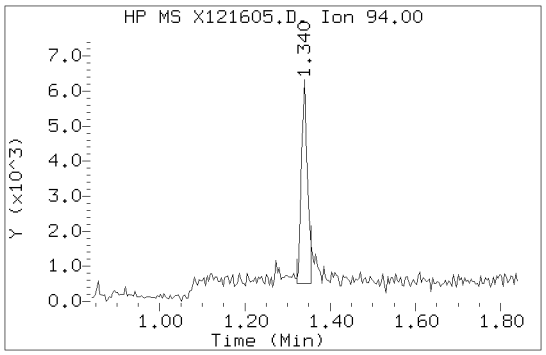

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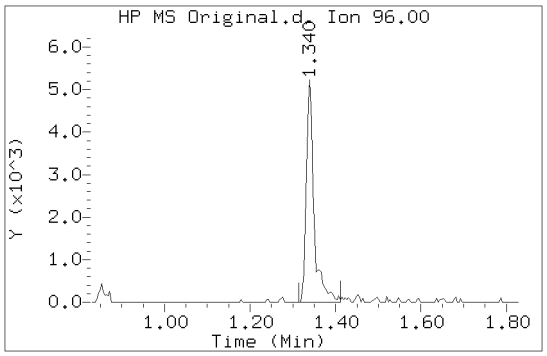

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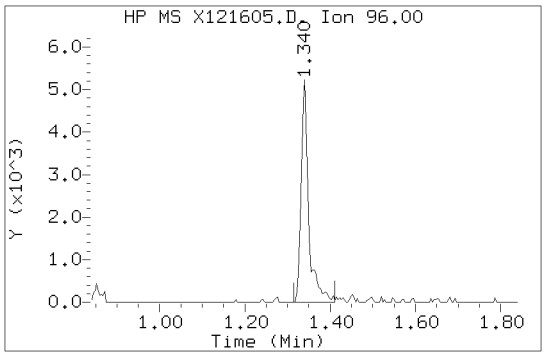

Chloroethane (75-00-3)

BEFORE
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HEIGHT
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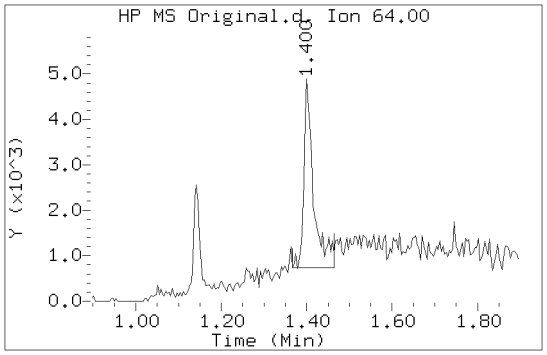
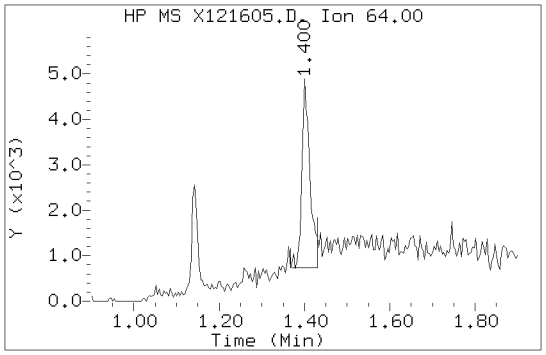
27-Dec-2022
16:03
linh
pham

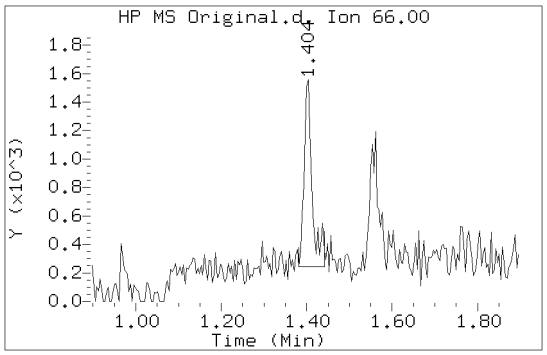


Reason Code:

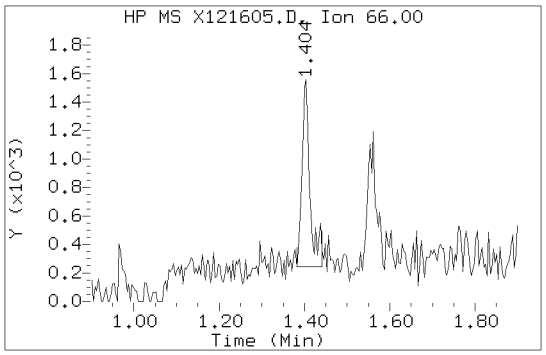
AFTER
MASS
64
AREA
5667
HEIGHT
4162
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
66
AREA
1745
HEIGHT
1315
27-Dec-2022
16:03
linh
pham



AFTER
MASS
66
AREA
1745
HEIGHT
1315
27-Dec-2022
16:07
linh
pham



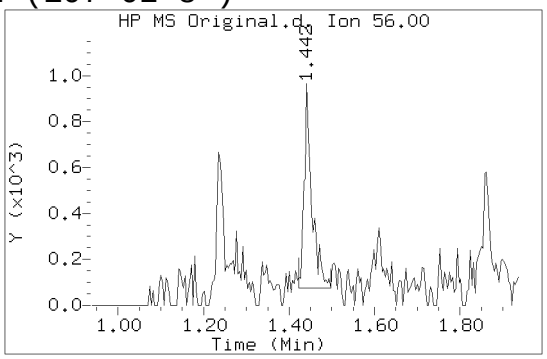
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Acrolein (107-02-8)

Reason Code:

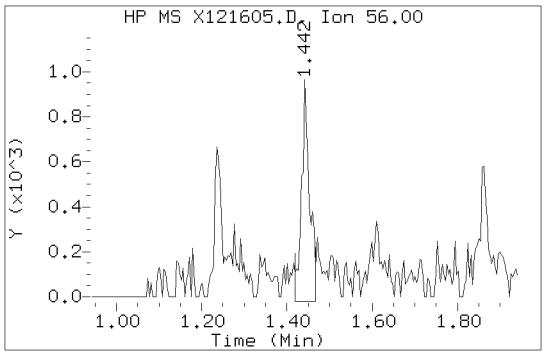
BEFORE

MASS
56
AREA
1122
HEIGHT
890
27-Dec-2022
16:03
linh
pham



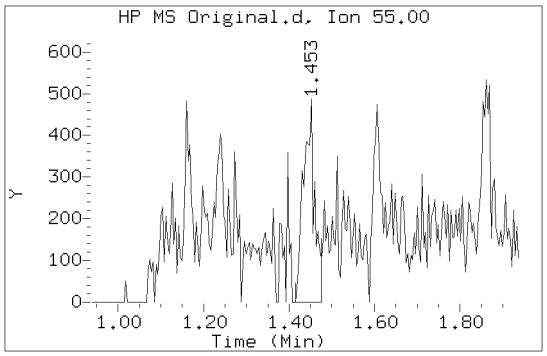
AFTER

MASS
56
AREA
1317
HEIGHT
985
27-Dec-2022
16:07
linh
pham



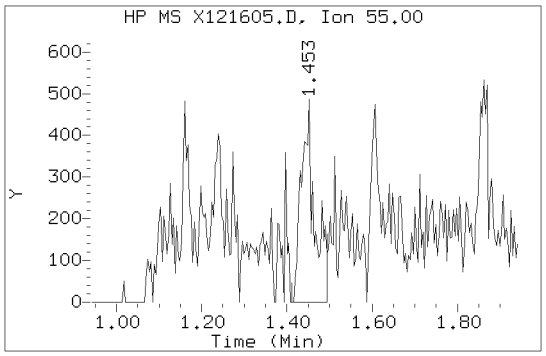
BEFORE

MASS
55
AREA
885
HEIGHT
487
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
1067
HEIGHT
487
27-Dec-2022
16:07
linh
pham

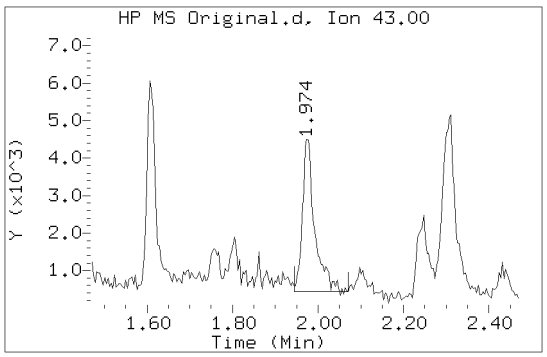


Acetone (67-64-1)

Reason Code:

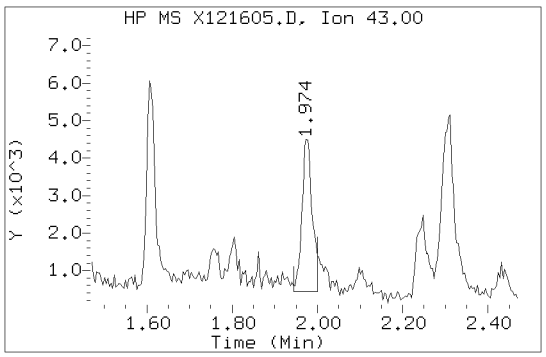
BEFORE

MASS
43
AREA
8369
HEIGHT
4066
27-Dec-2022
16:03
linh
pham



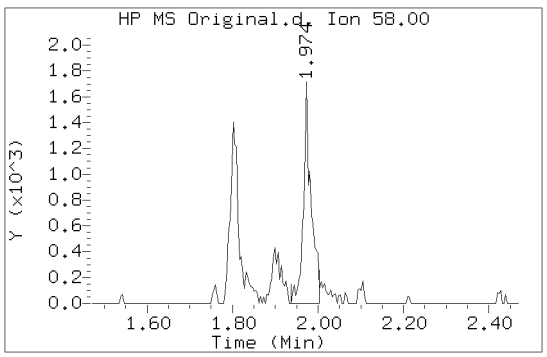
AFTER

MASS
43
AREA
7041
HEIGHT
4066
27-Dec-2022
16:07
linh
pham



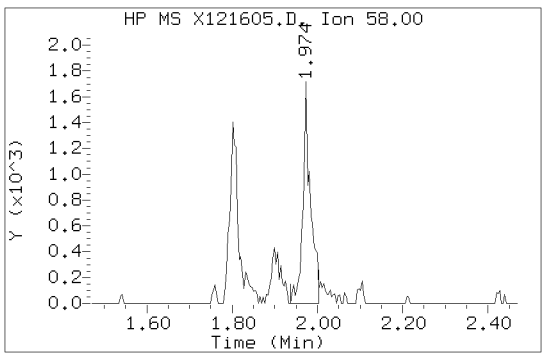
BEFORE

MASS
58
AREA
2165
HEIGHT
1717
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
2165
HEIGHT
1717
27-Dec-2022
16:07
linh
pham

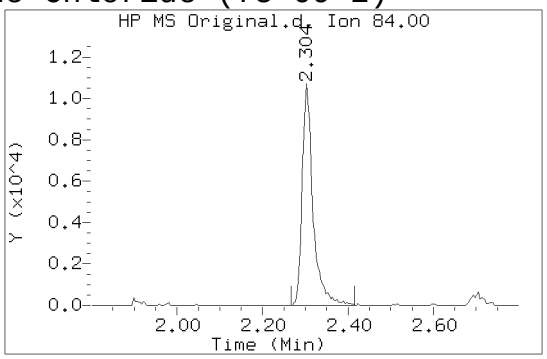


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Methylene Chloride (75-09-2)

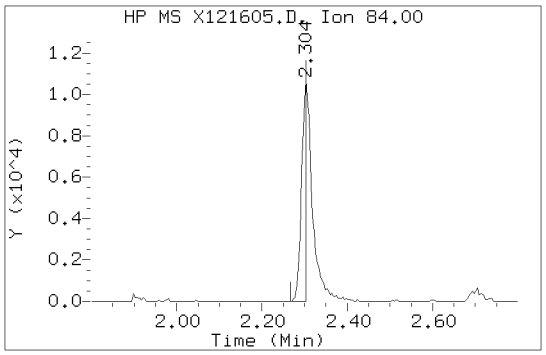
BEFORE

MASS
84
AREA
19299
HEIGHT
10710
27-Dec-2022
16:03
linh
pham



AFTER

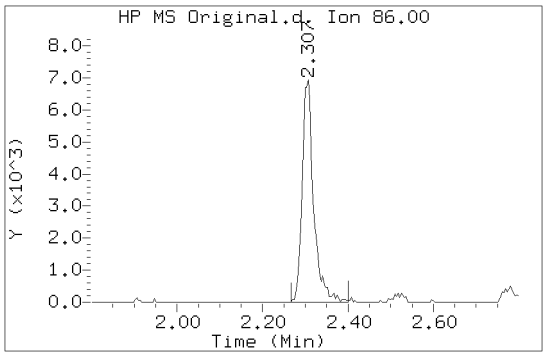
MASS
84
AREA
9194
HEIGHT
10710
27-Dec-2022
16:07
linh
pham



Reason Code:

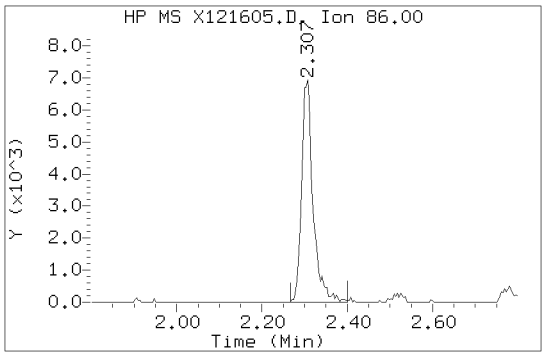
BEFORE

MASS
86
AREA
13231
HEIGHT
6936
27-Dec-2022
16:03
linh
pham



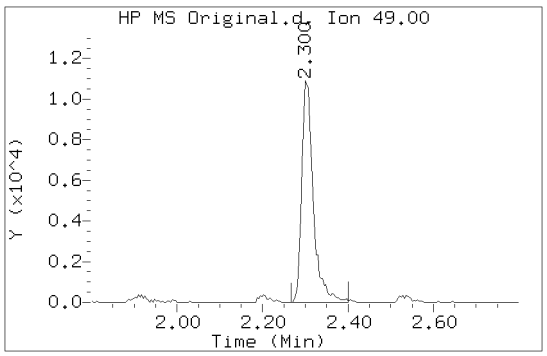
AFTER

MASS
86
AREA
13231
HEIGHT
6936
27-Dec-2022
16:07
linh
pham



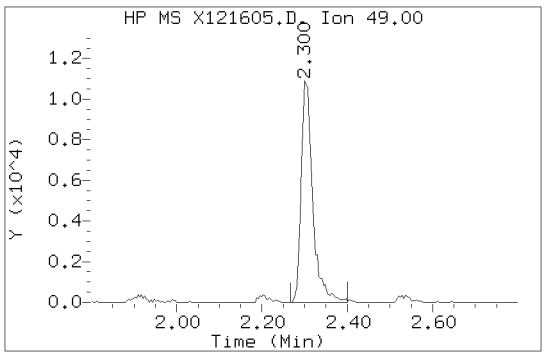
BEFORE

MASS
49
AREA
21067
HEIGHT
10905
27-Dec-2022
16:03
linh
pham



AFTER

MASS
49
AREA
21067
HEIGHT
10905
27-Dec-2022
16:07
linh
pham

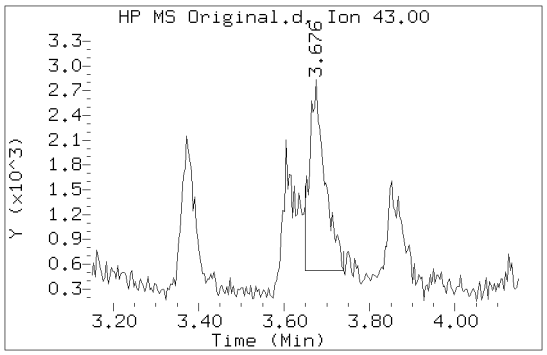


2-Butanone (78-93-3)

Reason Code:

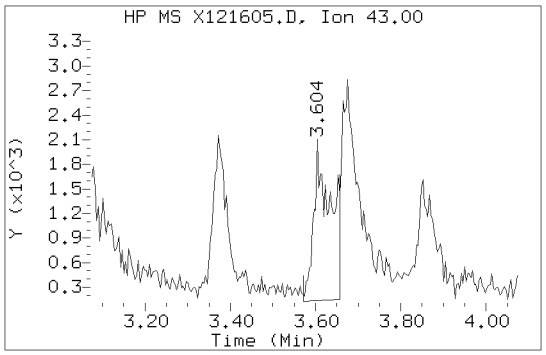
BEFORE

MASS
43
AREA
5778
HEIGHT
2307
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
5418
HEIGHT
1969
27-Dec-2022
16:07
linh
pham



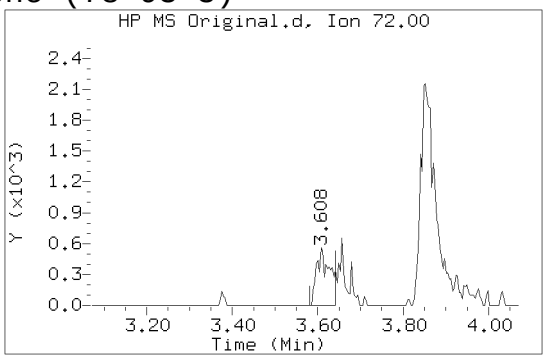
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

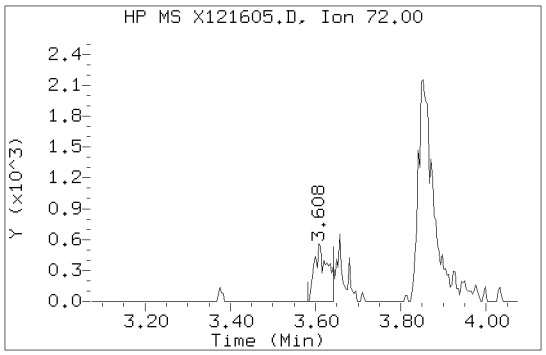
BEFORE

MASS
72
AREA
1209
HEIGHT
563
27-Dec-2022
16:03
linh
pham



AFTER

MASS
72
AREA
1209
HEIGHT
563
27-Dec-2022
16:07
linh
pham

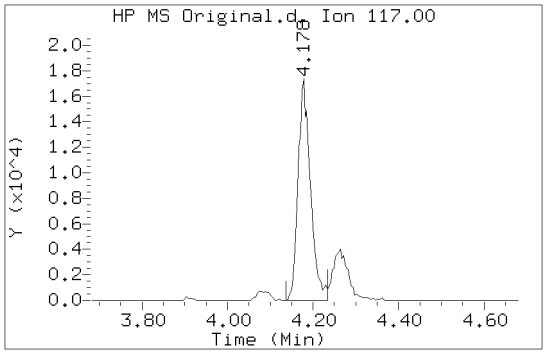


Carbon Tetrachloride (56-23-5)

Reason Code:

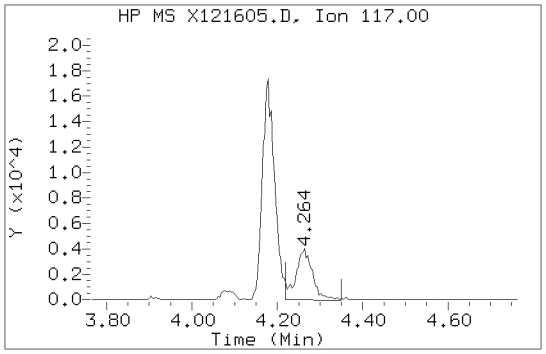
BEFORE

MASS
117
AREA
35555
HEIGHT
17376
27-Dec-2022
16:03
linh
pham



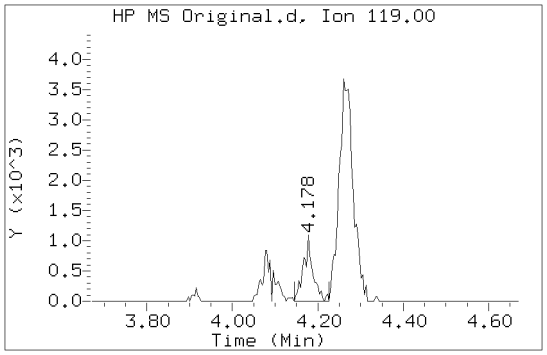
AFTER

MASS
117
AREA
11092
HEIGHT
4036
27-Dec-2022
16:07
linh
pham



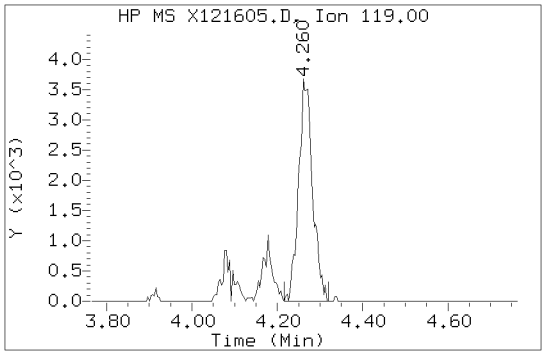
BEFORE

MASS
119
AREA
1692
HEIGHT
1100
27-Dec-2022
16:03
linh
pham



AFTER

MASS
119
AREA
8494
HEIGHT
3676
27-Dec-2022
16:07
linh
pham

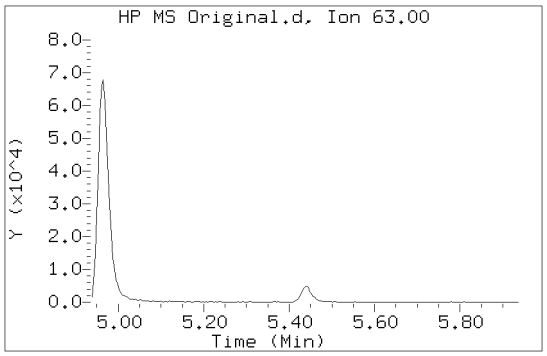


1,2-Dichloropropane (78-87-5)

Reason Code:

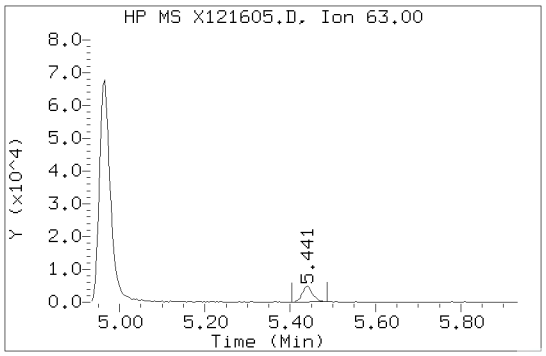
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
63
AREA
8129
HEIGHT
4705
27-Dec-2022
16:07
linh
pham



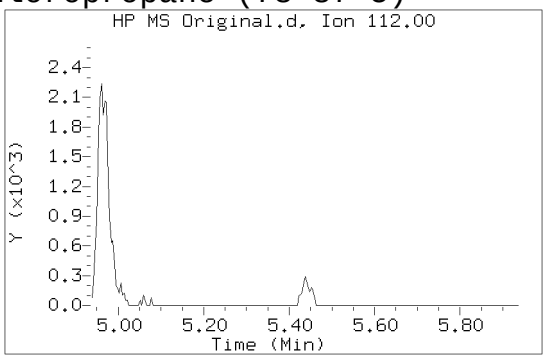
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

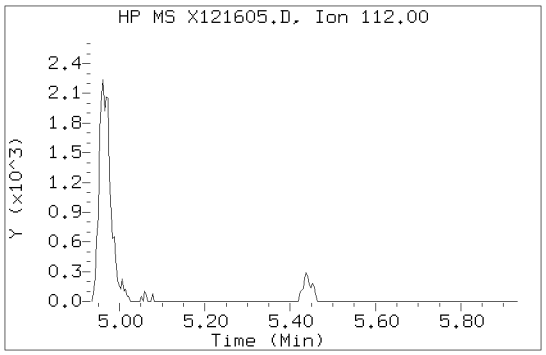
BEFORE

MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

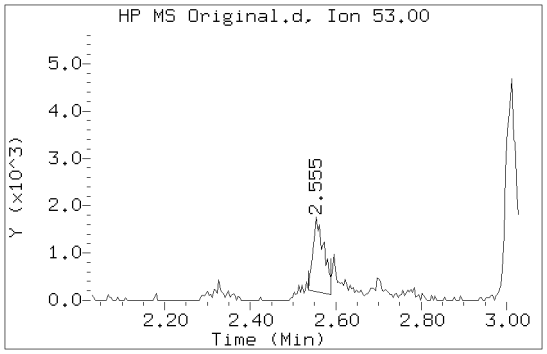


Acrylonitrile (107-13-1)

Reason Code:

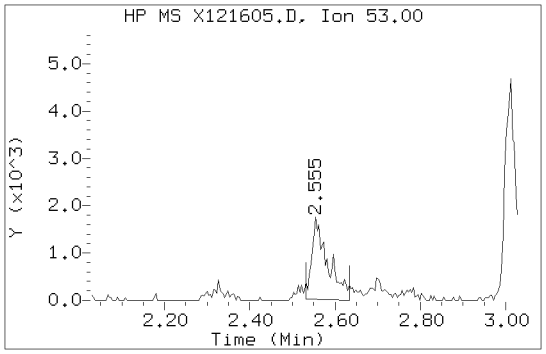
BEFORE

MASS
53
AREA
2810
HEIGHT
1577
27-Dec-2022
16:03
linh
pham



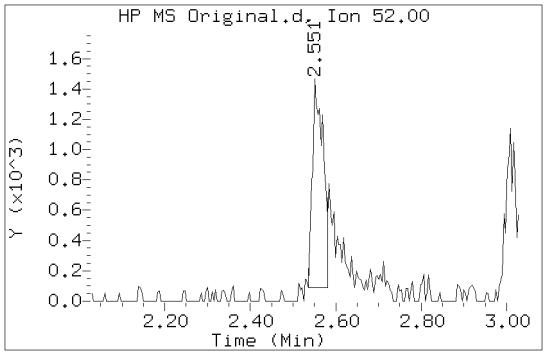
AFTER

MASS
53
AREA
4557
HEIGHT
1735
27-Dec-2022
16:07
linh
pham



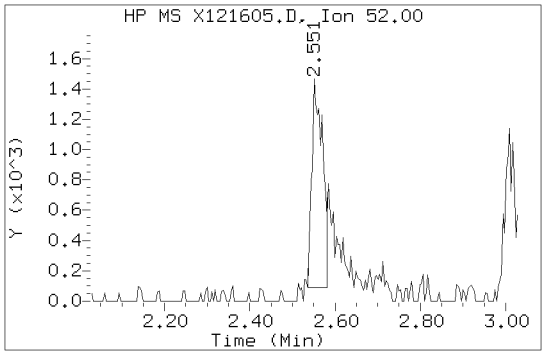
BEFORE

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:03
linh
pham



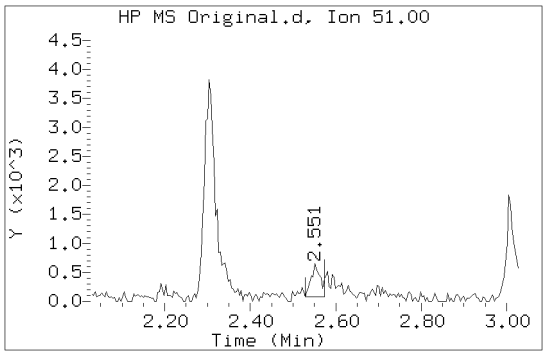
AFTER

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:07
linh
pham



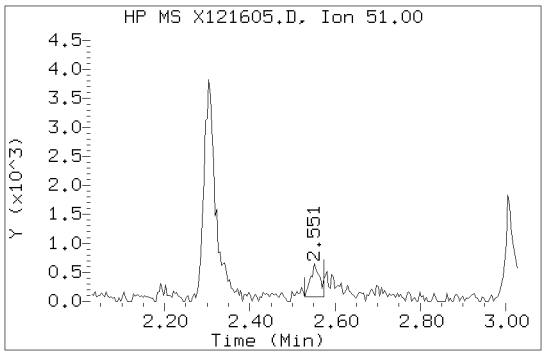
BEFORE

MASS
51
AREA
876
HEIGHT
575
27-Dec-2022
16:03
linh
pham



AFTER

MASS
51
AREA
876
HEIGHT
575
27-Dec-2022
16:07
linh
pham

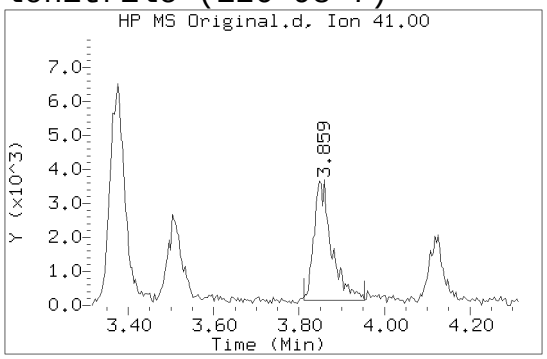


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

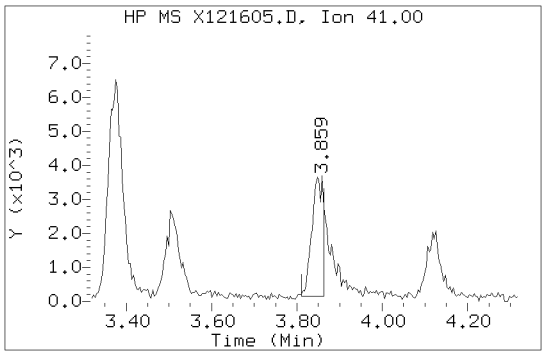
Methacrylonitrile (126-98-7)

Reason Code:

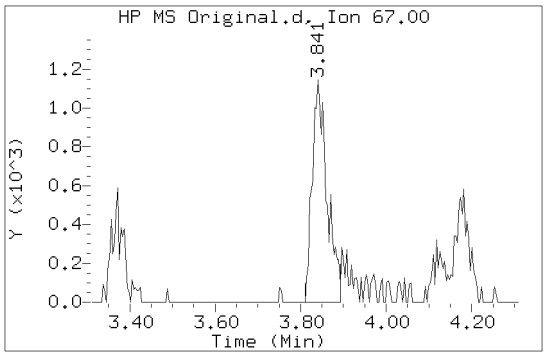
BEFORE
MASS
41
AREA
10013
HEIGHT
3544
27-Dec-2022
16:03
linh
pham



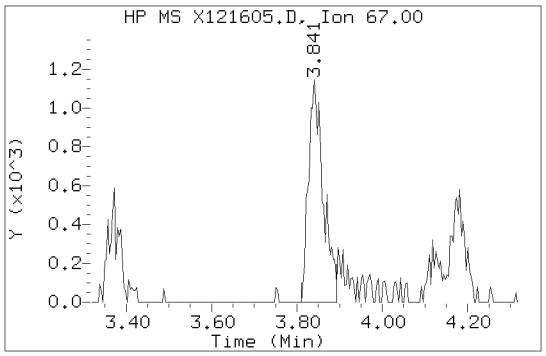
AFTER
MASS
41
AREA
6388
HEIGHT
3544
27-Dec-2022
16:07
linh
pham



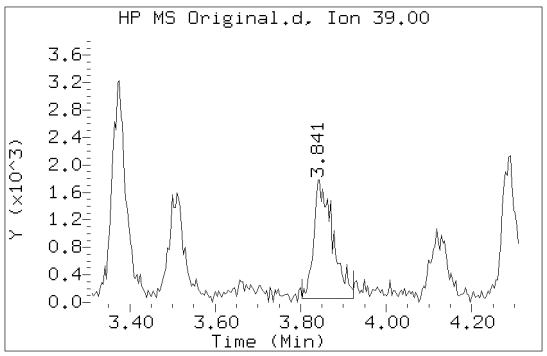
BEFORE
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:03
linh
pham



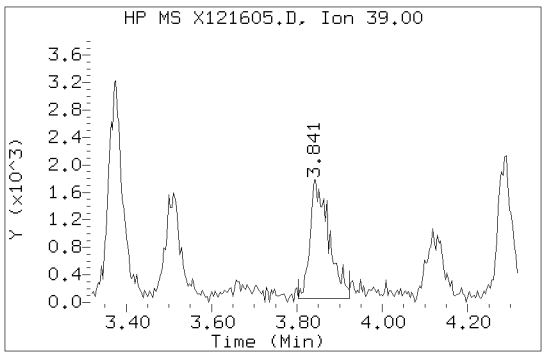
AFTER
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:03
linh
pham



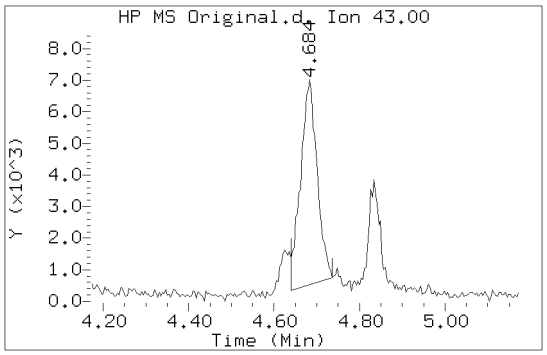
AFTER
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:07
linh
pham



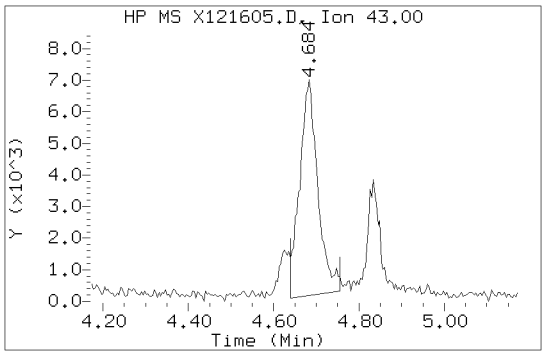
Isobutyl Alcohol (78-83-1)

Reason Code:

BEFORE
MASS
43
AREA
17811
HEIGHT
6479
27-Dec-2022
16:03
linh
pham



AFTER
MASS
43
AREA
20629
HEIGHT
6832
27-Dec-2022
16:07
linh
pham

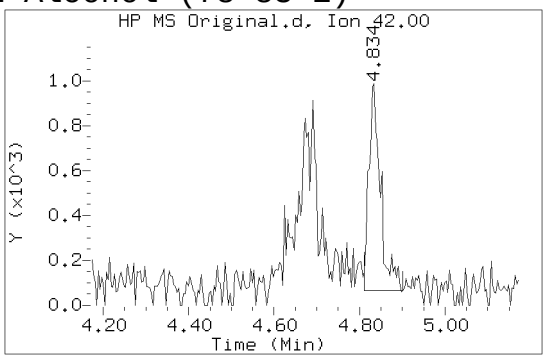


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Isobutyl Alcohol (78-83-1)

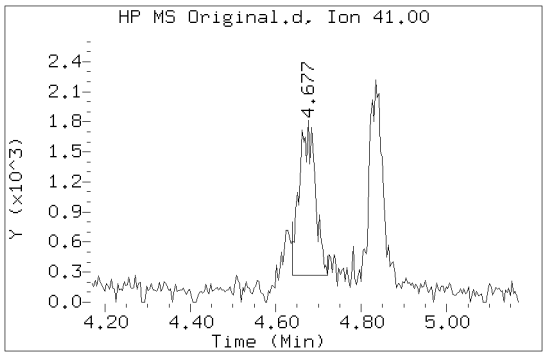
BEFORE

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:03
linh
pham



BEFORE

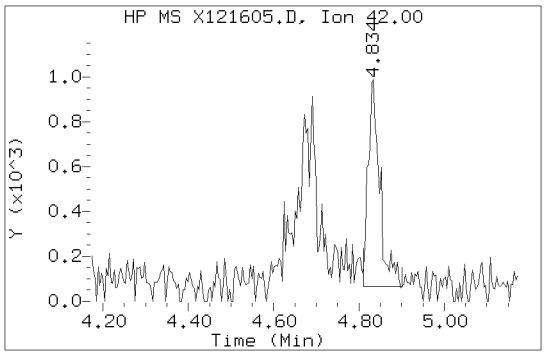
MASS
41
AREA
4067
HEIGHT
1547
27-Dec-2022
16:03
linh
pham



Reason Code:

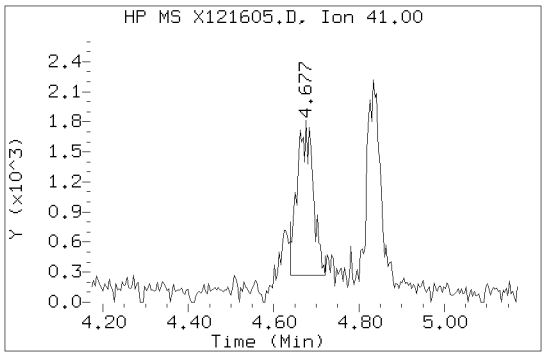
AFTER

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:07
linh
pham



AFTER

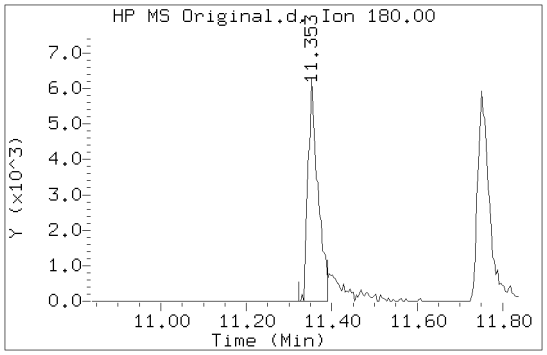
MASS
41
AREA
4067
HEIGHT
1547
27-Dec-2022
16:07
linh
pham



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

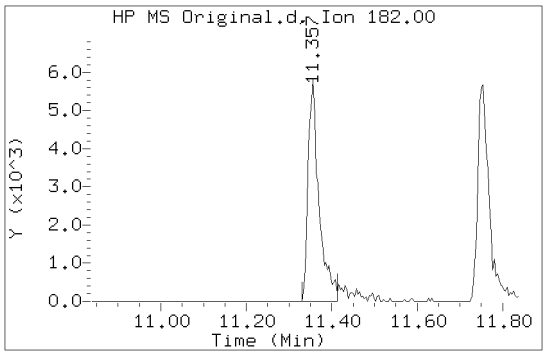
BEFORE

MASS
180
AREA
10131
HEIGHT
6269
27-Dec-2022
16:03
linh
pham



BEFORE

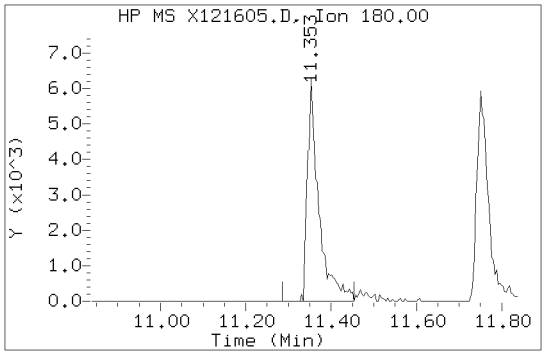
MASS
182
AREA
10317
HEIGHT
5807
27-Dec-2022
16:03
linh
pham



Reason Code:

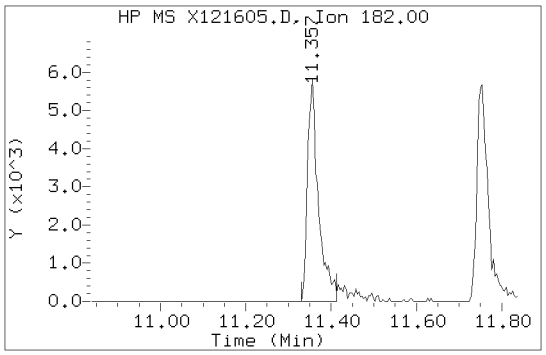
AFTER

MASS
180
AREA
11764
HEIGHT
6269
27-Dec-2022
16:07
linh
pham



AFTER

MASS
182
AREA
10317
HEIGHT
5807
27-Dec-2022
16:07
linh
pham

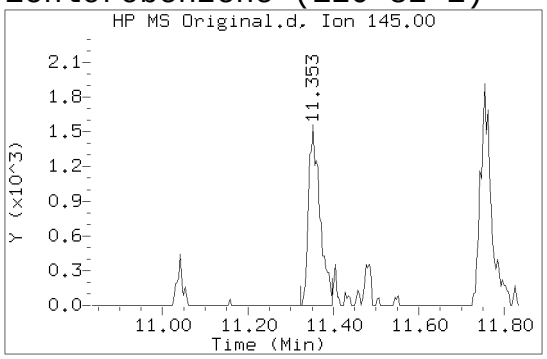


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

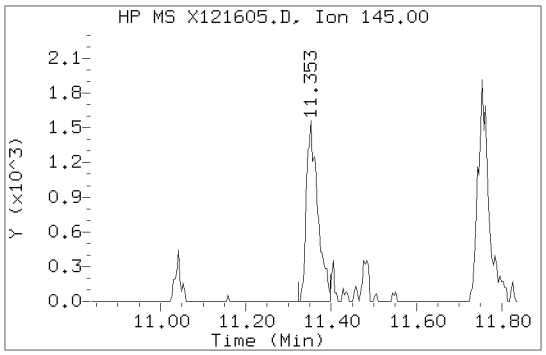
BEFORE

MASS
145
AREA
2887
HEIGHT
1565
27-Dec-2022
16:03
linh
pham



AFTER

MASS
145
AREA
2887
HEIGHT
1565
27-Dec-2022
16:07
linh
pham

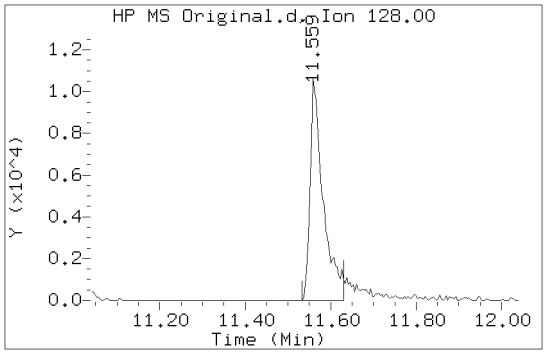


Reason Code:

Naphthalene (91-20-3)

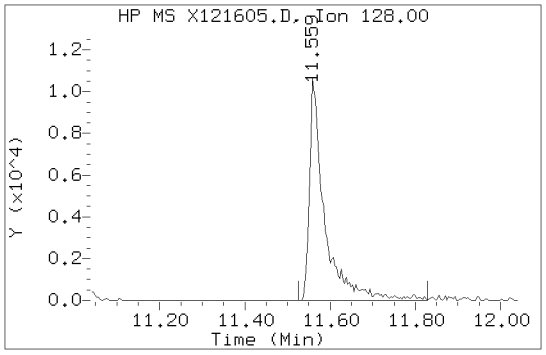
BEFORE

MASS
128
AREA
22581
HEIGHT
10616
27-Dec-2022
16:03
linh
pham



AFTER

MASS
128
AREA
26250
HEIGHT
10616
27-Dec-2022
16:07
linh
pham

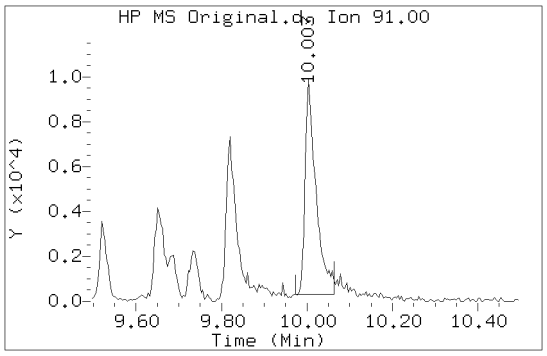


Reason Code:

n-Butylbenzene (104-51-8)

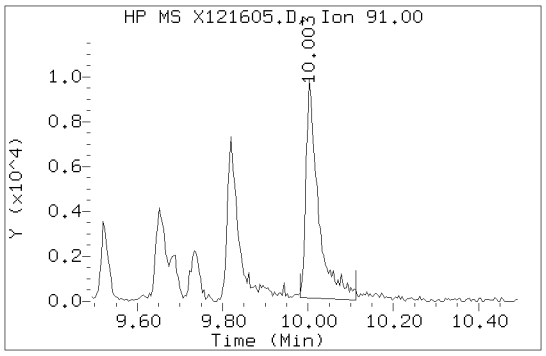
BEFORE

MASS
91
AREA
17181
HEIGHT
9558
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
19853
HEIGHT
9720
27-Dec-2022
16:07
linh
pham



Reason Code:

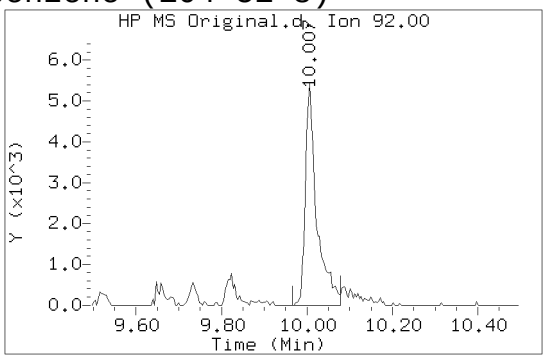
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butylbenzene (104-51-8)

Reason Code:

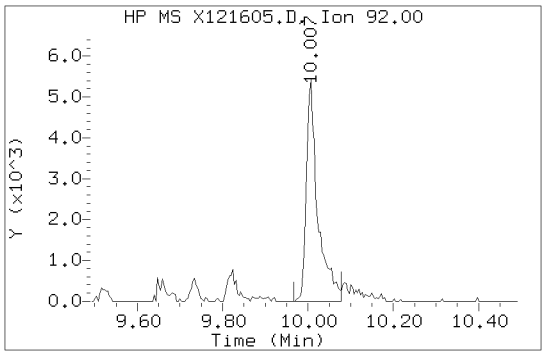
BEFORE

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:03
linh
pham



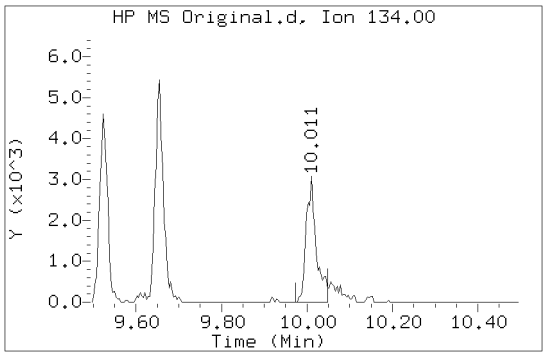
AFTER

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:07
linh
pham



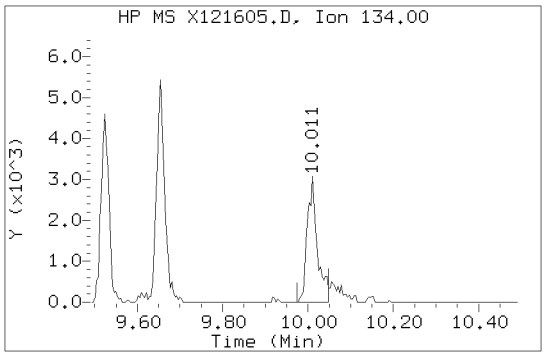
BEFORE

MASS
134
AREA
5059
HEIGHT
3076
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
5059
HEIGHT
3076
27-Dec-2022
16:07
linh
pham

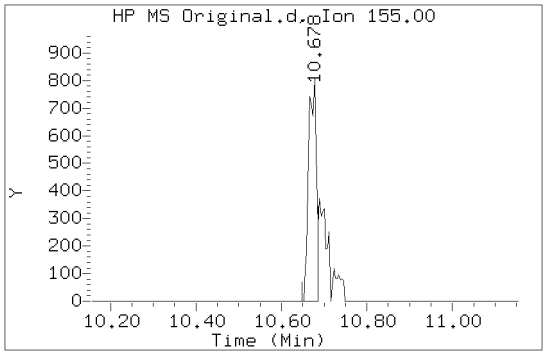


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

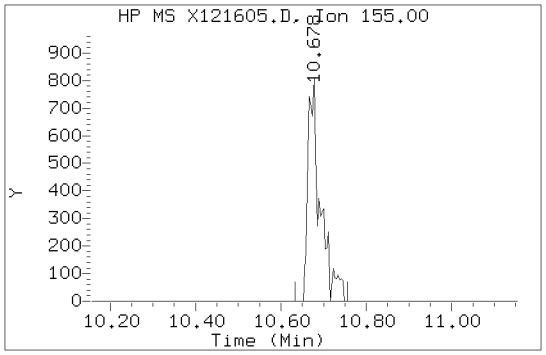
BEFORE

MASS
155
AREA
1026
HEIGHT
806
27-Dec-2022
16:03
linh
pham



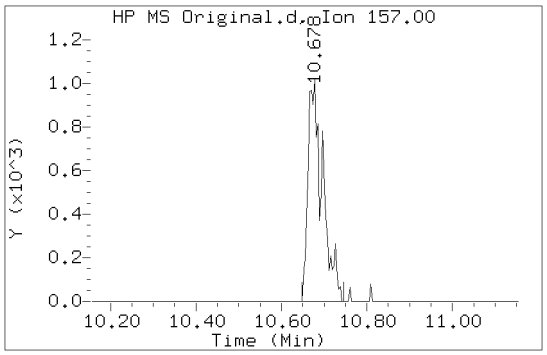
AFTER

MASS
155
AREA
1619
HEIGHT
806
27-Dec-2022
16:07
linh
pham



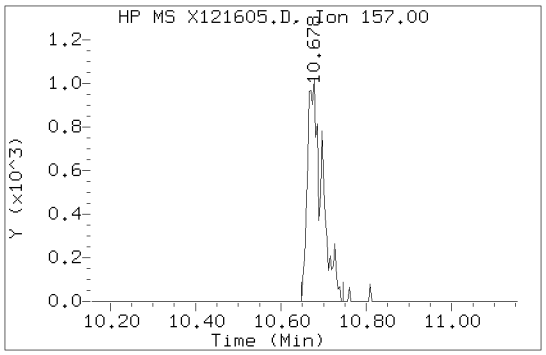
BEFORE

MASS
157
AREA
2422
HEIGHT
1016
27-Dec-2022
16:03
linh
pham



AFTER

MASS
157
AREA
2422
HEIGHT
1016
27-Dec-2022
16:07
linh
pham



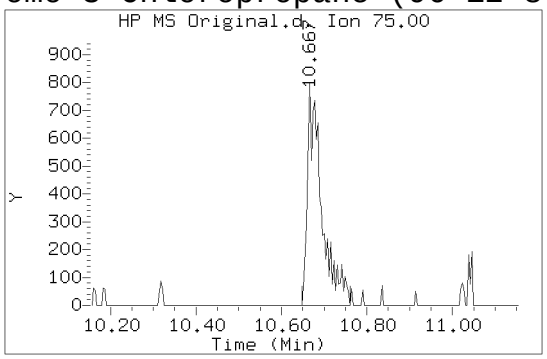
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

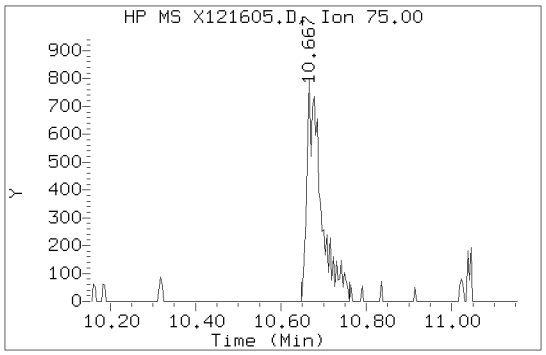
BEFORE

MASS
75
AREA
1843
HEIGHT
796
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
1843
HEIGHT
796
27-Dec-2022
16:07
linh
pham

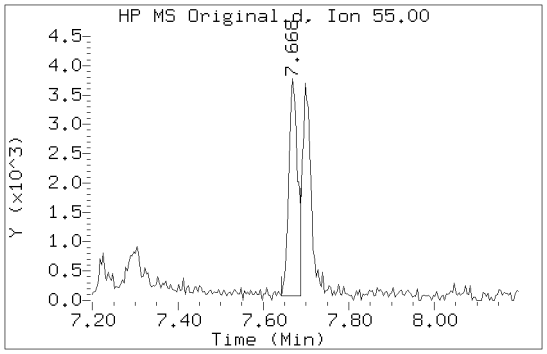


1-Chlorohexane (544-10-5)

Reason Code:

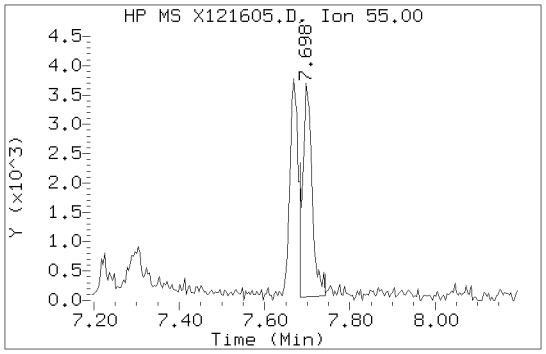
BEFORE

MASS
55
AREA
5357
HEIGHT
3703
27-Dec-2022
16:03
linh
pham



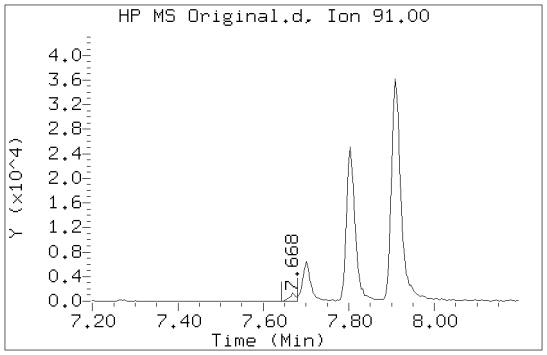
AFTER

MASS
55
AREA
5855
HEIGHT
3647
27-Dec-2022
16:07
linh
pham



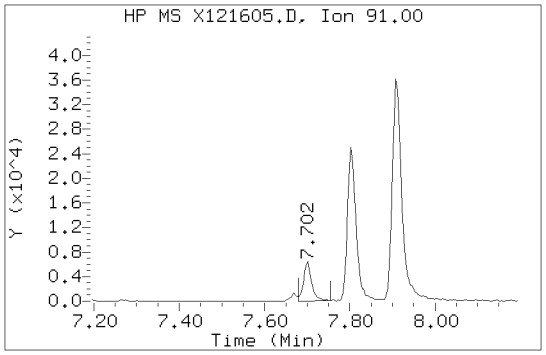
BEFORE

MASS
91
AREA
1356
HEIGHT
1324
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
8682
HEIGHT
6440
27-Dec-2022
16:07
linh
pham

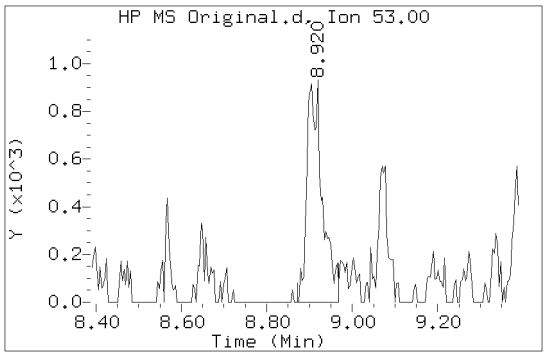


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

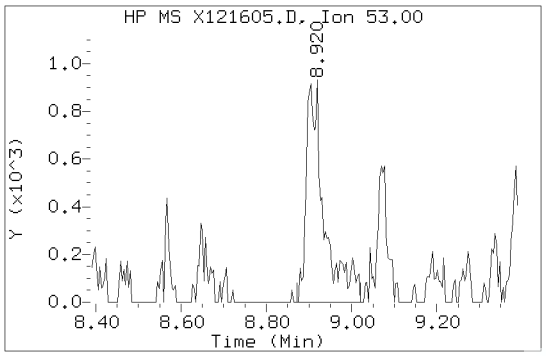
BEFORE

MASS
53
AREA
2313
HEIGHT
932
27-Dec-2022
16:03
linh
pham



AFTER

MASS
53
AREA
2690
HEIGHT
932
27-Dec-2022
16:07
linh
pham



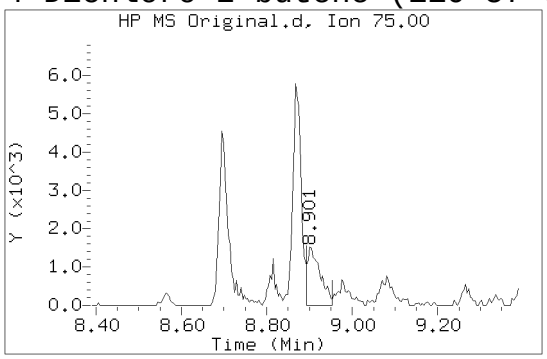
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

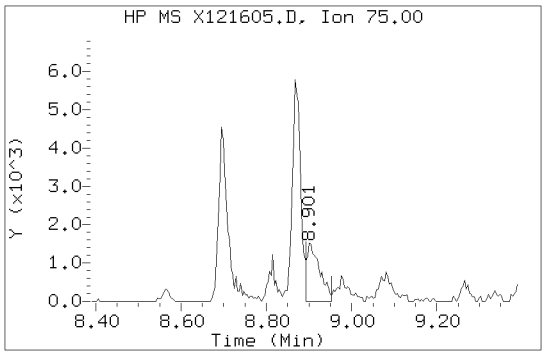
BEFORE

MASS
75
AREA
3228
HEIGHT
1526
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
3228
HEIGHT
1526
27-Dec-2022
16:07
linh
pham

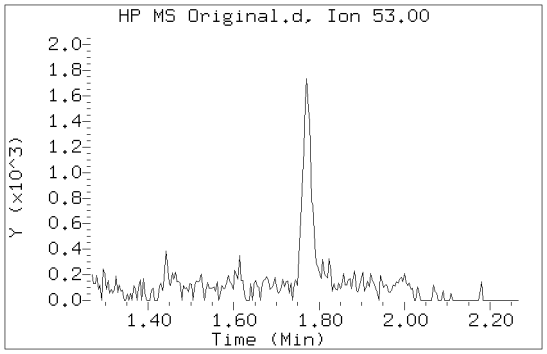


Chloroprene (126-99-8)

Reason Code:

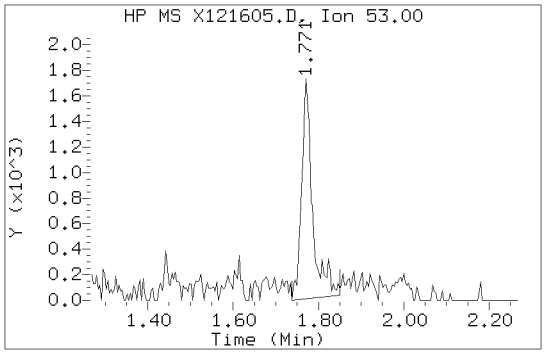
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



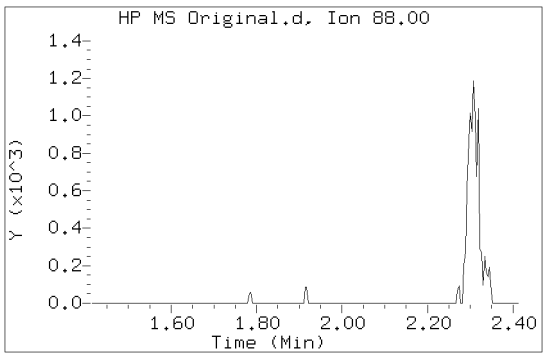
AFTER

MASS
53
AREA
3126
HEIGHT
1722
27-Dec-2022
16:07
linh
pham



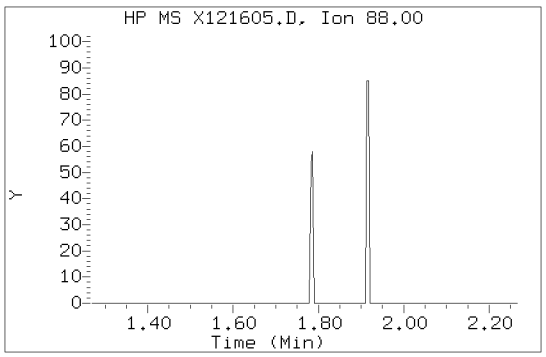
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

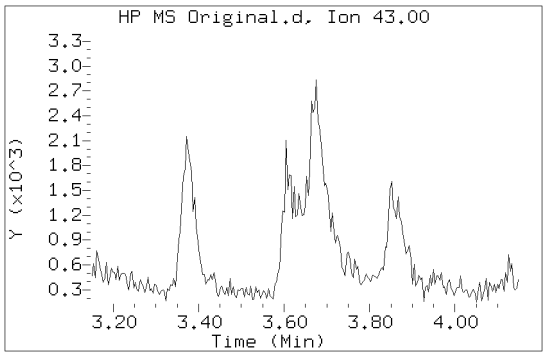


Ethyl Acetate (141-78-6)

Reason Code:

BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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27-Dec-2022
16:07
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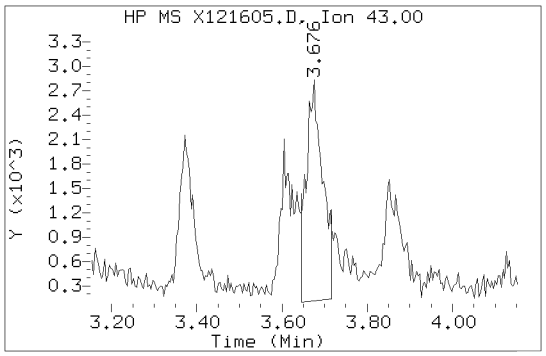

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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

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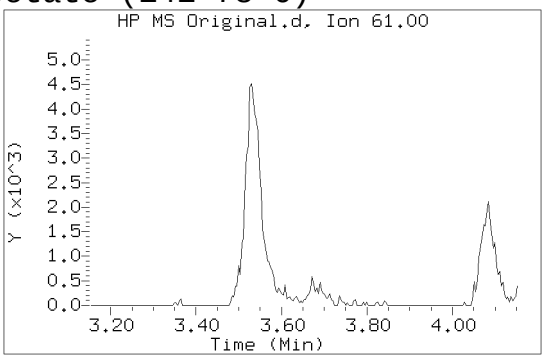

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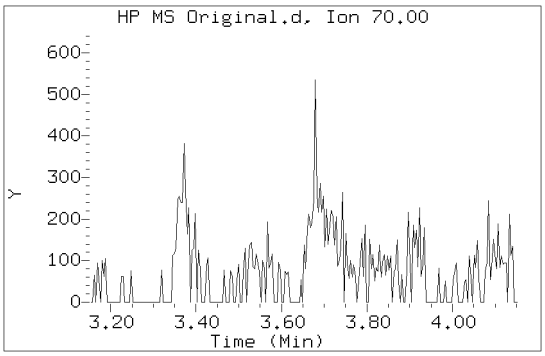

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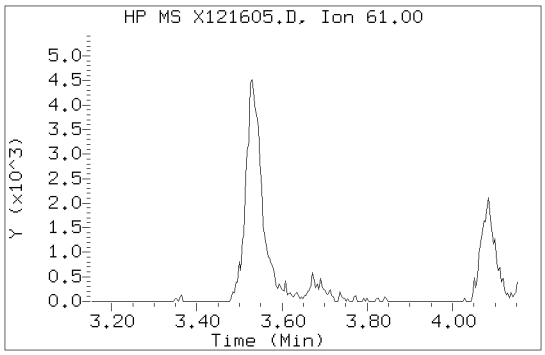

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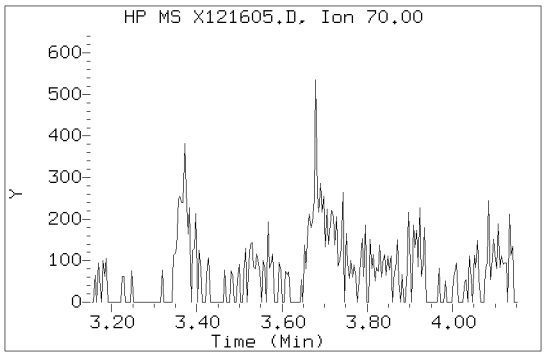

Methyl Acrylate (96-33-3)

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16:03
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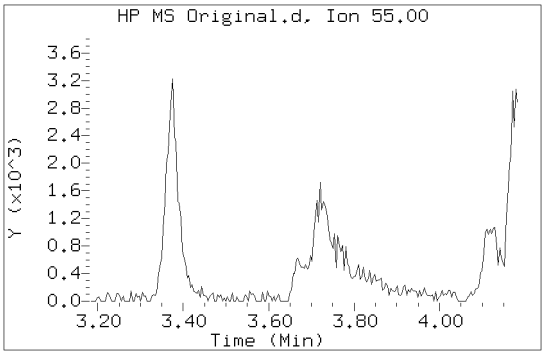

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16:03
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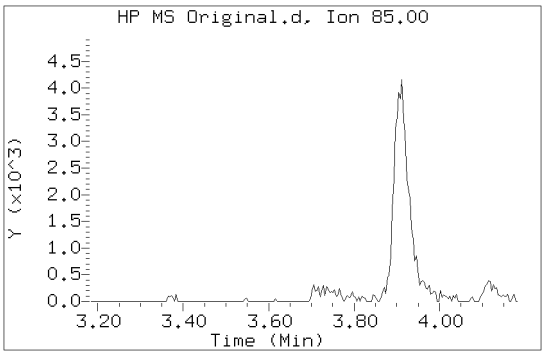

Reason Code:

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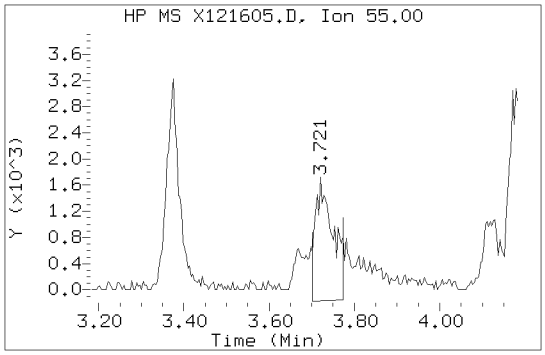

AFTER
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16:07
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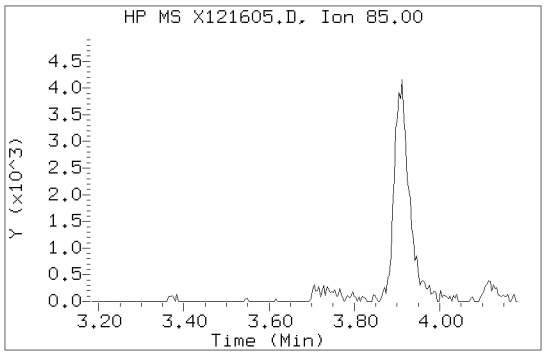

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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

BEFORE

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56
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HEIGHT
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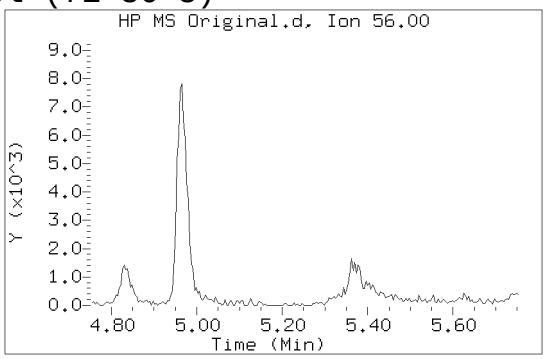
16:03
linh
pham



AFTER

MASS
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HEIGHT
808
27-Dec-2022
16:07
linh
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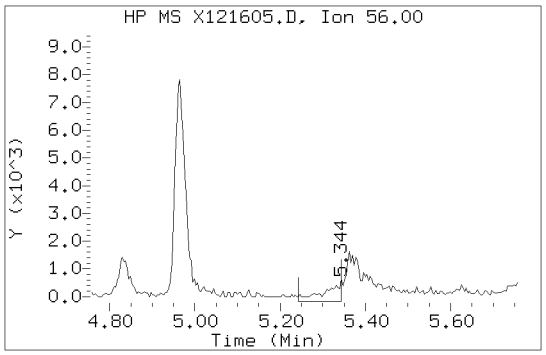

BEFORE

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16:03
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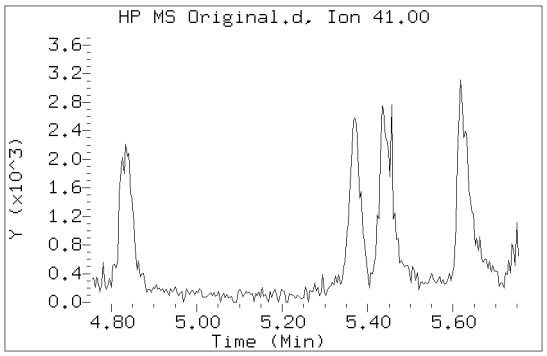

AFTER

MASS
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16:07
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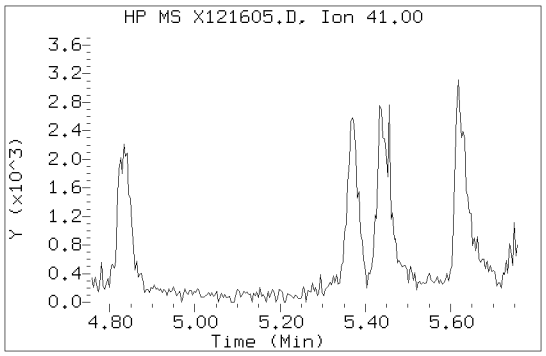

1,4-Dioxane ()

Reason Code:

BEFORE

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88
AREA
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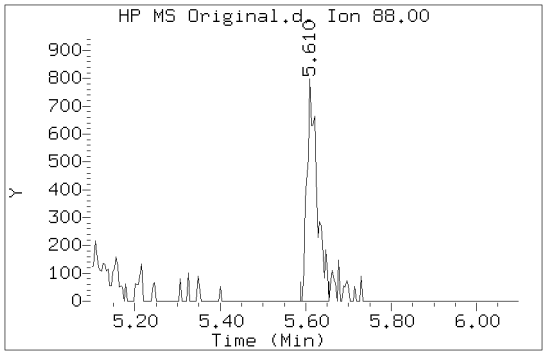
HEIGHT
798
27-Dec-2022
16:03
linh
pham



AFTER

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AREA
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798
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16:07
linh
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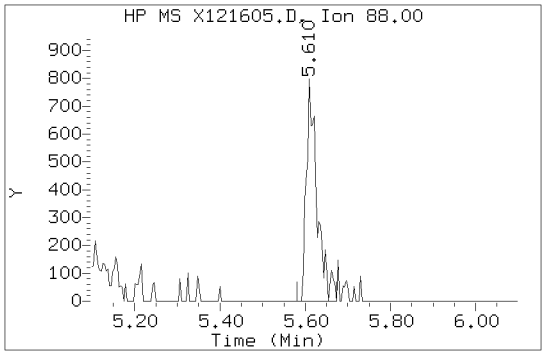

BEFORE

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58
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501
27-Dec-2022
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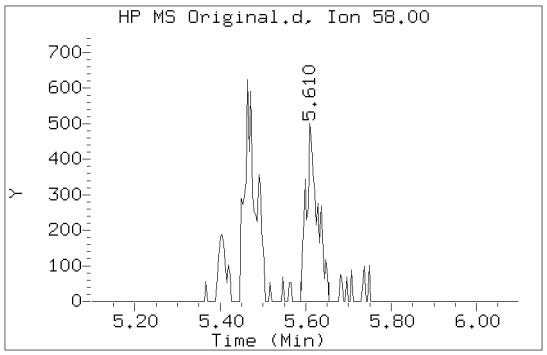

AFTER

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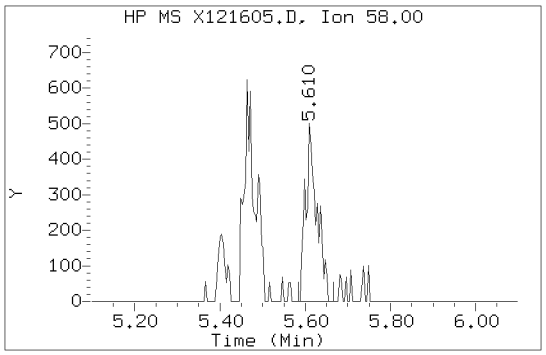

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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Tetrahydrofuran (109-99-9)

BEFORE

MASS
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AREA
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27-Dec-2022
16:03
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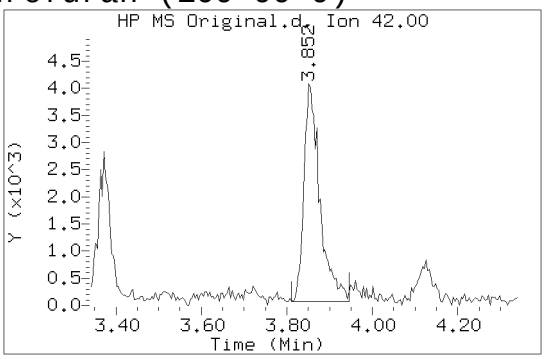
pham



BEFORE

MASS
71
AREA
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2086
27-Dec-2022
16:03
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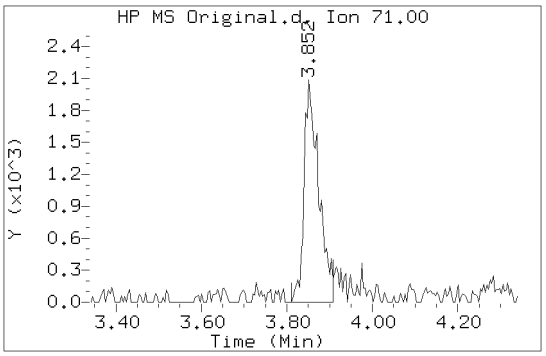
pham



Reason Code:

AFTER

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HEIGHT
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16:07
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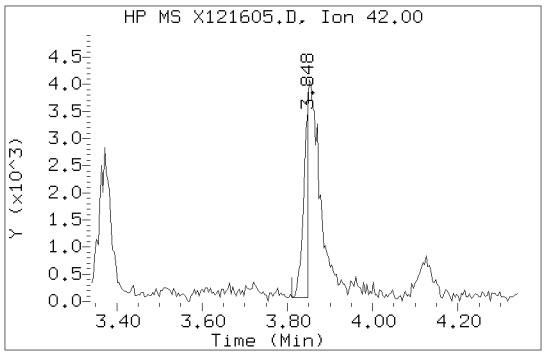

AFTER

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16:07
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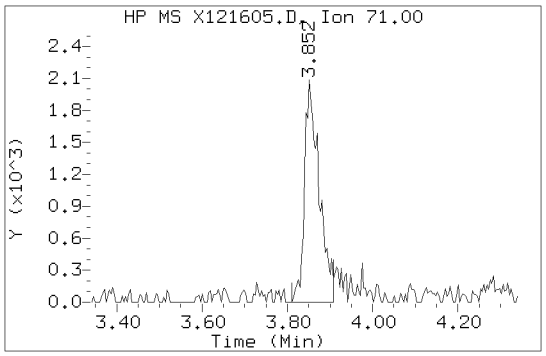

Methylcyclohexane (108-87-2)

BEFORE

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16:03
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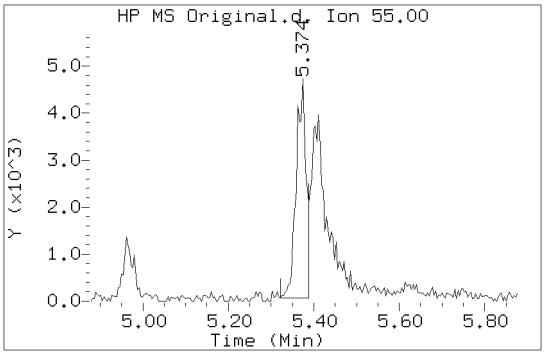

BEFORE

MASS
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AREA
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HEIGHT
6672
27-Dec-2022
16:03
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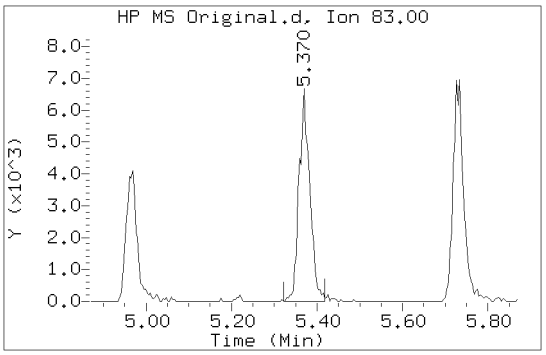
pham



Reason Code:

AFTER

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16:07
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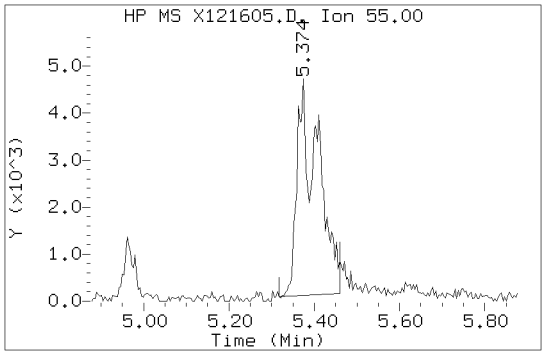

AFTER

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27-Dec-2022
16:07
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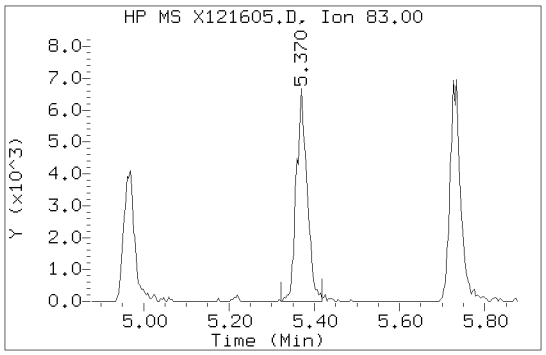

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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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HEIGHT
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27-Dec-2022
16:03
linh
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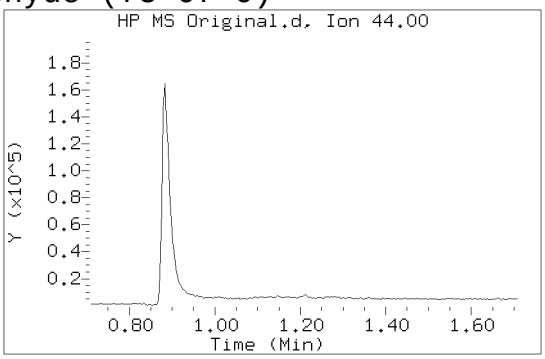

AFTER
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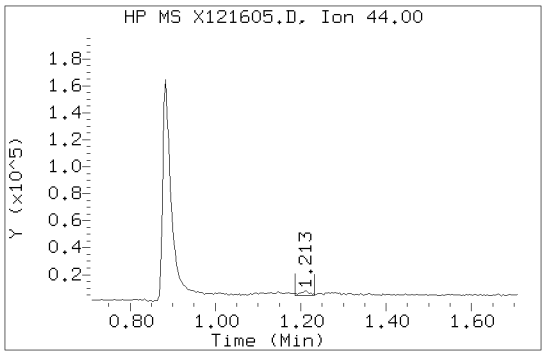

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27-Dec-2022
16:03
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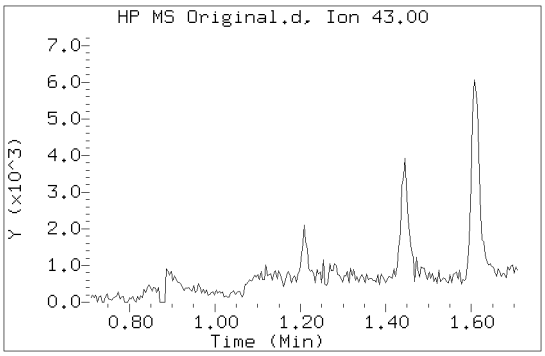

AFTER
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27-Dec-2022
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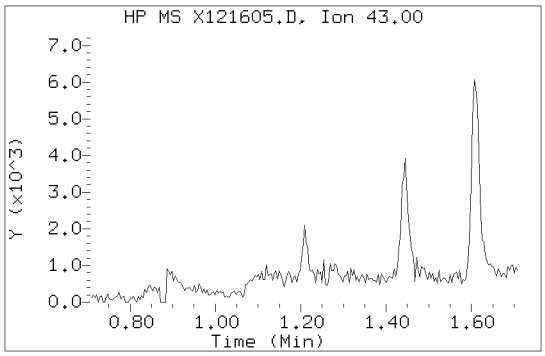

BEFORE
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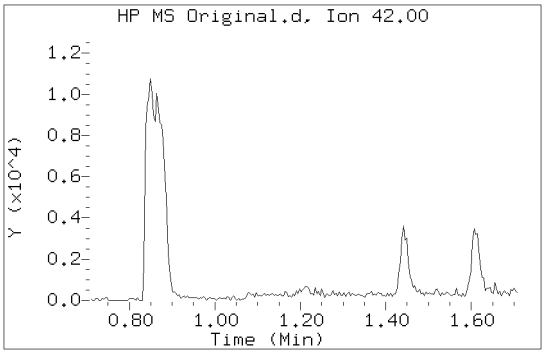

AFTER
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HEIGHT
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27-Dec-2022
16:07
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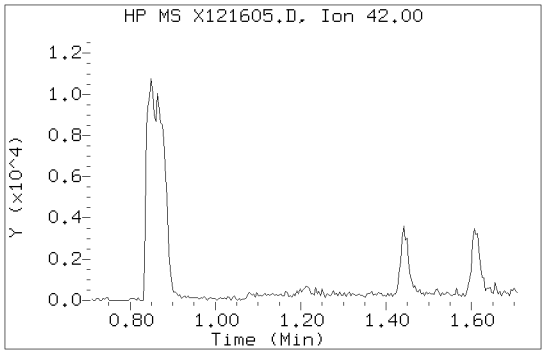

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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
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Inj Date : 16-DEC-2022 13:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 13:02 Cal File: X121605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	450664	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.341)	4197	100.000	101.88(M)
140 1,3-Butadiene	54	1.164	1.164	(0.279)	14283	5.00000	4.61
25 Methacrylonitrile	41	3.840	3.840	(0.919)	15701	5.00000	4.92(M)
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	51624	100.000	101.84
13 Acetonitrile	39	2.198	2.198	(0.526)	19635	50.0000	47.87
14 Allyl Chloride	41	2.198	2.198	(0.526)	37993	5.00000	4.86
4 Propionitrile	54	3.660	3.660	(0.876)	23049	50.0000	50.12
136 n-Hexane	57	2.772	2.772	(0.664)	14618	5.00000	4.50
72 trans-1,4-Dichloro-2-butene	53	8.901	8.901	(1.161)	6648	5.00000	4.70(M)
194 Acetaldehyde	44	1.209	1.209	(0.289)	6161	20.0000	0.80(M)
23 Chloroprene	53	1.771	1.771	(0.424)	7154	5.00000	4.66(M)
145 alpha-Methylstyrene	118	9.261	9.261	(0.958)	37831	5.00000	4.79
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	40144	5.00000	4.53
139 Diethyl ether	59	1.756	1.756	(0.420)	15119	5.00000	5.02
130 Ethyl Acetate	43	3.660	3.660	(0.876)	18020	5.00000	5.12(M)
40 Methyl Methacrylate	41	5.617	5.617	(1.345)	15119	5.00000	4.92
49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	13801	5.00000	4.27
132 n-Butanol	56	5.287	5.287	(1.266)	4891	100.000	125.41(M)
142 Tetrahydrofuran	42	3.848	3.848	(0.921)	7598	10.0000	10.82(M)

150	Allyl alcohol	57	2.772	2.772 (0.664)	14618	100.000	83.50
166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	80329	5.00000	4.68

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D Page 2
Report Date: 27-Dec-2022 16:07

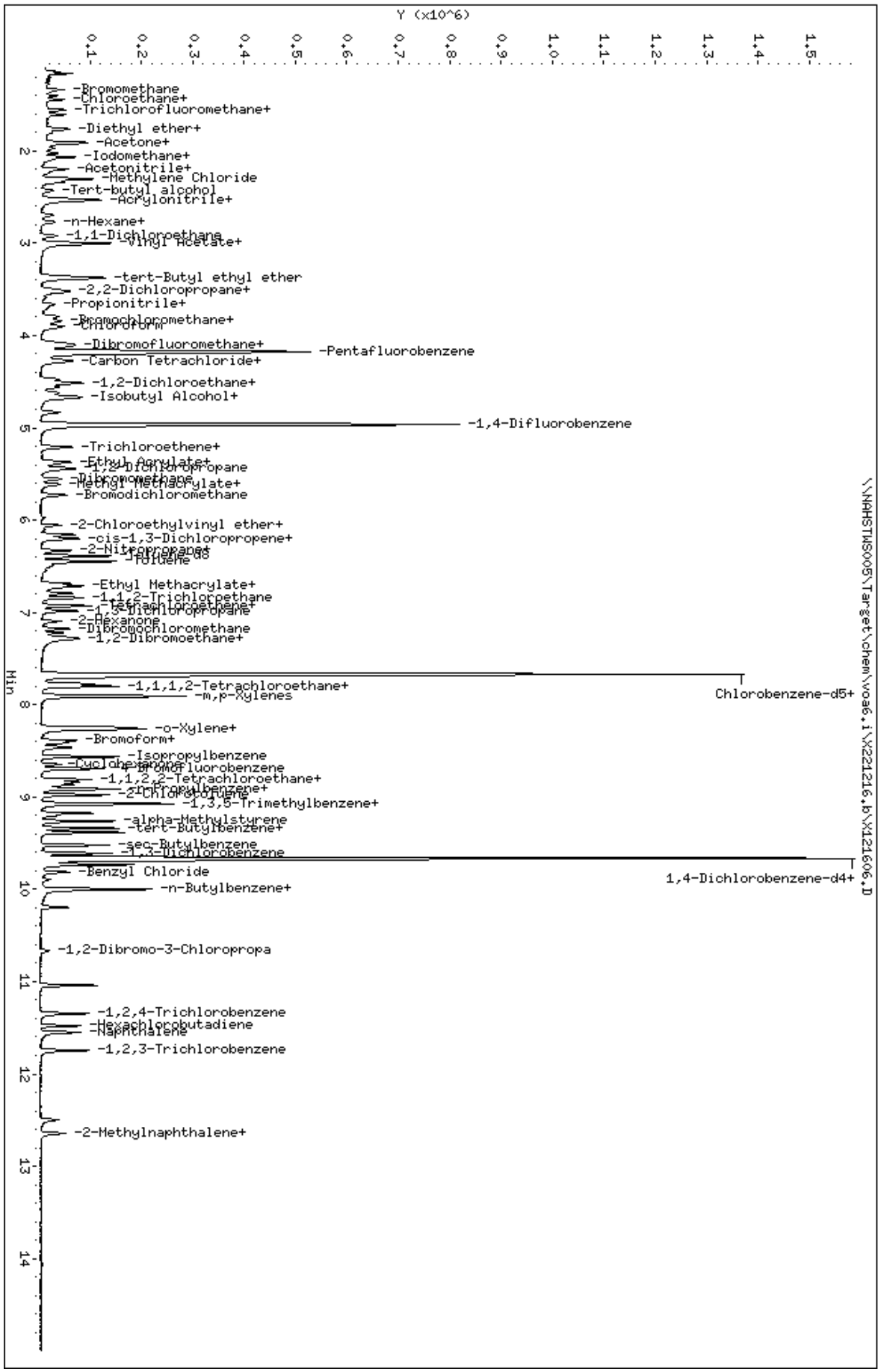
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.705	3.705	(0.887)	14950	5.00000	4.88(M)
	162	Butyl acrylate	55	8.260	8.260	(1.077)	38320	5.00000	4.48
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	15008	5.00000	5.11
	3	Chloromethane	50	1.077	1.077	(0.258)	19623	5.00000	6.81
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	19002	5.00000	4.82
	6	Bromomethane	94	1.336	1.336	(0.320)	15112	5.00000	6.66
	7	Chloroethane	64	1.400	1.400	(0.335)	14167	5.00000	5.17
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	26620	5.00000	4.83
	9	Acrolein	56	1.441	1.441	(0.345)	2699	10.0000	11.33
	10	Acetone	43	1.973	1.973	(0.472)	17632	10.0000	13.91
	11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	16850	5.00000	4.92
	15	Iodomethane	142	2.026	2.026	(0.485)	26708	10.0000	9.27
	16	Acrylonitrile	53	2.551	2.551	(0.611)	11047	10.0000	9.52
	17	Methylene Chloride	84	2.303	2.303	(0.551)	22932	5.00000	4.88(M)
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	56330	5.00000	5.03
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	85418	10.0000	9.54
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	19006	5.00000	4.96
	21	Vinyl Acetate	43	3.000	3.000	(0.718)	101238	10.0000	10.30
	22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	33810	5.00000	5.03
	24	2-Butanone	43	3.600	3.600	(0.862)	11771	10.0000	11.53(H)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	27881	5.00000	4.88
	27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.846)	22734	5.00000	4.88
	28	Chloroform	83	3.904	3.904	(0.935)	38156	5.00000	5.06
	29	Bromochloromethane	128	3.799	3.799	(0.909)	13213	5.00000	5.18
$	30	Dibromofluoromethane	113	4.103	4.103	(0.982)	24255	5.00000	5.45
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	29017	5.00000	4.85
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	23845	5.00000	4.90(M)
	33	1,2-Dichloroethane	62	4.556	4.556	(0.918)	28173	5.00000	5.01
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	24171	5.00000	4.65
$	35	1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	24938	5.00000	5.70(M)
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	685413	50.0000	
	37	Benzene	78	4.511	4.511	(0.909)	81981	5.00000	5.00
	38	Trichloroethene	130	5.208	5.208	(1.049)	22693	5.00000	4.88
	39	Bromodichloromethane	83	5.729	5.729	(1.154)	29358	5.00000	4.77
	41	2-Chloroethylvinyl ether	63	6.056	6.056	(1.220)	17700	10.0000	10.12
	42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	21679	5.00000	4.97
	44	Dibromomethane	93	5.557	5.557	(1.119)	14449	5.00000	4.88
	45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	34912	10.0000	9.98
	46	cis-1,3-Dichloropropene	75	6.161	6.161	(1.241)	35507	5.00000	4.92
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	654176	50.0000	
$	48	Toluene-d8	98	6.389	6.389	(0.833)	81640	5.00000	5.05
	50	Toluene	91	6.449	6.449	(0.841)	89594	5.00000	4.95
	51	trans-1,3-Dichloropropene	75	6.689	6.689	(1.347)	28399	5.00000	4.74(M)
	52	2-Hexanone	43	7.094	7.094	(0.925)	24056	10.0000	10.11
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	18638	5.00000	5.13
	54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	35759	5.00000	5.00
	55	Dibromochloromethane	129	7.176	7.176	(0.936)	25357	5.00000	4.84
	56	Tetrachloroethene	164	6.929	6.929	(0.904)	17219	5.00000	4.60
	57	1,2-Dibromoethane	107	7.263	7.263	(0.947)	23172	5.00000	5.10
	58	1-Chlorohexane	55	7.698	7.698	(1.550)	15210	5.00000	4.59(MH)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	62744	5.00000	4.89
	60	1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	22632	5.00000	4.74

61 Ethylbenzene	106	7.802	7.802 (1.018)	29550	5.00000	4.89
62 m,p-Xylenes	106	7.907	7.907 (1.031)	73283	10.0000	9.40

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
63	o-Xylene	106	8.245	8.245	(1.075)	37189	5.00000	4.83
64	Styrene	104	8.267	8.267	(1.078)	62411	5.00000	4.84
66	Bromoform	173	8.414	8.414	(1.097)	16801	5.00000	4.63
67	Isopropylbenzene	105	8.563	8.563	(1.117)	85440	5.00000	4.86
68	1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	29807	5.00000	5.24
$ 69	4-Bromofluorobenzene	95	8.695	8.695	(1.134)	32501	5.00000	5.43
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	356340	50.0000	
71	1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	20685	5.00000	5.21(M)
73	n-Propylbenzene	91	8.916	8.916	(0.923)	97603	5.00000	4.94
74	Bromobenzene	156	8.811	8.811	(0.912)	28887	5.00000	4.94
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	72501	5.00000	4.97
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	65973	5.00000	5.09
77	4-Chlorotoluene	91	9.077	9.077	(0.939)	75073	5.00000	5.08
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	59375	5.00000	4.97
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	75723	5.00000	4.93
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	77577	5.00000	4.88
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	69666	5.00000	4.89
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	49954	5.00000	5.14
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	52655	5.00000	4.97
86	Benzyl Chloride	91	9.816	9.816	(1.280)	35254	5.00000	5.95
87	n-Butylbenzene	91	9.999	9.999	(1.035)	54831	5.00000	5.63
88	1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	50895	5.00000	5.09
89	1,2-Dibromo-3-Chloropropane	155	10.670	10.670	(1.104)	4911	5.00000	5.49
90	1,2,4-Trichlorobenzene	180	11.345	11.345	(1.174)	31873	5.00000	5.05
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	13454	5.00000	4.81
92	Naphthalene	128	11.551	11.551	(1.196)	72748	5.00000	5.06
93	1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	30274	5.00000	5.01
M 94	1,2-Dichloroethylene (total)	96				41740	10.0000	
M 95	Xylenes (total)	106				110472	15.0000	
141	Cyclohexane	56	4.118	4.118	(0.986)	19859	5.00000	5.52(H)
138	Freon TF	101	1.913	1.913	(0.458)	14845	5.00000	4.48
147	Methylcyclohexane	55	5.388	5.388	(1.085)	38650	5.00000	4.60(M)
146	Methyl Acetate	43	2.236	2.236	(0.535)	8968	5.00000	4.42
148	Tert-Butyl alcohol	59	2.431	2.431	(0.582)	30525	100.000	97.81
149	Isopropyl Alcohol	45	2.097	2.097	(0.502)	16518	100.000	101.35(T)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Date : 16-DEC-2022 13:23
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methylene Chloride (75-09-2)

Reason Code:

BEFORE
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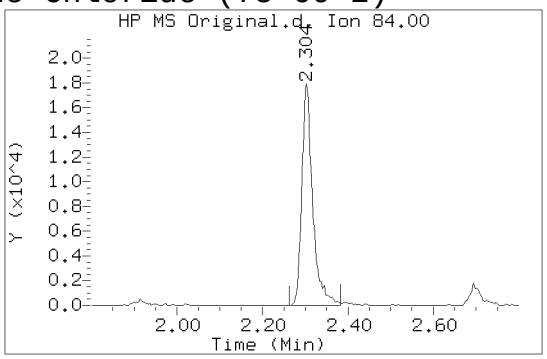
AREA
32325
HEIGHT
17936
27-Dec-2022
16:03
linh
pham



AFTER
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27-Dec-2022
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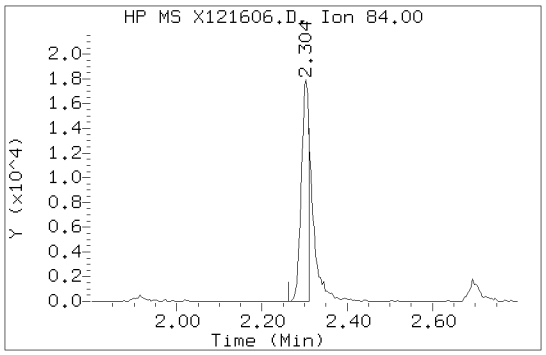

BEFORE
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27-Dec-2022
16:03
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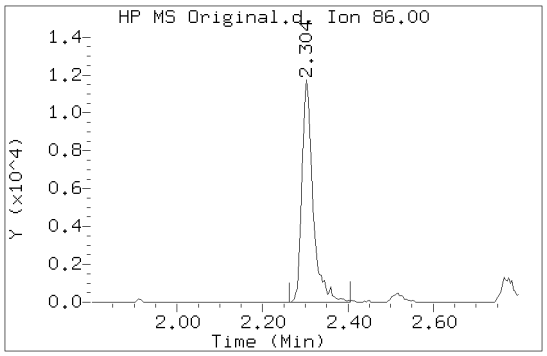

AFTER
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16:07
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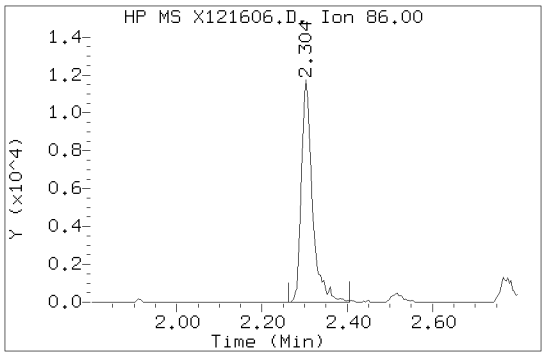

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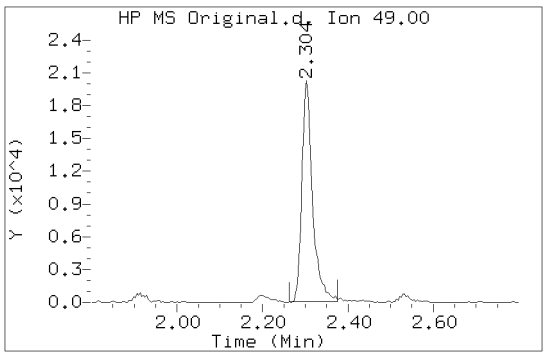

AFTER
MASS
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27-Dec-2022
16:07
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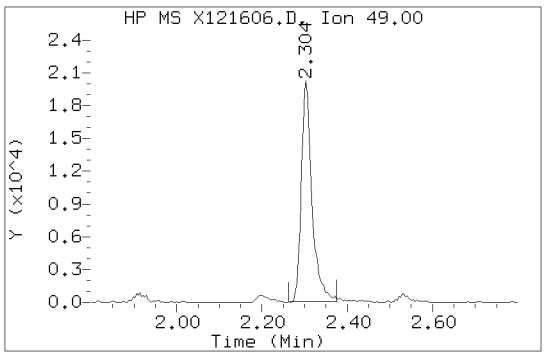

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
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AREA
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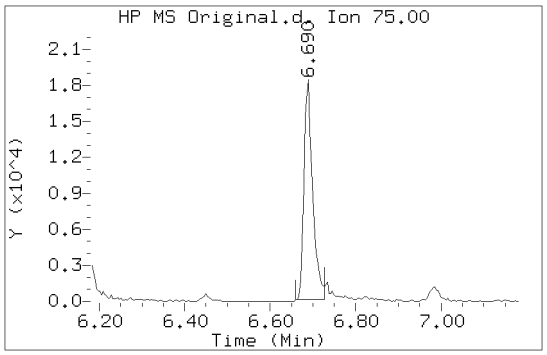
HEIGHT
18306
27-Dec-2022
16:03
linh
pham



AFTER
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AREA
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27-Dec-2022
16:07
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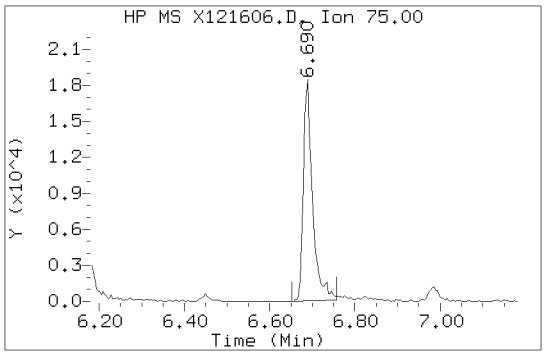

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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE

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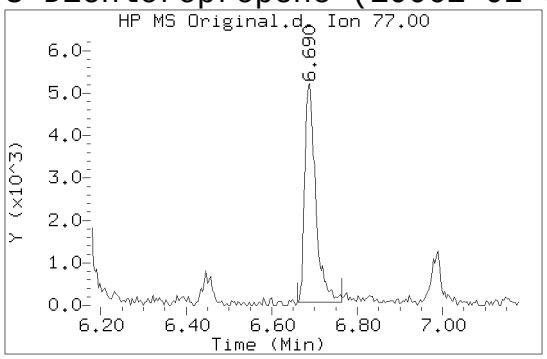
AREA
9244
HEIGHT
5154
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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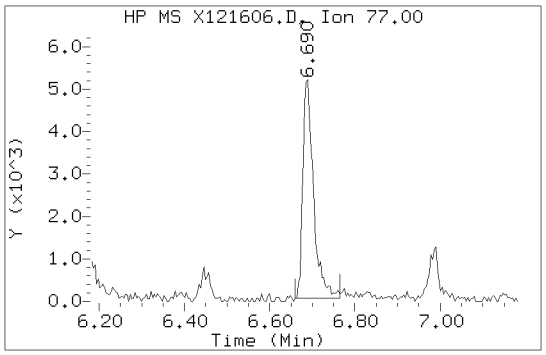
AREA
9244
HEIGHT
5154
27-Dec-2022
16:07
linh
pham



BEFORE

MASS
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AREA
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HEIGHT
8065
27-Dec-2022
16:03
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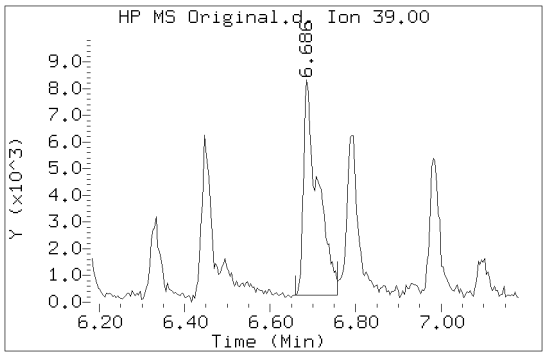
pham



AFTER

MASS
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AREA
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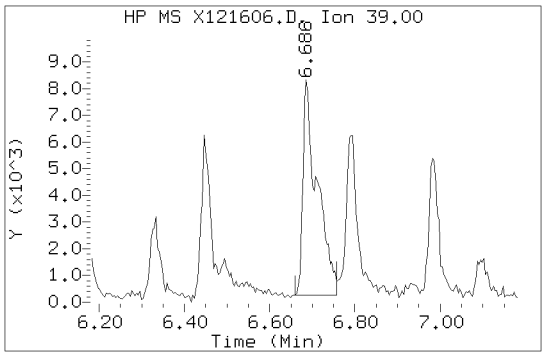
HEIGHT
8065
27-Dec-2022
16:07
linh
pham



Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

MASS
41
AREA
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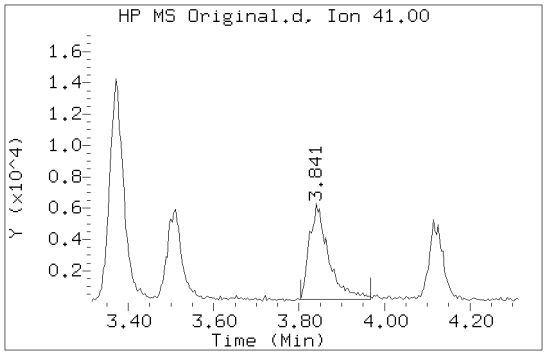
HEIGHT
6109
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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27-Dec-2022
16:07
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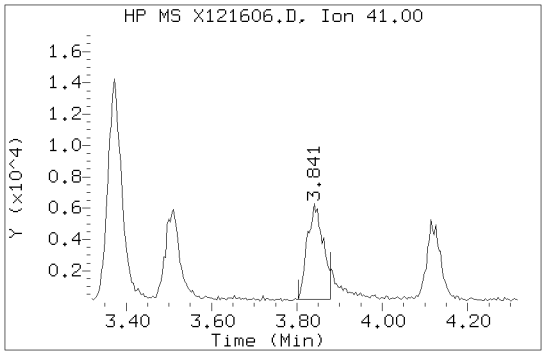
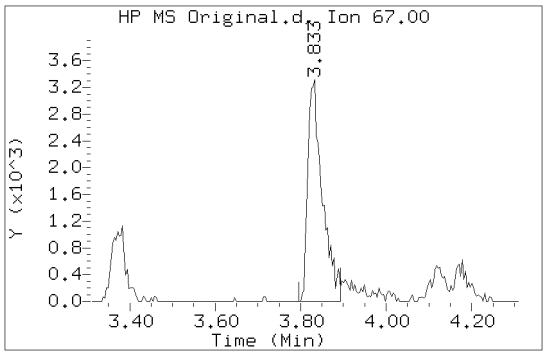


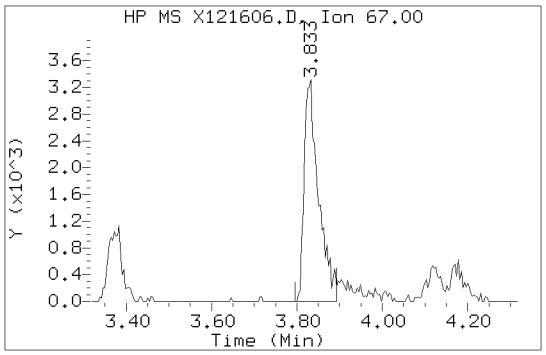
BEFORE

MASS
67
AREA
7866
HEIGHT
3315
27-Dec-2022
16:03
linh
pham



AFTER

MASS
67
AREA
7866
HEIGHT
3315
27-Dec-2022
16:07
linh
pham



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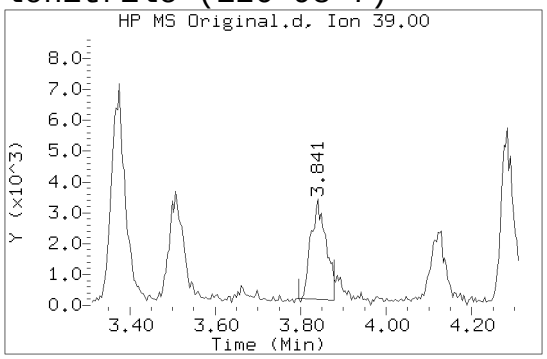
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

MASS
39
AREA
7951
HEIGHT
3252
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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3252
27-Dec-2022
16:07
linh
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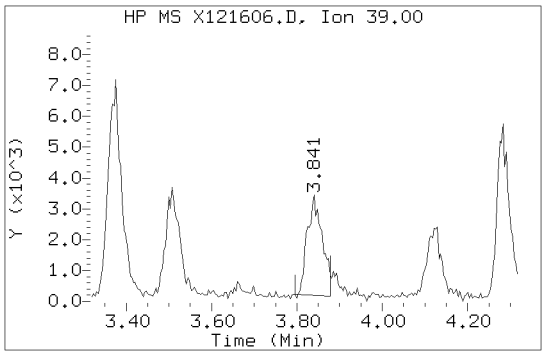

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

MASS
75
AREA
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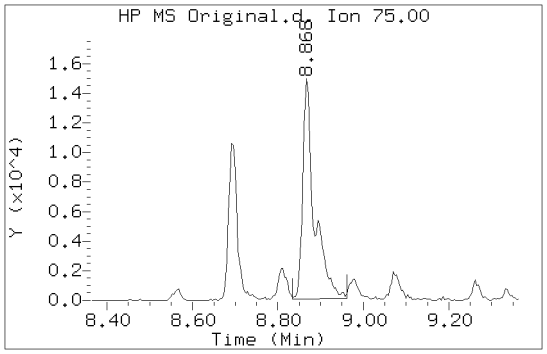
HEIGHT
14911
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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27-Dec-2022
16:07
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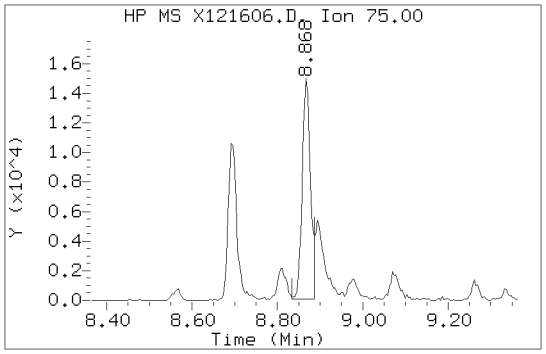

BEFORE

MASS
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AREA
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HEIGHT
5143
27-Dec-2022
16:03
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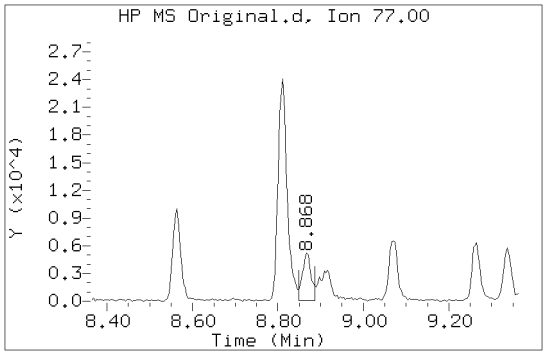

AFTER

MASS
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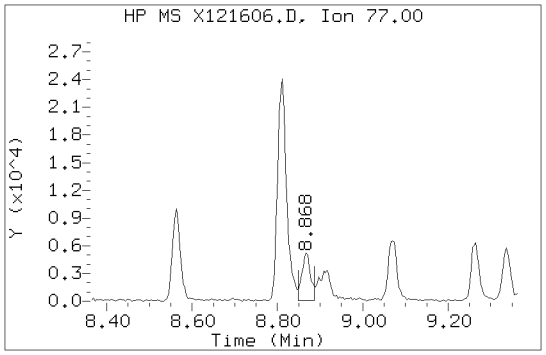
AREA
7524
HEIGHT
5143
27-Dec-2022
16:07
linh
pham



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

Reason Code:

BEFORE

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AREA
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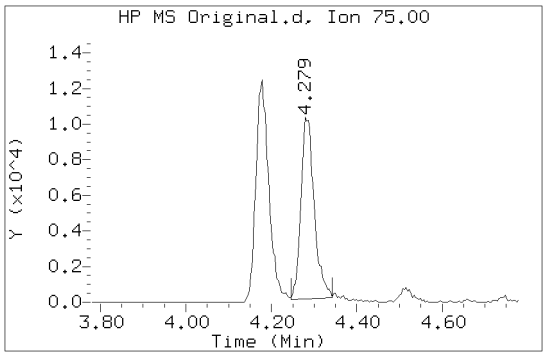
HEIGHT
10201
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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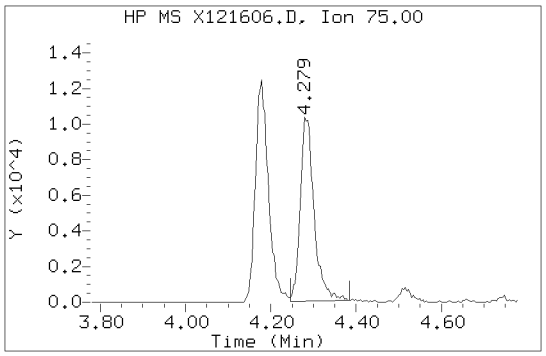
27-Dec-2022
16:07
linh
pham



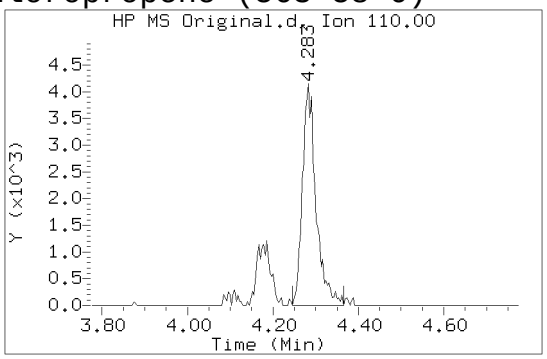
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

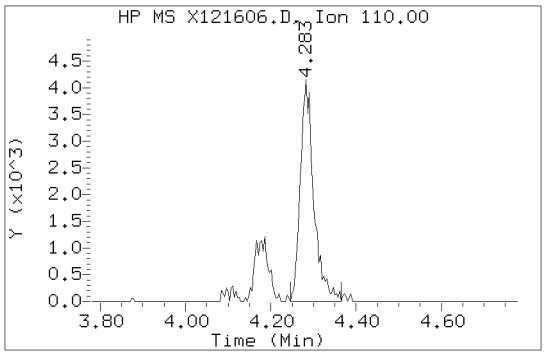
BEFORE

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:03
linh
pham



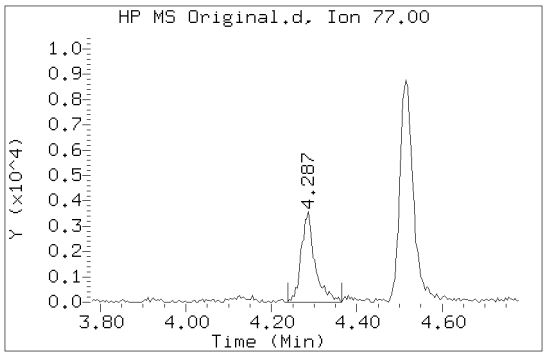
AFTER

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:07
linh
pham



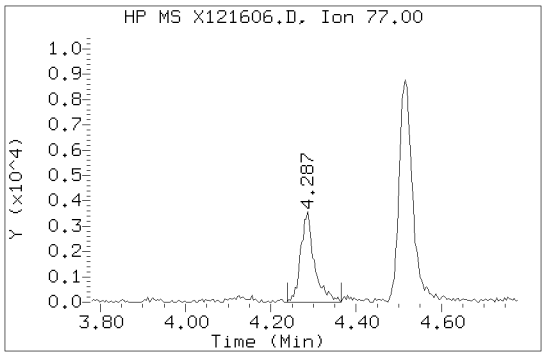
BEFORE

MASS
77
AREA
8083
HEIGHT
3567
27-Dec-2022
16:03
linh
pham



AFTER

MASS
77
AREA
8083
HEIGHT
3567
27-Dec-2022
16:07
linh
pham

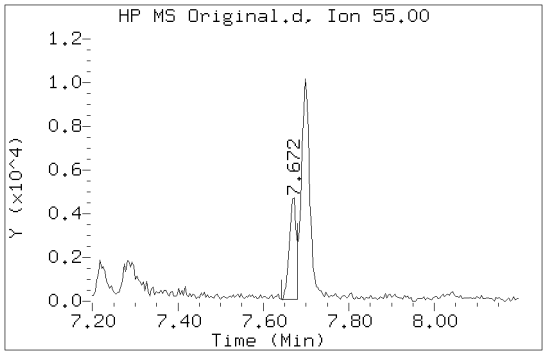


1-Chlorohexane (544-10-5)

Reason Code:

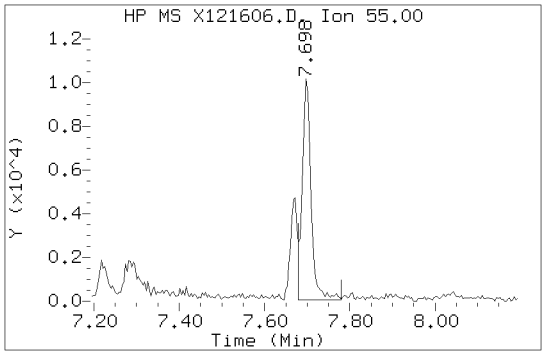
BEFORE

MASS
55
AREA
5371
HEIGHT
4660
27-Dec-2022
16:03
linh
pham



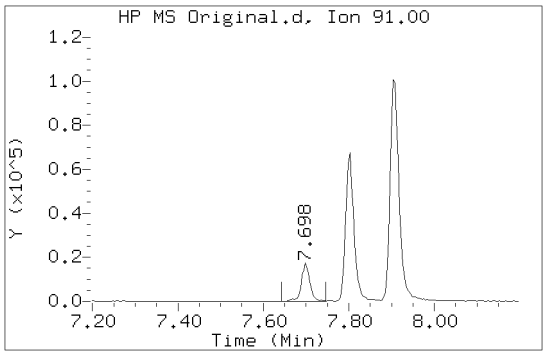
AFTER

MASS
55
AREA
15210
HEIGHT
10126
27-Dec-2022
16:07
linh
pham



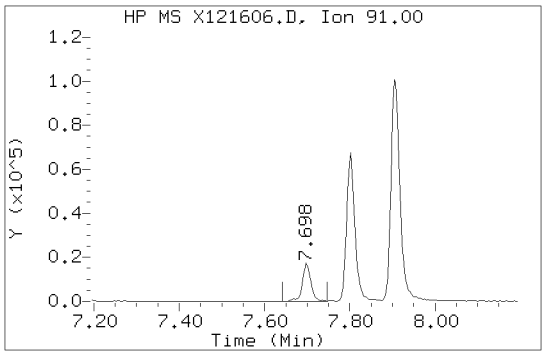
BEFORE

MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:03
linh
pham



AFTER

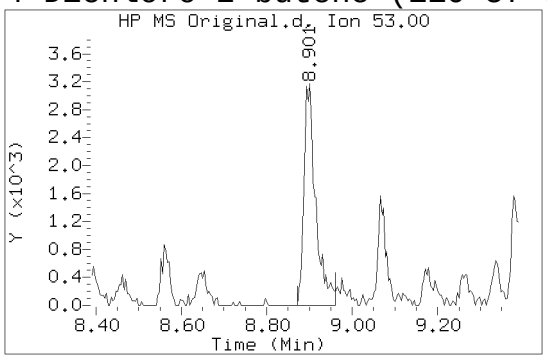
MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:07
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

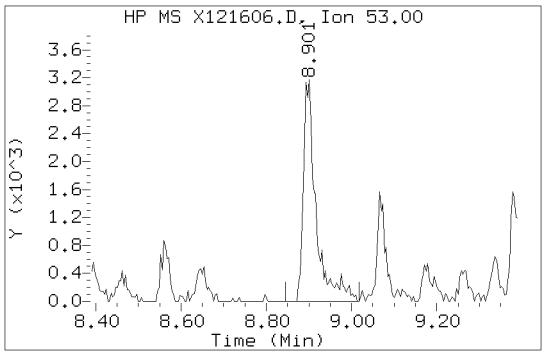
trans-1,4-Dichloro-2-butene (110-57-6)

BEFORE
MASS
53
AREA
6122
HEIGHT
3172
27-Dec-2022
16:03
linh
pham

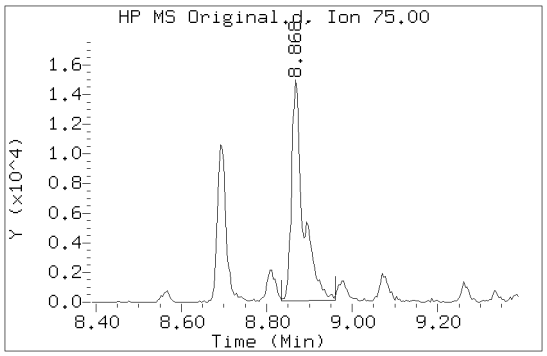


Reason Code:

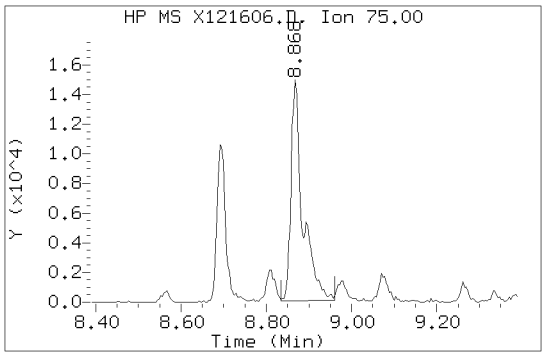
AFTER
MASS
53
AREA
6648
HEIGHT
3172
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham

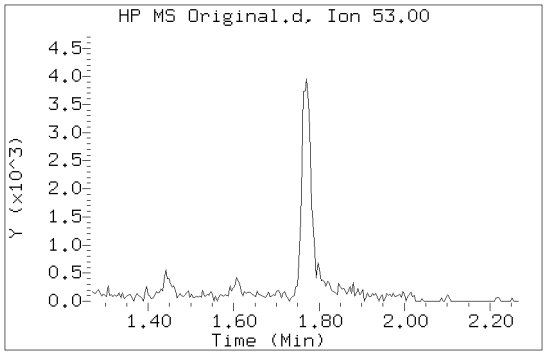


AFTER
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



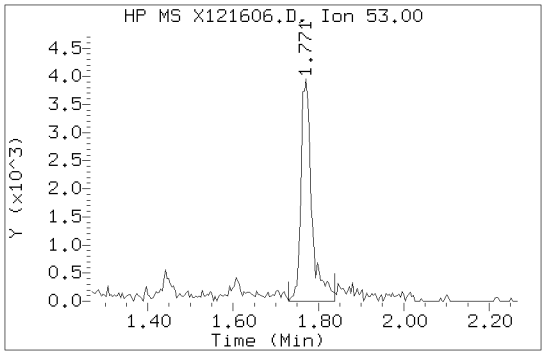
Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

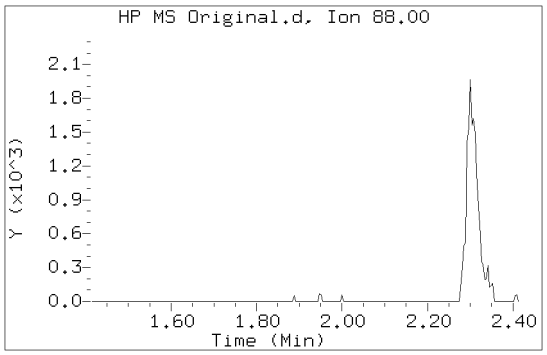


Reason Code:

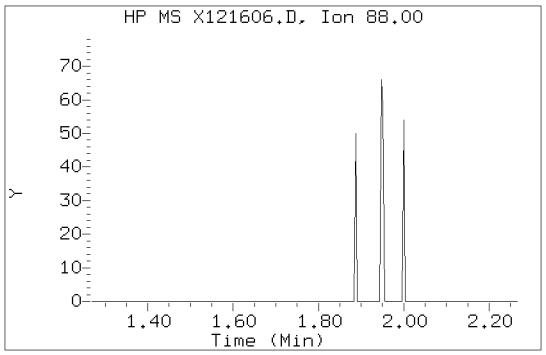
AFTER
MASS
53
AREA
7154
HEIGHT
3955
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



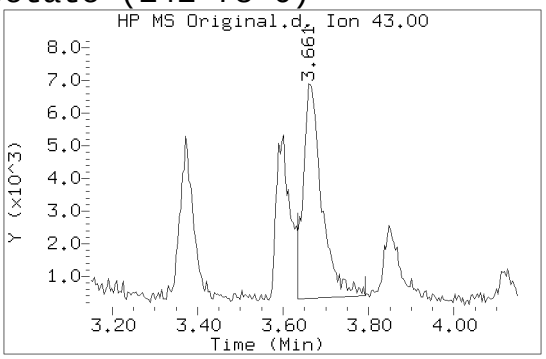
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

Reason Code:

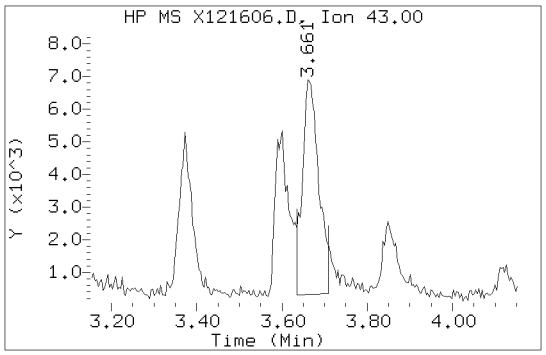
BEFORE

MASS
43
AREA
20113
HEIGHT
6576
27-Dec-2022
16:03
linh
pham



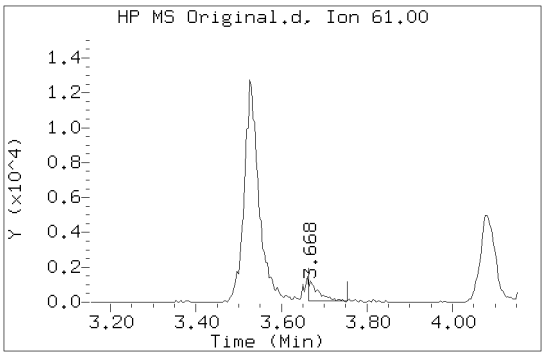
AFTER

MASS
43
AREA
18020
HEIGHT
6576
27-Dec-2022
16:07
linh
pham



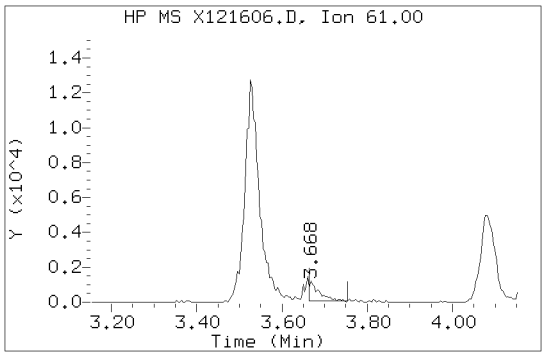
BEFORE

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:03
linh
pham



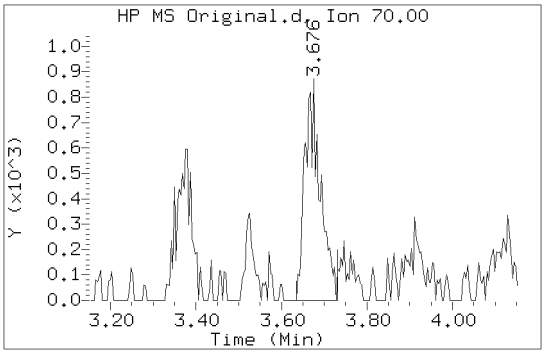
AFTER

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:07
linh
pham



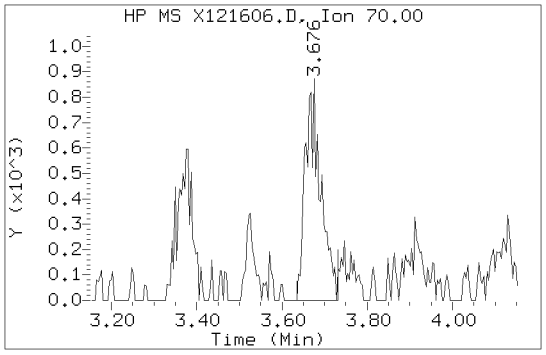
BEFORE

MASS
70
AREA
2205
HEIGHT
873
27-Dec-2022
16:03
linh
pham



AFTER

MASS
70
AREA
2205
HEIGHT
873
27-Dec-2022
16:07
linh
pham

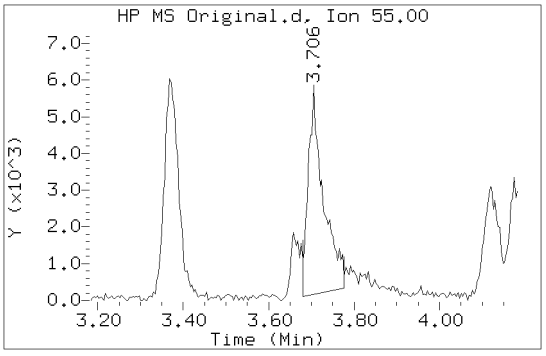


Methyl Acrylate (96-33-3)

Reason Code:

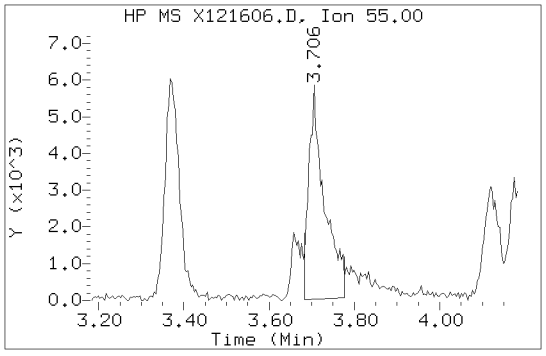
BEFORE

MASS
55
AREA
14157
HEIGHT
5696
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
14950
HEIGHT
5831
27-Dec-2022
16:07
linh
pham



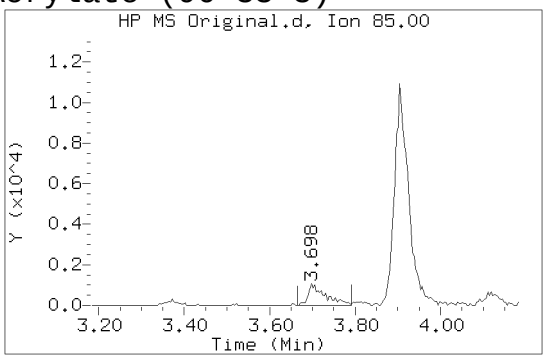
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methyl Acrylate (96-33-3)

Reason Code:

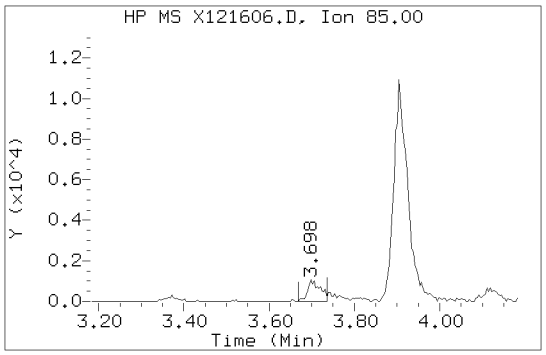
BEFORE

MASS
85
AREA
2934
HEIGHT
1073
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
2159
HEIGHT
1073
27-Dec-2022
16:07
linh
pham

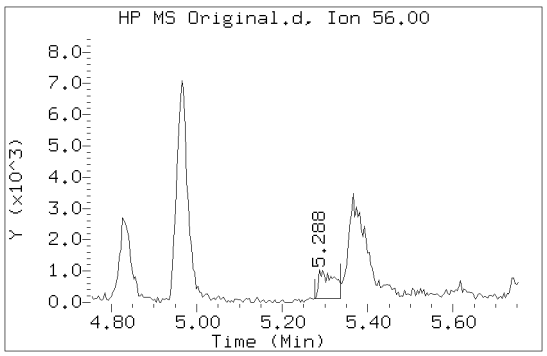


n-Butanol (71-36-3)

Reason Code:

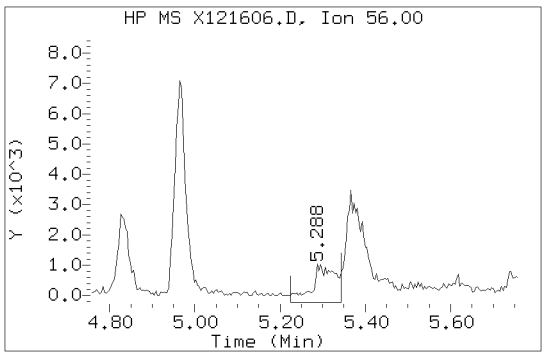
BEFORE

MASS
56
AREA
2243
HEIGHT
922
27-Dec-2022
16:03
linh
pham



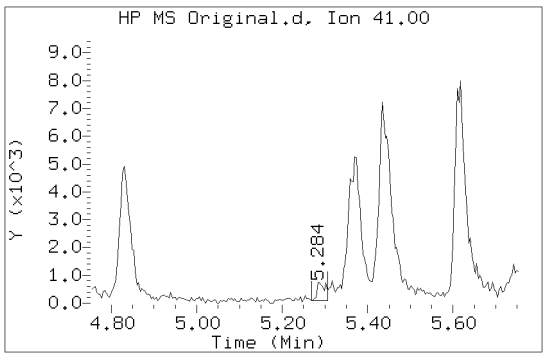
AFTER

MASS
56
AREA
4891
HEIGHT
1266
27-Dec-2022
16:07
linh
pham



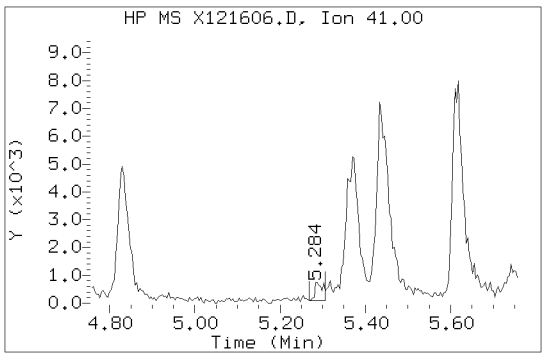
BEFORE

MASS
41
AREA
876
HEIGHT
641
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
876
HEIGHT
641
27-Dec-2022
16:07
linh
pham

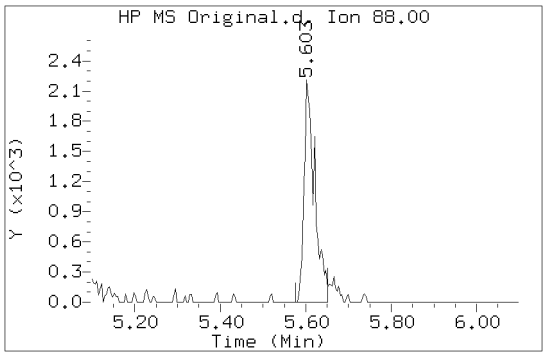


1,4-Dioxane ()

Reason Code:

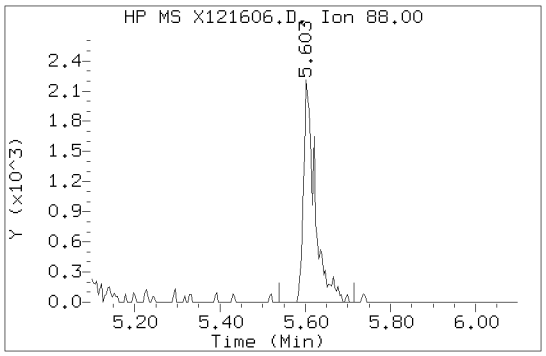
BEFORE

MASS
88
AREA
3873
HEIGHT
2211
27-Dec-2022
16:03
linh
pham



AFTER

MASS
88
AREA
4197
HEIGHT
2211
27-Dec-2022
16:07
linh
pham



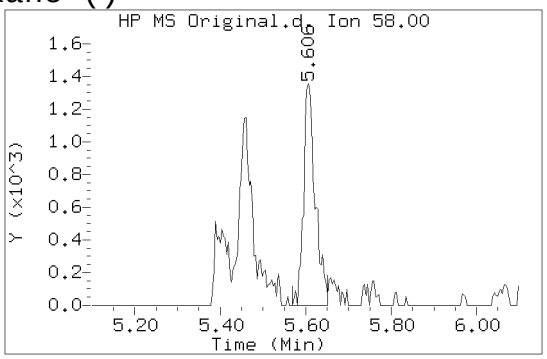
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

1,4-Dioxane ()

Reason Code:

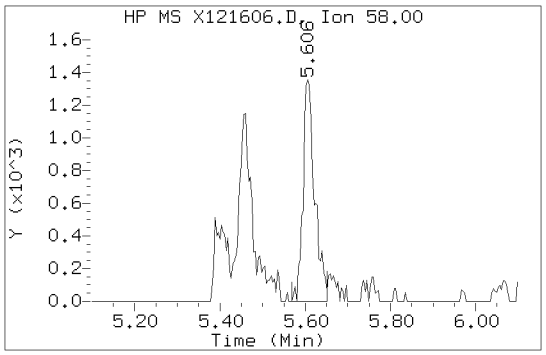
BEFORE

MASS
58
AREA
2625
HEIGHT
1356
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
2625
HEIGHT
1356
27-Dec-2022
16:07
linh
pham

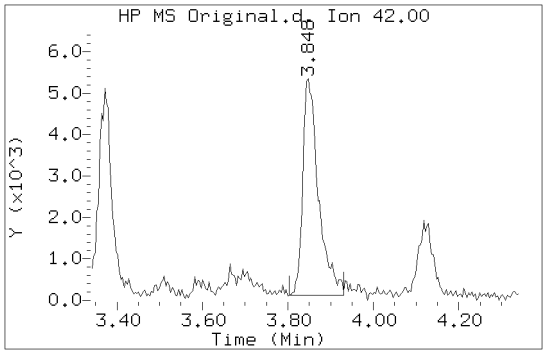


Tetrahydrofuran (109-99-9)

Reason Code:

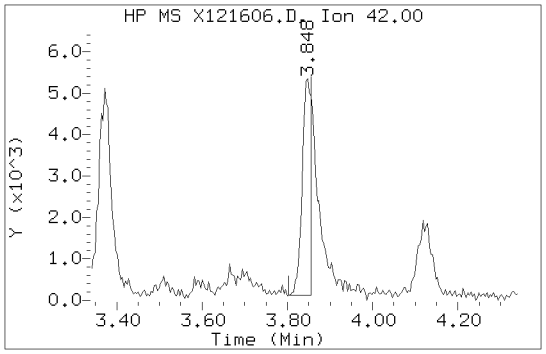
BEFORE

MASS
42
AREA
13557
HEIGHT
5225
27-Dec-2022
16:03
linh
pham



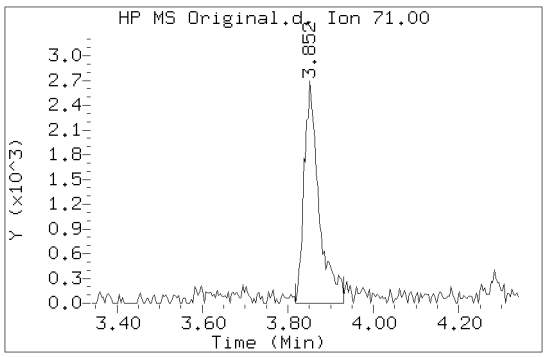
AFTER

MASS
42
AREA
7598
HEIGHT
5225
27-Dec-2022
16:07
linh
pham



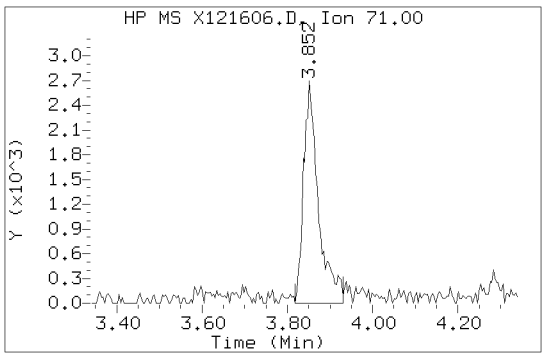
BEFORE

MASS
71
AREA
6572
HEIGHT
2695
27-Dec-2022
16:03
linh
pham



AFTER

MASS
71
AREA
6572
HEIGHT
2695
27-Dec-2022
16:07
linh
pham

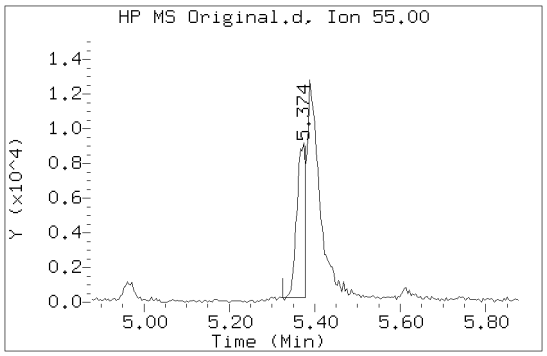


Methylcyclohexane (108-87-2)

Reason Code:

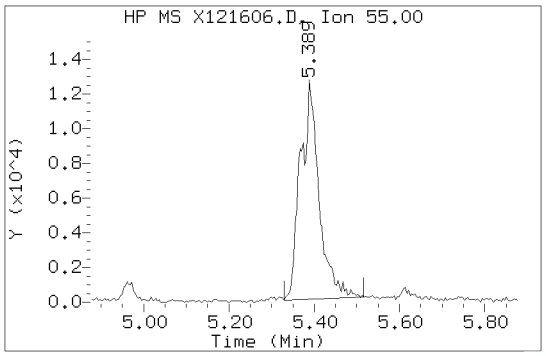
BEFORE

MASS
55
AREA
12381
HEIGHT
8941
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
38650
HEIGHT
12647
27-Dec-2022
16:07
linh
pham



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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methylcyclohexane (108-87-2)

BEFORE

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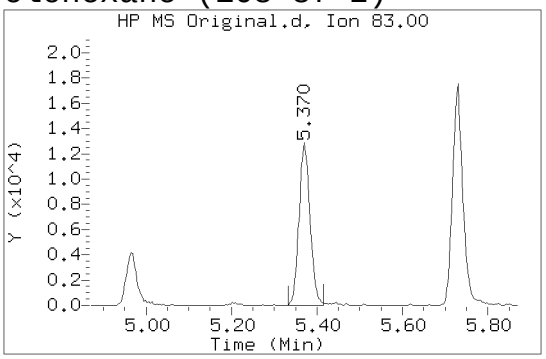

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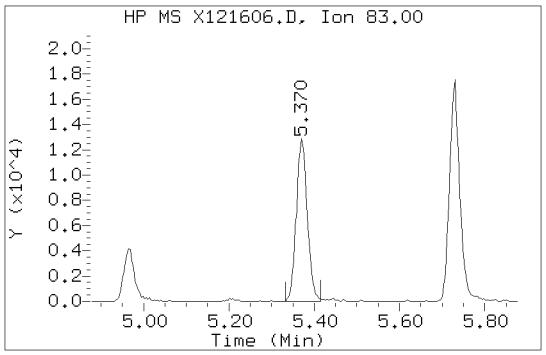

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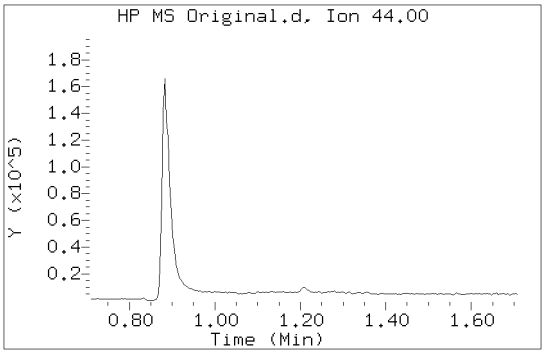

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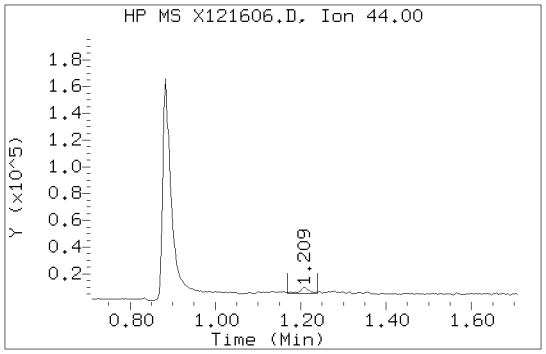

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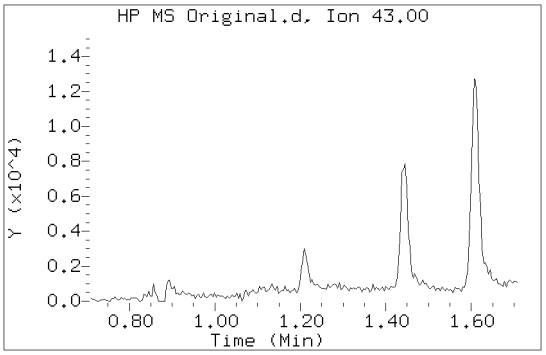

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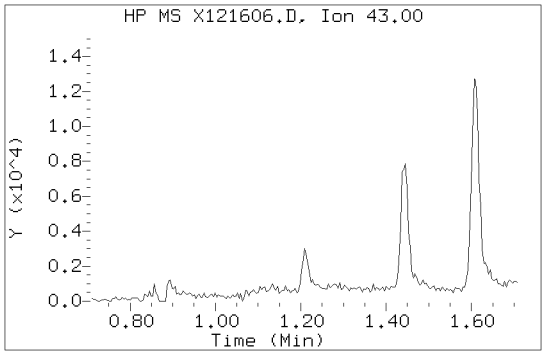

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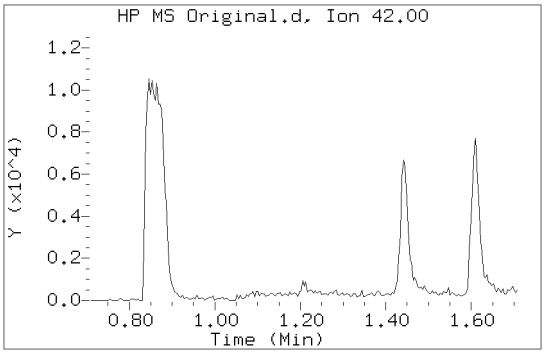

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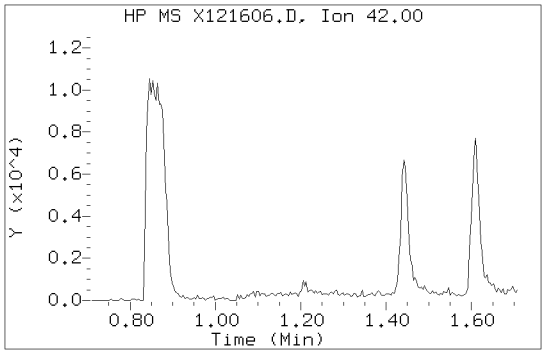

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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

BEFORE

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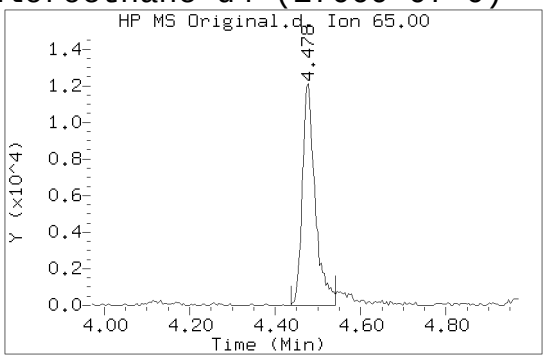

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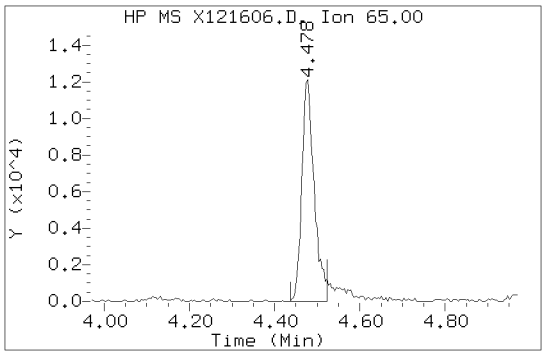

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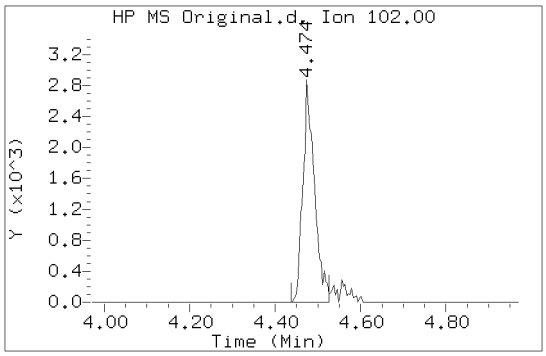

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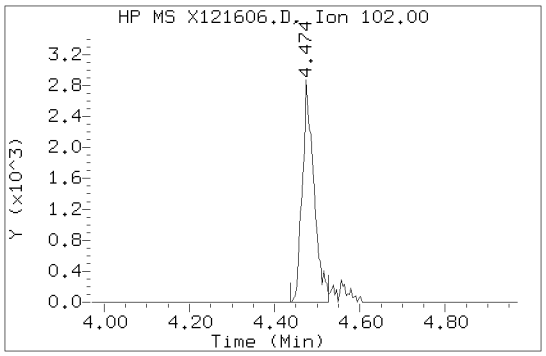

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D
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Inj Date : 16-DEC-2022 13:43
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 13:23 Cal File: X121606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	459407	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	16105	400.000	383.50(M)
140 1,3-Butadiene	54	1.164	1.164	(0.279)	58280	20.0000	18.48
25 Methacrylonitrile	41	3.821	3.821	(0.915)	62911	20.0000	19.33
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	201008	400.000	388.99
13 Acetonitrile	39	2.195	2.195	(0.525)	81163	200.000	194.11
14 Allyl Chloride	41	2.195	2.195	(0.525)	150748	20.0000	18.93
4 Propionitrile	54	3.653	3.653	(0.874)	85562	200.000	182.52
136 n-Hexane	57	2.768	2.768	(0.663)	65476	20.0000	19.79
72 trans-1,4-Dichloro-2-butene	53	8.893	8.893	(1.160)	26140	20.0000	18.70
194 Acetaldehyde	44	1.209	1.209	(0.289)	32393	80.0000	100.98(M)
23 Chloroprene	53	1.767	1.767	(0.423)	27967	20.0000	17.90(M)
145 alpha-Methylstyrene	118	9.261	9.261	(0.958)	155968	20.0000	19.76
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	171978	20.0000	19.62
139 Diethyl ether	59	1.756	1.756	(0.420)	55275	20.0000	18.00
130 Ethyl Acetate	43	3.660	3.660	(0.876)	75163	20.0000	20.96
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	56242	20.0000	17.95
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	58073	20.0000	18.07
132 n-Butanol	56	5.268	5.268	(1.261)	15012	400.000	294.62
142 Tetrahydrofuran	42	3.848	3.848	(0.921)	28221	40.0000	47.81

150	Allyl alcohol	57	2.768	2.768 (0.663)	65476	400.000	366.93
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	331546	20.0000	19.32

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D Page 2
Report Date: 27-Dec-2022 16:07

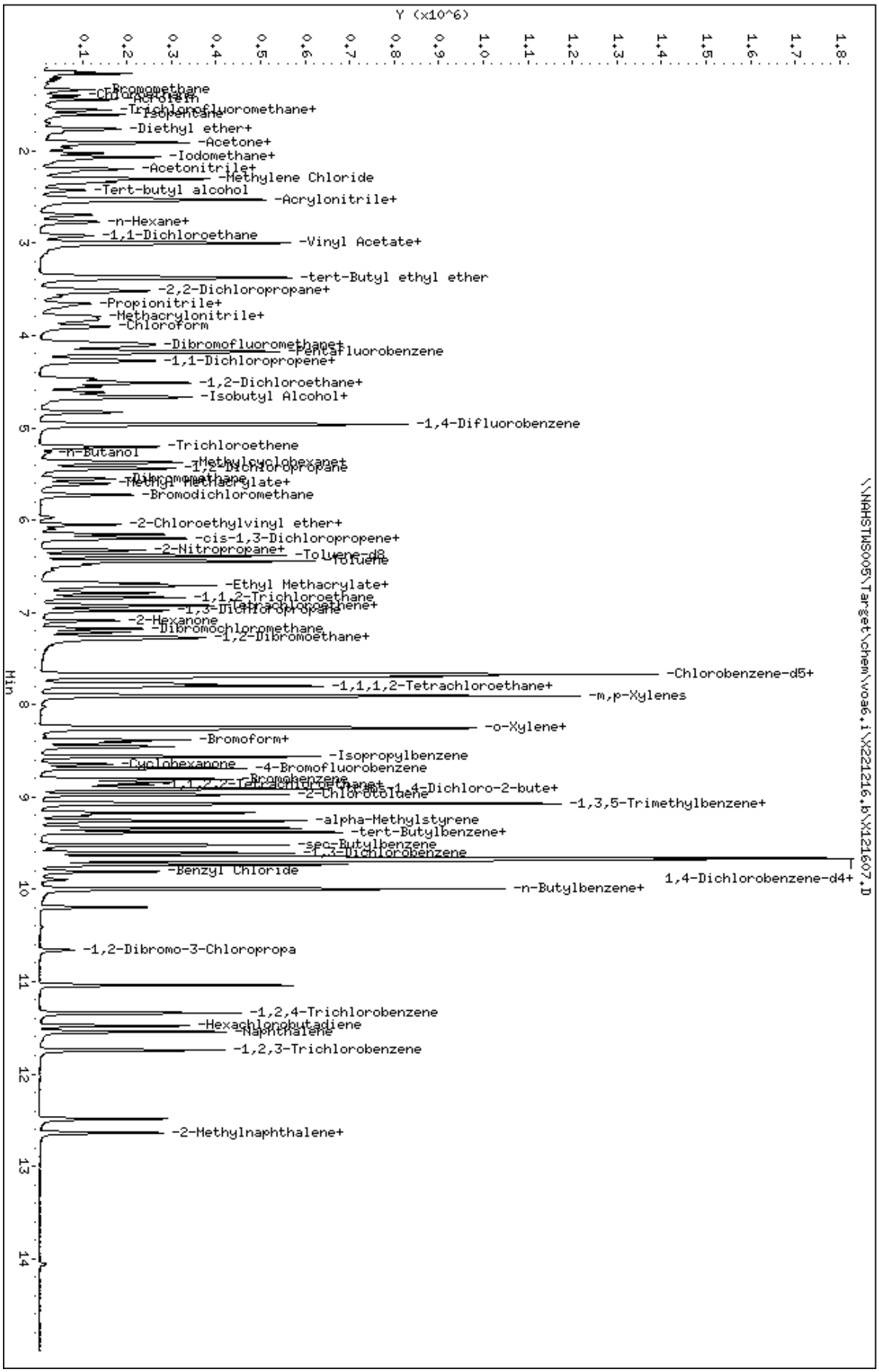
		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.690	3.690	(0.883)	57874	20.0000	18.55(M)
	162 Butyl acrylate	55	8.252	8.252	(1.076)	156518	20.0000	18.50
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	63382	20.0000	19.96
	3 Chloromethane	50	1.077	1.077	(0.258)	72324	20.0000	18.84
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	74461	20.0000	18.55
	6 Bromomethane	94	1.340	1.340	(0.321)	52034	20.0000	18.30
	7 Chloroethane	64	1.400	1.400	(0.335)	52021	20.0000	18.62
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	106188	20.0000	18.90
	9 Acrolein	56	1.441	1.441	(0.345)	12279	40.0000	40.80
	10 Acetone	43	1.973	1.973	(0.472)	50987	40.0000	39.53
	11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	65650	20.0000	18.82
	15 Iodomethane	142	2.026	2.026	(0.485)	143457	40.0000	34.36
	16 Acrylonitrile	53	2.532	2.532	(0.606)	46552	40.0000	39.36
	17 Methylene Chloride	84	2.303	2.303	(0.551)	94402	20.0000	19.73
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.606)	214504	20.0000	18.79
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	337289	40.0000	36.97
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	74471	20.0000	19.08
	21 Vinyl Acetate	43	2.997	2.997	(0.717)	387538	40.0000	38.68
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	129644	20.0000	18.93
	24 2-Butanone	43	3.578	3.578	(0.856)	47830	40.0000	36.94(H)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	108952	20.0000	18.73
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	88894	20.0000	18.71
	28 Chloroform	83	3.904	3.904	(0.935)	145610	20.0000	18.96
	29 Bromochloromethane	128	3.795	3.795	(0.908)	47919	20.0000	18.42
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	90108	20.0000	20.32
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	116049	20.0000	19.05
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	93914	20.0000	19.38
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	108750	20.0000	19.45
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	93815	20.0000	18.13
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	92990	20.0000	20.13
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	682389	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	313141	20.0000	19.21
	38 Trichloroethene	130	5.205	5.205	(1.048)	90292	20.0000	19.53
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	116178	20.0000	18.99
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	71559	40.0000	41.12
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	82954	20.0000	19.13
	44 Dibromomethane	93	5.553	5.553	(1.119)	57196	20.0000	19.41
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	138209	40.0000	39.93
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	142141	20.0000	19.79
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	647445	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	315179	20.0000	19.70
	50 Toluene	91	6.445	6.445	(0.841)	339968	20.0000	18.99
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	116330	20.0000	19.51
	52 2-Hexanone	43	7.086	7.086	(0.924)	93119	40.0000	39.54
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	69855	20.0000	19.45
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	137967	20.0000	19.52
	55 Dibromochloromethane	129	7.176	7.176	(0.936)	100749	20.0000	19.44
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	74611	20.0000	20.15
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	88886	20.0000	19.80
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	66757	20.0000	20.24
	59 Chlorobenzene	112	7.694	7.694	(1.003)	240885	20.0000	18.97
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	90283	20.0000	19.11

61 Ethylbenzene	106	7.799	7.799 (1.017)	117560	20.0000	19.66
62 m,p-Xylenes	106	7.904	7.904 (1.031)	299082	40.0000	38.80

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	147602	20.0000	19.40
	64 Styrene	104	8.260	8.260	(1.077)	253280	20.0000	19.86
	66 Bromoform	173	8.410	8.410	(1.097)	69137	20.0000	19.25
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	344283	20.0000	19.80
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	112594	20.0000	19.83
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	116878	20.0000	19.58
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	356229	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	76967	20.0000	19.41
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	404399	20.0000	20.49
	74 Bromobenzene	156	8.803	8.803	(0.911)	117586	20.0000	20.11
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	295026	20.0000	20.23
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	256591	20.0000	19.81
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	294244	20.0000	19.93
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	242174	20.0000	20.29
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	305461	20.0000	19.91
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	326826	20.0000	20.58
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	294187	20.0000	20.67
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	197278	20.0000	20.33
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	207572	20.0000	19.60
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	163895	20.0000	17.99
	87 n-Butylbenzene	91	9.995	9.995	(1.035)	248190	20.0000	19.23
	88 1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	201166	20.0000	20.13
	89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.104)	18635	20.0000	20.58
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	130463	20.0000	20.69
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	55912	20.0000	20.12
	92 Naphthalene	128	11.544	11.544	(1.195)	300432	20.0000	20.94
	93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	124401	20.0000	20.60
M	94 1,2-Dichloroethylene (total)	96				163365	40.0000	
M	95 Xylenes (total)	106				446684	60.0000	
	141 Cyclohexane	56	4.118	4.118	(0.986)	84355	20.0000	19.01(M)
	138 Freon TF	101	1.910	1.910	(0.457)	64657	20.0000	19.17
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	172044	20.0000	20.59
	146 Methyl Acetate	43	2.228	2.228	(0.533)	38475	20.0000	18.61
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	117583	400.000	369.63
	149 Isopropyl Alcohol	45	2.090	2.090	(0.500)	61646	400.000	371.06

QC Flag Legend

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



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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

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

Page 1

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D
Inj Date : 16-DEC-2022 13:43
InstruID : voa6.i
LabSampID : VSTD020

Chloroprene (126-99-8)

Reason Code:

BEFORE
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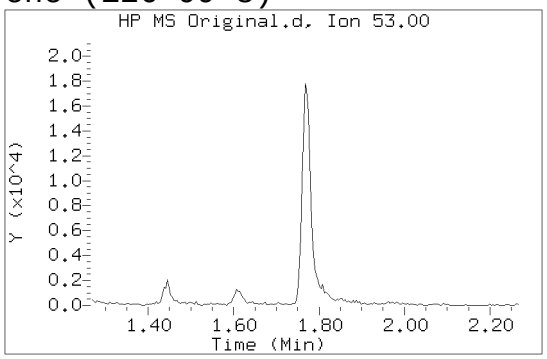
27-Dec-2022
16:03
linh
pham



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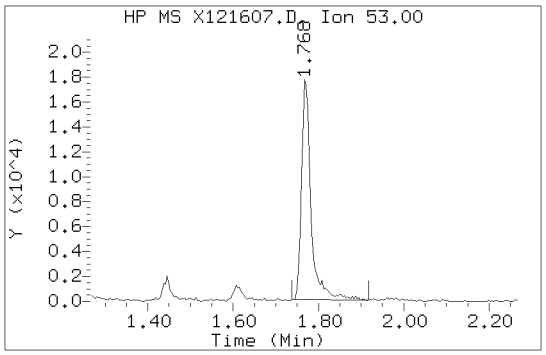

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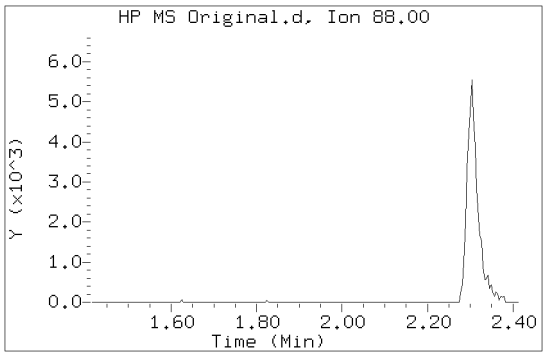

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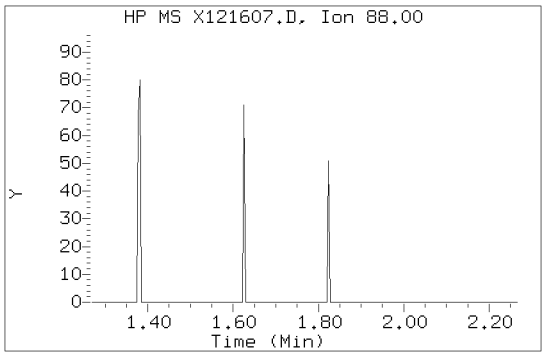

Methyl Acrylate (96-33-3)

Reason Code:

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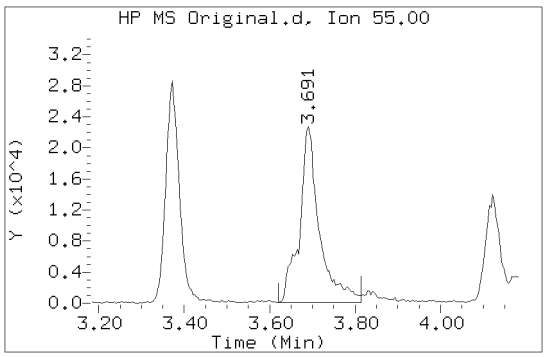

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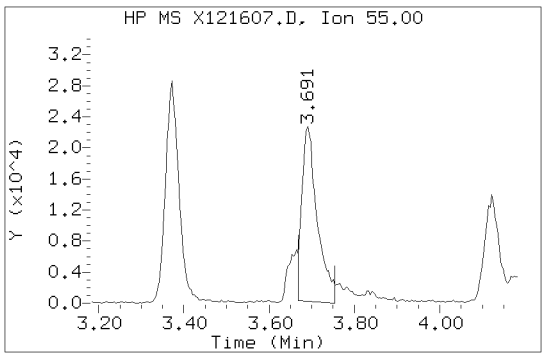

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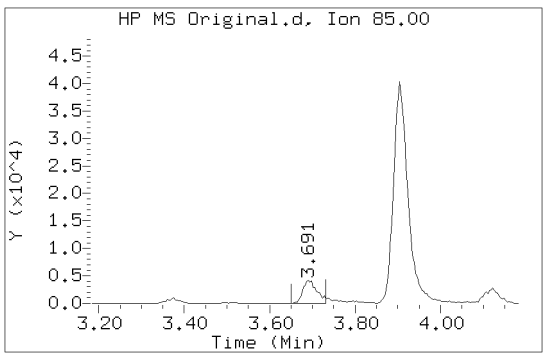

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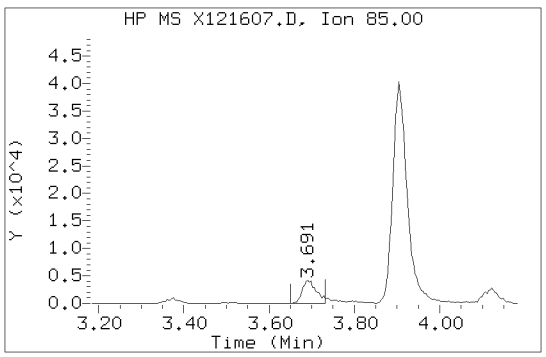

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Inj Date : 16-DEC-2022 13:43
InstruID : voa6.i
LabSampID : VSTD020

1,4-Dioxane ()

Reason Code:

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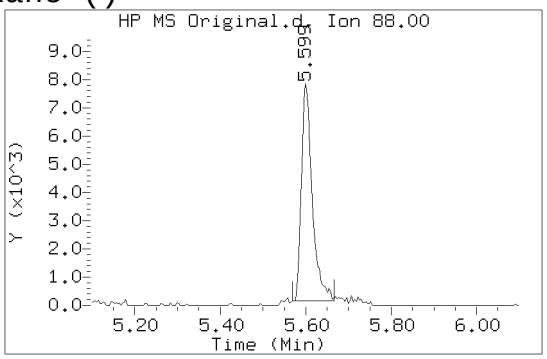

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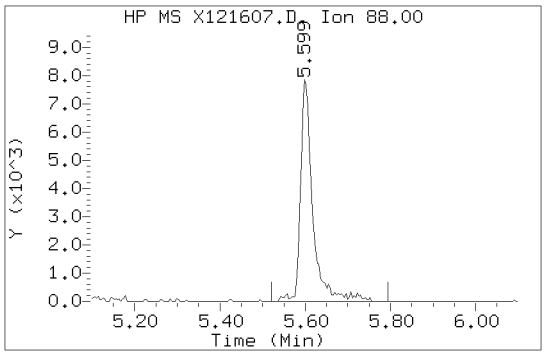

BEFORE

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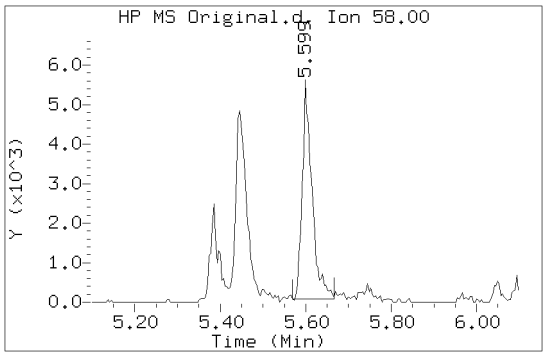

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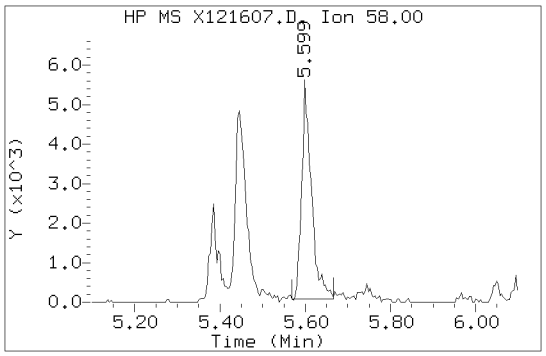

Cyclohexane (110-82-7)

Reason Code:

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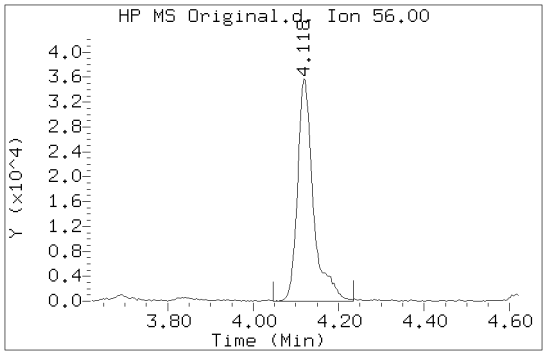

AFTER

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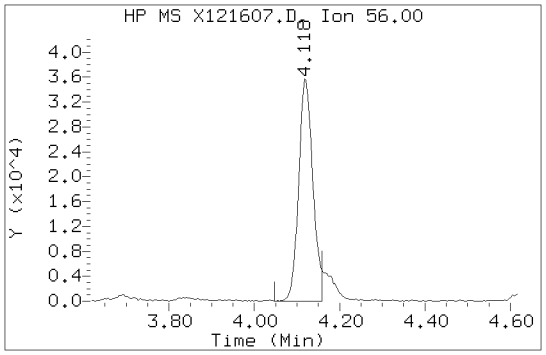

BEFORE

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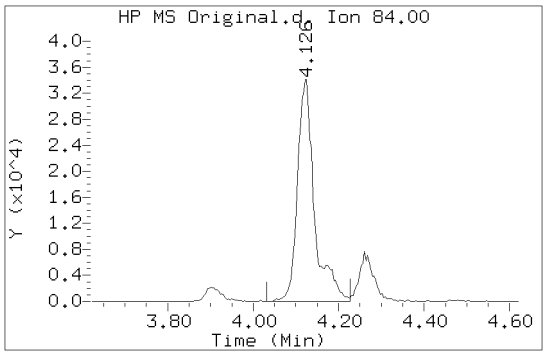

AFTER

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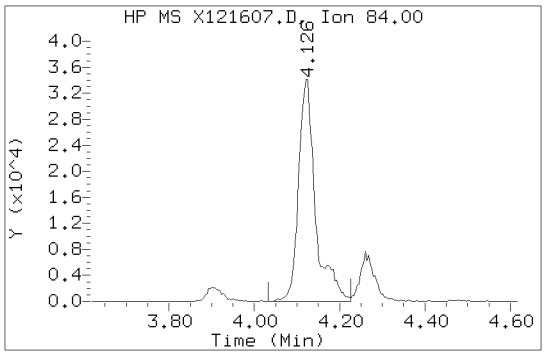

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Inj Date : 16-DEC-2022 13:43
InstruID : voa6.i
LabSampID : VSTD020

Cyclohexane (110-82-7)

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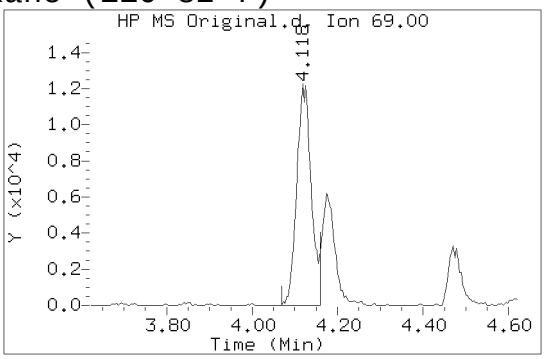

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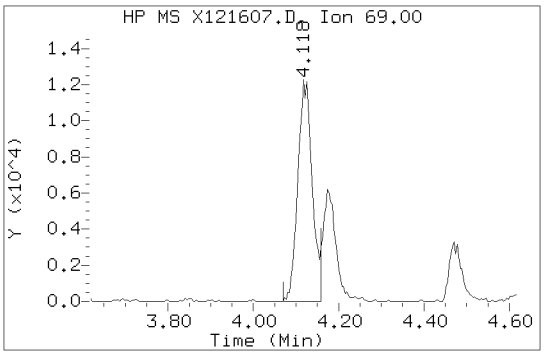

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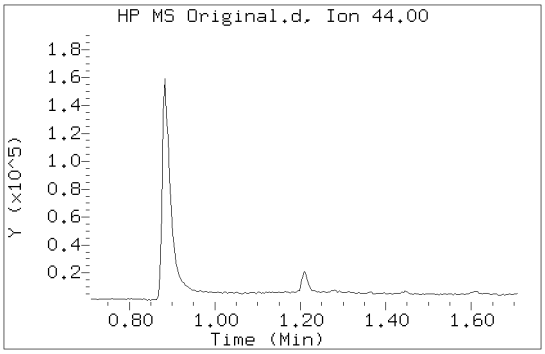

AFTER

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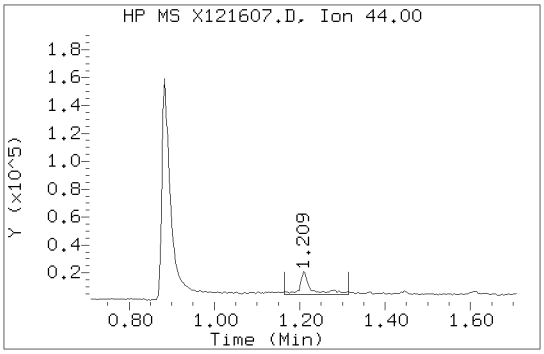

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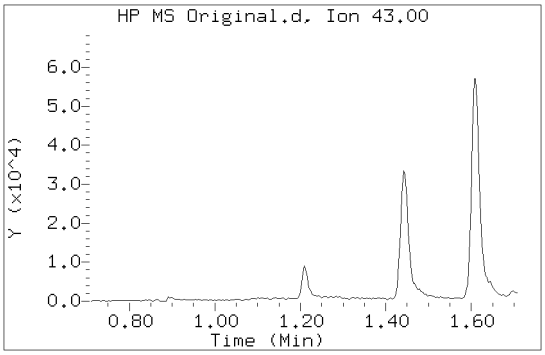

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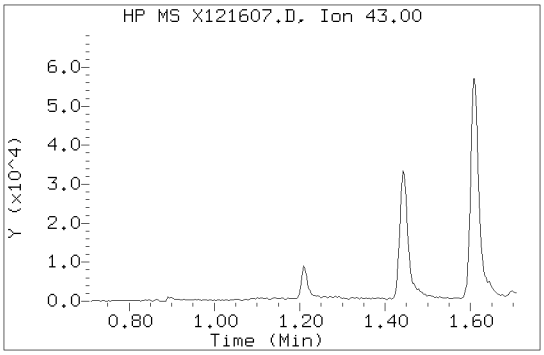

BEFORE

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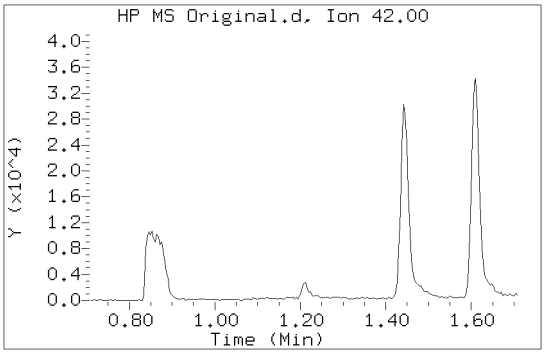

AFTER

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16:06
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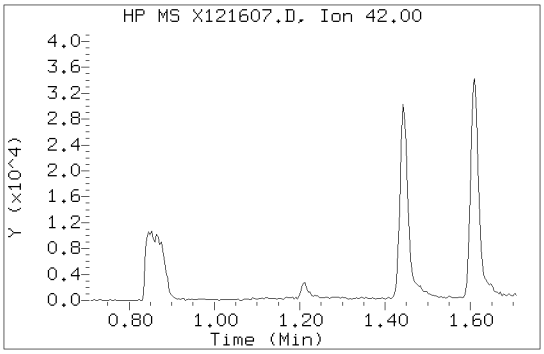

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D
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Inj Date : 16-DEC-2022 14:04
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 13:43 Cal File: X121607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	457591	50.0000	
135 1,4-Dioxane	88	5.595	5.595	(1.339)	40509	1000.00	968.45
140 1,3-Butadiene	54	1.160	1.160	(0.278)	152324	50.0000	48.50
25 Methacrylonitrile	41	3.821	3.821	(0.915)	147931	50.0000	45.65
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	499872	1000.00	971.21
13 Acetonitrile	39	2.195	2.195	(0.525)	202696	500.000	486.70
14 Allyl Chloride	41	2.195	2.195	(0.525)	372130	50.0000	46.91
4 Propionitrile	54	3.645	3.645	(0.873)	221995	500.000	475.45
136 n-Hexane	57	2.768	2.768	(0.663)	182358	50.0000	55.34
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	70497	50.0000	50.03
194 Acetaldehyde	44	1.209	1.209	(0.289)	67188	200.000	235.49(M)
23 Chloroprene	53	1.767	1.767	(0.423)	73877	50.0000	47.48(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	423646	50.0000	51.17
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	438695	50.0000	49.65
139 Diethyl ether	59	1.756	1.756	(0.420)	141705	50.0000	46.34
130 Ethyl Acetate	43	3.649	3.649	(0.873)	170590	50.0000	47.77
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	147516	50.0000	47.27
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	144135	50.0000	44.17
132 n-Butanol	56	5.253	5.253	(1.257)	54418	1000.00	935.85
142 Tetrahydrofuran	42	3.844	3.844	(0.920)	58181	100.000	102.34

150	Allyl alcohol	57	2.768	2.768 (0.663)	182358	1000.00	1026.00
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	826758	50.0000	45.95

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D Page 2
Report Date: 27-Dec-2022 16:07

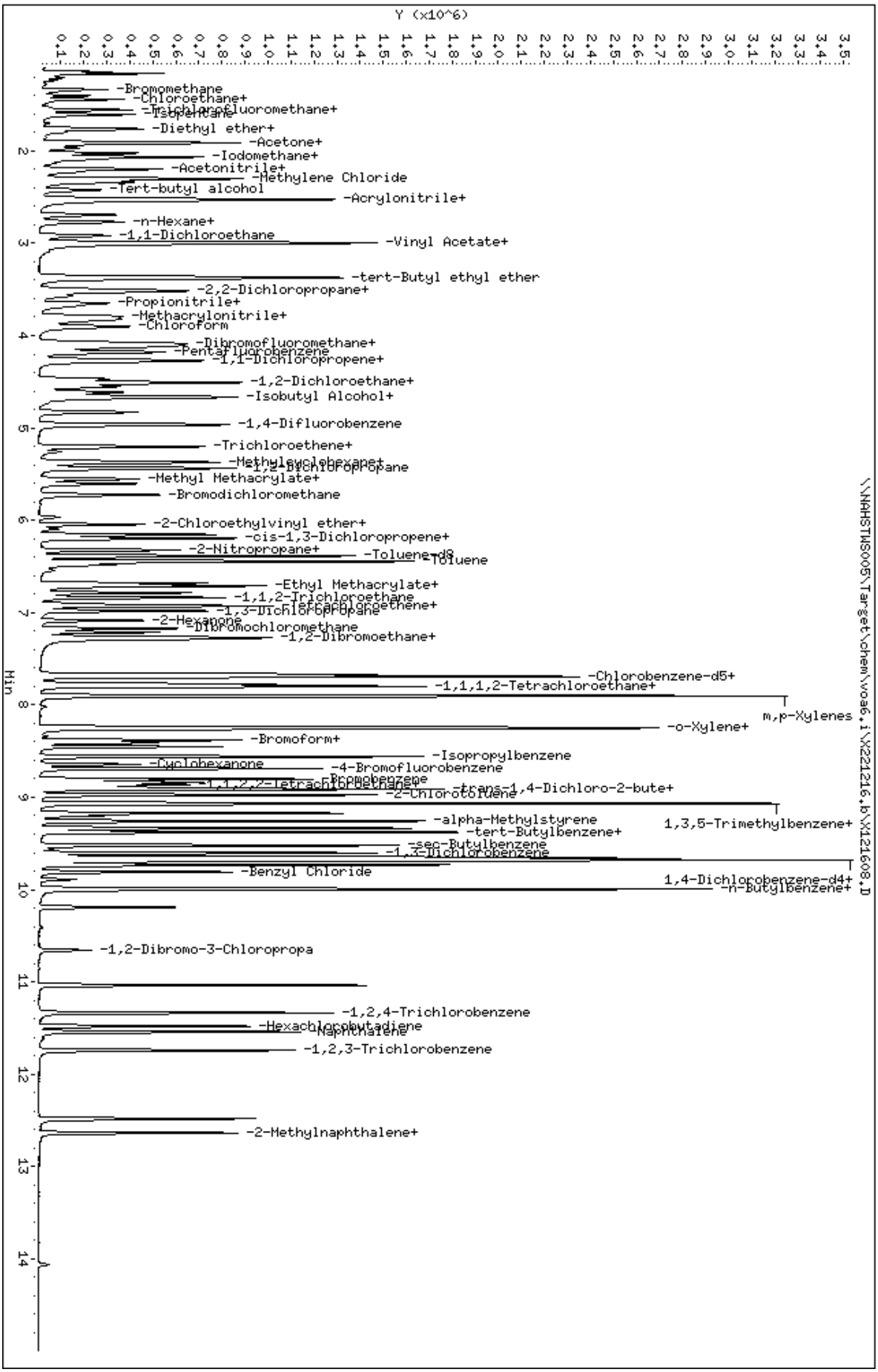
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.683	3.683	(0.882)	151068	50.0000	48.62(M)
	162 Butyl acrylate	55	8.252	8.252	(1.076)	415774	50.0000	48.76
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	160392	50.0000	50.11
	3 Chloromethane	50	1.077	1.077	(0.258)	192710	50.0000	46.69
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	201812	50.0000	50.48
	6 Bromomethane	94	1.336	1.336	(0.320)	139689	50.0000	46.33
	7 Chloroethane	64	1.400	1.400	(0.335)	134745	50.0000	48.43
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	278013	50.0000	49.70
	9 Acrolein	56	1.441	1.441	(0.345)	27445	100.000	88.04
	10 Acetone	43	1.970	1.970	(0.472)	124798	100.000	97.19
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	168905	50.0000	48.63
	15 Iodomethane	142	2.022	2.022	(0.484)	455792	100.000	99.60
	16 Acrylonitrile	53	2.528	2.528	(0.605)	118697	100.000	100.77
	17 Methylene Chloride	84	2.300	2.300	(0.550)	225642	50.0000	47.36
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.606)	534667	50.0000	47.03
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	892690	100.000	98.24
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	191505	50.0000	49.27
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	983875	100.000	98.59
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	330037	50.0000	48.38
	24 2-Butanone	43	3.574	3.574	(0.856)	130179	100.000	95.71(H)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	283996	50.0000	49.03
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	228729	50.0000	48.35
	28 Chloroform	83	3.904	3.904	(0.935)	370755	50.0000	48.49
	29 Bromochloromethane	128	3.788	3.788	(0.907)	120638	50.0000	46.58
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	211939	50.0000	48.23
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	300650	50.0000	49.56
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	256928	50.0000	52.23
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	276500	50.0000	48.70
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	251833	50.0000	47.94
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	222293	50.0000	47.94
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	692830	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	812279	50.0000	49.09
	38 Trichloroethene	130	5.205	5.205	(1.048)	233833	50.0000	49.83
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	297315	50.0000	47.88
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	180920	100.000	102.42
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	215079	50.0000	48.87
	44 Dibromomethane	93	5.553	5.553	(1.119)	143223	50.0000	47.87
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	336990	100.000	96.59
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	366231	50.0000	50.22
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	652727	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	772486	50.0000	47.89
	50 Toluene	91	6.446	6.446	(0.841)	889029	50.0000	49.27
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	309568	50.0000	51.15
	52 2-Hexanone	43	7.087	7.087	(0.924)	232879	100.000	98.10
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	172833	50.0000	47.75
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	345991	50.0000	48.56
	55 Dibromochloromethane	129	7.176	7.176	(0.936)	260477	50.0000	49.86
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	194749	50.0000	52.17
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	229442	50.0000	50.70
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	170128	50.0000	50.81
	59 Chlorobenzene	112	7.694	7.694	(1.003)	624151	50.0000	48.77
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	235373	50.0000	49.42

61 Ethylbenzene	106	7.799	7.799 (1.017)	311983	50.0000	51.75
62 m,p-Xylenes	106	7.904	7.904 (1.031)	785955	100.000	101.14

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	385427	50.0000	50.25
	64 Styrene	104	8.260	8.260	(1.077)	673066	50.0000	52.35
	66 Bromoform	173	8.410	8.410	(1.097)	181492	50.0000	50.14
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	920845	50.0000	52.55
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	276483	50.0000	46.43
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	292753	50.0000	48.55
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	373588	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	199888	50.0000	48.08(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1085689	50.0000	52.46
	74 Bromobenzene	156	8.803	8.803	(0.911)	299078	50.0000	48.79
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	793494	50.0000	51.90
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	670422	50.0000	49.37
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	782927	50.0000	50.57
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	652461	50.0000	52.14
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	815460	50.0000	50.69
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	889679	50.0000	53.43
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	810483	50.0000	54.32
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	520329	50.0000	51.14
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	544362	50.0000	49.03
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	472387	50.0000	46.44
	87 n-Butylbenzene	91	9.995	9.995	(1.035)	696355	50.0000	48.48
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	519532	50.0000	49.58
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	48660	50.0000	51.11
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	355455	50.0000	53.75
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	155390	50.0000	52.99
	92 Naphthalene	128	11.540	11.540	(1.194)	799829	50.0000	53.16
	93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	320836	50.0000	50.66
M	94 1,2-Dichloroethylene (total)	96				420234	100.000	
M	95 Xylenes (total)	106				1171382	150.000	
	141 Cyclohexane	56	4.121	4.121	(0.987)	237699	50.0000	51.49
	138 Freon TF	101	1.913	1.913	(0.458)	172155	50.0000	51.25
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	420886	50.0000	49.62
	146 Methyl Acetate	43	2.228	2.228	(0.533)	96420	50.0000	46.82
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	302677	1000.00	955.26
	149 Isopropyl Alcohol	45	2.090	2.090	(0.500)	157082	1000.00	949.28

QC Flag Legend

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



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Date : 16-DEC-2022 14:04
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\X221216.b\X121608.D
Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

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

BEFORE

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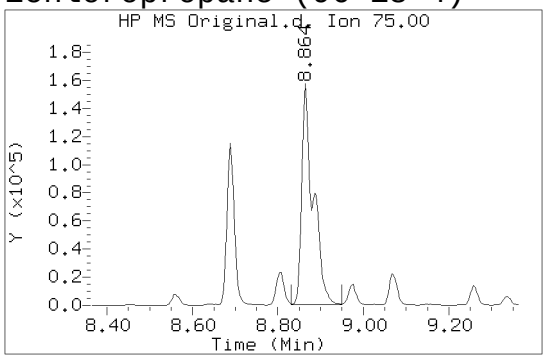
HEIGHT
157256
27-Dec-2022
16:03
linh
pham



BEFORE

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16:03
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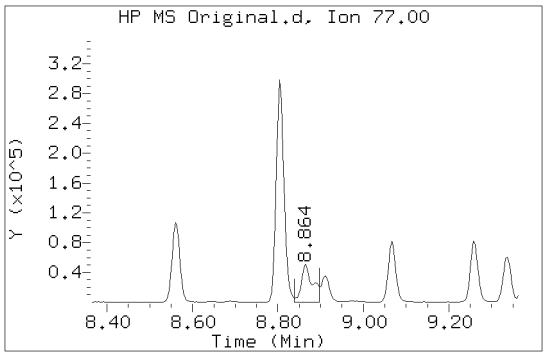

Reason Code:

AFTER

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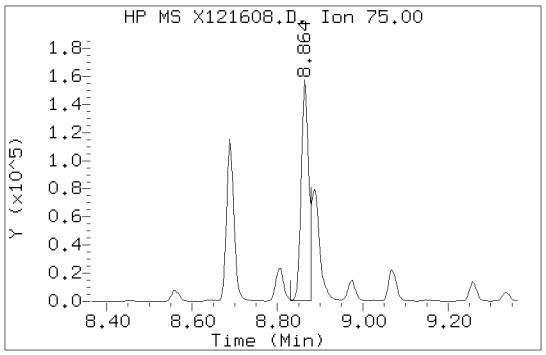

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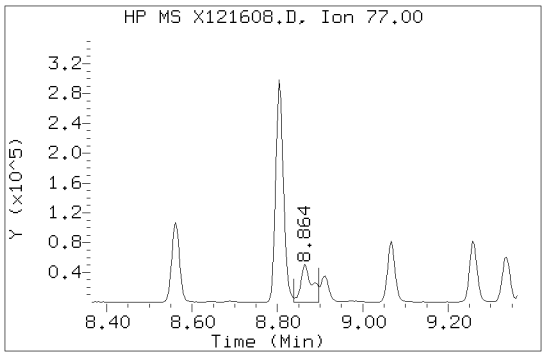

Chloroprene (126-99-8)

BEFORE

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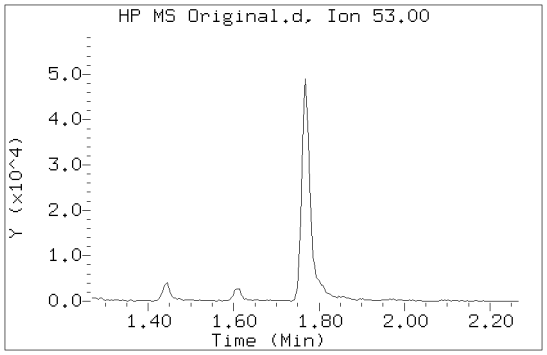

BEFORE

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27-Dec-2022
16:03
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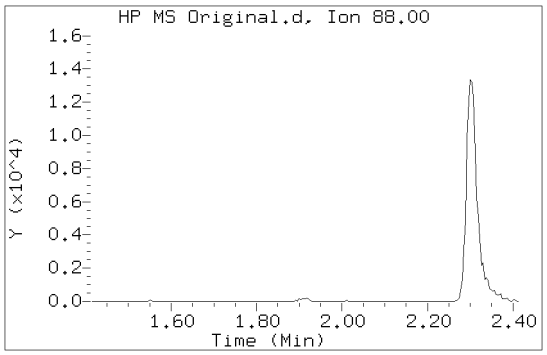

Reason Code:

AFTER

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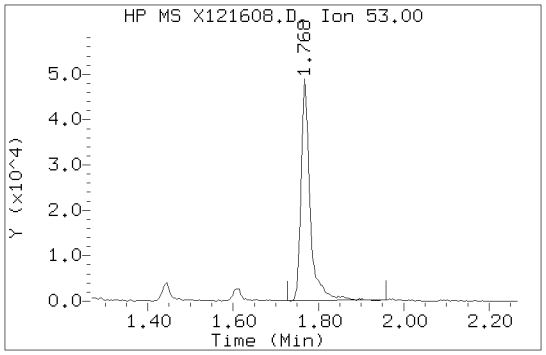

AFTER

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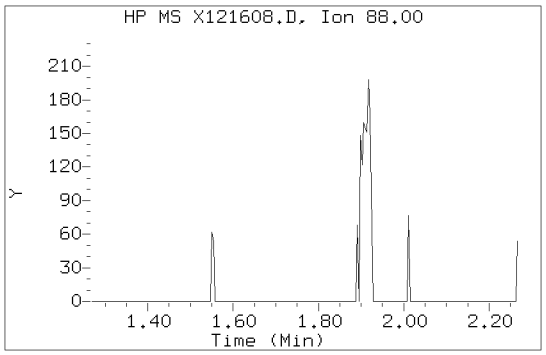

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Methyl Acrylate (96-33-3)

BEFORE

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HEIGHT
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27-Dec-2022
16:03
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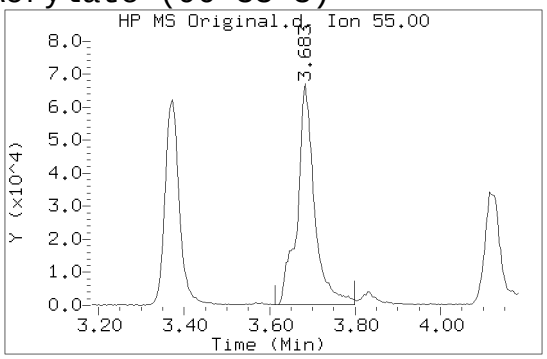
pham



BEFORE

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27-Dec-2022
16:03
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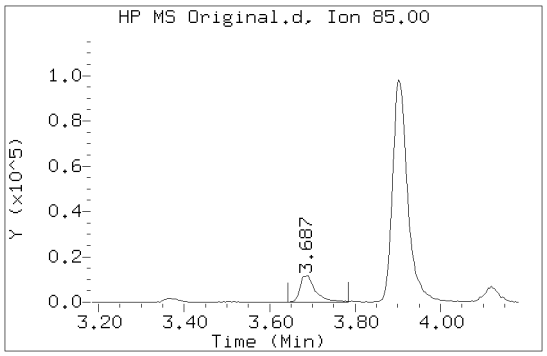

Reason Code:

AFTER

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HEIGHT
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16:06
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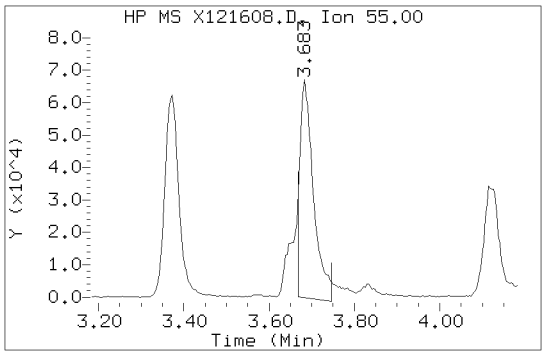

AFTER

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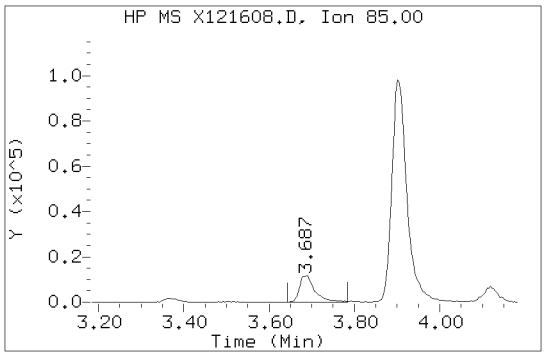

Acetaldehyde (75-07-0)

BEFORE

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16:03
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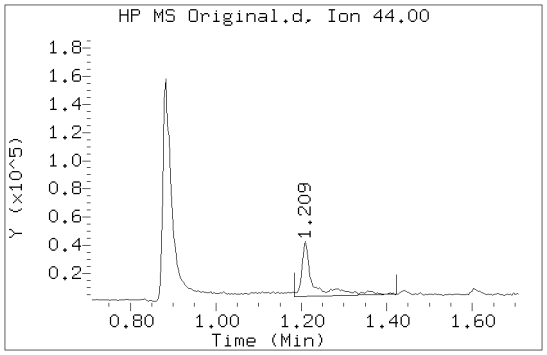

BEFORE

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16:03
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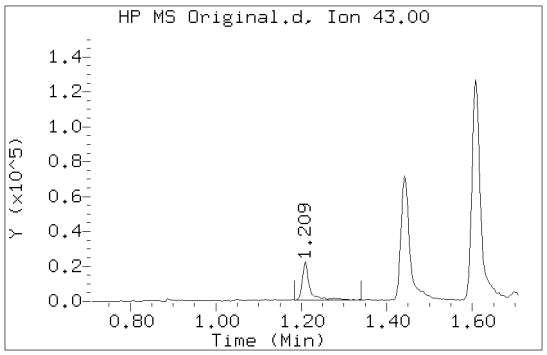

Reason Code:

AFTER

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16:06
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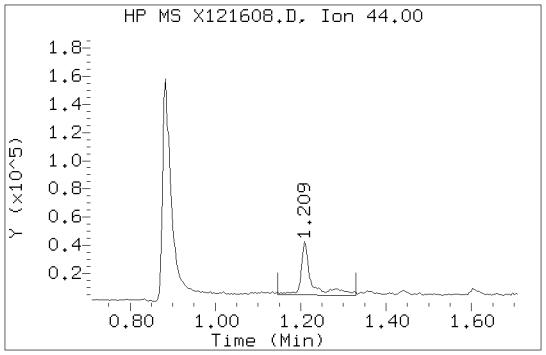

AFTER

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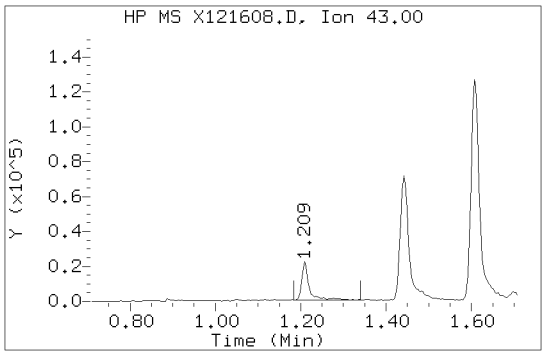

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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HEIGHT
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27-Dec-2022
16:03
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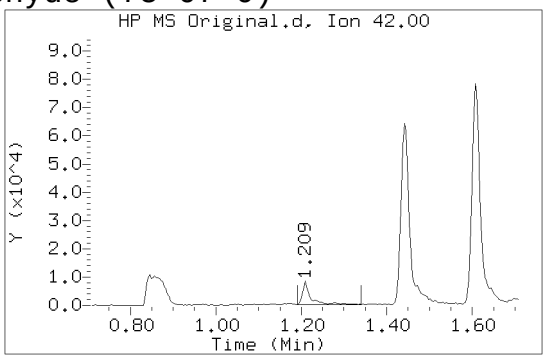

AFTER

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27-Dec-2022
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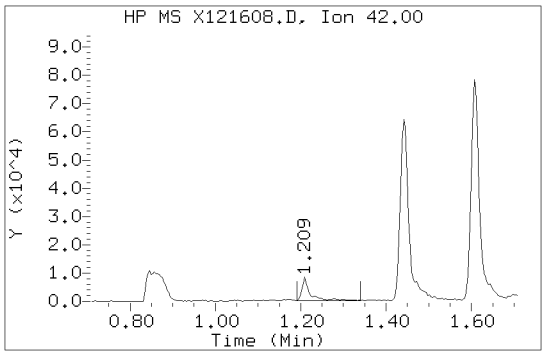


Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 16-DEC-2022 14:25
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	454640	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	80329	2000.00	1932.89
140 1,3-Butadiene	54	1.160	1.160	(0.278)	300004	100.000	96.14
25 Methacrylonitrile	41	3.822	3.822	(0.915)	296105	100.000	91.97
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	1010956	2000.00	1976.95
13 Acetonitrile	39	2.195	2.195	(0.525)	413876	1000.00	1000.23
14 Allyl Chloride	41	2.195	2.195	(0.525)	756242	100.000	95.96
4 Propionitrile	54	3.645	3.645	(0.873)	447087	1000.00	963.76
136 n-Hexane	57	2.768	2.768	(0.663)	330416	100.000	100.93
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	144667	100.000	100.47
194 Acetaldehyde	44	1.209	1.209	(0.289)	107798	400.000	394.60(M)
23 Chloroprene	53	1.767	1.767	(0.423)	146540	100.000	94.79(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	857105	100.000	100.18
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	912573	100.000	101.09
139 Diethyl ether	59	1.752	1.752	(0.420)	288002	100.000	94.80
130 Ethyl Acetate	43	3.649	3.649	(0.873)	318062	100.000	89.65
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	295199	100.000	95.22
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	311883	100.000	96.06
132 n-Butanol	56	5.253	5.253	(1.258)	124057	2000.00	1971.40
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	109518	200.000	196.74

150	Allyl alcohol	57	2.768	2.768 (0.663)	330416	2000.00	1871.09
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	1772216	100.000	95.31

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D Page 2
Report Date: 27-Dec-2022 16:07

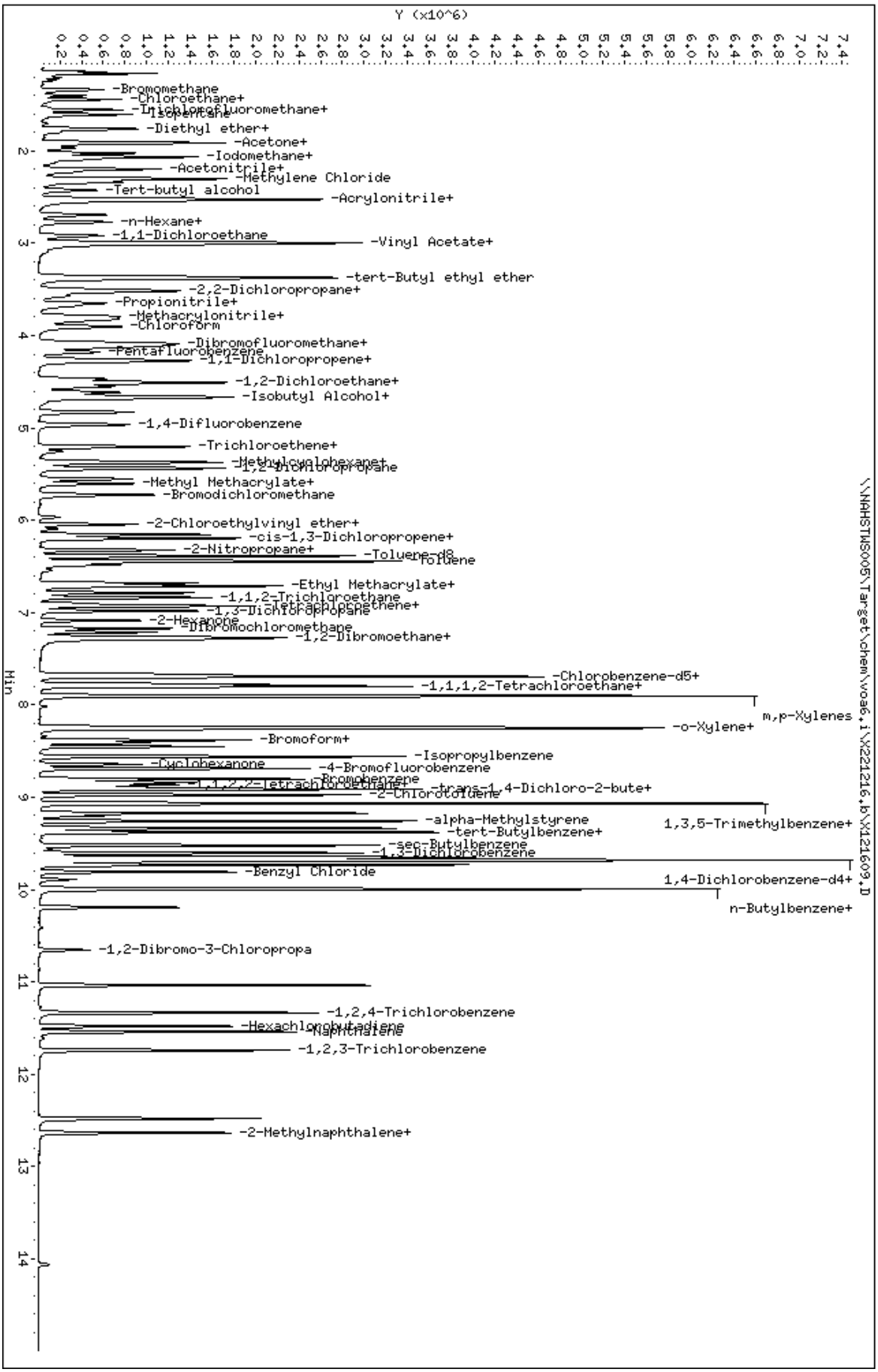
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	308372	100.000	99.90(M)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	901265	100.000	103.44
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	309019	100.000	96.81
	3	Chloromethane	50	1.078	1.078	(0.258)	388163	100.000	92.40
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	390567	100.000	98.34
	6	Bromomethane	94	1.336	1.336	(0.320)	284165	100.000	93.02
	7	Chloroethane	64	1.400	1.400	(0.335)	261091	100.000	94.45
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	543907	100.000	97.86
	9	Acrolein	56	1.441	1.441	(0.345)	60756	200.000	192.70
	10	Acetone	43	1.970	1.970	(0.472)	243517	200.000	190.92
	11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	329394	100.000	95.46
	15	Iodomethane	142	2.026	2.026	(0.485)	958603	200.000	197.72
	16	Acrylonitrile	53	2.528	2.528	(0.605)	235604	200.000	201.32
	17	Methylene Chloride	84	2.300	2.300	(0.550)	423827	100.000	89.54
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	1078258	100.000	95.46
	19	Carbon Disulfide	76	2.063	2.063	(0.494)	1765599	200.000	195.57
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	376933	100.000	97.60
	21	Vinyl Acetate	43	2.993	2.993	(0.716)	1955305	200.000	197.21
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	641083	100.000	94.59
	24	2-Butanone	43	3.570	3.570	(0.855)	264221	200.000	192.38(H)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	554902	100.000	96.43
	27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	443532	100.000	94.37
	28	Chloroform	83	3.904	3.904	(0.935)	715830	100.000	94.23
	29	Bromochloromethane	128	3.792	3.792	(0.908)	239022	100.000	92.88
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	438954	100.000	100.72
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	583361	100.000	96.79
	32	1,1-Dichloropropene	75	4.275	4.275	(0.861)	496096	100.000	101.35
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	553661	100.000	98.01
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	487488	100.000	93.26
$	35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	455890	100.000	98.67
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	689427	50.0000	
	37	Benzene	78	4.508	4.508	(0.908)	1590142	100.000	96.58
	38	Trichloroethene	130	5.205	5.205	(1.048)	456948	100.000	97.85
	39	Bromodichloromethane	83	5.722	5.722	(1.153)	587419	100.000	95.07
	41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	345852	200.000	196.75
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	420835	100.000	96.09
	44	Dibromomethane	93	5.550	5.550	(1.118)	280146	100.000	94.11
	45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	671115	200.000	188.25
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	735867	100.000	101.41
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	666948	50.0000	
$	48	Toluene-d8	98	6.386	6.386	(0.833)	1602890	100.000	97.25
	50	Toluene	91	6.446	6.446	(0.841)	1761917	100.000	95.57
	51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	618784	100.000	102.75
	52	2-Hexanone	43	7.087	7.087	(0.924)	458639	200.000	189.09
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	342194	100.000	92.52
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	682500	100.000	93.75
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	521219	100.000	97.64
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	373651	100.000	97.96
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	453499	100.000	98.07
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	326538	100.000	98.00
	59	Chlorobenzene	112	7.694	7.694	(1.003)	1229287	100.000	94.01
	60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	472962	100.000	97.19

61 Ethylbenzene	106	7.799	7.799 (1.017)	612289	100.000	99.40
62 m,p-Xylenes	106	7.904	7.904 (1.031)	1556563	200.000	196.03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	767814	100.000	97.97
	64 Styrene	104	8.260	8.260	(1.077)	1350780	100.000	102.83
	66 Bromoform	173	8.410	8.410	(1.097)	367943	100.000	99.50
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1818857	100.000	101.58
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	554091	100.000	90.03
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	615584	100.000	99.86
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386107	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	407425	100.000	94.83(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	2152414	100.000	100.64
	74 Bromobenzene	156	8.803	8.803	(0.911)	602819	100.000	95.16
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1603520	100.000	101.49
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	1326500	100.000	94.51
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1587855	100.000	99.24
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	1287608	100.000	99.56
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1640529	100.000	98.68
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1778581	100.000	103.36
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	1606121	100.000	104.16
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	1039293	100.000	98.84
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1114780	100.000	97.16
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	1009234	100.000	94.18
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	1425779	100.000	94.31
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	1054319	100.000	97.36
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	94321	100.000	95.78
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	697257	100.000	102.03
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	299042	100.000	97.63
	92 Naphthalene	128	11.540	11.540	(1.194)	1592534	100.000	102.42
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	642199	100.000	98.12
M	94 1,2-Dichloroethylene (total)	96				820465	200.000	
M	95 Xylenes (total)	106				2324377	300.000	
	141 Cyclohexane	56	4.118	4.118	(0.986)	432198	100.000	93.19
	138 Freon TF	101	1.913	1.913	(0.458)	327614	100.000	98.16
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	862071	100.000	102.15(A)
	146 Methyl Acetate	43	2.228	2.228	(0.533)	196542	100.000	96.07
	148 Tert-Butyl alcohol	59	2.427	2.427	(0.581)	592215	2000.00	1881.19
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	321288	2000.00	1954.21

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\X221216.b\X121609.D
Date : 16-DEC-2022 14:25
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

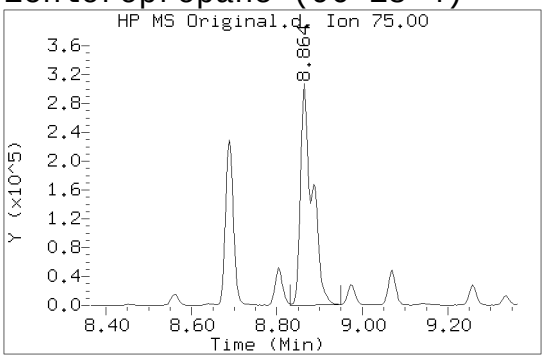
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D
Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

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

BEFORE

MASS
75
AREA
602953
HEIGHT
307037
27-Dec-2022
16:03
linh
pham



BEFORE

MASS
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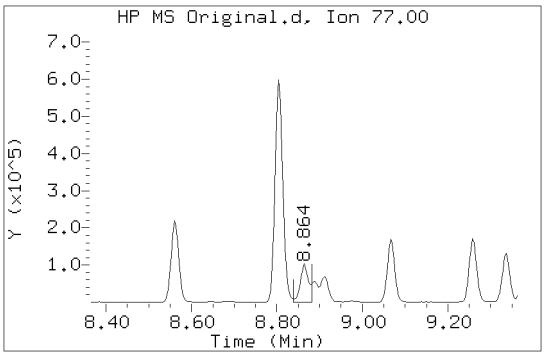
AREA
149362
HEIGHT
103354
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

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75
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407425
HEIGHT
307037
27-Dec-2022
16:06
linh
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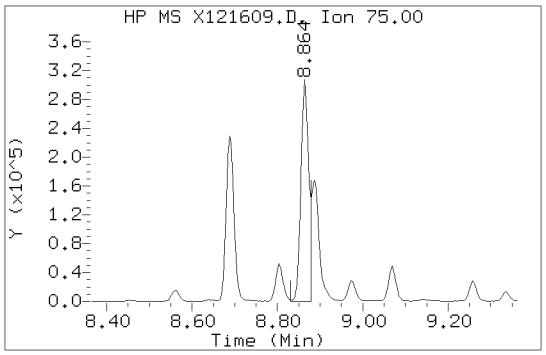

AFTER

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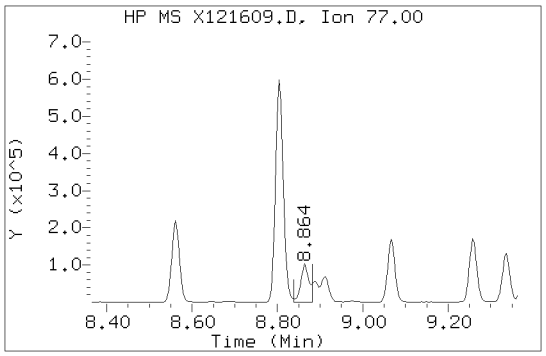
pham



Chloroprene (126-99-8)

BEFORE

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AREA
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HEIGHT
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27-Dec-2022
16:03
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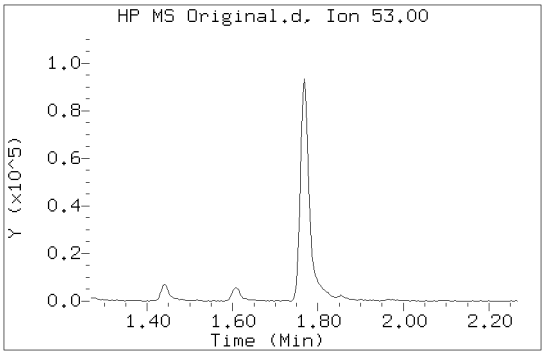
pham



BEFORE

MASS
88
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27-Dec-2022
16:03
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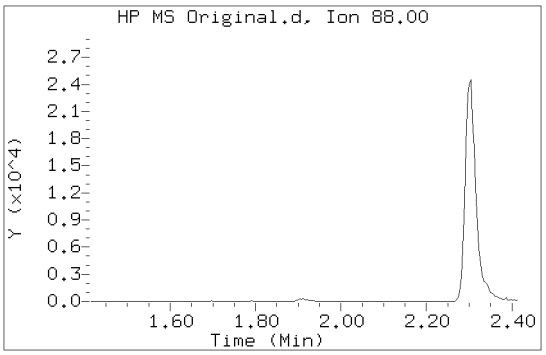

Reason Code:

AFTER

MASS
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HEIGHT
93219
27-Dec-2022
16:06
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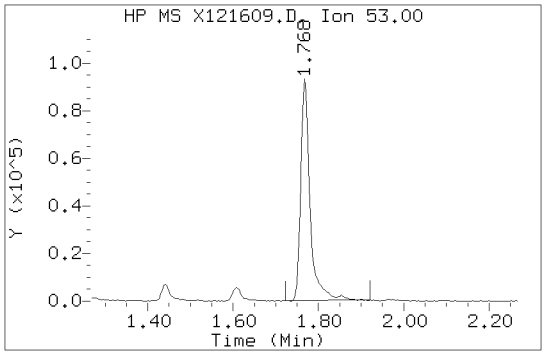
pham



AFTER

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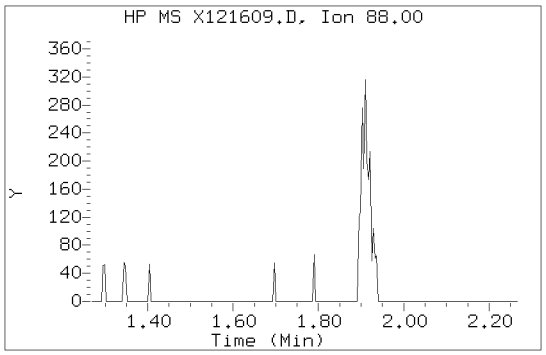

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Methyl Acrylate (96-33-3)

BEFORE
MASS
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AREA
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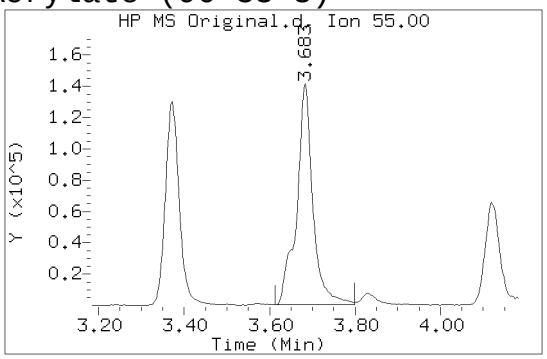
HEIGHT
141345
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER
MASS
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AREA
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HEIGHT
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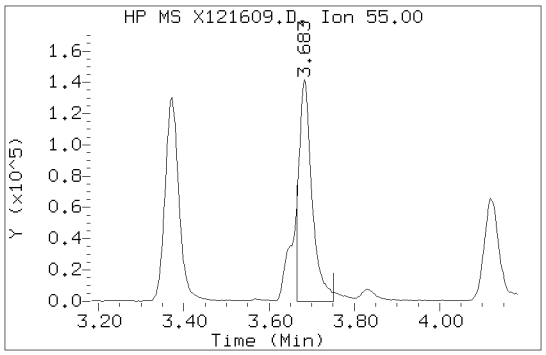
27-Dec-2022
16:06
linh
pham



BEFORE
MASS
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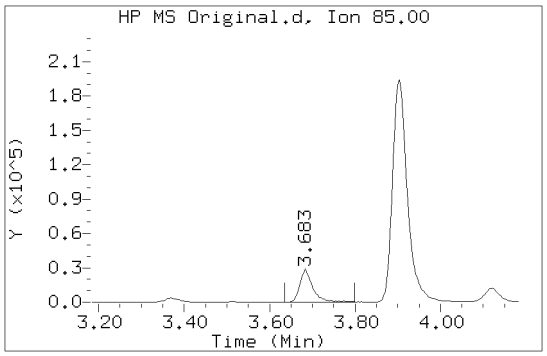
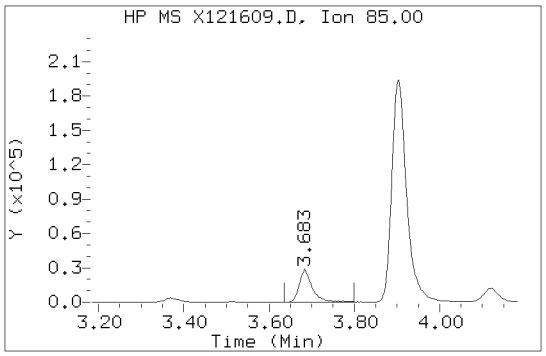
AREA
62241
HEIGHT
29192
27-Dec-2022
16:03
linh
pham



AFTER
MASS
85
AREA
62241
HEIGHT
29192
27-Dec-2022
16:06
linh
pham



Acetaldehyde (75-07-0)

BEFORE
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AREA
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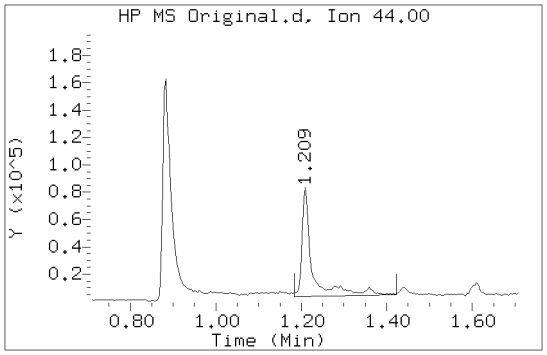
HEIGHT
79995
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER
MASS
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AREA
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HEIGHT
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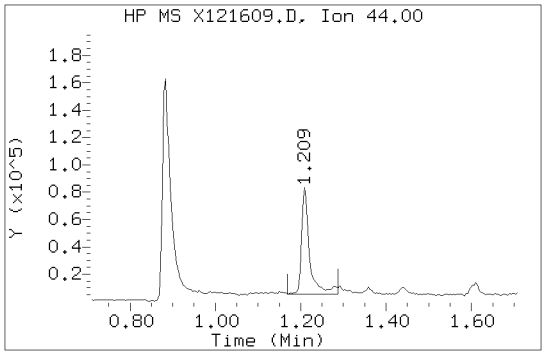
27-Dec-2022
16:06
linh
pham



BEFORE
MASS
43
AREA
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HEIGHT
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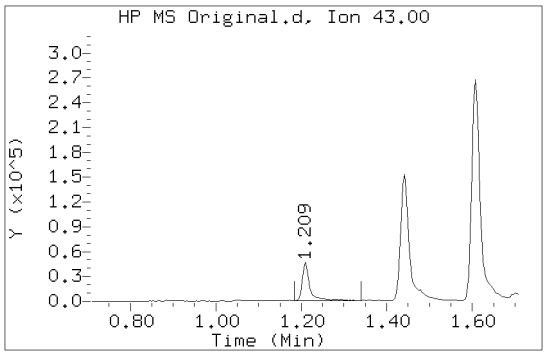
27-Dec-2022
16:03
linh
pham



AFTER
MASS
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AREA
58307
HEIGHT
46134
27-Dec-2022
16:06
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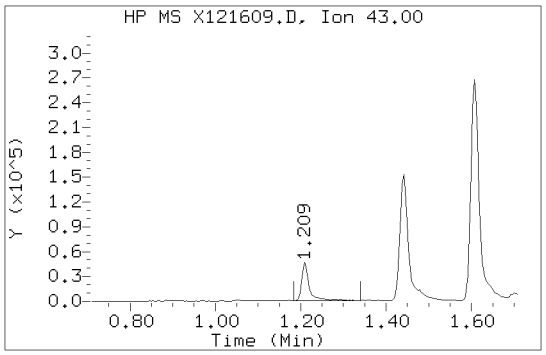

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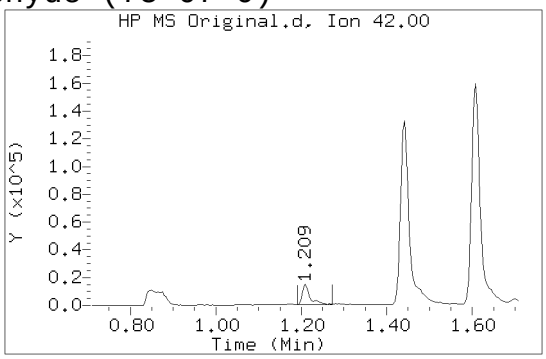
Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
42
AREA
19613
HEIGHT
14674
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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27-Dec-2022
16:06
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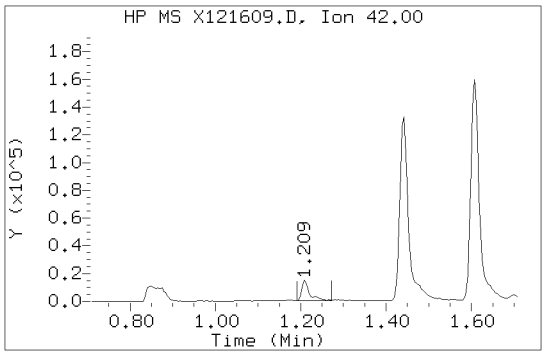


Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 16-DEC-2022 14:46
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:25 Cal File: X121609.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.177	(1.000)	447266	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	128845	3000.00	3151.41
140 1,3-Butadiene	54	1.160	1.160	(0.278)	468966	150.000	152.77
25 Methacrylonitrile	41	3.818	3.818	(0.914)	457301	150.000	144.39
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	1595753	3000.00	3171.99
13 Acetonitrile	39	2.194	2.194	(0.525)	642798	1500.00	1579.09
14 Allyl Chloride	41	2.194	2.194	(0.525)	1164663	150.000	150.22
4 Propionitrile	54	3.649	3.649	(0.873)	694740	1500.00	1522.31
136 n-Hexane	57	2.768	2.768	(0.663)	533876	150.000	165.78
72 trans-1,4-Dichloro-2-butene	53	8.889	8.889	(1.159)	234252	150.000	161.53
194 Acetaldehyde	44	1.209	1.209	(0.289)	161053	600.000	611.34(M)
23 Chloroprene	53	1.767	1.767	(0.423)	225733	150.000	148.43
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	1351001	150.000	157.73
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	1420820	150.000	156.27
139 Diethyl ether	59	1.752	1.752	(0.419)	443624	150.000	148.44
130 Ethyl Acetate	43	3.649	3.649	(0.873)	516433	150.000	147.97
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	465959	150.000	152.78
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	517063	150.000	157.90
132 n-Butanol	56	5.253	5.253	(1.258)	210842	3000.00	3100.52
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	162133	300.000	297.65

150	Allyl alcohol	57	2.768	2.768 (0.663)	533876	3000.00	3073.09
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	2744011	150.000	147.41

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D Page 2
Report Date: 27-Dec-2022 16:07

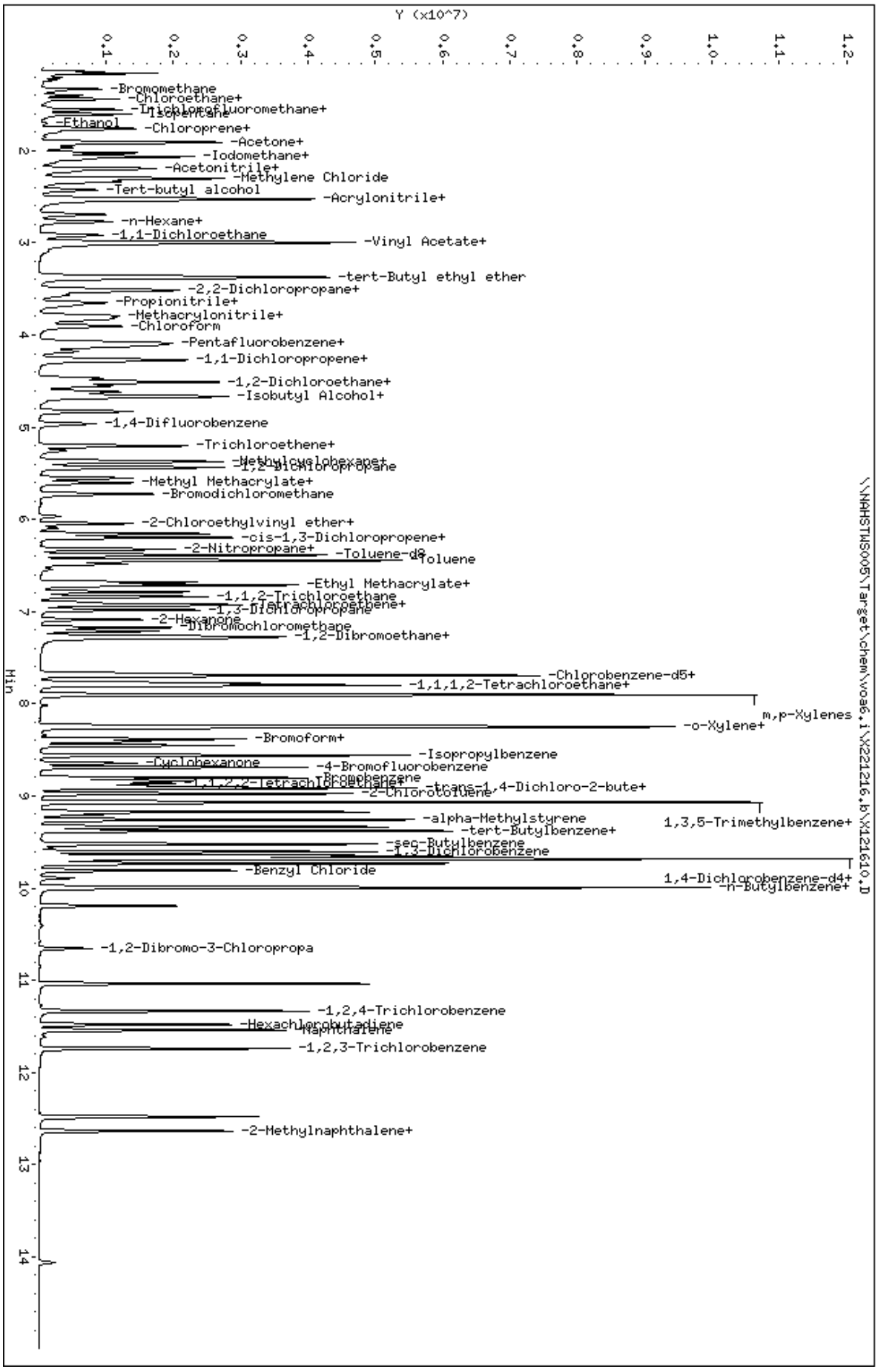
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	479571	150.000	157.93(M)
	162	Butyl acrylate	55	8.248	8.248	(1.076)	1470193	150.000	167.53
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	476130	150.000	151.40
	3	Chloromethane	50	1.077	1.077	(0.258)	621048	150.000	148.89
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	602774	150.000	154.27
	6	Bromomethane	94	1.332	1.332	(0.319)	470318	150.000	155.29
	7	Chloroethane	64	1.400	1.400	(0.335)	409168	150.000	150.45
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	866865	150.000	158.54
	9	Acrolein	56	1.441	1.441	(0.345)	96139	300.000	308.25
	10	Acetone	43	1.969	1.969	(0.472)	373504	300.000	297.68
	11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	516820	150.000	152.24
	15	Iodomethane	142	2.022	2.022	(0.484)	1554547	300.000	304.69
	16	Acrylonitrile	53	2.528	2.528	(0.605)	371872	300.000	323.00
	17	Methylene Chloride	84	2.299	2.299	(0.550)	656037	150.000	140.89
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	1661314	150.000	149.51
	19	Carbon Disulfide	76	2.063	2.063	(0.494)	2747788	300.000	309.38
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	579939	150.000	152.65
	21	Vinyl Acetate	43	2.993	2.993	(0.716)	3127175	300.000	320.61
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	993924	150.000	149.06
	24	2-Butanone	43	3.570	3.570	(0.855)	407629	300.000	299.97(H)
	26	2,2-Dichloropropane	77	3.506	3.506	(0.839)	858853	150.000	151.71
	27	cis-1,2-Dichloroethene	96	3.521	3.521	(0.843)	693846	150.000	150.07
	28	Chloroform	83	3.904	3.904	(0.935)	1135322	150.000	151.92
	29	Bromochloromethane	128	3.791	3.791	(0.908)	379595	150.000	149.95
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	652724	150.000	152.32
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	907111	150.000	152.99
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	766313	150.000	155.22
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	857022	150.000	150.42
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	758288	150.000	143.83
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	686218	150.000	150.83
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	695375	50.0000	
	37	Benzene	78	4.511	4.511	(0.909)	2450385	150.000	147.56
	38	Trichloroethene	130	5.205	5.205	(1.048)	707016	150.000	150.11
	39	Bromodichloromethane	83	5.722	5.722	(1.153)	932632	150.000	149.65
	41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	534005	300.000	301.19
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	658007	150.000	148.96
	44	Dibromomethane	93	5.549	5.549	(1.118)	444851	150.000	148.16
	45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	1052577	300.000	293.14
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1159982	150.000	158.49
*	47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	671780	50.0000	
$	48	Toluene-d8	98	6.385	6.385	(0.833)	2346444	150.000	141.35
	50	Toluene	91	6.445	6.445	(0.841)	2724692	150.000	146.73
	51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	982044	150.000	161.68
	52	2-Hexanone	43	7.086	7.086	(0.924)	738082	300.000	302.12
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	540625	150.000	145.13
	54	1,3-Dichloropropane	76	6.981	6.981	(0.911)	1079961	150.000	147.29
	55	Dibromochloromethane	129	7.176	7.176	(0.936)	822094	150.000	152.90
	56	Tetrachloroethene	164	6.929	6.929	(0.904)	574499	150.000	149.53
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	715678	150.000	153.66
	58	1-Chlorohexane	55	7.697	7.697	(1.550)	522502	150.000	155.48
	59	Chlorobenzene	112	7.694	7.694	(1.003)	1944205	150.000	147.62
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	744470	150.000	151.89

61 Ethylbenzene	106	7.799	7.799 (1.017)	946928	150.000	152.63
62 m,p-Xylenes	106	7.904	7.904 (1.031)	2421267	300.000	302.75

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	1210374	150.000	153.33
	64 Styrene	104	8.260	8.260	(1.077)	2169528	150.000	163.97
	66 Bromoform	173	8.410	8.410	(1.097)	588916	150.000	158.11
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	2877359	150.000	159.55
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	873933	150.000	141.84
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	936681	150.000	150.82
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386546	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	702545	150.000	163.33
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	3370402	150.000	157.41
	74 Bromobenzene	156	8.803	8.803	(0.911)	952608	150.000	150.20
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	2529726	150.000	159.93
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	2083510	150.000	148.28
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	2540753	150.000	158.62
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	2055293	150.000	158.74
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	2613455	150.000	157.03
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	2819238	150.000	163.65
	82 p-Isopropyltoluene	119	9.650	9.650	(0.999)	2542764	150.000	164.71
	83 1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	1650440	150.000	156.79
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	1766146	150.000	153.76
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	1650494	150.000	151.23
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	2293126	150.000	150.43
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	1672283	150.000	154.25
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	149691	150.000	151.78
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	1094701	150.000	160.01
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	466452	150.000	150.10
	92 Naphthalene	128	11.540	11.540	(1.194)	2498440	150.000	160.50
	93 1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	991236	150.000	151.28
M	94 1,2-Dichloroethylene (total)	96				1273785	300.000	
M	95 Xylenes (total)	106				3631641	450.000	
	141 Cyclohexane	56	4.117	4.117	(0.986)	682728	150.000	148.87
	138 Freon TF	101	1.910	1.910	(0.457)	517229	150.000	157.53
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	1358300	150.000	159.57(A)
	146 Methyl Acetate	43	2.224	2.224	(0.533)	301298	150.000	149.70
	148 Tert-Butyl alcohol	59	2.427	2.427	(0.581)	962267	3000.00	3107.07
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	514966	3000.00	3183.89

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\X221216,b\X121610.D
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Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D
Inj Date : 16-DEC-2022 14:46
InstruID : voa6.i
LabSampID : VSTD150

Methyl Acrylate (96-33-3)

BEFORE

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16:04
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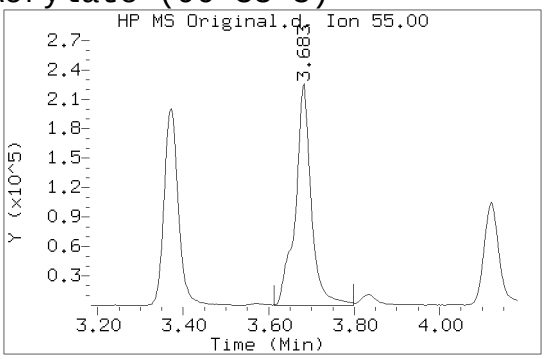

BEFORE

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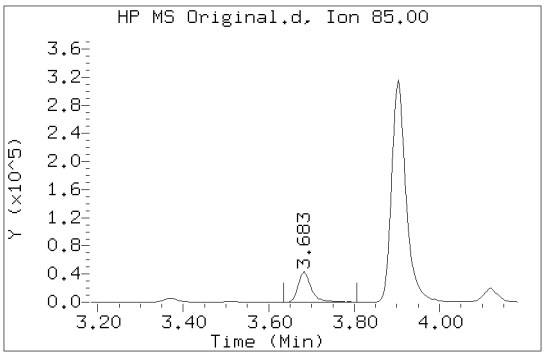

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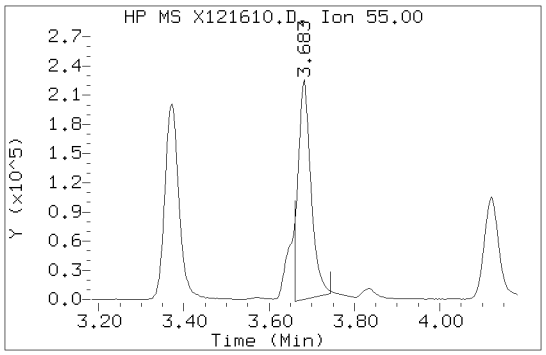

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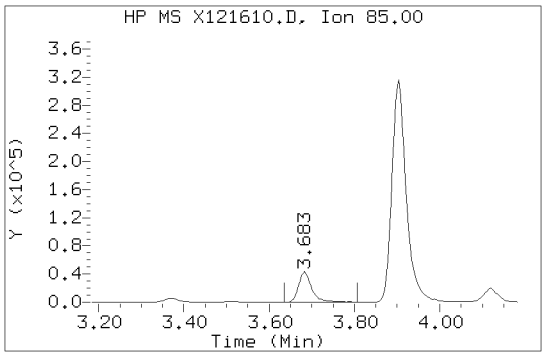

Acetaldehyde (75-07-0)

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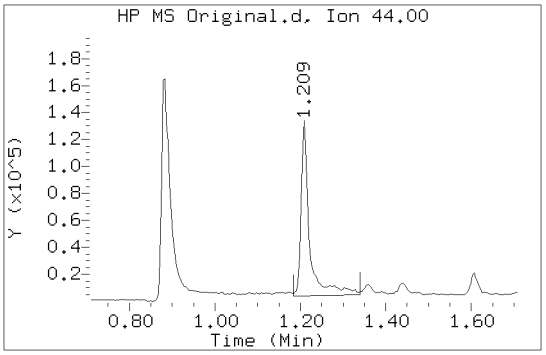

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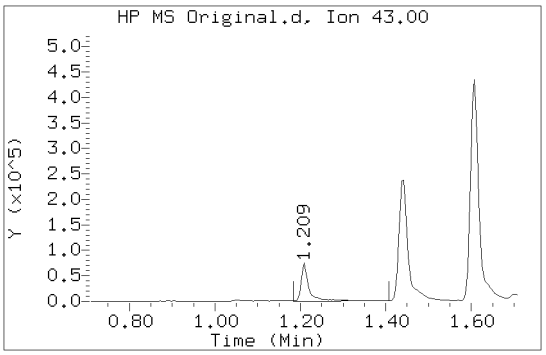

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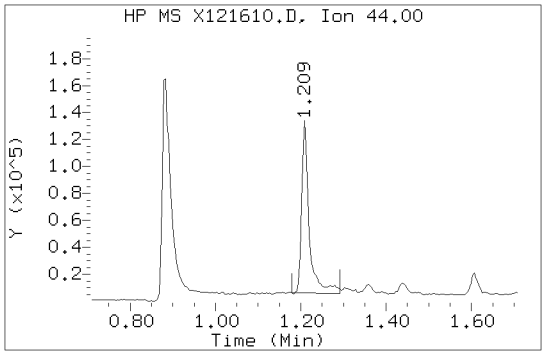

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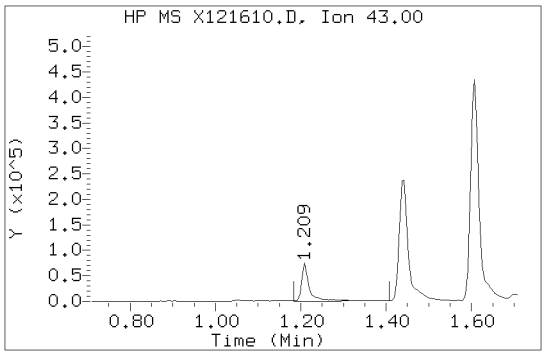

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Inj Date : 16-DEC-2022 14:46
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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27-Dec-2022
16:04
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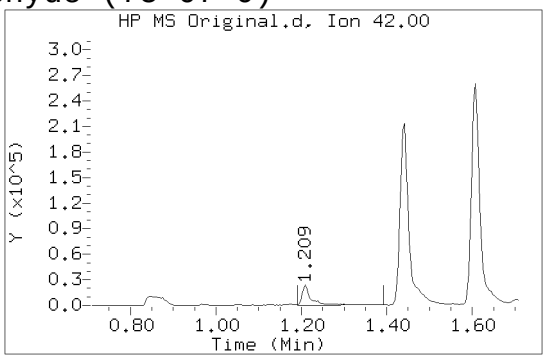

AFTER

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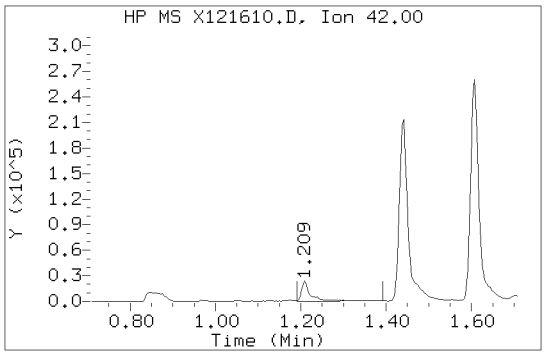


Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 16-DEC-2022 15:07
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:46 Cal File: X121610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	450847	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	179280	4000.00	4350.17(A)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	646265	200.000	208.86(A)
25 Methacrylonitrile	41	3.814	3.814	(0.913)	619479	200.000	194.04
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	2146631	4000.00	4233.12(A)
13 Acetonitrile	39	2.195	2.195	(0.525)	854153	2000.00	2081.63(A)
14 Allyl Chloride	41	2.195	2.195	(0.525)	1558053	200.000	199.36
4 Propionitrile	54	3.649	3.649	(0.873)	933721	2000.00	2029.71(A)
136 n-Hexane	57	2.768	2.768	(0.663)	726173	200.000	223.70(A)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	324976	200.000	217.73(A)
194 Acetaldehyde	44	1.209	1.209	(0.289)	205547	800.000	780.23(M)
23 Chloroprene	53	1.767	1.767	(0.423)	315248	200.000	205.64(A)
145 alpha-Methylstyrene	118	9.261	9.261	(0.958)	1880547	200.000	211.54(A)
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	1929723	200.000	206.22(A)
139 Diethyl ether	59	1.752	1.752	(0.419)	595638	200.000	197.72
130 Ethyl Acetate	43	3.649	3.649	(0.873)	706790	200.000	200.90(A)
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	643877	200.000	209.45(A)
49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	735246	200.000	222.23(A)
132 n-Butanol	56	5.253	5.253	(1.258)	297334	4000.00	3955.86
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	219995	400.000	401.77(A)

150 Allyl alcohol	57	2.768	2.768 (0.663)	726173	4000.00	4146.79(A)
166 1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	3701988	200.000	191.61

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D Page 2
Report Date: 27-Dec-2022 16:07

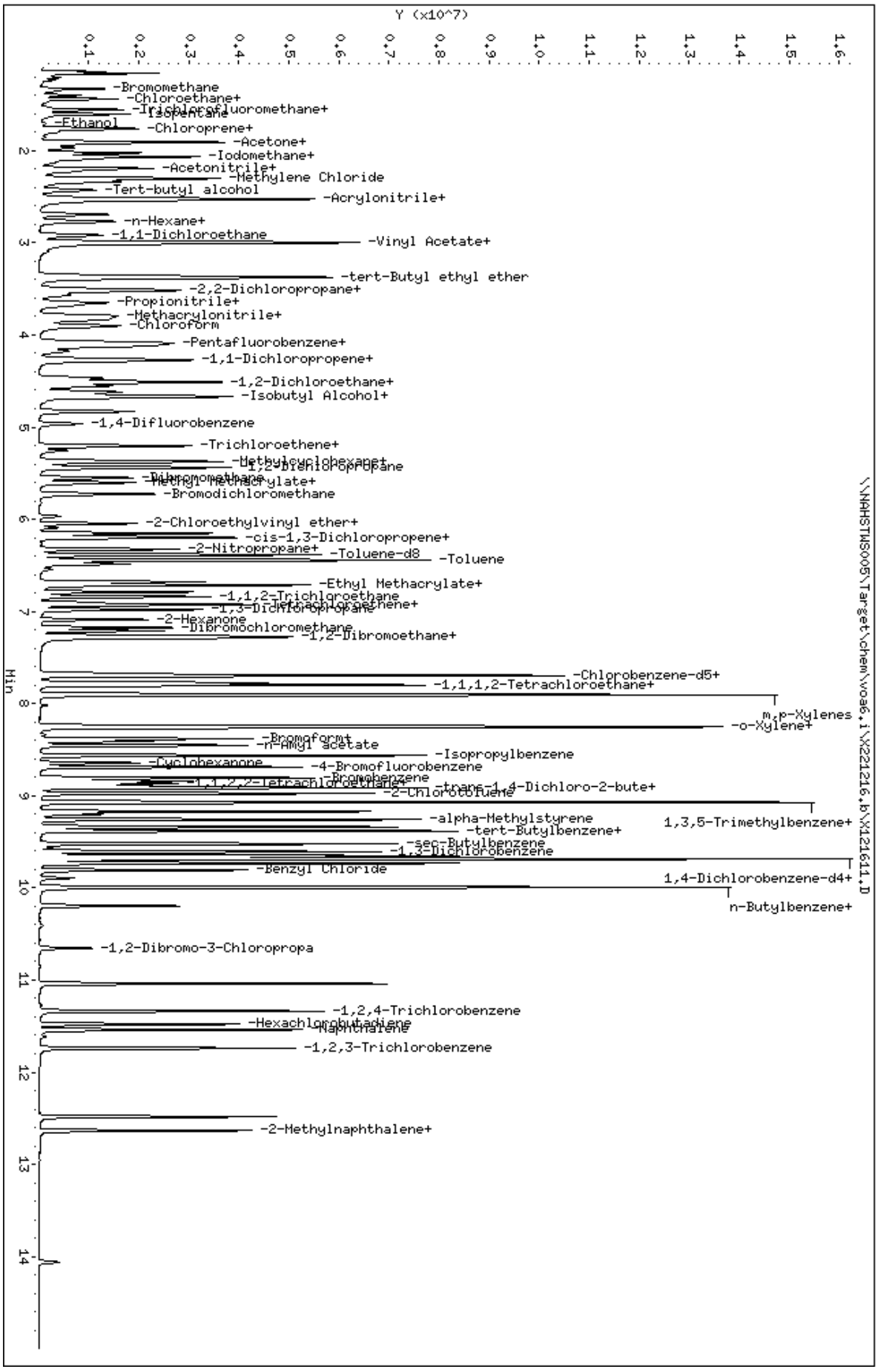
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	646827	200.000	211.32(AM)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	2063916	200.000	228.52(A)
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	635808	200.000	200.44(A)
	3	Chloromethane	50	1.074	1.074	(0.257)	865151	200.000	204.92(A)
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	827926	200.000	210.21(A)
	6	Bromomethane	94	1.329	1.329	(0.318)	666705	200.000	217.67(A)
	7	Chloroethane	64	1.396	1.396	(0.334)	548415	200.000	200.06(A)
	8	Trichlorofluoromethane	101	1.553	1.553	(0.372)	1173529	200.000	212.92(A)
	9	Acrolein	56	1.437	1.437	(0.344)	125874	400.000	399.54
	10	Acetone	43	1.970	1.970	(0.472)	514105	400.000	406.50(A)
	11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	704695	200.000	205.94(A)
	15	Iodomethane	142	2.022	2.022	(0.484)	2193685	400.000	398.07
	16	Acrylonitrile	53	2.528	2.528	(0.605)	504850	400.000	435.02(A)
	17	Methylene Chloride	84	2.299	2.299	(0.550)	863945	200.000	184.07
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	2237559	200.000	199.78
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	3829593	400.000	427.76(A)
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	785444	200.000	205.10(A)
	21	Vinyl Acetate	43	2.993	2.993	(0.716)	4210603	400.000	428.26(A)
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	1342786	200.000	199.79
	24	2-Butanone	43	3.570	3.570	(0.855)	555896	400.000	404.77(AH)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	1175128	200.000	205.93(A)
	27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	927934	200.000	199.10
	28	Chloroform	83	3.904	3.904	(0.935)	1523082	200.000	202.19(A)
	29	Bromochloromethane	128	3.791	3.791	(0.908)	510028	200.000	199.87
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	856027	200.000	198.23
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	1257327	200.000	210.37(A)
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	1048877	200.000	210.29(A)
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	1153034	200.000	200.31(A)
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	1051824	200.000	197.48
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	919752	200.000	200.47(A)
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	702551	50.0000	
	37	Benzene	78	4.511	4.511	(0.909)	3321582	200.000	197.98
	38	Trichloroethene	130	5.205	5.205	(1.048)	973709	200.000	204.62(A)
	39	Bromodichloromethane	83	5.722	5.722	(1.153)	1264834	200.000	200.88(A)
	41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	729151	400.000	407.06(A)
	42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	895211	200.000	200.59(A)
	44	Dibromomethane	93	5.550	5.550	(1.118)	600170	200.000	197.85
	45	4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1447268	400.000	391.63
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1583645	200.000	214.16(A)
*	47	Chlorobenzene-d5	117	7.671	7.671	(1.000)	691386	50.0000	
$	48	Toluene-d8	98	6.385	6.385	(0.832)	3061758	200.000	179.21
	50	Toluene	91	6.445	6.445	(0.840)	3757557	200.000	196.62
	51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	1365007	200.000	222.44(A)
	52	2-Hexanone	43	7.086	7.086	(0.924)	1026898	400.000	408.42(A)
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	736981	200.000	192.23
	54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	1482067	200.000	196.39
	55	Dibromochloromethane	129	7.176	7.176	(0.936)	1128140	200.000	203.88(A)
	56	Tetrachloroethene	164	6.929	6.929	(0.903)	798932	200.000	202.05(A)
	57	1,2-Dibromoethane	107	7.259	7.259	(0.946)	970608	200.000	202.48(A)
	58	1-Chlorohexane	55	7.698	7.698	(1.550)	746326	200.000	219.81(A)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	2696715	200.000	198.95
	60	1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	1028448	200.000	203.88(A)

61 Ethylbenzene	106	7.799	7.799 (1.017)	1312165	200.000	205.50(A)
62 m,p-Xylenes	106	7.904	7.904 (1.030)	3401207	400.000	413.22(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
63	o-Xylene	106	8.241	8.241	(1.074)	1701245	200.000	209.41(A)
64	Styrene	104	8.260	8.260	(1.077)	3030858	200.000	222.58(A)
66	Bromoform	173	8.410	8.410	(1.096)	809693	200.000	211.22(A)
67	Isopropylbenzene	105	8.563	8.563	(1.116)	4031708	200.000	217.22(A)
68	1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	1186926	200.000	185.61
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.132)	1277239	200.000	199.81
* 70	1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	401196	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	864931	200.000	193.75(M)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	4694239	200.000	211.23(A)
74	Bromobenzene	156	8.807	8.807	(0.911)	1313631	200.000	199.57
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	3532485	200.000	215.17(A)
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	2866849	200.000	196.59
77	4-Chlorotoluene	91	9.070	9.070	(0.938)	3546402	200.000	213.32(A)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	2865820	200.000	213.26(A)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	3599947	200.000	208.40(A)
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	3952917	200.000	221.08(A)
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	3537904	200.000	220.81(A)
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	2282597	200.000	208.93(A)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	2442324	200.000	204.86(A)
86	Benzyl Chloride	91	9.808	9.808	(1.279)	2286488	200.000	202.63(A)
87	n-Butylbenzene	91	9.995	9.995	(1.034)	3216534	200.000	202.68(A)
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	2296902	200.000	204.14(A)
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.102)	205063	200.000	200.30(A)
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	1524896	200.000	214.75(A)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	654615	200.000	200.27(A)
92	Naphthalene	128	11.540	11.540	(1.194)	3413593	200.000	211.29(A)
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.214)	1363987	200.000	200.56(A)
M 94	1,2-Dichloroethylene (total)	96				1713378	400.000	
M 95	Xylenes (total)	106				5102452	600.000	
141	Cyclohexane	56	4.121	4.121	(0.987)	943314	200.000	203.60(A)
138	Freon TF	101	1.910	1.910	(0.457)	714577	200.000	215.91(A)
147	Methylcyclohexane	55	5.377	5.377	(1.083)	1829310	200.000	212.71(A)
146	Methyl Acetate	43	2.224	2.224	(0.533)	408781	200.000	201.49(A)
148	Tert-Butyl alcohol	59	2.431	2.431	(0.582)	1308623	4000.00	4191.87(A)
149	Isopropyl Alcohol	45	2.093	2.093	(0.501)	697543	4000.00	4278.45(A)

QC Flag Legend

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



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Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D
Inj Date : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

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

BEFORE

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27-Dec-2022
16:04
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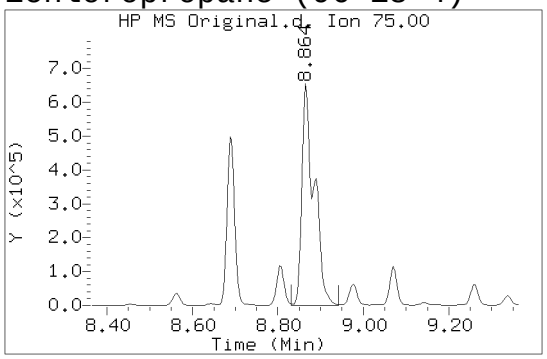

BEFORE

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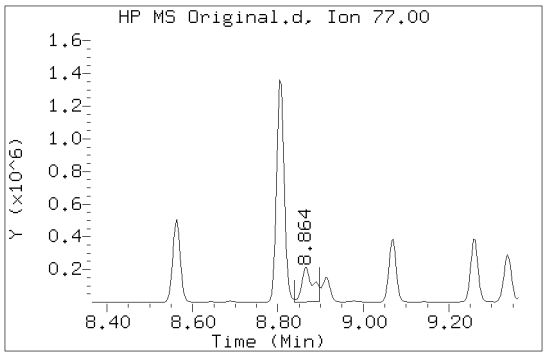

Reason Code:

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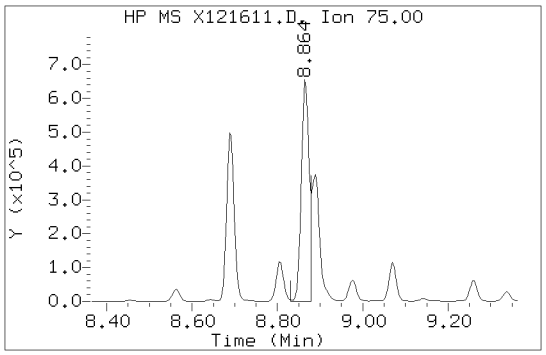

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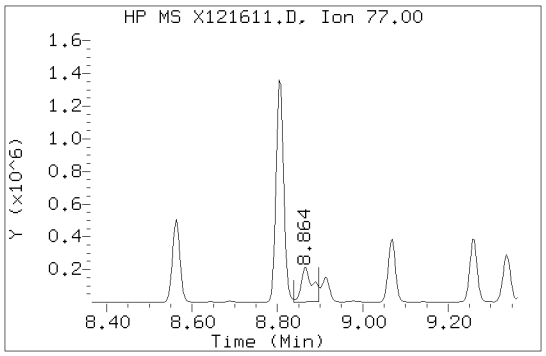

Methyl Acrylate (96-33-3)

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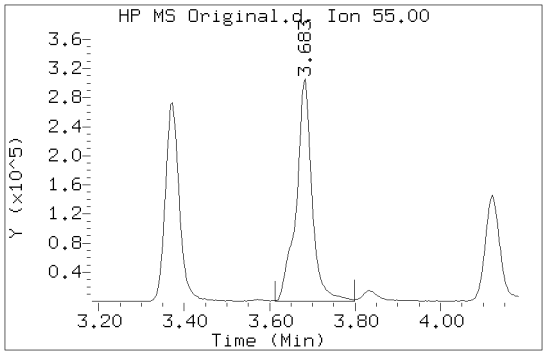

BEFORE

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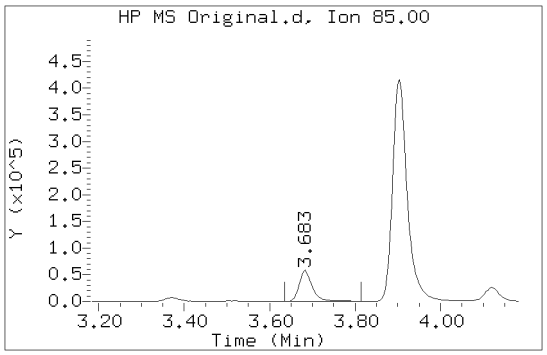

Reason Code:

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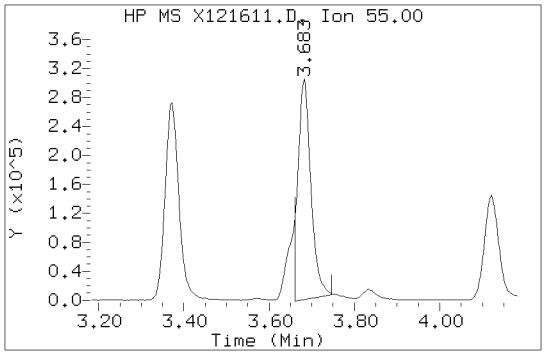

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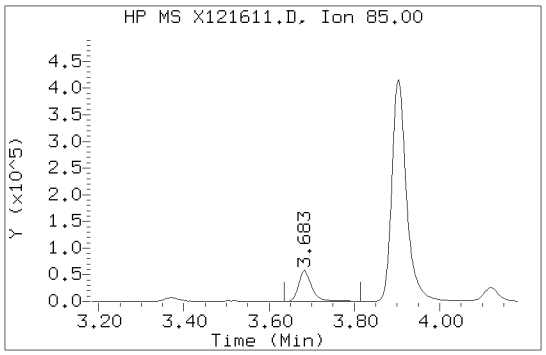

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Inj Date : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

Acetaldehyde (75-07-0)

Reason Code:

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27-Dec-2022
16:04
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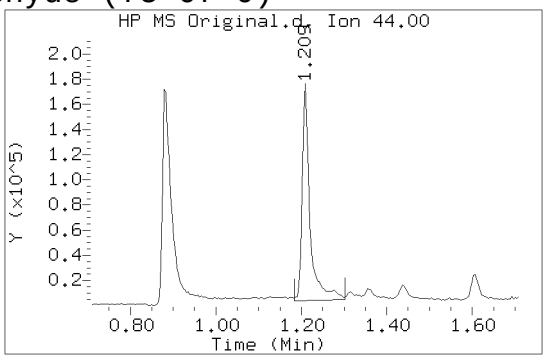

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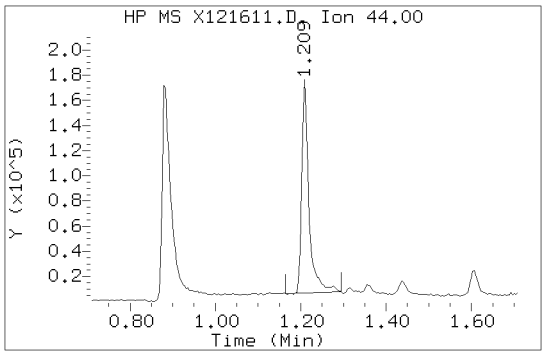

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27-Dec-2022
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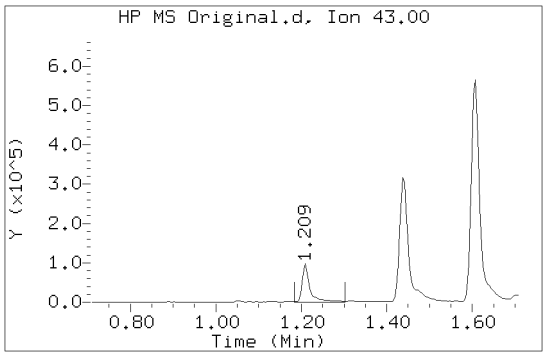

AFTER

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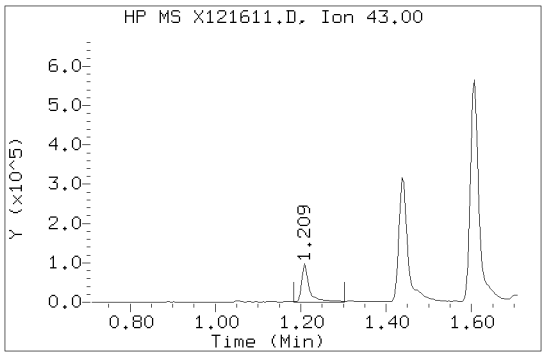

BEFORE

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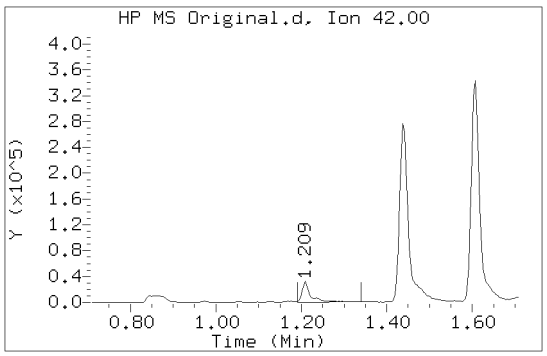

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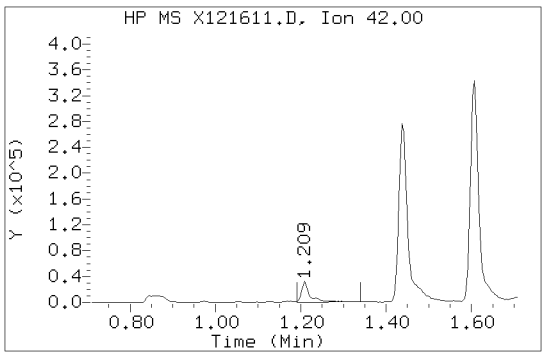


Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D Page 1
Report Date: 13-Feb-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 16-DEC-2022 15:49
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:38 Linh.Pham Quant Type: ISTD
Cal Date : 16-DEC-2022 15:07 Cal File: X121611.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	457291	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	42711	1021.77	1021.76
140 1,3-Butadiene	54	1.164	1.160	(0.279)	155959	49.6927	49.69
25 Methacrylonitrile	41	3.818	3.818	(0.914)	151341	46.7389	46.73
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	505171	982.151	982.15
13 Acetonitrile	39	2.194	2.195	(0.525)	197937	475.590	475.59
14 Allyl Chloride	41	2.194	2.195	(0.525)	375064	47.3168	47.31
4 Propionitrile	54	3.649	3.645	(0.873)	227186	486.896	486.89
136 n-Hexane	57	2.768	2.768	(0.663)	183599	55.7620	55.76
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	71513	49.7372	49.73
194 Acetaldehyde	44	1.209	1.209	(0.289)	52697	179.814	179.81(M)
23 Chloroprene	53	1.767	1.767	(0.423)	74243	47.7493	47.74(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	428317	51.3094	51.30
200 Dimethyl Disulfide	94	6.198	6.194	(0.808)	437905	48.5791	48.57
139 Diethyl ether	59	1.752	1.752	(0.419)	142672	46.6930	46.69
130 Ethyl Acetate	43	3.653	3.653	(0.874)	171211	47.9808	47.98
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	148777	47.7146	47.71
49 Ethyl Methacrylate	69	6.712	6.708	(1.352)	142471	44.0730	44.07
132 n-Butanol	56	5.257	5.253	(1.258)	56842	974.397	974.39
142 Tetrahydrofuran	42	3.840	3.844	(0.919)	61534	108.502	108.50

166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	846843	46.6777	46.67
131	Methyl Acrylate	55	3.683	3.683 (0.882)	162555	52.3594	52.35

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D Page 2
Report Date: 13-Feb-2023 13:08

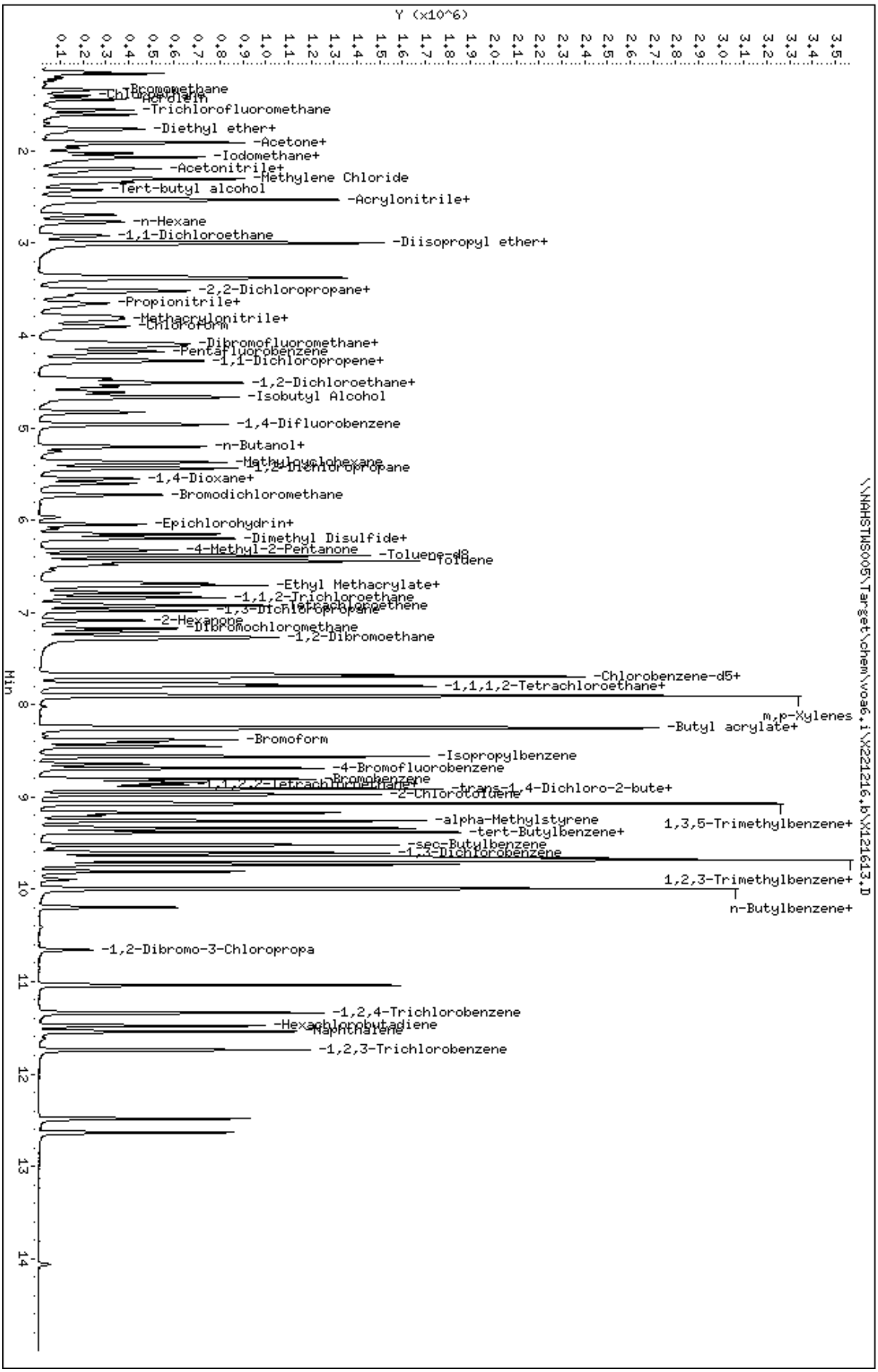
			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	417137	47.9449	47.94
	2	Dichlorodifluoromethane	85	0.972	0.969	(0.233)	166984	52.1924	52.19
	3	Chloromethane	50	1.077	1.077	(0.258)	207623	50.1741	50.17
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	202038	50.5766	50.57
	6	Bromomethane	94	1.336	1.336	(0.320)	153541	50.7886	50.78
	7	Chloroethane	64	1.400	1.400	(0.335)	134354	48.3213	48.32
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	285144	51.0083	51.00
	9	Acrolein	56	1.441	1.441	(0.345)	29687	95.0682	95.06
	10	Acetone	43	1.970	1.970	(0.472)	130747	101.899	101.89
	11	1,1-Dichloroethene	96	1.913	1.910	(0.458)	171246	49.3414	49.34
	15	Iodomethane	142	2.026	2.026	(0.485)	440111	96.4856	96.48
	16	Acrylonitrile	53	2.532	2.528	(0.606)	119393	101.430	101.42
	17	Methylene Chloride	84	2.299	2.299	(0.550)	226449	47.5675	47.56
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	546711	48.1256	48.12
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	894433	98.5011	98.50
	20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	194181	49.9917	49.99
	21	Vinyl Acetate	43	2.997	2.993	(0.717)	1044658	104.756	104.75
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	328530	48.1931	48.19
	24	2-Butanone	43	3.574	3.574	(0.856)	132931	97.7407	97.74(H)
	26	2,2-Dichloropropane	77	3.507	3.503	(0.839)	295126	50.9895	50.98
	27	cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	228100	48.2538	48.25
	28	Chloroform	83	3.904	3.900	(0.935)	370227	48.4556	48.45
	29	Bromochloromethane	128	3.795	3.791	(0.908)	122310	47.2570	47.25
$	30	Dibromofluoromethane	113	4.095	4.099	(0.980)	223563	50.9182	50.91
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	304118	50.1673	50.16
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	254008	52.1195	52.11
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	278558	49.5262	49.52
	34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	255322	49.0600	49.06
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	233432	50.3661	50.36
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	686467	50.0000	
	37	Benzene	78	4.511	4.507	(0.909)	824422	50.2921	50.29
	38	Trichloroethene	130	5.205	5.205	(1.048)	238429	51.2807	51.28
	39	Bromodichloromethane	83	5.726	5.726	(1.153)	302844	49.2265	49.22
	41	2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	182363	104.194	104.19
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	216322	49.6089	49.60
	44	Dibromomethane	93	5.550	5.550	(1.118)	145797	49.1915	49.19
	45	4-Methyl-2-Pentanone	43	6.325	6.322	(0.825)	334751	94.0316	94.03
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	376514	52.1120	52.11
*	47	Chlorobenzene-d5	117	7.667	7.668	(1.000)	666040	50.0000	
$	48	Toluene-d8	98	6.385	6.386	(0.833)	814721	49.5021	49.50
	50	Toluene	91	6.445	6.446	(0.841)	905906	49.2085	49.20
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	314805	52.5028	52.50
	52	2-Hexanone	43	7.086	7.083	(0.924)	234303	96.7356	96.73
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	176962	47.9147	47.91
	54	1,3-Dichloropropane	76	6.981	6.982	(0.911)	347689	47.8282	47.82
	55	Dibromochloromethane	129	7.176	7.173	(0.936)	263907	49.5095	49.50
	56	Tetrachloroethene	164	6.929	6.925	(0.904)	194246	50.9965	50.99
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	232024	50.2468	50.24
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	172462	51.9860	51.98
	59	Chlorobenzene	112	7.694	7.694	(1.003)	631235	48.3416	48.34
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	236254	48.6176	48.61
	61	Ethylbenzene	106	7.799	7.799	(1.017)	315635	51.3153	51.31

62 m,p-Xylenes	106	7.904	7.904 (1.031)	794307	100.175	100.17
63 o-Xylene	106	8.241	8.241 (1.075)	389371	49.7531	49.75

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	64	Styrene	104	8.260	8.256	(1.077)	683415	52.0997	52.09
	66	Bromoform	173	8.410	8.410	(1.097)	182169	49.3304	49.33
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	931467	52.0964	52.09
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	280729	46.7506	46.75
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	307493	49.9836	49.98
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	376748	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	201551	48.0786	48.07(M)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	1099273	52.6761	52.67
	74	Bromobenzene	156	8.803	8.803	(0.911)	306751	49.6271	49.62
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	806374	52.3068	52.30
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	683941	49.9441	49.94
	77	4-Chlorotoluene	91	9.069	9.070	(0.939)	800114	51.2527	51.25
	78	tert-Butylbenzene	119	9.336	9.336	(0.966)	666730	52.8346	52.83
	79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	832541	51.3249	51.32
	81	sec-Butylbenzene	105	9.519	9.519	(0.985)	909529	54.1700	54.16
	82	p-Isopropyltoluene	119	9.651	9.647	(0.999)	823827	54.7550	54.75
	83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	525438	51.2160	51.21
	84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	556610	49.7188	49.71
	87	n-Butylbenzene	91	9.995	9.992	(1.035)	735043	50.6672	50.66
	88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	523296	49.5268	49.52
	89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	48516	50.5353	50.53
	90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	364475	54.6601	54.66
	91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	170927	57.7383	57.73
	92	Naphthalene	128	11.544	11.540	(1.195)	799121	52.6729	52.67
	93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	337140	52.7917	52.79
M	94	1,2-Dichloroethylene (total)	96				422281	98.2454	98.24
M	95	Xylenes (total)	106				1183678	149.928	149.92
	141	Cyclohexane	56	4.121	4.121	(0.987)	238664	51.7326	51.73
	138	Freon TF	101	1.913	1.913	(0.458)	177599	52.9072	52.90
	147	Methylcyclohexane	55	5.377	5.377	(1.083)	427649	50.8929	50.89
	146	Methyl Acetate	43	2.228	2.228	(0.533)	99131	48.1755	48.17
	148	Tert-Butyl alcohol	59	2.423	2.427	(0.580)	311463	983.641	983.64
	149	Isopropyl Alcohol	45	2.090	2.090	(0.500)	170003	1028.04	1028.03

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X221216,b\X121613,D
Date : 16-DEC-2022 15:49
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

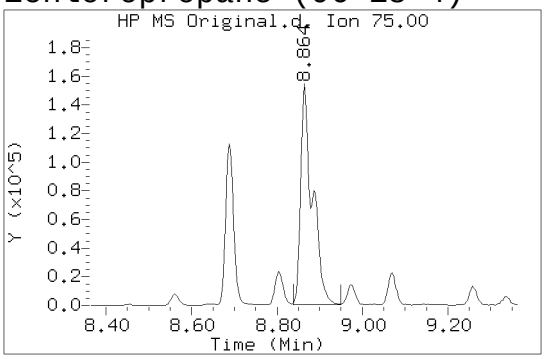
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D
Inj Date : 16-DEC-2022 15:49
InstruID : voa6.i
LabSampID : ICV

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

Reason Code:

BEFORE

MASS
75
AREA
301229
HEIGHT
154590
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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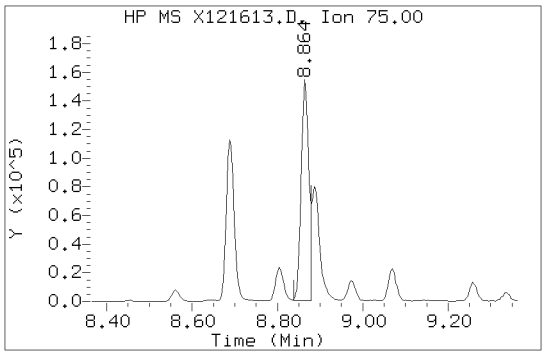
AREA
201551
HEIGHT
154590
13-Feb-2023
13:08
linh
pham



BEFORE

MASS
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AREA
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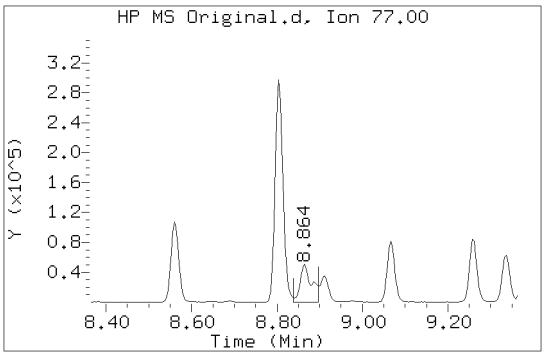
HEIGHT
50627
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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HEIGHT
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13-Feb-2023
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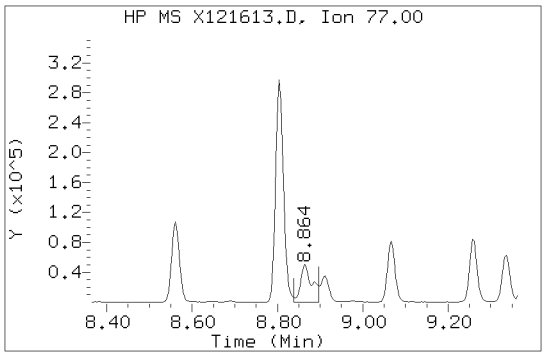

Chloroprene (126-99-8)

Reason Code:

BEFORE

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AREA
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HEIGHT
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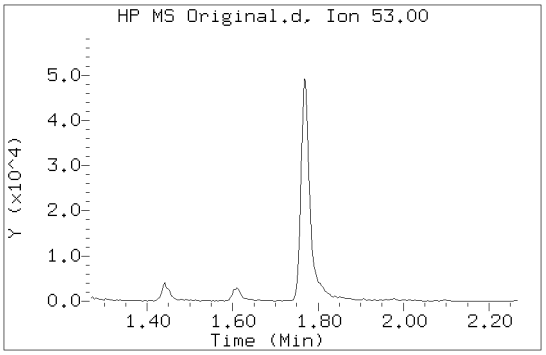
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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AREA
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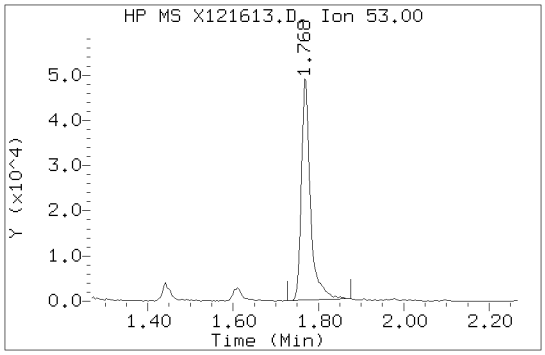
HEIGHT
48931
13-Feb-2023
13:08
linh
pham



BEFORE

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AREA
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27-Dec-2022
16:04
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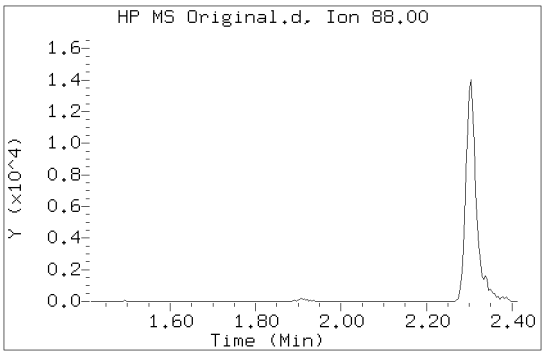

AFTER

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AREA
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HEIGHT
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13-Feb-2023
13:08
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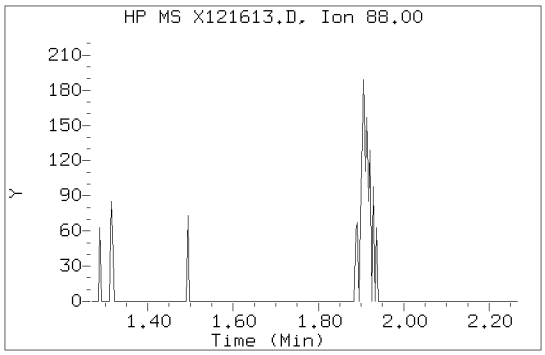
pham



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Inj Date : 16-DEC-2022 15:49
InstruID : voa6.i
LabSampID : ICV

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
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AREA
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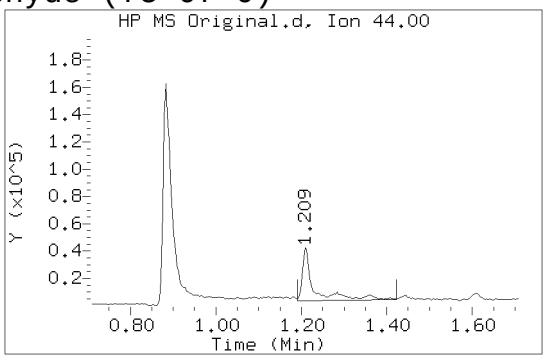
HEIGHT
39303
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
39303
13-Feb-2023
13:08
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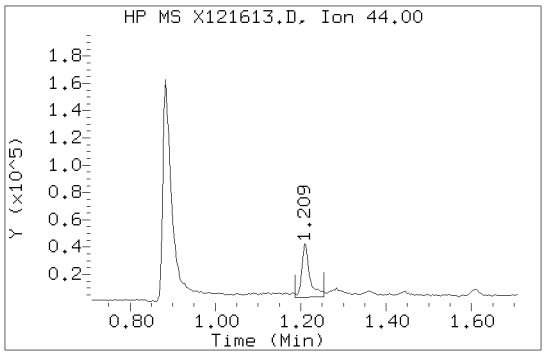
pham



BEFORE

MASS
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AREA
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27-Dec-2022
16:04
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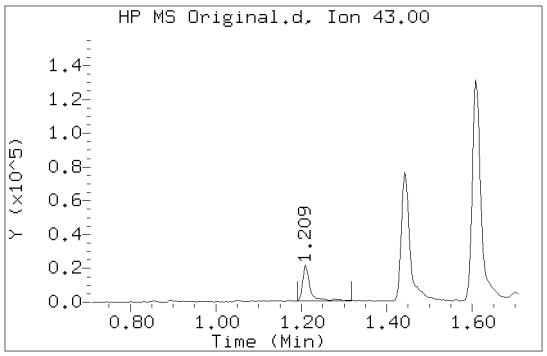
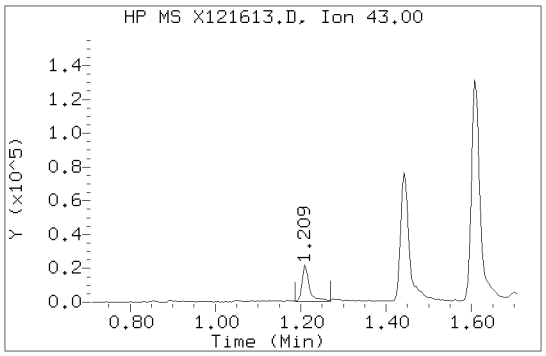


AFTER

MASS
43
AREA
26760
HEIGHT
21664
13-Feb-2023
13:08
linh
pham



BEFORE

MASS
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AREA
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7131
27-Dec-2022
16:04
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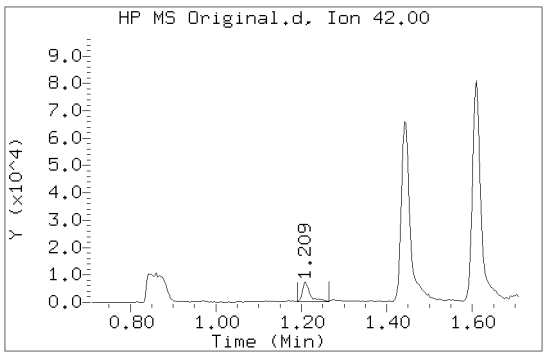
pham



AFTER

MASS
42
AREA
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HEIGHT
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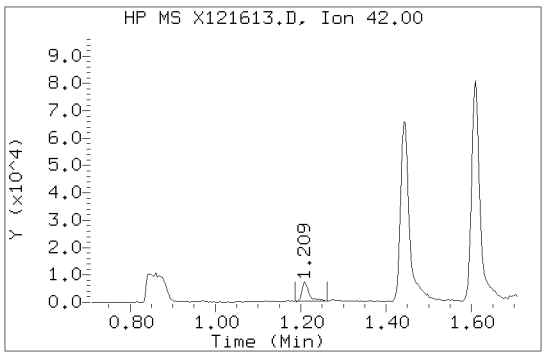
13-Feb-2023
13:08
linh
pham



right solutions.
right partner.

Raw Data VOA6 426320

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012301.D Page 1
Report Date: 23-Jan-2023 19:57

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012301.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 23-JAN-2023 11:16
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\bfb.m
Meth Date : 01-Dec-2022 12:59 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	19168			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	4561			15.00- 40.00	23.79
8.687	8.889	(0.000)	75	9314			30.00- 60.00	48.59
8.687	8.889	(0.000)	96	1585			5.00- 9.00	8.27
8.687	8.889	(0.000)	173	80			0.00- 2.00	0.48
8.687	8.889	(0.000)	174	16672			50.00- 0.00	86.98
8.687	8.889	(0.000)	175	1296			5.00- 9.00	7.77
8.687	8.889	(0.000)	176	16400			95.00- 101.00	98.37
8.687	8.889	(0.000)	177	956			5.00- 9.00	5.83

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.79
75	30.00 - 60.00% of mass 95	48.59
96	5.00 - 9.00% of mass 95	8.27
173	Less than 2.00% of mass 174	0.42 (0.48)
174	Greater than 50.00% of mass 95	86.98
175	5.00 - 9.00% of mass 174	6.76 (7.77)
176	95.00 - 101.00% of mass 174	85.56 (98.37)
177	5.00 - 9.00% of mass 176	4.99 (5.83)

Data File: X012301.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	328	57.80	340	81.90	167	116.80	91
37.00	1140	59.90	182	83.00	472	117.70	122
38.10	1062	60.90	1209	85.10	136	119.00	103
39.10	1614	61.90	1018	87.00	1023	126.80	139
40.00	1261	63.00	862	87.90	807	127.80	262
41.10	1660	64.00	102	90.80	188	129.90	68
42.00	2657	64.90	172	91.80	467	141.10	282
42.90	1090	66.90	214	92.90	929	142.70	121
43.90	1010	67.90	2661	93.90	2515	155.00	84
45.00	539	69.00	3450	95.00	19168	169.70	53
46.10	56	69.90	1186	96.00	1585	172.70	80
47.00	81	71.00	344	97.00	224	173.90	16672
48.00	136	71.70	114	98.00	1550	174.90	1296
49.00	812	73.00	900	98.90	116	175.90	16400
50.00	4561	74.00	3548	103.90	193	177.00	956
51.10	1322	75.00	9314	105.10	102	177.90	59
51.80	78	76.00	829	105.90	134	185.80	200
52.80	217	76.90	348	106.60	114	261.80	65
54.00	395	77.90	114	109.00	98		
55.00	3549	78.80	924	109.90	51		
56.00	1033	80.00	480	114.90	114		
57.00	1048	80.90	770	115.90	160		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012301.D Page 1

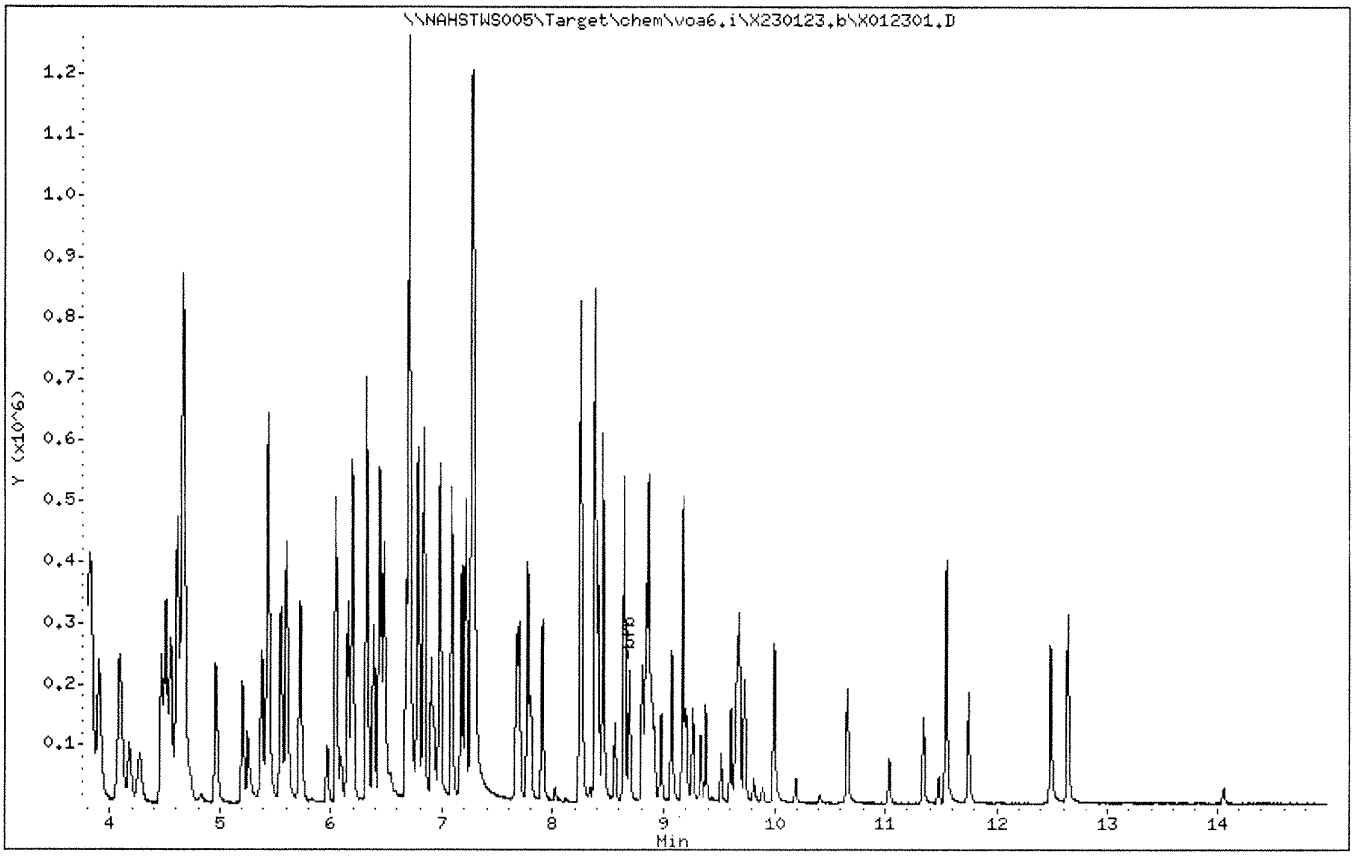
Date : 23-JAN-2023 11:16

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\X230123.b\X012301.D Page 2

Date : 23-JAN-2023 11:16

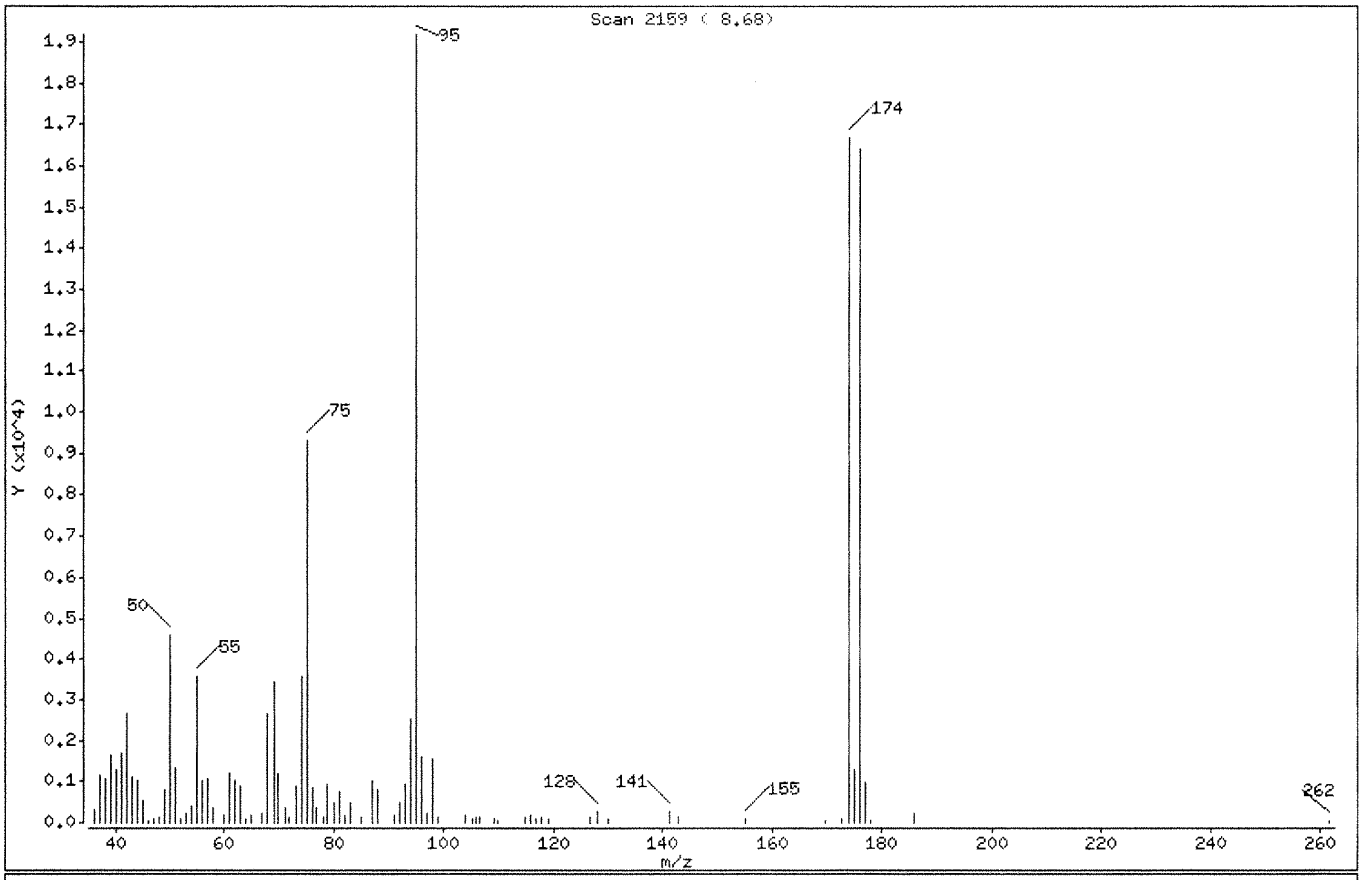
Client ID: BFB Instrument: voa6.i

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	23.79
75	30.00 - 60.00% of mass 95	48.59
96	5.00 - 9.00% of mass 95	8.27
173	Less than 2.00% of mass 174	0.42 (0.48)
174	Greater than 50.00% of mass 95	86.98
175	5.00 - 9.00% of mass 174	6.76 (7.77)
176	95.00 - 101.00% of mass 174	85.56 (98.37)
177	5.00 - 9.00% of mass 176	4.99 (5.83)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012301.D

Date : 23-JAN-2023 11:16

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: X012301.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	328	57.80	340	81.90	167	116.80	91
37.00	1140	59.90	182	83.00	472	117.70	122
38.10	1062	60.90	1209	85.10	136	119.00	103
39.10	1614	61.90	1018	87.00	1023	126.80	139
40.00	1261	63.00	862	87.90	807	127.80	262
41.10	1660	64.00	102	90.80	188	129.90	68
42.00	2657	64.90	172	91.80	467	141.10	282
42.90	1090	66.90	214	92.90	929	142.70	121
43.90	1010	67.90	2661	93.90	2515	155.00	84
45.00	539	69.00	3450	95.00	19168	169.70	53
46.10	56	69.90	1186	96.00	1585	172.70	80
47.00	81	71.00	344	97.00	224	173.90	16672
48.00	136	71.70	114	98.00	1550	174.90	1296
49.00	812	73.00	900	98.90	116	175.90	16400
50.00	4561	74.00	3548	103.90	193	177.00	956
51.10	1322	75.00	9314	105.10	102	177.90	59
51.80	78	76.00	829	105.90	134	185.80	200
52.80	217	76.90	348	106.60	114	261.80	65
54.00	395	77.90	114	109.00	98		
55.00	3549	78.80	924	109.90	51		
56.00	1033	80.00	480	114.90	114		
57.00	1048	80.90	770	115.90	160		

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012301.D
Inj Date : 23-JAN-2023 11:16
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012303.D Page 1
Report Date: 13-Feb-2023 13:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012303.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 23-JAN-2023 11:58
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.174	(1.000)	516521	50.0000	
135 1,4-Dioxane	88	5.595	5.595	(1.340)	52169	1000.00	1104.91
140 1,3-Butadiene	54	1.160	1.160	(0.278)	179843	50.0000	50.73
25 Methacrylonitrile	41	3.821	3.821	(0.916)	189391	50.0000	51.78
12 Isobutyl Alcohol	43	4.669	4.669	(1.119)	658817	1000.00	1133.99
13 Acetonitrile	39	2.195	2.195	(0.526)	255737	500.000	544.00
14 Allyl Chloride	41	2.195	2.195	(0.526)	462655	50.0000	51.67
4 Propionitrile	54	3.645	3.645	(0.873)	265154	500.000	503.10
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	91296	50.0000	57.18
194 Acetaldehyde	44	1.209	1.209	(0.290)	65017	200.000	198.56
23 Chloroprene	53	1.767	1.767	(0.423)	88334	50.0000	50.29(M)
40 Methyl Methacrylate	41	5.602	5.602	(1.342)	192027	50.0000	54.52
49 Ethyl Methacrylate	69	6.708	6.708	(1.351)	200315	50.0000	54.97
131 Methyl Acrylate	55	3.683	3.683	(0.882)	229800	50.0000	65.53
142 Tetrahydrofuran	42	3.840	3.840	(0.920)	66213	100.000	103.21
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	486984	50.0000	51.92
156 Diisopropyl ether	45	2.997	2.997	(0.718)	680141	50.0000	50.76
182 Epichlorohydrin	57	6.089	6.089	(1.226)	72988	200.000	210.48
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	978518	50.0000	48.00
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	206445	50.0000	57.08

3 Chloromethane	50	1.074	1.074 (0.257)	246763	50.0000	52.67
5 Vinyl Chloride	62	1.141	1.141 (0.273)	238044	50.0000	52.75

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012303.D Page 2
Report Date: 13-Feb-2023 13:14

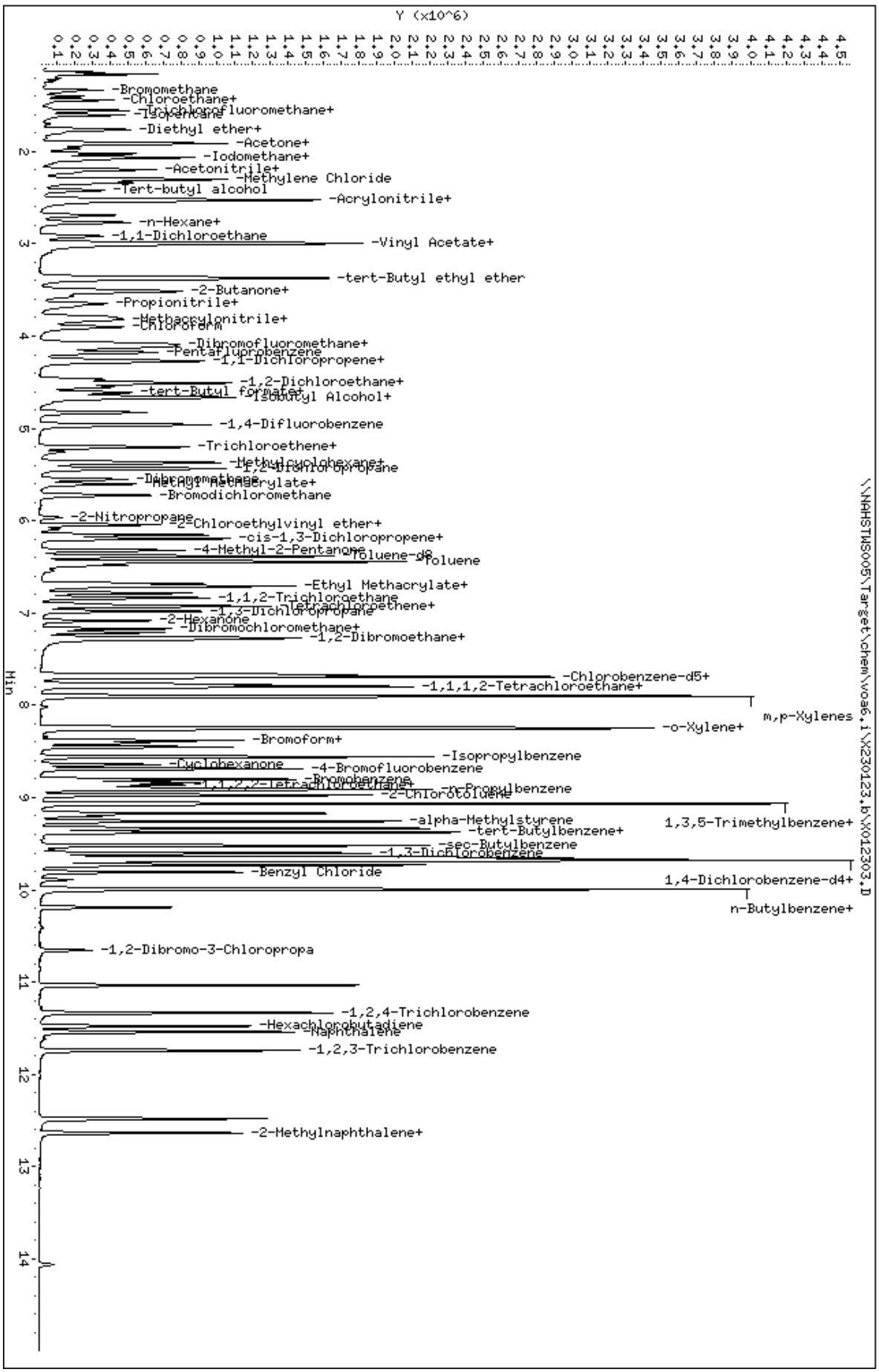
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	167906	50.0000	49.22
	7 Chloroethane	64	1.400	1.400	(0.335)	149298	50.0000	47.53
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	356309	50.0000	56.42
	9 Acrolein	56	1.441	1.441	(0.345)	33359	100.000	94.59
	10 Acetone	43	1.966	1.966	(0.471)	162545	100.000	112.15
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	202315	50.0000	51.60
	15 Iodomethane	142	2.022	2.022	(0.485)	539918	100.000	104.15
	16 Acrylonitrile	53	2.528	2.528	(0.606)	143813	100.000	108.16
	17 Methylene Chloride	84	2.299	2.299	(0.551)	247209	50.0000	45.97
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.606)	644280	50.0000	50.21
	19 Carbon Disulfide	76	2.063	2.063	(0.494)	1064949	100.000	103.83
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	222849	50.0000	50.79
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	1281658	100.000	113.78
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	389082	50.0000	50.53
	24 2-Butanone	43	3.570	3.570	(0.855)	175759	100.000	113.89
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	371982	50.0000	56.89
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	258054	50.0000	48.33
	28 Chloroform	83	3.900	3.900	(0.934)	437487	50.0000	50.69
	29 Bromochloromethane	128	3.788	3.788	(0.908)	136607	50.0000	46.72
$	30 Dibromofluoromethane	113	4.091	4.091	(0.980)	247588	50.0000	49.92
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.977)	380165	50.0000	55.52
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	325564	50.0000	59.26
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	352732	50.0000	55.63
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	323099	50.0000	55.07
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	280575	50.0000	53.57
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	773798	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	959842	50.0000	51.94
	38 Trichloroethene	130	5.205	5.205	(1.048)	273758	50.0000	52.23
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	355513	50.0000	51.26
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	255088	100.000	129.29
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	252277	50.0000	51.32
	44 Dibromomethane	93	5.550	5.550	(1.118)	165746	50.0000	49.61
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	445072	100.000	112.59
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	438584	50.0000	53.85
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	739557	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	931282	50.0000	50.95
	50 Toluene	91	6.445	6.445	(0.841)	1076009	50.0000	52.63
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	382817	50.0000	56.64
	52 2-Hexanone	43	7.083	7.083	(0.924)	316932	100.000	117.84
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	204943	50.0000	49.97
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	414784	50.0000	51.38
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	304246	50.0000	51.40
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	233543	50.0000	55.21
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	268873	50.0000	52.43
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	225270	50.0000	60.24
	59 Chlorobenzene	112	7.690	7.690	(1.003)	739006	50.0000	50.96
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	283507	50.0000	52.54
	61 Ethylbenzene	106	7.799	7.799	(1.017)	376347	50.0000	55.10
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	956780	100.000	108.67
	63 o-Xylene	106	8.241	8.241	(1.075)	455352	50.0000	52.40
	64 Styrene	104	8.256	8.256	(1.077)	805283	50.0000	55.28
	66 Bromoform	173	8.410	8.410	(1.097)	220511	50.0000	53.77

67 Isopropylbenzene	105	8.560	8.560 (1.116)	1163249	50.0000	58.59
68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	341952	50.0000	50.68

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	369682	50.0000	54.11
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	423283	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	262155	50.0000	55.66(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1395855	50.0000	59.53
	74 Bromobenzene	156	8.803	8.803	(0.911)	353206	50.0000	50.86
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1010569	50.0000	58.34
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	856489	50.0000	55.66
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1012245	50.0000	57.71
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	845490	50.0000	59.63
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1033492	50.0000	56.70
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1186968	50.0000	62.92
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1058144	50.0000	62.59
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	627552	50.0000	54.44
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	666904	50.0000	53.02
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	954643	50.0000	58.29
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	630395	50.0000	53.10
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	58880	50.0000	54.58
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	440656	50.0000	58.81
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	201188	50.0000	60.45
	92 Naphthalene	128	11.540	11.540	(1.194)	996391	50.0000	58.45
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	407259	50.0000	56.76
M	94 1,2-Dichloroethylene (total)	96				480903	100.000	(a)
	141 Cyclohexane	56	4.118	4.118	(0.987)	307502	50.0000	58.83
	138 Freon TF	101	1.910	1.910	(0.458)	206542	50.0000	54.47
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	539345	50.0000	56.94
	146 Methyl Acetate	43	2.224	2.224	(0.533)	122459	50.0000	52.68
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	411038	1000.00	1149.25
	149 Isopropyl Alcohol	45	2.086	2.086	(0.500)	224450	1000.00	1201.64

QC Flag Legend

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



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Date : 23-JAN-2023 11:58
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\X230123.b\X012303.D
Inj Date : 23-JAN-2023 11:58
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

BEFORE

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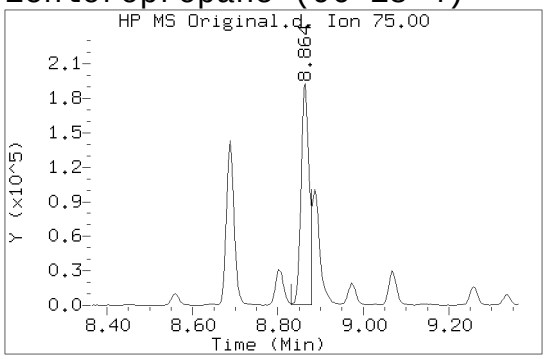
HEIGHT
192389
13-Feb-2023
13:13
linh
pham



AFTER

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13-Feb-2023
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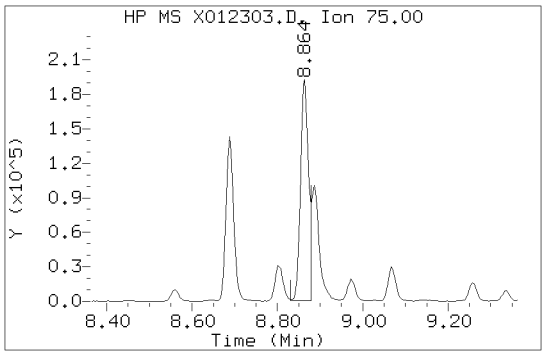

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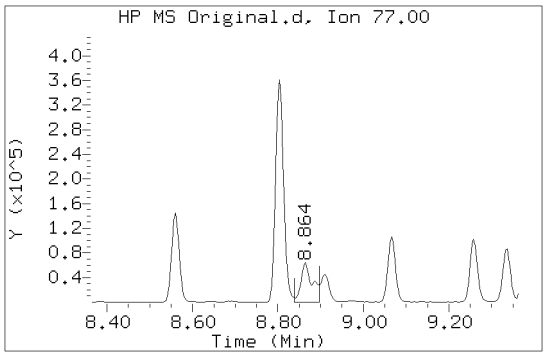

AFTER

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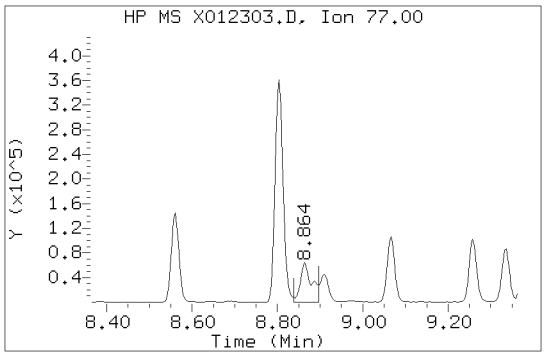

Chloroprene (126-99-8)

Reason Code:

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13-Feb-2023
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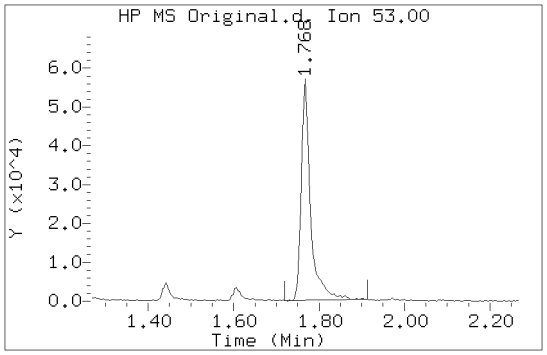
linh
pham



AFTER

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13-Feb-2023
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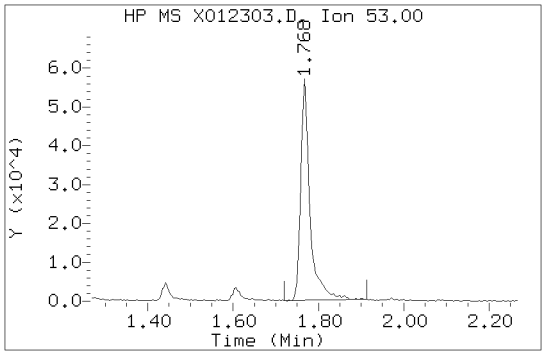

BEFORE

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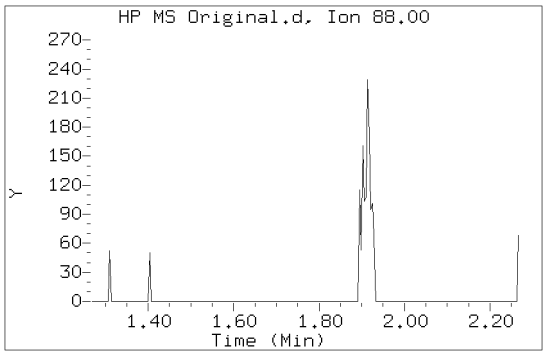

AFTER

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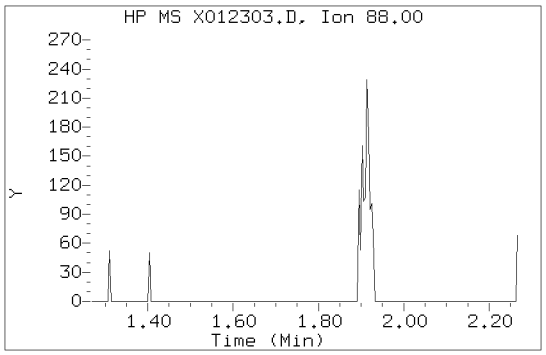

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Report Date: 09-Feb-2023 14:22

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012304.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 23-JAN-2023 12:19
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 09-Feb-2023 14:22 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	581391	50.0000	
$ 30 Dibromofluoromethane	113	4.091	4.091	(0.979)	259243	46.4266	46.42
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	293032	49.7333	49.73
* 36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	834048	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	751359	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	975880	52.5610	52.56
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	353420	50.9244	50.92
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	387886	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012305.D Page 1
Report Date: 13-Feb-2023 13:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012305.D
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Inj Date : 23-JAN-2023 12:40
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-233120;VLCSW-230123;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.174	(1.000)	497251	50.0000	
135	1,4-Dioxane	88	5.598	5.595	(1.340)	19971	439.368	439.36(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	73183	21.4442	21.44
25	Methacrylonitrile	41	3.818	3.821	(0.914)	77326	21.9616	21.96
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	262597	469.512	469.51
13	Acetonitrile	39	2.194	2.195	(0.525)	99656	220.205	220.20
14	Allyl Chloride	41	2.194	2.195	(0.525)	187590	21.7639	21.76
4	Propionitrile	54	3.649	3.645	(0.873)	113073	222.859	222.85(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	35165	22.6569	22.65
23	Chloroprene	53	1.767	1.767	(0.423)	35678	21.1023	21.10(M)
40	Methyl Methacrylate	41	5.602	5.602	(1.341)	81137	23.9305	23.93
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	81620	23.0442	23.04
131	Methyl Acrylate	55	3.686	3.683	(0.882)	86455	25.6095	25.60
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	26684	41.3667	41.36
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	189591	20.8753	20.87
156	Diisopropyl ether	45	2.997	2.997	(0.717)	270377	20.9609	20.96
182	Epichlorohydrin	57	6.093	6.089	(1.228)	31390	94.5240	94.52
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	414593	21.0045	21.00
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	67292	19.5897	19.58
3	Chloromethane	50	1.074	1.074	(0.257)	92840	21.9349	21.93

5 Vinyl Chloride	62	1.141	1.141 (0.273)	90574	20.8515	20.85
6 Bromomethane	94	1.336	1.336 (0.320)	68025	21.7387	21.73

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012305.D Page 2
Report Date: 13-Feb-2023 13:14

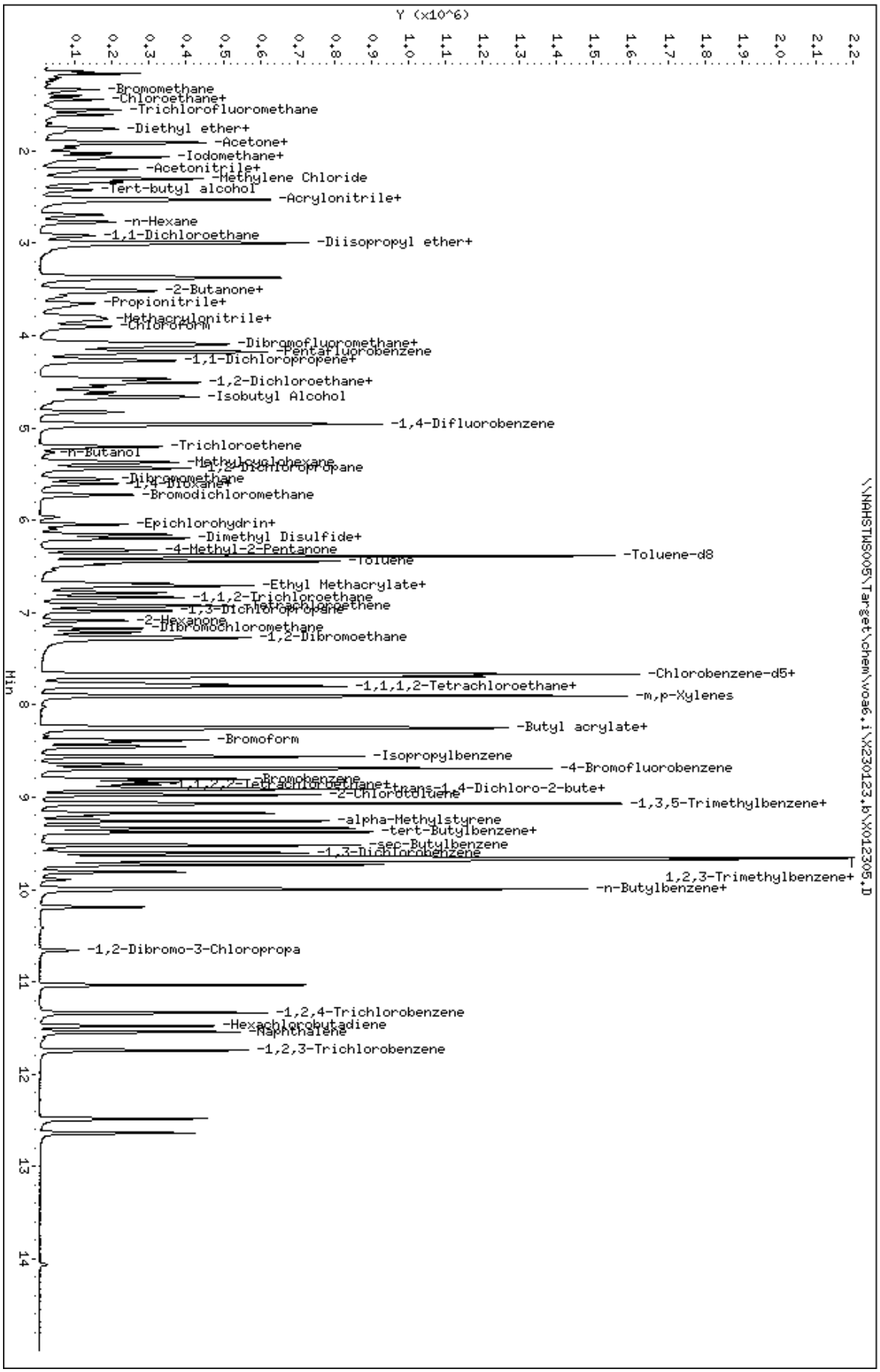
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	7 Chloroethane	64	1.400	1.400	(0.335)	60632	20.0543	20.05
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	146438	24.0906	24.09
	9 Acrolein	56	1.441	1.441	(0.345)	11994	37.0957	37.09
	10 Acetone	43	1.970	1.966	(0.472)	67663	48.4779	48.47
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	81538	21.6057	21.60
	15 Iodomethane	142	2.022	2.022	(0.484)	196366	42.4477	42.44
	16 Acrylonitrile	53	2.532	2.528	(0.606)	58751	45.9006	45.90
	17 Methylene Chloride	84	2.299	2.299	(0.550)	105991	20.4751	20.47
	18 Methyl tert-butyl ether	73	2.532	2.528	(0.606)	262791	21.2738	21.27
	19 Carbon Disulfide	76	2.063	2.063	(0.494)	433969	43.9510	43.95
	20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	89449	21.1779	21.17
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	515314	47.5219	47.52
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	161970	21.8505	21.85
	24 2-Butanone	43	3.574	3.570	(0.856)	65419	45.8915	45.89
	26 2,2-Dichloropropane	77	3.503	3.503	(0.838)	148463	23.5889	23.58
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	105825	20.5879	20.58
	28 Chloroform	83	3.904	3.900	(0.935)	177353	21.3467	21.34
	29 Bromochloromethane	128	3.788	3.788	(0.907)	54788	19.4673	19.46
$	30 Dibromofluoromethane	113	4.095	4.091	(0.980)	239631	50.1894	50.18
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	154223	23.3962	23.39
	32 1,1-Dichloropropene	75	4.275	4.279	(0.862)	128020	23.9746	23.97
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	142773	23.1678	23.16
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	133719	23.4505	23.45
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	282167	55.9585	55.95
*	36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	752142	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	384035	21.3816	21.38
	38 Trichloroethene	130	5.205	5.205	(1.049)	111371	21.8618	21.86
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	143573	21.2997	21.29
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	89802	46.8286	46.82
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	99471	20.8198	20.81
	44 Dibromomethane	93	5.550	5.550	(1.119)	68246	21.0154	21.01
	45 4-Methyl-2-Pentanone	43	6.325	6.322	(0.825)	177214	46.1150	46.11
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	172568	21.7990	21.79
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	718965	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	879803	49.5213	49.52
	50 Toluene	91	6.445	6.445	(0.841)	426731	21.4736	21.47
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	146042	22.2300	22.22
	52 2-Hexanone	43	7.086	7.083	(0.924)	127306	48.6911	48.69
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	81214	20.3710	20.37
	54 1,3-Dichloropropane	76	6.978	6.982	(0.910)	165318	21.0671	21.06
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	119386	20.7483	20.74
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	94167	22.9023	22.90
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	107280	21.5222	21.52
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	96376	26.5144	26.51
	59 Chlorobenzene	112	7.694	7.690	(1.003)	295340	20.9529	20.95
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	109936	20.9579	20.95
	61 Ethylbenzene	106	7.799	7.799	(1.017)	151332	22.7921	22.79
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	382605	44.7005	44.70
	63 o-Xylene	106	8.241	8.241	(1.075)	184237	21.8085	21.80
	64 Styrene	104	8.256	8.256	(1.077)	317750	22.4403	22.44
	66 Bromoform	173	8.410	8.410	(1.097)	81660	20.4853	20.48
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	461647	23.9190	23.91

	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	134605	20.6037	20.60
$	69 4-Bromofluorobenzene	95	8.687	8.687 (1.133)	343730	51.7586	51.75

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	409890	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	98843	21.6719	21.67(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	556082	24.4924	24.49
	74 Bromobenzene	156	8.803	8.803	(0.911)	137608	20.4626	20.46
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	401985	23.9671	23.96
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	341318	22.9091	22.90
	77 4-Chlorotoluene	91	9.069	9.070	(0.939)	394630	23.2348	23.23
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	334154	24.3388	24.33
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	402383	22.8006	22.80
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	471537	25.8132	25.81
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	420042	25.6604	25.66
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	247304	22.1564	22.15
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	262535	21.5546	21.55
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	372630	24.5571	24.55
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	247616	21.5405	21.54
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	21571	20.7066	20.70
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	176304	24.3024	24.30
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	77611	24.2613	24.26
	92 Naphthalene	128	11.544	11.540	(1.195)	379763	23.0076	23.00
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	157152	22.6182	22.61
M	94 1,2-Dichloroethylene (total)	96				195274	41.7658	41.76
M	95 Xylenes (total)	106				566842	66.5090	66.50
	141 Cyclohexane	56	4.118	4.118	(0.986)	132853	27.0984	27.09
	138 Freon TF	101	1.913	1.910	(0.458)	89044	24.3947	24.39
	147 Methylcyclohexane	55	5.381	5.377	(1.085)	214400	23.2870	23.28
	146 Methyl Acetate	43	2.228	2.224	(0.533)	51444	22.9916	22.99
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	165046	479.349	479.34
	149 Isopropyl Alcohol	45	2.090	2.086	(0.500)	85672	476.441	476.44

QC Flag Legend

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



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Sample Info: VLCSW-233120;VLCSW-230123;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 23-JAN-2023 12:40
InstruID : voa6.i
LabSampID : VLCSW-233120

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

Reason Code:

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13-Feb-2023
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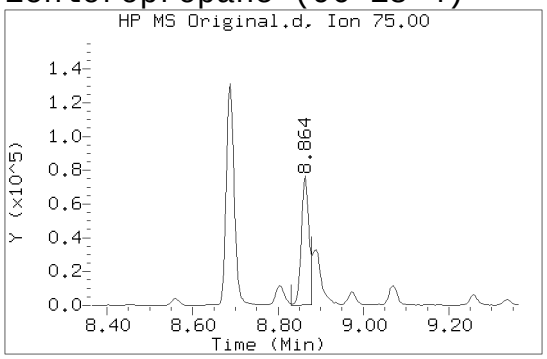

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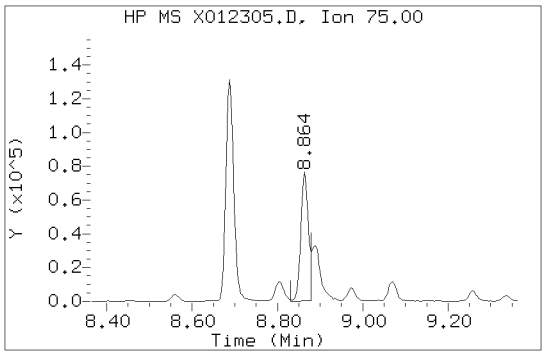

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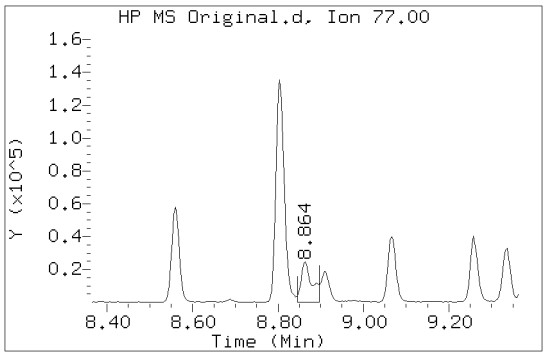

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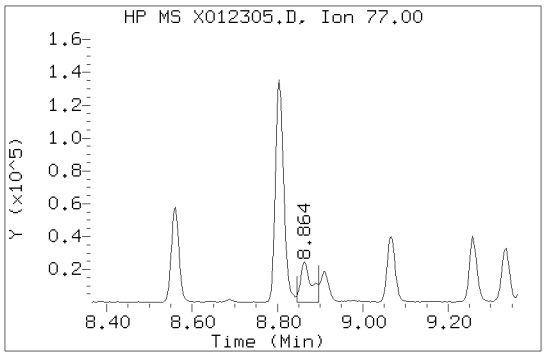

Chloroprene (126-99-8)

Reason Code:

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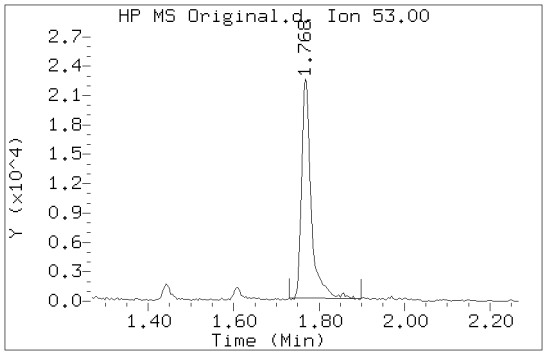

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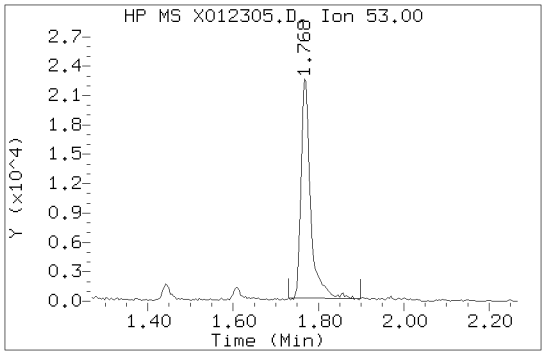

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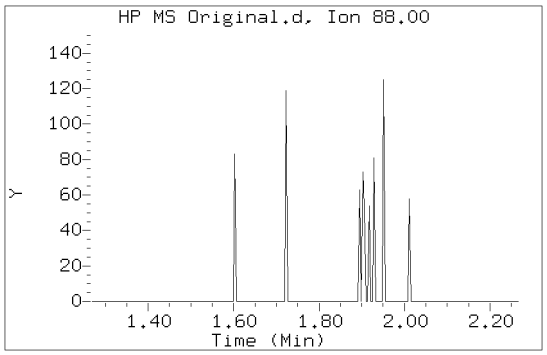

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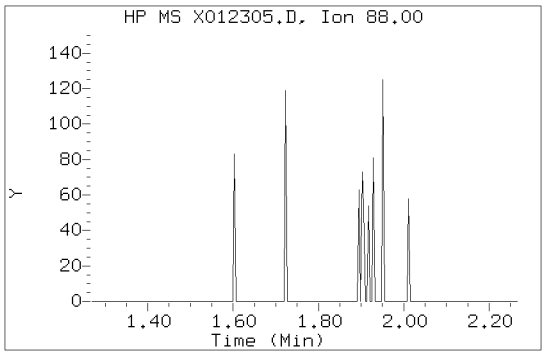

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Report Date: 13-Feb-2023 13:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012307.D
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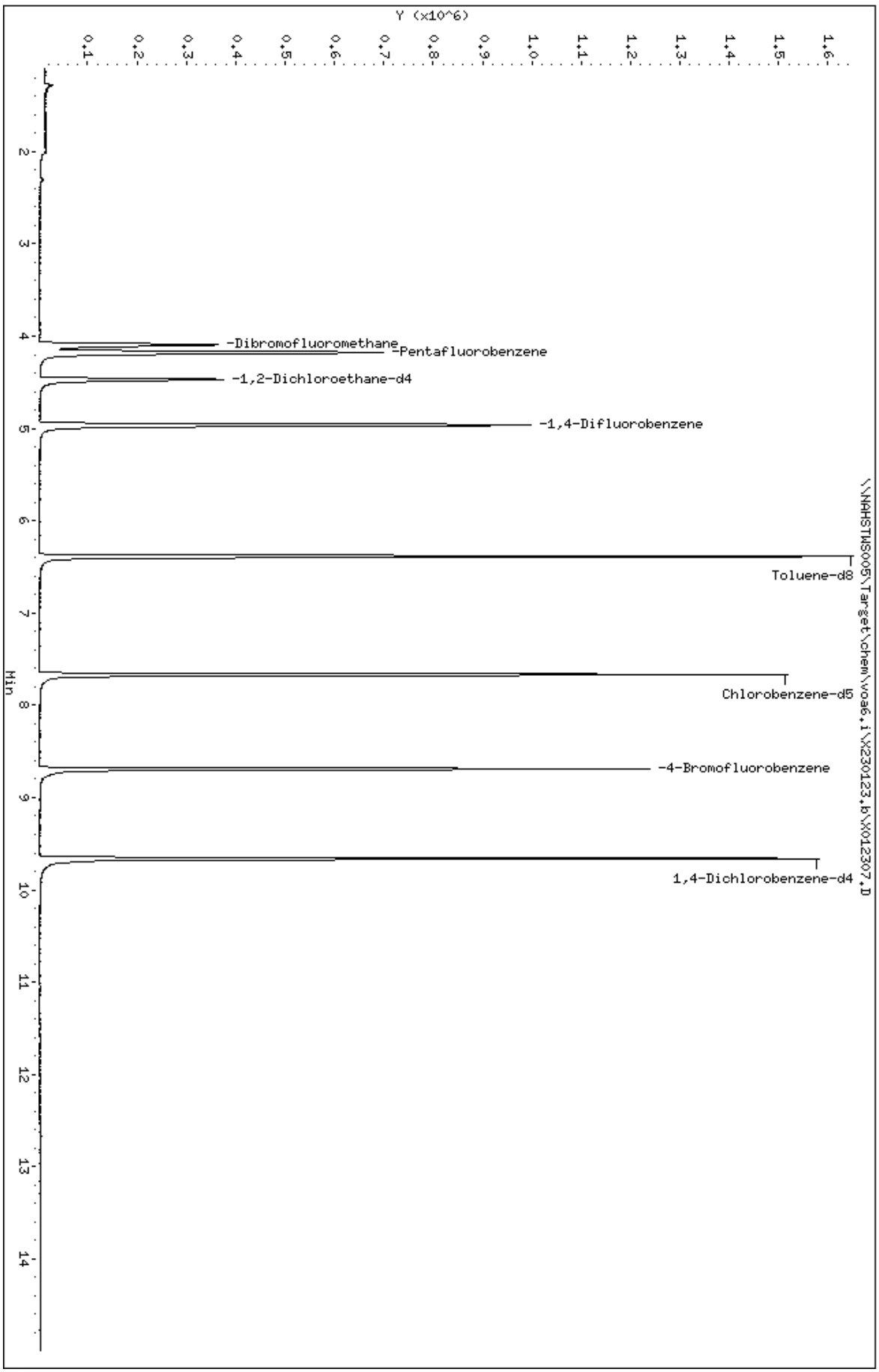
Inj Date : 23-JAN-2023 13:22
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230123;VBLKW-230123;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	570496	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.091	(0.980)	254870	46.5155	46.51
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	288132	49.8350	49.83
* 36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	819696	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	736361	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	957853	52.6408	52.64
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	341625	50.2283	50.22
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	383647	50.0000	



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Date : 23-JAN-2023 13:22
Client ID: VBLKW-230123
Sample Info: VBLKW-230123;VBLKW-230123;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012307.D
Inj Date : 23-JAN-2023 13:22
InstruID : voa6.i
LabSampID : VBLKW-230123

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D Page 1
Report Date: 13-Feb-2023 13:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D
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Inj Date : 23-JAN-2023 16:11
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-05;HS23010982-05;;;
Misc Info : V6;WATER;0;200;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 15
Dil Factor: 200.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

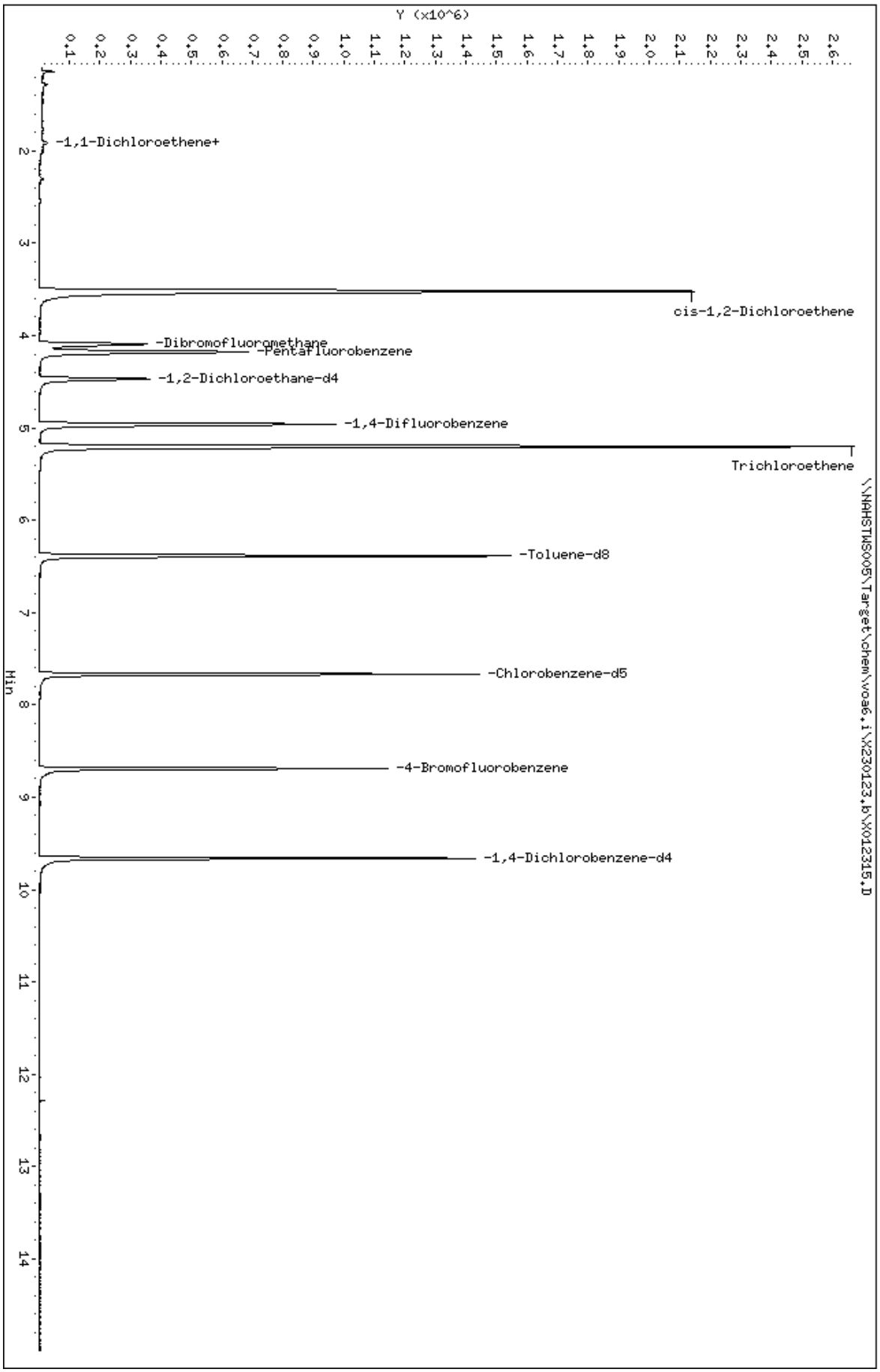
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	200.000	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	4.174	4.174	(1.000)	555856	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	27259	5.61380	1122.75
	11 1,1-Dichloroethene	96	1.909	1.910	(0.458)	2549	0.60421	120.84(a)
	27 cis-1,2-Dichloroethene	96	3.521	3.522	(0.844)	1133643	197.293	39458.67
$	30 Dibromofluoromethane	113	4.095	4.091	(0.981)	249231	46.6850	46.68
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	279759	49.6622	49.66
*	36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	796654	50.0000	
	38 Trichloroethene	130	5.201	5.205	(1.048)	851932	157.888	31577.63
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	703453	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	916547	52.7272	52.72
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	317266	48.8308	48.83
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	357166	50.0000	
M	94 1,2-Dichloroethylene (total)	96				1133643	197.293	39458.67
	138 Freon TF	101	1.913	1.910	(0.458)	3746	0.91806	183.61(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D
Date : 23-JAN-2023 16:11
Client ID: HS23010982-05
Sample Info: HS23010982-05;HS23010982-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D Page 2

Date : 23-JAN-2023 16:11

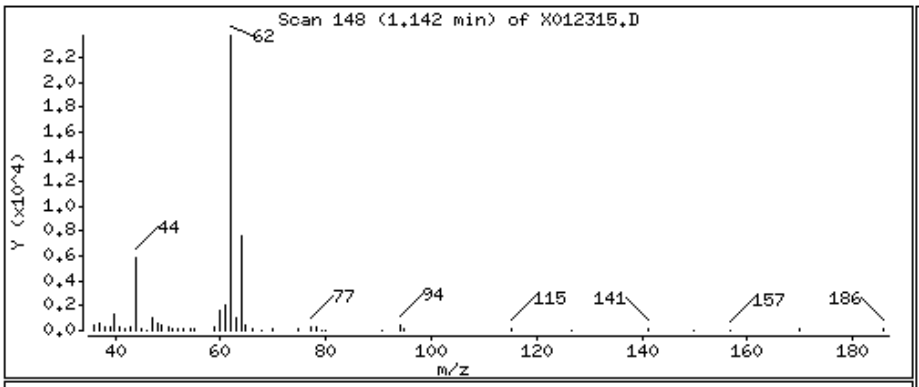
Client ID: HS23010982-05 Instrument: voa6.i

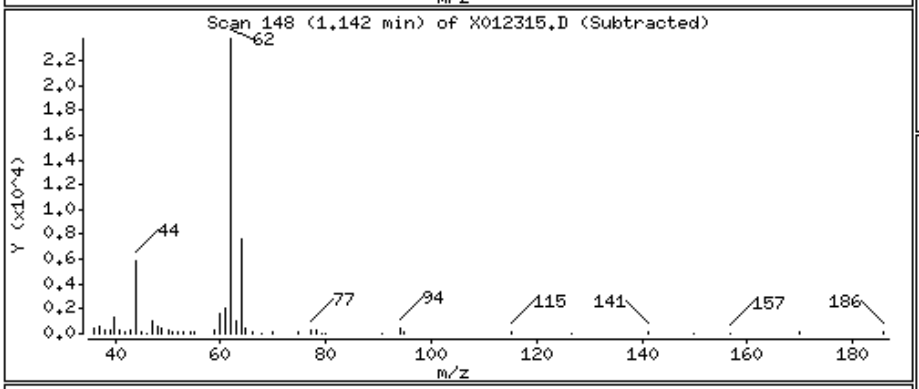
Sample Info: HS23010982-05;HS23010982-05;;;

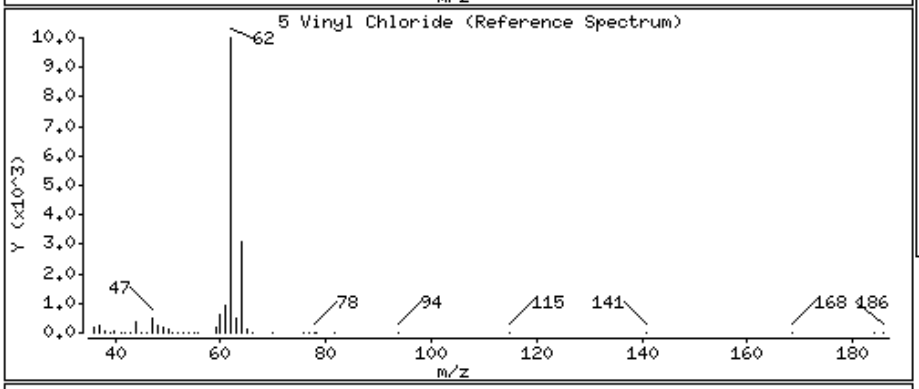
Purge Volume: 5.0 Operator: PC

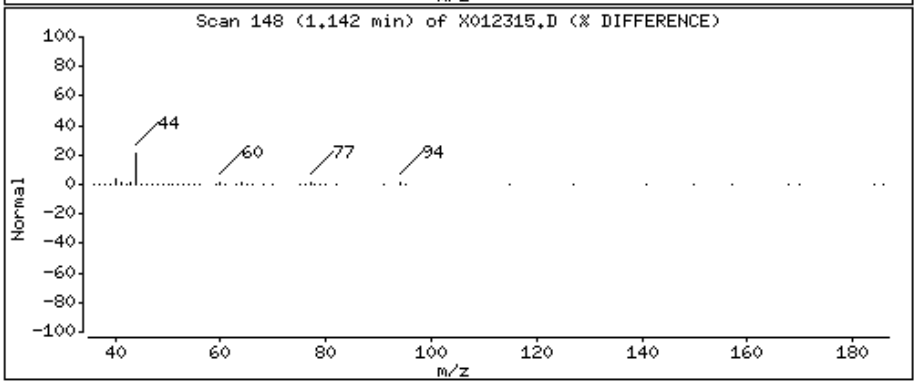
Column phase: DB624 Column diameter: 0.18

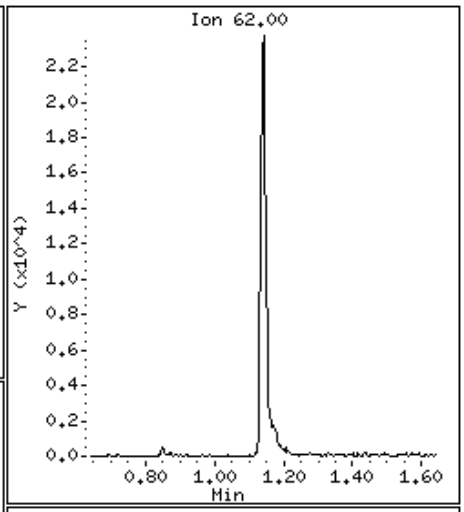
5 Vinyl Chloride Concentration: 1122.75 ug/l

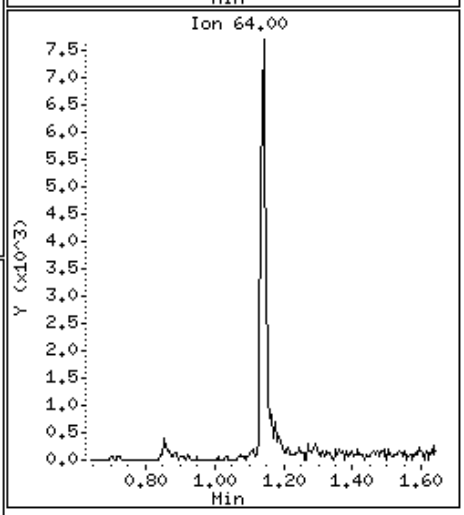












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D Page 3

Date : 23-JAN-2023 16:11

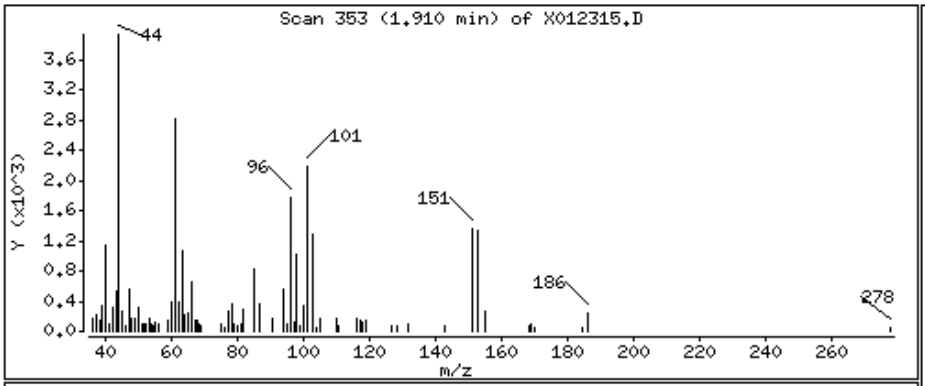
Client ID: HS23010982-05 Instrument: voa6.i

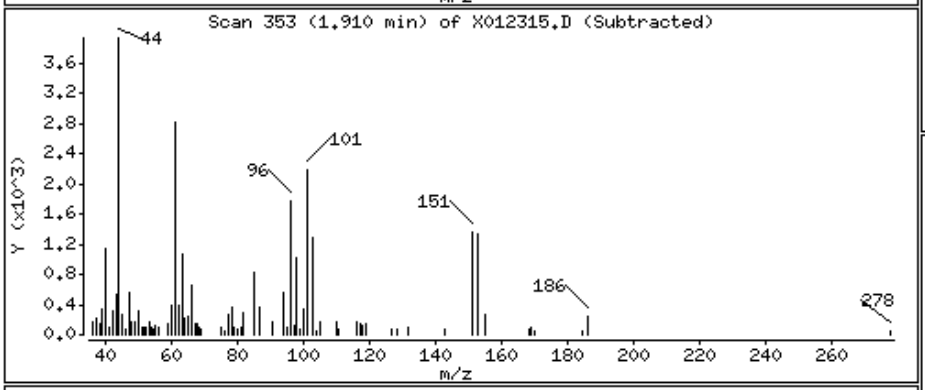
Sample Info: HS23010982-05;HS23010982-05;;;

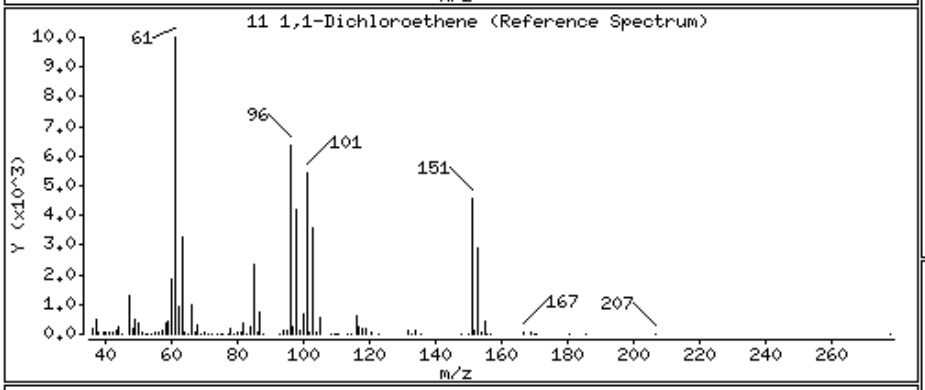
Purge Volume: 5.0 Operator: PC

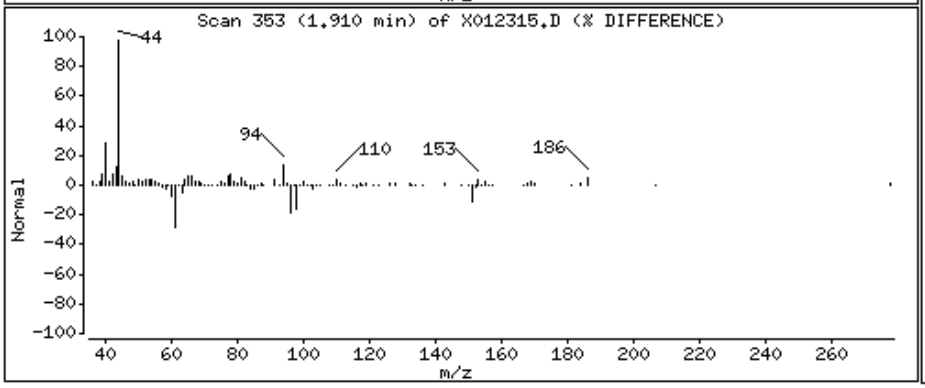
Column phase: DB624 Column diameter: 0.18

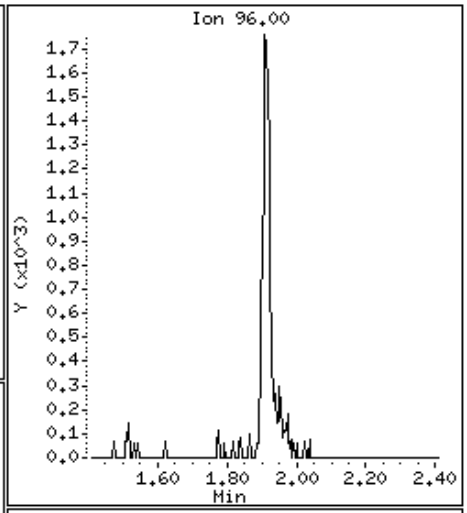
11 1,1-Dichloroethene Concentration: 120.84 ug/l

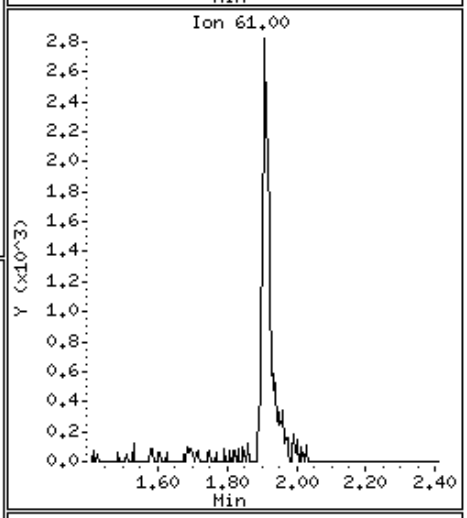


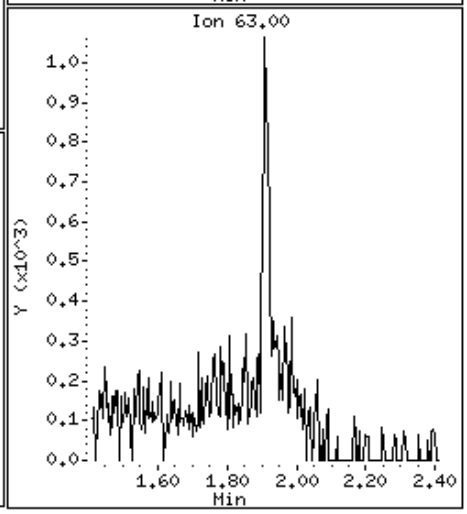












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D Page 4

Date : 23-JAN-2023 16:11

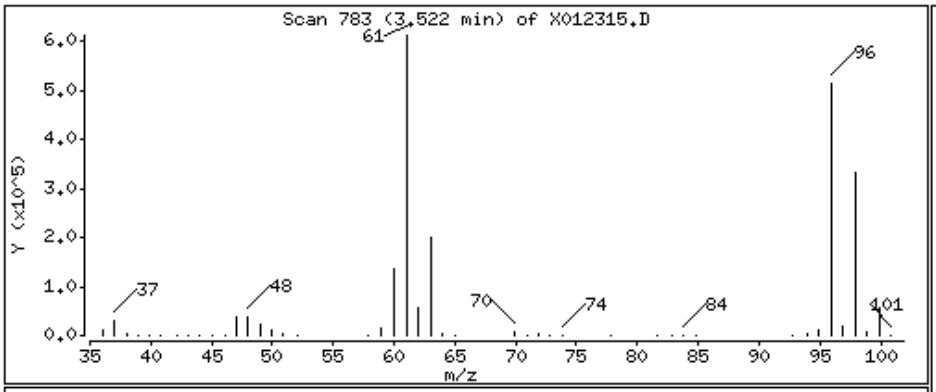
Client ID: HS23010982-05 Instrument: voa6.i

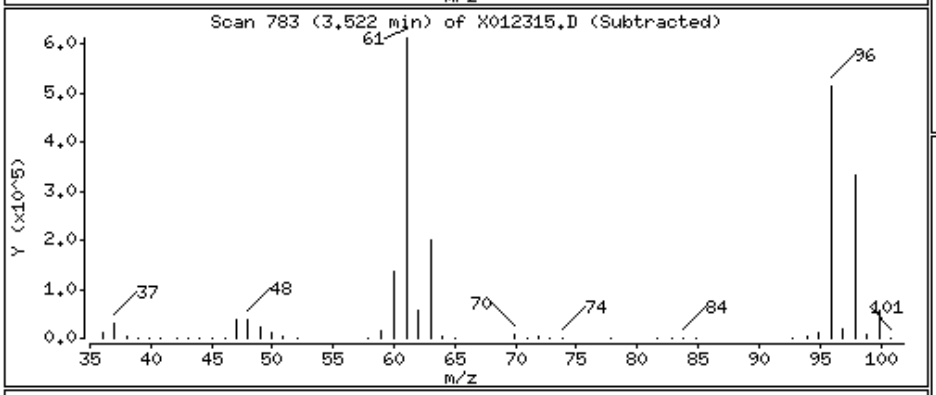
Sample Info: HS23010982-05;HS23010982-05;;;

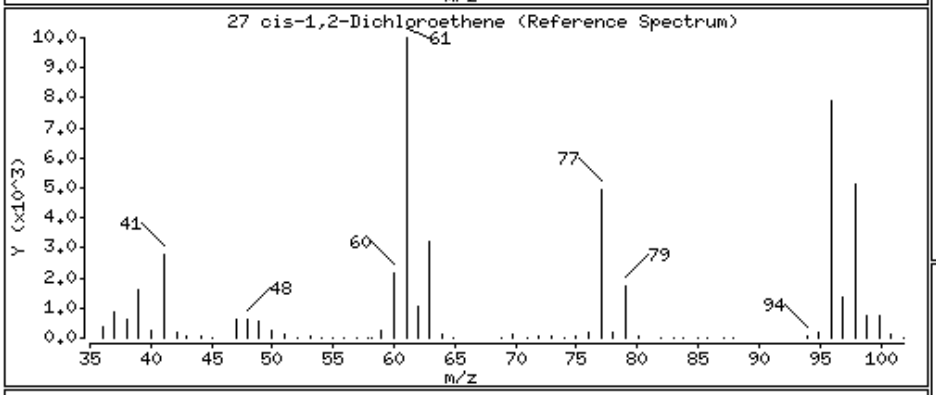
Purge Volume: 5.0 Operator: PC

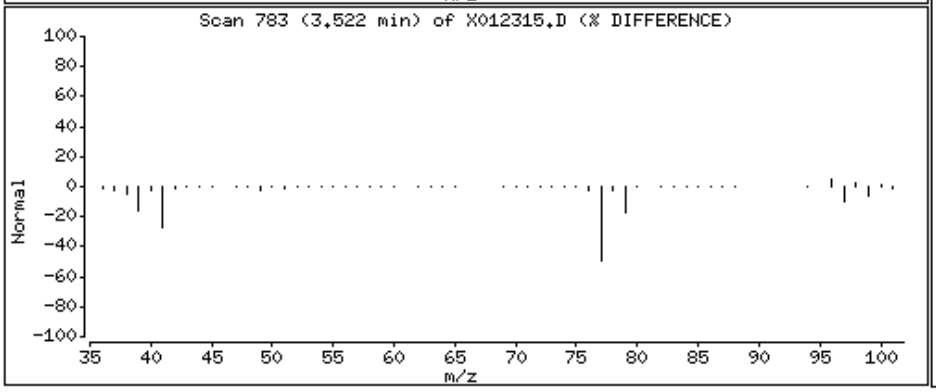
Column phase: DB624 Column diameter: 0.18

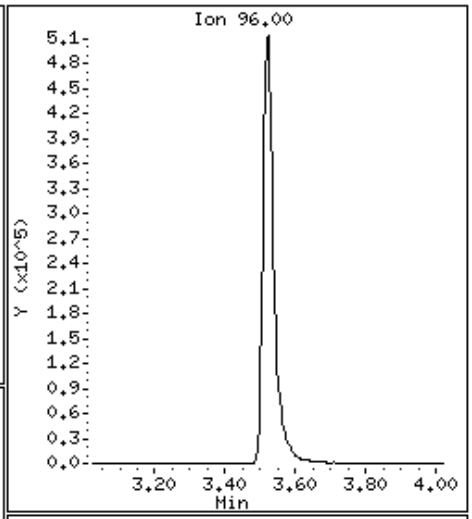
27 cis-1,2-Dichloroethene Concentration: 39458.67 ug/l

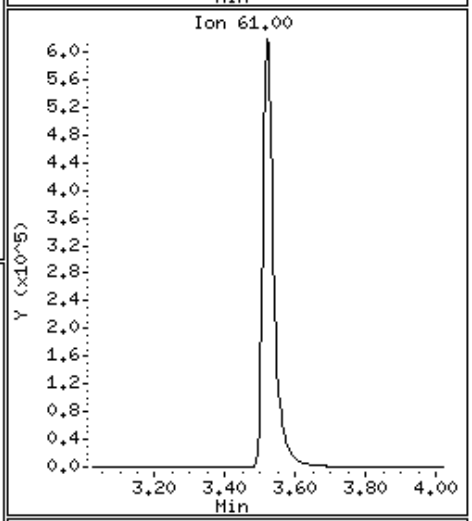


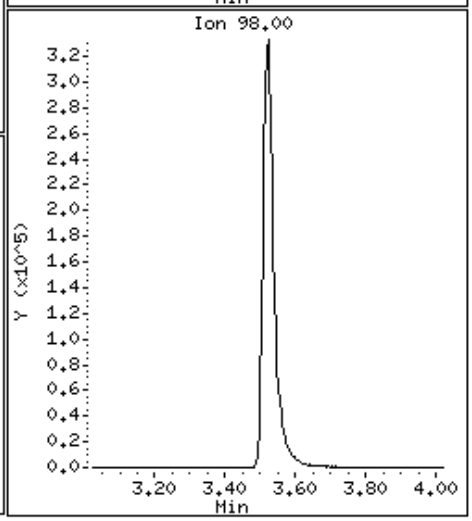












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D Page 5

Date : 23-JAN-2023 16:11

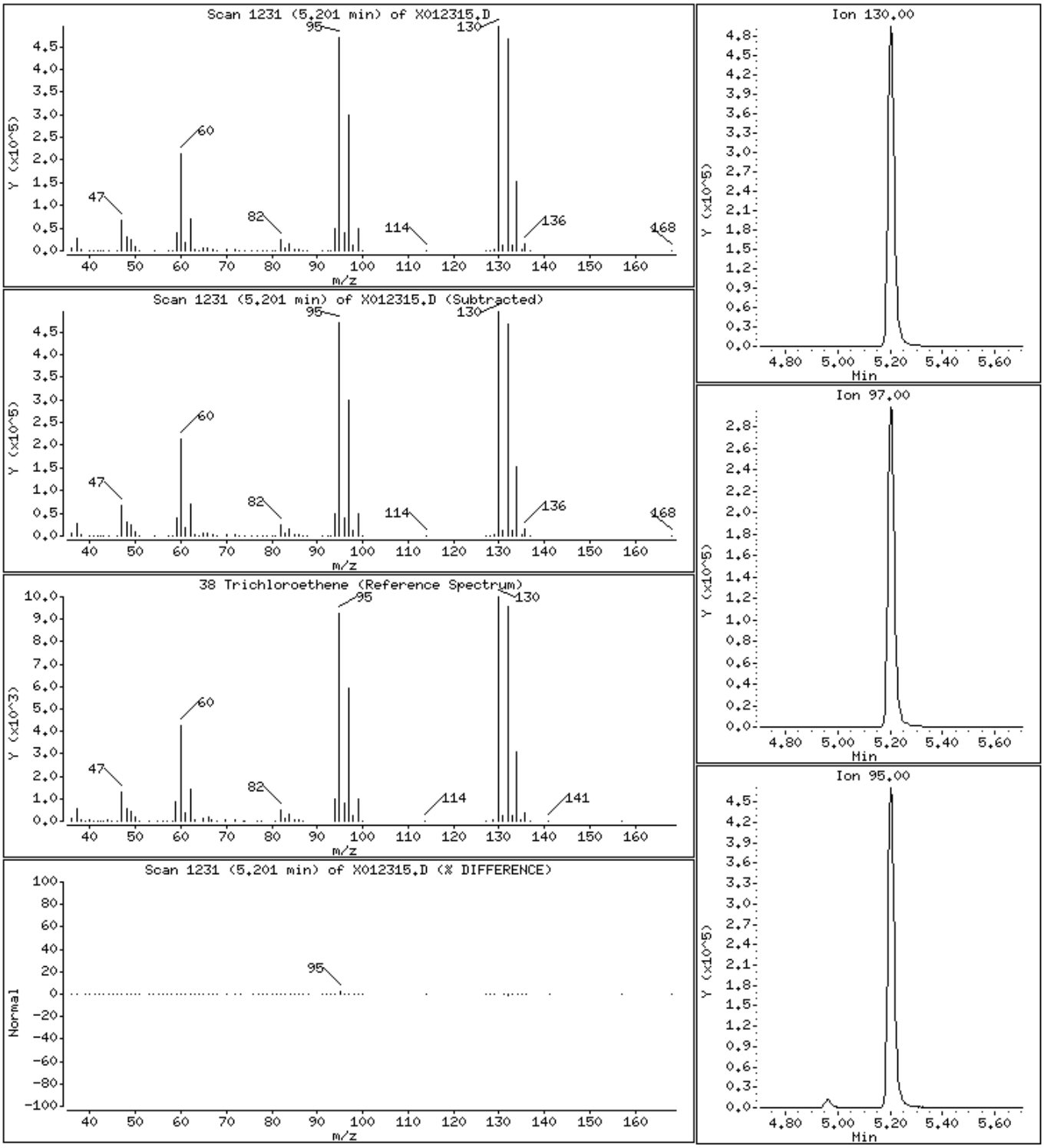
Client ID: HS23010982-05 Instrument: voa6.i

Sample Info: HS23010982-05;HS23010982-05;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 31577.63 ug/l



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D Page 6

Date : 23-JAN-2023 16:11

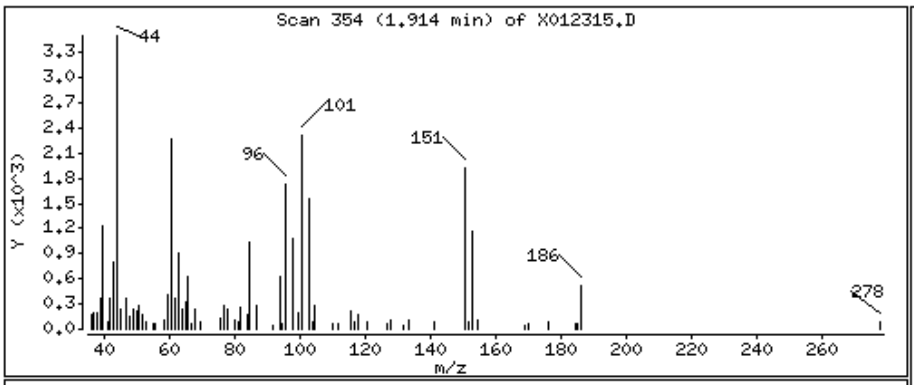
Client ID: HS23010982-05 Instrument: voa6.i

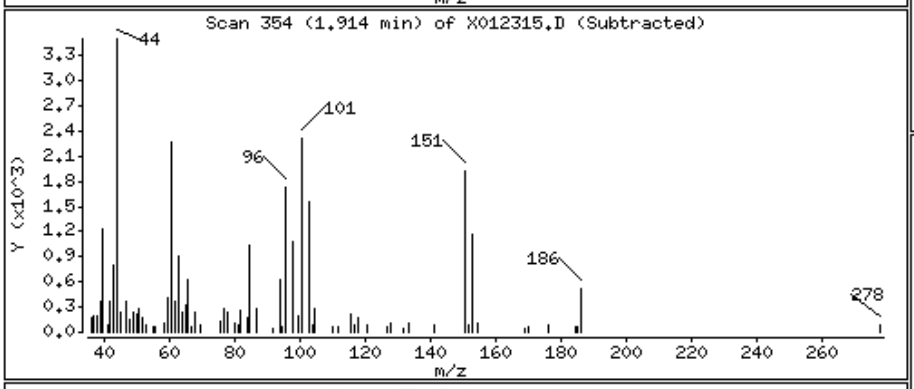
Sample Info: HS23010982-05;HS23010982-05;;;

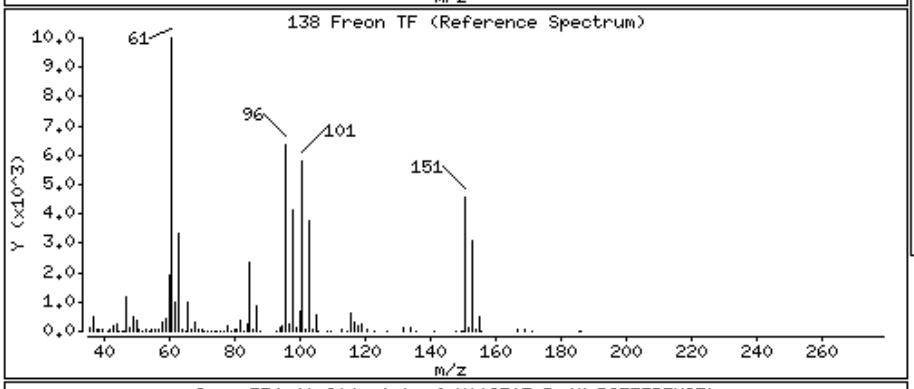
Purge Volume: 5.0 Operator: PC

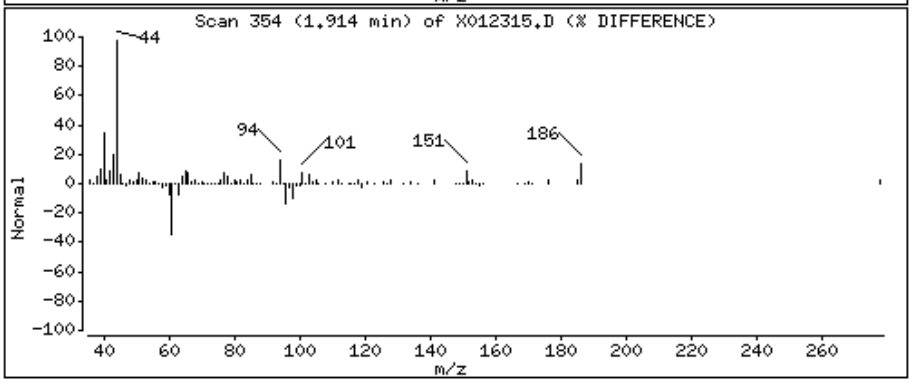
Column phase: DB624 Column diameter: 0.18

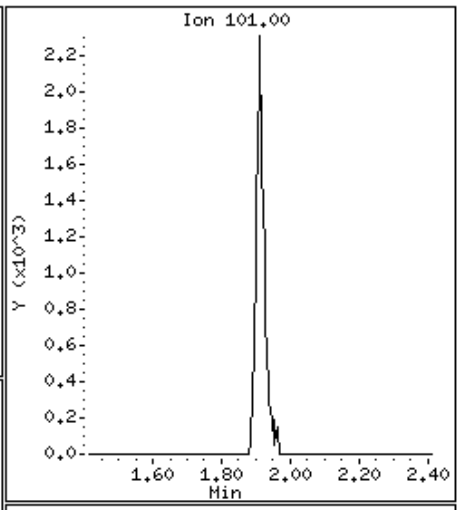
138 Freon TF Concentration: 183.61 ug/l

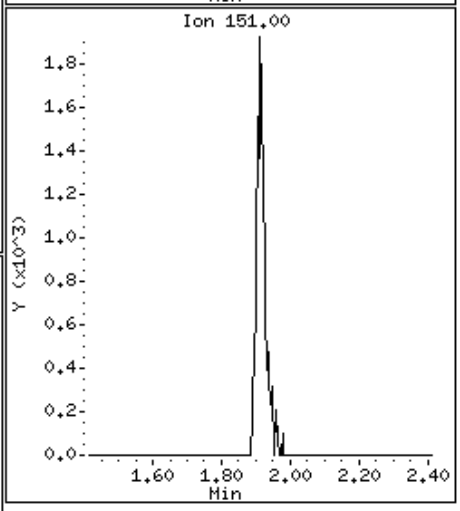












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012315.D
Inj Date : 23-JAN-2023 16:11
InstruID : voa6.i
LabSampID : HS23010982-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012316.D Page 1
Report Date: 13-Feb-2023 13:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012316.D
Lab Smp Id: HS23010982-05 Client Smp ID: HS23010982-05
Inj Date : 23-JAN-2023 16:32
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-05;HS23010982-05;;;
Misc Info : V6;WATER;0;2000;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 16
Dil Factor: 2000.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	2000.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.177	4.174	(1.000)	565180	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	2498	0.50596	1011.91(a)
	27 cis-1,2-Dichloroethene	96	3.521	3.522	(0.843)	113956	19.5051	39010.26
$	30 Dibromofluoromethane	113	4.095	4.091	(0.980)	252006	46.4251	46.42
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	281818	49.2049	49.20
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	808382	50.0000	
	38 Trichloroethene	130	5.208	5.205	(1.049)	87461	15.9739	31947.89
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	718046	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	938882	52.9144	52.91
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	325423	49.0680	49.06
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	371980	50.0000	
M	94 1,2-Dichloroethylene (total)	96				113956	19.5051	39010.26

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012316.D

Page 1

Date : 23-JAN-2023 16:32

Client ID: HS23010982-05

Instrument: voa6.i

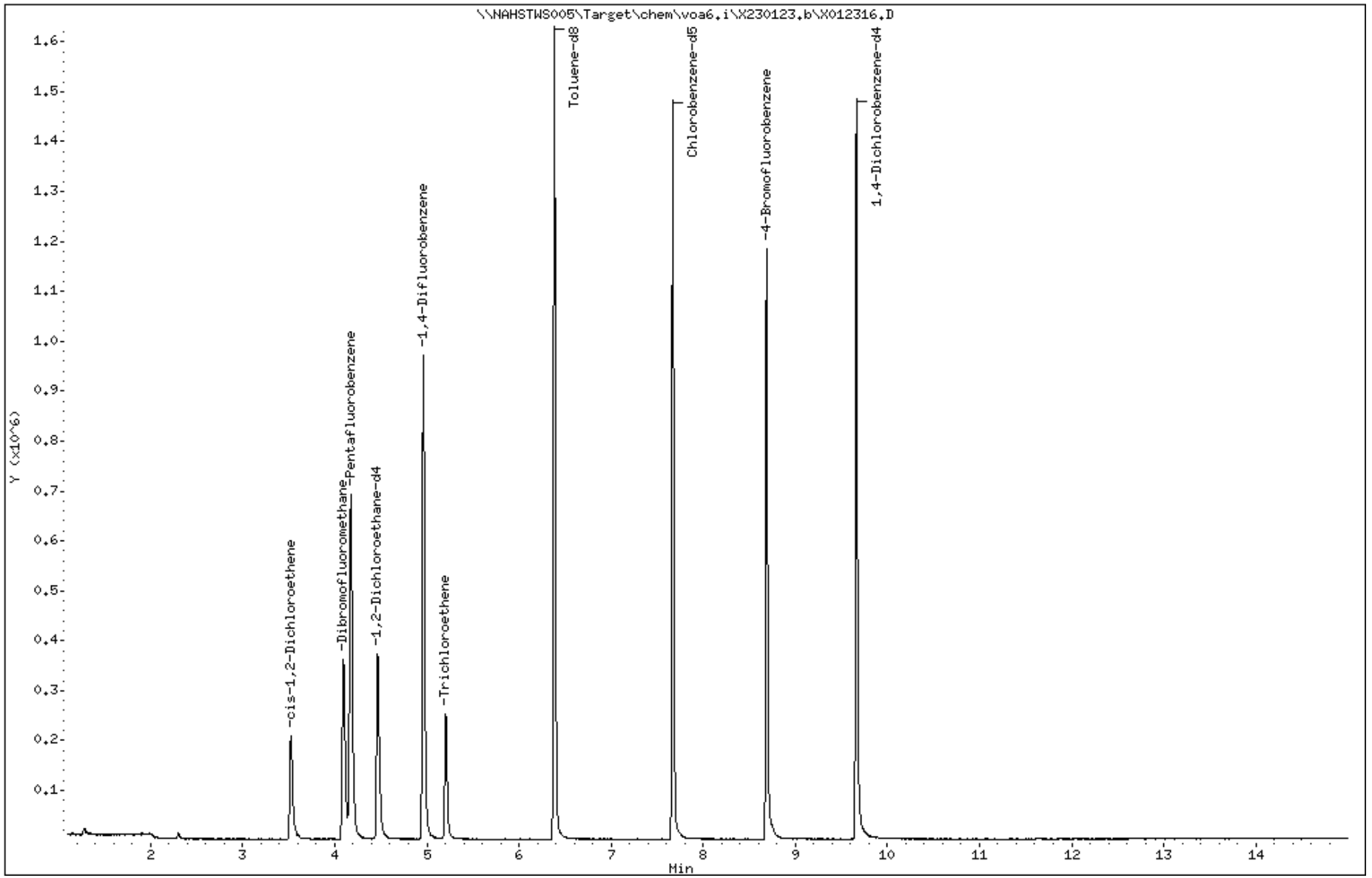
Sample Info: HS23010982-05;HS23010982-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012316.D Page 2

Date : 23-JAN-2023 16:32

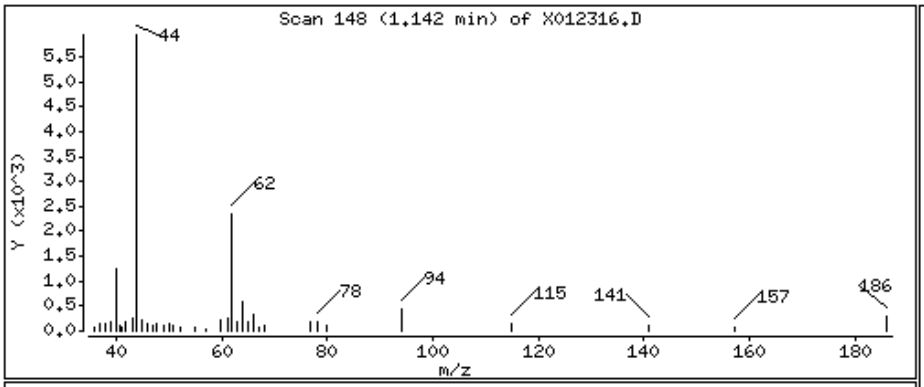
Client ID: HS23010982-05 Instrument: voa6.i

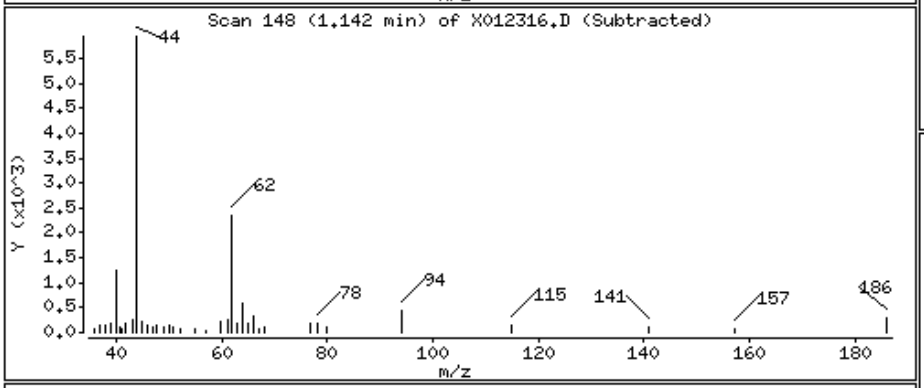
Sample Info: HS23010982-05;HS23010982-05;;;

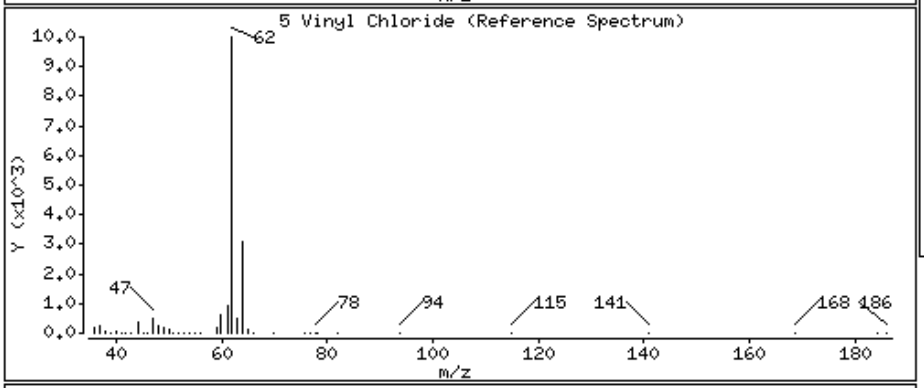
Purge Volume: 5.0 Operator: PC

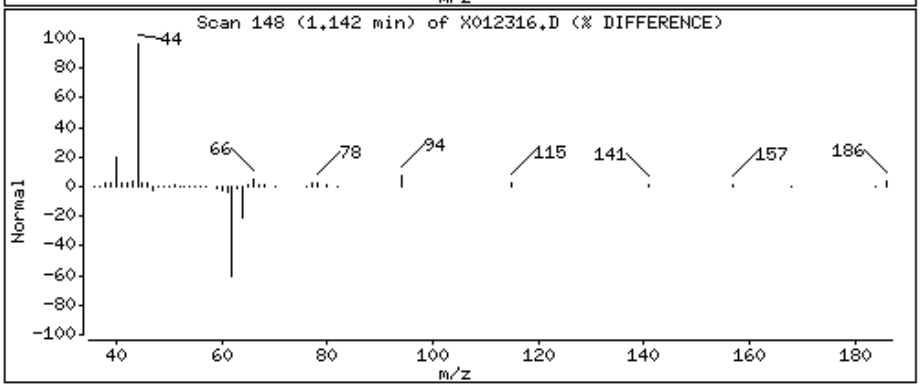
Column phase: DB624 Column diameter: 0.18

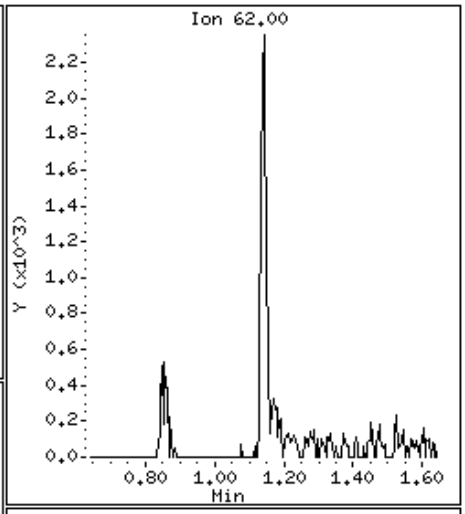
5 Vinyl Chloride Concentration: 1011.91 ug/l

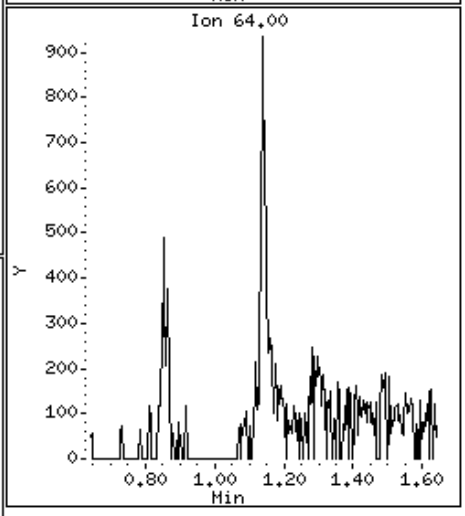












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012316.D Page 3

Date : 23-JAN-2023 16:32

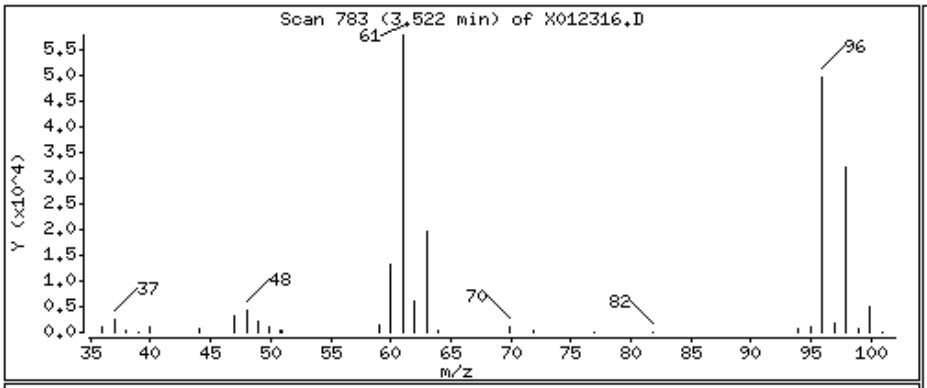
Client ID: HS23010982-05 Instrument: voa6.i

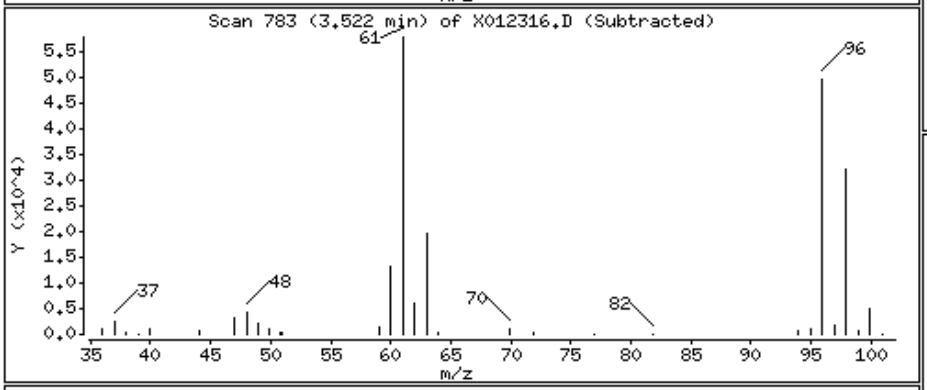
Sample Info: HS23010982-05;HS23010982-05;;;

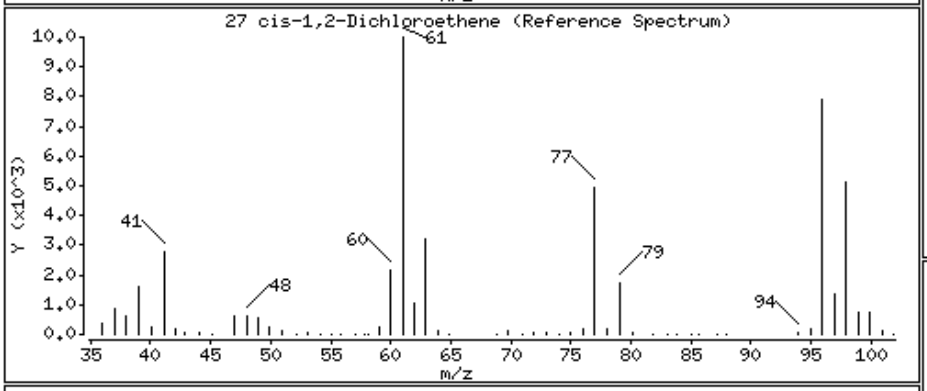
Purge Volume: 5.0 Operator: PC

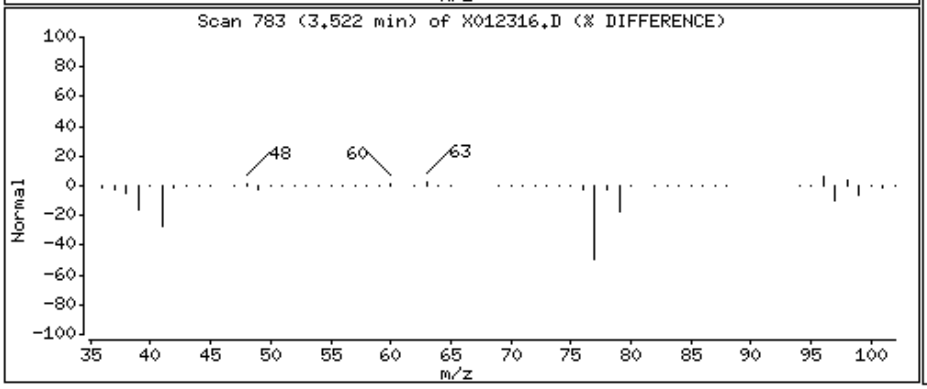
Column phase: DB624 Column diameter: 0.18

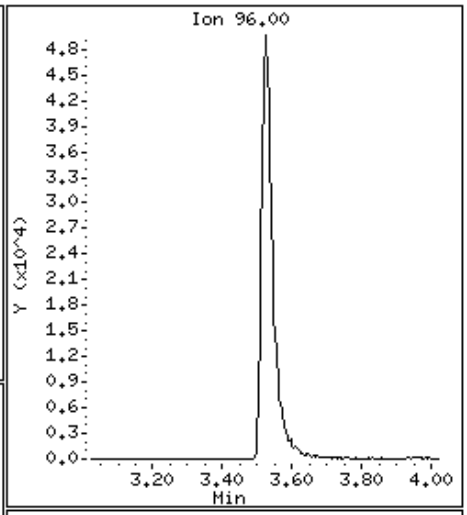
27 cis-1,2-Dichloroethene Concentration: 39010.26 ug/l

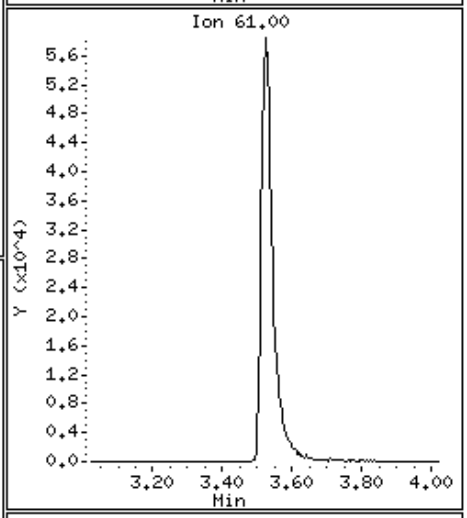


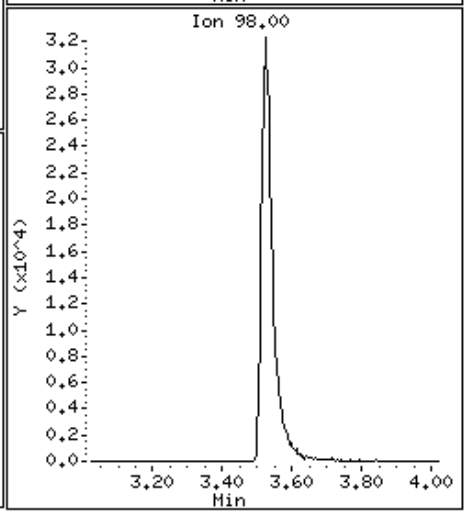












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012316.D Page 4

Date : 23-JAN-2023 16:32

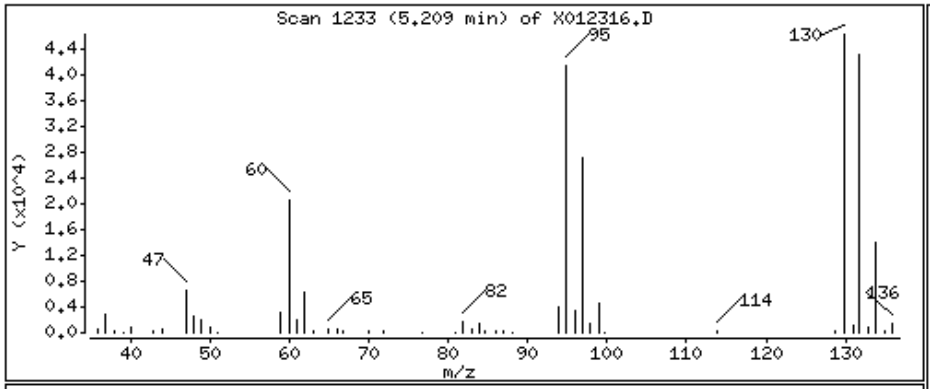
Client ID: HS23010982-05 Instrument: voa6.i

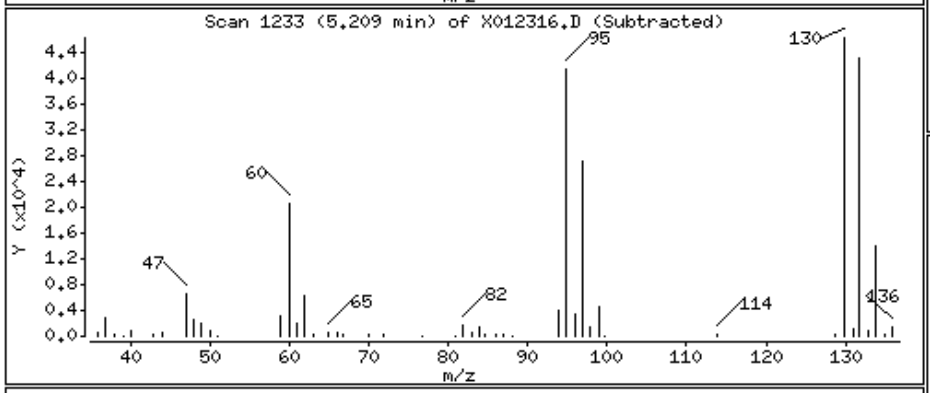
Sample Info: HS23010982-05;HS23010982-05;;;

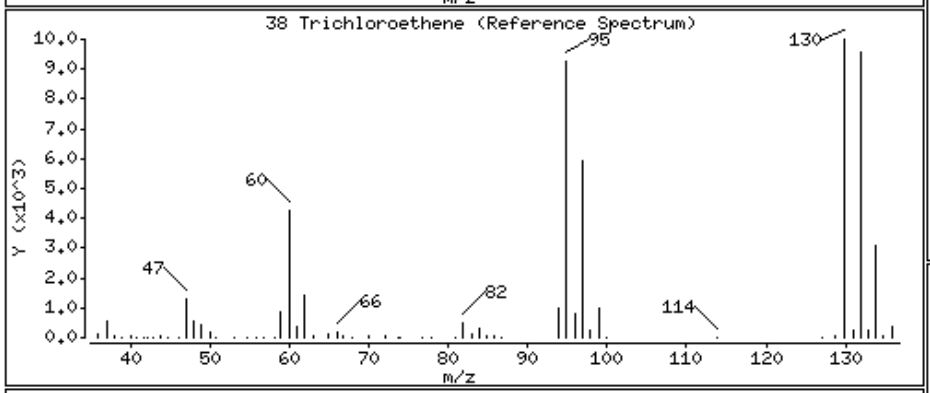
Purge Volume: 5.0 Operator: PC

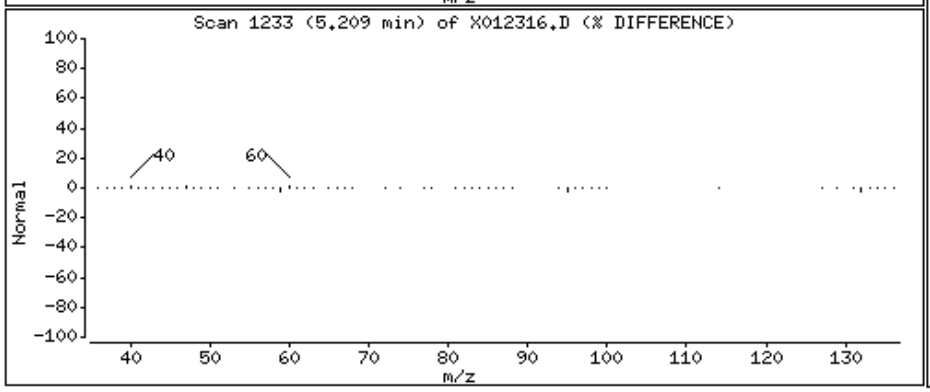
Column phase: DB624 Column diameter: 0.18

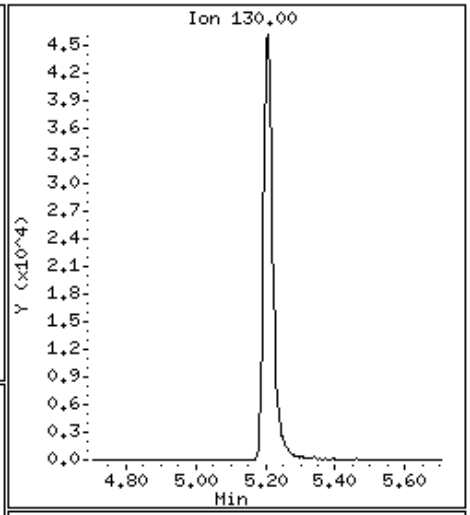
38 Trichloroethene Concentration: 31947.89 ug/l

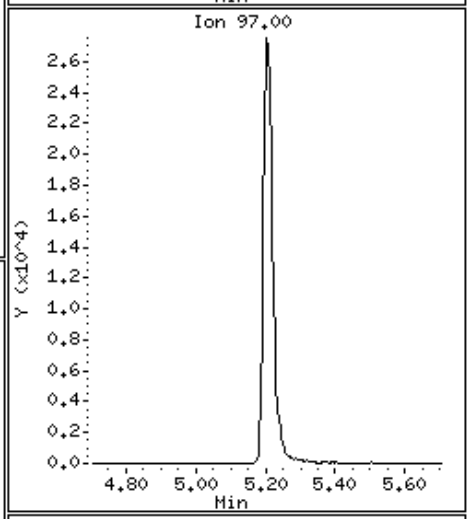


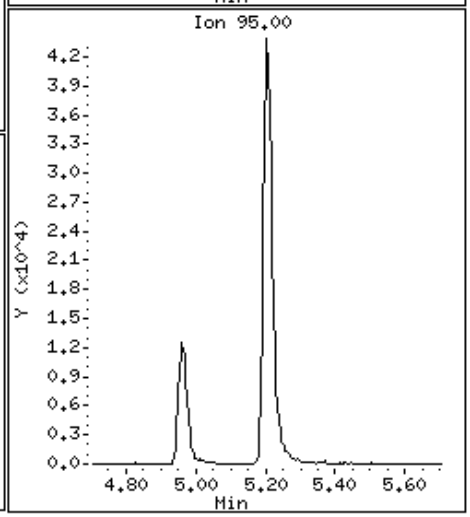












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NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012319.D Page 1
Report Date: 13-Feb-2023 13:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012319.D
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Inj Date : 23-JAN-2023 17:35
Operator : PC Inst ID: voa6.i
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Misc Info : V6;WATER;0;2000;
Comment   :
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Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 19 QC Sample: MS
Dil Factor: 2000.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	2000.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.174	(1.000)	572145	50.0000	
135 1,4-Dioxane	88	5.594	5.595	(1.339)	19678	376.252	752504.42(a)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	76560	19.4971	38994.22
25 Methacrylonitrile	41	3.818	3.821	(0.914)	73684	18.1879	36375.75
12 Isobutyl Alcohol	43	4.672	4.669	(1.118)	263019	408.708	817416.84
13 Acetonitrile	39	2.194	2.195	(0.525)	116203	223.157	446313.43
14 Allyl Chloride	41	2.194	2.195	(0.525)	201709	20.3386	40677.25
4 Propionitrile	54	3.649	3.645	(0.873)	114510	196.148	392296.28(a)
72 trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	35093	22.0781	44156.12
194 Acetaldehyde	44	1.208	1.209	(0.289)	64309	174.813	349625.11
23 Chloroprene	53	1.767	1.767	(0.423)	40810	20.9780	41956.08(M)
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	77145	19.7747	39549.41
49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	69282	18.1180	36235.92
131 Methyl Acrylate	55	3.686	3.683	(0.882)	81422	20.9615	41923.00
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	28279	37.8507	75701.39
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	204550	22.7374	45474.72
156 Diisopropyl ether	45	2.997	2.997	(0.717)	296925	20.0058	40011.59
182 Epichlorohydrin	57	6.097	6.089	(1.229)	30475	85.2516	170503.29
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	444419	22.7305	45460.91
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	65637	16.6665	33333.01

3 Chloromethane	50	1.074	1.074 (0.257)	90297	18.8836	37767.16
5 Vinyl Chloride	62	1.141	1.141 (0.273)	100207	20.0494	40098.78

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012319.D Page 2
Report Date: 13-Feb-2023 13:14

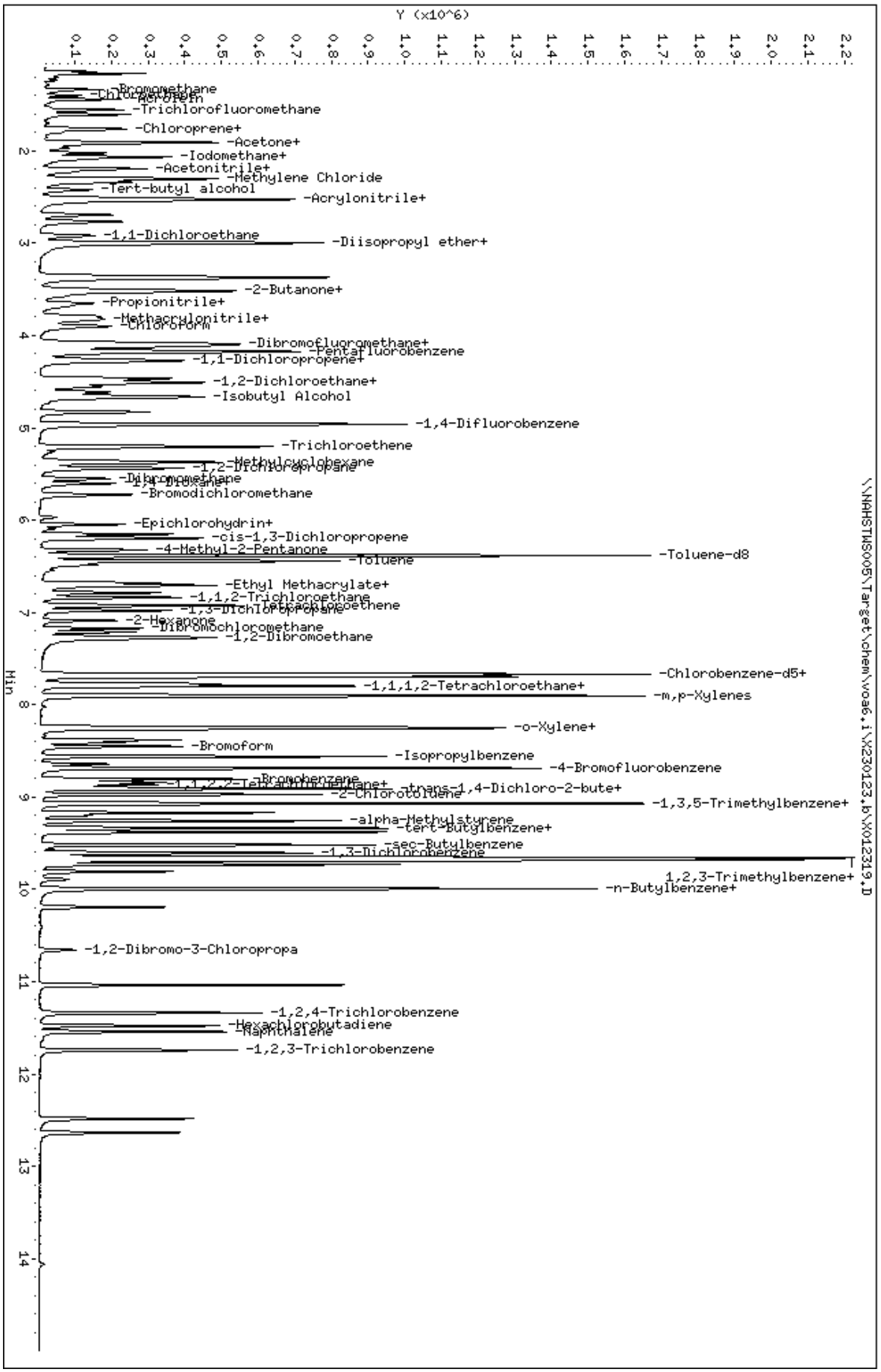
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
6	Bromomethane	94	1.336	1.336	(0.320)	74355	20.7394	41478.80
7	Chloroethane	64	1.400	1.400	(0.335)	62386	17.9334	35866.71
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	156621	22.3930	44786.06
9	Acrolein	56	1.441	1.441	(0.345)	16572	43.9789	87957.74
10	Acetone	43	1.969	1.966	(0.472)	46208	28.7586	57517.29
11	1,1-Dichloroethene	96	1.909	1.910	(0.457)	87951	20.2544	40508.70
15	Iodomethane	142	2.022	2.022	(0.484)	177384	34.1444	68288.83
16	Acrylonitrile	53	2.532	2.528	(0.606)	60936	41.3758	82751.64
17	Methylene Chloride	84	2.299	2.299	(0.550)	105250	17.6705	35340.99
18	Methyl tert-butyl ether	73	2.528	2.528	(0.605)	278889	19.6217	39243.33
19	Carbon Disulfide	76	2.067	2.063	(0.495)	455560	40.0982	80196.45
20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	96146	19.7838	39567.50
21	Vinyl Acetate	43	2.997	2.993	(0.717)	513297	41.1396	82279.21
22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	163726	19.1961	38392.26
24	2-Butanone	43	3.574	3.570	(0.856)	56230	35.0473	70094.58
26	2,2-Dichloropropane	77	3.506	3.503	(0.839)	151283	20.8905	41781.07
27	cis-1,2-Dichloroethene	96	3.521	3.522	(0.843)	224356	37.9341	75868.25
28	Chloroform	83	3.900	3.900	(0.934)	182671	19.1087	38217.49
29	Bromochloromethane	128	3.791	3.788	(0.908)	55046	16.9987	33997.45
$ 30	Dibromofluoromethane	113	4.095	4.091	(0.980)	249655	45.4285	45.42
31	1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	161925	21.3491	42698.12
32	1,1-Dichloropropene	75	4.275	4.279	(0.862)	139719	24.2355	48470.98
33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	135487	20.3639	40727.74
34	Carbon Tetrachloride	117	4.260	4.260	(0.859)	141010	22.9051	45810.25
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	284877	49.1339	49.13
* 36	1,4-Difluorobenzene	114	4.961	4.965	(1.000)	812038	50.0000	
37	Benzene	78	4.507	4.507	(0.909)	398874	20.5698	41139.52
38	Trichloroethene	130	5.205	5.205	(1.049)	207539	37.7344	75468.86
39	Bromodichloromethane	83	5.722	5.722	(1.153)	142364	19.5625	39124.93
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	89631	43.2919	86583.82
42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	102178	19.8089	39617.76
44	Dibromomethane	93	5.553	5.550	(1.119)	64689	18.4508	36901.61
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	169801	43.1455	86291.06
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	166576	19.4900	38980.07
* 47	Chlorobenzene-d5	117	7.667	7.668	(1.000)	736303	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	950471	52.2393	52.23
50	Toluene	91	6.445	6.445	(0.841)	447073	21.9674	43934.86
51	trans-1,3-Dichloropropene	75	6.681	6.678	(1.347)	141397	19.9354	39870.75
52	2-Hexanone	43	7.086	7.083	(0.924)	110533	41.2804	82560.86
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	80290	19.6650	39329.99
54	1,3-Dichloropropane	76	6.978	6.982	(0.910)	163567	20.3532	40706.35
55	Dibromochloromethane	129	7.173	7.173	(0.935)	117155	19.8812	39762.35
56	Tetrachloroethene	164	6.925	6.925	(0.903)	102802	24.4137	48827.41
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	104483	20.4675	40935.03
58	1-Chlorohexane	55	7.694	7.694	(1.551)	107505	27.3946	54789.15
59	Chlorobenzene	112	7.694	7.690	(1.003)	302433	20.9509	41901.84
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	110372	20.5455	41091.06
61	Ethylbenzene	106	7.799	7.799	(1.017)	157018	23.0916	46183.25
62	m,p-Xylenes	106	7.900	7.904	(1.030)	400967	45.7427	91485.43
63	o-Xylene	106	8.241	8.241	(1.075)	189310	21.8813	43762.64
64	Styrene	104	8.260	8.256	(1.077)	324455	22.3743	44748.55
66	Bromoform	173	8.410	8.410	(1.097)	79781	19.5427	39085.31

67	Isopropylbenzene	105	8.560	8.560 (1.116)	501706	25.3824	50764.87
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	130859	20.2215	40442.91

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	349282	51.3567	51.35
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	406015	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	94305	20.8742	41748.44(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	589956	26.2323	52464.66
	74 Bromobenzene	156	8.803	8.803	(0.911)	141904	21.3028	42605.58
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	425537	25.6135	51226.90
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	351850	23.8414	47682.82
	77 4-Chlorotoluene	91	9.069	9.070	(0.939)	408650	24.2899	48579.78
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	363550	26.7326	53465.25
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	423323	24.2160	48432.07
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	509718	28.1696	56339.22
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	448587	27.6658	55331.59
	83 1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	254034	22.9766	45953.13
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	271956	22.5412	45082.36
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	393951	26.0904	52180.89
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	250424	21.9927	43985.33
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	21338	20.6785	41357.00
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	169611	23.6029	47205.84
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	79588	25.1135	50227.09
	92 Naphthalene	128	11.543	11.540	(1.195)	364640	22.3022	44604.40
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	151858	22.0649	44129.77
M	94 1,2-Dichloroethylene (total)	96				320502	57.7179	115435.76
M	95 Xylenes (total)	106				590277	67.6240	135248.08
	141 Cyclohexane	56	4.117	4.118	(0.986)	157089	27.8127	55625.47
	138 Freon TF	101	1.913	1.910	(0.458)	99996	23.8091	47618.25
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	241600	24.3058	48611.59
	146 Methyl Acetate	43	2.228	2.224	(0.533)	49910	19.3861	38772.24
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	156265	394.438	788875.01
	149 Isopropyl Alcohol	45	2.089	2.086	(0.500)	84316	407.521	815041.04

QC Flag Legend

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



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Sample Info: HS23010982-05MS;HS23010982-05MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 23-JAN-2023 17:35
InstruID : voa6.i
LabSampID : HS23010982-05MS

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

Reason Code:

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13-Feb-2023
13:14
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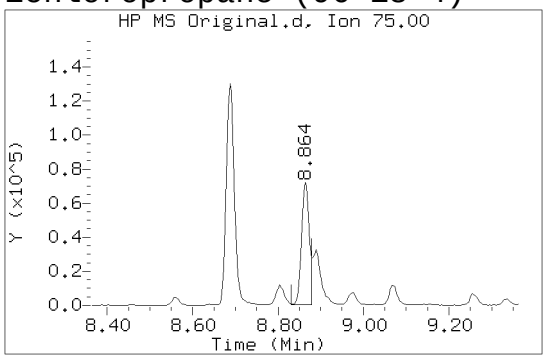

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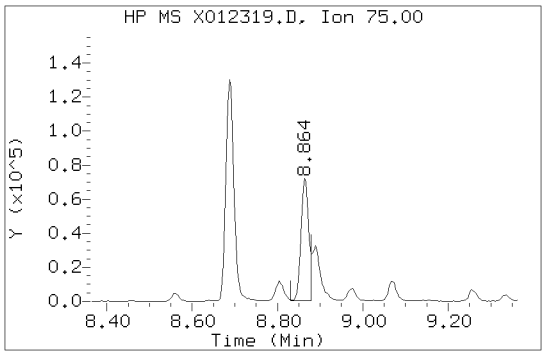

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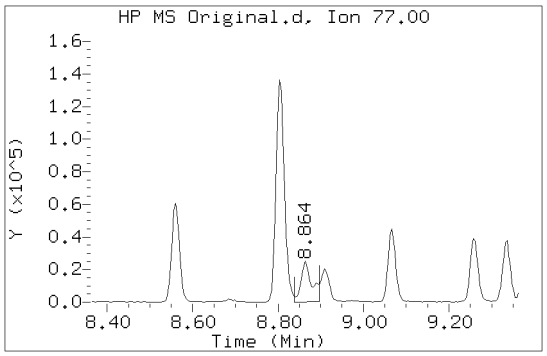

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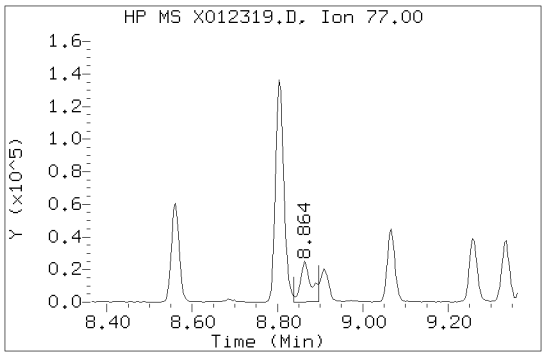

Chloroprene (126-99-8)

Reason Code:

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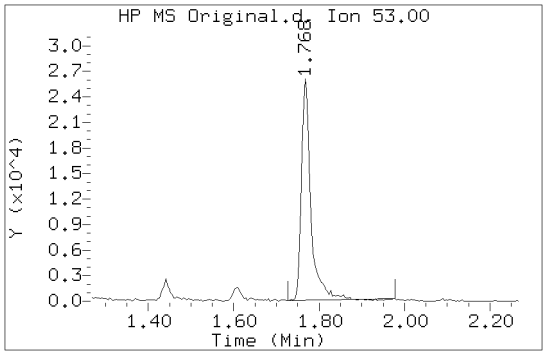

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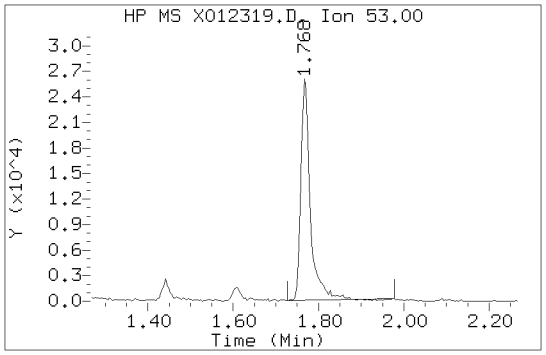

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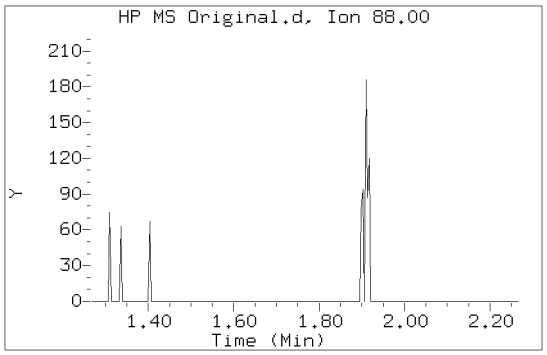

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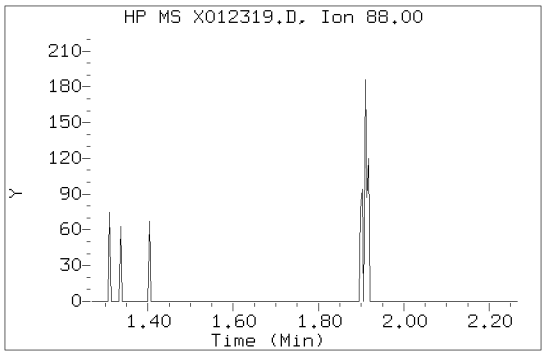

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Report Date: 13-Feb-2023 13:14

ALS Laboratory Group

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Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 19 QC Sample: MSD
Dil Factor: 2000.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	2000.000	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	4.174	4.174	(1.000)	575104	50.0000	
135 1,4-Dioxane	88	5.598	5.595	(1.341)	19254	366.251	732501.95(a)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	69912	17.7125	35424.99
25 Methacrylonitrile	41	3.818	3.821	(0.915)	74284	18.2416	36483.27
12 Isobutyl Alcohol	43	4.669	4.669	(1.119)	272992	422.023	844045.96
13 Acetonitrile	39	2.195	2.195	(0.526)	115774	221.189	442377.85
14 Allyl Chloride	41	2.195	2.195	(0.526)	198051	19.8670	39734.07
4 Propionitrile	54	3.645	3.645	(0.873)	109487	186.579	373158.25(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	33576	20.5446	41089.17
194 Acetaldehyde	44	1.209	1.209	(0.290)	71001	194.301	388602.86
23 Chloroprene	53	1.767	1.767	(0.423)	40330	20.6246	41249.27(M)
40 Methyl Methacrylate	41	5.606	5.602	(1.343)	77168	19.6788	39357.65
49 Ethyl Methacrylate	69	6.708	6.708	(1.351)	71692	18.3434	36686.71
131 Methyl Acrylate	55	3.687	3.683	(0.883)	90496	23.1777	46355.33
142 Tetrahydrofuran	42	3.837	3.840	(0.919)	27885	37.0711	74142.23
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	197541	21.2453	42490.52
156 Diisopropyl ether	45	2.997	2.997	(0.718)	300872	20.1674	40334.86
182 Epichlorohydrin	57	6.093	6.089	(1.227)	28295	77.6729	155345.87
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	433419	21.4480	42896.08
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	60099	15.2168	30433.54

3 Chloromethane	50	1.074	1.074 (0.257)	89907	18.7262	37452.32
5 Vinyl Chloride	62	1.141	1.141 (0.274)	93797	18.6703	37340.64

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012320.D Page 2
Report Date: 13-Feb-2023 13:14

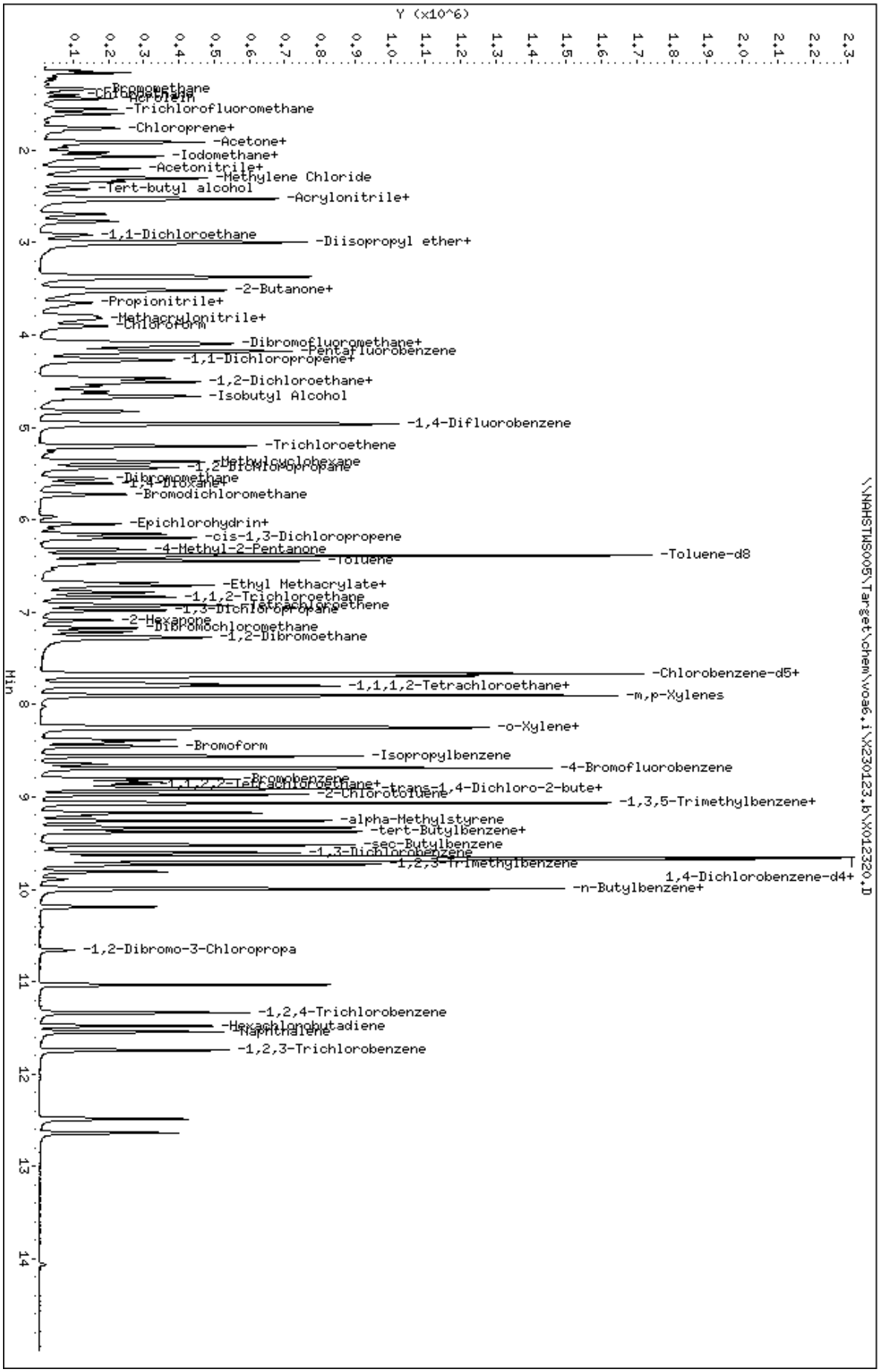
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	70673	19.7070	39413.95
	7 Chloroethane	64	1.400	1.400	(0.335)	60500	17.3017	34603.46
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	150806	21.4507	42901.38
	9 Acrolein	56	1.441	1.441	(0.345)	15545	41.2297	82459.30
	10 Acetone	43	1.966	1.966	(0.471)	48664	30.1330	60265.99
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	85995	19.7020	39404.01
	15 Iodomethane	142	2.022	2.022	(0.485)	193491	36.7346	73469.29
	16 Acrylonitrile	53	2.532	2.528	(0.607)	61511	41.5514	83102.71
	17 Methylene Chloride	84	2.300	2.299	(0.551)	103756	17.3300	34660.08
	18 Methyl tert-butyl ether	73	2.532	2.528	(0.607)	277800	19.4445	38888.97
	19 Carbon Disulfide	76	2.067	2.063	(0.495)	439165	38.4563	76912.51
	20 trans-1,2-Dichloroethene	96	2.525	2.524	(0.605)	92175	18.8691	37738.12
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	511501	40.7847	81569.46
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	160163	18.6818	37363.54
	24 2-Butanone	43	3.578	3.570	(0.857)	55189	34.2927	68585.49
	26 2,2-Dichloropropane	77	3.507	3.503	(0.840)	147306	20.2367	40473.39
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	220414	37.0759	74151.73
	28 Chloroform	83	3.900	3.900	(0.934)	178971	18.6254	37250.74
	29 Bromochloromethane	128	3.792	3.788	(0.908)	55486	17.0464	34092.89
$	30 Dibromofluoromethane	113	4.095	4.091	(0.981)	255427	46.2427	46.24
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	158670	20.8123	41624.53
	32 1,1-Dichloropropene	75	4.275	4.279	(0.861)	136164	23.1088	46217.64
	33 1,2-Dichloroethane	62	4.553	4.552	(0.917)	141819	20.8553	41710.59
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	138378	21.9922	43984.43
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	290334	49.8136	49.81
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	829960	50.0000	
	37 Benzene	78	4.508	4.507	(0.908)	391301	19.7435	39486.96
	38 Trichloroethene	130	5.205	5.205	(1.048)	199386	35.4692	70938.48
	39 Bromodichloromethane	83	5.722	5.722	(1.152)	140946	18.9494	37898.79
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	89730	42.4039	84807.71
	42 1,2-Dichloropropane	63	5.437	5.433	(1.095)	99705	18.9121	37824.10
	44 Dibromomethane	93	5.550	5.550	(1.118)	67563	18.8544	37708.82
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	163604	40.4313	80862.56
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	169562	19.4110	38822.00
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	757057	50.0000	
$	48 Toluene-d8	98	6.386	6.385	(0.833)	974178	52.0744	52.07
	50 Toluene	91	6.446	6.445	(0.841)	437643	20.9146	41829.13
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	142445	19.6495	39298.91
	52 2-Hexanone	43	7.087	7.083	(0.924)	111063	40.3413	80682.56
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	81998	19.5328	39065.52
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	166817	20.1885	40377.07
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	118302	19.5255	39050.92
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	97193	22.4489	44897.80
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	104116	19.8365	39672.99
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	104471	26.0466	52093.18
	59 Chlorobenzene	112	7.690	7.690	(1.003)	298553	20.1152	40230.31
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	112938	20.4469	40893.71
	61 Ethylbenzene	106	7.799	7.799	(1.017)	152337	21.7891	43578.11
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	391458	43.4337	86867.33
	63 o-Xylene	106	8.241	8.241	(1.075)	184460	20.7362	41472.49
	64 Styrene	104	8.260	8.256	(1.077)	318597	21.3680	42736.03
	66 Bromoform	173	8.410	8.410	(1.097)	80098	19.0824	38164.87

67	Isopropylbenzene	105	8.560	8.560 (1.116)	485620	23.8951	47790.16
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	128429	19.2015	38403.08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	358728	51.2997	51.29
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419641	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	94751	20.2919	40583.88(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	571592	24.5905	49181.02
	74 Bromobenzene	156	8.807	8.803	(0.912)	142314	20.6706	41341.25
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	412455	24.0199	48039.83
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	342017	22.4226	44845.23
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	400400	23.0267	46053.46
	78 tert-Butylbenzene	119	9.332	9.336	(0.966)	355321	25.2792	50558.30
	79 1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	414102	22.9194	45838.74
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	501838	26.8336	53667.15
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	436045	26.0191	52038.16
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	249608	21.8432	43686.37
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	266236	21.3505	42701.09
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	390547	25.0977	50195.30
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	245978	20.9008	41801.55
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	21074	19.7636	39527.23
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.173)	170534	22.9608	45921.59
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	79251	24.1985	48397.09
	92 Naphthalene	128	11.544	11.540	(1.195)	360997	21.3625	42724.91
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	154685	21.7458	43491.69
M	94 1,2-Dichloroethylene (total)	96				312589	55.9449	111889.86
M	95 Xylenes (total)	106				575918	64.1699	128339.83
	141 Cyclohexane	56	4.121	4.118	(0.987)	150557	26.5777	53155.48
	138 Freon TF	101	1.910	1.910	(0.458)	92446	21.8982	43796.42
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	240245	23.6476	47295.13
	146 Methyl Acetate	43	2.228	2.224	(0.534)	50239	19.4135	38827.02
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	156491	392.976	785951.17
	149 Isopropyl Alcohol	45	2.090	2.086	(0.501)	83586	401.914	803827.28

QC Flag Legend

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



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Client ID: HS230109B2-05MSD
Sample Info: HS230109B2-05MSD;HS230109B2-05MSD;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\X230123.b\X012320.D
Inj Date : 23-JAN-2023 17:56
InstruID : voa6.i
LabSampID : HS23010982-05MSD

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

Reason Code:

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13-Feb-2023
13:14
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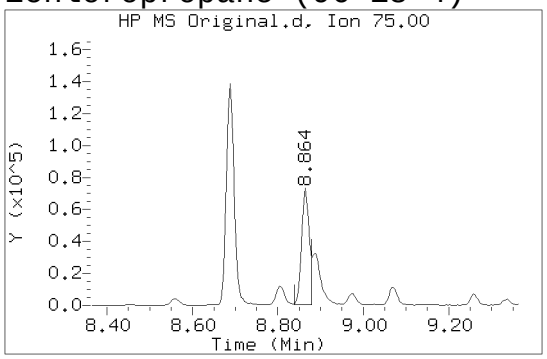

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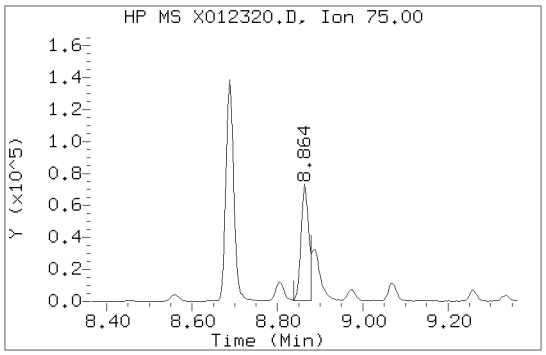

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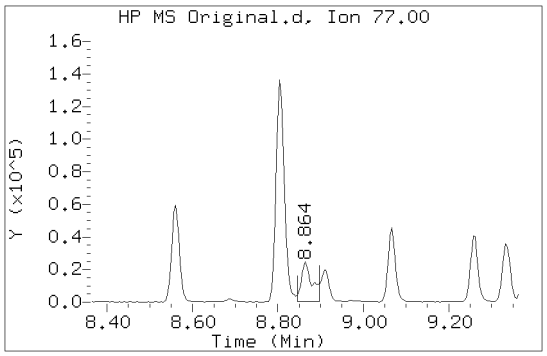

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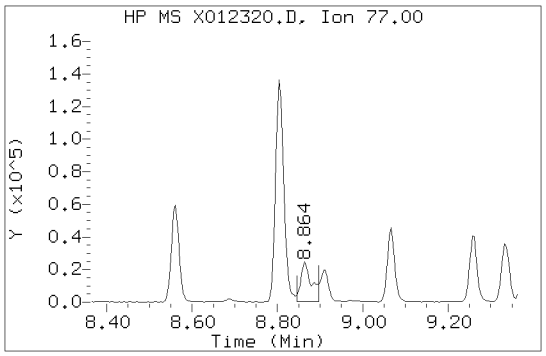

Chloroprene (126-99-8)

Reason Code:

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13-Feb-2023
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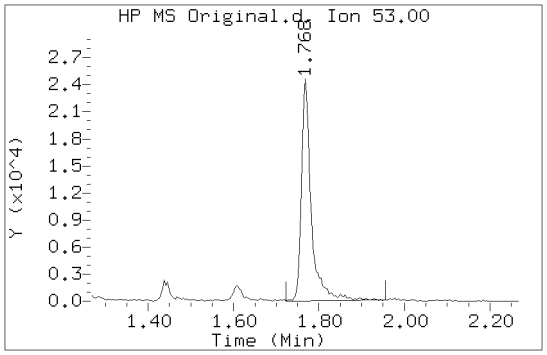

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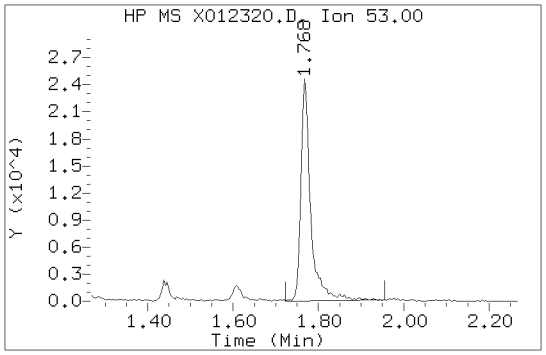

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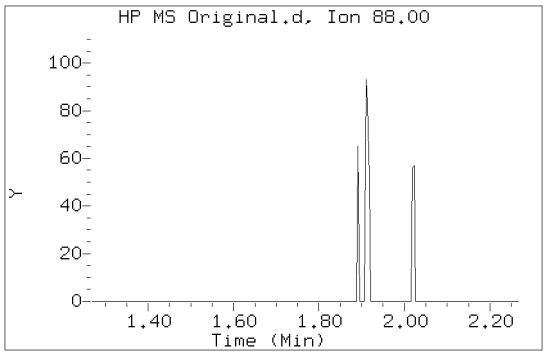

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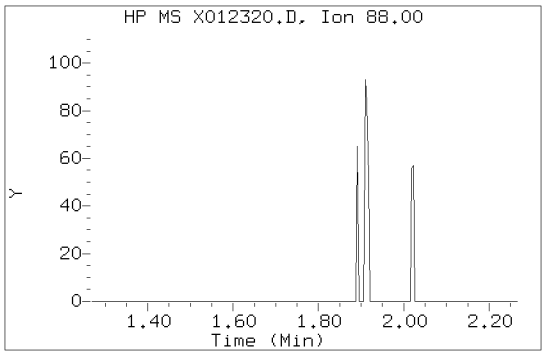

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Report Date: 13-Feb-2023 13:15

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012327.D
Lab Smp Id: HS23010982-03 Client Smp ID: HS23010982-03
Inj Date : 23-JAN-2023 20:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-03;HS23010982-03;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

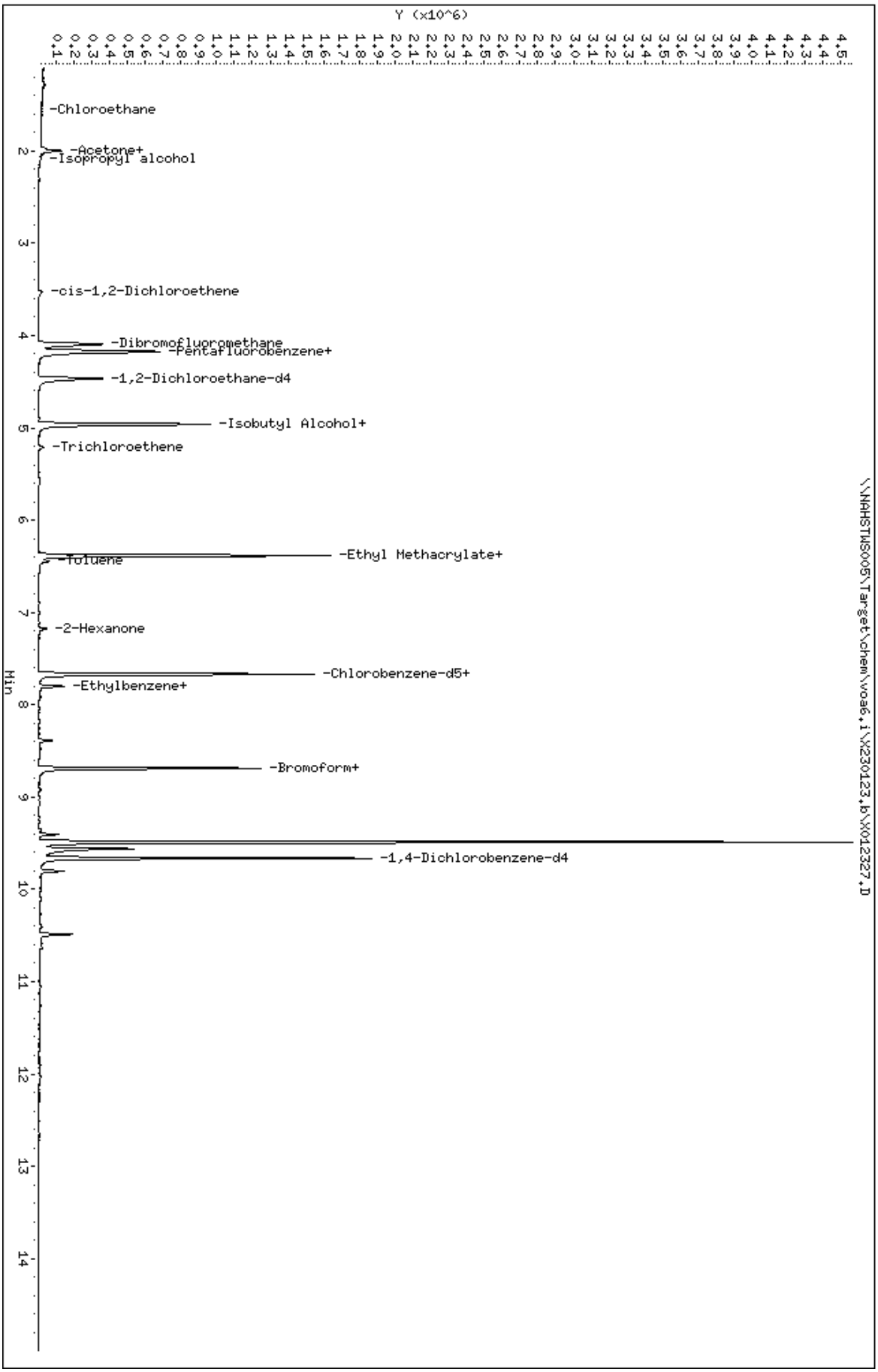
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.174	(1.000)	557769	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.091	(0.980)	253128	47.2543	47.25
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	279536	49.4536	49.45
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	800910	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	724710	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	942787	52.6458	52.64
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	334711	50.0032	50.00
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408373	50.0000	
27 cis-1,2-Dichloroethene	96	3.536	3.522	(0.847)	10781	1.86983	1.86(a)
38 Trichloroethene	130	5.208	5.205	(1.049)	8472	1.56177	1.56(a)

QC Flag Legend

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



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Sample Info: HS230109B2-03;HS230109B2-03;;;
Purge Volume: 5.0
Column phase: DB624

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

Page 1

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012327.D Page 2

Date : 23-JAN-2023 20:23

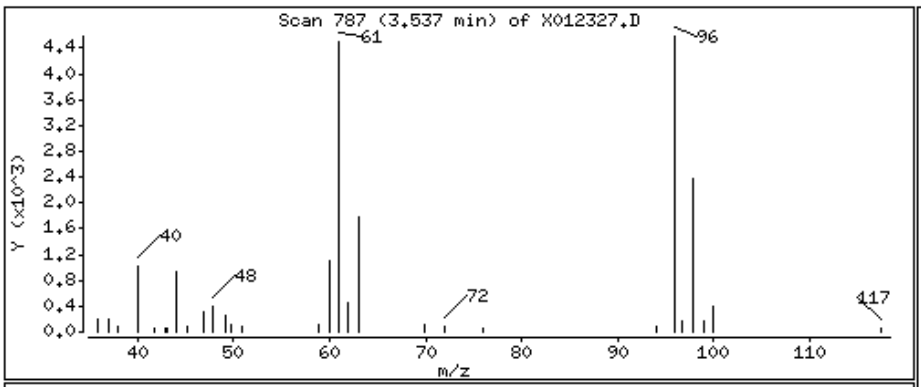
Client ID: HS23010982-03 Instrument: voa6.i

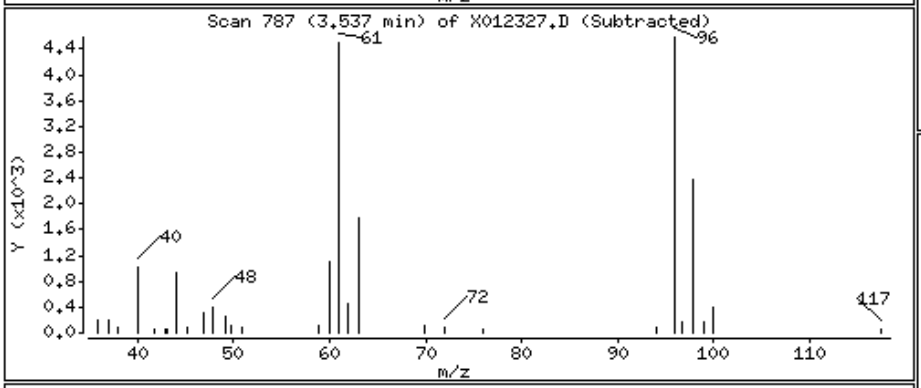
Sample Info: HS23010982-03;HS23010982-03;;;

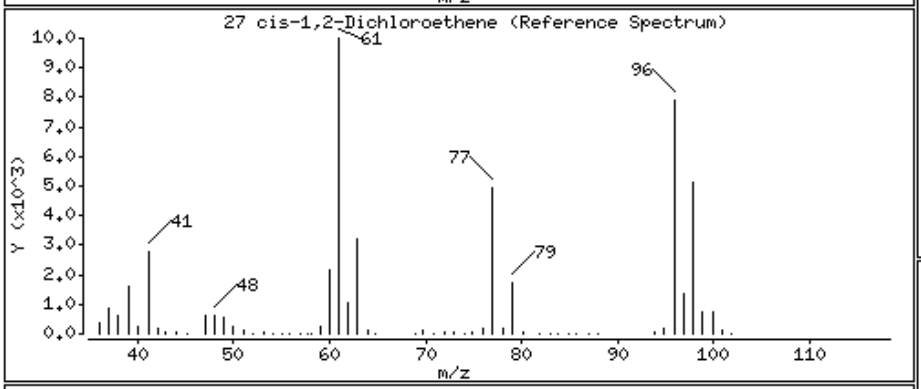
Purge Volume: 5.0 Operator: PC

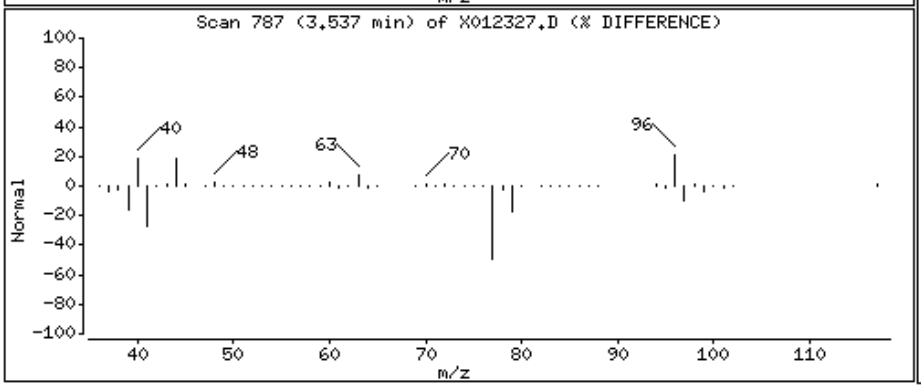
Column phase: DB624 Column diameter: 0.18

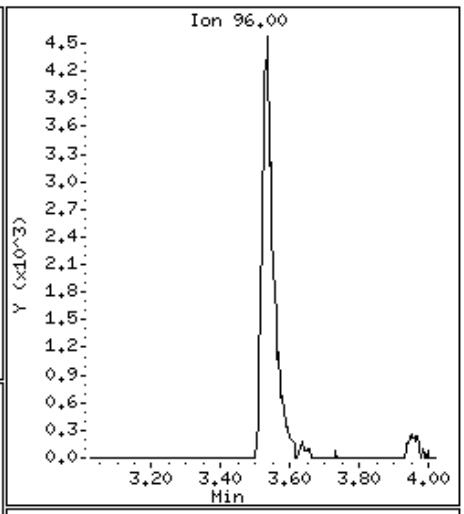
27 cis-1,2-Dichloroethene Concentration: 1.86 ug/l

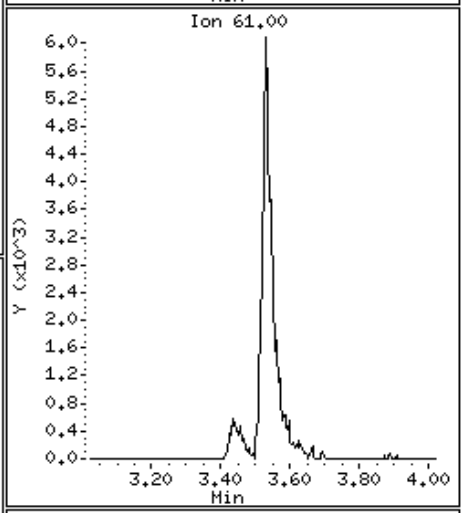


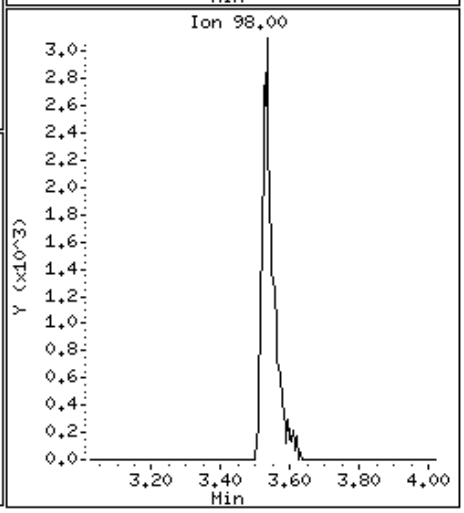












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012327.D Page 3

Date : 23-JAN-2023 20:23

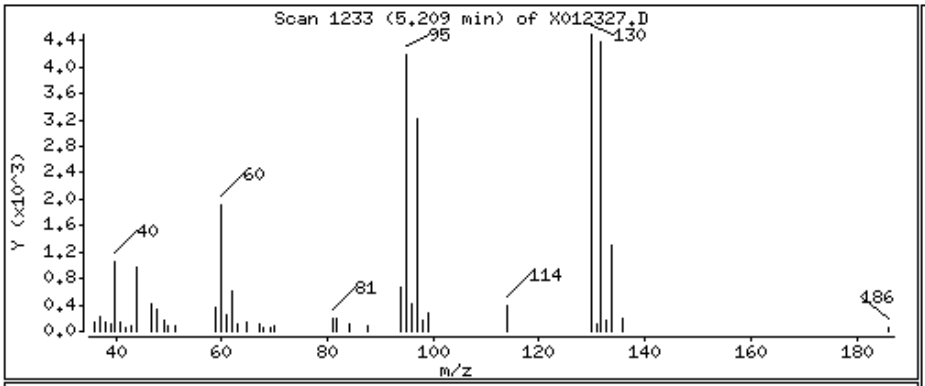
Client ID: HS23010982-03 Instrument: voa6.i

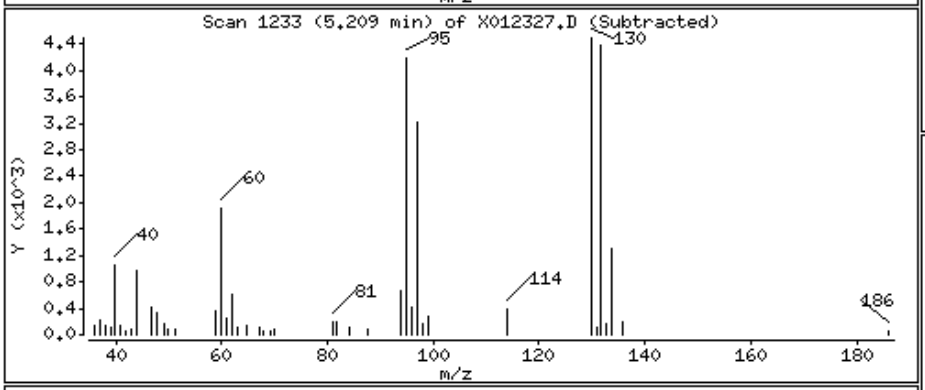
Sample Info: HS23010982-03;HS23010982-03;;;

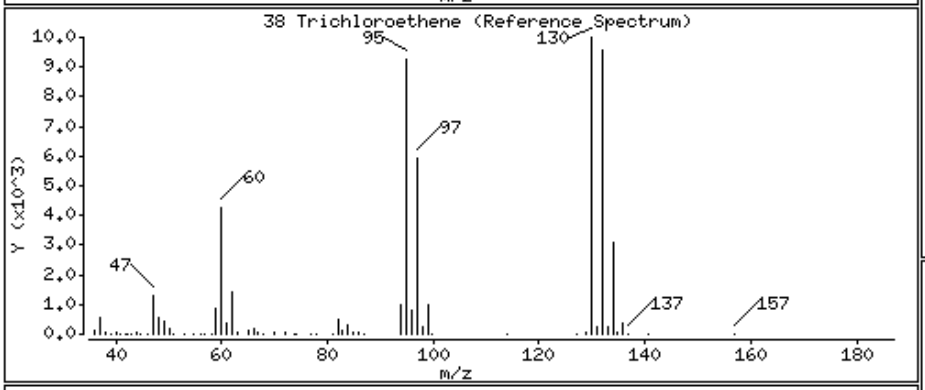
Purge Volume: 5.0 Operator: PC

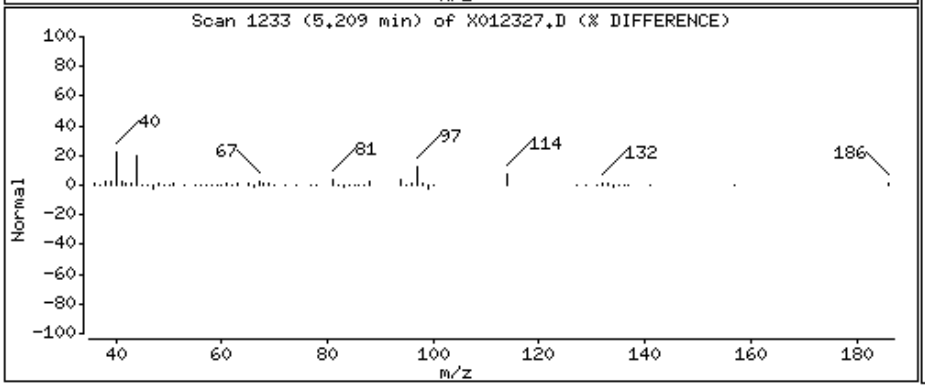
Column phase: DB624 Column diameter: 0.18

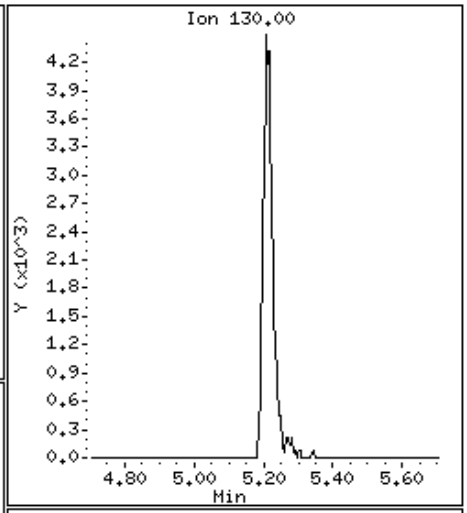
38 Trichloroethene Concentration: 1.56 ug/l

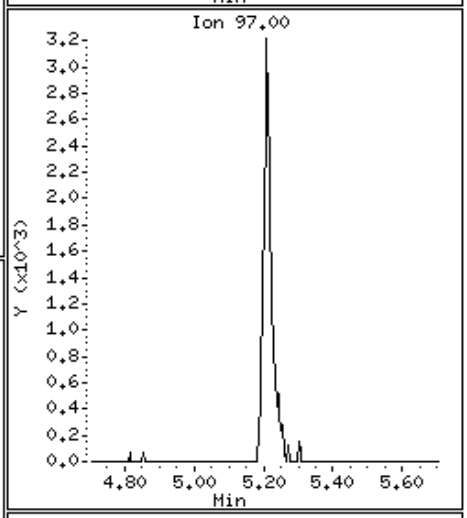


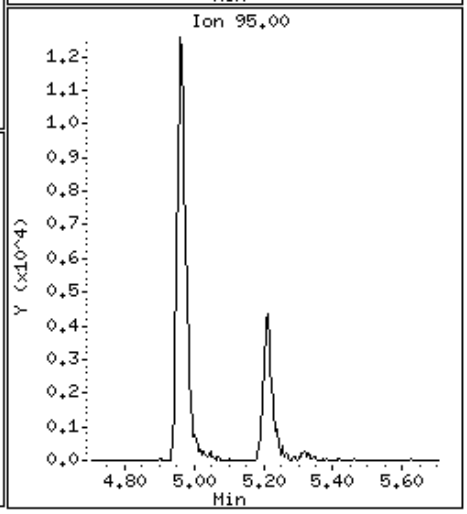












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Inj Date : 23-JAN-2023 20:23
InstruID : voa6.i
LabSampID : HS23010982-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012328.D Page 1
Report Date: 13-Feb-2023 13:15

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012328.D
Lab Smp Id: HS23010982-04 Client Smp ID: HS23010982-04
Inj Date : 23-JAN-2023 20:44
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-04;HS23010982-04;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

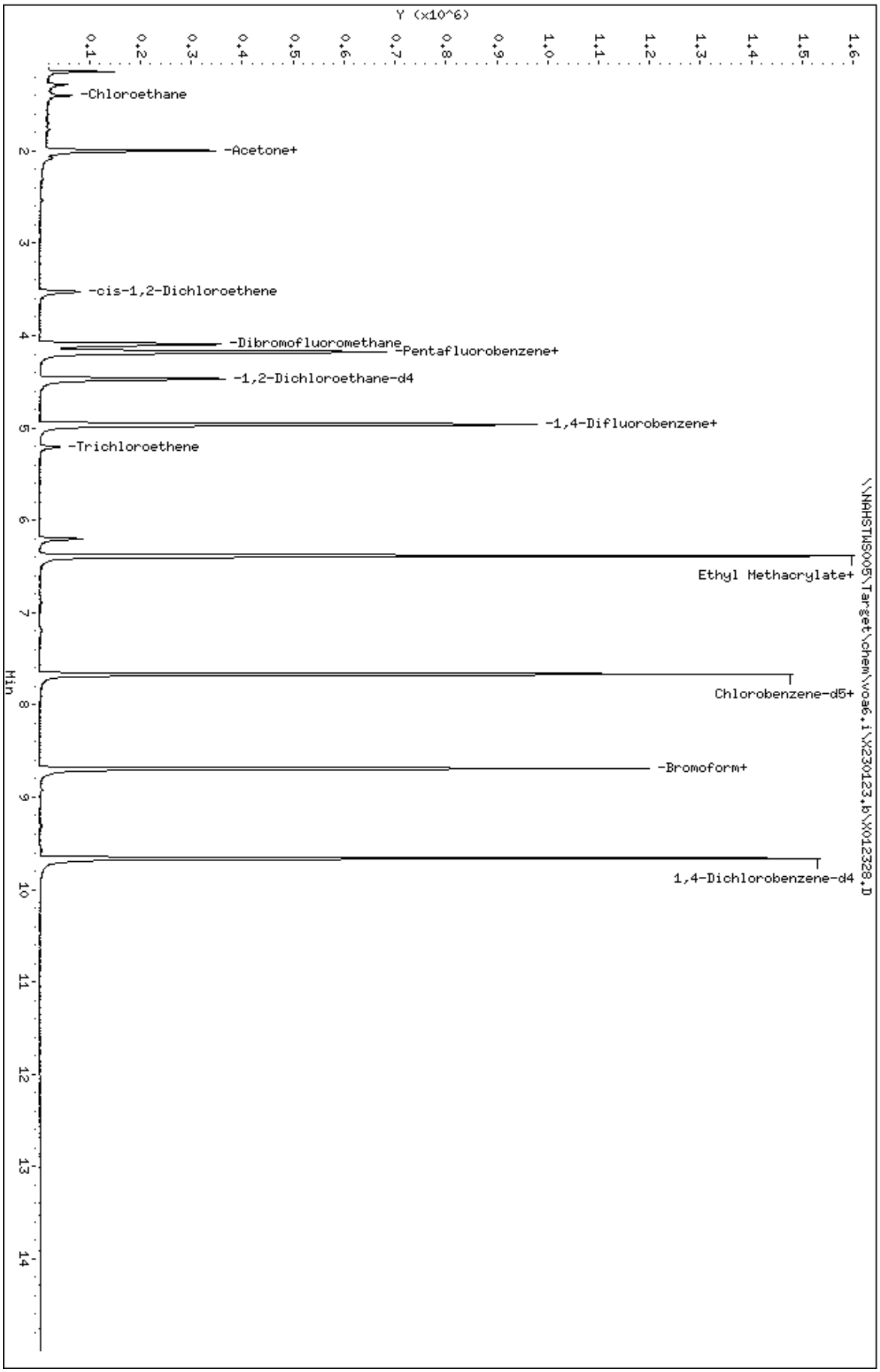
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.174	(1.000)	557323	50.0000	
$ 30 Dibromofluoromethane	113	4.091	4.091	(0.980)	250375	46.7761	46.77
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	280235	49.6160	49.61
* 36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	805585	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	722615	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	933465	52.2764	52.27
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	327320	49.0420	49.04
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	373590	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.274)	85407	17.5427	17.54
27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.845)	45210	7.84741	7.84
38 Trichloroethene	130	5.212	5.205	(1.051)	13822	2.53323	2.53(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012328.D
Date : 23-JAN-2023 20:44
Client ID: HS23010982-04
Sample Info: HS23010982-04;HS23010982-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012328.D Page 2

Date : 23-JAN-2023 20:44

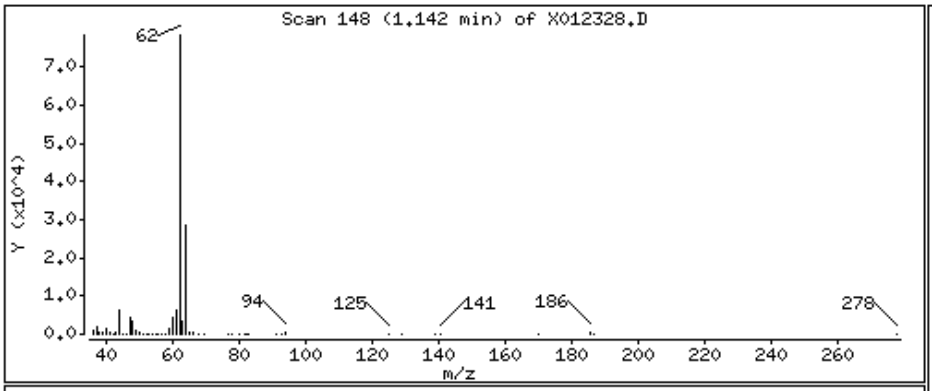
Client ID: HS23010982-04 Instrument: voa6.i

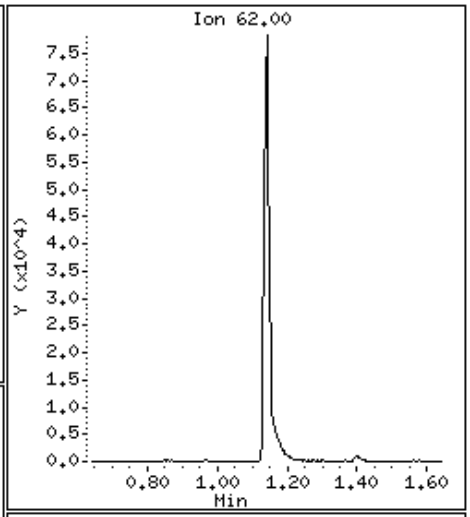
Sample Info: HS23010982-04;HS23010982-04;;;

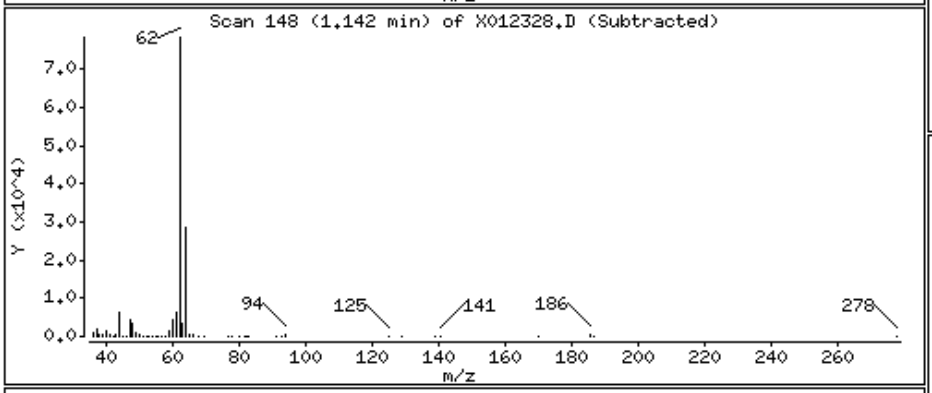
Purge Volume: 5.0 Operator: PC

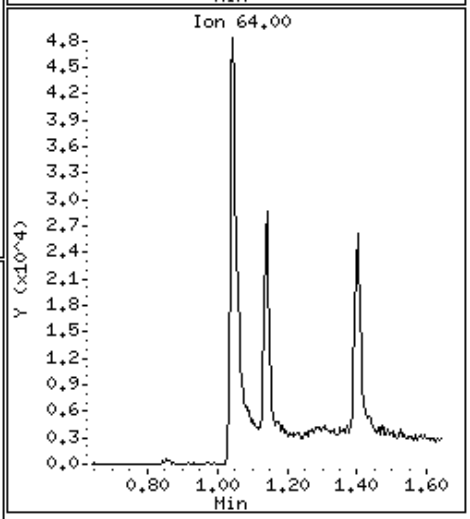
Column phase: DB624 Column diameter: 0.18

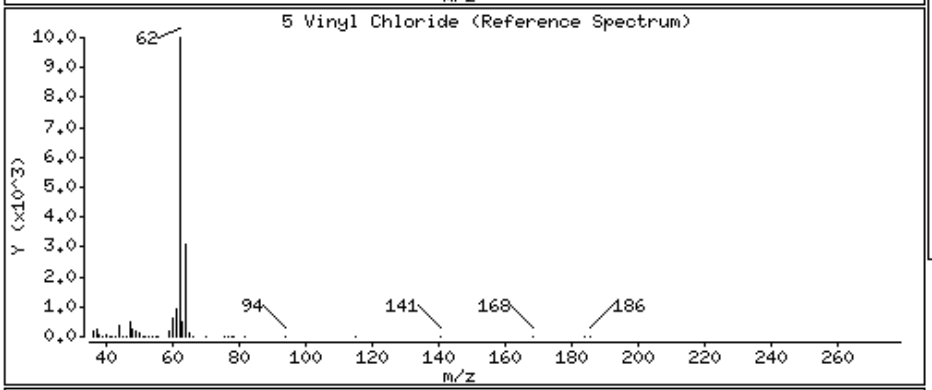
5 Vinyl Chloride Concentration: 17.54 ug/l

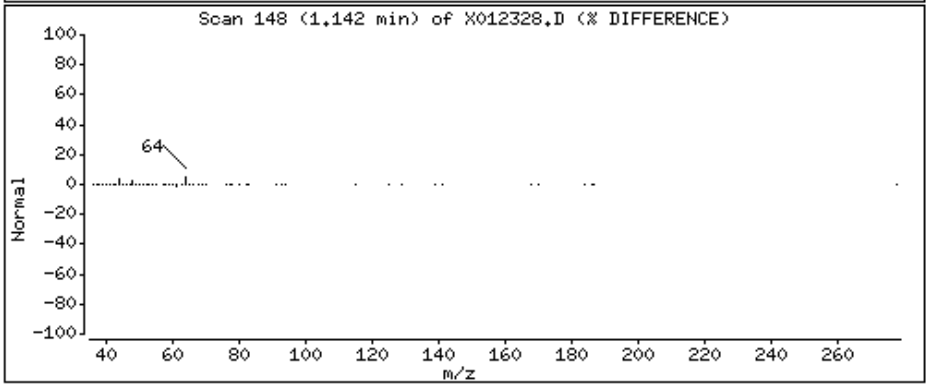












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012328.D Page 3

Date : 23-JAN-2023 20:44

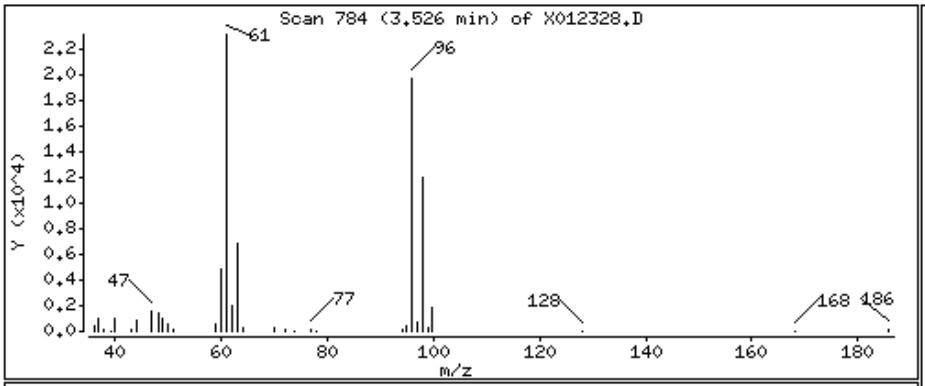
Client ID: HS23010982-04 Instrument: voa6.i

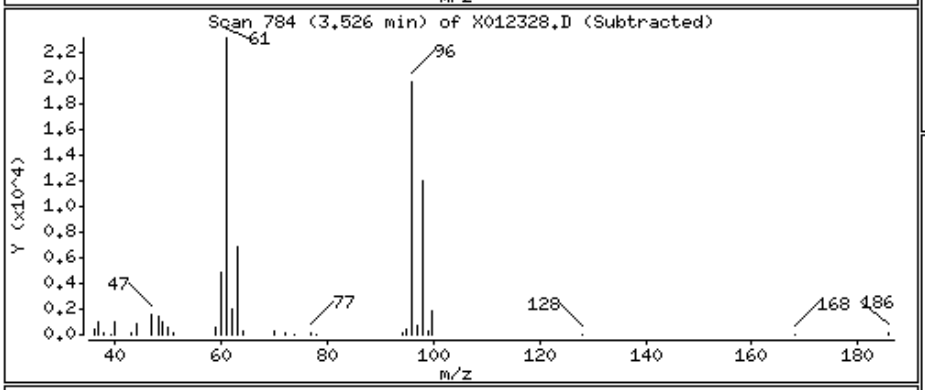
Sample Info: HS23010982-04;HS23010982-04;;;

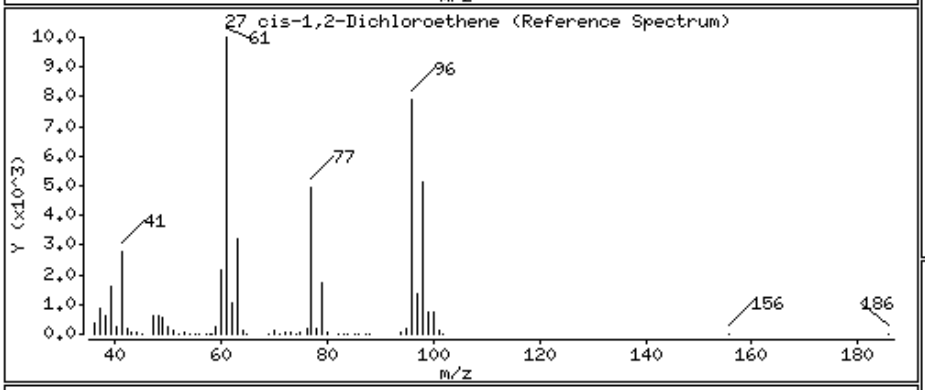
Purge Volume: 5.0 Operator: PC

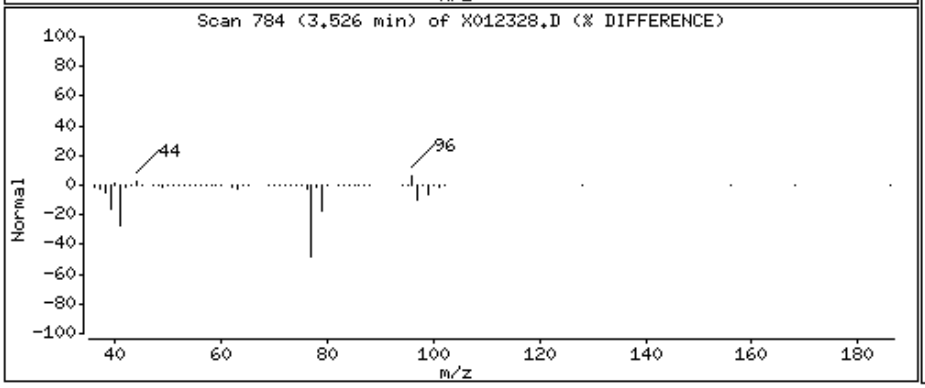
Column phase: DB624 Column diameter: 0.18

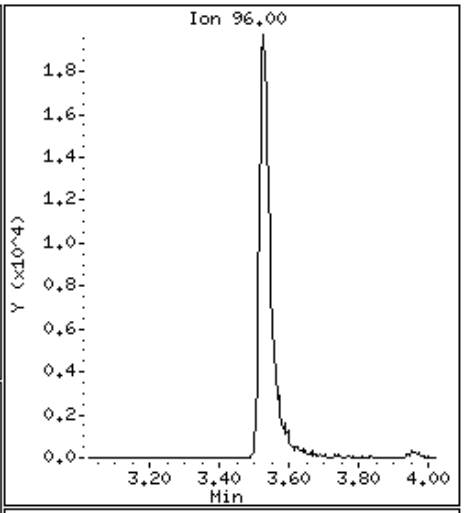
27 cis-1,2-Dichloroethene Concentration: 7.84 ug/l

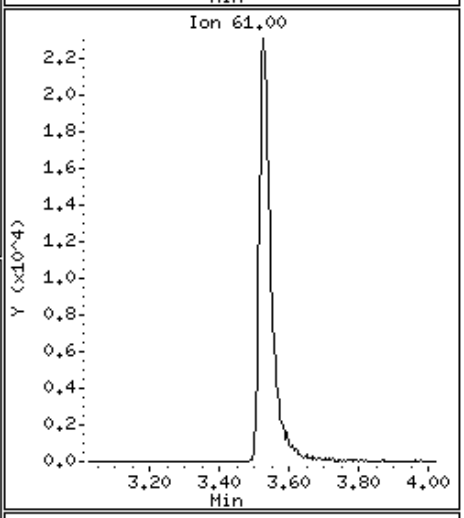


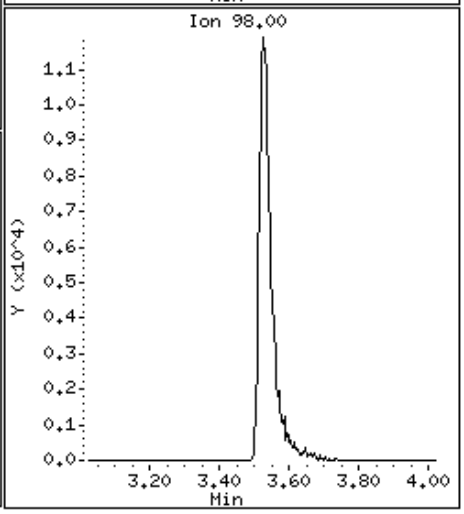












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012328.D

Date : 23-JAN-2023 20:44

Client ID: HS23010982-04

Instrument: voa6.i

Sample Info: HS23010982-04;HS23010982-04;;;

Purge Volume: 5.0

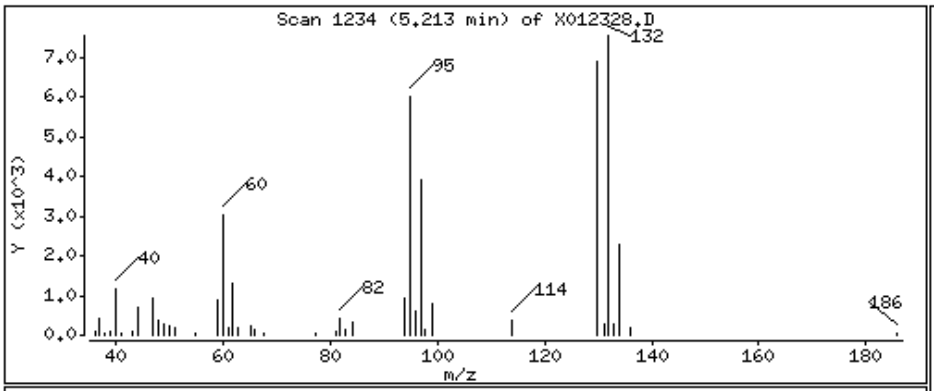
Operator: PC

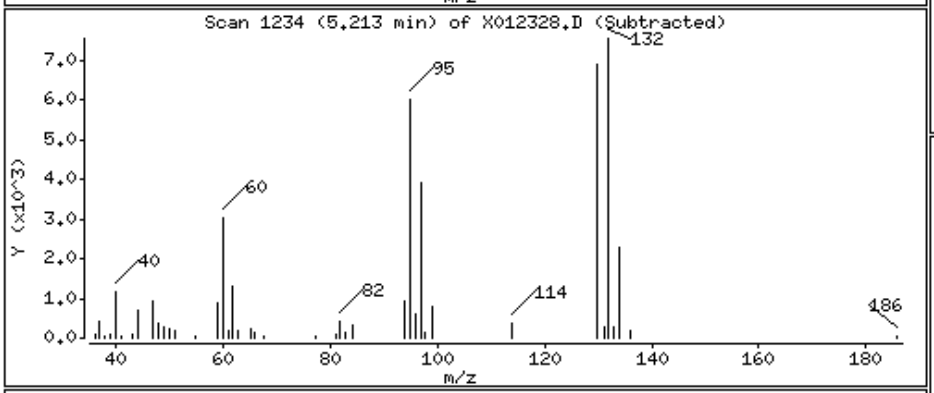
Column phase: DB624

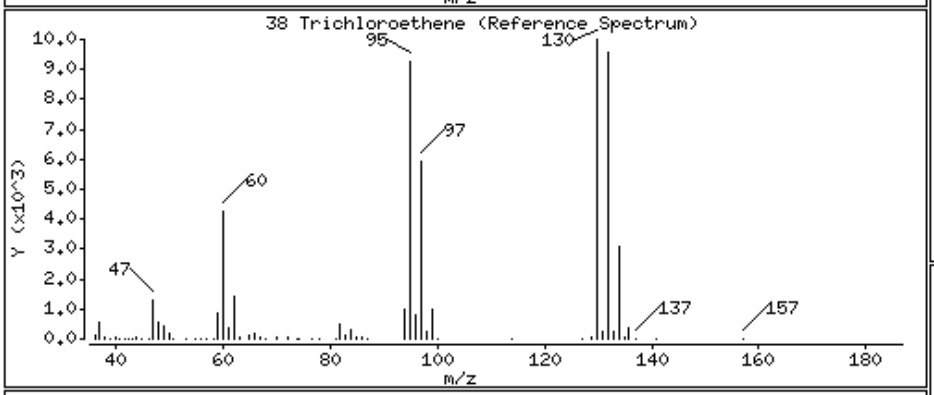
Column diameter: 0.18

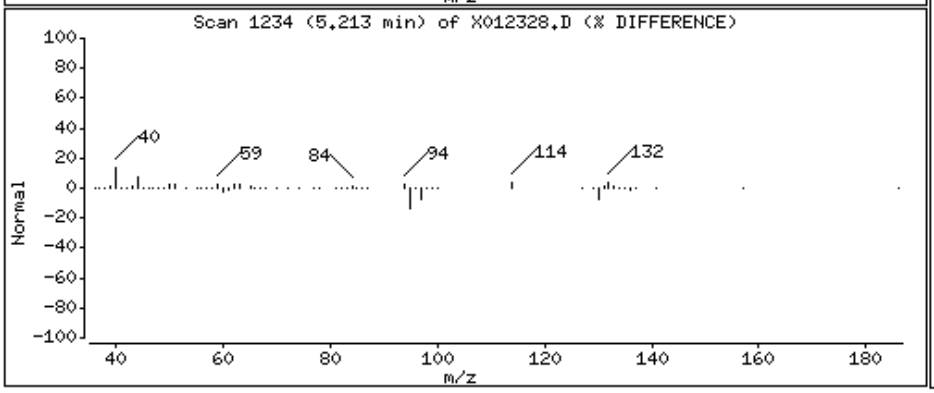
38 Trichloroethene

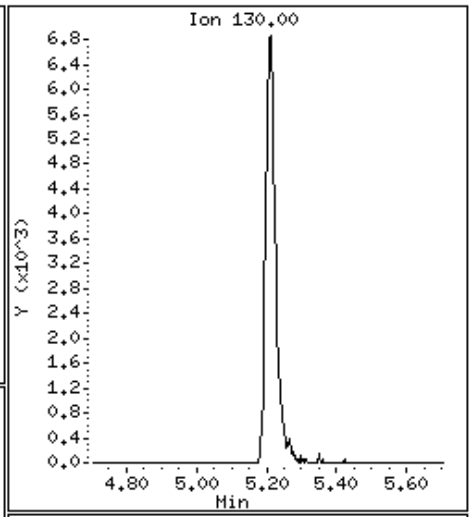
Concentration: 2.53 ug/l

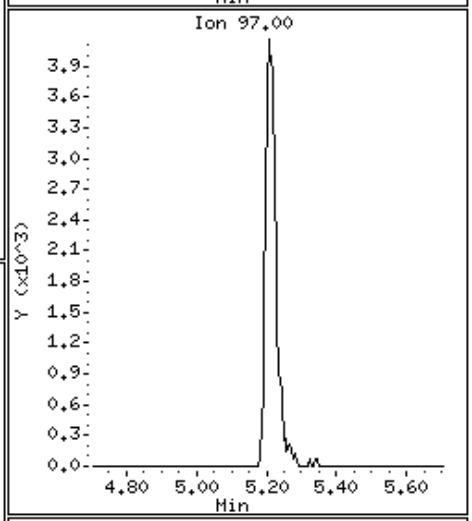


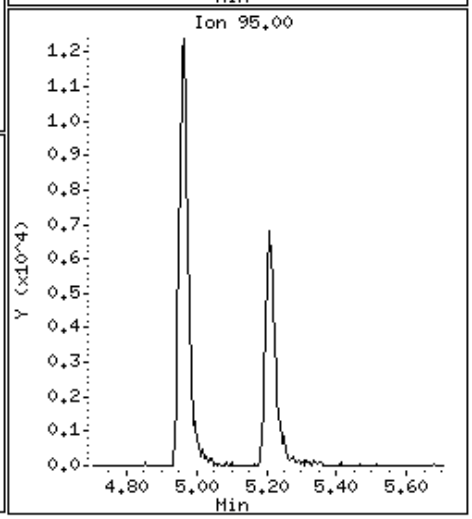












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Inj Date : 23-JAN-2023 20:44
InstruID : voa6.i
LabSampID : HS23010982-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012329.D Page 1
Report Date: 13-Feb-2023 13:15

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012329.D
Lab Smp Id: HS23010982-01 Client Smp ID: HS23010982-01
Inj Date : 23-JAN-2023 21:05
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-01;HS23010982-01;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 28
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

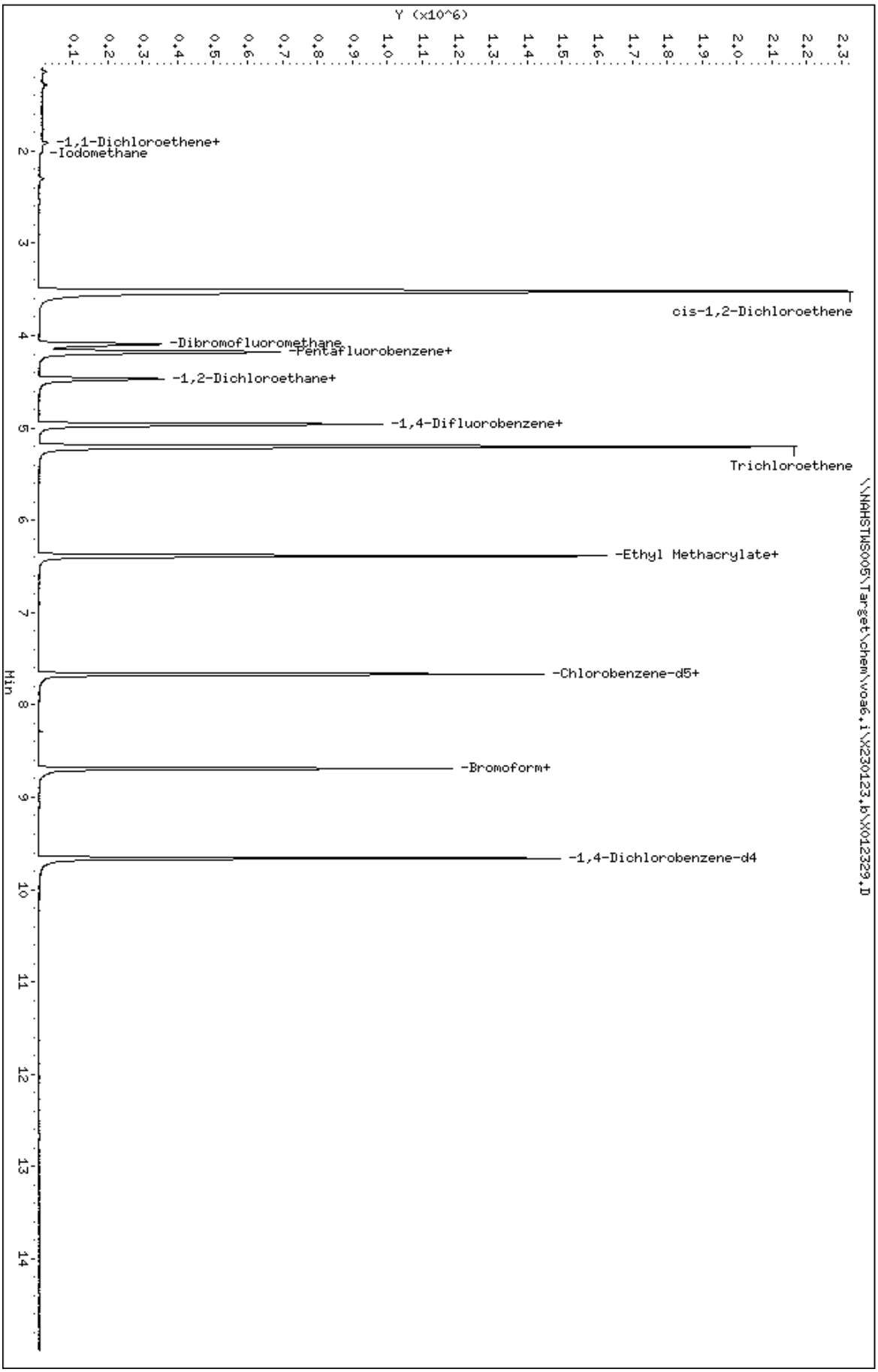
Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.174	(1.000)	560629	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.091	(0.981)	250747	46.5686	46.56
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	278696	49.0556	49.05
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	807860	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	720668	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	940528	52.8143	52.81
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	323806	48.6471	48.64
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	365845	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	8812	1.79932	179.93(a)
11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	2549	0.59907	59.90(a)
27 cis-1,2-Dichloroethene	96	3.521	3.522	(0.844)	1254360	216.444	21644.38(A)
33 1,2-Dichloroethane	62	4.560	4.552	(0.918)	3335	0.50385	50.38(a)
38 Trichloroethene	130	5.201	5.205	(1.048)	708728	129.526	12952.62

QC Flag Legend

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

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012329.D
Date : 23-JAN-2023 21:05
Client ID: HS23010982-01
Sample Info: HS23010982-01;HS23010982-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012329.D

Date : 23-JAN-2023 21:05

Client ID: HS23010982-01

Instrument: voa6.i

Sample Info: HS23010982-01;HS23010982-01;;;

Purge Volume: 5.0

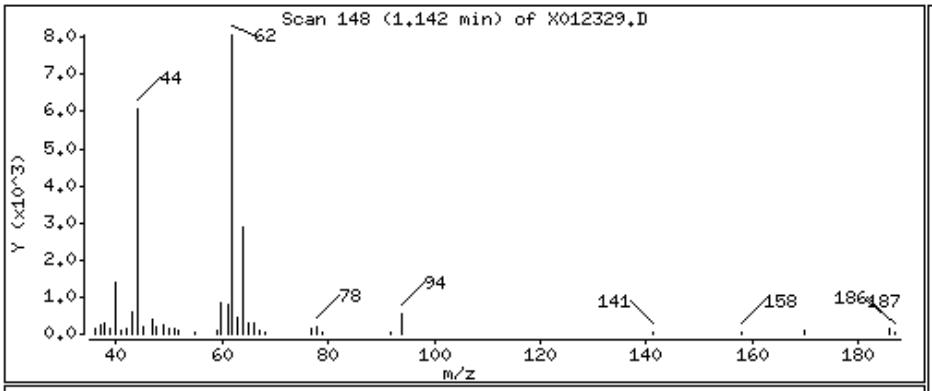
Operator: PC

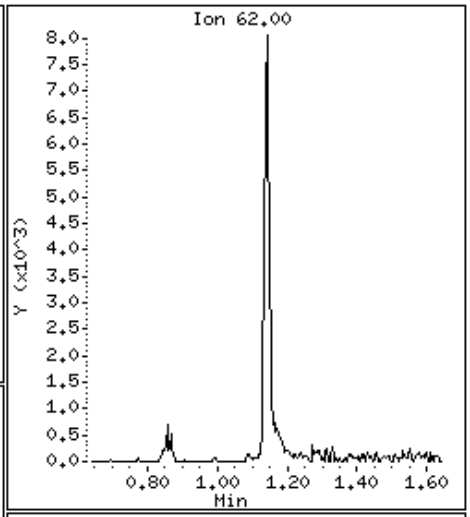
Column phase: DB624

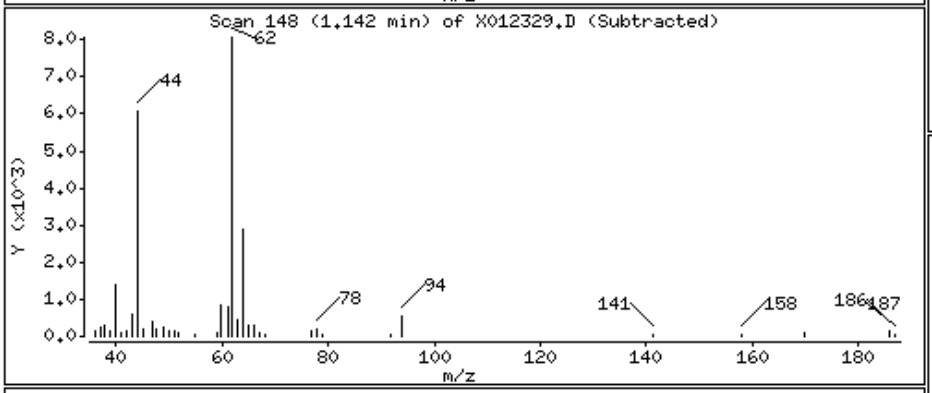
Column diameter: 0.18

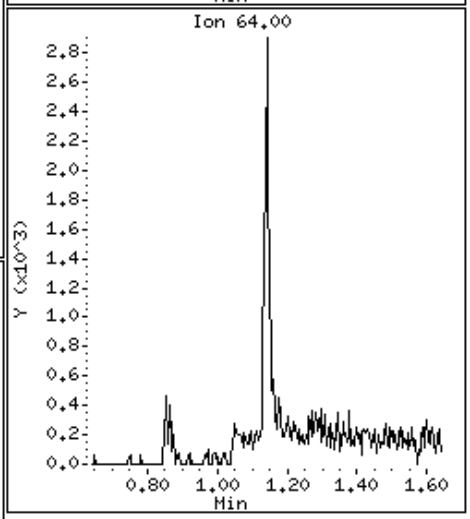
5 Vinyl Chloride

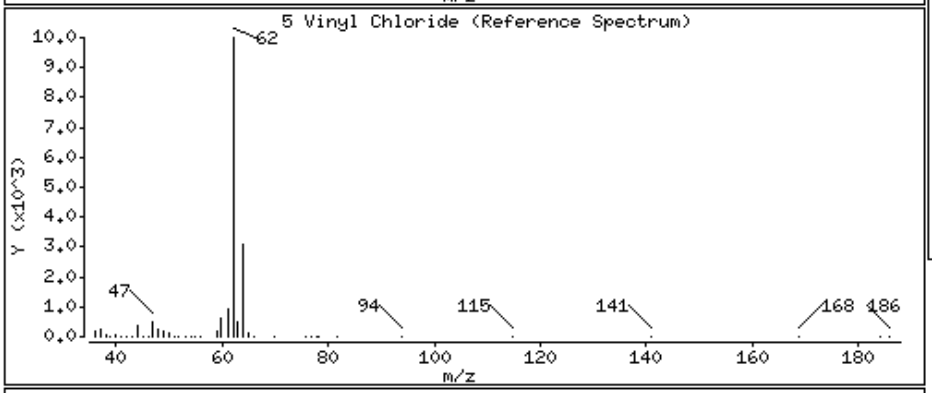
Concentration: 179.93 ug/l

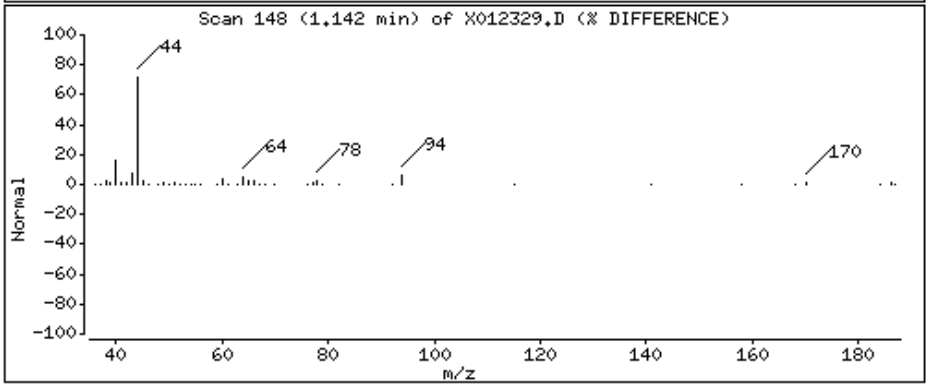












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012329.D Page 3

Date : 23-JAN-2023 21:05

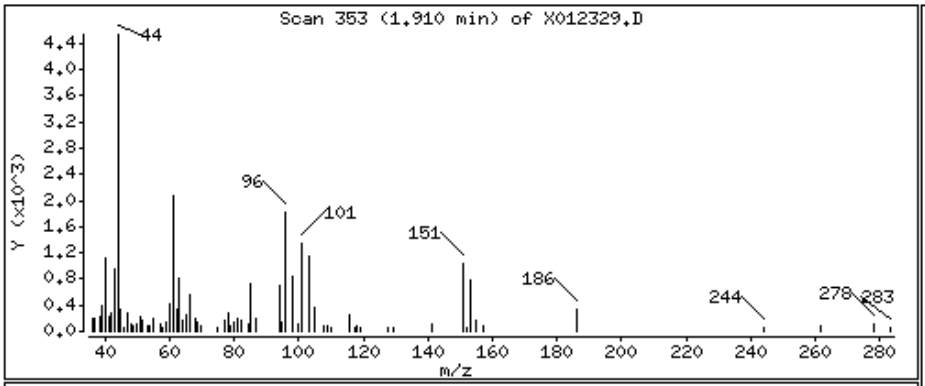
Client ID: HS23010982-01 Instrument: voa6.i

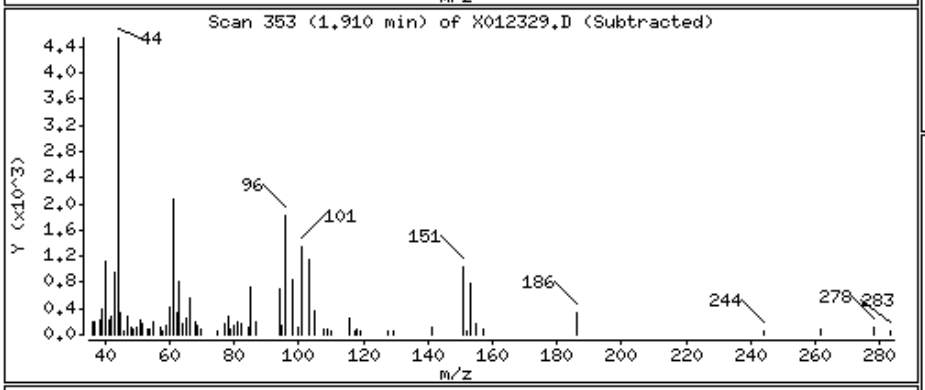
Sample Info: HS23010982-01;HS23010982-01;;;

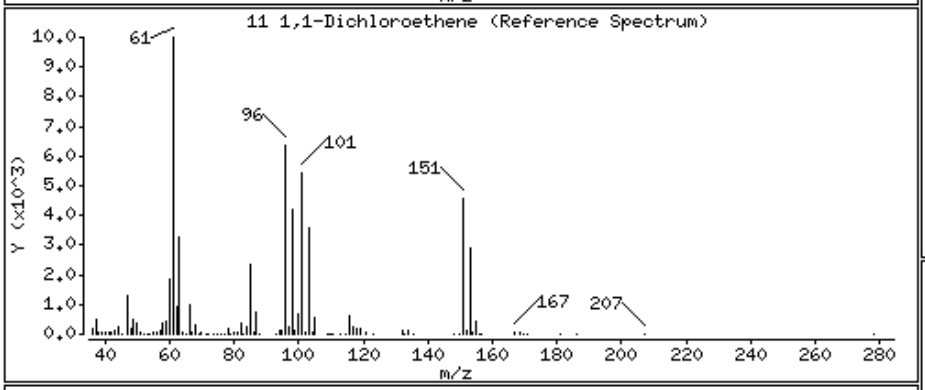
Purge Volume: 5.0 Operator: PC

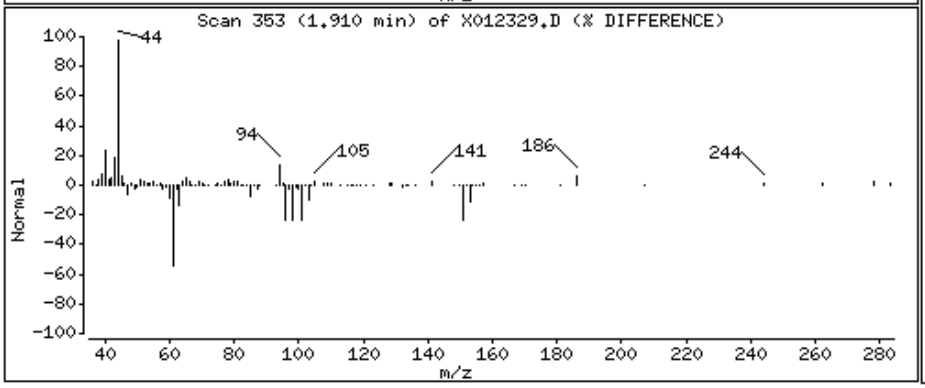
Column phase: DB624 Column diameter: 0.18

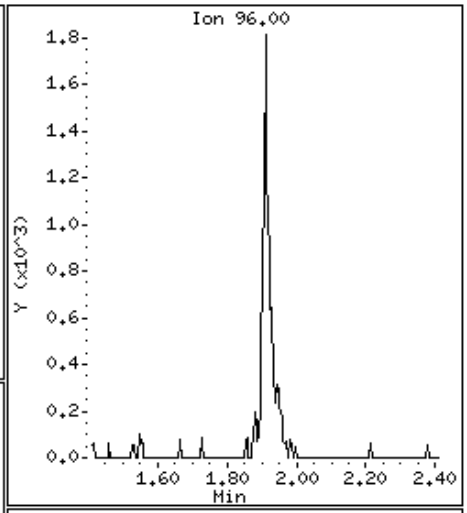
11 1,1-Dichloroethene Concentration: 59.90 ug/l

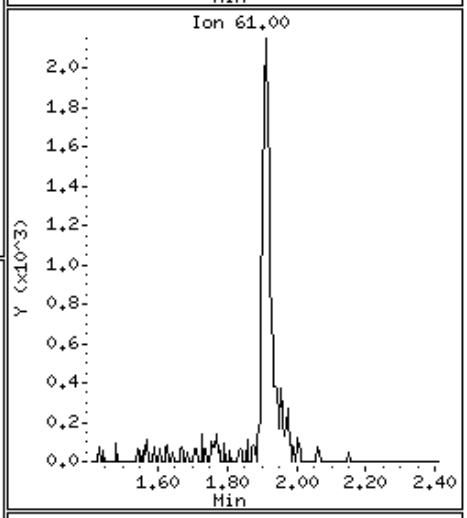


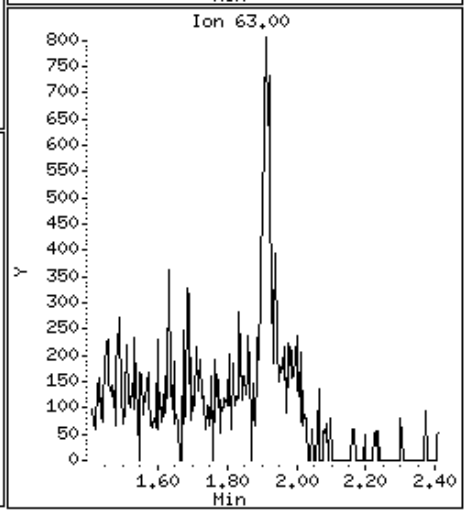












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Date : 23-JAN-2023 21:05

Client ID: HS23010982-01

Instrument: voa6.i

Sample Info: HS23010982-01;HS23010982-01;;;

Purge Volume: 5.0

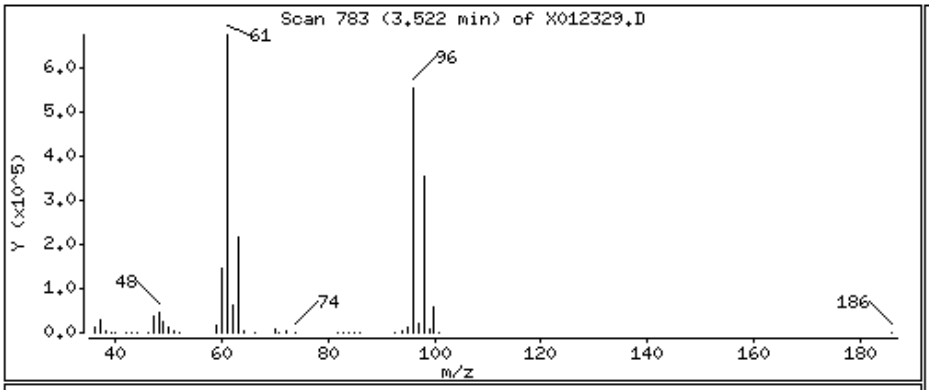
Operator: PC

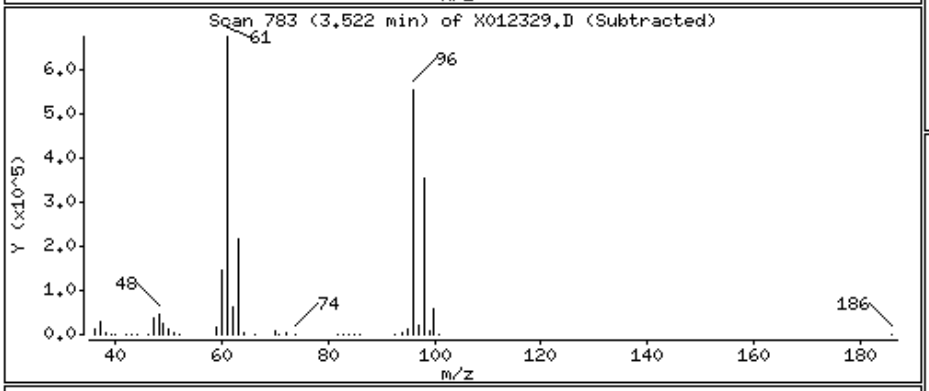
Column phase: DB624

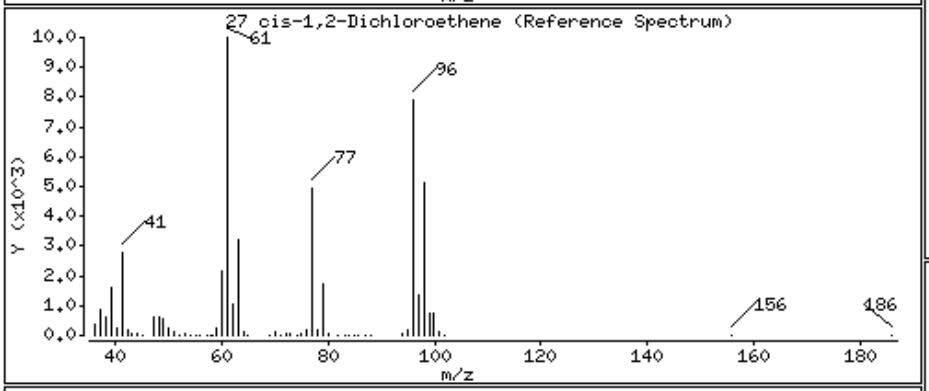
Column diameter: 0.18

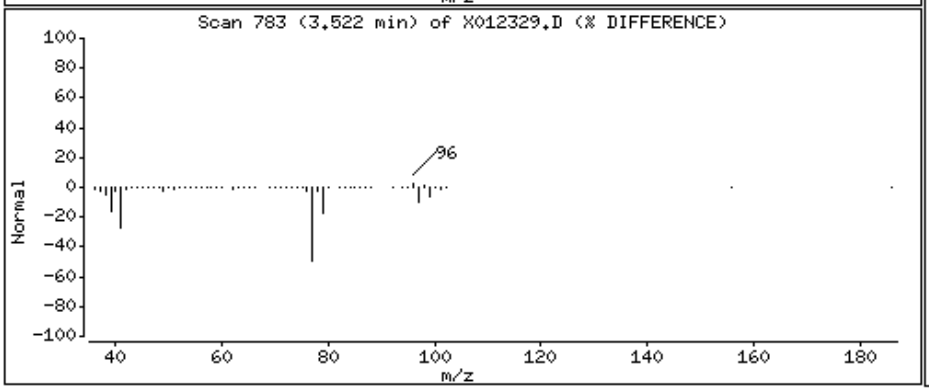
27 cis-1,2-Dichloroethene

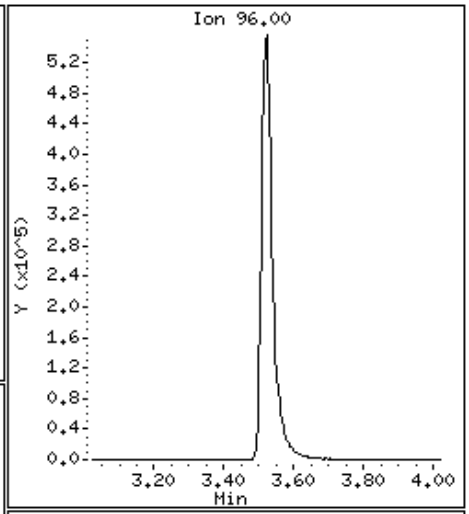
Concentration: 21644.38 ug/l

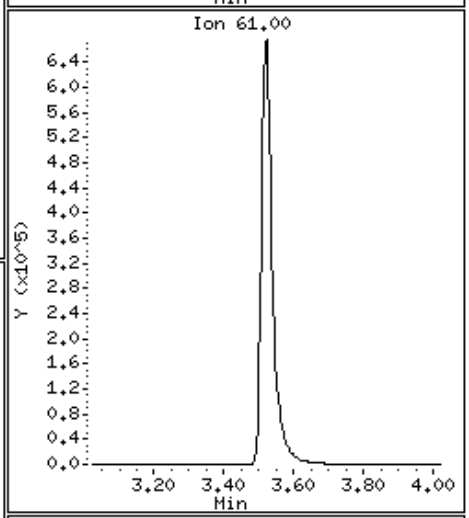


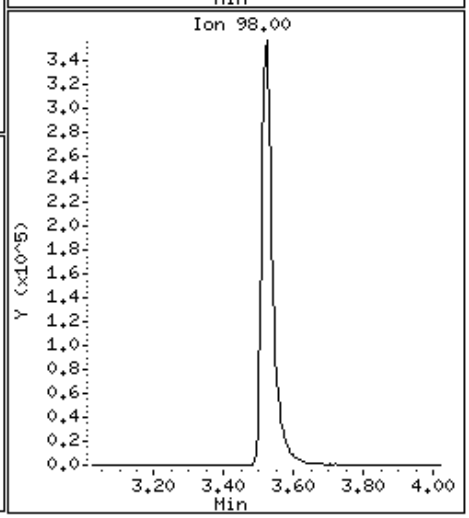












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012329.D Page 5

Date : 23-JAN-2023 21:05

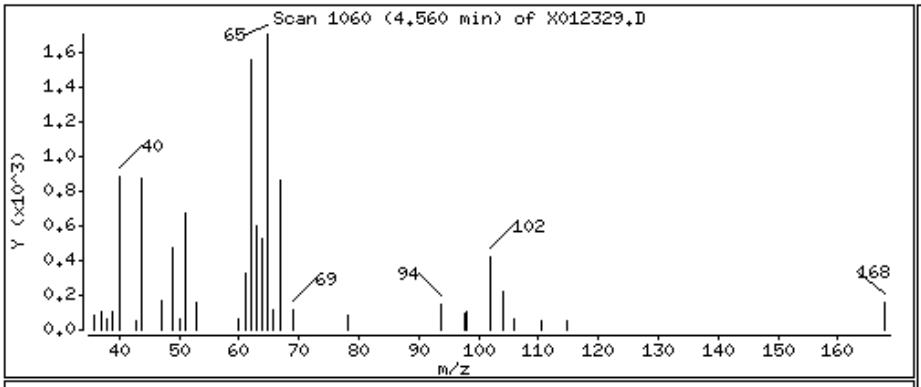
Client ID: HS23010982-01 Instrument: voa6.i

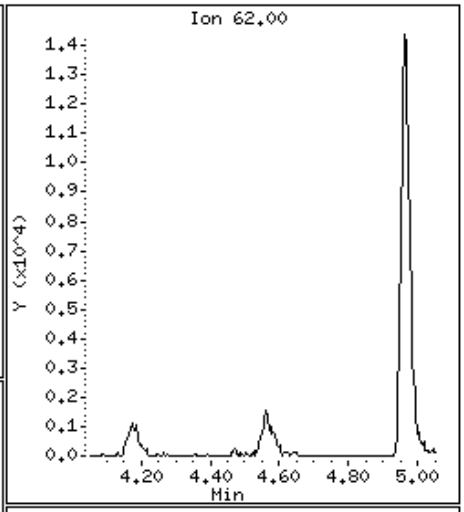
Sample Info: HS23010982-01;HS23010982-01;;;

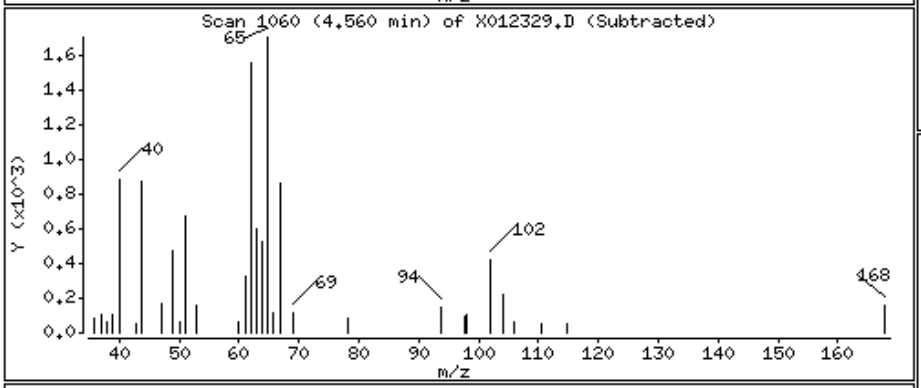
Purge Volume: 5.0 Operator: PC

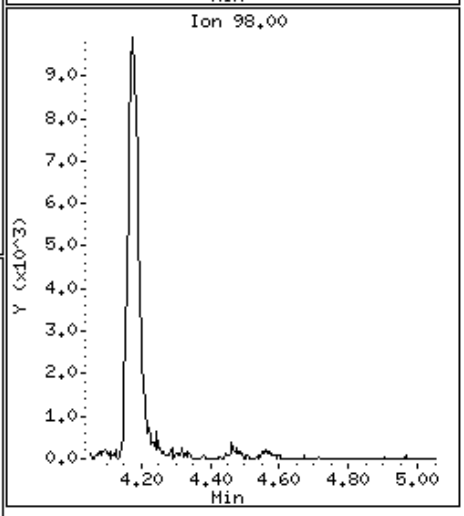
Column phase: DB624 Column diameter: 0.18

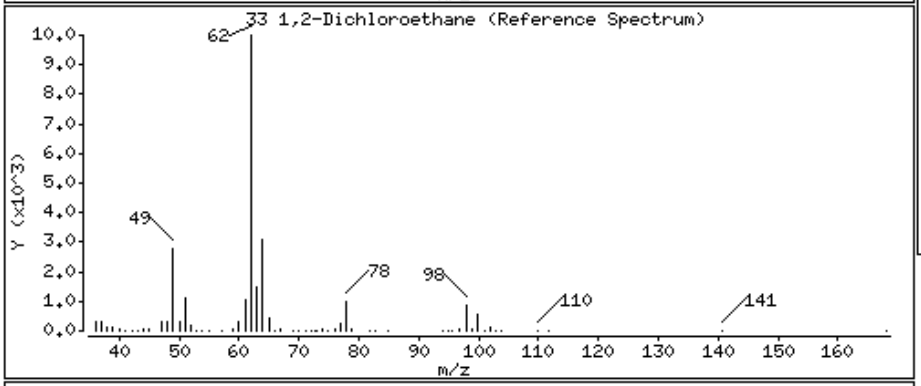
33 1,2-Dichloroethane Concentration: 50.38 ug/l

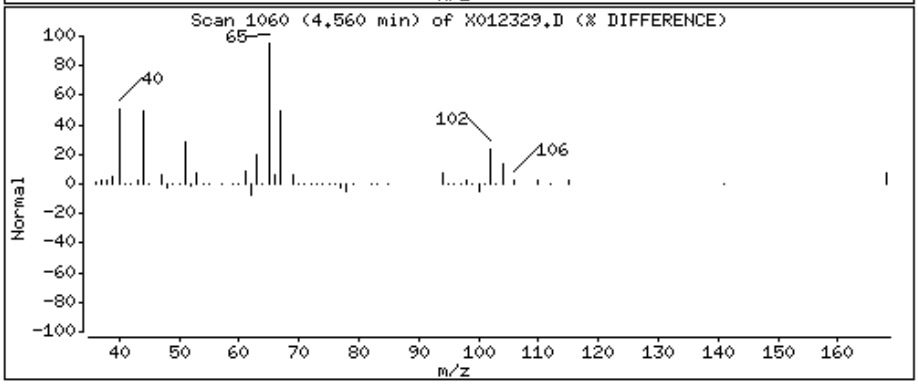












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012329.D

Date : 23-JAN-2023 21:05

Client ID: HS23010982-01

Instrument: voa6.i

Sample Info: HS23010982-01;HS23010982-01;;;

Purge Volume: 5.0

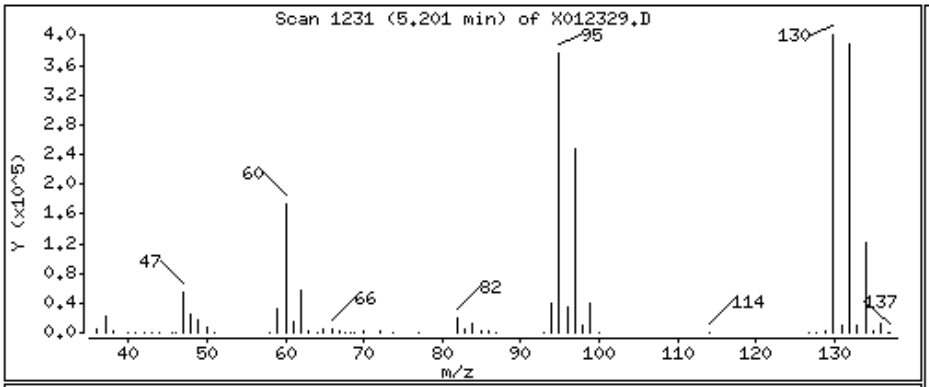
Operator: PC

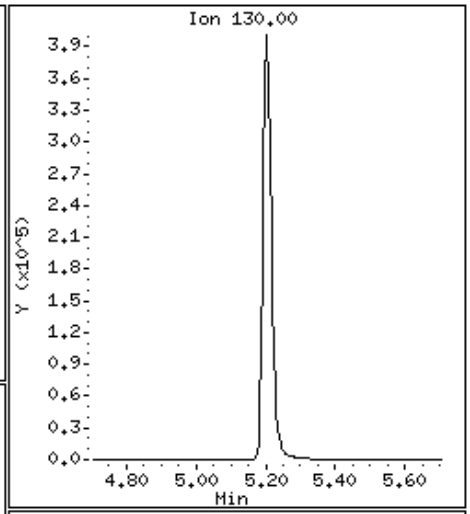
Column phase: DB624

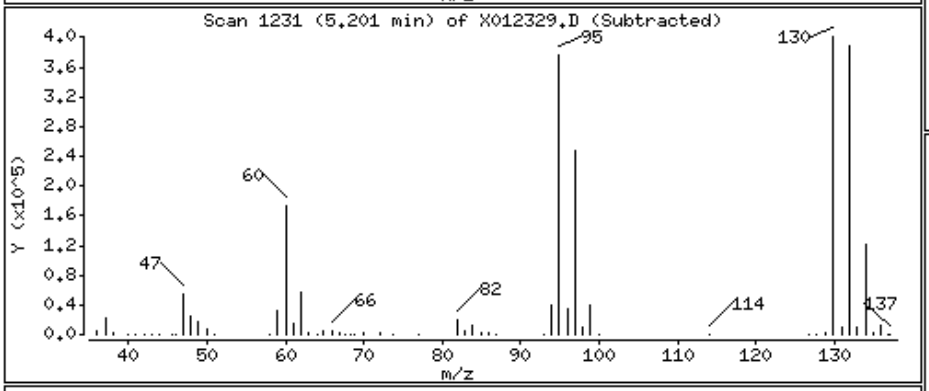
Column diameter: 0.18

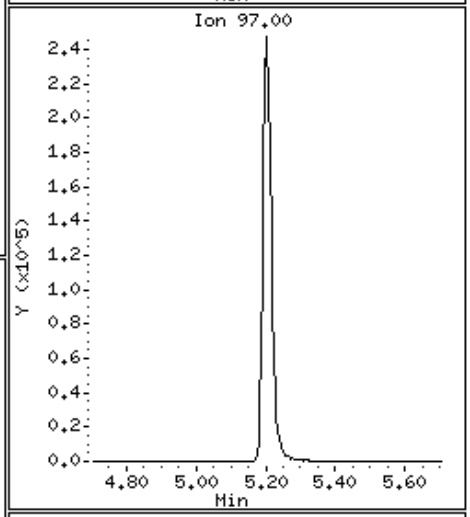
38 Trichloroethene

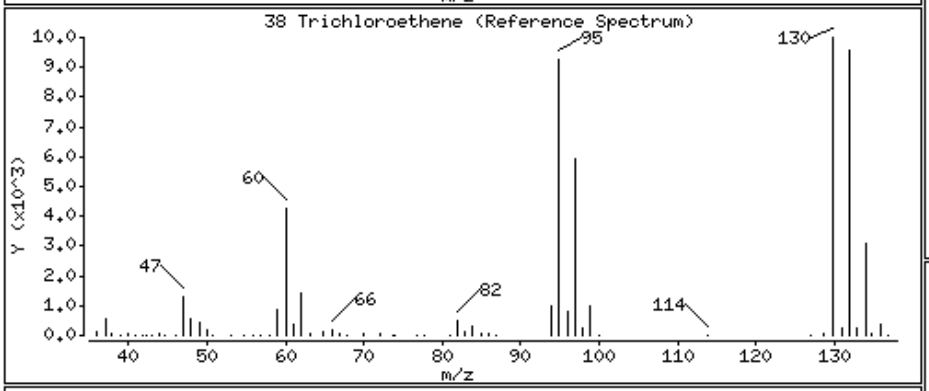
Concentration: 12952.62 ug/l

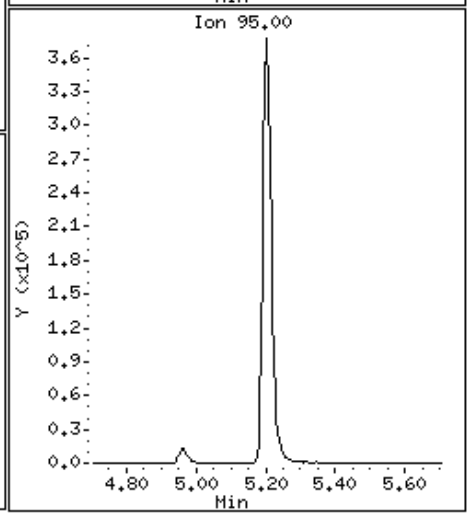


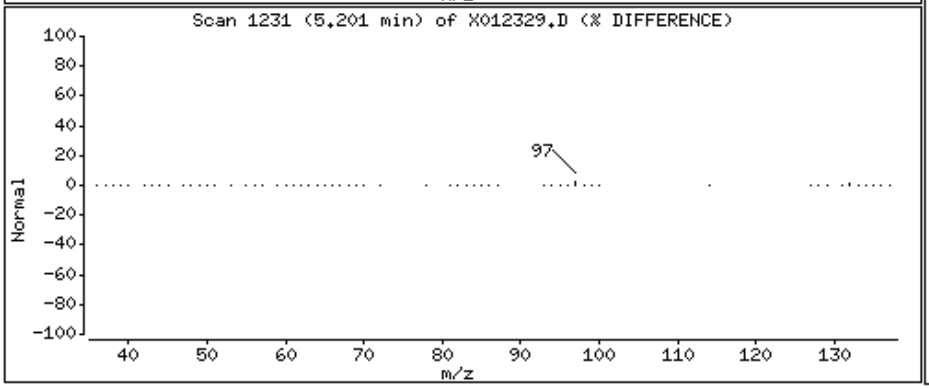












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Inj Date : 23-JAN-2023 21:05
InstruID : voa6.i
LabSampID : HS23010982-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012330.D Page 1
Report Date: 13-Feb-2023 13:15

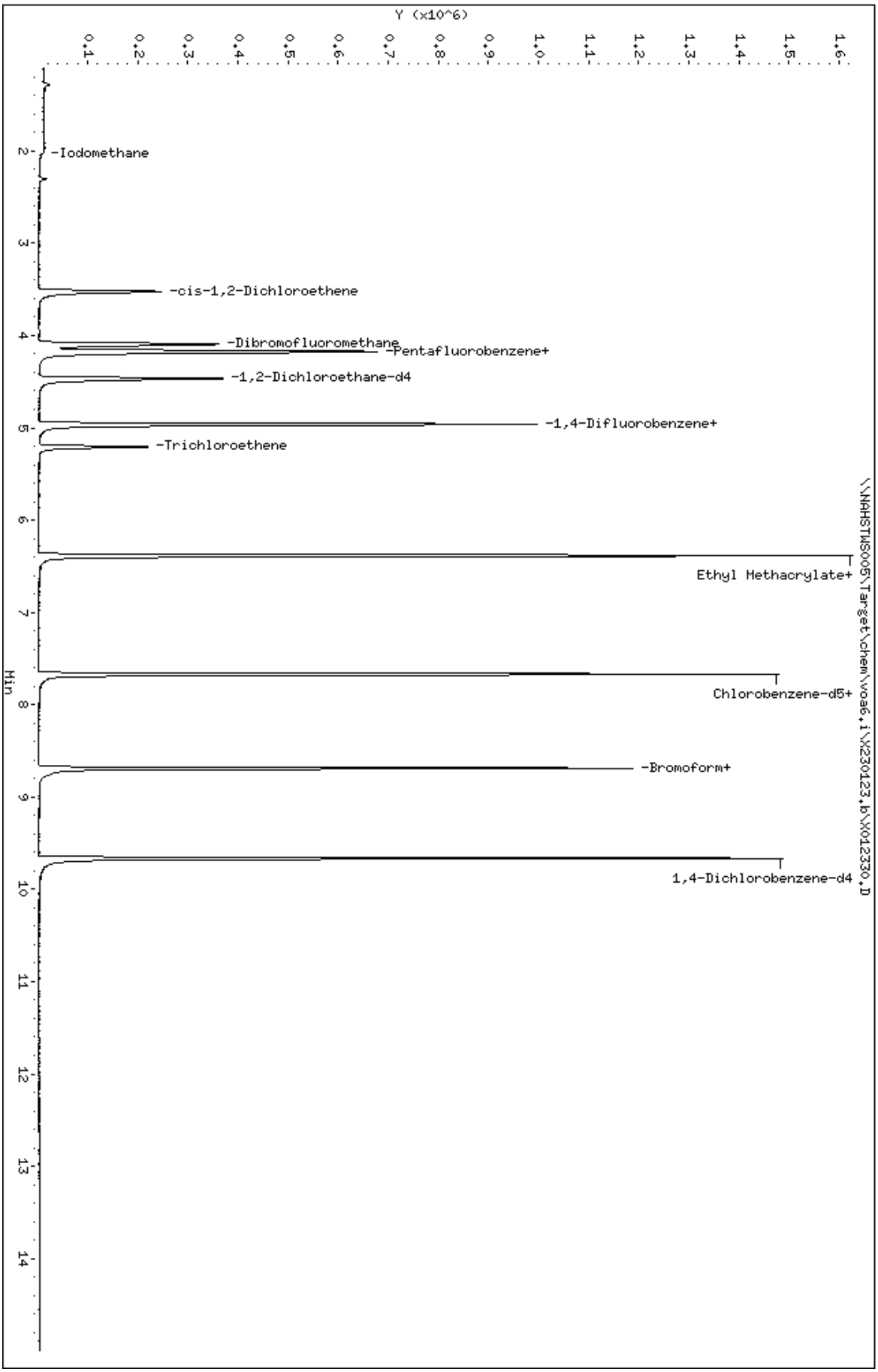
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012330.D
Lab Smp Id: HS23010982-01 Client Smp ID: HS23010982-01
Inj Date : 23-JAN-2023 21:26
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-01;HS23010982-01;;;
Misc Info : V6;WATER;0;1000;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\8260W.m
Meth Date : 13-Feb-2023 13:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 29
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.174	4.174	(1.000)	559122	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.091	(0.981)	254498	47.3956	47.39
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	284790	50.2567	50.25
* 36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	802861	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	711580	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	930900	52.9412	52.94
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	324550	49.3807	49.38
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	364279	50.0000	
27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.845)	132874	22.9896	22989.62
38 Trichloroethene	130	5.205	5.205	(1.049)	75501	13.8844	13884.38



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Date : 23-JAN-2023 21:26
Client ID: HS23010982-01
Sample Info: HS23010982-01;HS23010982-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012330.D Page 2

Date : 23-JAN-2023 21:26

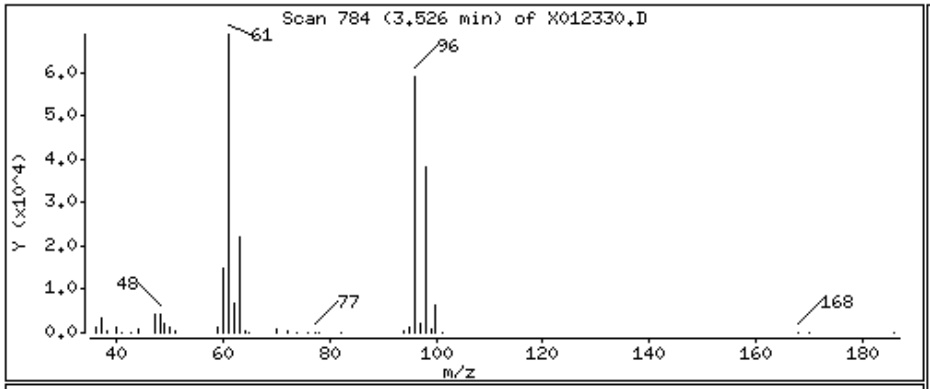
Client ID: HS23010982-01 Instrument: voa6.i

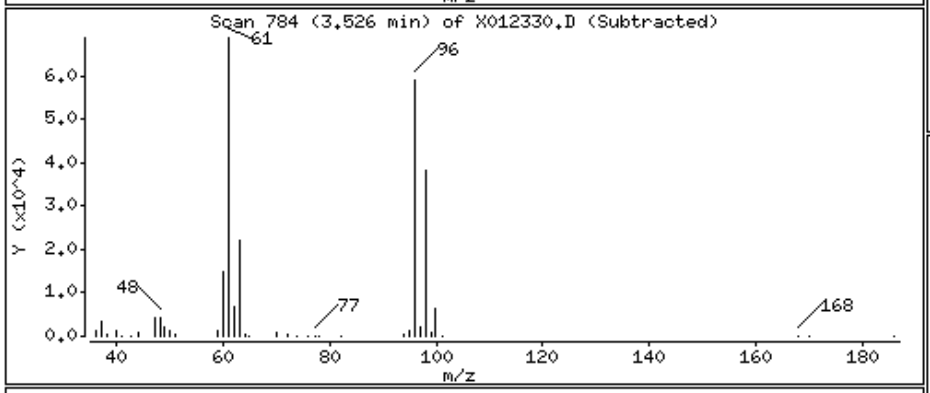
Sample Info: HS23010982-01;HS23010982-01;;;

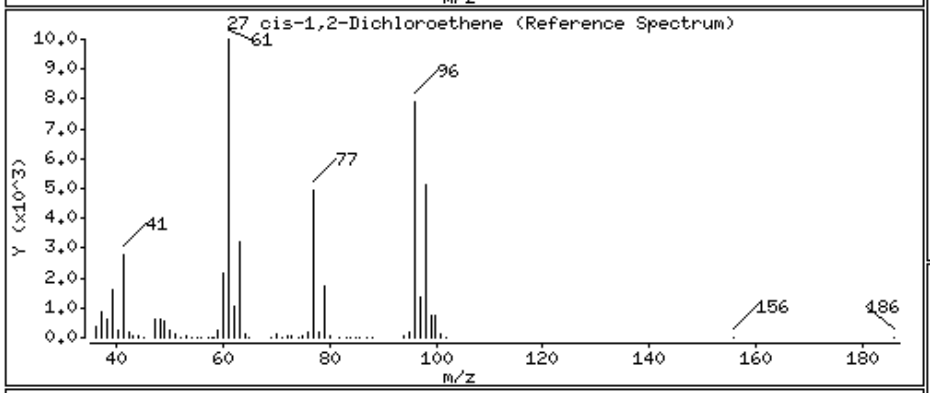
Purge Volume: 5.0 Operator: PC

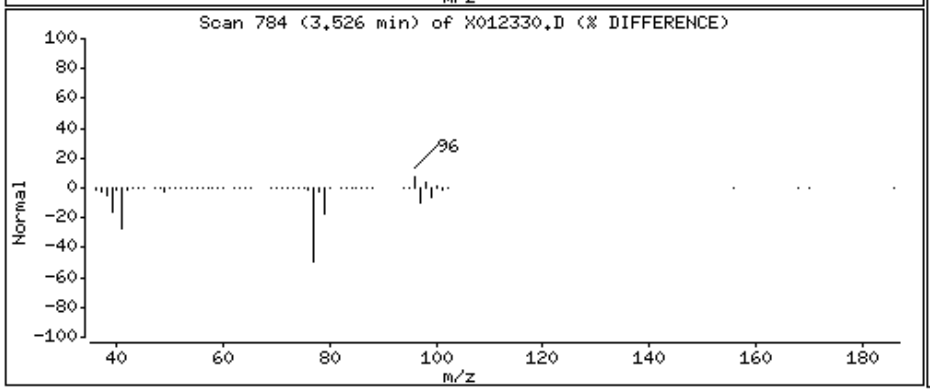
Column phase: DB624 Column diameter: 0.18

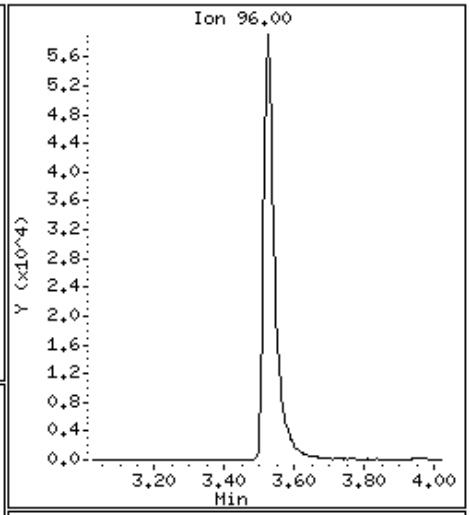
27 cis-1,2-Dichloroethene Concentration: 22989.62 ug/l

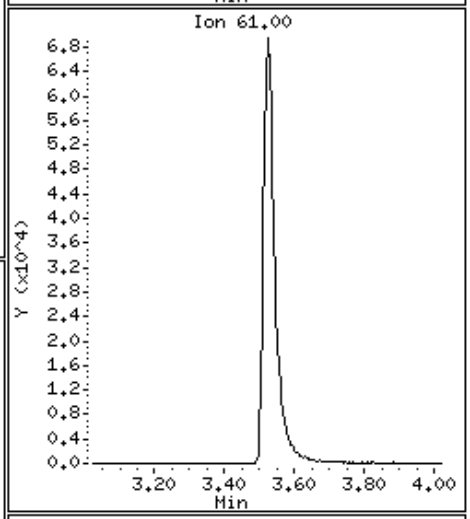


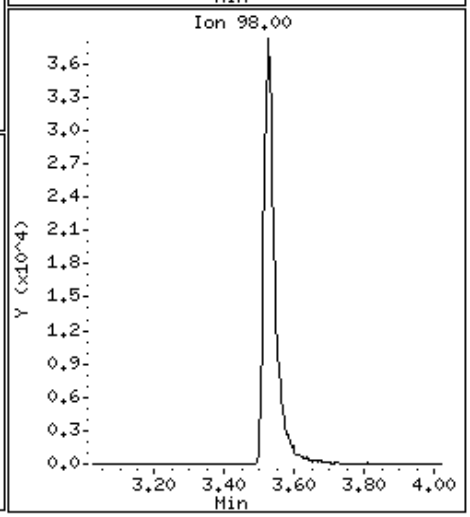












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012330.D Page 3

Date : 23-JAN-2023 21:26

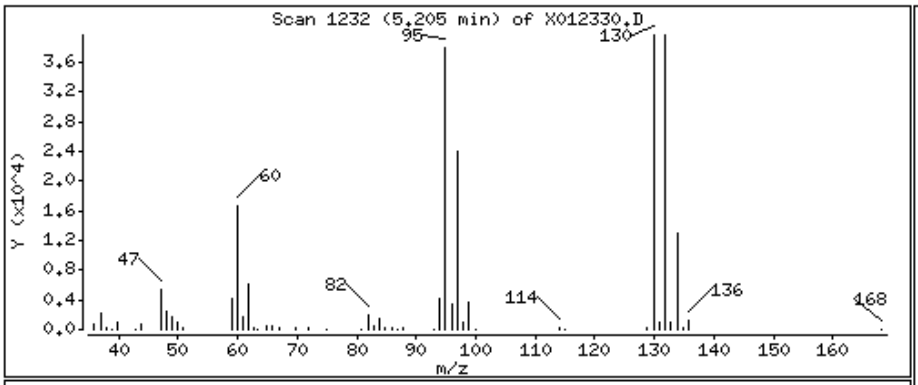
Client ID: HS23010982-01 Instrument: voa6.i

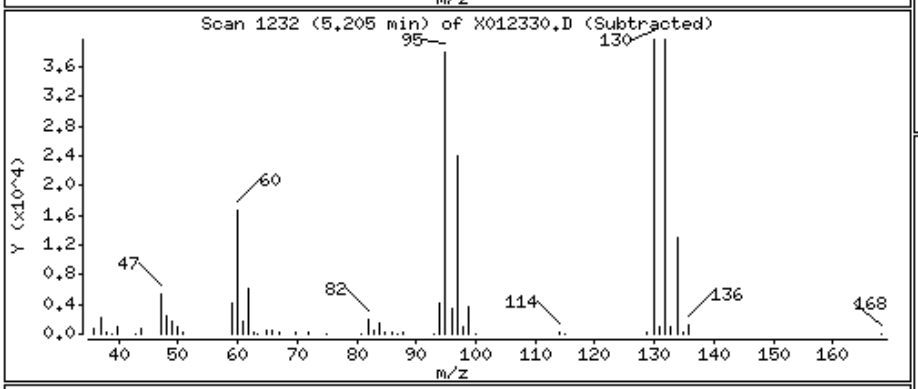
Sample Info: HS23010982-01;HS23010982-01;;;

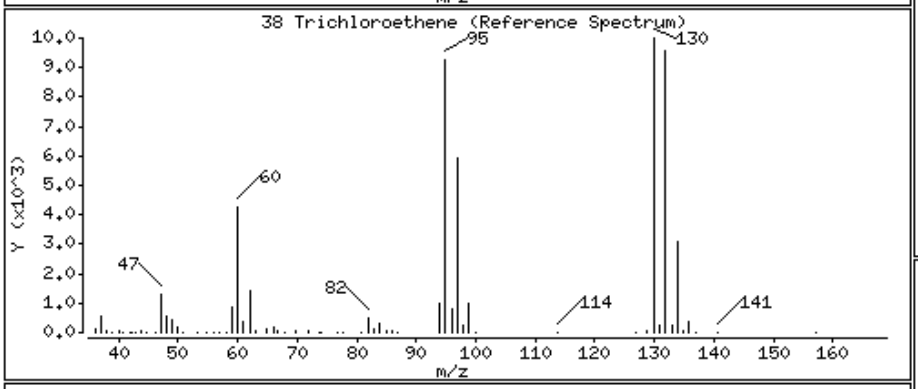
Purge Volume: 5.0 Operator: PC

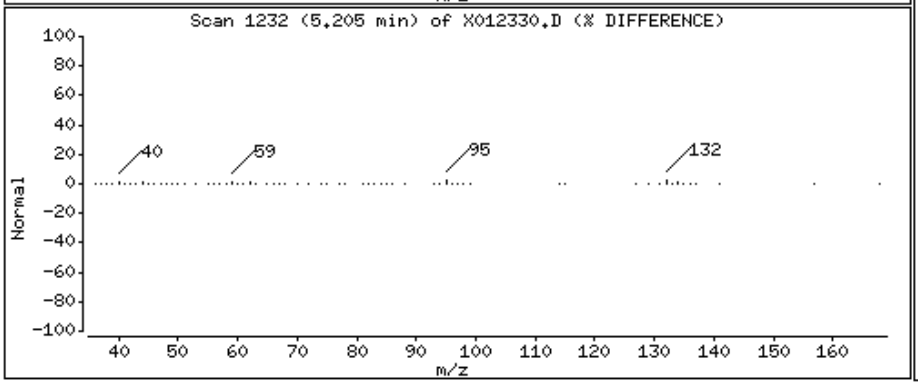
Column phase: DB624 Column diameter: 0.18

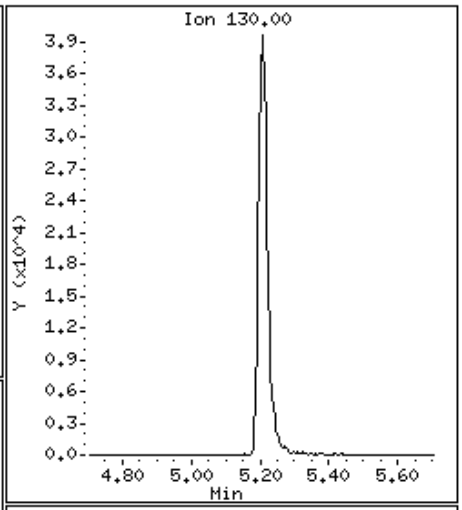
38 Trichloroethene Concentration: 13884.38 ug/l

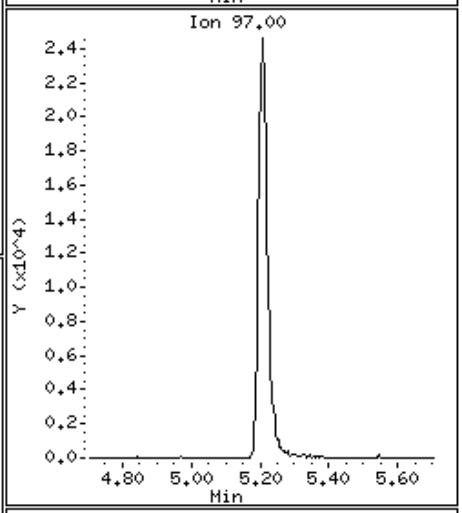


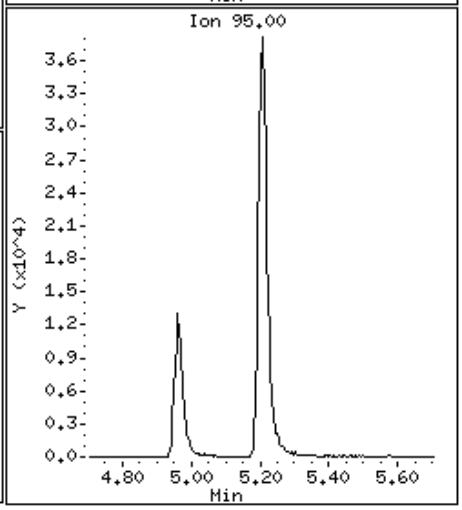












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NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012331.D Page 1
Report Date: 13-Feb-2023 13:15

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012331.D
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Inj Date : 23-JAN-2023 21:47
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Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
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Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.177	(1.000)	481163	50.0000	
135 1,4-Dioxane	88	5.594	5.594	(1.339)	50207	1000.00	1141.50
140 1,3-Butadiene	54	1.160	1.160	(0.278)	155875	50.0000	47.20
25 Methacrylonitrile	41	3.818	3.818	(0.914)	178207	50.0000	52.30
12 Isobutyl Alcohol	43	4.669	4.669	(1.118)	589939	1000.00	1090.05
13 Acetonitrile	39	2.194	2.194	(0.525)	225636	500.000	515.24
14 Allyl Chloride	41	2.194	2.194	(0.525)	409451	50.0000	49.09
4 Propionitrile	54	3.649	3.649	(0.873)	259789	500.000	529.14
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	81006	50.0000	51.50
194 Acetaldehyde	44	1.209	1.209	(0.289)	90472	200.000	308.10
23 Chloroprene	53	1.767	1.767	(0.423)	77105	50.0000	47.12(M)
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	181132	50.0000	55.20
49 Ethyl Methacrylate	69	6.708	6.708	(1.351)	189925	50.0000	53.62
131 Methyl Acrylate	55	3.683	3.683	(0.882)	189752	50.0000	58.08
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	62272	100.000	104.23
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	464055	50.0000	49.13
156 Diisopropyl ether	45	2.997	2.997	(0.717)	614958	50.0000	49.26
182 Epichlorohydrin	57	6.093	6.093	(1.227)	70042	200.000	207.84
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	988201	50.0000	48.14
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	141527	50.0000	42.11

3 Chloromethane	50	1.074	1.074 (0.257)	191729	50.0000	44.30
5 Vinyl Chloride	62	1.141	1.141 (0.273)	201232	50.0000	47.87

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230123.b\X012331.D Page 2
Report Date: 13-Feb-2023 13:15

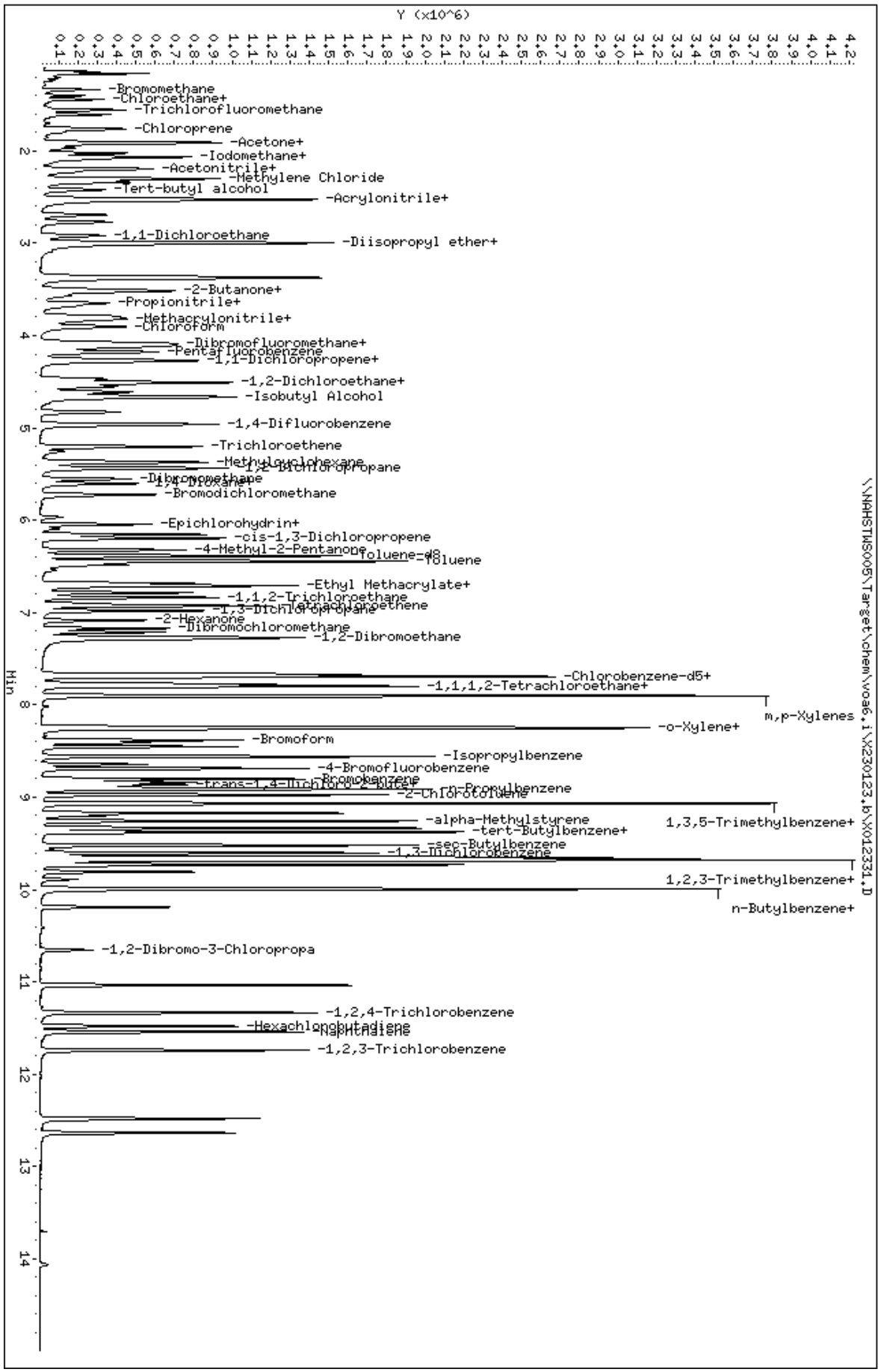
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	141145	50.0000	44.59
	7 Chloroethane	64	1.400	1.400	(0.335)	136896	50.0000	46.79
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	312249	50.0000	53.08
	9 Acrolein	56	1.441	1.441	(0.345)	26133	100.000	79.99
	10 Acetone	43	1.970	1.970	(0.472)	118678	100.000	87.89
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	181294	50.0000	49.64
	15 Iodomethane	142	2.022	2.022	(0.484)	452711	100.000	94.47
	16 Acrylonitrile	53	2.528	2.528	(0.605)	135391	100.000	109.31
	17 Methylene Chloride	84	2.299	2.299	(0.550)	231681	50.0000	46.25
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	581379	50.0000	48.63
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	958189	100.000	100.28
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	203832	50.0000	49.87
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	923257	100.000	87.98
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	359211	50.0000	50.07
	24 2-Butanone	43	3.570	3.570	(0.855)	147802	100.000	103.11
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	286752	50.0000	47.08
	27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.843)	245075	50.0000	49.27
	28 Chloroform	83	3.904	3.904	(0.935)	413102	50.0000	51.38
	29 Bromochloromethane	128	3.788	3.788	(0.907)	129796	50.0000	47.66
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	228261	50.0000	49.40
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	342730	50.0000	53.73
	32 1,1-Dichloropropene	75	4.275	4.275	(0.861)	288679	50.0000	54.06
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	327400	50.0000	53.12
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	289549	50.0000	50.77
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	261639	50.0000	53.63
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	752129	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	892477	50.0000	49.69
	38 Trichloroethene	130	5.205	5.205	(1.048)	265695	50.0000	52.15
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	330587	50.0000	49.04
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	211542	100.000	110.31
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	232745	50.0000	48.71
	44 Dibromomethane	93	5.549	5.549	(1.118)	158391	50.0000	48.77
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	406482	100.000	104.38
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	386686	50.0000	48.84
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	728521	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	864965	50.0000	48.04
	50 Toluene	91	6.445	6.445	(0.841)	994872	50.0000	49.40
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	337337	50.0000	51.34
	52 2-Hexanone	43	7.083	7.083	(0.924)	279856	100.000	105.63
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	192681	50.0000	47.69
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	386925	50.0000	48.66
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	284999	50.0000	48.88
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	213245	50.0000	51.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	254445	50.0000	50.37
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	196877	50.0000	54.16
	59 Chlorobenzene	112	7.694	7.694	(1.003)	693756	50.0000	48.57
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	264994	50.0000	49.85
	61 Ethylbenzene	106	7.799	7.799	(1.017)	349011	50.0000	51.87
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	887217	100.000	102.29
	63 o-Xylene	106	8.241	8.241	(1.075)	429320	50.0000	50.15
	64 Styrene	104	8.256	8.256	(1.077)	756662	50.0000	52.73
	66 Bromoform	173	8.410	8.410	(1.097)	199996	50.0000	49.51

67	Isopropylbenzene	105	8.560	8.560 (1.116)	1082876	50.0000	55.37
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	301896	50.0000	44.43

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	346174	50.0000	51.44
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	426275	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	237685	50.0000	50.11(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1275234	50.0000	54.00
	74 Bromobenzene	156	8.803	8.803	(0.911)	337785	50.0000	48.29
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	944012	50.0000	54.12
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	789476	50.0000	50.95
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	923872	50.0000	52.30
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	786835	50.0000	55.10
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	965745	50.0000	52.61
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1094503	50.0000	57.61
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	968030	50.0000	56.86
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	591626	50.0000	50.96
	84 1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	621840	50.0000	49.09
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	844556	50.0000	51.42
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	597360	50.0000	49.96
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54216	50.0000	49.91
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	401035	50.0000	53.15
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	168565	50.0000	50.40
	92 Naphthalene	128	11.540	11.540	(1.194)	914642	50.0000	53.28
	93 1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	374448	50.0000	51.82
M	94 1,2-Dichloroethylene (total)	96				448907	100.000	(a)
	141 Cyclohexane	56	4.117	4.117	(0.986)	269580	50.0000	55.44
	138 Freon TF	101	1.913	1.913	(0.458)	178953	50.0000	50.66
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	478491	50.0000	51.97
	146 Methyl Acetate	43	2.224	2.224	(0.533)	117488	50.0000	54.26
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	371117	1000.00	1113.88
	149 Isopropyl Alcohol	45	2.086	2.086	(0.499)	199919	1000.00	1148.96

QC Flag Legend

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


Y (x10^6)
Min
-Bromomethane
-Chloroethane+
-Trichlorofluoromethane
-Chloroprene
-Acetone+
-Iodomethane+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-1,1-Dichloroethane
-Diisopropyl ether+
-2-Butanone+
-Propionitrile+
-Methacrylonitrile+
-Chloroform
-Dibromofluoromethane+
-Pentafluorobenzene
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol
-1,4-Difluorobenzene
-Trichloroethene
-Methylcyclohexane
-1,2-Dichloropropane
-Dibromomethane
-1,4-Dioxane
-Bromodichloromethane
-Epichlorohydrin+
-cis-1,3-Dichloropropene
-4-Methyl-2-Pentanone
Toluene-d8
Toluene
-Ethyl Methacrylate+
-1,1,2-Trichloroethane
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-1,3-Dichloropropane
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-o-Xylene+
-Bromoform
-Isopropylbenzene
-4-Bromofluorobenzene
-Bromobenzene
-trans-1,4-Dichloro-2-butene
n-Propylbenzene
-2-Chlorotoluene
-alpha-Methylstyrene
1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
-1,3-Dichlorobenzene
1,2,3-Trimethylbenzene+
n-Butylbenzene+
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-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
Naphthalene
-1,2,3-Trichlorobenzene
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Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1

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Inj Date : 23-JAN-2023 21:47
InstruID : voa6.i
LabSampID : CCV-END

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

Reason Code:

BEFORE

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13-Feb-2023
13:14
linh
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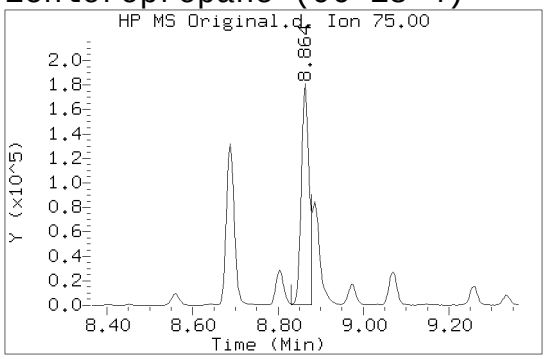

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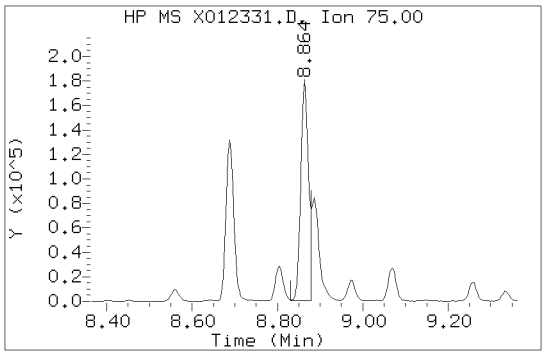

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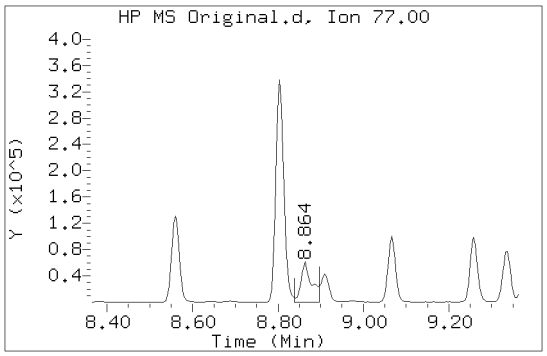

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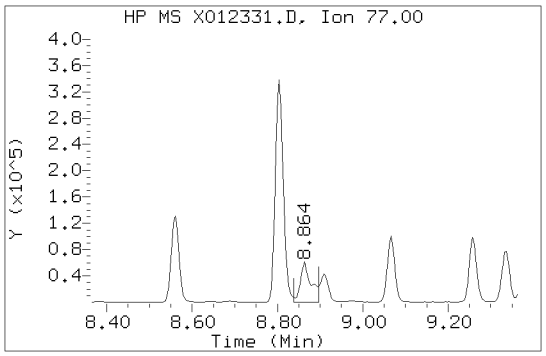

Chloroprene (126-99-8)

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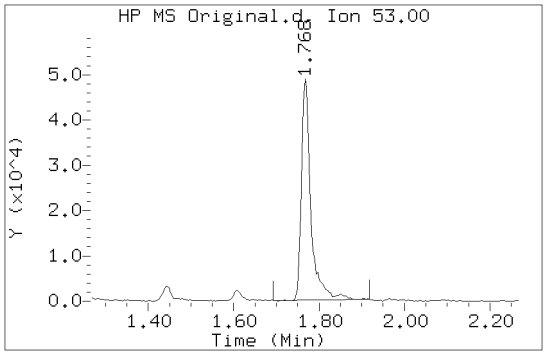

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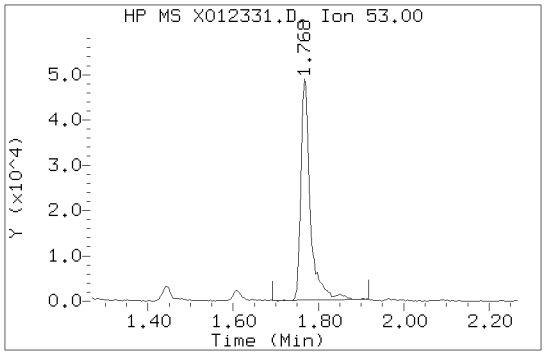

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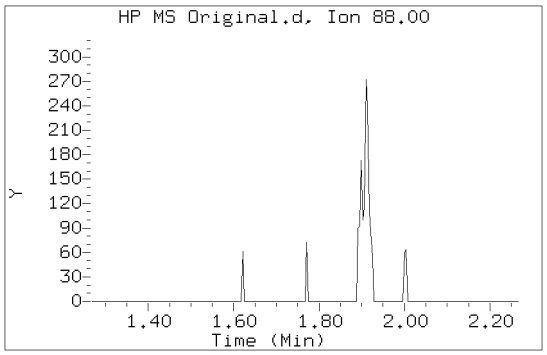

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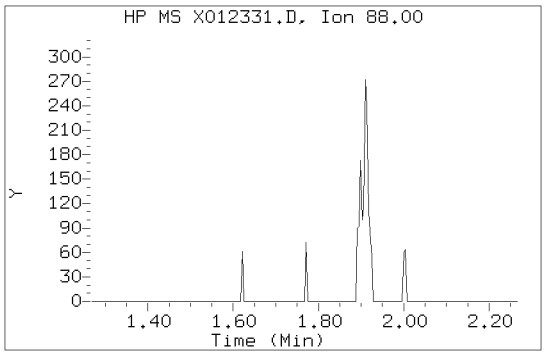

right solutions.
right partner.

Raw Data VOA6 426355

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
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Data File: \\nahstws005\Target\chem\voa6.i\X230124.b\X012401.D Page 1
Report Date: 24-Jan-2023 07:49

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X230124.b\X012401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-JAN-2023 07:31
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230124.b\bfb.m
Meth Date : 01-Dec-2022 12:59 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: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	139072			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	26840			15.00- 40.00	19.30
8.687	8.889	(0.000)	75	69504			30.00- 60.00	49.98
8.687	8.889	(0.000)	96	9797			5.00- 9.00	7.04
8.687	8.889	(0.000)	173	989			0.00- 2.00	0.82
8.687	8.889	(0.000)	174	120704			50.00- 0.00	86.79
8.687	8.889	(0.000)	175	8511			5.00- 9.00	7.05
8.687	8.889	(0.000)	176	116088			95.00- 101.00	96.18
8.687	8.889	(0.000)	177	8022			5.00- 9.00	6.91

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.30
75	30.00 - 60.00% of mass 95	49.98
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.71 (0.82)
174	Greater than 50.00% of mass 95	86.79
175	5.00 - 9.00% of mass 174	6.12 (7.05)
176	95.00 - 101.00% of mass 174	83.47 (96.18)
177	5.00 - 9.00% of mass 176	5.77 (6.91)

Data File: X012401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1469	67.00	455	103.90	611	143.00	1332
37.00	7593	68.00	14524	104.80	454	143.80	82
38.00	6223	69.00	15791	105.90	587	145.00	82
39.00	3440	70.00	2012	106.80	329	145.70	99
40.00	1590	71.10	369	109.00	233	147.00	245
41.10	1911	72.00	990	109.70	75	147.70	379
42.00	2101	73.00	6057	110.80	166	148.60	162
43.00	1244	74.00	23456	111.60	207	149.80	160
44.00	1791	75.00	69504	112.80	165	152.80	56
44.90	1484	76.00	6011	114.80	179	153.90	122
46.00	138	77.00	1159	115.80	418	154.80	380
47.00	1373	77.90	647	116.90	982	156.80	71
48.00	896	78.90	5122	117.90	358	157.80	62
49.00	6948	79.90	1309	118.90	817	158.90	131
50.00	26840	80.90	5225	120.00	71	160.90	81
51.00	8739	81.80	1151	120.90	74	170.00	148
51.90	461	83.00	540	123.70	123	170.70	72
52.90	307	84.80	158	125.90	100	171.50	138
54.00	239	85.90	308	127.00	151	173.00	989
55.00	3454	86.90	5872	127.80	720	173.90	120704
56.00	2550	87.90	5682	128.90	256	174.90	8511
57.00	4809	90.80	583	129.80	318	175.90	116088
57.90	516	91.20	485	130.80	202	176.90	8022
59.10	73	92.00	4175	134.80	297	177.90	156
59.90	976	93.00	5899	136.10	58	186.10	274
61.00	7256	94.00	15180	136.80	292	187.00	67
62.00	7128	95.00	139072	138.60	115	207.00	62
63.00	5118	96.00	9797	139.20	52	235.60	52
64.10	378	97.00	514	140.00	120	277.80	50
64.70	203	97.90	1400	140.90	1536		
65.80	65	98.90	105	141.90	89		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012401.D

Date : 24-JAN-2023 07:31

Client ID: BFB

Instrument: voa6.i

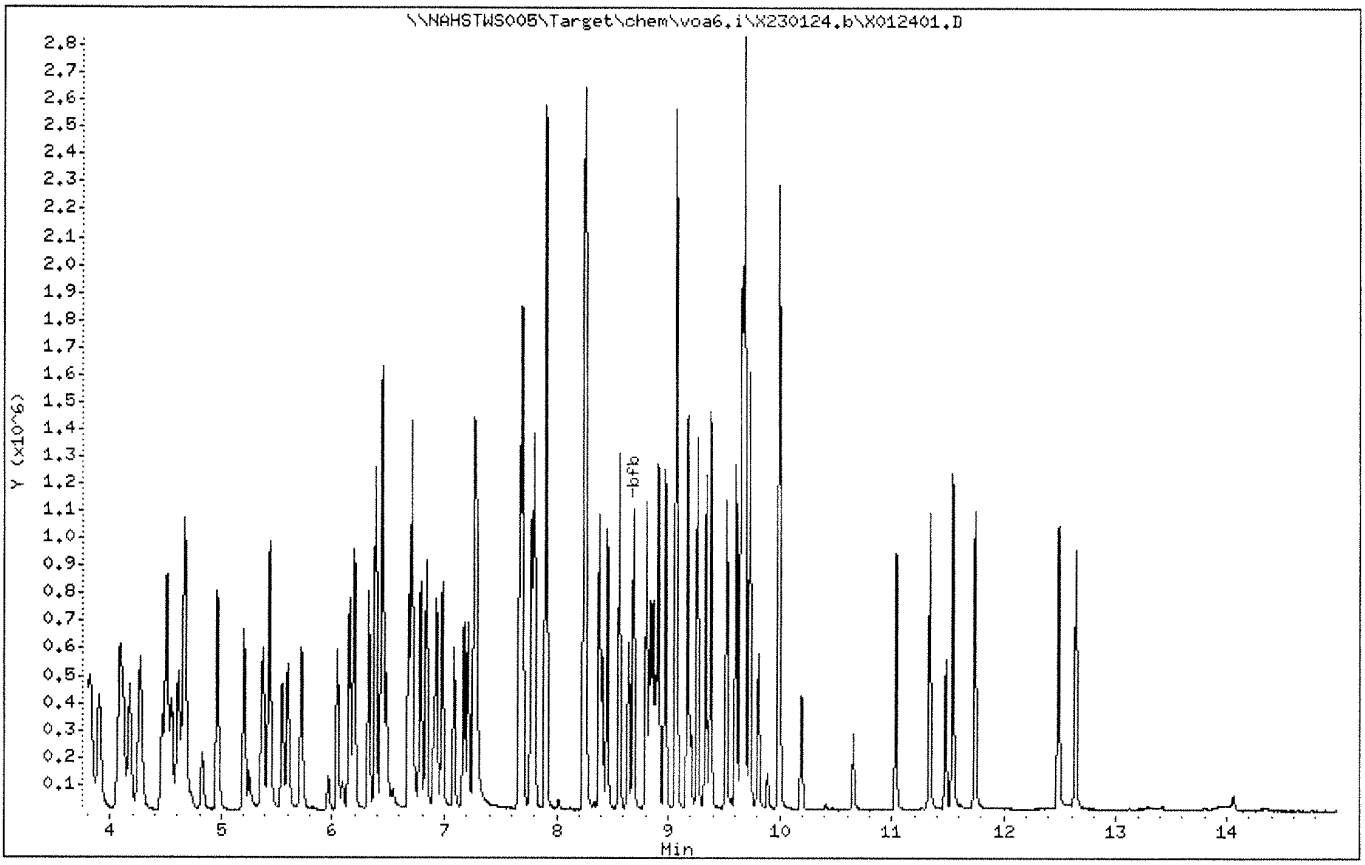
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012401.D

Date : 24-JAN-2023 07:31

Client ID: BFB

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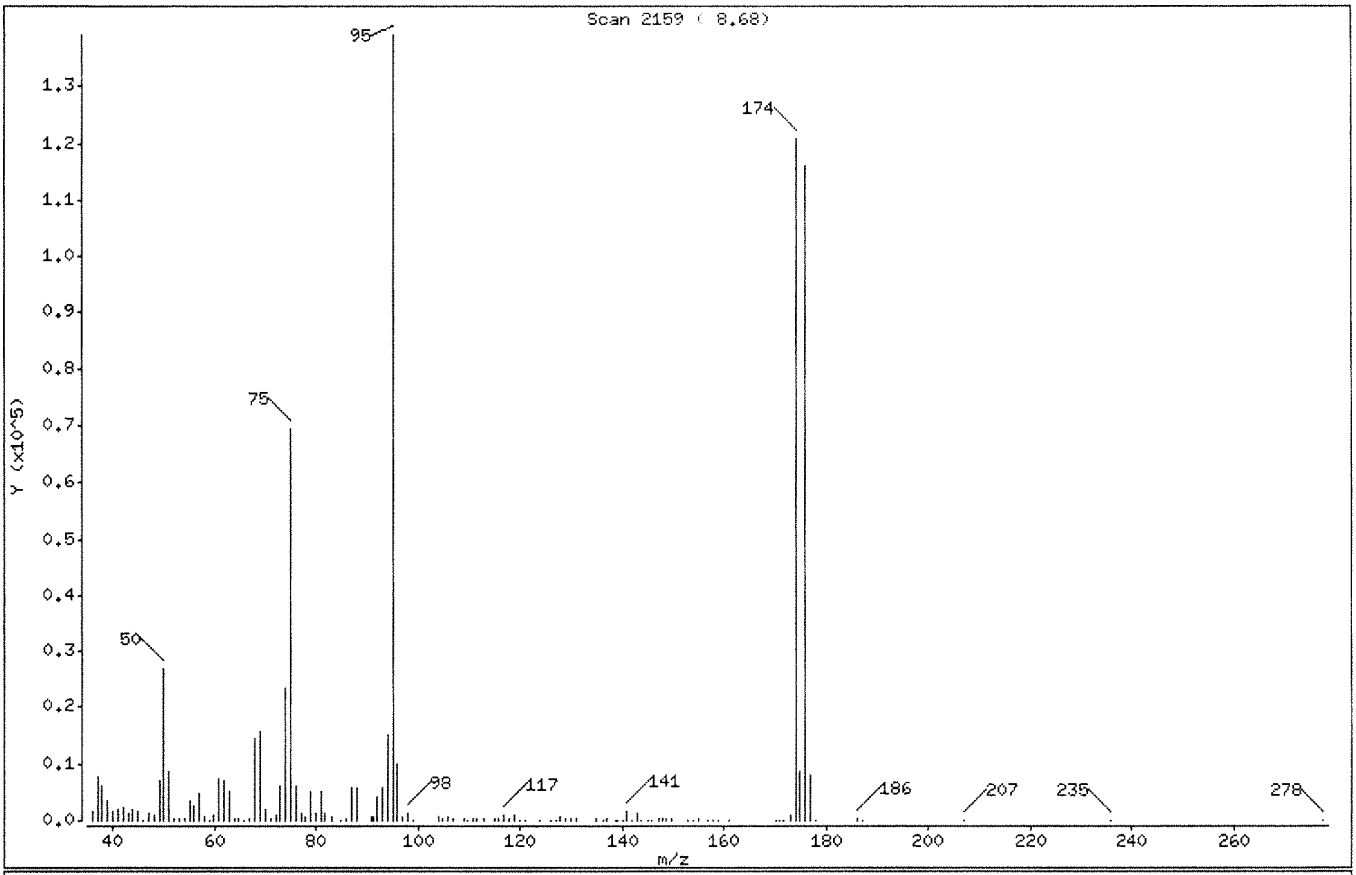
Column diameter: 0.25

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	19.30
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173	Less than 2.00% of mass 174	0.71 (0.82)
174	Greater than 50.00% of mass 95	86.79
175	5.00 - 9.00% of mass 174	6.12 (7.05)
176	95.00 - 101.00% of mass 174	83.47 (96.18)
177	5.00 - 9.00% of mass 176	5.77 (6.91)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012401.D

Date : 24-JAN-2023 07:31

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: X012401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1469	67.00	455	103.90	611	143.00	1332
37.00	7593	68.00	14524	104.80	454	143.80	82
38.00	6223	69.00	15791	105.90	587	145.00	82
39.00	3440	70.00	2012	106.80	329	145.70	99
40.00	1590	71.10	369	109.00	233	147.00	245
41.10	1911	72.00	990	109.70	75	147.70	379
42.00	2101	73.00	6057	110.80	166	148.60	162
43.00	1244	74.00	23456	111.60	207	149.80	160
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44.90	1484	76.00	6011	114.80	179	153.90	122
46.00	138	77.00	1159	115.80	418	154.80	380
47.00	1373	77.90	647	116.90	982	156.80	71
48.00	896	78.90	5122	117.90	358	157.80	62
49.00	6948	79.90	1309	118.90	817	158.90	131
50.00	26840	80.90	5225	120.00	71	160.90	81
51.00	8739	81.80	1151	120.90	74	170.00	148
51.90	461	83.00	540	123.70	123	170.70	72
52.90	307	84.80	158	125.90	100	171.50	138
54.00	239	85.90	308	127.00	151	173.00	989
55.00	3454	86.90	5872	127.80	720	173.90	120704
56.00	2550	87.90	5682	128.90	256	174.90	8511
57.00	4809	90.80	583	129.80	318	175.90	116088
57.90	516	91.20	485	130.80	202	176.90	8022
59.10	73	92.00	4175	134.80	297	177.90	156
59.90	976	93.00	5899	136.10	58	186.10	274
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62.00	7128	95.00	139072	138.60	115	207.00	62
63.00	5118	96.00	9797	139.20	52	235.60	52
64.10	378	97.00	514	140.00	120	277.80	50
64.70	203	97.90	1400	140.90	1536		
65.80	65	98.90	105	141.90	89		

Data File : \\nahstws005\Target\chem\voa6.i\X230124.b\X012401.D
Inj Date : 24-JAN-2023 07:31
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012402.D Page 1
Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012402.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 24-JAN-2023 07:52
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	507505	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	154092	50.0000	43.46
3 Chloromethane	50	1.074	1.074	(0.257)	215373	50.0000	47.04
4 Propionitrile	54	3.645	3.645	(0.873)	287139	500.000	554.49
5 Vinyl Chloride	62	1.141	1.141	(0.273)	215871	50.0000	48.69
6 Bromomethane	94	1.336	1.336	(0.320)	155067	50.0000	46.37
7 Chloroethane	64	1.400	1.400	(0.335)	145676	50.0000	47.20
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	338394	50.0000	54.54
9 Acrolein	56	1.441	1.441	(0.345)	35688	100.000	102.74
10 Acetone	43	1.966	1.966	(0.471)	156002	100.000	109.55
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	192989	50.0000	50.10
12 Isobutyl Alcohol	43	4.669	4.669	(1.118)	669687	1000.00	1173.17
13 Acetonitrile	39	2.195	2.195	(0.525)	274083	500.000	593.39
14 Allyl Chloride	41	2.195	2.195	(0.525)	488047	50.0000	55.47
15 Iodomethane	142	2.022	2.022	(0.484)	520197	100.000	102.28
16 Acrylonitrile	53	2.528	2.528	(0.605)	150701	100.000	115.35
17 Methylene Chloride	84	2.300	2.300	(0.550)	246625	50.0000	46.67
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	676851	50.0000	53.68
19 Carbon Disulfide	76	2.067	2.067	(0.495)	1066793	100.000	105.85
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	222607	50.0000	51.63

21 Vinyl Acetate	43	2.993	2.993 (0.716)	1291106	100.000	116.65
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	389464	50.0000	51.47

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012402.D Page 2
Report Date: 09-Feb-2023 13:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	1.767	1.767	(0.423)	83208	50.0000	48.22(M)
24	2-Butanone	43	3.570	3.570	(0.855)	168134	100.000	110.97
25	Methacrylonitrile	41	3.818	3.818	(0.914)	199583	50.0000	55.53(a)
26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	374403	50.0000	58.28
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	256499	50.0000	48.89
28	Chloroform	83	3.900	3.900	(0.934)	435864	50.0000	51.40
29	Bromochloromethane	128	3.788	3.788	(0.907)	134366	50.0000	46.77
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.980)	246285	50.0000	50.54
31	1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	381342	50.0000	56.68
32	1,1-Dichloropropene	75	4.275	4.275	(0.862)	322539	50.0000	59.27
33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	349665	50.0000	55.68
34	Carbon Tetrachloride	117	4.260	4.260	(0.859)	321681	50.0000	55.36
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	282664	50.0000	54.92
* 36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	766430	50.0000	
37	Benzene	78	4.508	4.508	(0.909)	944565	50.0000	51.60
38	Trichloroethene	130	5.205	5.205	(1.049)	275087	50.0000	52.99
39	Bromodichloromethane	83	5.722	5.722	(1.153)	349078	50.0000	50.82
40	Methyl Methacrylate	41	5.602	5.602	(1.341)	202573	50.0000	58.53
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	227973	100.000	116.66
42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	245818	50.0000	50.49
43	2-Nitropropane	43	5.966	5.966	(1.428)	79809	50.0000	62.27
44	Dibromomethane	93	5.550	5.550	(1.119)	165976	50.0000	50.15
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	436226	100.000	110.79
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	430559	50.0000	53.37
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	736604	50.0000	
$ 48	Toluene-d8	98	6.386	6.386	(0.833)	913964	50.0000	50.21
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	205272	50.0000	56.87
50	Toluene	91	6.446	6.446	(0.841)	1058771	50.0000	52.00
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	376785	50.0000	56.28
52	2-Hexanone	43	7.083	7.083	(0.924)	307039	100.000	114.62
53	1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	200761	50.0000	49.15
54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	412114	50.0000	51.25
55	Dibromochloromethane	129	7.173	7.173	(0.935)	299820	50.0000	50.85
56	Tetrachloroethene	164	6.925	6.925	(0.903)	236453	50.0000	56.13
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	266396	50.0000	52.16
58	1-Chlorohexane	55	7.694	7.694	(1.551)	227635	50.0000	61.45
59	Chlorobenzene	112	7.694	7.694	(1.003)	724465	50.0000	50.16
60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	276223	50.0000	51.39
61	Ethylbenzene	106	7.799	7.799	(1.017)	374007	50.0000	54.98
62	m,p-Xylenes	106	7.904	7.904	(1.031)	953775	100.000	108.76
63	o-Xylene	106	8.241	8.241	(1.075)	453186	50.0000	52.35
64	Styrene	104	8.256	8.256	(1.077)	789506	50.0000	54.42
66	Bromoform	173	8.410	8.410	(1.097)	210442	50.0000	51.52
67	Isopropylbenzene	105	8.560	8.560	(1.116)	1172710	50.0000	59.30
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	329440	50.0000	48.57
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	362762	50.0000	53.31
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	425473	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	251028	50.0000	53.02(M)
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	91108	50.0000	57.29
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1400792	50.0000	59.43
74	Bromobenzene	156	8.803	8.803	(0.911)	346094	50.0000	49.57
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1015822	50.0000	58.34

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	847551	50.0000	54.80
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	993651	50.0000	56.36

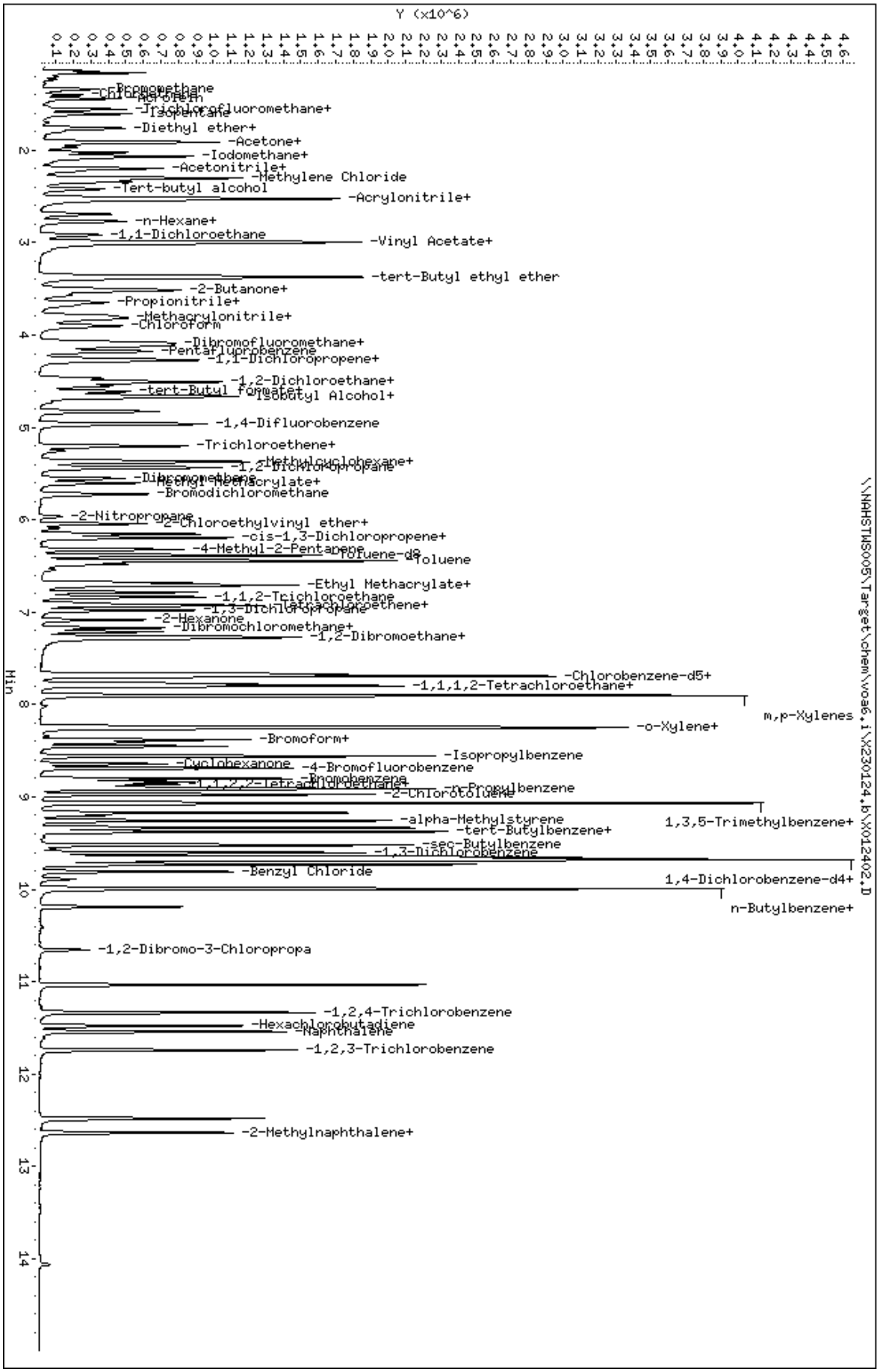
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	846915	50.0000	59.42	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1031770	50.0000	56.32	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1201894	50.0000	63.38	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1073554	50.0000	63.18	
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	624301	50.0000	53.88	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	658068	50.0000	52.04	
86	Benzyl Chloride	91	9.808	9.808	(1.279)	634707	50.0000	54.78	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	976563	50.0000	59.29	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	617170	50.0000	51.72	
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	57313	50.0000	52.85	
90	1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	448754	50.0000	59.59	
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	197414	50.0000	59.03	
92	Naphthalene	128	11.540	11.540	(1.194)	960961	50.0000	56.08	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	407820	50.0000	56.54	
146	Methyl acetate	43	2.225	2.225	(0.533)	130422	50.0000	57.11	
138	Freon TF	101	1.910	1.910	(0.457)	199870	50.0000	53.65	
141	Cyclohexane	56	4.121	4.121	(0.987)	307391	50.0000	59.83	
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	66643	100.000	105.80	
147	Methylcyclohexane	55	5.373	5.373	(1.083)	598166	50.0000	63.75	
135	1,4-Dioxane	88	5.598	5.598	(1.340)	51736	1000.00	1115.21	
132	n-Butanol	56	5.250	5.250	(1.257)	77147	1000.00	1170.23	
131	Methyl Acrylate	55	3.683	3.683	(0.882)	221779	50.0000	64.36	
133	Ethyl Acrylate	55	5.373	5.373	(1.286)	598166	50.0000	59.78	
136	n-Hexane	57	2.768	2.768	(0.663)	236946	50.0000	64.84	
139	Diethyl ether	59	1.752	1.752	(0.420)	161298	50.0000	47.56	
148	Tert-butyl alcohol	59	2.420	2.420	(0.579)	414531	1000.00	1179.61	
149	Isopropyl alcohol	45	2.086	2.086	(0.499)	222964	1000.00	1214.89	
156	Diisopropyl ether	45	2.997	2.997	(0.717)	716198	50.0000	54.40	
160	2-Methylnaphthalene	142	12.635	12.635	(1.308)	455715	50.0000	55.20	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1124346	50.0000	54.87	
167	Ethanol	45	1.700	1.700	(0.407)	36596	1000.00	1107.27	
172	tert-Butyl formate	59	4.612	4.612	(1.104)	325988	100.000	121.05	
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	422127	1000.00	1211.21	
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	768539	50.0000	52.53	
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	750478	50.0000	53.64	
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	325988	1000.00	1195.99	
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	874340	1000.00	1205.29	
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	455715	50.0000	(a)	
140	1,3-Butadiene	54	1.160	1.160	(0.278)	169233	50.0000	48.58	
152	Amyl alcohol	42	6.899	6.899	(0.900)	86783	1000.00	1191.41	
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	31804	50.0000	48.39	
159	Propylene oxide	43	1.752	1.752	(0.420)	32591	100.000	102.12	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	93010	1000.00	1277.14	
162	Butyl acrylate	55	8.249	8.249	(1.076)	559568	50.0000	58.15	
182	Epichlorohydrin	57	6.089	6.089	(1.227)	78561	200.000	228.51	
M 94	1,2-Dichloroethylene (total)	96				479106	100.000	(a)	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	491428	50.0000	52.12	
130	Ethyl Acetate	43	3.649	3.649	(0.873)	227429	50.0000	57.42	
134	Cyclohexanone	55	8.642	8.642	(0.894)	229738	1000.00	1294.43	
185	Isoprene	39	1.767	1.767	(0.423)	76442	50.0000	56.53	
186	Isopentane	42	1.606	1.606	(0.385)	146038	50.0000	(a)	
188	Isopropyl acetate	43	4.669	4.669	(0.941)	671984	50.0000	56.43	

187 n-Amyl acetate	43	8.451	8.451 (1.102)	453988	50.0000	52.85
189 n-Butyl acetate	43	7.210	7.210 (0.940)	374785	50.0000	59.23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	236946	1000.00	1270.23
194 Acetaldehyde	44	1.209	1.209	(0.289)	64437	200.000	200.48
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	554067	50.0000	56.57
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	535809	50.0000	53.74
168 1-Propanol	59	2.993	2.993	(0.716)	82662	1000.00	996.66

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Bromomethane
Chloroethane
Acrolein
Trichlorofluoromethane+
Isopentane
Diethyl ether+
Acetone+
Iodomethane+
Acetonitrile+
Methylene Chloride
Tert-butyl alcohol
Acrylonitrile+
n-Hexane+
1,1-Dichloroethane
Vinyl Acetate+
tert-Butyl ethyl ether
2-Butanone+
Propionitrile+
Methacrylonitrile+
Chloroform
Dibromofluoromethane+
Pentafluorobenzene
1,1-Dichloropropene+
1,2-Dichloroethane+
tert-Butyl formate+
Isobutyl Alcohol+
1,4-Difluorobenzene
Trichloroethene+
Methylcyclohexane+
1,2-Dichloropropane
Dibromomethane
Methyl methacrylate+
Bromodichloromethane
2-Nitropropane
2-Chloroethylvinyl ether+
cis-1,3-Dichloropropene+
4-Methyl-2-Pentanone
Toluene-d8
Toluene
Ethyl Methacrylate+
1,1,2-Trichloroethane
Tetrachloroethene+
1,3-Dichloropropane
2-Hexanone
Dibromochloromethane+
1,2-Dibromoethane+
Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
Bromoform+
Isopropylbenzene
Cyclohexanone
4-Bromofluorobenzene
Bromobenzene
1,1,2,2-Tetrachloroethane+
n-Propylbenzene
2-Chlorotoluene
alpha-Methylstyrene
1,3,5-Trimethylbenzene+
tert-Butylbenzene+
sec-Butylbenzene
1,3-Dichlorobenzene
Benzyl Chloride
1,4-Dichlorobenzene-d4+
n-Butylbenzene+
1,2-Dibromo-3-Chloropropa
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
2-Methylnaphthalene+

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Inj Date : 24-JAN-2023 07:52
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LabSampID : CCV

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

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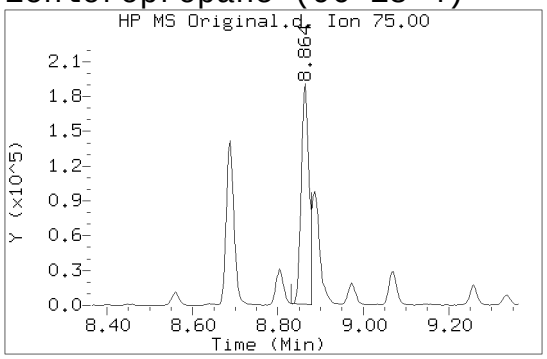

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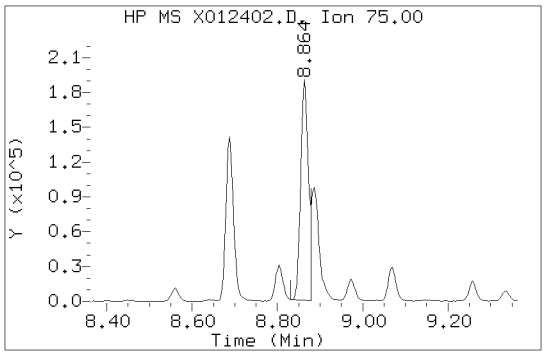

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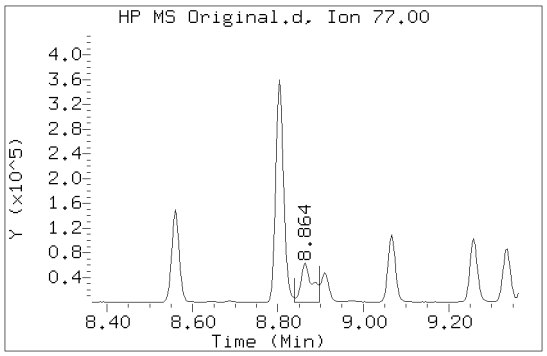

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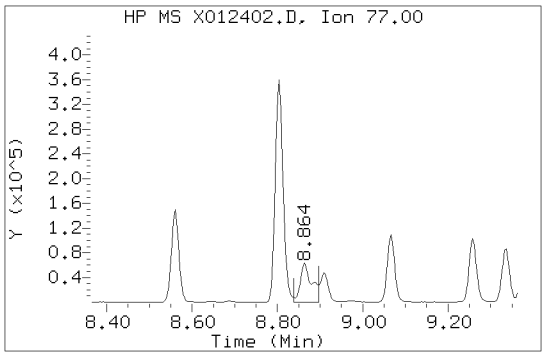

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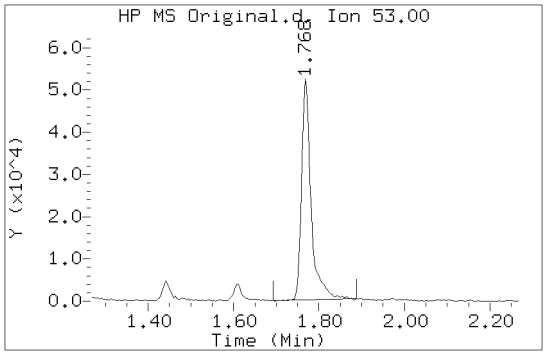

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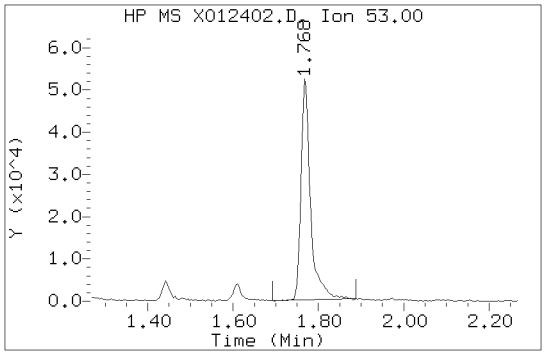

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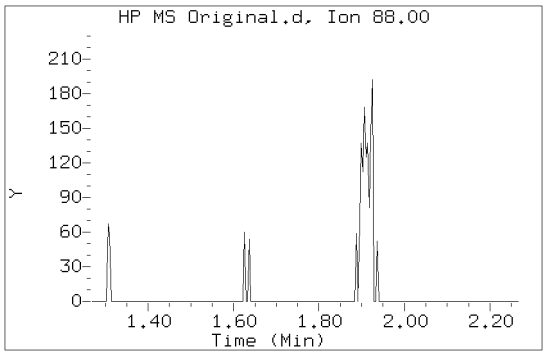

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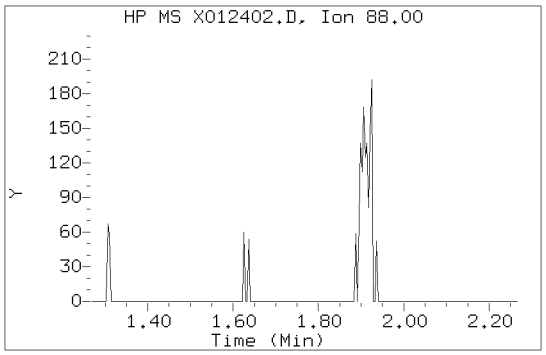

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Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012404.D
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Inj Date : 24-JAN-2023 08:55
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230124;VLCSW-230124;3;;LCS
Misc Info : V6;WATER;0;1;
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Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	506288	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	62469	17.8957	17.89
3 Chloromethane	50	1.074	1.074	(0.257)	90079	21.0067	21.00
4 Propionitrile	54	3.649	3.645	(0.873)	110314	213.540	213.54(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	88747	20.0662	20.06
6 Bromomethane	94	1.340	1.336	(0.321)	67045	21.0995	21.09
7 Chloroethane	64	1.400	1.400	(0.335)	60209	19.5589	19.55
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	135266	21.8555	21.85
9 Acrolein	56	1.445	1.441	(0.346)	15269	45.6755	45.67
10 Acetone	43	1.970	1.966	(0.472)	67482	47.4845	47.48
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	81077	21.1001	21.10
12 Isobutyl Alcohol	43	4.672	4.669	(1.118)	273658	480.555	480.55(a)
13 Acetonitrile	39	2.195	2.195	(0.525)	111916	242.881	242.88(a)
14 Allyl Chloride	41	2.198	2.195	(0.526)	199817	22.7686	22.76(a)
15 Iodomethane	142	2.026	2.022	(0.485)	196355	41.7582	41.75
16 Acrylonitrile	53	2.532	2.528	(0.606)	62715	48.1230	48.12
17 Methylene Chloride	84	2.300	2.300	(0.550)	106774	20.2582	20.25
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	275936	21.9392	21.93
19 Carbon Disulfide	76	2.067	2.067	(0.495)	430725	42.8438	42.84
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	91611	21.3026	21.30

21 Vinyl Acetate	43	2.993	2.993 (0.716)	523654	47.4290	47.42
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	158089	20.9462	20.94

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012404.D Page 2
Report Date: 09-Feb-2023 13:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
23	Chloroprene	53	1.771	1.767	(0.424)	32496	18.8772	18.87(M)
24	2-Butanone	43	3.578	3.570	(0.856)	67501	46.4662	46.46
25	Methacrylonitrile	41	3.818	3.818	(0.914)	79502	22.1766	22.17(a)
26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	147532	23.0226	23.02
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	106823	20.4111	20.41
28	Chloroform	83	3.900	3.900	(0.934)	178133	21.0579	21.05
29	Bromochloromethane	128	3.791	3.788	(0.908)	56511	19.7211	19.72
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.980)	243009	49.9878	49.98
31	1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	152525	22.7255	22.72
32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	125127	22.9406	22.94
33	1,2-Dichloroethane	62	4.556	4.552	(0.918)	144499	22.9554	22.95
34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	125520	21.5503	21.55
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	282777	55.0828	55.08
* 36	1,4-Difluorobenzene	114	4.965	4.961	(1.000)	768279	50.0000	
37	Benzene	78	4.511	4.508	(0.909)	387650	21.1296	21.12
38	Trichloroethene	130	5.205	5.205	(1.048)	109813	21.1032	21.10
39	Bromodichloromethane	83	5.726	5.722	(1.153)	142462	20.6909	20.69
40	Methyl Methacrylate	41	5.606	5.602	(1.342)	83692	24.2435	24.24(a)
41	2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	90415	46.1579	46.15
42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	98874	20.2601	20.26
43	2-Nitropropane	43	5.966	5.966	(1.428)	31524	24.6570	24.65
44	Dibromomethane	93	5.550	5.550	(1.118)	68046	20.5137	20.51
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	176568	45.2486	45.24
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	170594	21.0970	21.09
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	730061	50.0000	
$ 48	Toluene-d8	98	6.386	6.386	(0.833)	895066	49.6147	49.61
49	Ethyl Methacrylate	69	6.708	6.708	(1.351)	85092	23.5199	23.51(a)
50	Toluene	91	6.446	6.446	(0.841)	422989	20.9617	20.96
51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	146584	21.8438	21.84
52	2-Hexanone	43	7.087	7.083	(0.924)	127418	47.9933	47.99
53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	80110	19.7887	19.78
54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	163805	20.5571	20.55
55	Dibromochloromethane	129	7.173	7.173	(0.935)	117422	20.0969	20.09
56	Tetrachloroethene	164	6.925	6.925	(0.903)	89643	21.4707	21.47
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	106098	20.9616	20.96
58	1-Chlorohexane	55	7.694	7.694	(1.550)	86825	23.3850	23.38
59	Chlorobenzene	112	7.694	7.694	(1.003)	284874	19.9033	19.90
60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	108445	20.3594	20.35
61	Ethylbenzene	106	7.799	7.799	(1.017)	146027	21.6589	21.65
62	m,p-Xylenes	106	7.904	7.904	(1.031)	370485	42.6267	42.62
63	o-Xylene	106	8.241	8.241	(1.075)	177616	20.7052	20.70
64	Styrene	104	8.260	8.256	(1.077)	307584	21.3922	21.39
66	Bromoform	173	8.410	8.410	(1.097)	82508	20.3834	20.38
67	Isopropylbenzene	105	8.560	8.560	(1.116)	442744	22.5909	22.59
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	134625	20.2630	20.26
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	343904	50.9987	50.99
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	416844	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	99436	21.4382	21.43(M)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	35433	22.4826	22.48(a)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	521108	22.5691	22.56
74	Bromobenzene	156	8.807	8.803	(0.912)	135925	19.8751	19.87
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	382078	22.4002	22.40

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	327457	21.6121	21.61
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	383169	22.1837	22.18

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Report Date: 09-Feb-2023 13:42

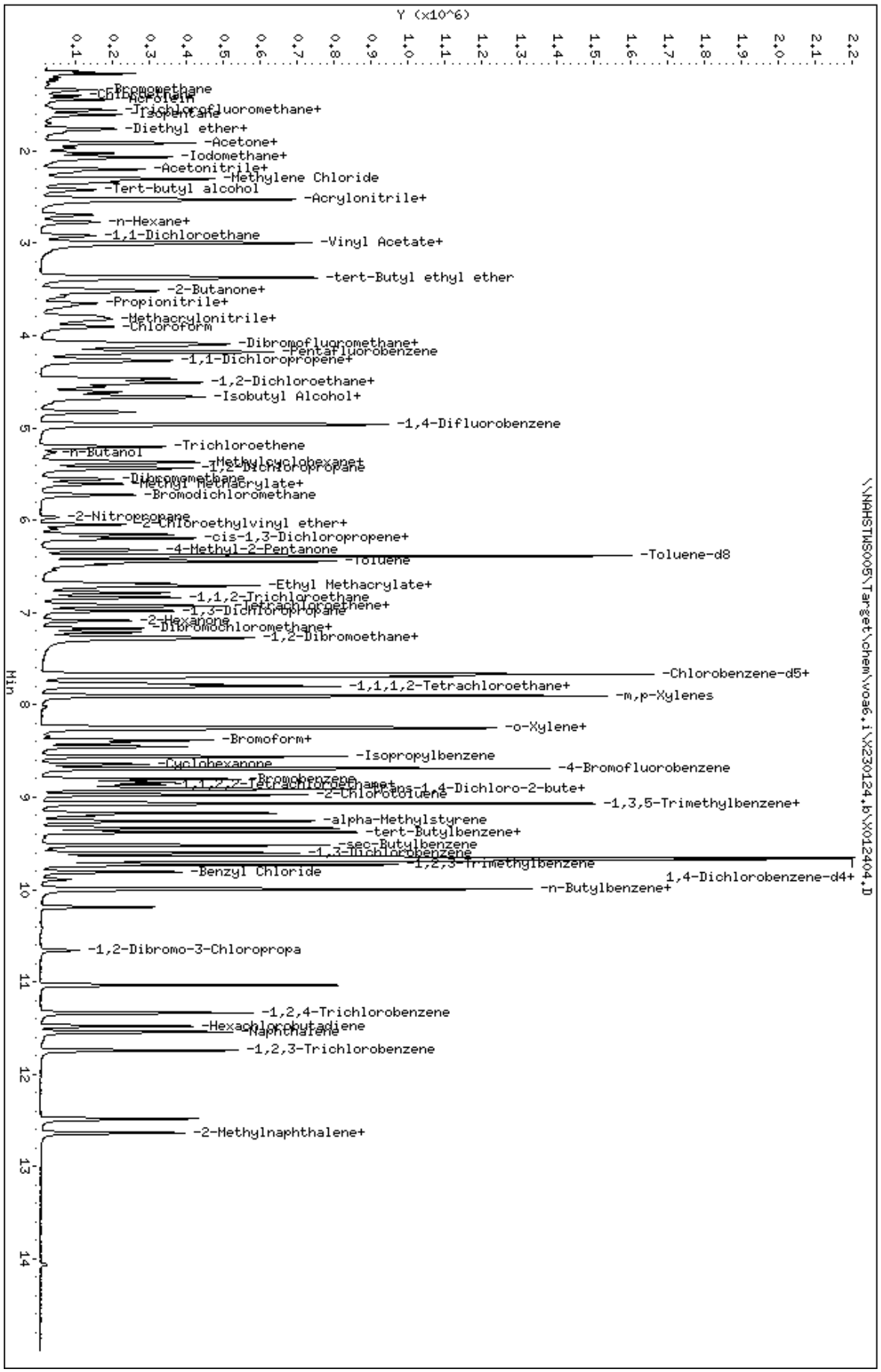
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	311579	22.3159	22.31
79	1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	387355	21.5829	21.58
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	426433	22.9546	22.95
82	p-Isopropyltoluene	119	9.651	9.647	(0.999)	388385	23.3307	23.33
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	241951	21.3152	21.31
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	254276	20.5283	20.52
86	Benzyl Chloride	91	9.808	9.808	(1.279)	224941	21.3216	21.32
87	n-Butylbenzene	91	9.995	9.992	(1.035)	332820	21.7838	21.78
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	239107	20.4533	20.45
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	22979	21.6858	21.68
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	163245	22.1269	22.12
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	66796	20.5422	20.54
92	Naphthalene	128	11.544	11.540	(1.195)	376622	22.4366	22.43
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	152265	21.5493	21.54
146	Methyl acetate	43	2.228	2.225	(0.533)	51445	22.5816	22.58
138	Freon TF	101	1.913	1.910	(0.458)	74921	20.1592	20.15
141	Cyclohexane	56	4.121	4.121	(0.987)	114430	23.1183	23.11
142	Tetrahydrofuran	42	3.844	3.840	(0.920)	29275	44.8187	44.81
147	Methylcyclohexane	55	5.377	5.373	(1.083)	236865	25.1867	25.18
135	1,4-Dioxane	88	5.598	5.598	(1.340)	19936	430.769	430.76
132	n-Butanol	56	5.261	5.250	(1.259)	24436	413.771	413.77(a)
131	Methyl Acrylate	55	3.690	3.683	(0.883)	85607	24.9057	24.90
133	Ethyl Acrylate	55	5.377	5.373	(1.287)	236865	24.8338	24.83
136	n-Hexane	57	2.768	2.768	(0.663)	76818	21.0730	21.07
139	Diethyl ether	59	1.756	1.752	(0.420)	66426	19.6357	19.63
148	Tert-butyl alcohol	59	2.419	2.420	(0.579)	170769	487.118	487.11
149	Isopropyl alcohol	45	2.090	2.086	(0.500)	91141	497.808	497.80
156	Diisopropyl ether	45	2.993	2.997	(0.716)	287962	21.9257	21.92
160	2-Methylnaphthalene	142	12.635	12.635	(1.308)	176642	21.8418	21.84
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	441927	22.0158	22.01
167	Ethanol	45	1.700	1.700	(0.407)	14764	445.819	445.81
172	tert-Butyl formate	59	4.612	4.612	(1.104)	129200	48.0920	48.09
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	164161	475.252	475.25
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	320910	21.9892	21.98
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	302902	21.7047	21.70
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	129200	475.154	475.15
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.351)	352283	484.462	484.46
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	176642		(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	68482	19.7085	19.70
152	Amyl alcohol	42	6.907	6.899	(0.901)	29470	408.211	408.21
158	Dichlorofluoromethane	67	1.527	1.531	(0.366)	13453	20.5217	20.52
159	Propylene oxide	43	1.756	1.752	(0.420)	13824	43.4204	43.42
161	3-Methyl-1-butanol	55	6.907	6.903	(0.901)	33775	467.930	467.93
162	Butyl acrylate	55	8.252	8.249	(1.076)	217697	22.8275	22.82
182	Epichlorohydrin	57	6.097	6.089	(1.228)	33208	97.8089	97.80
M 94	1,2-Dichloroethylene (total)	96				198434	41.7137	41.71
M 95	Xylenes (total)	106				548101	63.3319	63.33
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	183108	19.8252	19.82
130	Ethyl Acetate	43	3.653	3.649	(0.874)	93094	23.5642	23.56
134	Cyclohexanone	55	8.642	8.642	(0.894)	95712	550.442	550.44
185	Isoprene	39	1.767	1.767	(0.423)	31441	23.3110	23.31
186	Isopentane	42	1.610	1.606	(0.385)	55668		(a)

188 Isopropyl acetate	43	4.672	4.669 (0.941)	274060	22.9603	22.96
187 n-Amyl acetate	43	8.451	8.451 (1.102)	185654	21.8083	21.80

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.210	7.210	(0.940)	153357	24.4534	24.45
150 Allyl alcohol	57	2.768	2.768	(0.663)	76818	412.802	412.80
194 Acetaldehyde	44	1.209	1.209	(0.289)	52740	160.308	160.30
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	228908	23.5829	23.58
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	206858	20.9355	20.93
168 1-Propanol	59	2.997	2.993	(0.717)	31848	384.917	384.91

QC Flag Legend

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



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Date : 24-JAN-2023 08:55
Client ID: VLCSW-230124
Sample Info: VLCSW-230124;VLCSW-230124;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

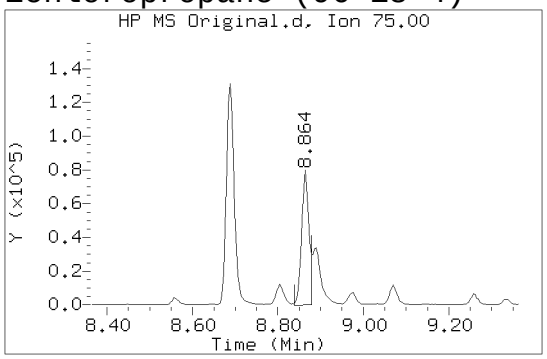
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012404.D
Inj Date : 24-JAN-2023 08:55
InstruID : voa6.i
LabSampID : VLCSW-230124

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

Reason Code:

BEFORE

MASS
75
AREA
99436
HEIGHT
79950
03-Feb-2023
10:50
linh
pham



AFTER

MASS
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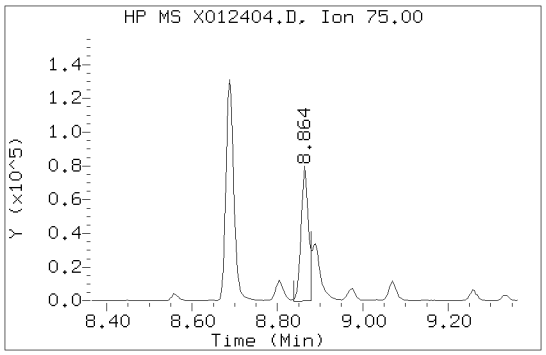
AREA
99436
HEIGHT
79950
09-Feb-2023
13:42



BEFORE

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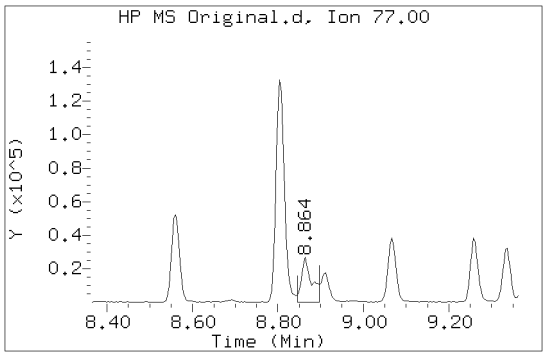
26695
03-Feb-2023
10:50
linh
pham



AFTER

MASS
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AREA
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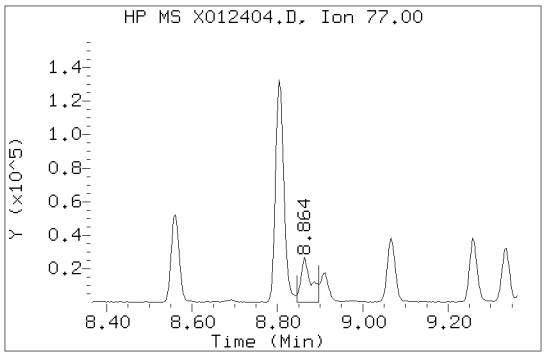
HEIGHT
26695
09-Feb-2023
13:42



Chloroprene (126-99-8)

Reason Code:

BEFORE

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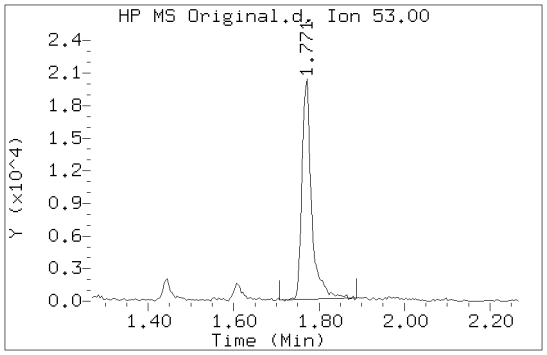
AREA
32496
HEIGHT
20292
03-Feb-2023
10:50
linh
pham



AFTER

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AREA
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HEIGHT
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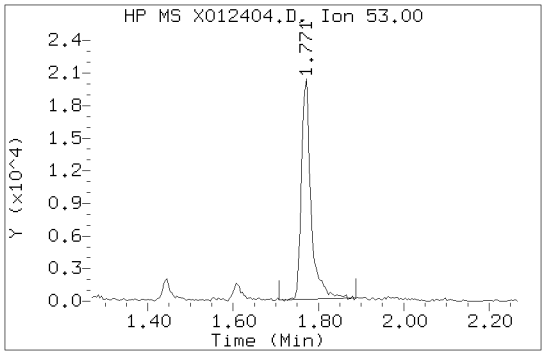
09-Feb-2023
13:42



BEFORE

MASS
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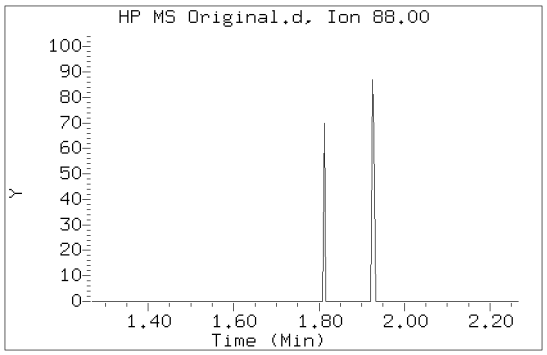
AREA
0
HEIGHT
0
03-Feb-2023
10:50
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
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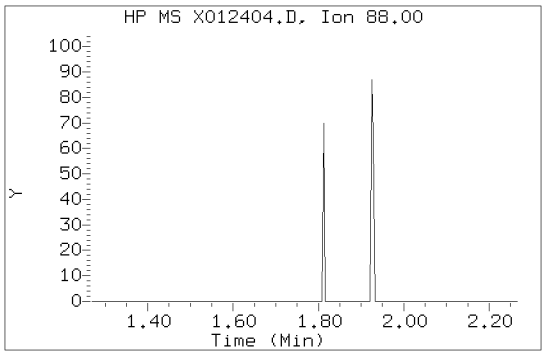
09-Feb-2023
13:42



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012406.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012406.D
Lab Smp Id: VBLKW-230124 Client Smp ID: VBLKW-230124
Inj Date : 24-JAN-2023 09:37
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230124;VBLKW-230124;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	599102	50.0000	
$ 30 Dibromofluoromethane	113	4.091	4.095	(0.980)	270280	46.9742	46.97
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	299130	49.2700	49.26
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	853587	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	761276	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	993783	52.8280	52.82
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	352821	50.1767	50.17
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	394519	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012406.D

Date : 24-JAN-2023 09:37

Client ID: VBLKW-230124

Instrument: voa6.i

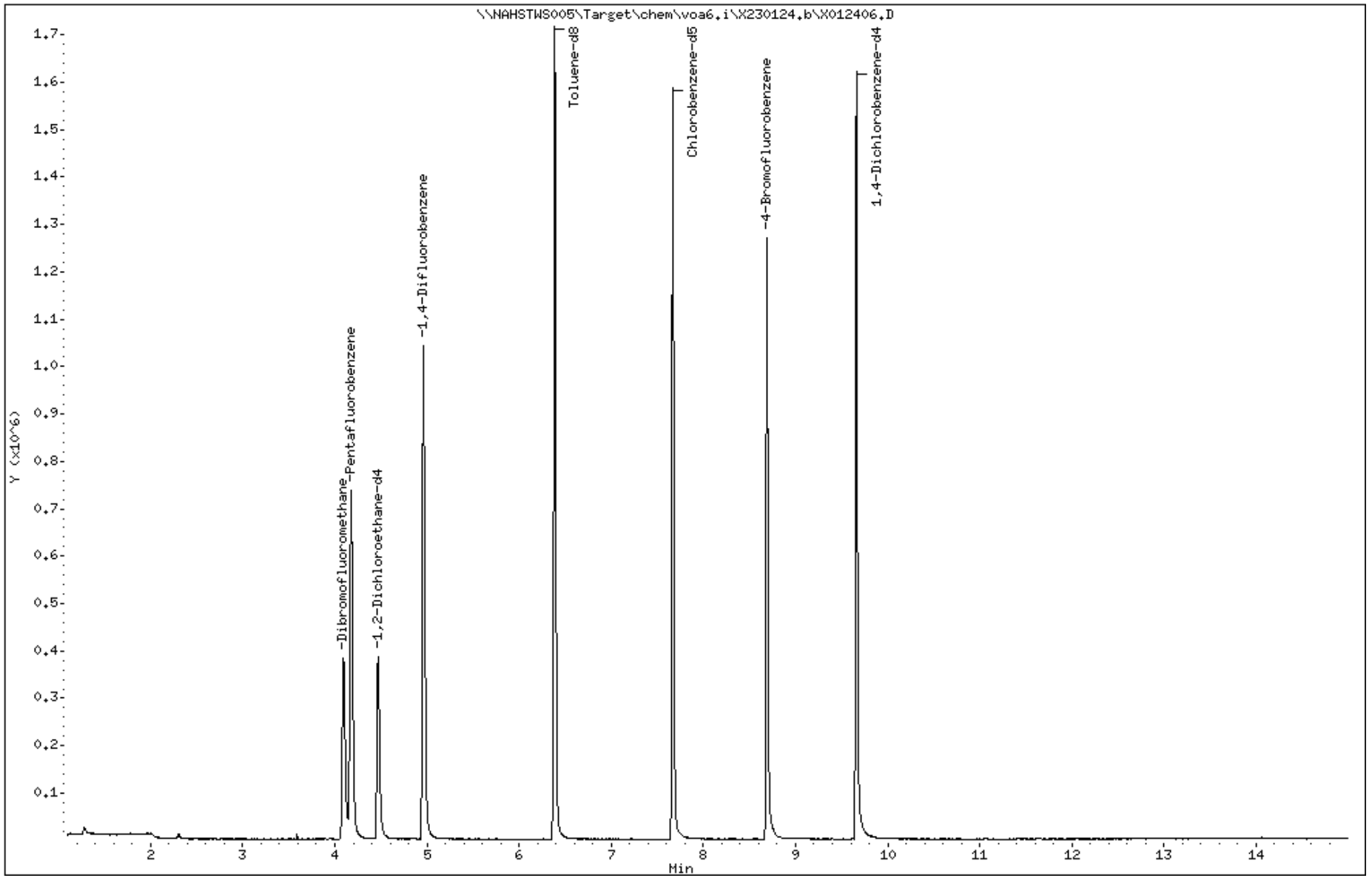
Sample Info: VBLKW-230124;VBLKW-230124;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 24-JAN-2023 09:37
InstruID : voa6.i
LabSampID : VBLKW-230124

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D
Lab Smp Id: HS23010982-05 Client Smp ID: HS23010982-05
Inj Date : 24-JAN-2023 09:58
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-05;HS23010982-05;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 8
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

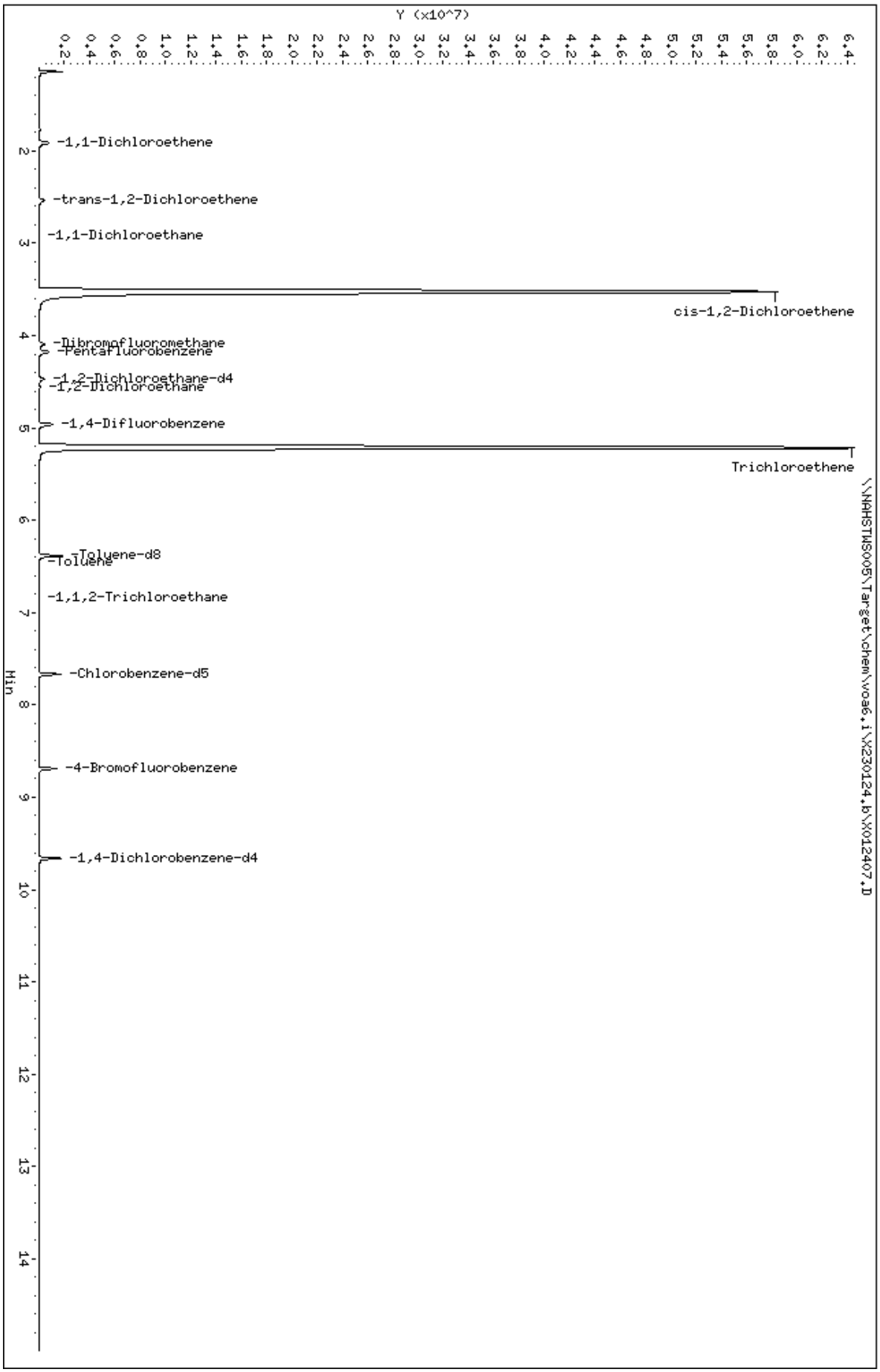
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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	4.174	4.178	(1.000)	620904	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	1191306	219.638	21963.83(A)
	11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	131924	27.9952	2799.51
	20 trans-1,2-Dichloroethene	96	2.532	2.524	(0.607)	203796	38.6416	3864.15
	22 1,1-Dichloroethane	63	2.922	2.918	(0.700)	18864	2.03803	203.80
	27 cis-1,2-Dichloroethene	96	3.510	3.522	(0.841)	30102983	4690.12	469011.61(AM)
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	282851	47.4346	47.43
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	70047	9.45092	945.09
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	317173	50.4012	50.40
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	904596	50.0000	
	38 Trichloroethene	130	5.201	5.205	(1.048)	23775272	3880.48	388047.82(A)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	819512	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1045416	51.6236	51.62
	50 Toluene	91	6.453	6.446	(0.842)	14239	0.62861	62.86(a)
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	5469	1.20349	120.34(aH)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	377890	49.9233	49.92
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	422766	50.0000	
M	94 1,2-Dichloroethylene (total)	96				30306779	4728.76	472875.77

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230124,b\X012407.D
Date : 24-JAN-2023 09:58
Client ID: HS230109B2-05
Sample Info: HS230109B2-05;HS230109B2-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 2

Date : 24-JAN-2023 09:58

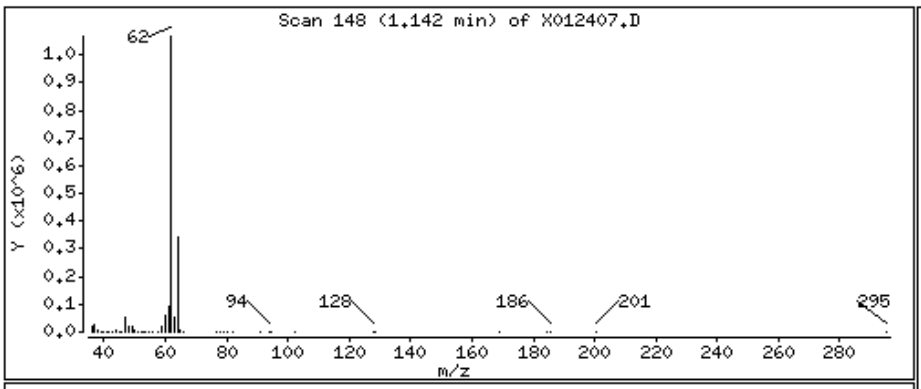
Client ID: HS23010982-05 Instrument: voa6.i

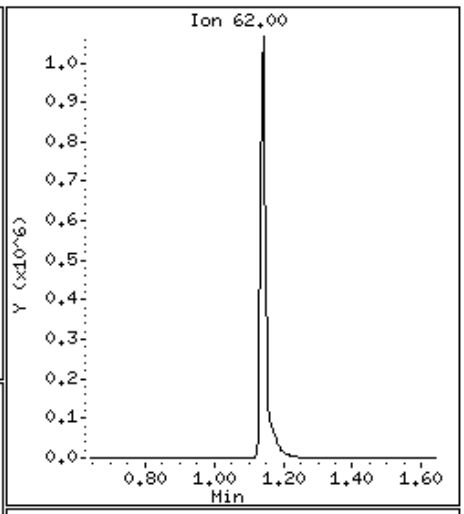
Sample Info: HS23010982-05;HS23010982-05;;;

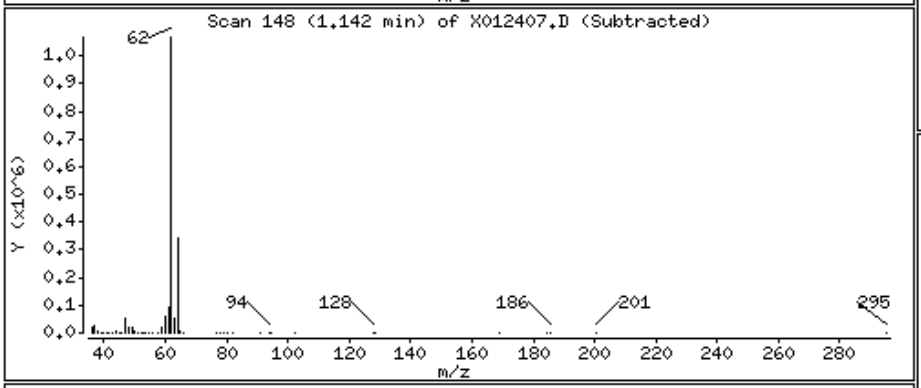
Purge Volume: 5.0 Operator: PC

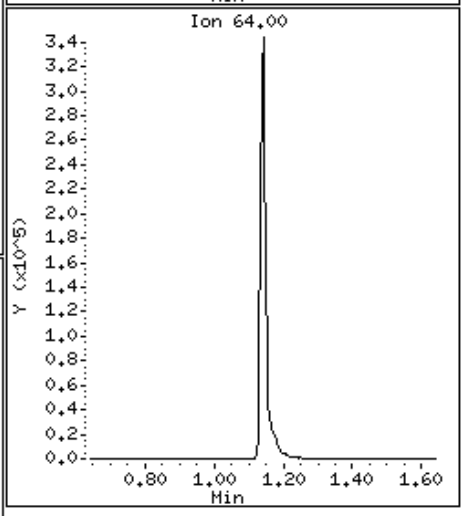
Column phase: DB624 Column diameter: 0.18

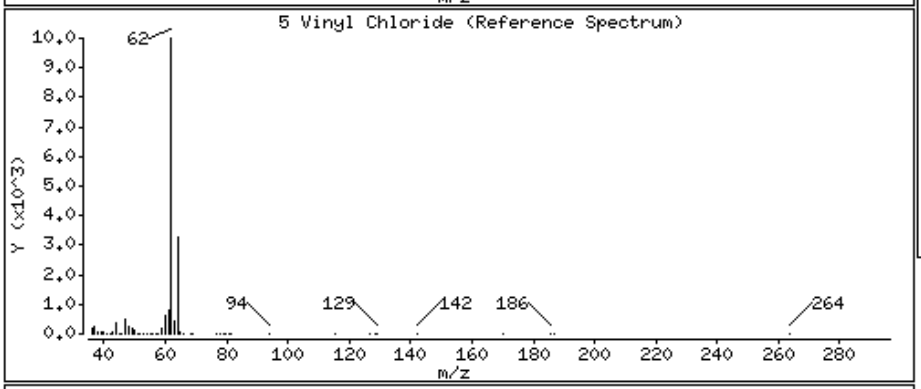
5 Vinyl Chloride Concentration: 21963.83 ug/l

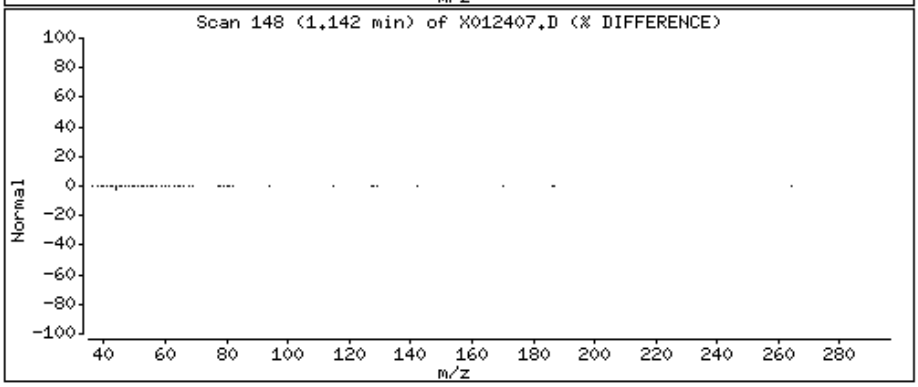












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 3

Date : 24-JAN-2023 09:58

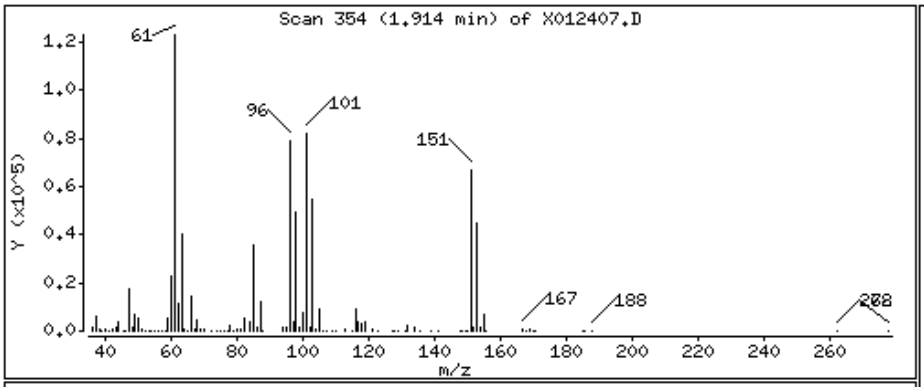
Client ID: HS23010982-05 Instrument: voa6.i

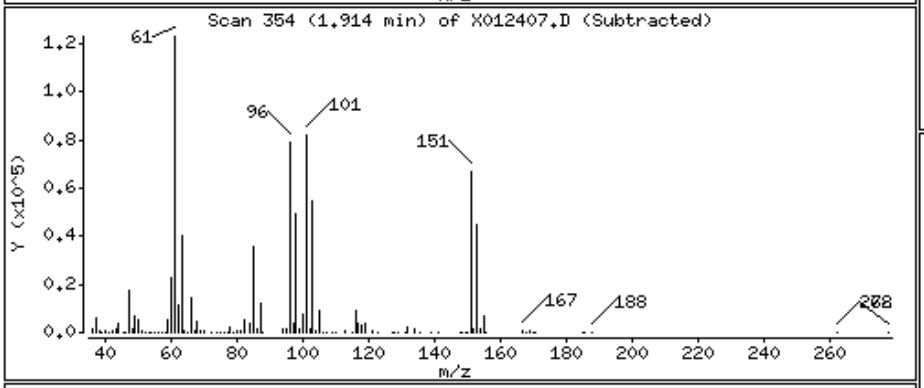
Sample Info: HS23010982-05;HS23010982-05;;;

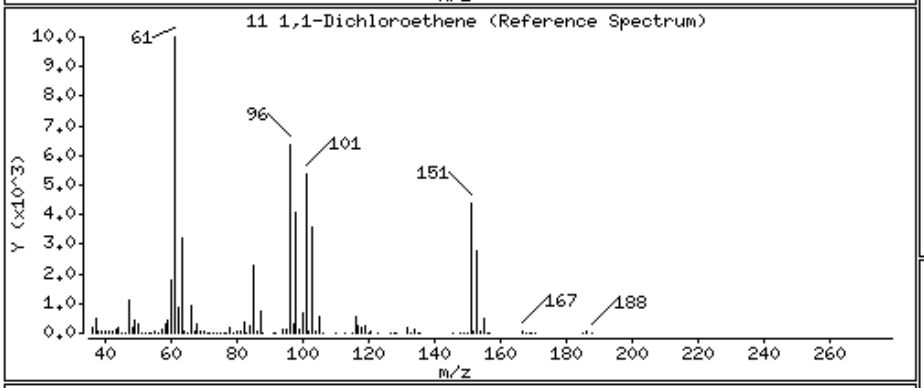
Purge Volume: 5.0 Operator: PC

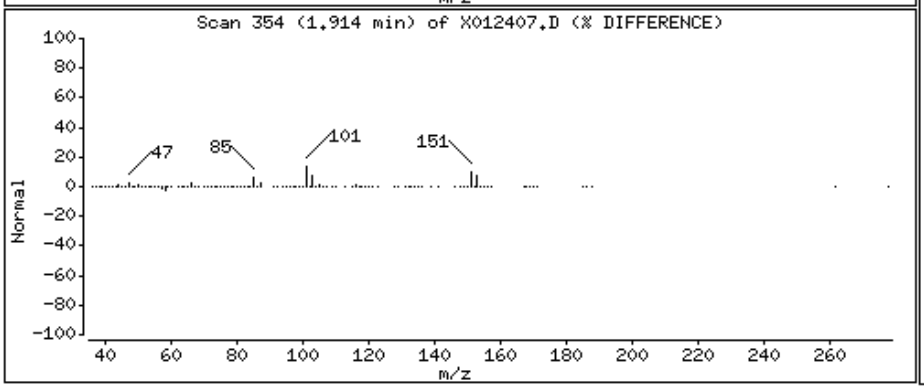
Column phase: DB624 Column diameter: 0.18

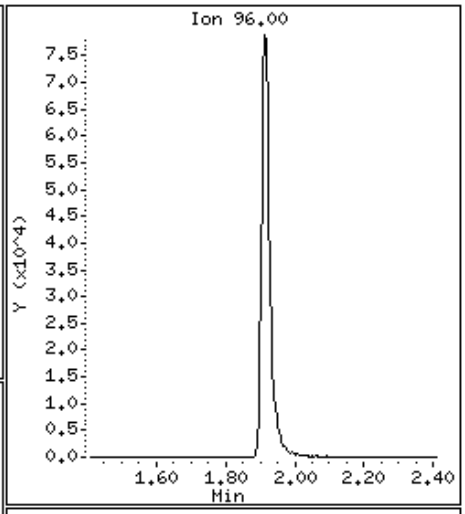
11 1,1-Dichloroethene Concentration: 2799.51 ug/l

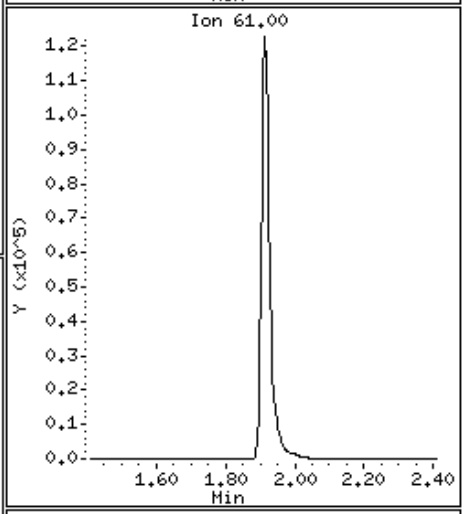


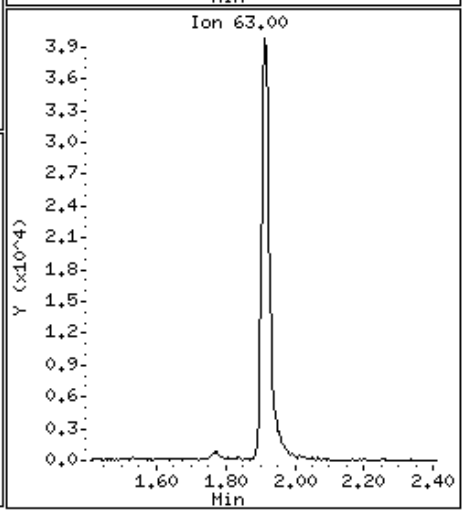












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 4

Date : 24-JAN-2023 09:58

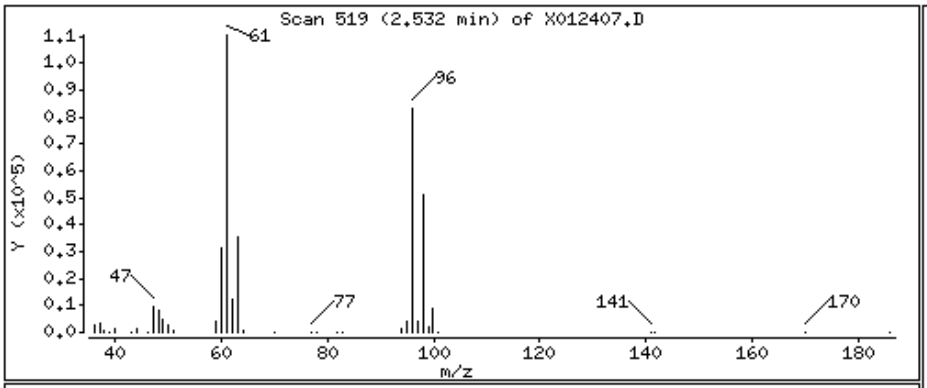
Client ID: HS23010982-05 Instrument: voa6.i

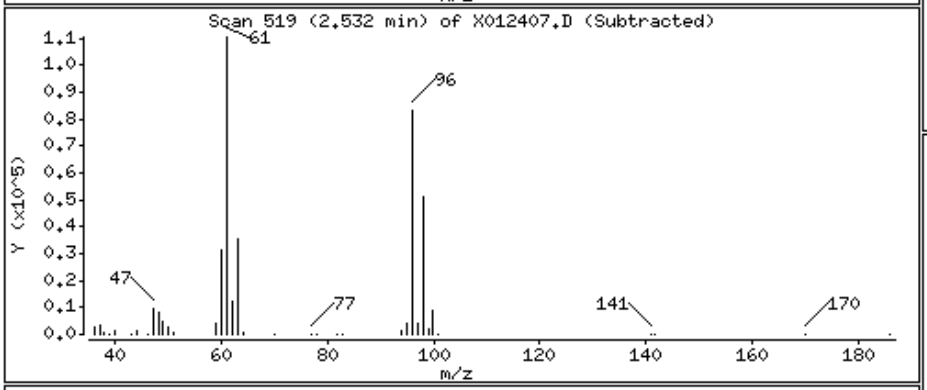
Sample Info: HS23010982-05;HS23010982-05;;;

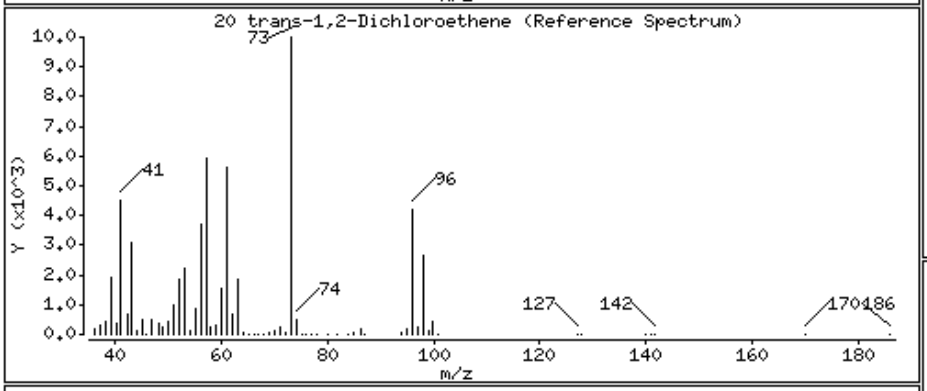
Purge Volume: 5.0 Operator: PC

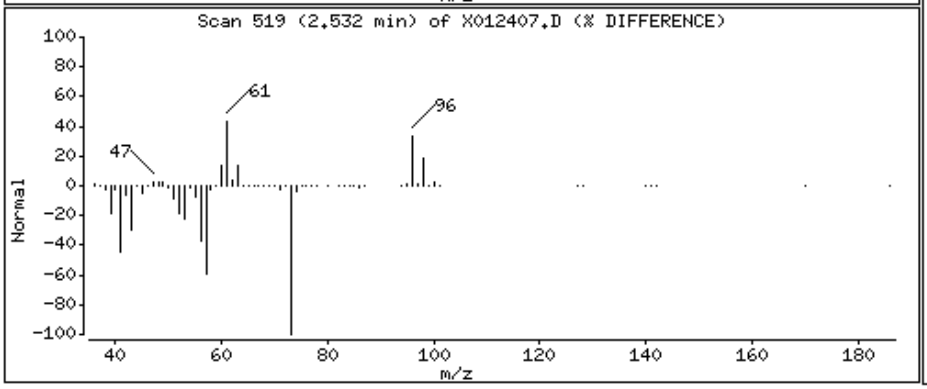
Column phase: DB624 Column diameter: 0.18

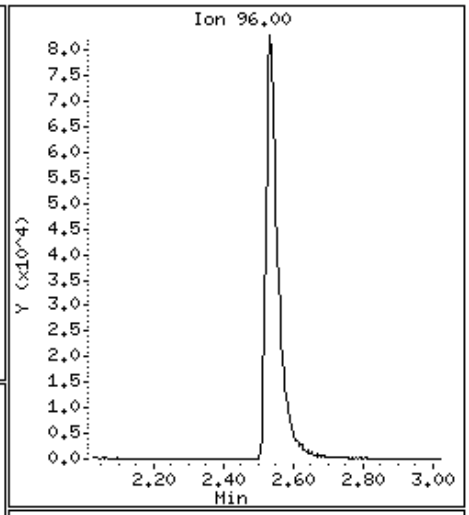
20 trans-1,2-Dichloroethene Concentration: 3864.15 ug/l

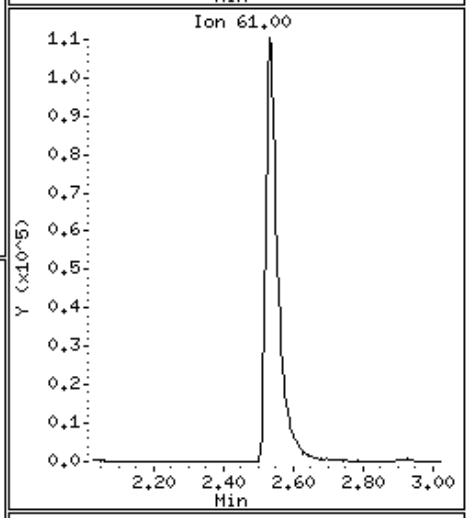


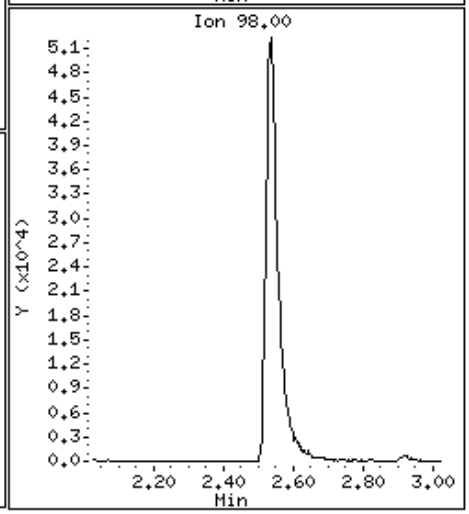












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 5

Date : 24-JAN-2023 09:58

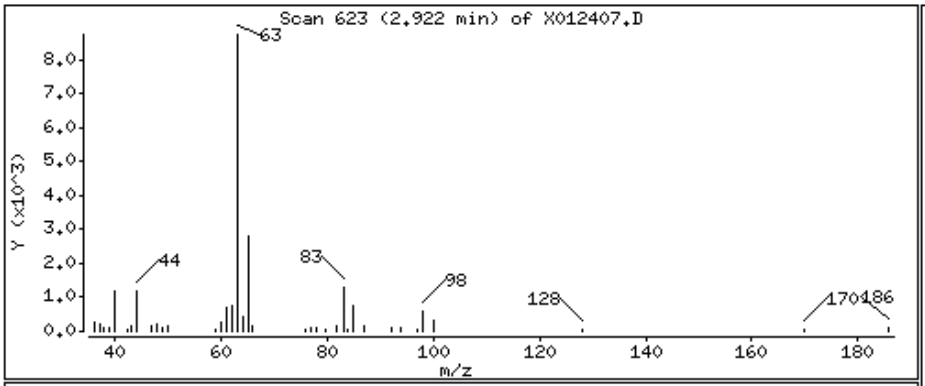
Client ID: HS23010982-05 Instrument: voa6.i

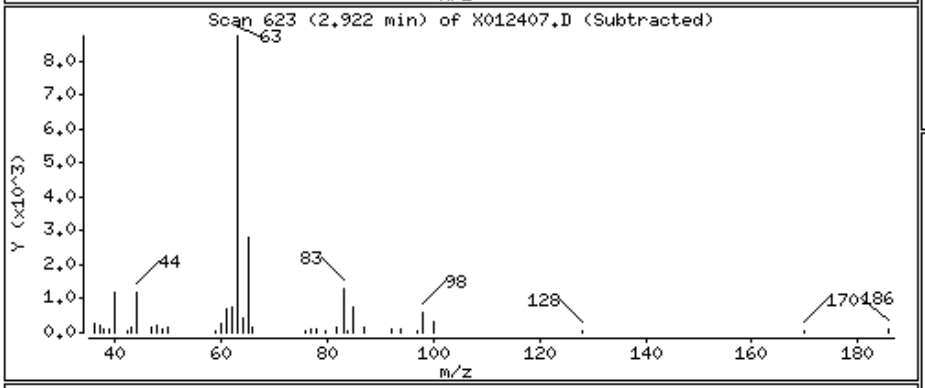
Sample Info: HS23010982-05;HS23010982-05;;;

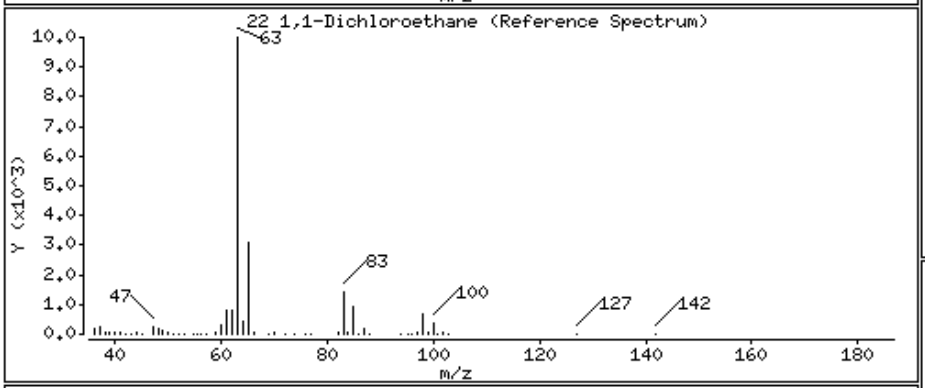
Purge Volume: 5.0 Operator: PC

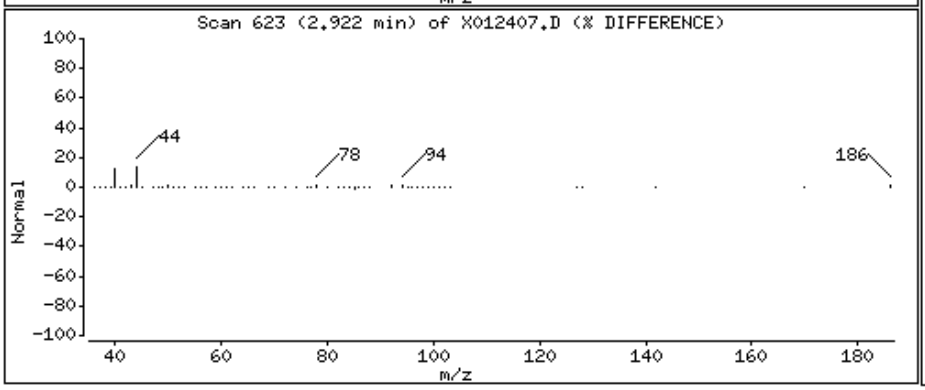
Column phase: DB624 Column diameter: 0.18

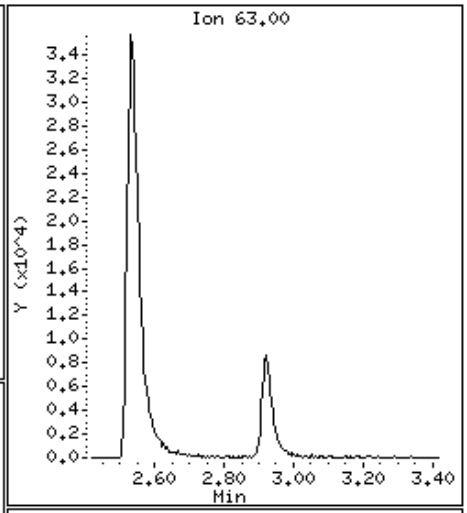
22 1,1-Dichloroethane Concentration: 203.80 ug/l

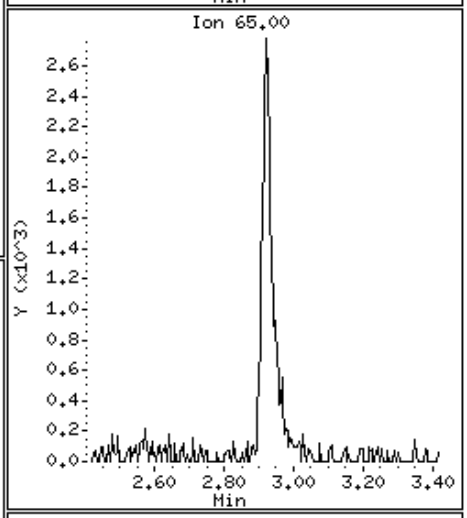


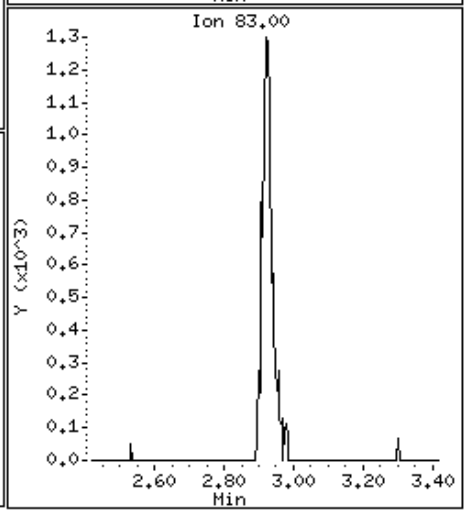












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 6

Date : 24-JAN-2023 09:58

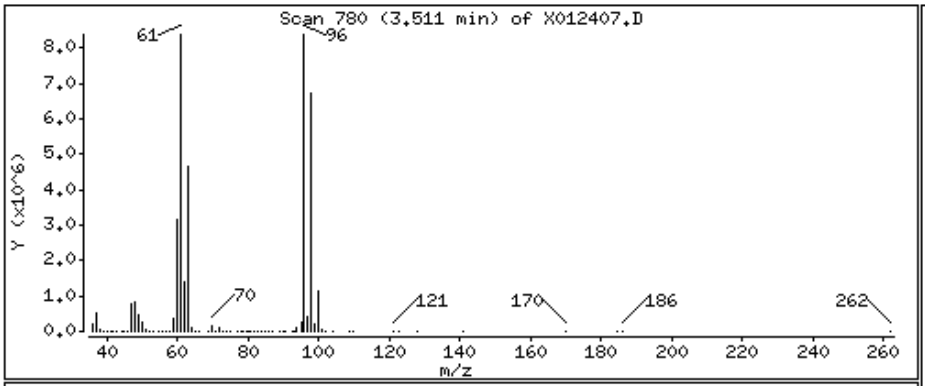
Client ID: HS23010982-05 Instrument: voa6.i

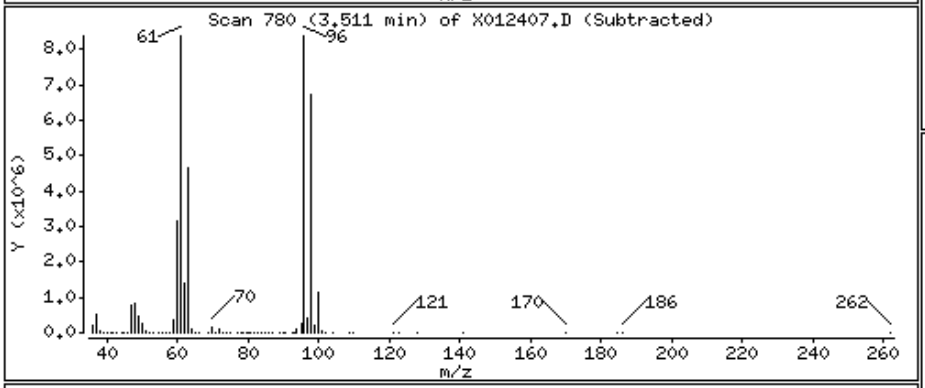
Sample Info: HS23010982-05;HS23010982-05;;;

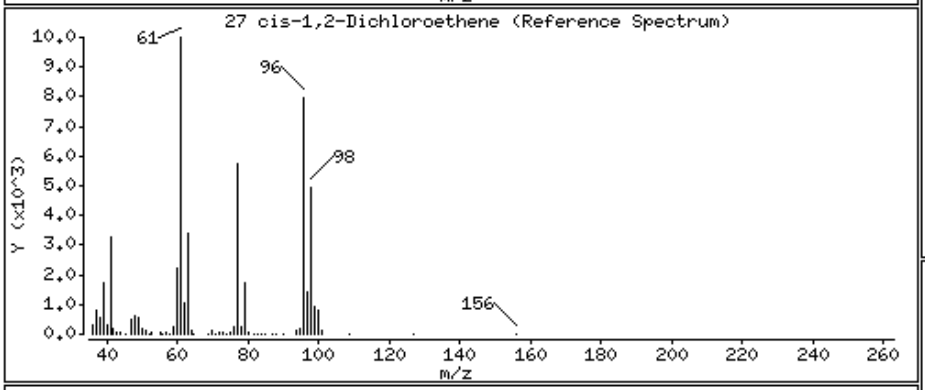
Purge Volume: 5.0 Operator: PC

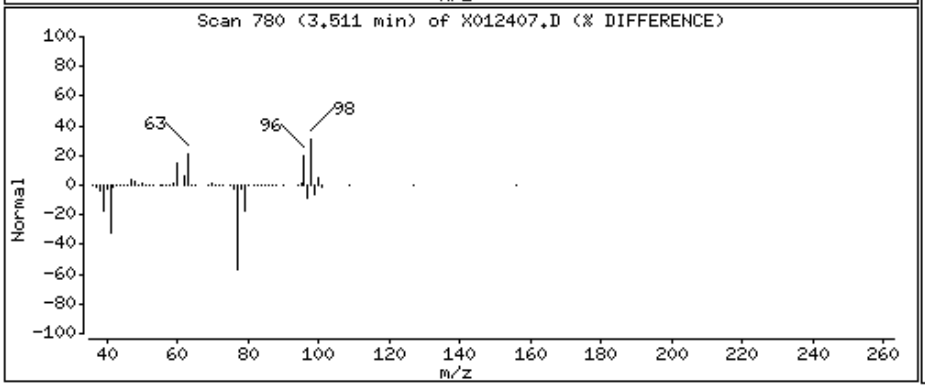
Column phase: DB624 Column diameter: 0.18

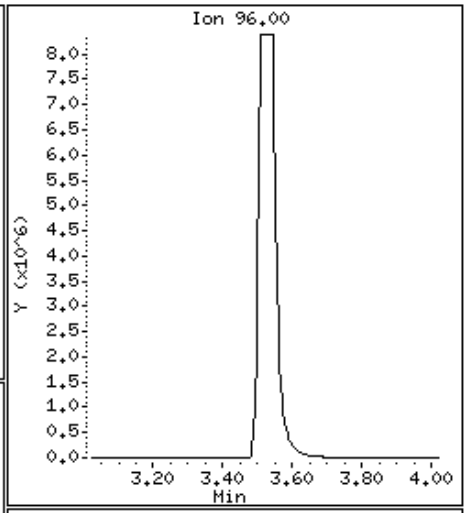
27 cis-1,2-Dichloroethene Concentration: 469011.61 ug/l

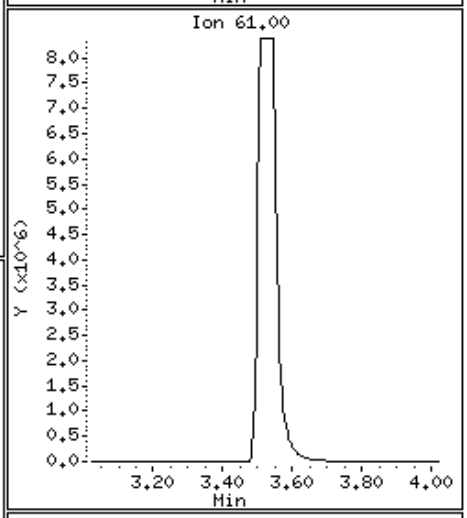


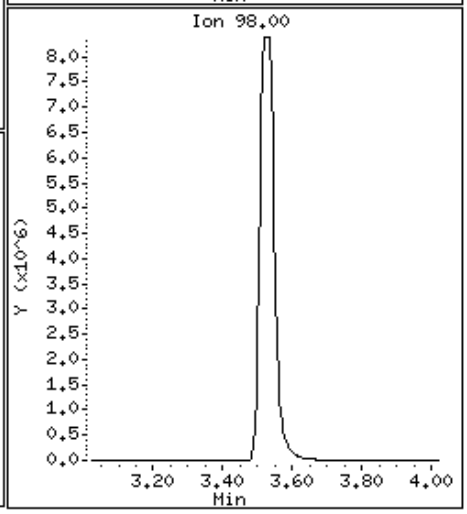












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 7

Date : 24-JAN-2023 09:58

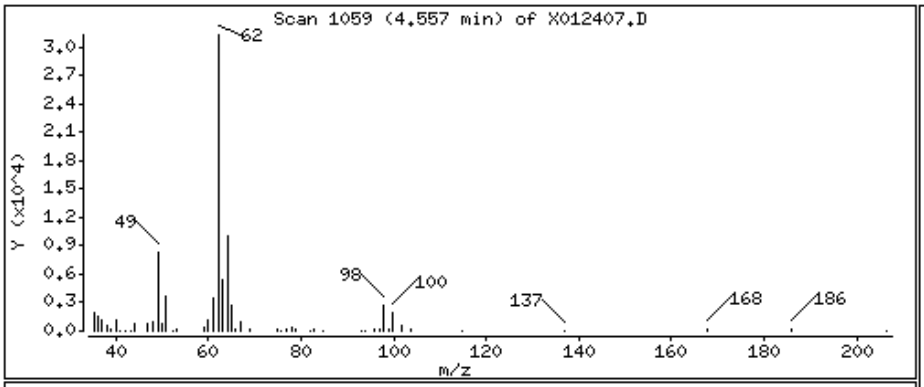
Client ID: HS23010982-05 Instrument: voa6.i

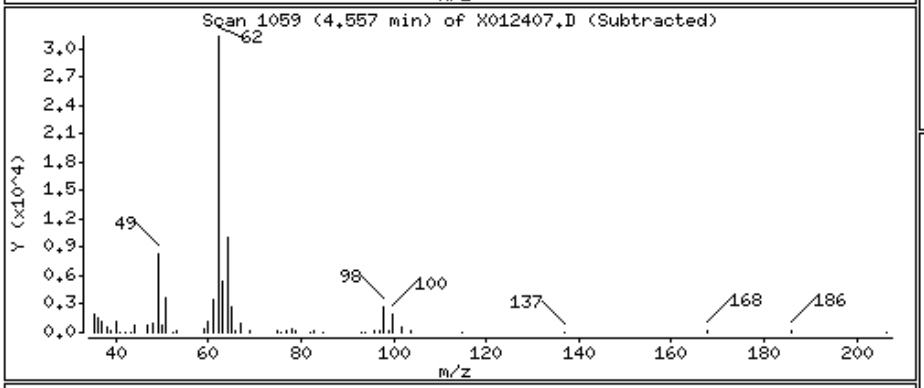
Sample Info: HS23010982-05;HS23010982-05;;;

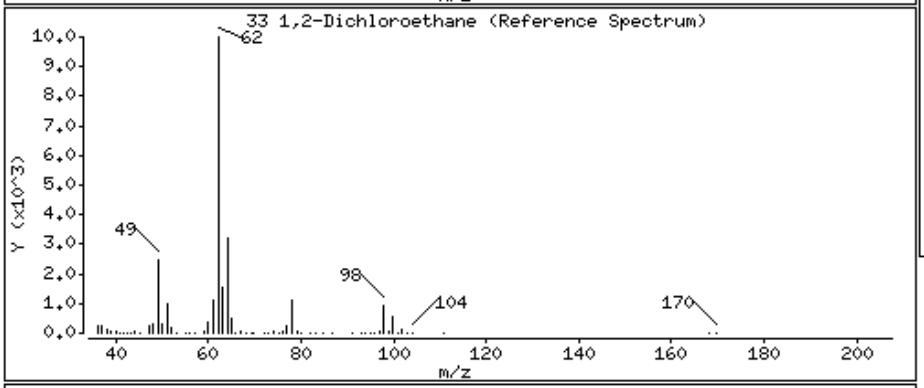
Purge Volume: 5.0 Operator: PC

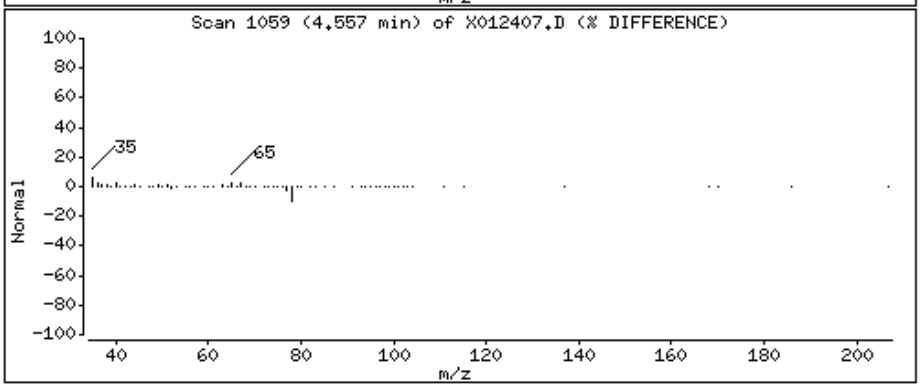
Column phase: DB624 Column diameter: 0.18

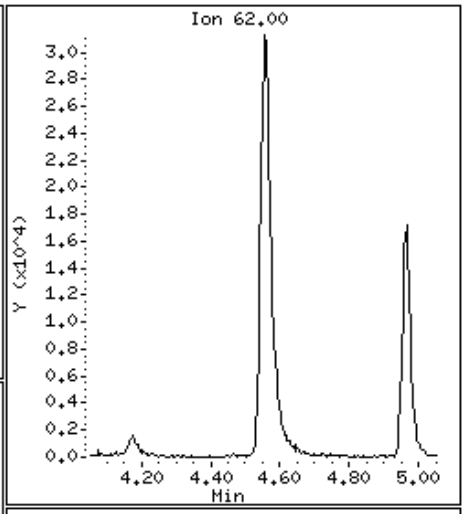
33 1,2-Dichloroethane Concentration: 945.09 ug/l

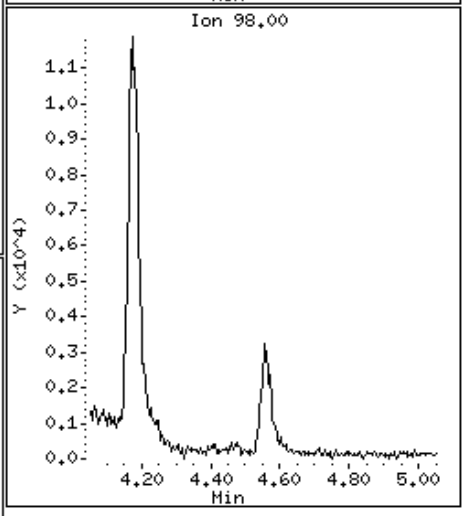












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D Page 8

Date : 24-JAN-2023 09:58

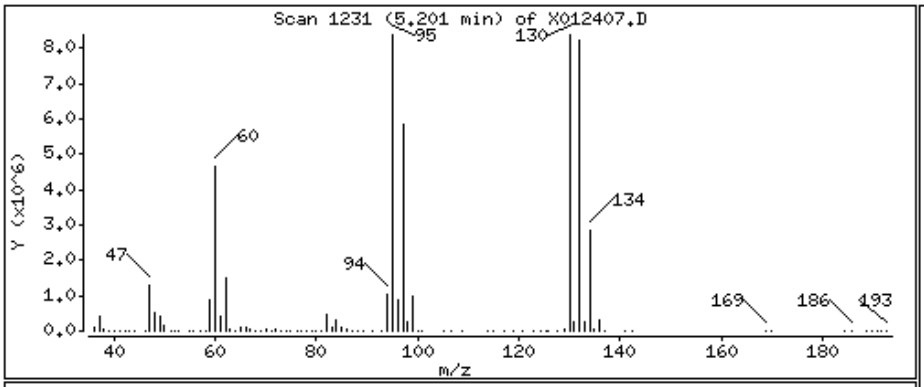
Client ID: HS23010982-05 Instrument: voa6.i

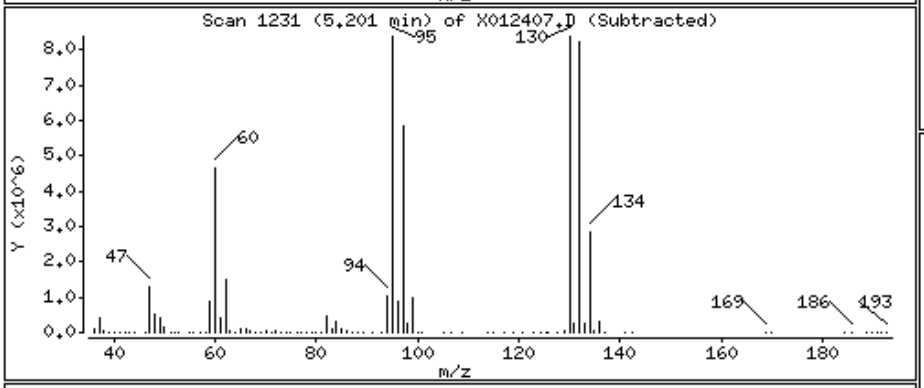
Sample Info: HS23010982-05;HS23010982-05;;;

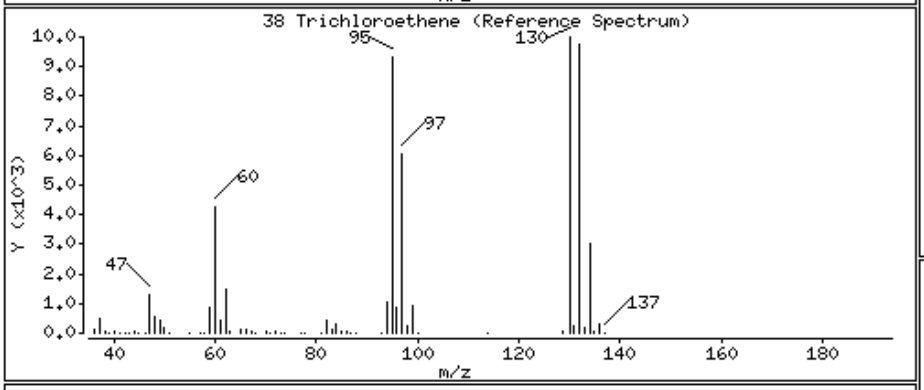
Purge Volume: 5.0 Operator: PC

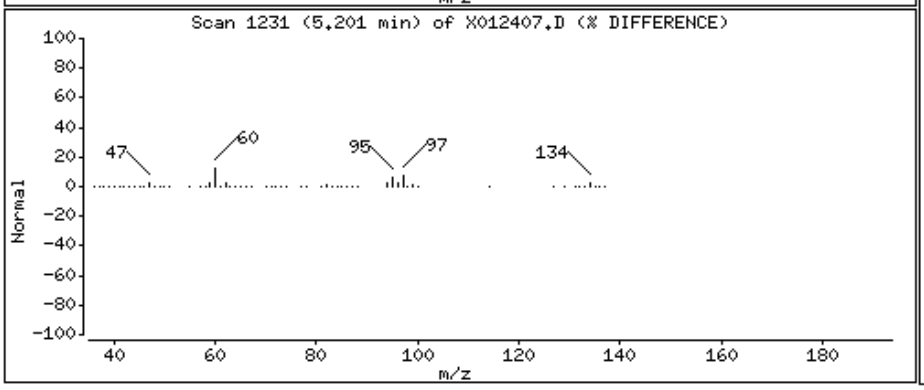
Column phase: DB624 Column diameter: 0.18

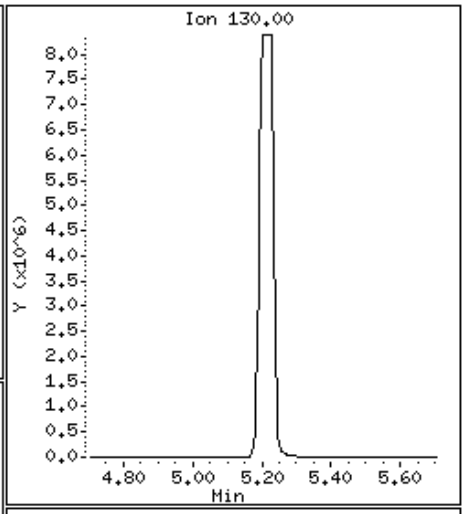
38 Trichloroethene Concentration: 388047.82 ug/l

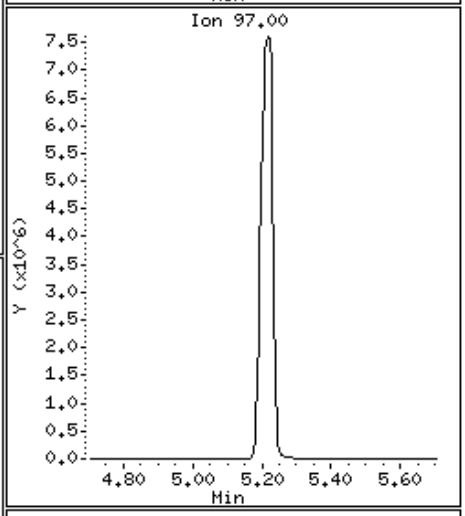


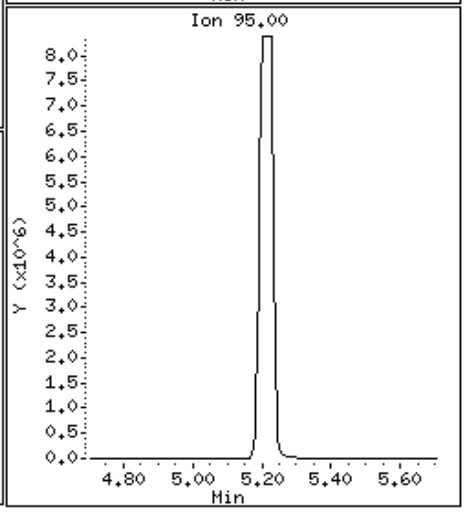












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Date : 24-JAN-2023 09:58

Client ID: HS23010982-05

Instrument: voa6.i

Sample Info: HS23010982-05;HS23010982-05;;;

Purge Volume: 5.0

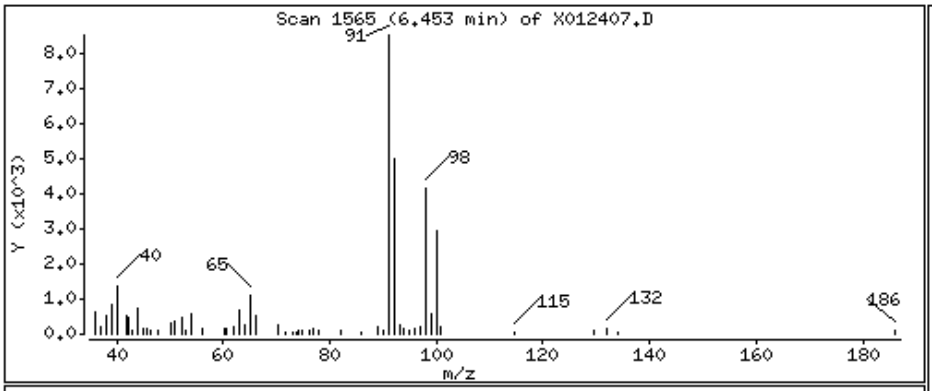
Operator: PC

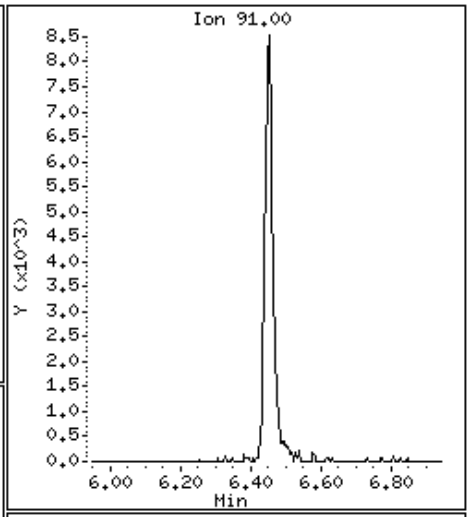
Column phase: DB624

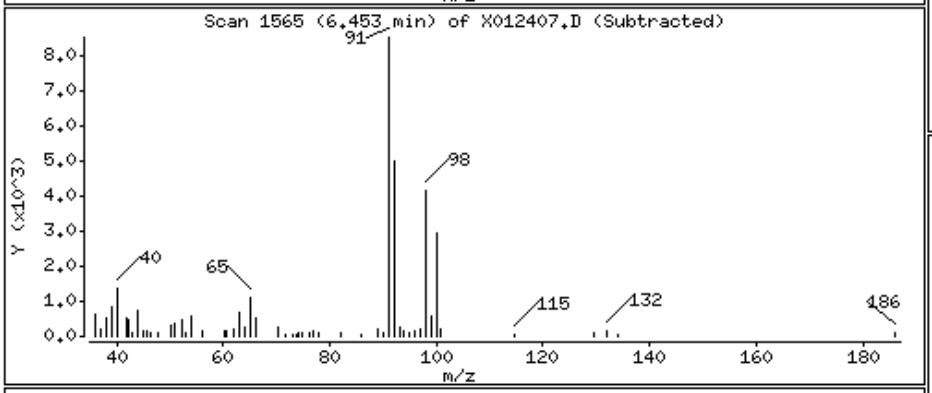
Column diameter: 0.18

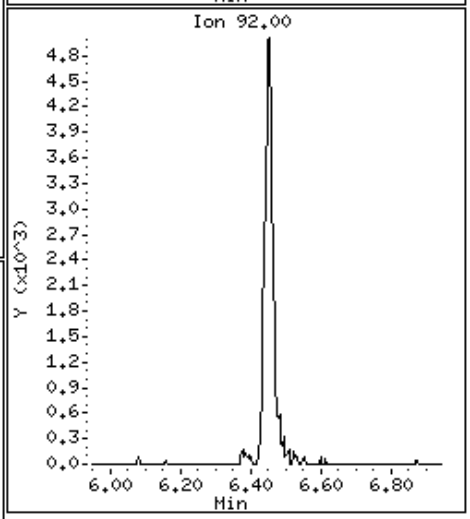
50 Toluene

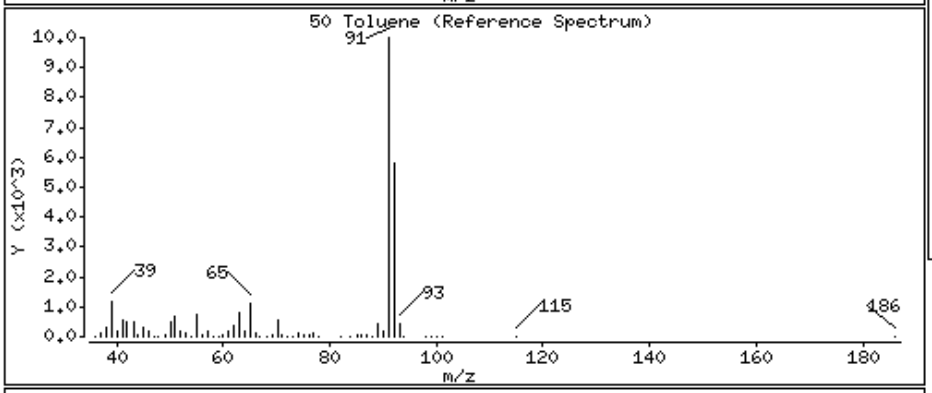
Concentration: 62.86 ug/l

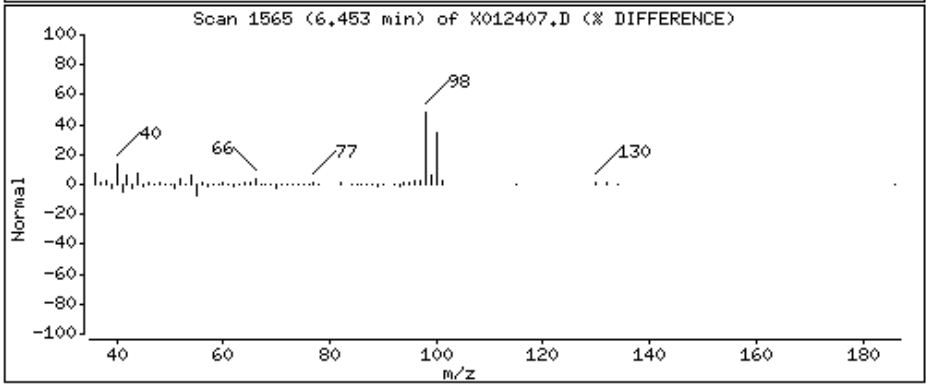












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D

Date : 24-JAN-2023 09:58

Client ID: HS23010982-05

Instrument: voa6.i

Sample Info: HS23010982-05;HS23010982-05;;;

Purge Volume: 5.0

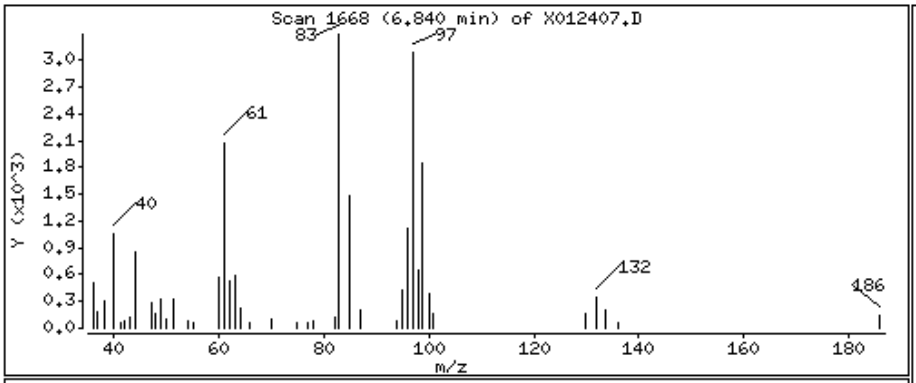
Operator: PC

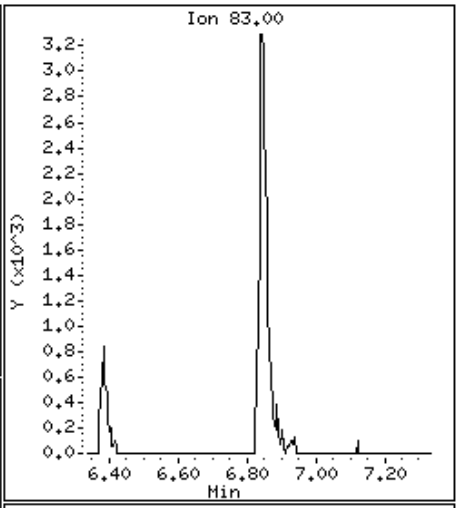
Column phase: DB624

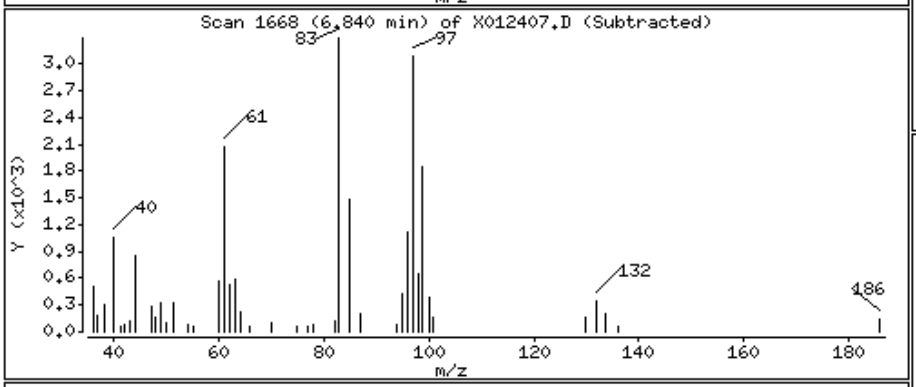
Column diameter: 0.18

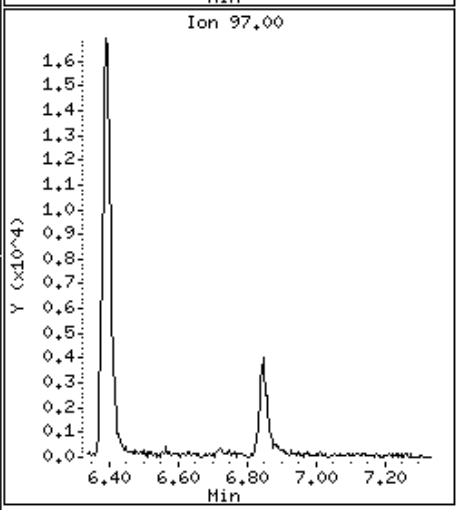
53 1,1,2-Trichloroethane

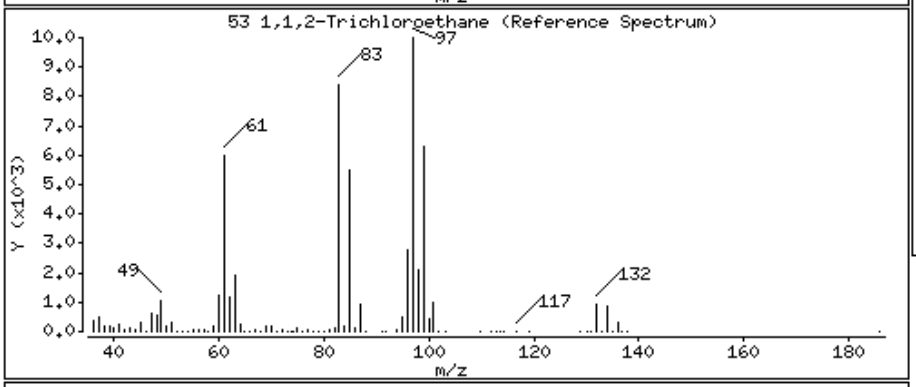
Concentration: 120.34 ug/l

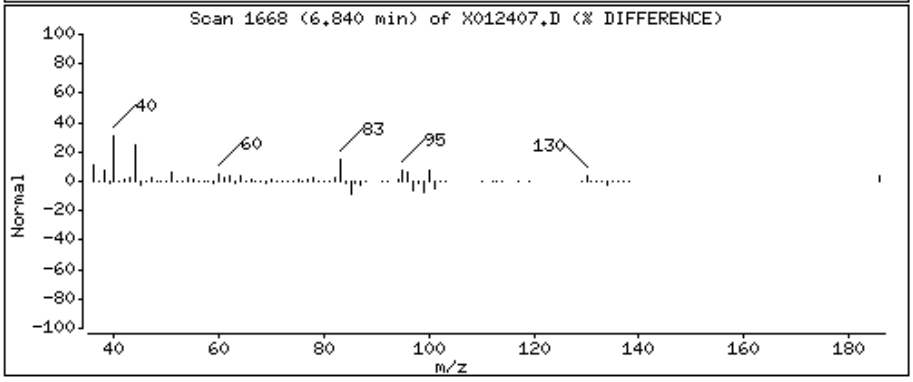












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012407.D
Inj Date : 24-JAN-2023 09:58
InstruID : voa6.i
LabSampID : HS23010982-05

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

Reason Code:

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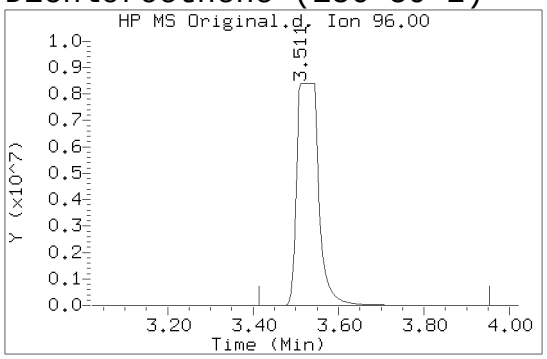

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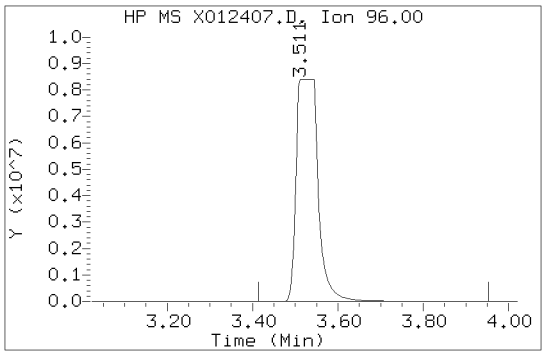

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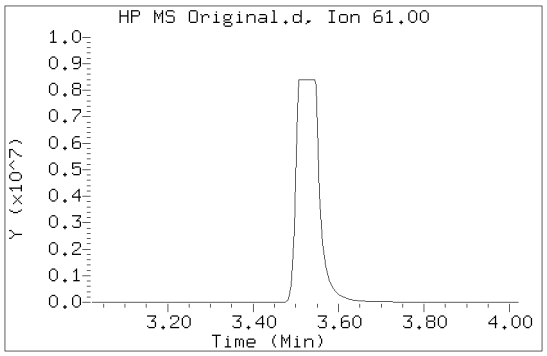

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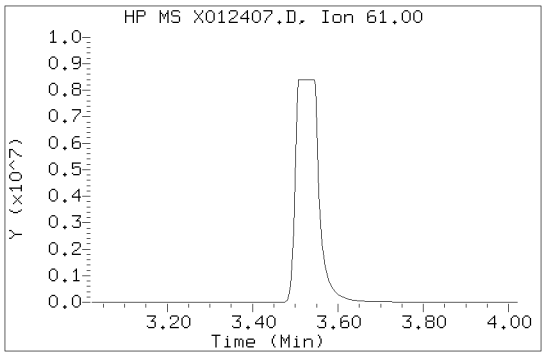

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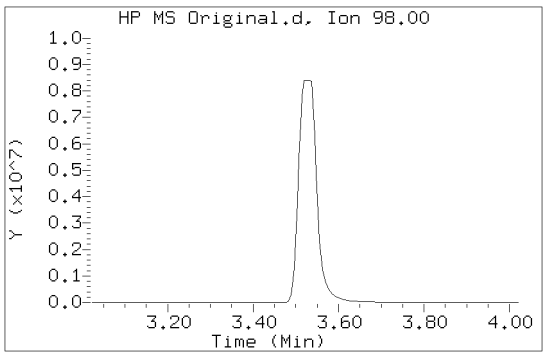

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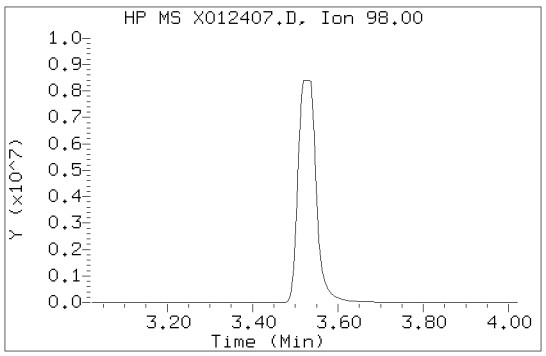

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Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012410.D
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Inj Date : 24-JAN-2023 11:01
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-05MS;HS23010982-05MS;3;;MS
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 11 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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	4.174	4.178	(1.000)	607736	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	63839	15.2938	1529.37
3 Chloromethane	50	1.074	1.074	(0.257)	94253	18.5949	1859.48
4 Propionitrile	54	3.653	3.645	(0.875)	105024	169.364	16936.37(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	1272140	239.623	23962.34(A)
6 Bromomethane	94	1.336	1.336	(0.320)	71217	18.8743	1887.42
7 Chloroethane	64	1.400	1.400	(0.335)	60898	16.4804	1648.04
8 Trichlorofluoromethane	101	1.561	1.557	(0.374)	160520	21.6064	2160.64
9 Acrolein	56	1.441	1.441	(0.345)	15280	38.5478	3854.77
10 Acetone	43	1.970	1.966	(0.472)	48073	28.1665	2816.64
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	222585	48.2575	4825.74
12 Isobutyl Alcohol	43	4.676	4.669	(1.120)	258586	378.288	37828.80(a)
13 Acetonitrile	39	2.195	2.195	(0.526)	75258	136.062	13606.18(a)
14 Allyl Chloride	41	2.195	2.195	(0.526)	152934	14.5175	1451.74(a)
15 Iodomethane	142	2.022	2.022	(0.485)	175286	32.0211	3202.10
16 Acrylonitrile	53	2.532	2.528	(0.607)	59913	38.2988	3829.87
17 Methylene Chloride	84	2.299	2.300	(0.551)	99223	15.6830	1568.30
18 Methyl tert-butyl ether	73	2.532	2.528	(0.607)	256835	17.0118	1701.17
19 Carbon Disulfide	76	2.067	2.067	(0.495)	483921	40.1001	4010.00
20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.606)	267626	51.8438	5184.38

21 Vinyl Acetate	43	2.997	2.993 (0.718)	489724	36.9517	3695.16
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	166414	18.3686	1836.86

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012410.D Page 2
Report Date: 09-Feb-2023 13:42

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	3.581	3.570	(0.858)	56884	33.5226	3352.26
	25	Methacrylonitrile	41	3.829	3.818	(0.917)	69739	16.2060	1620.59(a)
	26	2,2-Dichloropropane	77	3.510	3.507	(0.841)	143661	18.6762	1867.62
	27	cis-1,2-Dichloroethene	96	3.510	3.522	(0.841)	30205762	4808.10	480809.85(A)
	28	Chloroform	83	3.904	3.900	(0.935)	193523	19.0584	1905.83
	29	Bromochloromethane	128	3.795	3.788	(0.909)	47186	13.7181	1371.81
$	30	Dibromofluoromethane	113	4.095	4.095	(0.981)	274190	46.9768	46.97
	31	1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	160319	19.8994	1989.94
	32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	142155	22.8753	2287.53
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	207703	28.9611	2896.10
	34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	139402	21.0068	2100.68
$	35	1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	307933	49.9953	49.99
*	36	1,4-Difluorobenzene	114	4.965	4.961	(1.000)	875321	50.0000	
	37	Benzene	78	4.511	4.508	(0.909)	397213	19.0032	1900.31
	38	Trichloroethene	130	5.201	5.205	(1.048)	23800730	4014.55	401455.44(A)
	39	Bromodichloromethane	83	5.726	5.722	(1.153)	140738	17.9409	1794.08
	40	Methyl Methacrylate	41	5.606	5.602	(1.343)	72689	17.5413	1754.13(a)
	42	1,2-Dichloropropane	63	5.437	5.433	(1.095)	97082	17.4602	1746.02
	43	2-Nitropropane	43	5.969	5.966	(1.430)	29442	19.1844	1918.44
	44	Dibromomethane	93	5.550	5.550	(1.118)	65115	17.2296	1722.95
	45	4-Methyl-2-Pentanone	43	6.326	6.322	(0.825)	165040	38.1745	3817.45
	46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.240)	166637	18.0876	1808.75
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	808850	50.0000	
$	48	Toluene-d8	98	6.385	6.386	(0.833)	1026971	51.3813	51.38
	49	Ethyl Methacrylate	69	6.712	6.708	(1.352)	73884	17.9246	1792.45(a)
	50	Toluene	91	6.445	6.446	(0.841)	445312	19.9184	1991.83
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	144790	18.9379	1893.78
	52	2-Hexanone	43	7.086	7.083	(0.924)	115698	39.3339	3933.38
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	87259	19.4550	1945.50
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	161517	18.2955	1829.54
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	119349	18.4369	1843.69
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	103090	22.2863	2228.62
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	105515	18.8158	1881.57
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	105100	24.8455	2484.54
	59	Chlorobenzene	112	7.694	7.694	(1.003)	303897	19.1641	1916.41
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	110510	18.7262	1872.61
	61	Ethylbenzene	106	7.799	7.799	(1.017)	154500	20.6834	2068.34
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	392379	40.7481	4074.81
	63	o-Xylene	106	8.241	8.241	(1.075)	189624	19.9518	1995.17
	64	Styrene	104	8.260	8.256	(1.077)	311845	19.5759	1957.59
	66	Bromoform	173	8.410	8.410	(1.097)	81837	18.2483	1824.83
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	488309	22.4889	2248.88
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	131408	18.3413	1834.12
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387349	51.8450	51.84
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	449514	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	143855	28.7607	2876.06
	72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	36869	21.1150	2111.49(a)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	585836	23.5284	2352.83
	74	Bromobenzene	156	8.807	8.803	(0.912)	141994	19.2535	1925.35
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	413268	22.4678	2246.78
	76	2-Chlorotoluene	91	8.976	8.972	(0.929)	347562	21.2719	2127.18
	77	4-Chlorotoluene	91	9.070	9.070	(0.939)	402553	21.6121	2161.20

78	tert-Butylbenzene	119	9.336	9.336 (0.966)	356978	23.7092	2370.92
79	1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	414397	21.4115	2141.14

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012410.D Page 3
Report Date: 09-Feb-2023 13:42

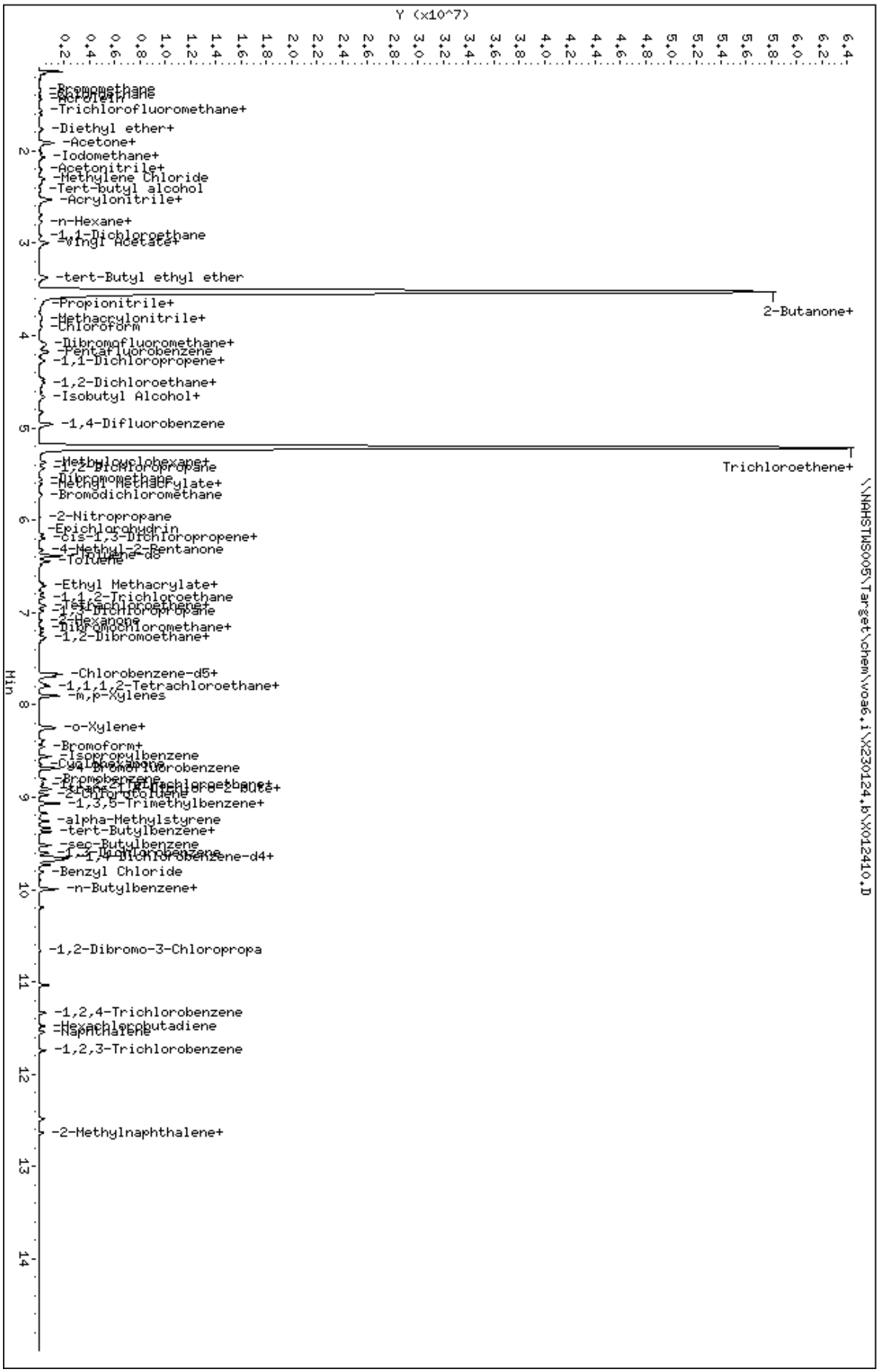
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	504375	25.1770	2517.69
82	p-Isopropyltoluene	119	9.651	9.647	(0.999)	440200	24.5214	2452.14
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	249385	20.3734	2037.33
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	260169	19.4775	1947.74
86	Benzyl Chloride	91	9.808	9.808	(1.279)	224825	19.4984	1949.83
87	n-Butylbenzene	91	9.992	9.992	(1.034)	391872	23.6216	2362.16
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	245160	19.4469	1944.69
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	21473	18.8040	1880.40
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	161081	20.2467	2024.67
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	78648	22.4241	2242.40
92	Naphthalene	128	11.544	11.540	(1.195)	355445	19.6361	1963.60
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	146487	19.2248	1922.48
146	Methyl acetate	43	2.232	2.225	(0.535)	46737	17.0905	1709.05
138	Freon TF	101	1.910	1.910	(0.458)	254373	57.0194	5701.94
141	Cyclohexane	56	4.118	4.121	(0.987)	151141	25.3113	2531.13
142	Tetrahydrofuran	42	3.848	3.840	(0.922)	25122	31.1377	3113.76
147	Methylcyclohexane	55	5.377	5.373	(1.083)	223790	20.8864	2088.63
135	1,4-Dioxane	88	5.598	5.598	(1.341)	20403	367.268	36726.81
132	n-Butanol	56	5.265	5.250	(1.261)	22363	326.259	32625.87(a)
131	Methyl Acrylate	55	3.686	3.683	(0.883)	88101	21.3527	2135.26
133	Ethyl Acrylate	55	5.377	5.373	(1.288)	223790	19.9361	1993.60
136	n-Hexane	57	2.772	2.768	(0.664)	113585	25.9577	2595.77
139	Diethyl ether	59	1.756	1.752	(0.421)	62652	15.4286	1542.85
148	Tert-butyl alcohol	59	2.427	2.420	(0.582)	165187	392.540	39253.96
149	Isopropyl alcohol	45	2.090	2.086	(0.501)	85537	389.211	38921.05
156	Diisopropyl ether	45	2.997	2.997	(0.718)	273189	17.3286	1732.85
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	163116	18.7034	1870.34
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	405271	18.7223	1872.23
167	Ethanol	45	1.696	1.700	(0.406)	15468	388.689	38868.94
172	tert-Butyl formate	59	4.616	4.612	(1.106)	128364	39.8049	3980.48
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	142090	371.286	37128.62
174	tert-Amyl methyl ether	73	4.665	4.661	(1.118)	298060	17.0143	1701.42
175	tert-Butyl ethyl ether	59	3.375	3.372	(0.809)	283988	16.9525	1695.24
176	tert-Amyl alcohol	59	4.616	4.612	(1.106)	128364	393.276	39327.60
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.351)	286518	345.837	34583.68
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	163116		(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	74588	17.8825	1788.25
152	Amyl alcohol	42	6.907	6.899	(0.901)	26849	335.679	33567.85
158	Dichlorofluoromethane	67	1.527	1.531	(0.366)	14184	18.0250	1802.50
159	Propylene oxide	43	1.752	1.752	(0.420)	12809	33.5164	3351.64
161	3-Methyl-1-butanol	55	6.907	6.903	(0.901)	30137	376.857	37685.71
162	Butyl acrylate	55	8.252	8.249	(1.076)	199804	18.9104	1891.03
182	Epichlorohydrin	57	6.097	6.089	(1.228)	27127	70.8350	7083.49
M 94	1,2-Dichloroethylene (total)	96				30473388	4859.94	485994.23
M 95	Xylenes (total)	106				582003	60.6999	6069.99
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	199435	20.0235	2002.35
134	Cyclohexanone	55	8.642	8.642	(0.894)	61501	327.988	32798.78(a)
185	Isoprene	39	1.767	1.767	(0.423)	31098	19.2079	1920.78
186	Isopentane	42	1.606	1.606	(0.385)	59091		(a)
188	Isopropyl acetate	43	4.676	4.669	(0.942)	261483	19.2277	1922.76
187	n-Amyl acetate	43	8.451	8.451	(1.102)	184173	19.5270	1952.69
189	n-Butyl acetate	43	7.214	7.210	(0.941)	148488	21.3707	2137.07

150 Allyl alcohol	57	2.772	2.768 (0.664)	113585	508.490	50849.02
194 Acetaldehyde	44	1.209	1.209 (0.290)	78004	202.927	20292.70

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	191863	17.8410	1784.09
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	200857	18.3480	1834.80
168 1-Propanol	59	2.997	2.993	(0.718)	32059	322.788	32278.79

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.



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Sample Info: HS23010982-05HS;HS23010982-05HS;3;;HS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 24-JAN-2023 11:01
InstruID : voa6.i
LabSampID : HS23010982-05MS

NO MANUAL INTEGRATIONS

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Report Date: 09-Feb-2023 13:42

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012411.D
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Operator : PC Inst ID: voa6.i
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Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 11 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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	4.178	4.178	(1.000)	616157	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	58398	13.8375	1383.74
3	Chloromethane	50	1.074	1.074	(0.257)	94499	18.4131	1841.31
4	Propionitrile	54	3.653	3.645	(0.874)	106644	169.626	16962.58(a)
5	Vinyl Chloride	62	1.141	1.141	(0.273)	1215141	225.759	22575.87(A)
6	Bromomethane	94	1.336	1.336	(0.320)	64947	17.1546	1715.46
7	Chloroethane	64	1.400	1.400	(0.335)	56224	15.0076	1500.75
8	Trichlorofluoromethane	101	1.561	1.557	(0.374)	151743	20.1459	2014.58
9	Acrolein	56	1.441	1.441	(0.345)	13622	34.2359	3423.59
10	Acetone	43	1.970	1.966	(0.472)	47027	27.1758	2717.58
11	1,1-Dichloroethene	96	1.917	1.910	(0.459)	211816	45.2951	4529.50
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	257308	371.274	37127.39(a)
13	Acetonitrile	39	2.198	2.195	(0.526)	75516	134.662	13466.23(a)
14	Allyl Chloride	41	2.198	2.195	(0.526)	147729	13.8317	1383.17(a)
15	Iodomethane	142	2.022	2.022	(0.484)	157844	28.8451	2884.51
16	Acrylonitrile	53	2.532	2.528	(0.606)	58941	37.1625	3716.25
17	Methylene Chloride	84	2.299	2.300	(0.550)	96317	15.0157	1501.56
18	Methyl tert-butyl ether	73	2.528	2.528	(0.605)	252853	16.5191	1651.91
19	Carbon Disulfide	76	2.067	2.067	(0.495)	458023	37.4353	3743.53
20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	243811	46.5849	4658.49

21 Vinyl Acetate	43	2.993	2.993 (0.716)	480993	35.7969	3579.68
22 1,1-Dichloroethane	63	2.922	2.918 (0.699)	163434	17.7932	1779.31

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012411.D Page 2
Report Date: 09-Feb-2023 13:42

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	3.578	3.570	(0.856)	55880	32.5749	3257.48
	25	Methacrylonitrile	41	3.825	3.818	(0.916)	69559	15.9433	1594.32(a)
	26	2,2-Dichloropropane	77	3.514	3.507	(0.841)	133881	17.1670	1716.69
	27	cis-1,2-Dichloroethene	96	3.510	3.522	(0.840)	29981128	4707.12	470711.82(A)
	28	Chloroform	83	3.900	3.900	(0.934)	188888	18.3477	1834.77
	29	Bromochloromethane	128	3.791	3.788	(0.908)	45981	13.1851	1318.51
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	277416	46.8796	46.87
	31	1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	153674	18.8140	1881.39
	32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	133698	21.3251	2132.51
	33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	204626	28.2809	2828.09
	34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	133810	19.9867	1998.67
$	35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	314528	50.3661	50.36
*	36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	883093	50.0000	
	37	Benzene	78	4.511	4.508	(0.909)	380187	18.0285	1802.85
	38	Trichloroethene	130	5.201	5.205	(1.048)	23418906	3915.39	391538.60(A)
	39	Bromodichloromethane	83	5.726	5.722	(1.154)	137789	17.4104	1741.03
	40	Methyl Methacrylate	41	5.606	5.602	(1.342)	71262	16.9619	1696.19(a)
	42	1,2-Dichloropropane	63	5.437	5.433	(1.096)	92999	16.5787	1657.87
	43	2-Nitropropane	43	5.969	5.966	(1.429)	29804	19.1549	1915.49
	44	Dibromomethane	93	5.553	5.550	(1.119)	63984	16.7813	1678.13
	45	4-Methyl-2-Pentanone	43	6.326	6.322	(0.825)	162783	37.3450	3734.50
	46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.241)	161896	17.4183	1741.83
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	815509	50.0000	
$	48	Toluene-d8	98	6.386	6.386	(0.833)	1034287	51.3248	51.32
	49	Ethyl Methacrylate	69	6.712	6.708	(1.353)	69578	16.7313	1673.13(a)
	50	Toluene	91	6.445	6.446	(0.841)	432199	19.1740	1917.39
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	141642	18.3631	1836.31
	52	2-Hexanone	43	7.087	7.083	(0.924)	114493	38.6064	3860.63
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	84670	18.7236	1872.36
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	158836	17.8449	1784.48
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	116772	17.8915	1789.15
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	98823	21.1894	2118.93
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	103386	18.2856	1828.55
	58	1-Chlorohexane	55	7.694	7.694	(1.551)	100956	23.6558	2365.58
	59	Chlorobenzene	112	7.694	7.694	(1.003)	292362	18.2862	1828.61
	60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	106586	17.9137	1791.37
	61	Ethylbenzene	106	7.799	7.799	(1.017)	148954	19.7781	1977.81
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	372076	38.3242	3832.41
	63	o-Xylene	106	8.241	8.241	(1.075)	181286	18.9187	1891.87
	64	Styrene	104	8.260	8.256	(1.077)	298926	18.6117	1861.17
	66	Bromoform	173	8.410	8.410	(1.097)	79284	17.5347	1753.46
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	465819	21.2779	2127.79
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	130175	18.2200	1822.00
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387636	51.4602	51.46
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	448260	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	139149	27.8977	2789.76
	72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	35874	20.3774	2037.73(a)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	557187	22.4404	2244.03
	74	Bromobenzene	156	8.803	8.803	(0.911)	134703	18.3160	1831.60
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	391646	21.3519	2135.19
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	331421	20.3407	2034.07
	77	4-Chlorotoluene	91	9.070	9.070	(0.939)	382720	20.6048	2060.47

78	tert-Butylbenzene	119	9.336	9.336 (0.966)	336739	22.4276	2242.76
79	1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	393541	20.3908	2039.07

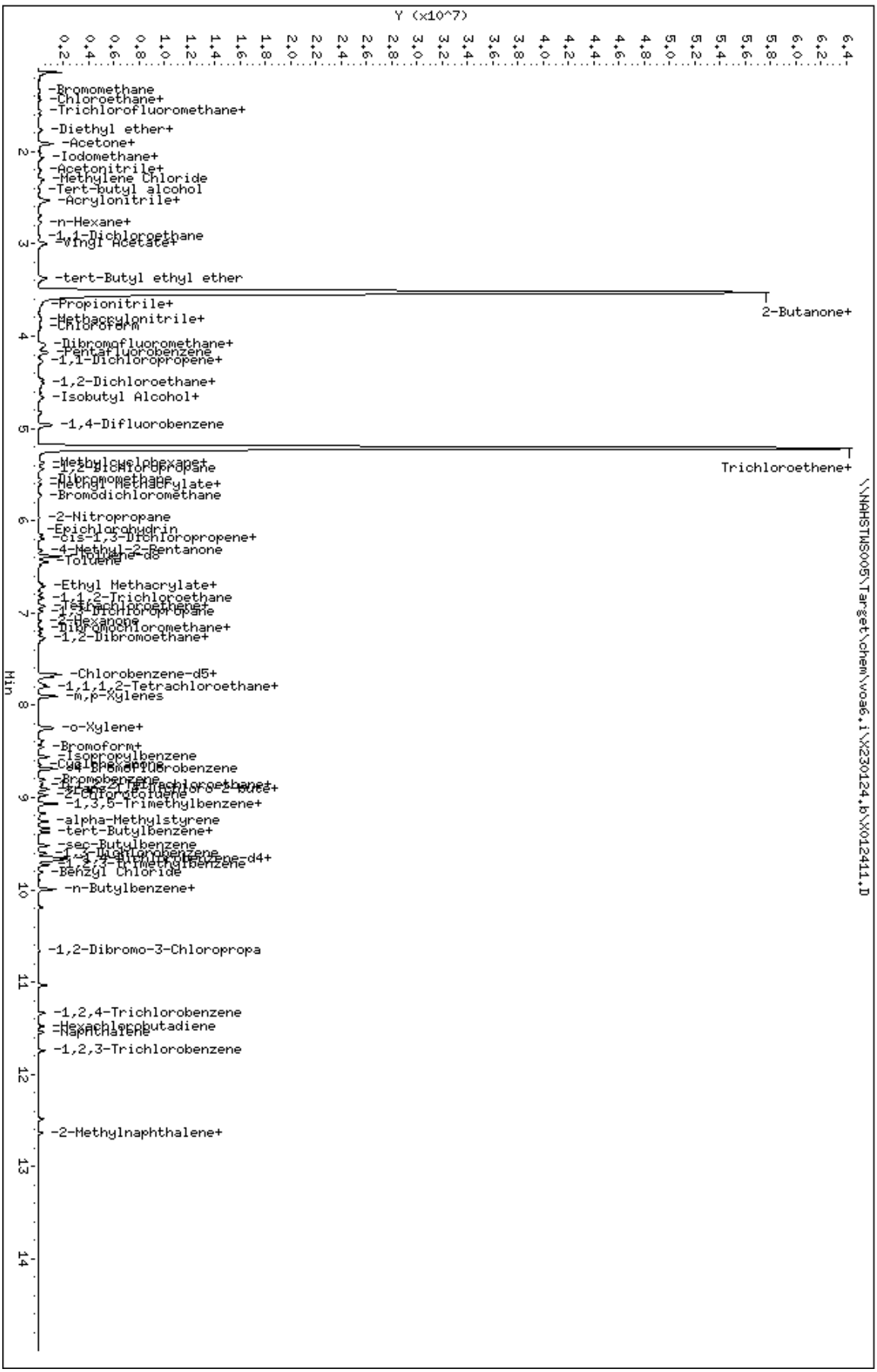
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	479175	23.9860	2398.59
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	421084	23.5222	2352.21
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	241201	19.7599	1975.98
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	253748	19.0499	1904.99
86	Benzyl Chloride	91	9.808	9.808	(1.279)	216542	18.7471	1874.70
87	n-Butylbenzene	91	9.995	9.992	(1.035)	376976	22.8500	2284.99
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	233459	18.5705	1857.05
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	20133	17.6854	1768.54
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	160721	20.2580	2025.79
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	76806	21.9615	2196.14
92	Naphthalene	128	11.544	11.540	(1.195)	352319	19.5178	1951.78
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	147095	19.3586	1935.86
146	Methyl acetate	43	2.228	2.225	(0.533)	46990	16.9482	1694.81
138	Freon TF	101	1.910	1.910	(0.457)	243829	53.9090	5390.89
141	Cyclohexane	56	4.121	4.121	(0.987)	144119	23.8805	2388.05
142	Tetrahydrofuran	42	3.844	3.840	(0.920)	26547	32.5881	3258.80
147	Methylcyclohexane	55	5.377	5.373	(1.084)	215219	19.9096	1990.96
135	1,4-Dioxane	88	5.598	5.598	(1.340)	21123	375.032	37503.20
132	n-Butanol	56	5.268	5.250	(1.261)	21282	308.941	30894.13(a)
131	Methyl Acrylate	55	3.690	3.683	(0.883)	75700	18.0964	1809.63
133	Ethyl Acrylate	55	5.377	5.373	(1.287)	215219	19.0047	1900.46
136	n-Hexane	57	2.768	2.768	(0.663)	102574	23.1210	2312.10
139	Diethyl ether	59	1.752	1.752	(0.419)	61554	14.9510	1495.10
148	Tert-butyl alcohol	59	2.423	2.420	(0.580)	163620	383.502	38350.19
149	Isopropyl alcohol	45	2.090	2.086	(0.500)	83172	373.277	37327.71
156	Diisopropyl ether	45	2.997	2.997	(0.717)	264208	16.5299	1652.98
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	164086	18.8673	1886.72
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	384553	17.8149	1781.49
167	Ethanol	45	1.700	1.700	(0.407)	15239	377.608	37760.82
172	tert-Butyl formate	59	4.616	4.612	(1.105)	125940	38.5195	3851.94
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	128576	333.230	33323.03
174	tert-Amyl methyl ether	73	4.665	4.661	(1.117)	301177	16.9572	1695.72
175	tert-Butyl ethyl ether	59	3.379	3.372	(0.809)	278519	16.3988	1639.88
176	tert-Amyl alcohol	59	4.616	4.612	(1.105)	125940	380.576	38057.60
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	258826	309.662	30966.22
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	164086		(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	70837	16.7511	1675.10
152	Amyl alcohol	42	6.910	6.899	(0.901)	25499	316.197	31619.71
158	Dichlorofluoromethane	67	1.524	1.531	(0.365)	13142	16.4726	1647.25
159	Propylene oxide	43	1.752	1.752	(0.419)	14174	36.5813	3658.12
161	3-Methyl-1-butanol	55	6.907	6.903	(0.901)	28225	350.066	35006.60
162	Butyl acrylate	55	8.252	8.249	(1.076)	190074	17.8426	1784.26
182	Epichlorohydrin	57	6.097	6.089	(1.229)	27000	69.9165	6991.64
M 94	1,2-Dichloroethylene (total)	96				30224939	4753.70	475370.31
M 95	Xylenes (total)	106				553362	57.2429	5724.29
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	189184	19.0475	1904.74
134	Cyclohexanone	55	8.642	8.642	(0.894)	58846	314.707	31470.65(a)
185	Isoprene	39	1.767	1.767	(0.423)	27928	17.0142	1701.41
186	Isopentane	42	1.606	1.606	(0.385)	54097		(a)
188	Isopropyl acetate	43	4.672	4.669	(0.942)	259211	18.8929	1889.28
187	n-Amyl acetate	43	8.451	8.451	(1.102)	179919	18.9202	1892.01
189	n-Butyl acetate	43	7.214	7.210	(0.941)	145559	20.7781	2077.81

150 Allyl alcohol	57	2.768	2.768 (0.663)	102574	452.921	45292.10
195 Methyl Amyl Ketone	43	8.380	8.380 (1.093)	184794	17.0433	1704.33

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	197589	17.9021	1790.21
168 1-Propanol	59	2.997	2.993	(0.717)	31639	314.205	31420.54

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.



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Sample Info: HS230109B2-05MSD;HS230109B2-05MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 24-JAN-2023 11:22
InstruID : voa6.i
LabSampID : HS23010982-05MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D
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Inj Date : 24-JAN-2023 16:38
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-02;HS23010982-02;;;
Misc Info : V6;WATER;0;1;
Comment   :
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Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

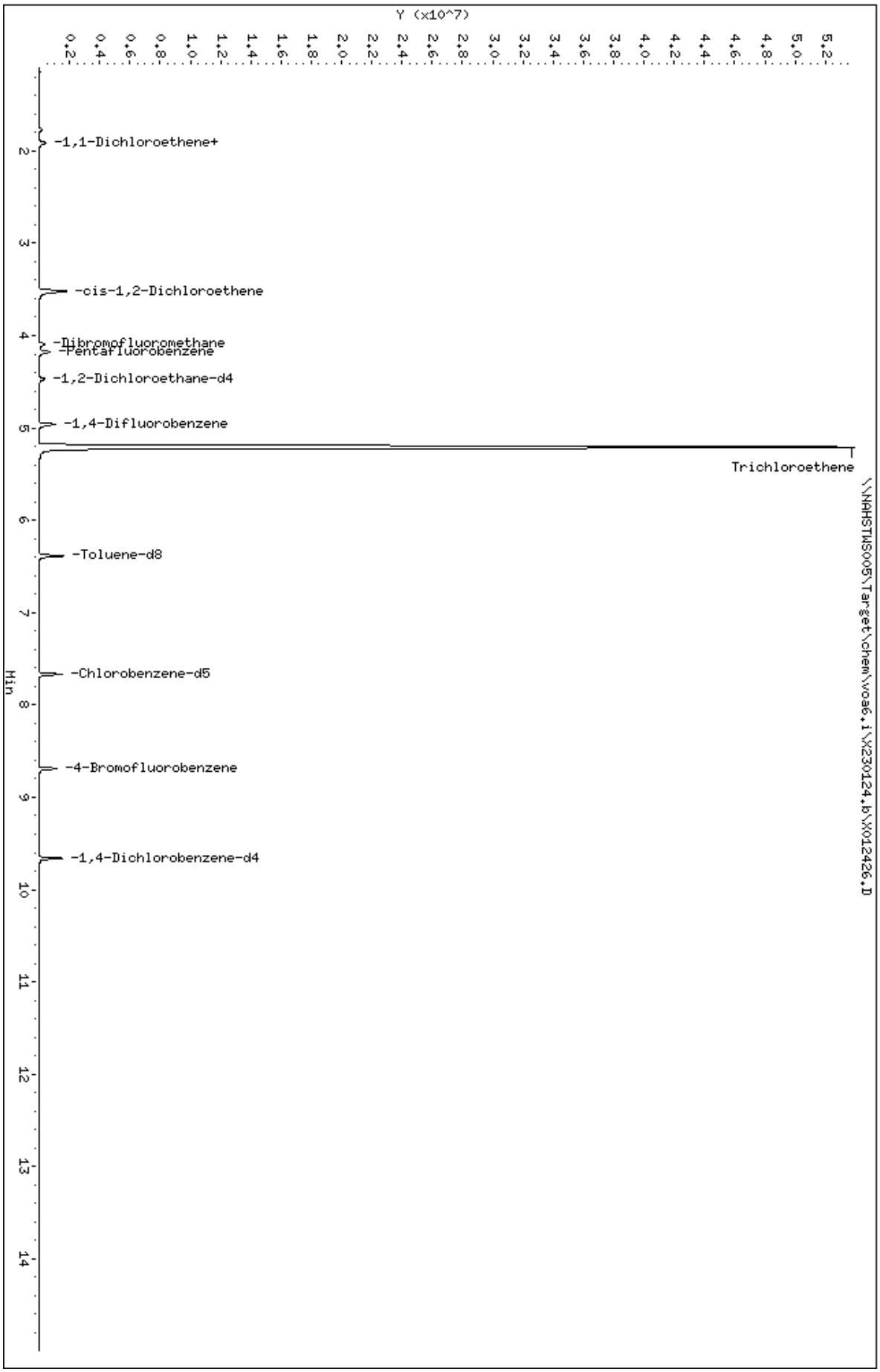
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.178	4.178	(1.000)	590320	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	31742	6.15540	6.15
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	15680	3.49979	3.49
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	987608	161.844	161.84
$	30 Dibromofluoromethane	113	4.091	4.095	(0.979)	260744	45.9876	45.98
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	294924	49.2997	49.29
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	849688	50.0000	
	38 Trichloroethene	130	5.205	5.205	(1.049)	18183069	3159.53	3159.52(A)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	740347	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	965953	52.8002	52.80
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	344005	50.3058	50.30
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	388357	50.0000	
	138 Freon TF	101	1.913	1.910	(0.458)	174142	40.1868	40.18
M	94 1,2-Dichloroethylene (total)	96				987608	161.844	161.84

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.



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Sample Info: HS230109B2-02;HS230109B2-02;;;
Purge Volume: 5.0
Column phase: DB624

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

Page 1

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D Page 2

Date : 24-JAN-2023 16:38

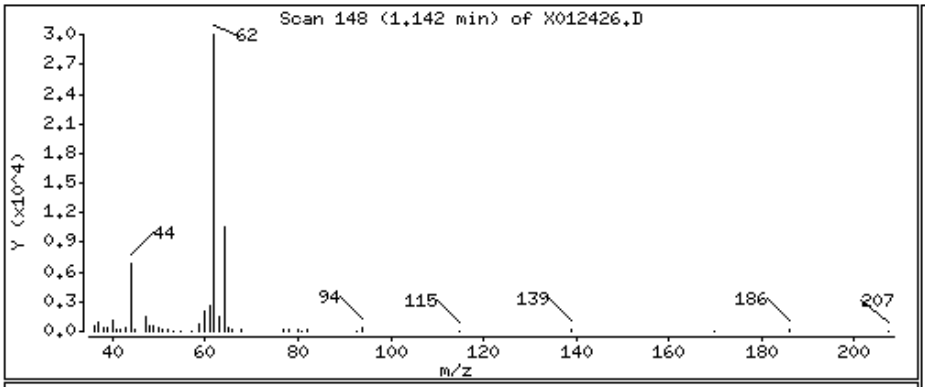
Client ID: HS23010982-02 Instrument: voa6.i

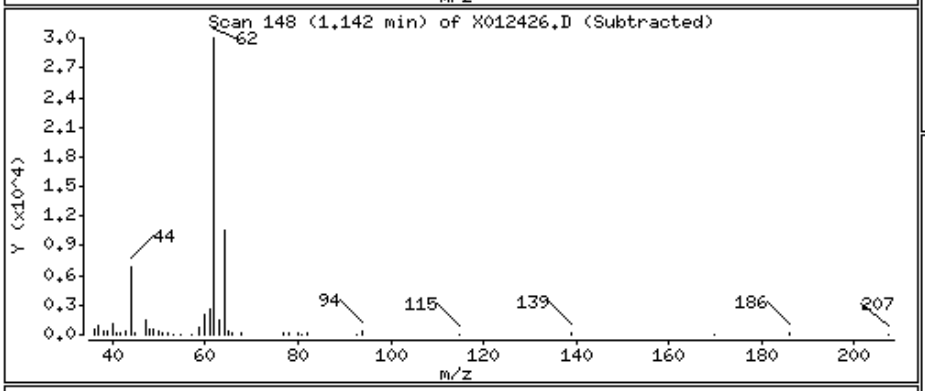
Sample Info: HS23010982-02;HS23010982-02;;;

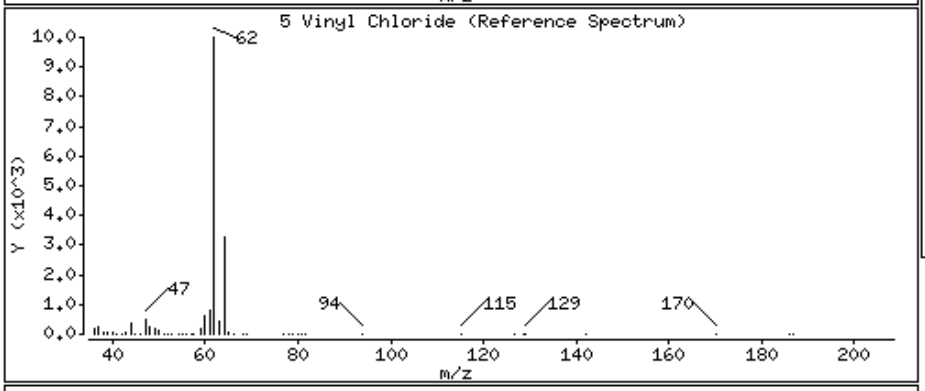
Purge Volume: 5.0 Operator: PC

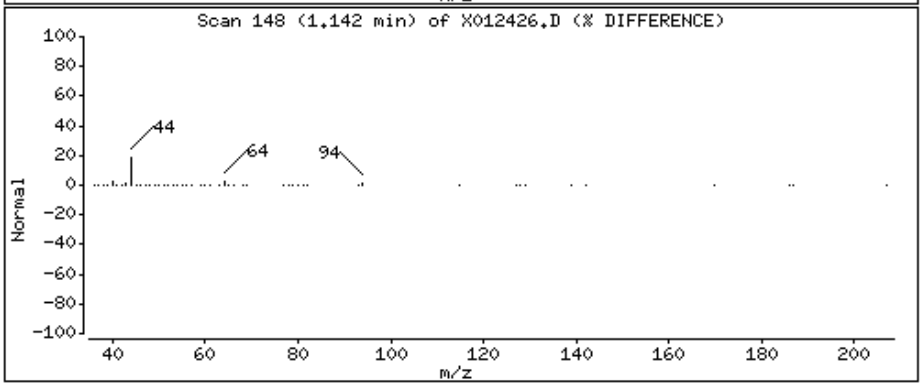
Column phase: DB624 Column diameter: 0.18

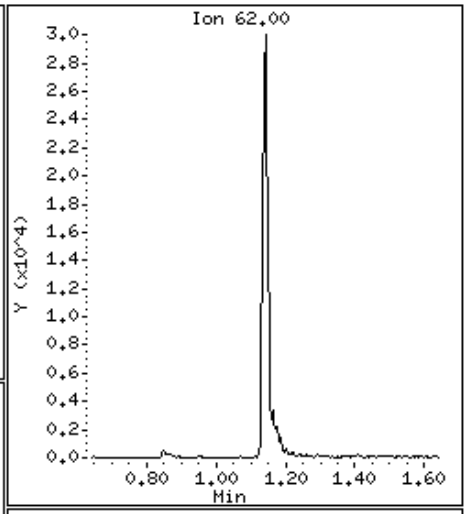
5 Vinyl Chloride Concentration: 6.15 ug/l

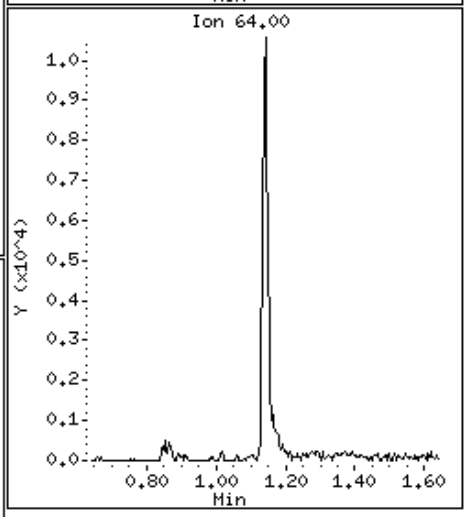












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D Page 3

Date : 24-JAN-2023 16:38

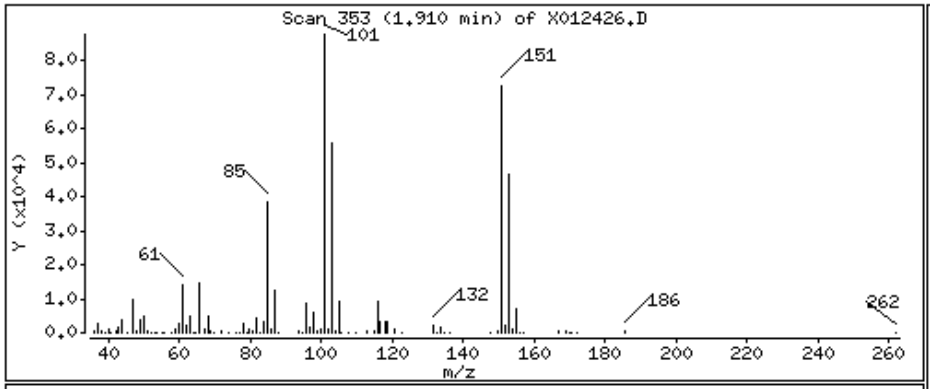
Client ID: HS23010982-02 Instrument: voa6.i

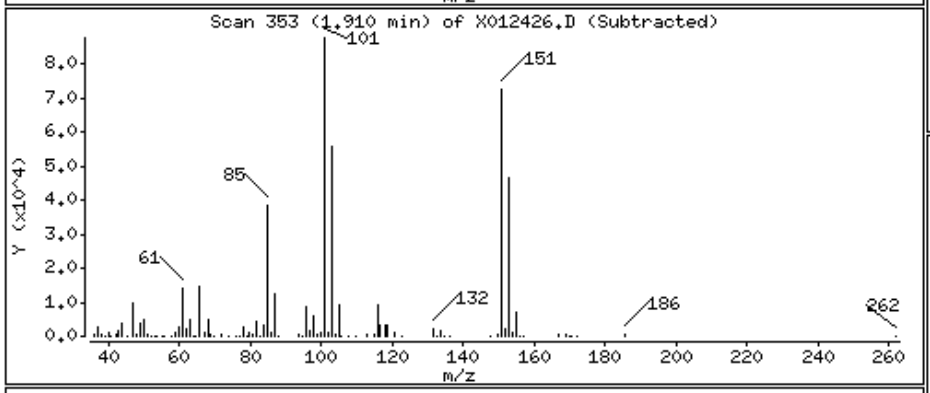
Sample Info: HS23010982-02;HS23010982-02;;;

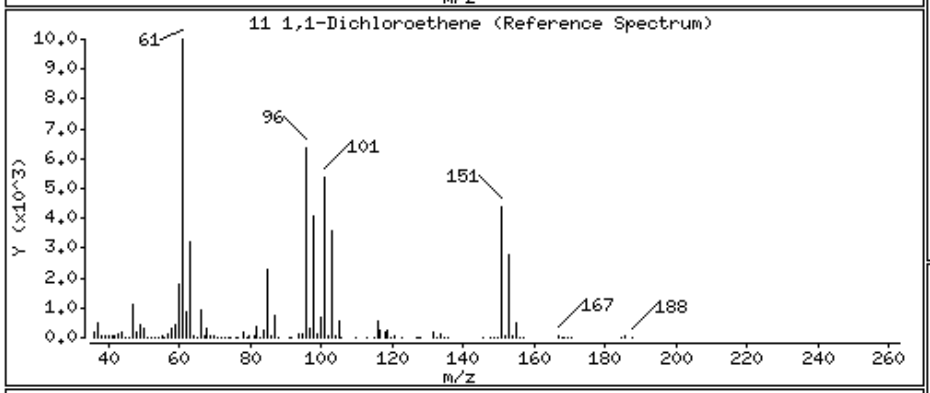
Purge Volume: 5.0 Operator: PC

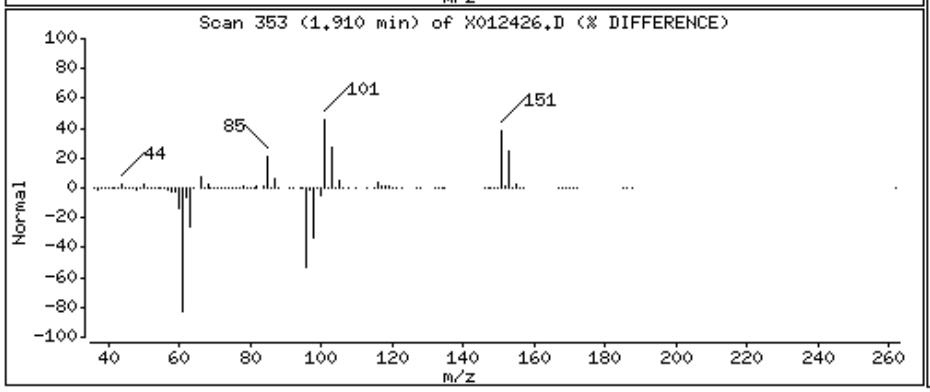
Column phase: DB624 Column diameter: 0.18

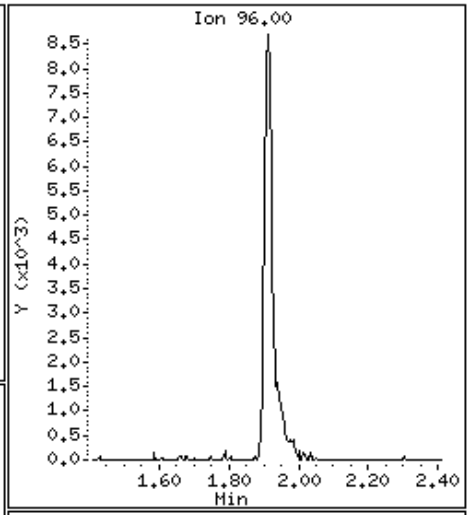
11 1,1-Dichloroethene Concentration: 3.49 ug/l

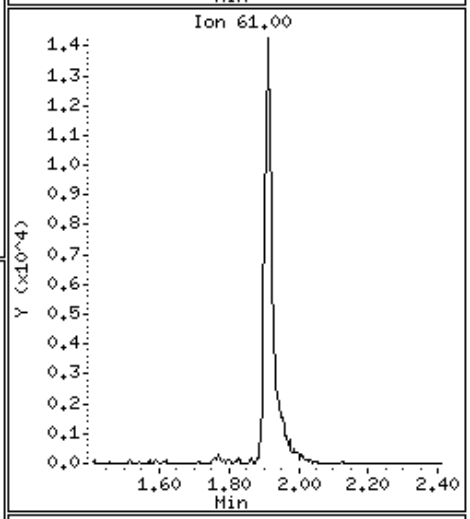


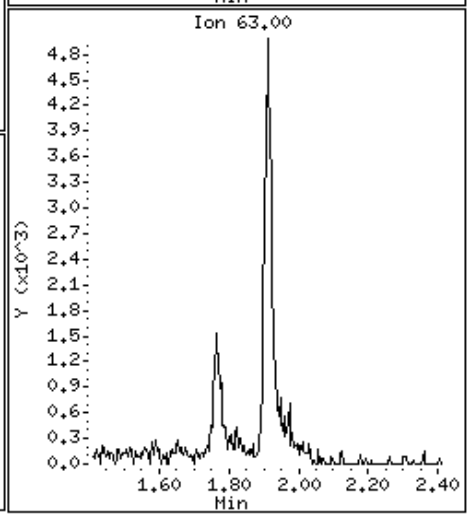












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D Page 4

Date : 24-JAN-2023 16:38

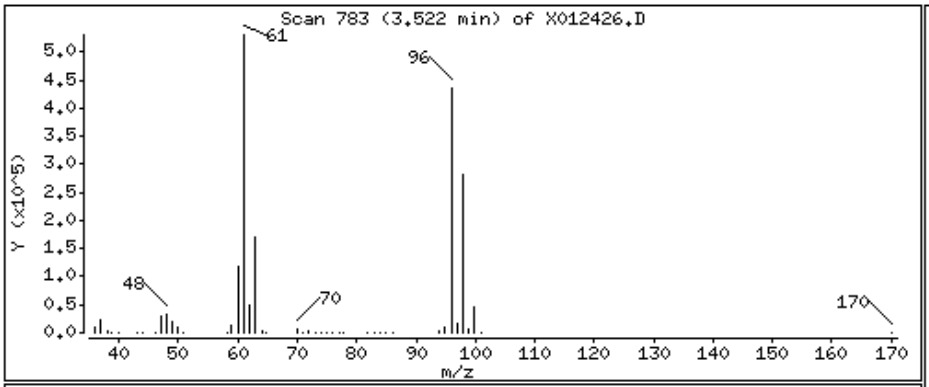
Client ID: HS23010982-02 Instrument: voa6.i

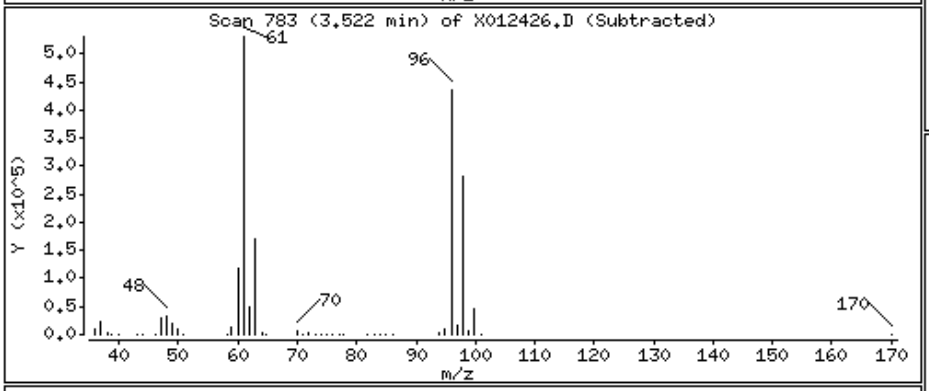
Sample Info: HS23010982-02;HS23010982-02;;;

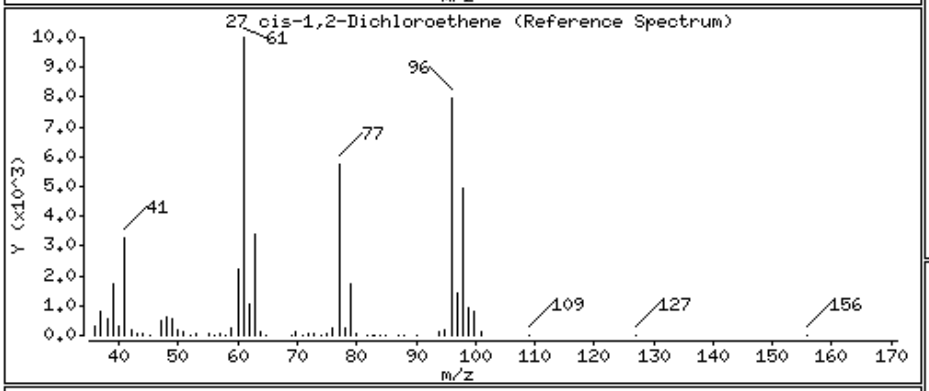
Purge Volume: 5.0 Operator: PC

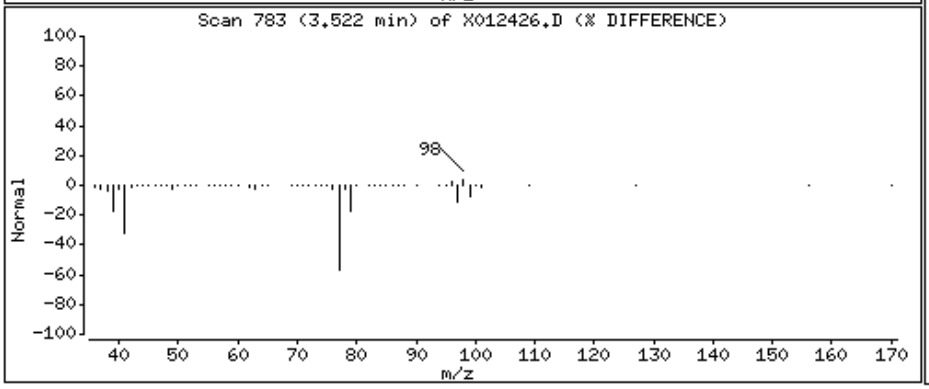
Column phase: DB624 Column diameter: 0.18

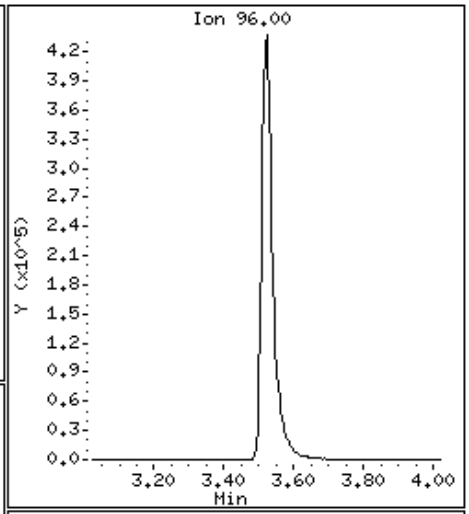
27 cis-1,2-Dichloroethene Concentration: 161.84 ug/l

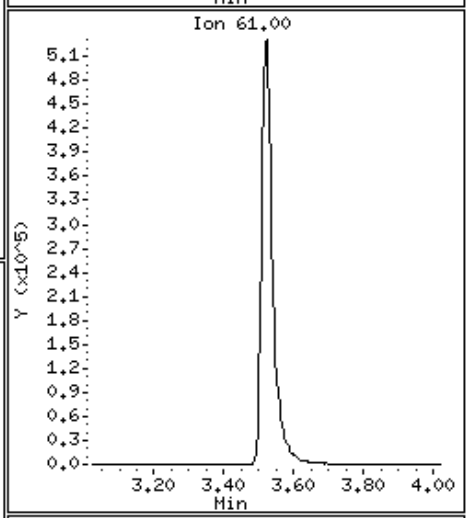


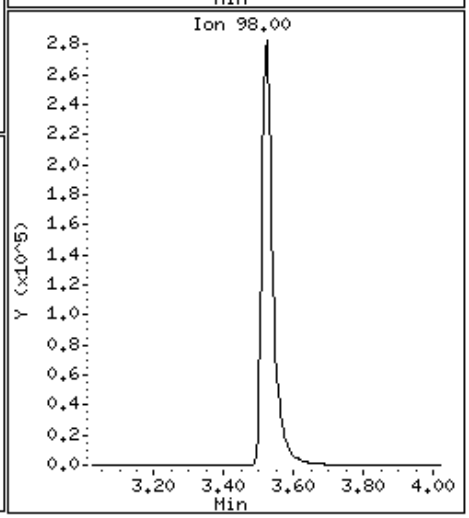












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D Page 5

Date : 24-JAN-2023 16:38

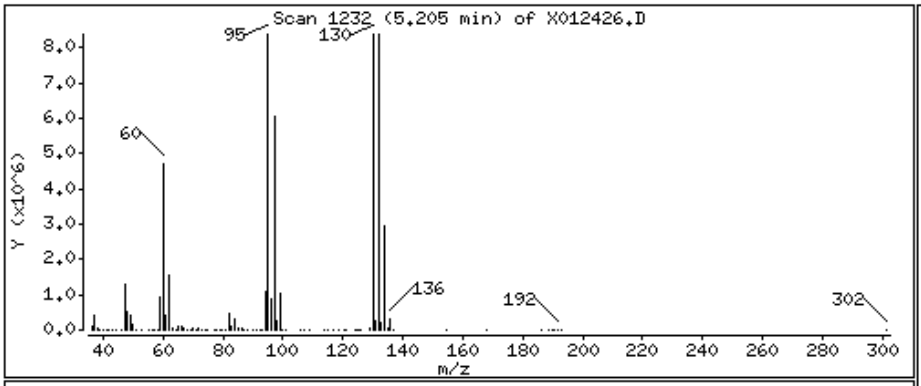
Client ID: HS23010982-02 Instrument: voa6.i

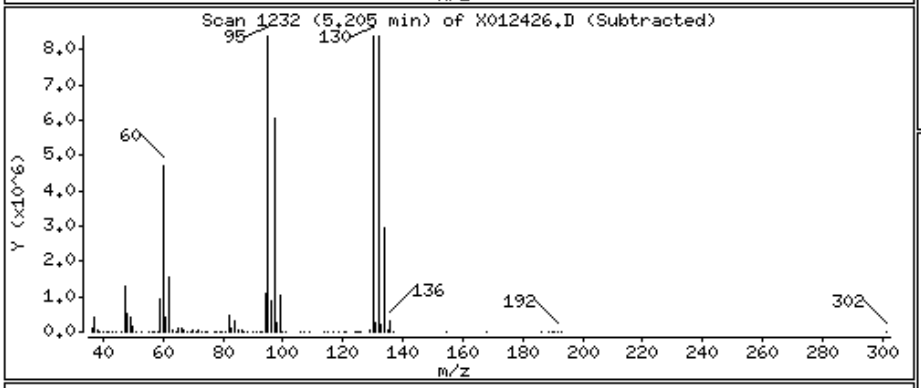
Sample Info: HS23010982-02;HS23010982-02;;;

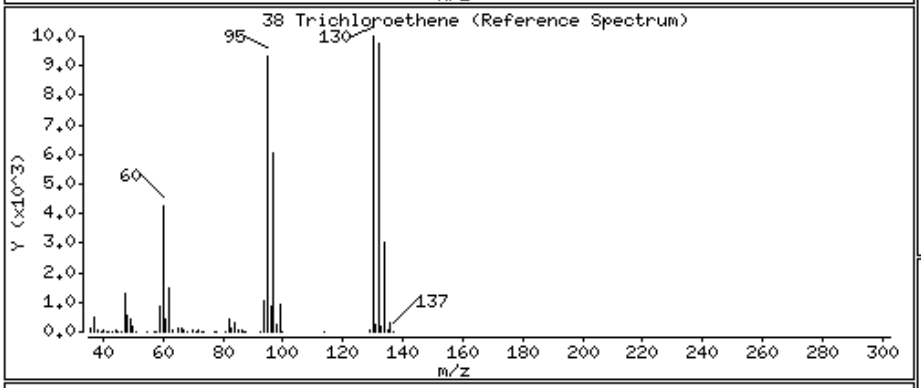
Purge Volume: 5.0 Operator: PC

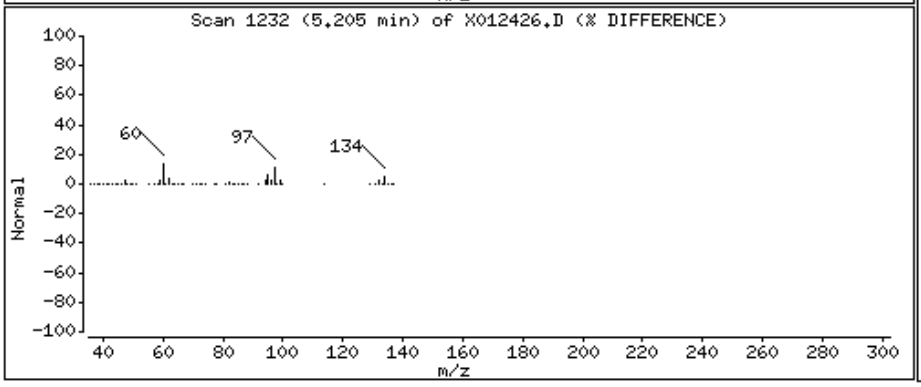
Column phase: DB624 Column diameter: 0.18

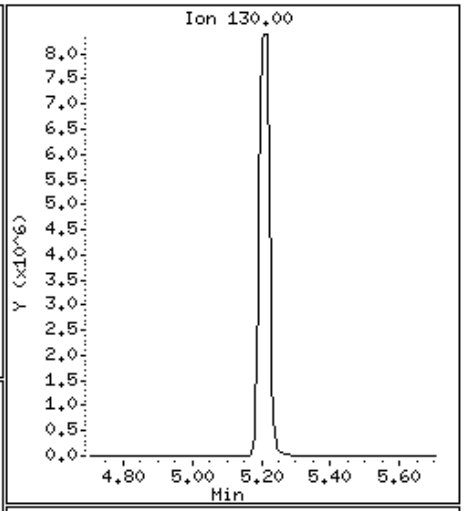
38 Trichloroethene Concentration: 3159.52 ug/l

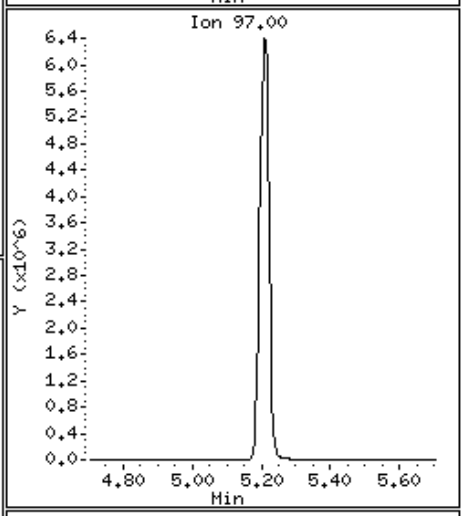


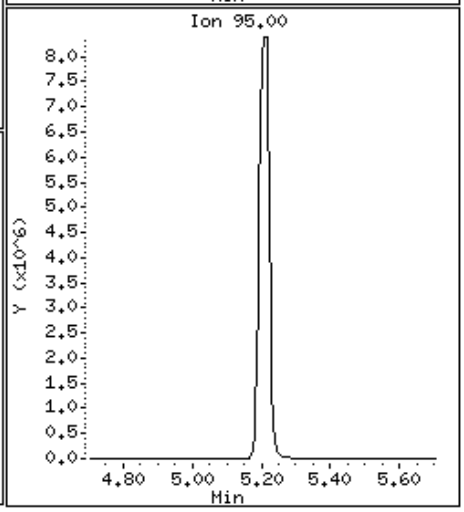












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D

Date : 24-JAN-2023 16:38

Client ID: HS23010982-02

Instrument: voa6.i

Sample Info: HS23010982-02;HS23010982-02;;;

Purge Volume: 5.0

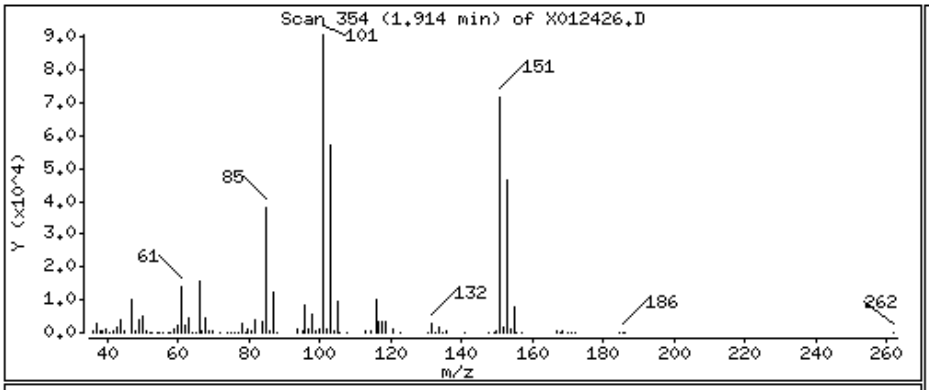
Operator: PC

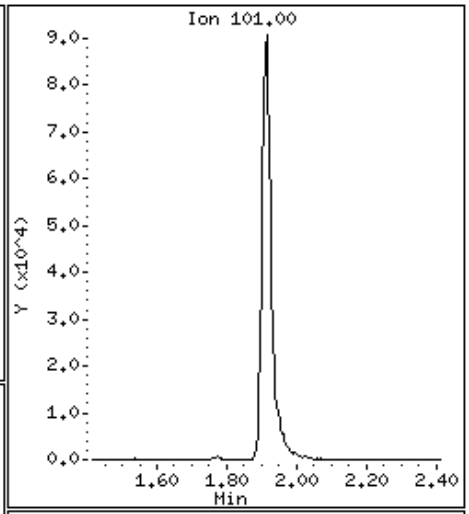
Column phase: DB624

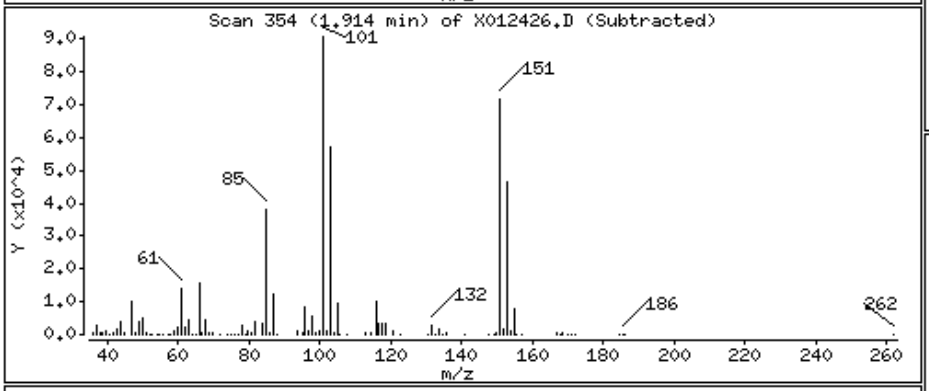
Column diameter: 0.18

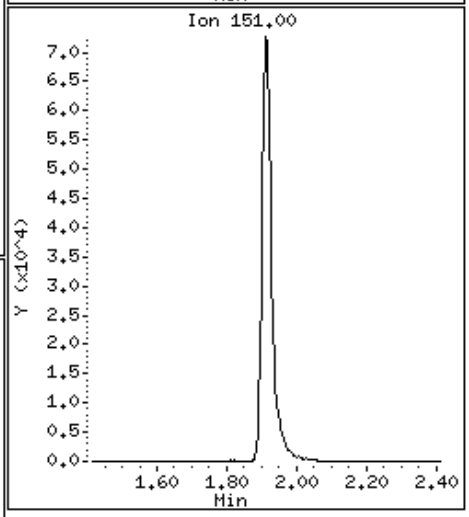
138 Freon TF

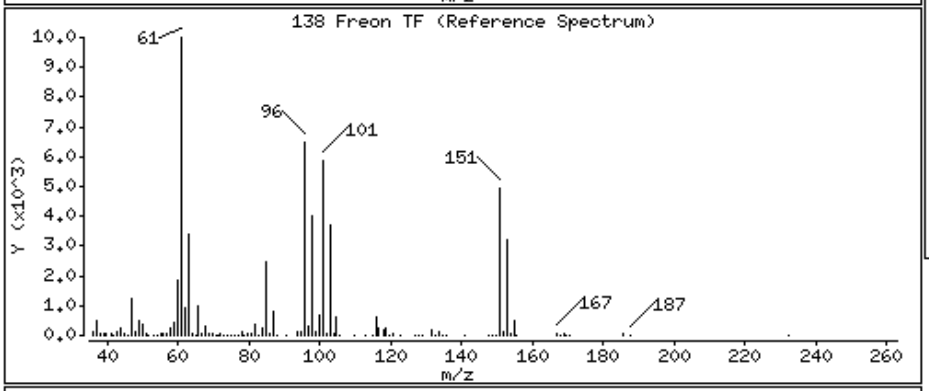
Concentration: 40.18 ug/l

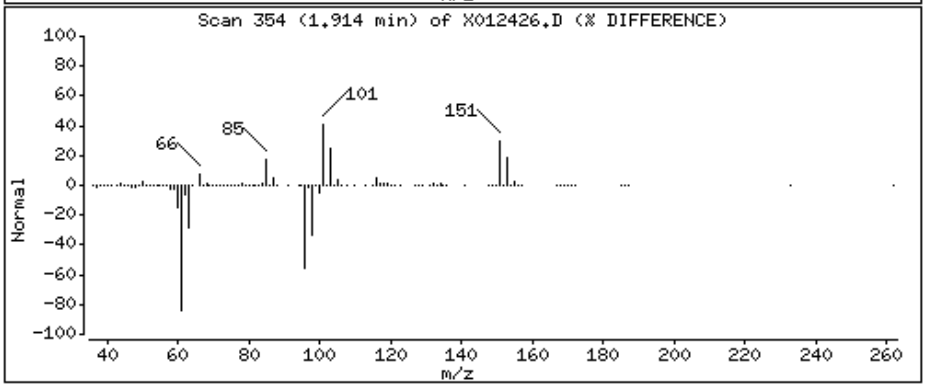












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012426.D
Inj Date : 24-JAN-2023 16:38
InstruID : voa6.i
LabSampID : HS23010982-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 1
Report Date: 03-Feb-2023 10:52

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D
Lab Smp Id: HS23010982-06 Client Smp ID: HS23010982-06
Inj Date : 24-JAN-2023 17:20
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-06;HS23010982-06;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

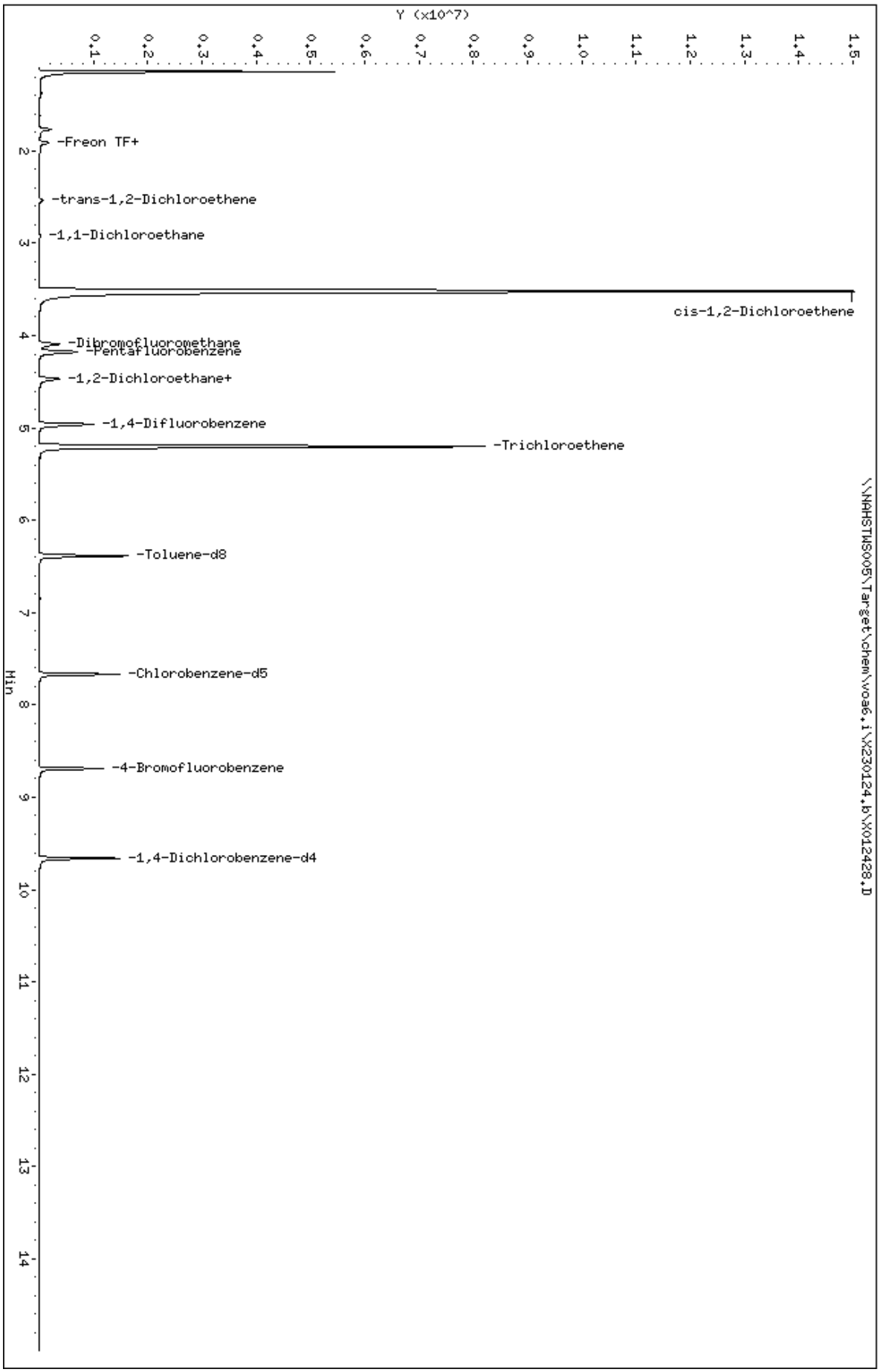
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.177	4.178	(1.000)	584141	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	3493664	684.657	684.65(A)
	11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	29120	6.56837	6.56(H)
	20 trans-1,2-Dichloroethene	96	2.532	2.524	(0.606)	28799	5.80421	5.80
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	30405	3.49164	3.49
	27 cis-1,2-Dichloroethene	96	3.521	3.522	(0.843)	7964283	1318.95	1318.94(A)
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	258502	46.0747	46.07
	33 1,2-Dichloroethane	62	4.560	4.552	(0.919)	7500	1.10838	1.10
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	290028	48.9958	48.99
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	825867	50.0000	
	38 Trichloroethene	130	5.201	5.205	(1.048)	2598701	464.580	464.58(A)
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	729328	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	964081	53.4940	53.49
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	333036	49.4387	49.43
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	367590	50.0000	
	138 Freon TF	101	1.913	1.910	(0.458)	31516	7.34988	7.34
M	94 1,2-Dichloroethylene (total)	96				7993082	1324.75	1324.75

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D
Date : 24-JAN-2023 17:20
Client ID: HS230109B2-06
Sample Info: HS230109B2-06;HS230109B2-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 2

Date : 24-JAN-2023 17:20

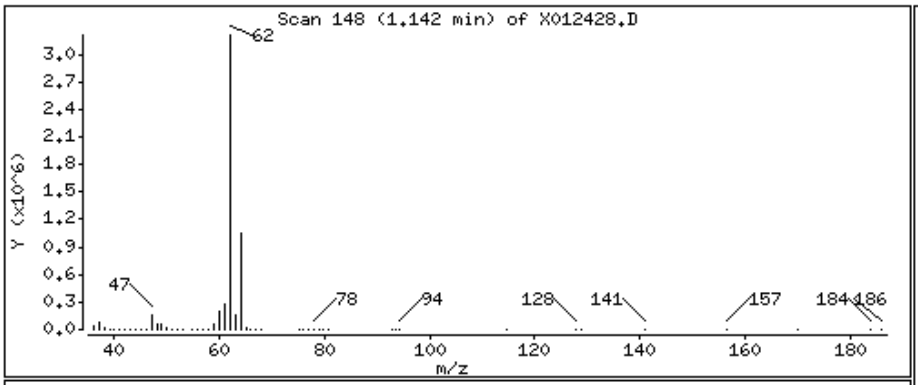
Client ID: HS23010982-06 Instrument: voa6.i

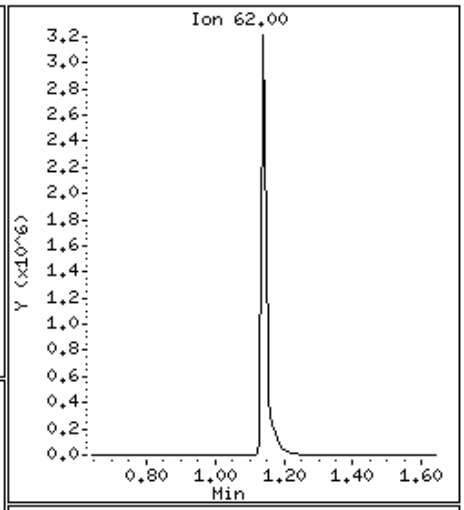
Sample Info: HS23010982-06;HS23010982-06;;;

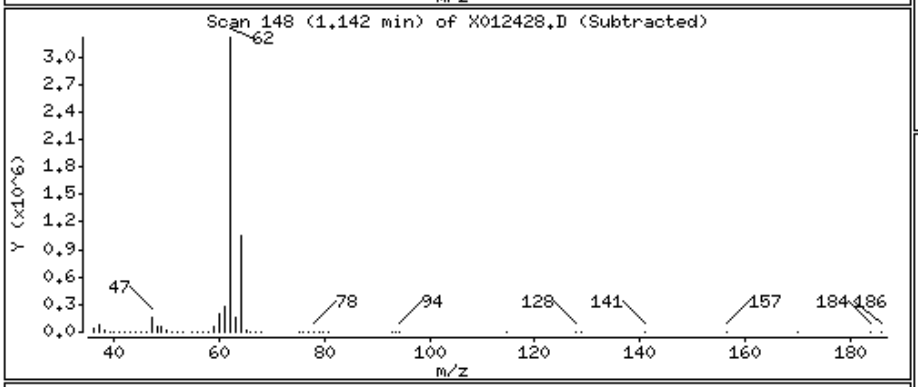
Purge Volume: 5.0 Operator: PC

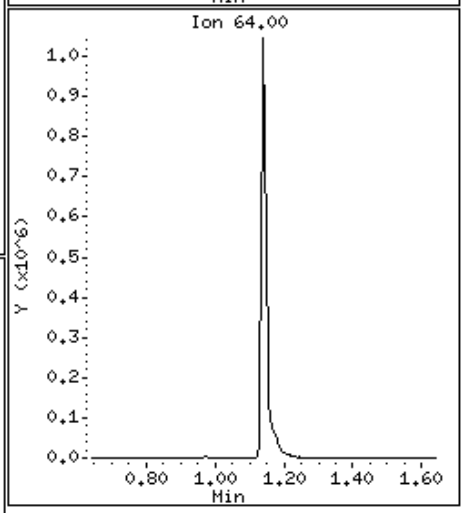
Column phase: DB624 Column diameter: 0.18

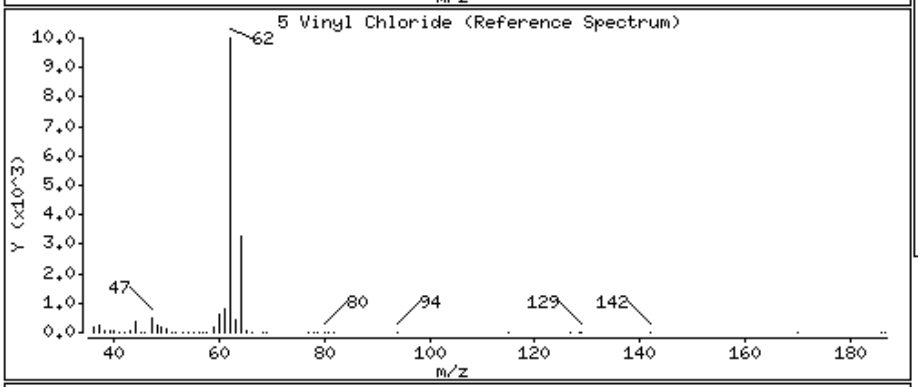
5 Vinyl Chloride Concentration: 684.65 ug/l

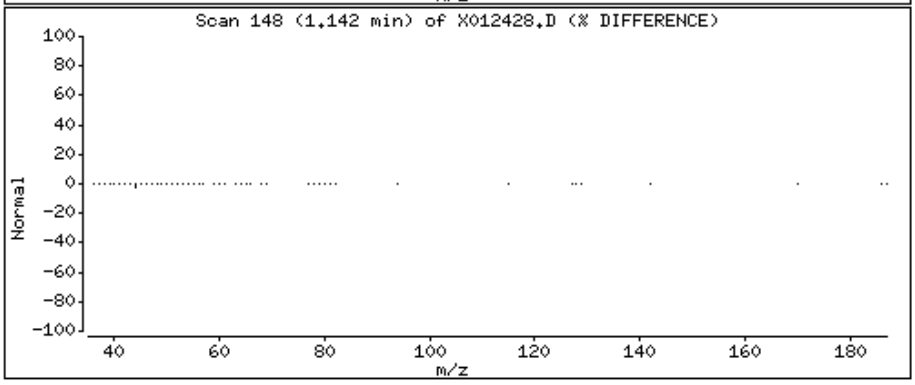












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 3

Date : 24-JAN-2023 17:20

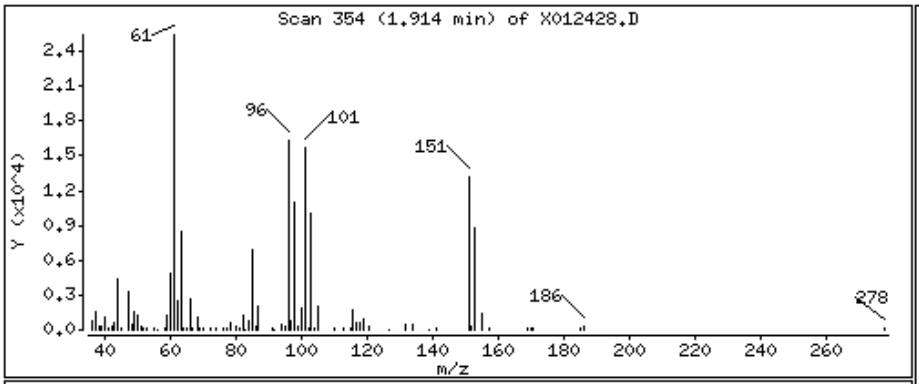
Client ID: HS23010982-06 Instrument: voa6.i

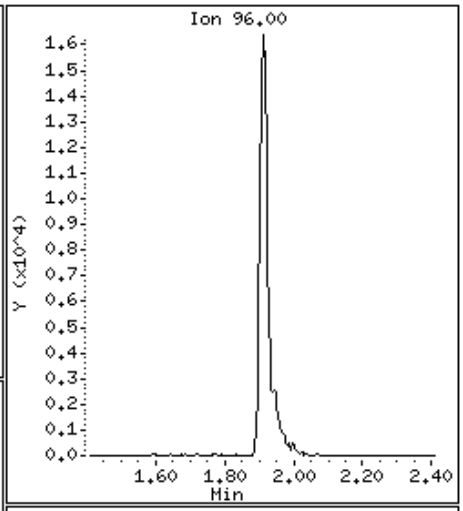
Sample Info: HS23010982-06;HS23010982-06;;;

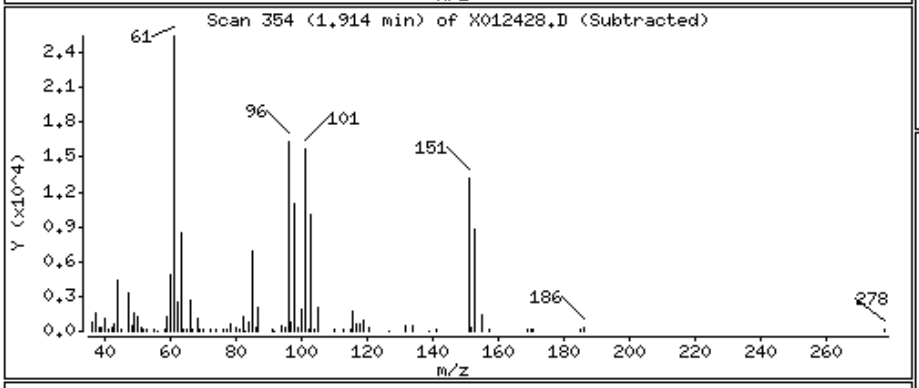
Purge Volume: 5.0 Operator: PC

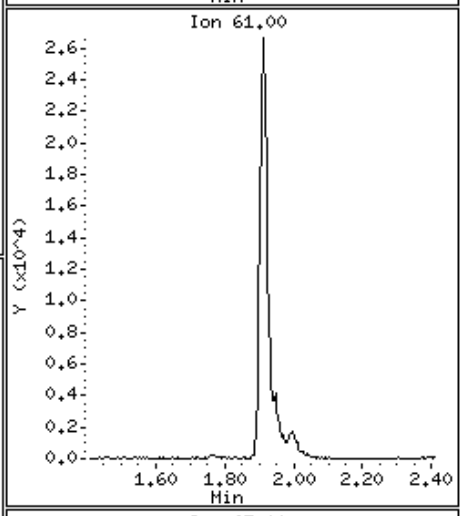
Column phase: DB624 Column diameter: 0.18

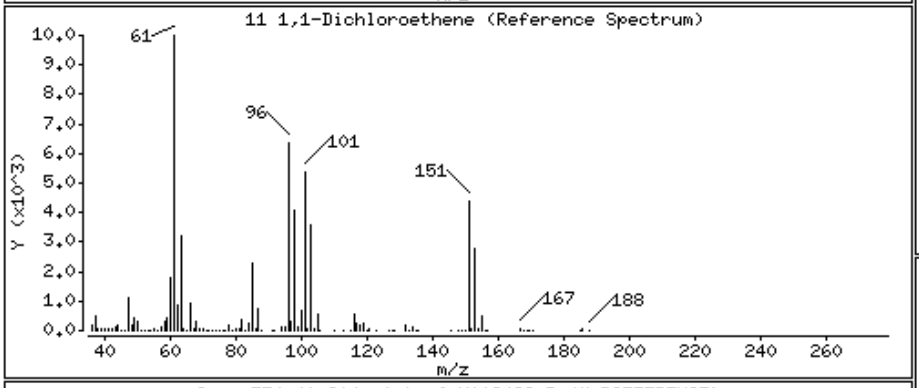
11 1,1-Dichloroethene Concentration: 6.56 ug/l

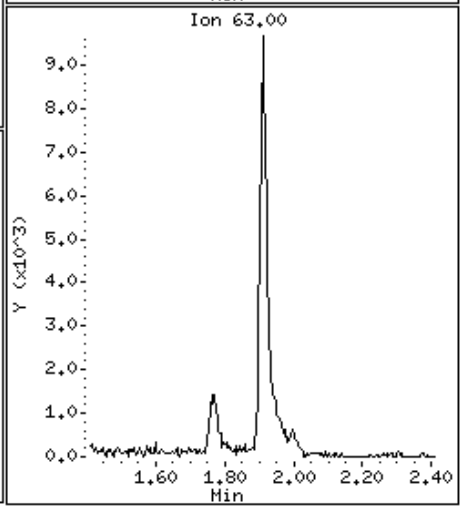


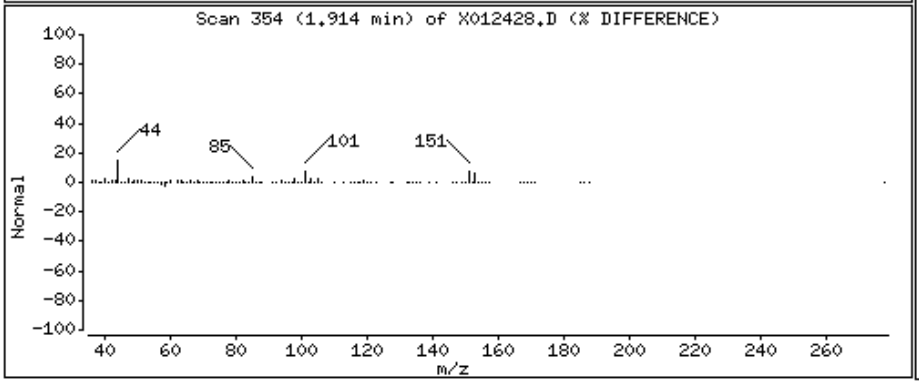












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 4

Date : 24-JAN-2023 17:20

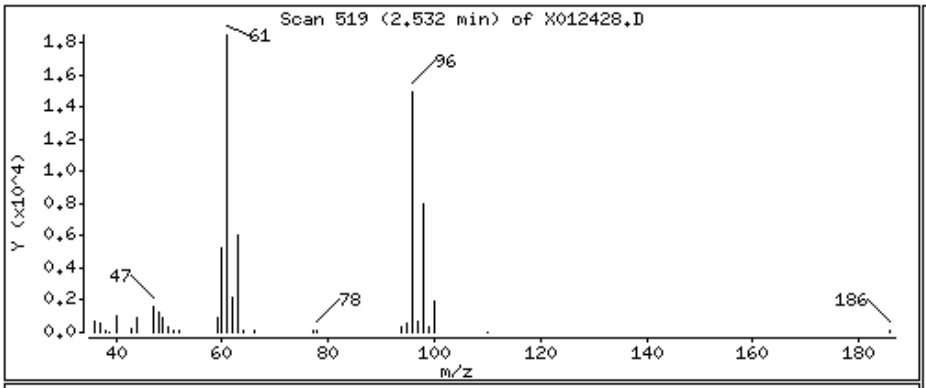
Client ID: HS23010982-06 Instrument: voa6.i

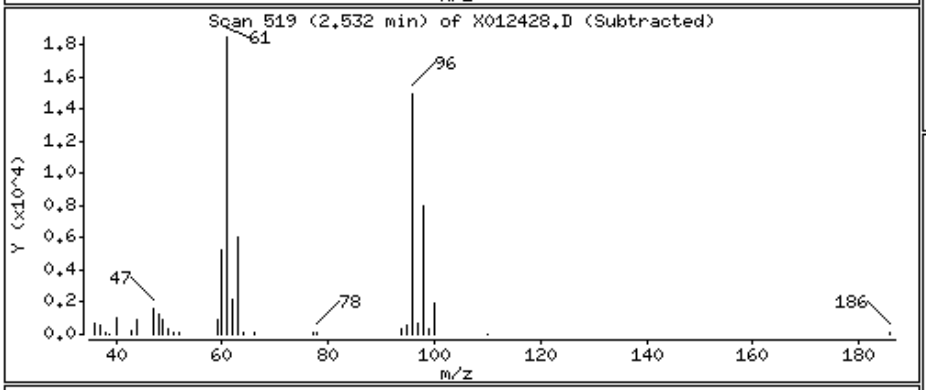
Sample Info: HS23010982-06;HS23010982-06;;;

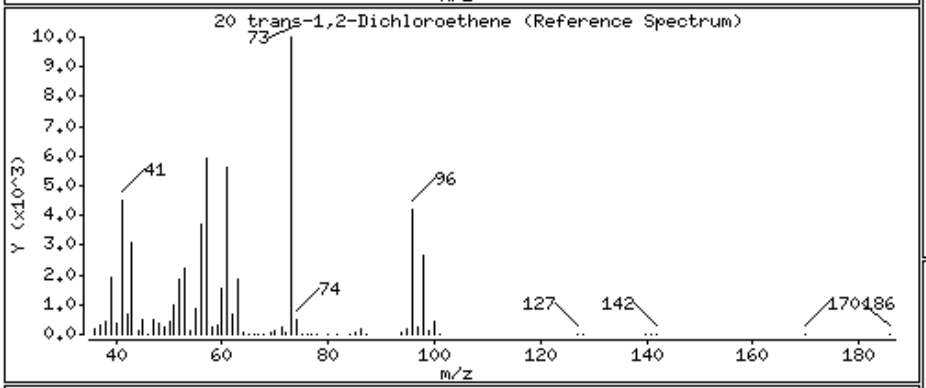
Purge Volume: 5.0 Operator: PC

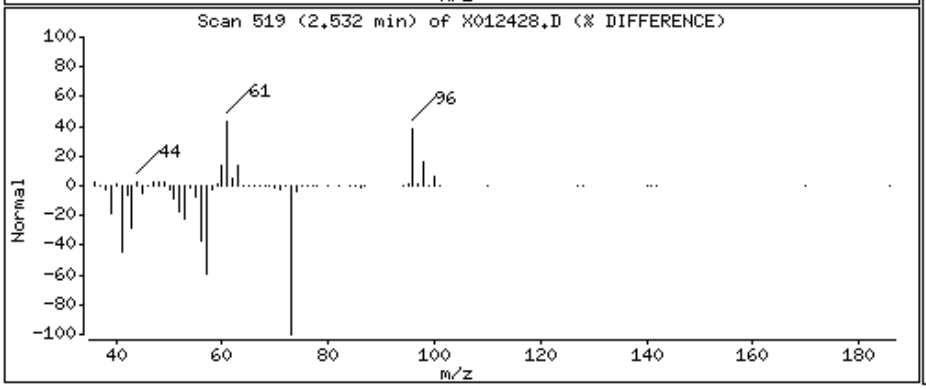
Column phase: DB624 Column diameter: 0.18

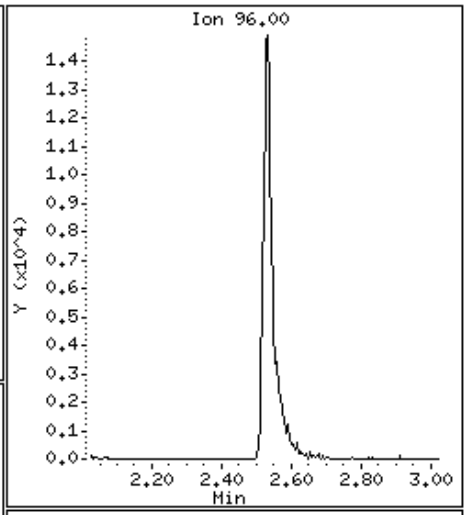
20 trans-1,2-Dichloroethene Concentration: 5.80 ug/l

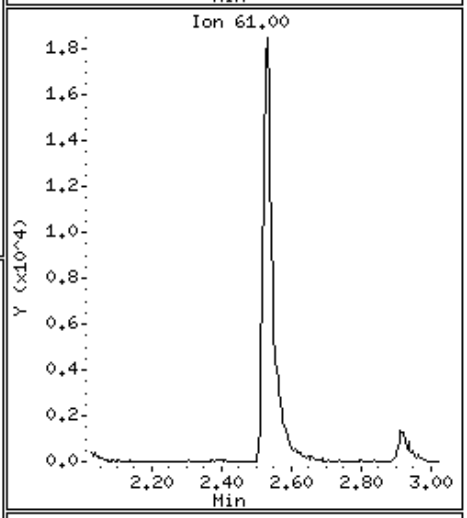


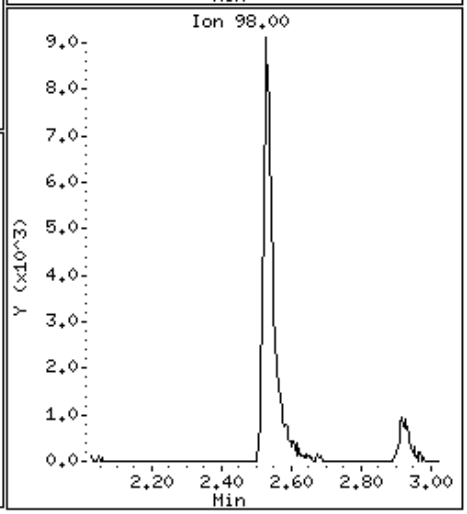












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 5

Date : 24-JAN-2023 17:20

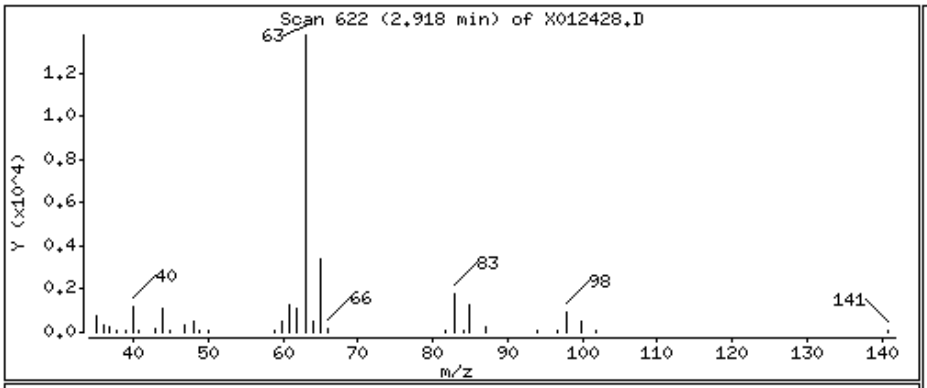
Client ID: HS23010982-06 Instrument: voa6.i

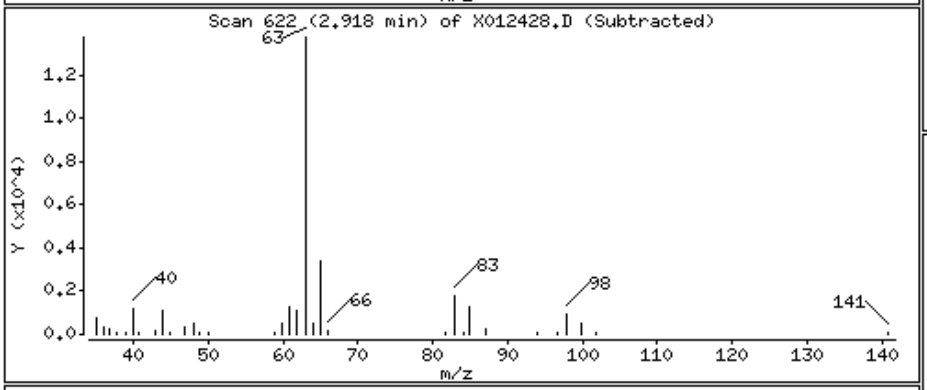
Sample Info: HS23010982-06;HS23010982-06;;;

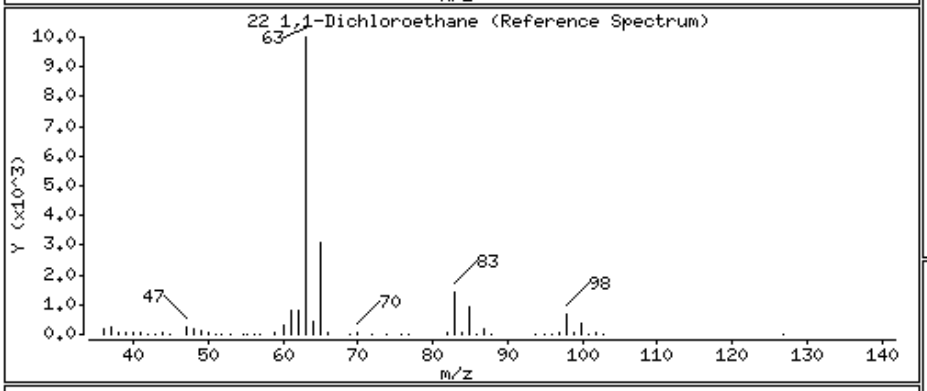
Purge Volume: 5.0 Operator: PC

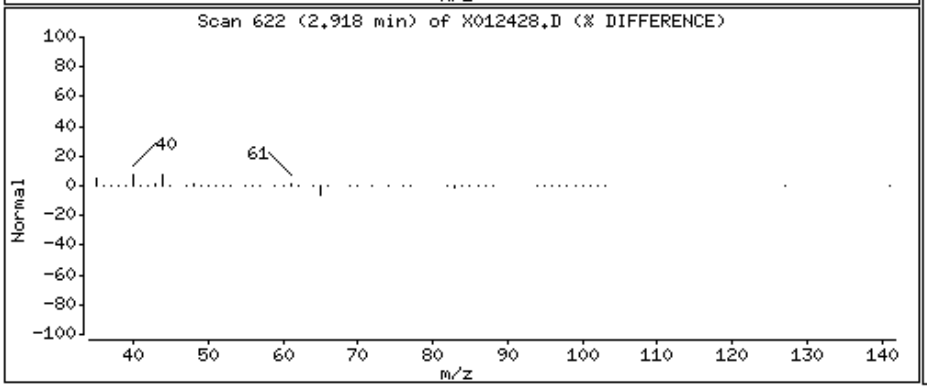
Column phase: DB624 Column diameter: 0.18

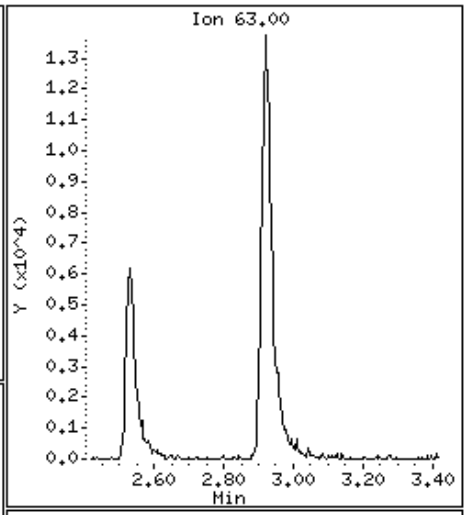
22 1,1-Dichloroethane Concentration: 3.49 ug/l

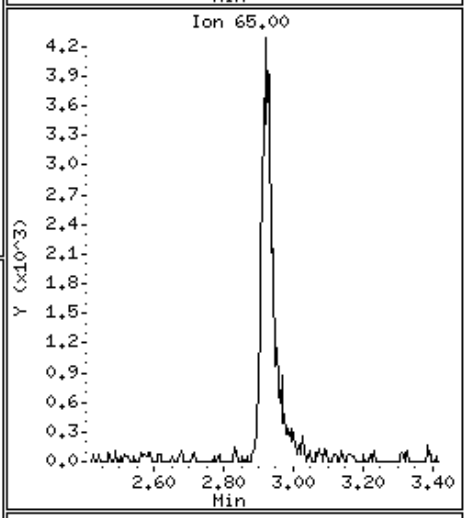


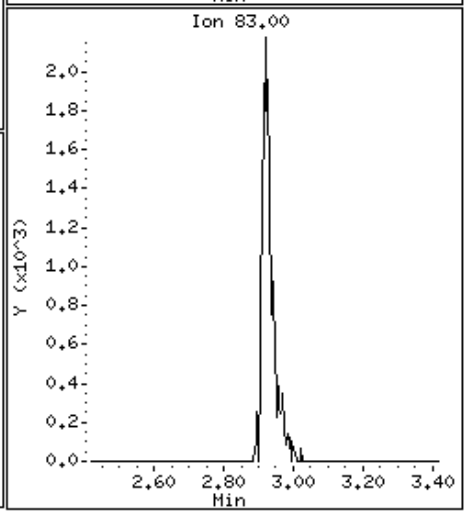












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 6

Date : 24-JAN-2023 17:20

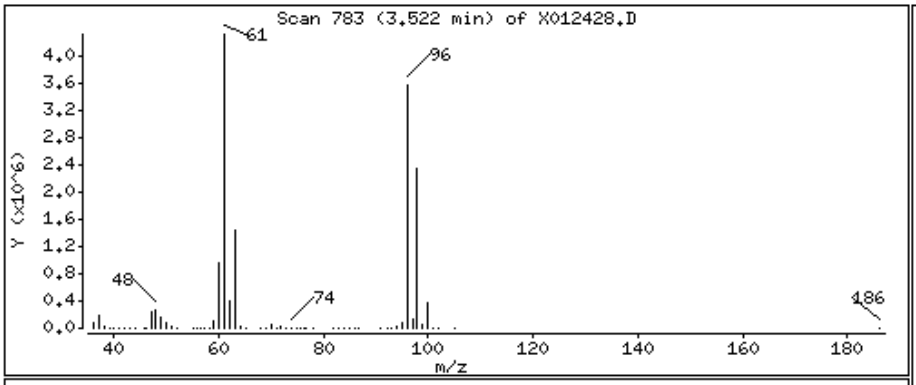
Client ID: HS23010982-06 Instrument: voa6.i

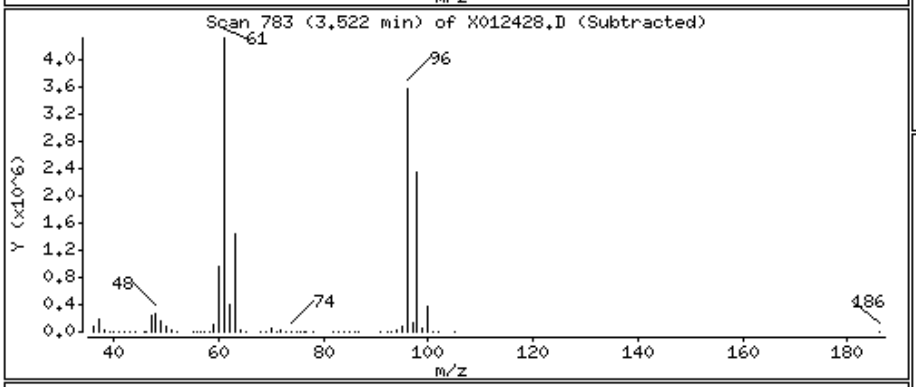
Sample Info: HS23010982-06;HS23010982-06;;;

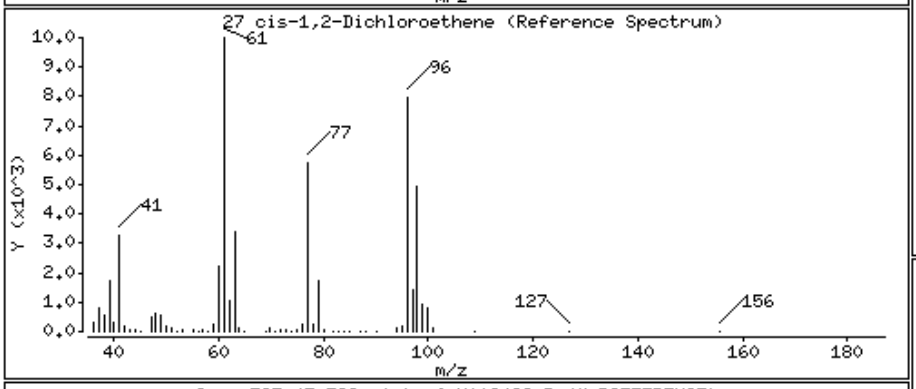
Purge Volume: 5.0 Operator: PC

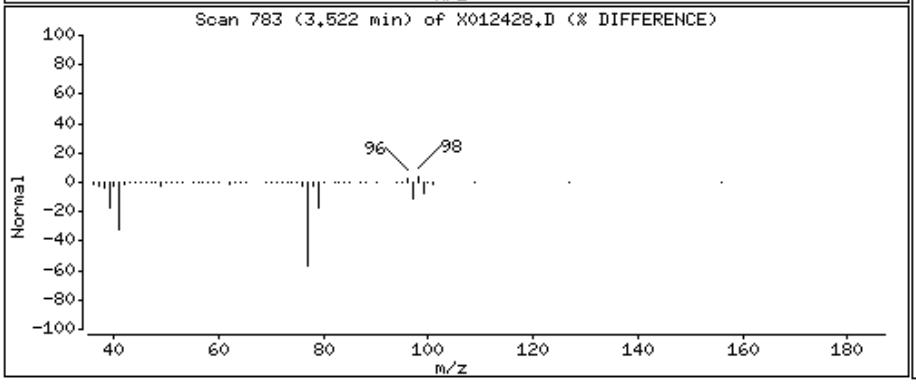
Column phase: DB624 Column diameter: 0.18

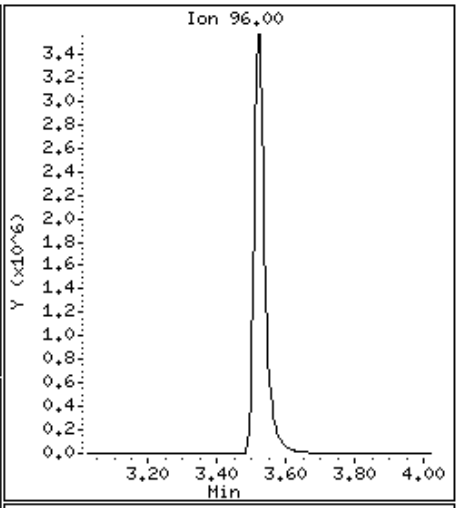
27 cis-1,2-Dichloroethene Concentration: 1318.94 ug/l

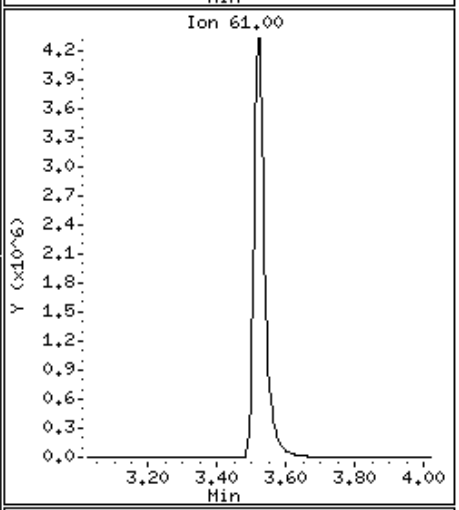


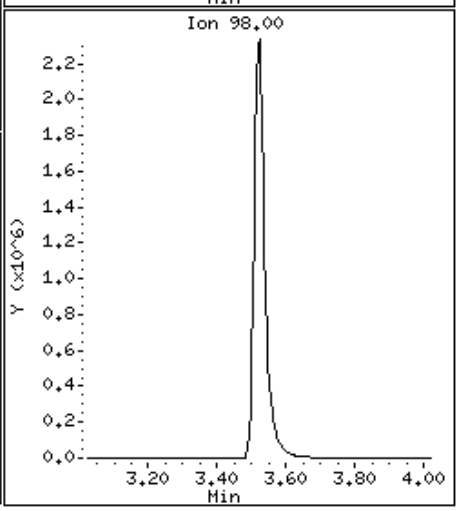












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Date : 24-JAN-2023 17:20

Client ID: HS23010982-06

Instrument: voa6.i

Sample Info: HS23010982-06;HS23010982-06;;;

Purge Volume: 5.0

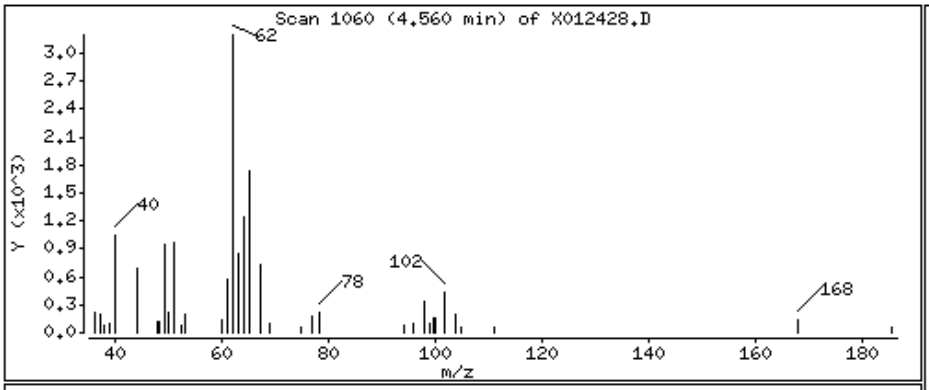
Operator: PC

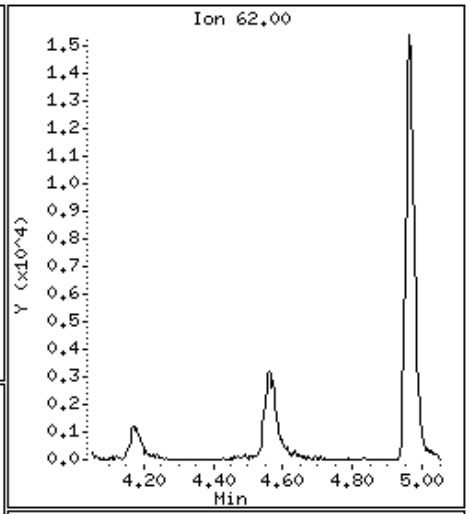
Column phase: DB624

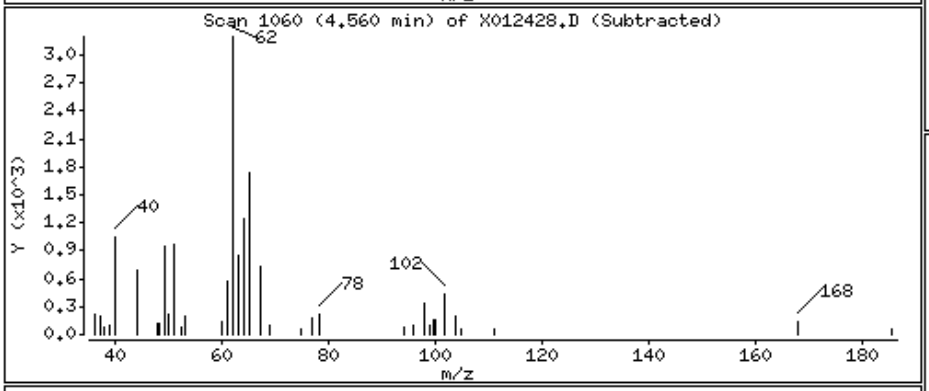
Column diameter: 0.18

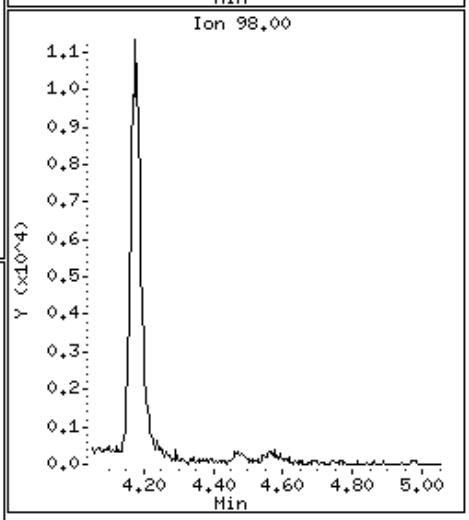
33 1,2-Dichloroethane

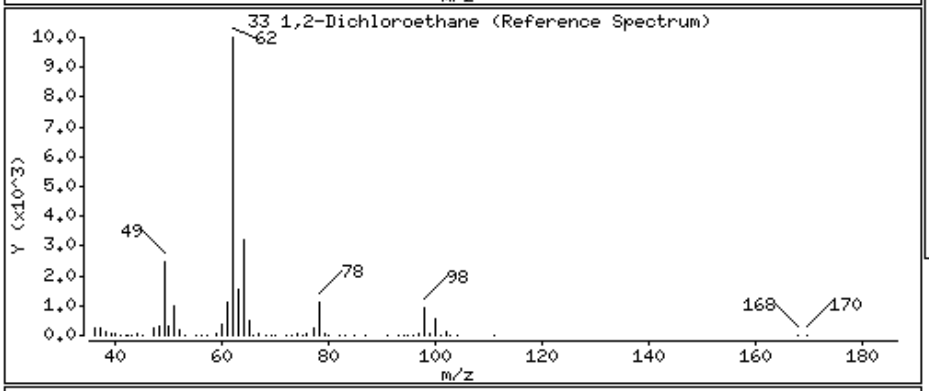
Concentration: 1.10 ug/l

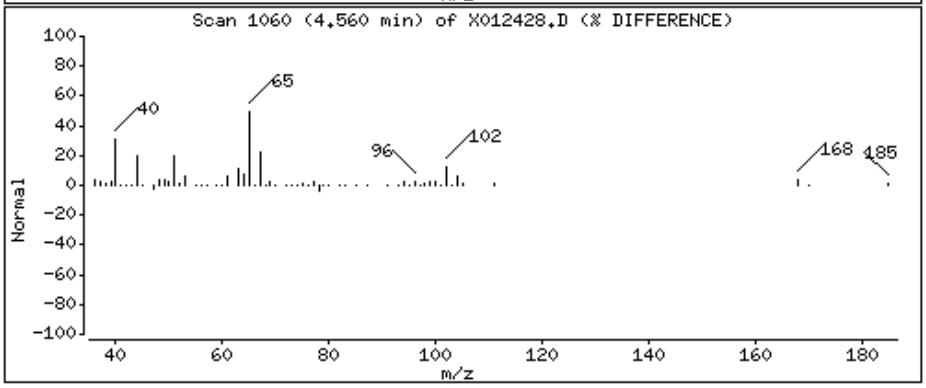












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 8

Date : 24-JAN-2023 17:20

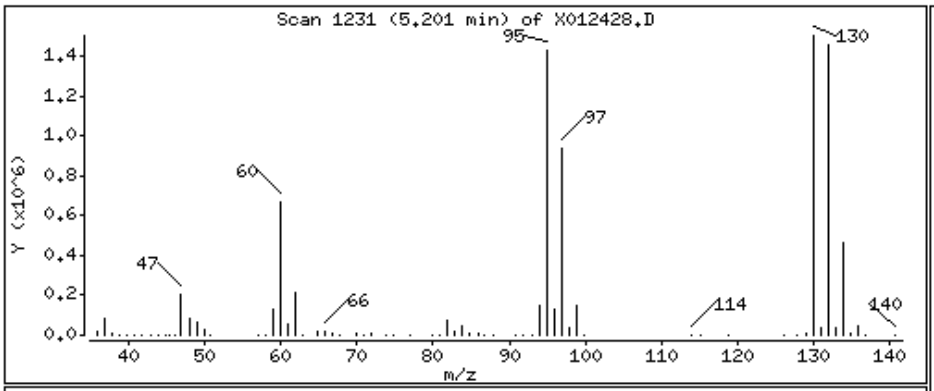
Client ID: HS23010982-06 Instrument: voa6.i

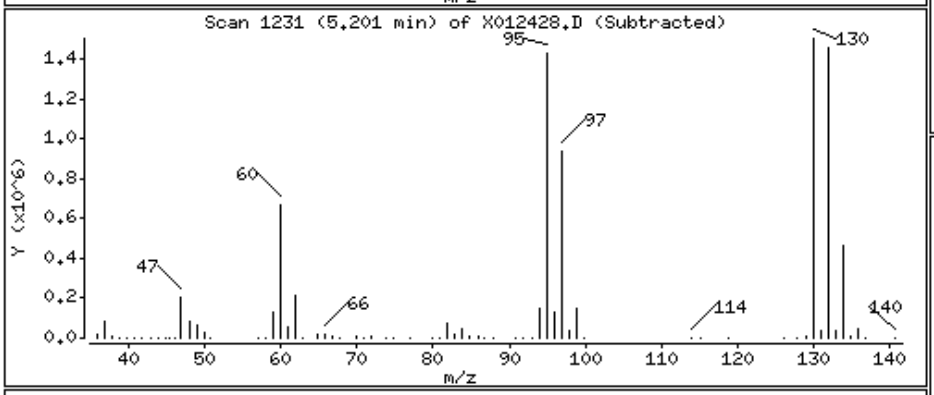
Sample Info: HS23010982-06;HS23010982-06;;;

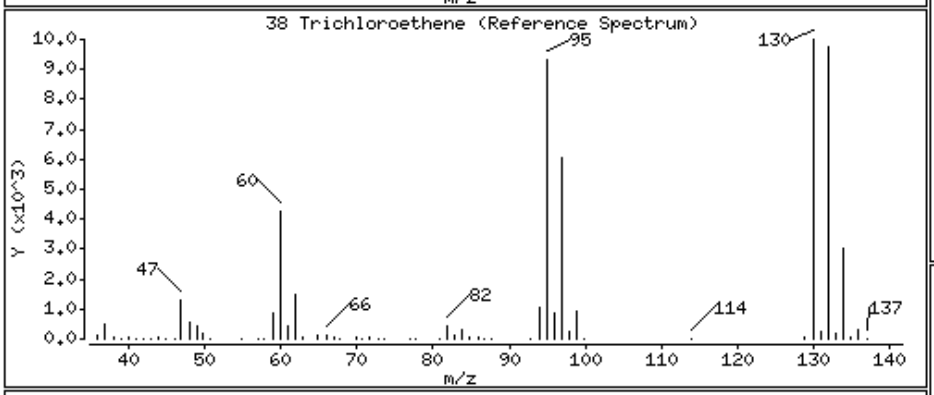
Purge Volume: 5.0 Operator: PC

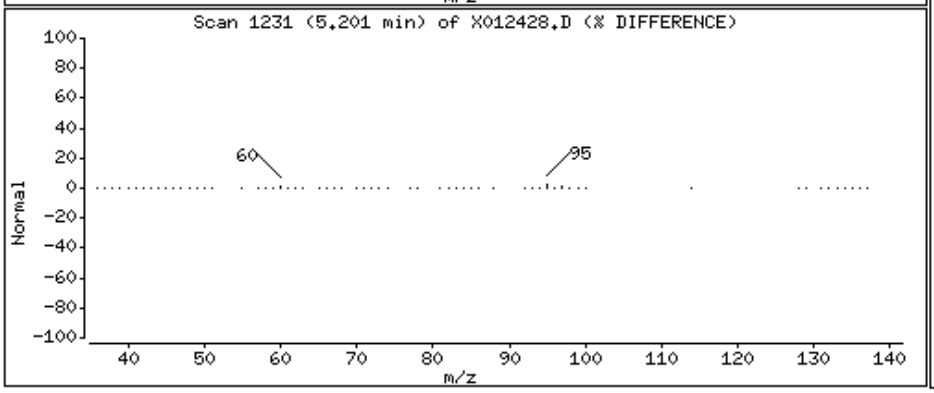
Column phase: DB624 Column diameter: 0.18

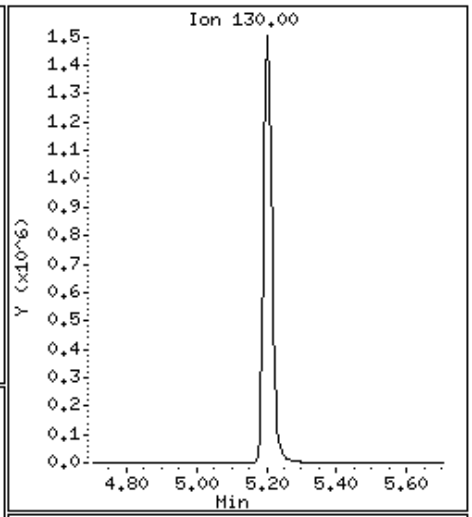
38 Trichloroethene Concentration: 464.58 ug/l

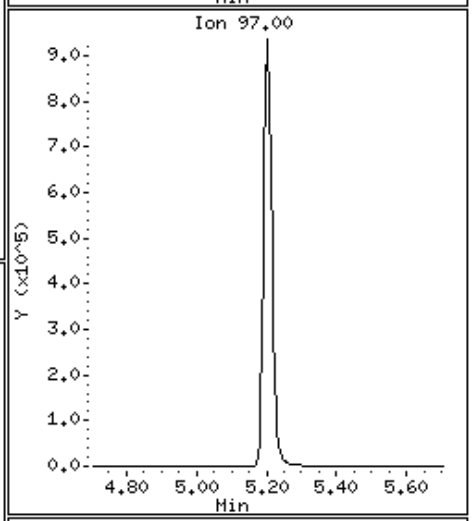


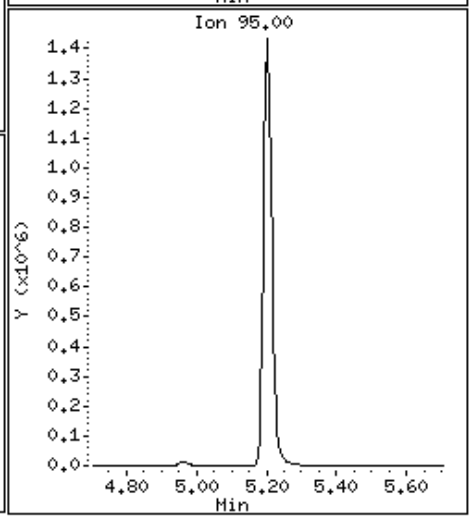












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012428.D Page 9

Date : 24-JAN-2023 17:20

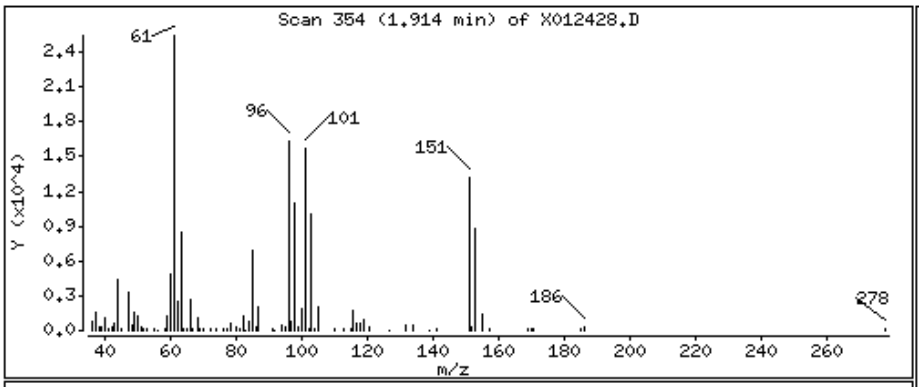
Client ID: HS23010982-06 Instrument: voa6.i

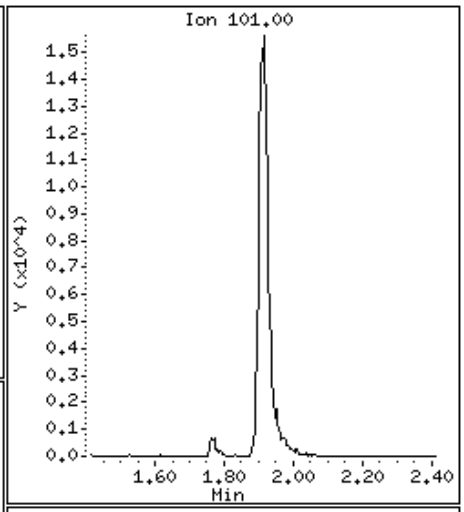
Sample Info: HS23010982-06;HS23010982-06;;;

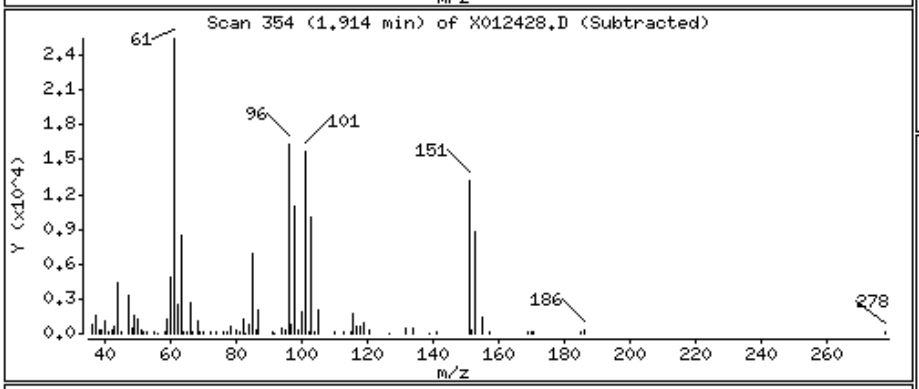
Purge Volume: 5.0 Operator: PC

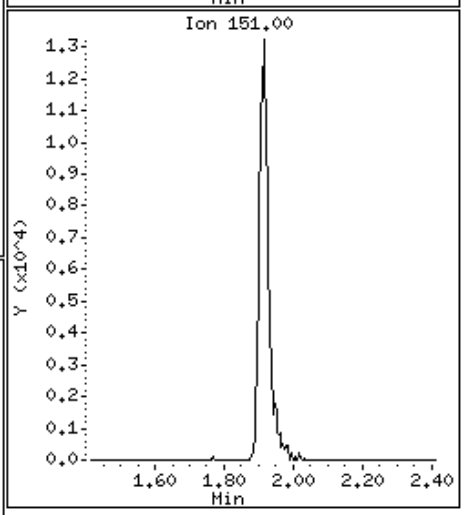
Column phase: DB624 Column diameter: 0.18

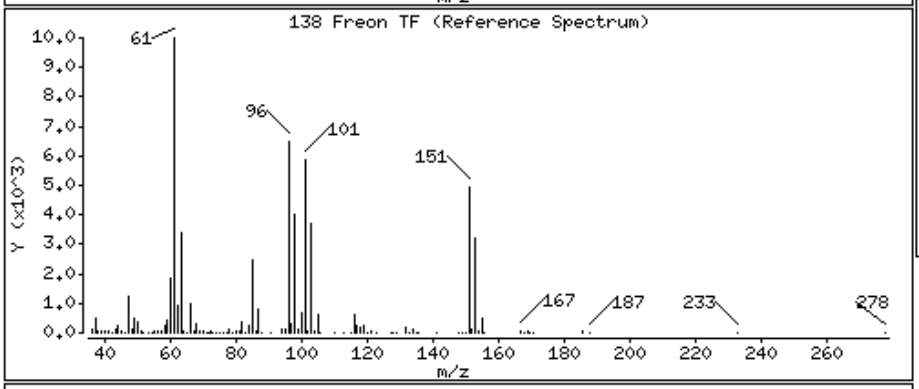
138 Freon TF Concentration: 7.34 ug/l

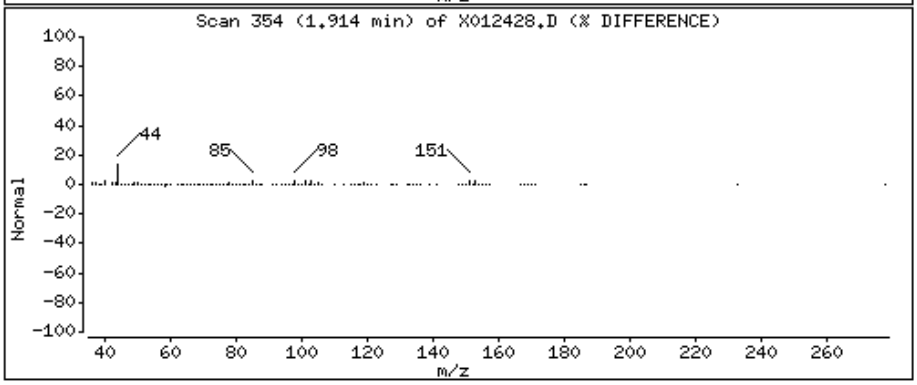












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Inj Date : 24-JAN-2023 17:20
InstruID : voa6.i
LabSampID : HS23010982-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012431.D Page 1
Report Date: 03-Feb-2023 10:52

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012431.D
Lab Smp Id: HS23010986-05MS Client Smp ID: HS23010986-05MS
Inj Date : 24-JAN-2023 18:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-05MS;HS23010986-05MS;3;;MS
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 31 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.178	4.178	(1.000)	609595	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	52571	12.6262	1262.62
3	Chloromethane	50	1.074	1.074	(0.257)	79015	15.9043	1590.42
4	Propionitrile	54	3.649	3.645	(0.873)	103274	166.034	16603.37(a)
5	Vinyl Chloride	62	1.141	1.141	(0.273)	86395	16.2239	1622.39
6	Bromomethane	94	1.336	1.336	(0.320)	64302	17.1658	1716.58
7	Chloroethane	64	1.400	1.400	(0.335)	52078	14.0506	1405.05
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	131672	17.6694	1766.93
9	Acrolein	56	1.441	1.441	(0.345)	12959	33.0287	3302.86
10	Acetone	43	1.970	1.966	(0.472)	45518	26.5862	2658.62
11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	80062	17.3049	1730.48
12	Isobutyl Alcohol	43	4.676	4.669	(1.119)	232885	339.651	33965.08(a)
13	Acetonitrile	39	2.194	2.195	(0.525)	99650	179.612	17961.17(a)
14	Allyl Chloride	41	2.194	2.195	(0.525)	172786	16.3520	1635.19(a)
15	Iodomethane	142	2.022	2.022	(0.484)	133340	25.1476	2514.76
16	Acrylonitrile	53	2.532	2.528	(0.606)	47952	30.5594	3055.93
17	Methylene Chloride	84	2.299	2.300	(0.550)	87198	13.7404	1374.03
18	Methyl tert-butyl ether	73	2.532	2.528	(0.606)	242479	16.0119	1601.19
19	Carbon Disulfide	76	2.067	2.067	(0.495)	378497	31.2685	3126.84
20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	80435	15.5341	1553.41

21 Vinyl Acetate	43	2.997	2.993 (0.717)	439018	33.0247	3302.46
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	138184	15.2061	1520.61

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012431.D Page 2
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			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	3.578	3.570	(0.856)	46981	28.1365	2813.64
	25	Methacrylonitrile	41	3.821	3.818	(0.915)	69811	16.1733	1617.32(a)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	115977	15.0313	1503.12
	27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	602582	95.6254	9562.54
	28	Chloroform	83	3.904	3.900	(0.935)	153946	15.1146	1511.45
	29	Bromochloromethane	128	3.791	3.788	(0.908)	46261	13.4082	1340.81
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	266061	45.4396	45.43
	31	1,1,1-Trichloroethane	97	4.084	4.076	(0.978)	137532	17.0190	1701.89
	32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	119732	19.5607	1956.07
	33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	122058	17.2785	1727.85
	34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	117898	18.0371	1803.71
$	35	1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	307719	49.8092	49.80
*	36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	862181	50.0000	
	37	Benzene	78	4.511	4.508	(0.909)	338611	16.4465	1644.64
	38	Trichloroethene	130	5.201	5.205	(1.048)	1058028	181.181	18118.12
	39	Bromodichloromethane	83	5.726	5.722	(1.154)	119994	15.5296	1552.96
	40	Methyl Methacrylate	41	5.606	5.602	(1.342)	69666	16.7605	1676.05(a)
	41	2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	27352	12.4427	1244.27(a)
	42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	83903	15.3200	1531.99
	43	2-Nitropropane	43	5.969	5.966	(1.429)	26158	16.9926	1699.26
	44	Dibromomethane	93	5.553	5.550	(1.119)	57214	15.3697	1536.96
	45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	146239	34.5348	3453.48
	46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.241)	139200	15.3397	1533.97
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	792242	50.0000	
$	48	Toluene-d8	98	6.385	6.386	(0.833)	1012685	51.7287	51.72
	49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	67724	16.6805	1668.05(a)
	50	Toluene	91	6.445	6.446	(0.841)	375362	17.1415	1714.15
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	118991	15.8007	1580.06
	52	2-Hexanone	43	7.086	7.083	(0.924)	100396	34.8472	3484.71
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	70113	15.9599	1595.98
	54	1,3-Dichloropropane	76	6.978	6.982	(0.910)	139834	16.1714	1617.14
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	98942	15.6049	1560.48
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	84240	18.5930	1859.29
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	91328	16.6273	1662.73
	58	1-Chlorohexane	55	7.694	7.694	(1.551)	90908	21.8181	2181.80
	59	Chlorobenzene	112	7.694	7.694	(1.003)	253528	16.3229	1632.29
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	92972	16.0846	1608.45
	61	Ethylbenzene	106	7.799	7.799	(1.017)	131892	18.0270	1802.69
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	329625	34.9488	3494.87
	63	o-Xylene	106	8.241	8.241	(1.075)	158801	17.0589	1705.89
	64	Styrene	104	8.260	8.256	(1.077)	267913	17.1707	1717.06
	66	Bromoform	173	8.410	8.410	(1.097)	67317	15.3253	1532.52
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	412384	19.3903	1939.03
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	112159	15.9367	1593.67
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	373998	51.1083	51.10
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	441556	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	120118	24.4478	2444.78
	72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	28611	16.7291	1672.90(a)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	482800	19.7397	1973.97
	74	Bromobenzene	156	8.807	8.803	(0.912)	118118	16.3048	1630.47
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	346054	19.1527	1915.27
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	290916	18.1258	1812.58

77 4-Chlorotoluene	91	9.069	9.070 (0.939)	336516	18.3923	1839.23
78 tert-Butylbenzene	119	9.336	9.336 (0.966)	300890	20.3442	2034.42

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012431.D Page 3
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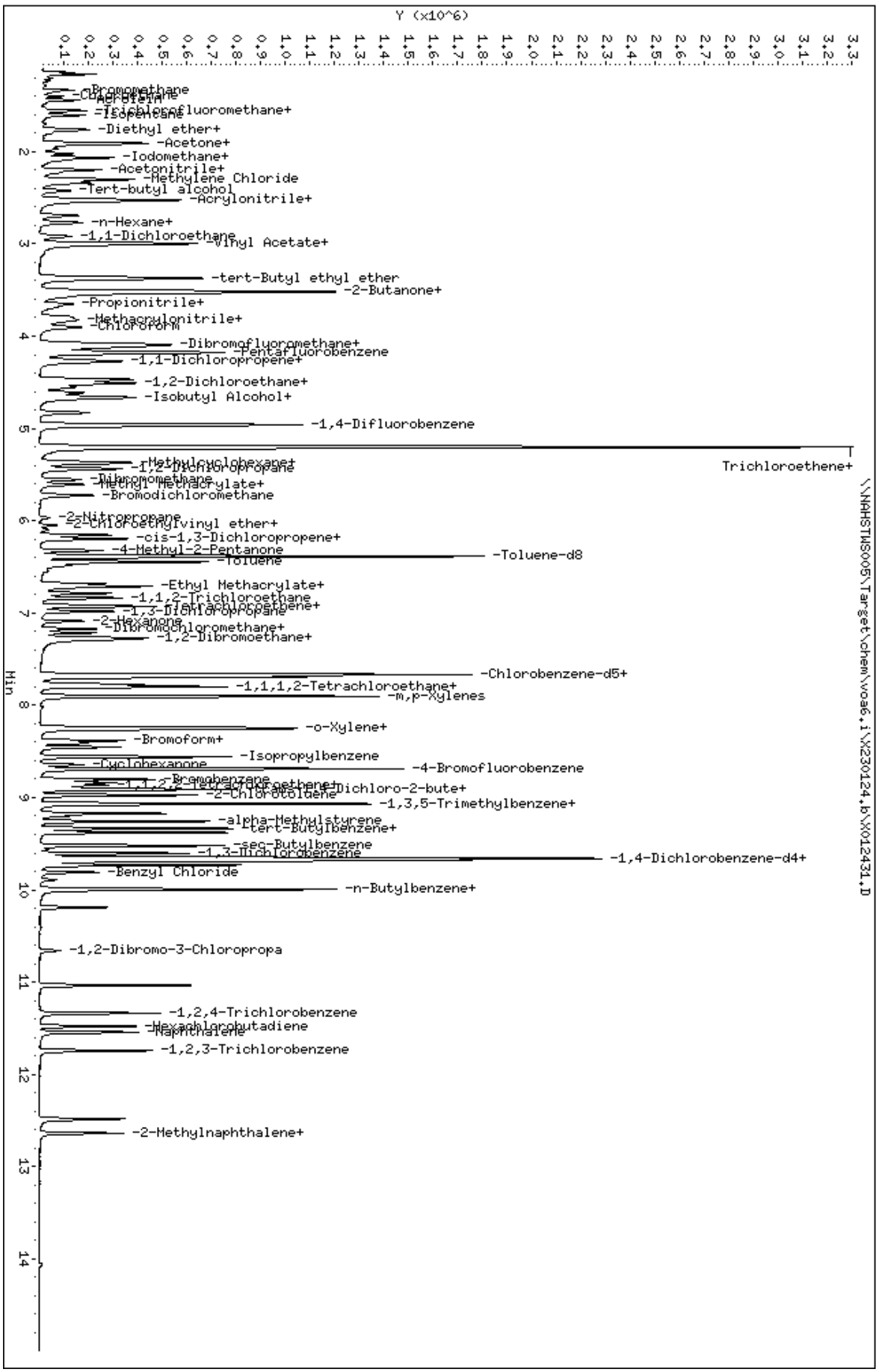
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	345204	18.1578	1815.78
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	418811	21.2826	2128.26
82	p-Isopropyltoluene	119	9.651	9.647	(0.999)	365192	20.7097	2070.97
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	207367	17.2460	1724.60
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	221520	16.8829	1688.29
86	Benzyl Chloride	91	9.808	9.808	(1.279)	143113	13.6149	1361.48
87	n-Butylbenzene	91	9.995	9.992	(1.035)	316978	19.7649	1976.49
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	203138	16.4040	1640.39
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	18026	16.0834	1608.33
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	134286	17.1830	1718.29
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	65079	18.8972	1889.71
92	Naphthalene	128	11.544	11.540	(1.195)	306846	17.2568	1725.67
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	127555	17.0419	1704.18
146	Methyl acetate	43	2.228	2.225	(0.533)	45894	16.7311	1673.10
138	Freon TF	101	1.910	1.910	(0.457)	90731	20.2760	2027.59
141	Cyclohexane	56	4.118	4.121	(0.986)	133101	22.3761	2237.61
142	Tetrahydrofuran	42	3.844	3.840	(0.920)	24361	29.9971	2999.70
147	Methylcyclohexane	55	5.381	5.373	(1.085)	202770	19.2130	1921.29
135	1,4-Dioxane	88	5.602	5.598	(1.341)	18766	336.771	33677.08
132	n-Butanol	56	5.268	5.250	(1.261)	16496	251.348	25134.83(a)
131	Methyl Acrylate	55	3.686	3.683	(0.882)	74003	17.8811	1788.11
133	Ethyl Acrylate	55	5.381	5.373	(1.288)	202770	18.1854	1818.54
136	n-Hexane	57	2.768	2.768	(0.663)	83256	18.9686	1896.85
139	Diethyl ether	59	1.752	1.752	(0.419)	59684	14.6529	1465.28
148	Tert-butyl alcohol	59	2.423	2.420	(0.580)	141675	335.641	33564.05
149	Isopropyl alcohol	45	2.090	2.086	(0.500)	76271	345.990	34599.00
156	Diisopropyl ether	45	2.997	2.997	(0.717)	254386	16.0867	1608.67
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	137685	16.0719	1607.19
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	364936	17.1628	1716.28
167	Ethanol	45	1.700	1.700	(0.407)	14390	360.259	36025.89
172	tert-Butyl formate	59	4.612	4.612	(1.104)	108287	33.4767	3347.67
173	3,3-Dimethyl-1-butanol	57	7.289	7.285	(0.951)	131018	349.532	34953.15
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	287181	16.3433	1634.32
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	267874	15.9418	1594.18
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	108287	330.753	33075.32
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	263100	322.410	32241.04
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	137685		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	62633	14.9705	1497.05
152	Amyl alcohol	42	6.910	6.899	(0.901)	19301	246.369	24636.86
158	Dichlorofluoromethane	67	1.527	1.531	(0.366)	12087	15.3133	1531.33
159	Propylene oxide	43	1.752	1.752	(0.419)	12190	31.7995	3179.94
161	3-Methyl-1-butanol	55	6.914	6.903	(0.902)	25523	325.851	32585.06
162	Butyl acrylate	55	8.252	8.249	(1.076)	178181	17.2174	1721.74
182	Epichlorohydrin	57	6.097	6.089	(1.229)	24771	65.8510	6585.09
M 94	1,2-Dichloroethylene (total)	96				683017	111.160	11115.95
M 95	Xylenes (total)	106				488426	52.0077	5200.77
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	164425	16.8060	1680.60
130	Ethyl Acetate	43	3.649	3.649	(0.873)	80530	16.9295	1692.95
134	Cyclohexanone	55	8.642	8.642	(0.894)	58569	317.981	31798.07(a)
185	Isoprene	39	1.767	1.767	(0.423)	29390	18.0976	1809.75
186	Isopentane	42	1.606	1.606	(0.385)	45872		(a)
188	Isopropyl acetate	43	4.676	4.669	(0.943)	232885	17.3858	1738.57

187 n-Amyl acetate	43	8.455	8.451 (1.103)	154662	16.7418	1674.18
189 n-Butyl acetate	43	7.214	7.210 (0.941)	127844	18.7853	1878.53

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	83256	371.579	37157.86
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	171647	16.2957	1629.57
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	180842	16.8660	1686.59
168 1-Propanol	59	3.000	2.993	(0.718)	32439	325.618	32561.79

QC Flag Legend

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



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Date : 24-JAN-2023 18:23
Client ID: HS230109B6-05MS
Sample Info: HS230109B6-05MS;HS230109B6-05MS;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\X230124.b\X012431.D
Inj Date : 24-JAN-2023 18:23
InstruID : voa6.i
LabSampID : HS23010986-05MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012432.D Page 1
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ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012432.D
Lab Smp Id: HS23010986-05MSD Client Smp ID: HS23010986-05MSD
Inj Date : 24-JAN-2023 18:44
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-05MSD;HS23010986-05MSD;3;;MSD
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 31 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.174	4.178	(1.000)	615830	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	44671	10.6826	1068.26
3	Chloromethane	50	1.074	1.074	(0.257)	74094	14.9215	1492.15
4	Propionitrile	54	3.649	3.645	(0.874)	102161	162.582	16258.15(a)
5	Vinyl Chloride	62	1.141	1.141	(0.273)	78653	14.6206	1462.05
6	Bromomethane	94	1.336	1.336	(0.320)	57074	15.2962	1529.61
7	Chloroethane	64	1.400	1.400	(0.335)	48788	13.0297	1302.96
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	120649	16.0263	1602.62
9	Acrolein	56	1.437	1.441	(0.344)	12003	30.5170	3051.70
10	Acetone	43	1.970	1.966	(0.472)	42236	24.4167	2441.67
11	1,1-Dichloroethene	96	1.910	1.910	(0.458)	73243	15.6707	1567.07
12	Isobutyl Alcohol	43	4.672	4.669	(1.119)	229439	331.237	33123.70(a)
13	Acetonitrile	39	2.194	2.195	(0.526)	90346	161.193	16119.32(a)
14	Allyl Chloride	41	2.194	2.195	(0.526)	169469	15.8757	1587.56(a)
15	Iodomethane	142	2.026	2.022	(0.485)	141796	26.2862	2628.61
16	Acrylonitrile	53	2.536	2.528	(0.608)	48469	30.5761	3057.60
17	Methylene Chloride	84	2.299	2.300	(0.551)	84473	13.1762	1317.61
18	Methyl tert-butyl ether	73	2.528	2.528	(0.606)	233744	15.2788	1527.88
19	Carbon Disulfide	76	2.067	2.067	(0.495)	351023	28.7052	2870.51
20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	75371	14.4088	1440.87

21 Vinyl Acetate	43	2.993	2.993 (0.717)	421837	31.4110	3141.09
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	130914	14.2603	1426.02

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Report Date: 03-Feb-2023 10:52

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	3.574	3.570	(0.856)	48423	28.6452	2864.51
	25	Methacrylonitrile	41	3.821	3.818	(0.916)	69168	15.8621	1586.20(a)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.840)	107613	13.8061	1380.60
	27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	587806	92.3361	9233.61
	28	Chloroform	83	3.900	3.900	(0.934)	146571	14.2448	1424.47
	29	Bromochloromethane	128	3.791	3.788	(0.908)	46403	13.3132	1331.31
$	30	Dibromofluoromethane	113	4.095	4.095	(0.981)	266608	45.0707	45.07
	31	1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	130469	15.9815	1598.14
	32	1,1-Dichloropropene	75	4.275	4.275	(0.861)	110424	17.8492	1784.91
	33	1,2-Dichloroethane	62	4.556	4.552	(0.918)	120201	16.8356	1683.56
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	112307	16.9999	1699.99
$	35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	307369	49.2519	49.25
*	36	1,4-Difluorobenzene	114	4.965	4.961	(1.000)	871402	50.0000	
	37	Benzene	78	4.511	4.508	(0.909)	319169	15.3381	1533.81
	38	Trichloroethene	130	5.201	5.205	(1.048)	1016699	172.262	17226.15
	39	Bromodichloromethane	83	5.726	5.722	(1.153)	114676	14.6843	1468.43
	40	Methyl Methacrylate	41	5.606	5.602	(1.343)	65283	15.5470	1554.70(a)
	41	2-Chloroethylvinyl ether	63	6.052	6.044	(1.219)	25024	11.2632	1126.32(a)
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	80800	14.5973	1459.72
	43	2-Nitropropane	43	5.969	5.966	(1.430)	24854	15.9820	1598.20
	44	Dibromomethane	93	5.550	5.550	(1.118)	56804	15.0981	1509.80
	45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	141080	33.1140	3311.39
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	134575	14.6731	1467.31
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	797088	50.0000	
$	48	Toluene-d8	98	6.385	6.386	(0.833)	1014868	51.5250	51.52
	49	Ethyl Methacrylate	69	6.708	6.708	(1.351)	64879	15.8107	1581.06(a)
	50	Toluene	91	6.445	6.446	(0.841)	355185	16.1215	1612.15
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	113677	14.9353	1493.53
	52	2-Hexanone	43	7.086	7.083	(0.924)	98276	33.9039	3390.39
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	65782	14.8830	1488.29
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	135788	15.6080	1560.80
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	96593	15.1418	1514.17
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	77523	17.0064	1700.64
	57	1,2-Dibromoethane	107	7.263	7.259	(0.947)	87804	15.8885	1588.85
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	84818	20.1410	2014.10
	59	Chlorobenzene	112	7.694	7.694	(1.003)	241082	15.4273	1542.72
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	89566	15.4011	1540.11
	61	Ethylbenzene	106	7.799	7.799	(1.017)	123766	16.8134	1681.34
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	313660	33.0539	3305.39
	63	o-Xylene	106	8.241	8.241	(1.075)	150394	16.0576	1605.76
	64	Styrene	104	8.260	8.256	(1.077)	251612	16.0279	1602.78
	66	Bromoform	173	8.410	8.410	(1.097)	65794	14.8875	1488.74
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	391713	18.3064	1830.63
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	111816	15.9052	1590.52
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	376614	51.1528	51.15
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	441078	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	116977	23.8343	2383.43
	72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	28717	16.6890	1668.89(a)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	457389	18.7210	1872.10
	74	Bromobenzene	156	8.807	8.803	(0.912)	114795	15.8632	1586.32
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	325604	18.0404	1804.04
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	276385	17.2391	1723.91

77 4-Chlorotoluene	91	9.070	9.070 (0.939)	318285	17.4147	1741.47
78 tert-Butylbenzene	119	9.336	9.336 (0.966)	283715	19.2038	1920.37

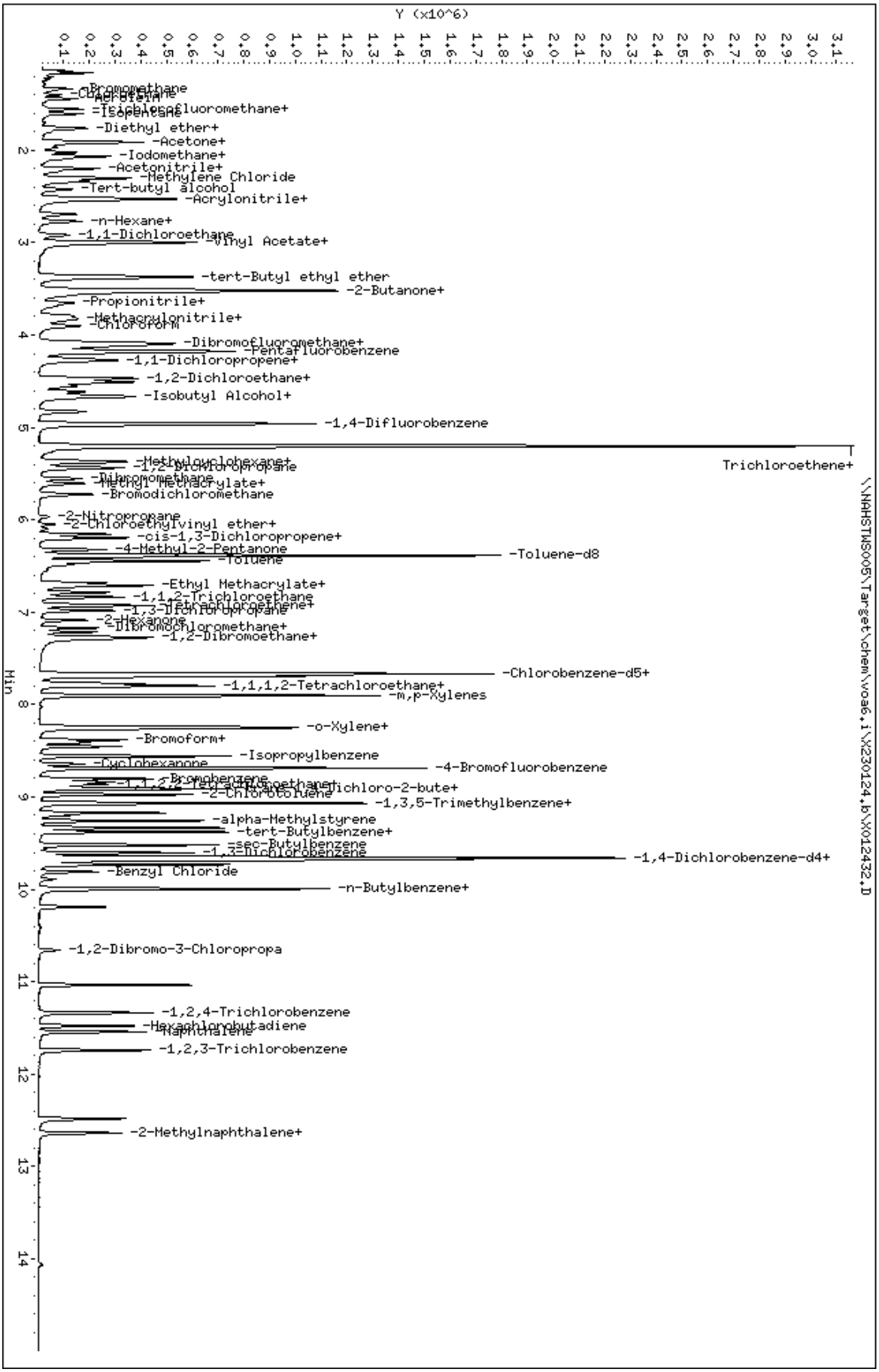
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	328729	17.3100	1730.99
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	393792	20.0329	2003.29
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	345349	19.6057	1960.56
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	199714	16.6276	1662.75
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	212890	16.2428	1624.27
86	Benzyl Chloride	91	9.808	9.808	(1.279)	138294	13.1830	1318.29
87	n-Butylbenzene	91	9.995	9.992	(1.035)	296997	18.6492	1864.91
88	1,2-Dichlorobenzene	146	9.995	9.992	(1.035)	200636	16.2195	1621.95
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	17683	15.7961	1579.60
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	134903	17.2806	1728.06
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	63787	18.5427	1854.26
92	Naphthalene	128	11.544	11.540	(1.195)	302313	17.0203	1702.02
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	125325	16.7621	1676.20
146	Methyl acetate	43	2.232	2.225	(0.535)	42763	15.4318	1543.18
138	Freon TF	101	1.913	1.910	(0.458)	84052	18.5932	1859.32
141	Cyclohexane	56	4.118	4.121	(0.987)	123539	20.6608	2066.07
142	Tetrahydrofuran	42	3.840	3.840	(0.920)	25277	30.8957	3089.56
147	Methylcyclohexane	55	5.377	5.373	(1.083)	190732	17.8811	1788.11
135	1,4-Dioxane	88	5.598	5.598	(1.341)	18121	321.903	32190.33
132	n-Butanol	56	5.265	5.250	(1.261)	18309	271.946	27194.61(a)
131	Methyl Acrylate	55	3.690	3.683	(0.884)	68971	16.4965	1649.65
133	Ethyl Acrylate	55	5.377	5.373	(1.288)	190732	17.0587	1705.86
136	n-Hexane	57	2.768	2.768	(0.663)	77657	17.5138	1751.38
139	Diethyl ether	59	1.752	1.752	(0.420)	55982	13.6048	1360.48
148	Tert-butyl alcohol	59	2.423	2.420	(0.581)	141836	332.620	33261.99
149	Isopropyl alcohol	45	2.090	2.086	(0.501)	76836	345.024	34502.41
156	Diisopropyl ether	45	2.997	2.997	(0.718)	236008	14.7734	1477.34
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	137592	16.0785	1607.84
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	338455	15.9347	1593.46
167	Ethanol	45	1.700	1.700	(0.407)	14490	359.079	35907.89
172	tert-Butyl formate	59	4.616	4.612	(1.106)	109382	33.4729	3347.28
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	129542	343.493	34349.28
174	tert-Amyl methyl ether	73	4.665	4.661	(1.118)	268413	15.1205	1512.05
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.808)	255180	15.0326	1503.26
176	tert-Amyl alcohol	59	4.616	4.612	(1.106)	109382	330.715	33071.52
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.351)	246226	298.540	29853.97
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	137592		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	56223	13.3023	1330.23
152	Amyl alcohol	42	6.910	6.899	(0.901)	20636	261.808	26180.79
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	11146	13.9782	1397.81
159	Propylene oxide	43	1.756	1.752	(0.421)	12109	31.2684	3126.83
161	3-Methyl-1-butanol	55	6.910	6.903	(0.901)	19640	249.218	24921.83
162	Butyl acrylate	55	8.252	8.249	(1.076)	171160	16.4384	1643.84
182	Epichlorohydrin	57	6.097	6.089	(1.228)	24515	64.5328	6453.28
M 94	1,2-Dichloroethylene (total)	96				663177	106.745	10674.49
M 95	Xylenes (total)	106				464054	49.1115	4911.15
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	158194	16.1867	1618.66
130	Ethyl Acetate	43	3.653	3.649	(0.875)	79929	16.6331	1663.30
134	Cyclohexanone	55	8.646	8.642	(0.895)	57876	314.559	31455.88(a)
185	Isoprene	39	1.767	1.767	(0.423)	25410	15.4884	1548.83
186	Isopentane	42	1.606	1.606	(0.385)	43366		(a)
188	Isopropyl acetate	43	4.672	4.669	(0.941)	229100	16.9222	1692.22

187 n-Amyl acetate	43	8.455	8.451 (1.103)	148175	15.9421	1594.20
189 n-Butyl acetate	43	7.214	7.210 (0.941)	126654	18.4973	1849.72

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	77657	343.081	34308.07
195 Methyl Amyl Ketone	43	8.384	8.380	(1.093)	166173	15.6801	1568.01
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	169858	15.7453	1574.52
168 1-Propanol	59	3.000	2.993	(0.719)	29960	297.689	29768.93

QC Flag Legend

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



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Purge Volume: 5.0
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Instrument: voa6,i
Operator: PC
Column diameter: 0.18

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NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012433.D Page 1
Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012433.D
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Inj Date : 24-JAN-2023 19:05
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
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Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 32 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	503782	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	155587	50.0000	44.20
3 Chloromethane	50	1.074	1.074	(0.257)	209947	50.0000	46.23
4 Propionitrile	54	3.645	3.645	(0.873)	274093	500.000	533.21
5 Vinyl Chloride	62	1.141	1.141	(0.273)	213553	50.0000	48.52
6 Bromomethane	94	1.336	1.336	(0.320)	153086	50.0000	46.13
7 Chloroethane	64	1.400	1.400	(0.335)	140773	50.0000	45.95
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	339865	50.0000	55.18
9 Acrolein	56	1.441	1.441	(0.345)	33743	100.000	97.99
10 Acetone	43	1.966	1.966	(0.471)	139467	100.000	98.66
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	190648	50.0000	49.86
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	642833	1000.00	1134.45
13 Acetonitrile	39	2.195	2.195	(0.525)	264439	500.000	576.74
14 Allyl Chloride	41	2.195	2.195	(0.525)	469871	50.0000	53.80
15 Iodomethane	142	2.022	2.022	(0.484)	490438	100.000	97.51
16 Acrylonitrile	53	2.528	2.528	(0.605)	145809	100.000	112.43
17 Methylene Chloride	84	2.300	2.300	(0.550)	241058	50.0000	45.96
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	651878	50.0000	52.08
19 Carbon Disulfide	76	2.067	2.067	(0.495)	1016362	100.000	101.59
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	217769	50.0000	50.89

21 Vinyl Acetate	43	2.993	2.993 (0.716)	1095602	100.000	99.72
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	372985	50.0000	49.66

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	83627	50.0000	48.82(M)
	24 2-Butanone	43	3.570	3.570	(0.855)	158138	100.000	105.30
	25 Methacrylonitrile	41	3.814	3.814	(0.913)	191557	50.0000	53.69(a)
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	311773	50.0000	48.89
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	254424	50.0000	48.85
	28 Chloroform	83	3.900	3.900	(0.934)	430391	50.0000	51.13
	29 Bromochloromethane	128	3.791	3.791	(0.908)	133040	50.0000	46.65
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	241236	50.0000	49.86
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	373247	50.0000	55.88
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	313963	50.0000	56.63
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	339174	50.0000	53.01
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	318093	50.0000	53.72
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	276867	50.0000	54.20
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	780908	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	928937	50.0000	49.81
	38 Trichloroethene	130	5.205	5.205	(1.049)	282221	50.0000	53.35
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	338735	50.0000	48.40
	40 Methyl Methacrylate	41	5.602	5.602	(1.341)	200840	50.0000	58.46
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	217478	100.000	109.22
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	238077	50.0000	47.99
	43 2-Nitropropane	43	5.966	5.966	(1.428)	72632	50.0000	57.09
	44 Dibromomethane	93	5.550	5.550	(1.119)	162130	50.0000	48.08
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	412674	100.000	102.70
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	403901	50.0000	49.14
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	751713	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	897577	50.0000	48.32
	49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	200213	50.0000	54.44
	50 Toluene	91	6.446	6.446	(0.841)	1040120	50.0000	50.05
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	348574	50.0000	51.10
	52 2-Hexanone	43	7.083	7.083	(0.924)	288329	100.000	105.47
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	197286	50.0000	47.32
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	396598	50.0000	48.33
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	290272	50.0000	48.24
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	231192	50.0000	53.77
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	256750	50.0000	49.26
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	220382	50.0000	58.39
	59 Chlorobenzene	112	7.694	7.694	(1.003)	707893	50.0000	48.03
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	270655	50.0000	49.34
	61 Ethylbenzene	106	7.799	7.799	(1.017)	370235	50.0000	53.33
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	933389	100.000	104.29
	63 o-Xylene	106	8.241	8.241	(1.075)	445953	50.0000	50.48
	64 Styrene	104	8.260	8.260	(1.077)	773042	50.0000	52.21
	66 Bromoform	173	8.410	8.410	(1.097)	202668	50.0000	48.62
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1165982	50.0000	57.78
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	312718	50.0000	44.80
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	352722	50.0000	50.80
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	437932	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	345607	50.0000	70.92
	72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	83894	50.0000	51.69
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1367431	50.0000	56.37
	74 Bromobenzene	156	8.803	8.803	(0.911)	343000	50.0000	47.73
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1005922	50.0000	56.13

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	831166	50.0000	52.21
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	974416	50.0000	53.69

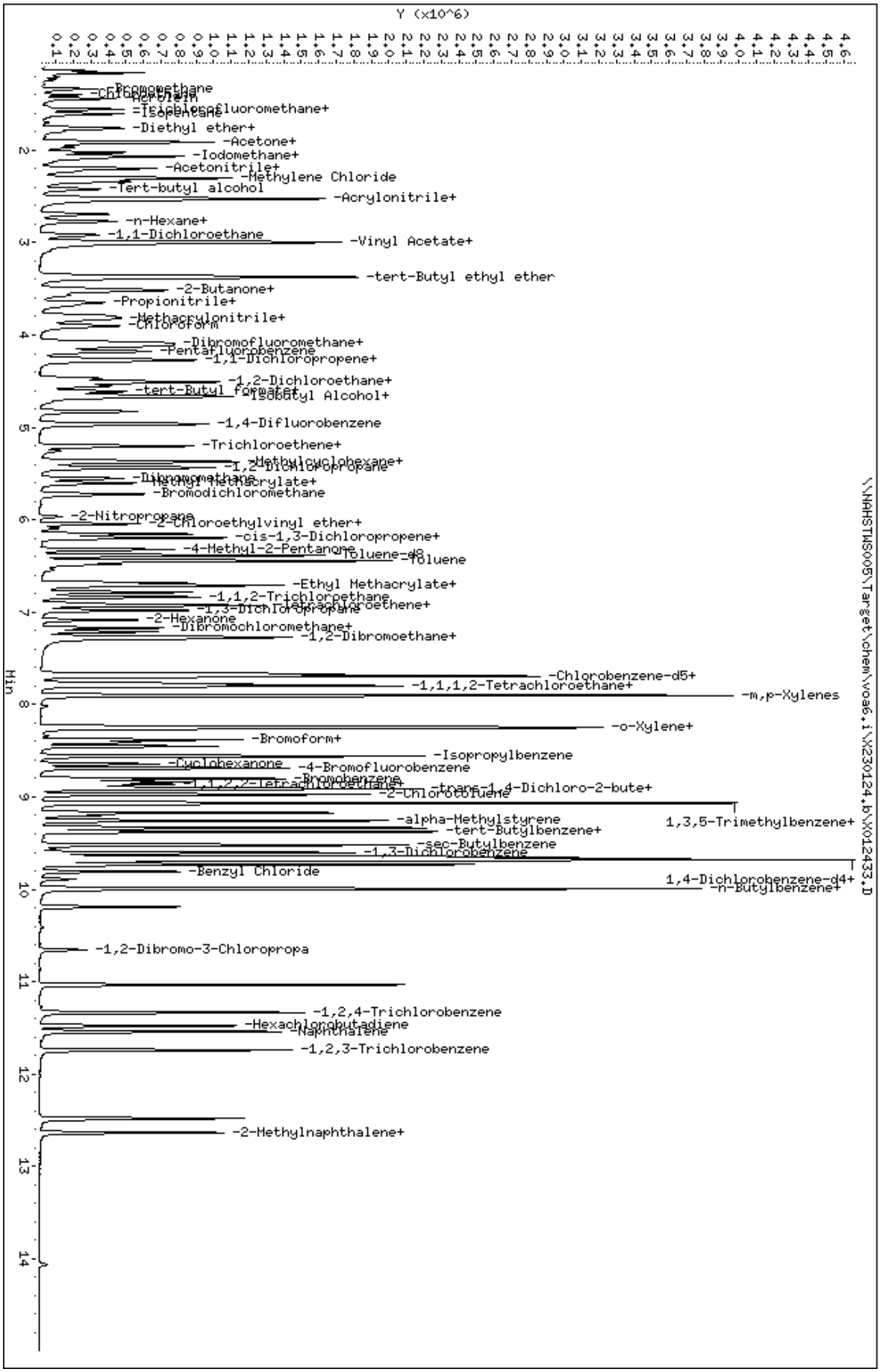
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	844813	50.0000	57.59	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1012381	50.0000	53.69	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1186719	50.0000	60.80	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1049404	50.0000	60.00	
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	608094	50.0000	50.99	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	643687	50.0000	49.46	
86	Benzyl Chloride	91	9.808	9.808	(1.279)	451031	50.0000	38.96	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	921964	50.0000	54.53	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	610219	50.0000	49.68	
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54384	50.0000	48.73	
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	424924	50.0000	54.82	
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	186823	50.0000	54.33	
92	Naphthalene	128	11.540	11.540	(1.194)	928291	50.0000	52.63	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	395312	50.0000	53.25	
146	Methyl acetate	43	2.225	2.225	(0.533)	121601	50.0000	53.64	
138	Freon TF	101	1.910	1.910	(0.457)	199808	50.0000	54.03	
141	Cyclohexane	56	4.121	4.121	(0.987)	307059	50.0000	60.20	
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	67162	100.000	107.46	
147	Methylcyclohexane	55	5.377	5.377	(1.084)	573848	50.0000	60.03	
135	1,4-Dioxane	88	5.595	5.595	(1.339)	54529	1000.00	1184.10	
132	n-Butanol	56	5.253	5.253	(1.258)	68388	1000.00	1055.84	
131	Methyl Acrylate	55	3.683	3.683	(0.882)	232484	50.0000	67.97	
133	Ethyl Acrylate	55	5.377	5.377	(1.287)	573848	50.0000	57.83	
136	n-Hexane	57	2.768	2.768	(0.663)	206505	50.0000	56.93	
139	Diethyl ether	59	1.752	1.752	(0.420)	157362	50.0000	46.74	
148	Tert-butyl alcohol	59	2.423	2.423	(0.580)	388001	1000.00	1112.27	
149	Isopropyl alcohol	45	2.086	2.086	(0.499)	209841	1000.00	1151.84	
156	Diisopropyl ether	45	2.997	2.997	(0.717)	693396	50.0000	53.05	
160	2-Methylnaphthalene	142	12.635	12.635	(1.308)	435417	50.0000	51.24	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1120380	50.0000	53.12	
167	Ethanol	45	1.696	1.696	(0.406)	35439	1000.00	1080.10	
172	tert-Butyl formate	59	4.612	4.612	(1.104)	301899	100.000	112.93	
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	387089	1000.00	1088.35	
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	760202	50.0000	52.34	
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	726073	50.0000	52.28	
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	301899	1000.00	1115.80	
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	737901	1000.00	998.35	
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	435417	50.0000	(a)	
140	1,3-Butadiene	54	1.160	1.160	(0.278)	165206	50.0000	47.78	
152	Amyl alcohol	42	6.903	6.903	(0.900)	80519	1000.00	1083.20	
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	33117	50.0000	50.76	
159	Propylene oxide	43	1.752	1.752	(0.420)	30911	100.000	97.57	
161	3-Methyl-1-butanol	55	6.899	6.899	(0.900)	82085	1000.00	1104.47	
162	Butyl acrylate	55	8.249	8.249	(1.076)	533492	50.0000	54.33	
182	Epichlorohydrin	57	6.093	6.093	(1.228)	73843	200.000	211.00	
M 94	1,2-Dichloroethylene (total)	96				472193	100.000	(a)	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	476649	50.0000	49.12	
130	Ethyl Acetate	43	3.653	3.653	(0.874)	210655	50.0000	53.58	
134	Cyclohexanone	55	8.642	8.642	(0.894)	218179	1000.00	1194.33	
185	Isoprene	39	1.767	1.767	(0.423)	72921	50.0000	54.33	
186	Isopentane	42	1.606	1.606	(0.385)	130208	50.0000	(a)	
188	Isopropyl acetate	43	4.672	4.672	(0.942)	642833	50.0000	52.98	

187 n-Amyl acetate	43	8.451	8.451 (1.102)	432768	50.0000	49.37
189 n-Butyl acetate	43	7.210	7.210 (0.940)	362030	50.0000	56.06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	206505	1000.00	1115.23
194 Acetaldehyde	44	1.209	1.209	(0.289)	79653	200.000	255.37
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	525143	50.0000	52.54
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	520675	50.0000	51.17
168 1-Propanol	59	2.997	2.997	(0.717)	80072	1000.00	972.56

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012433.D
Date : 24-JAN-2023 19:05
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\X230124.b\X012433.D
Inj Date : 24-JAN-2023 19:05
InstruID : voa6.i
LabSampID : CCV-END

Chloroprene (126-99-8)

Reason Code:

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MASS
53
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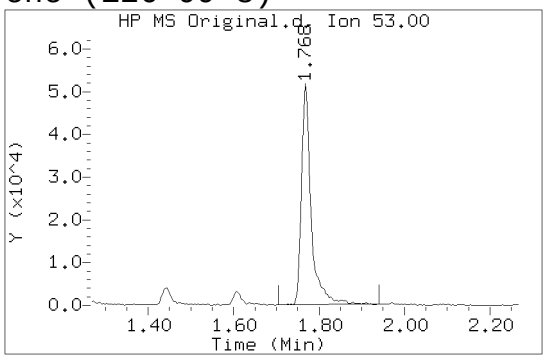
HEIGHT
51683
03-Feb-2023
10:50
linh
pham



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09-Feb-2023
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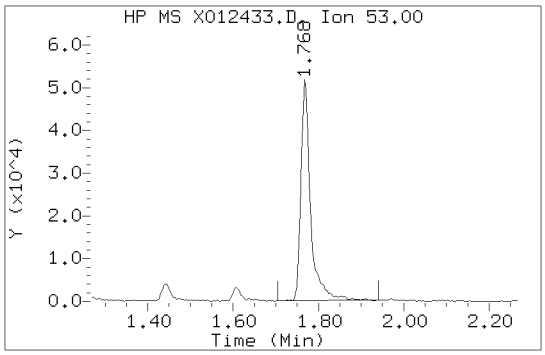

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linh
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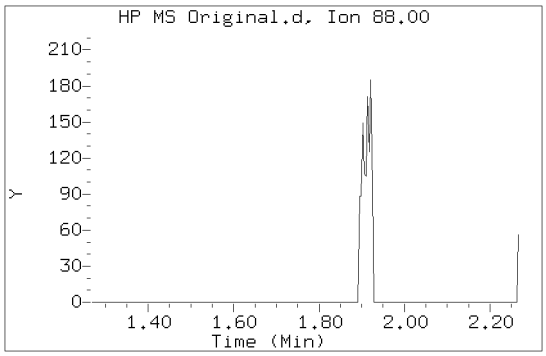

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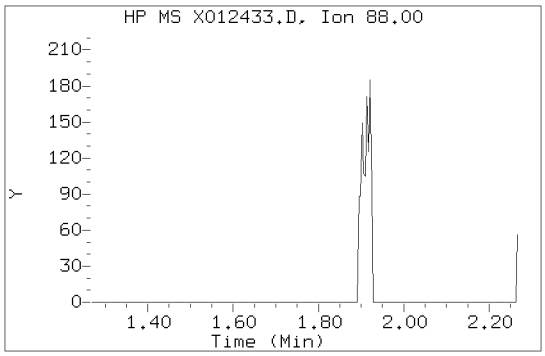


right solutions.
right partner.

Raw Data VOA6 426481

Volatiles by by EPA 8260

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\nahstws005\Target\chem\voa6.i\X230125.b\X012501.D Page 1
Report Date: 25-Jan-2023 08:05

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X230125.b\X012501.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JAN-2023 07:18
Operator : FT Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230125.b\bfb.m
Meth Date : 01-Dec-2022 12:59 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: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	177600			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	33896			15.00- 40.00	19.09
8.687	8.889	(0.000)	75	90328			30.00- 60.00	50.86
8.687	8.889	(0.000)	96	12967			5.00- 9.00	7.30
8.687	8.889	(0.000)	173	1382			0.00- 2.00	0.92
8.687	8.889	(0.000)	174	149824			50.00- 0.00	84.36
8.687	8.889	(0.000)	175	10828			5.00- 9.00	7.23
8.687	8.889	(0.000)	176	146240			95.00- 101.00	97.61
8.687	8.889	(0.000)	177	9470			5.00- 9.00	6.48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.09
75	30.00 - 60.00% of mass 95	50.86
96	5.00 - 9.00% of mass 95	7.30
173	Less than 2.00% of mass 174	0.78 (0.92)
174	Greater than 50.00% of mass 95	84.36
175	5.00 - 9.00% of mass 174	6.10 (7.23)
176	95.00 - 101.00% of mass 174	82.34 (97.61)
177	5.00 - 9.00% of mass 176	5.33 (6.48)

Data File: X012501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2253	66.00	174	99.10	245	141.90	248
37.00	9333	67.00	577	103.00	121	142.90	2055
38.00	8745	68.00	17944	103.90	773	144.00	77
39.00	4614	69.00	19064	105.00	707	144.70	115
40.00	1694	70.00	2308	105.90	1053	146.00	246
41.10	1835	70.90	286	106.90	427	147.00	182
42.00	2387	72.00	811	108.80	285	147.80	464
42.90	1385	73.00	8213	109.80	75	148.60	136
44.00	2114	74.00	30976	110.70	192	149.70	208
45.00	1992	75.00	90328	111.80	142	151.80	71
46.00	178	76.00	7743	112.80	107	152.90	79
47.00	1843	77.10	1385	115.00	315	153.80	136
47.90	1119	77.90	856	115.80	659	154.80	627
49.00	7069	78.90	5965	117.00	996	155.80	54
50.00	33896	80.00	1711	117.90	576	156.80	419
51.00	10700	80.90	5857	118.90	973	158.70	178
52.00	661	81.90	1216	120.10	99	160.70	417
52.90	240	83.00	488	123.90	103	170.00	91
54.10	239	84.90	161	125.00	124	170.80	82
55.00	3786	85.80	187	125.90	115	171.10	82
56.00	3409	86.90	7194	126.90	142	171.80	90
57.00	5992	88.00	6349	127.90	760	173.00	1382
58.00	578	91.00	928	128.70	328	173.90	149824
58.90	124	91.90	4866	129.80	643	174.90	10828
60.00	1756	93.00	7041	130.80	146	175.90	146240
61.00	8161	94.00	19792	134.70	192	176.90	9470
62.00	8719	95.00	177600	136.70	297	177.90	291
63.10	6615	96.00	12967	138.90	68	233.70	60
63.90	815	97.00	516	139.80	126	235.70	81
64.80	119	97.90	1674	140.90	1426		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012501.D

Date : 25-JAN-2023 07:18

Client ID: BFB

Instrument: voa6.i

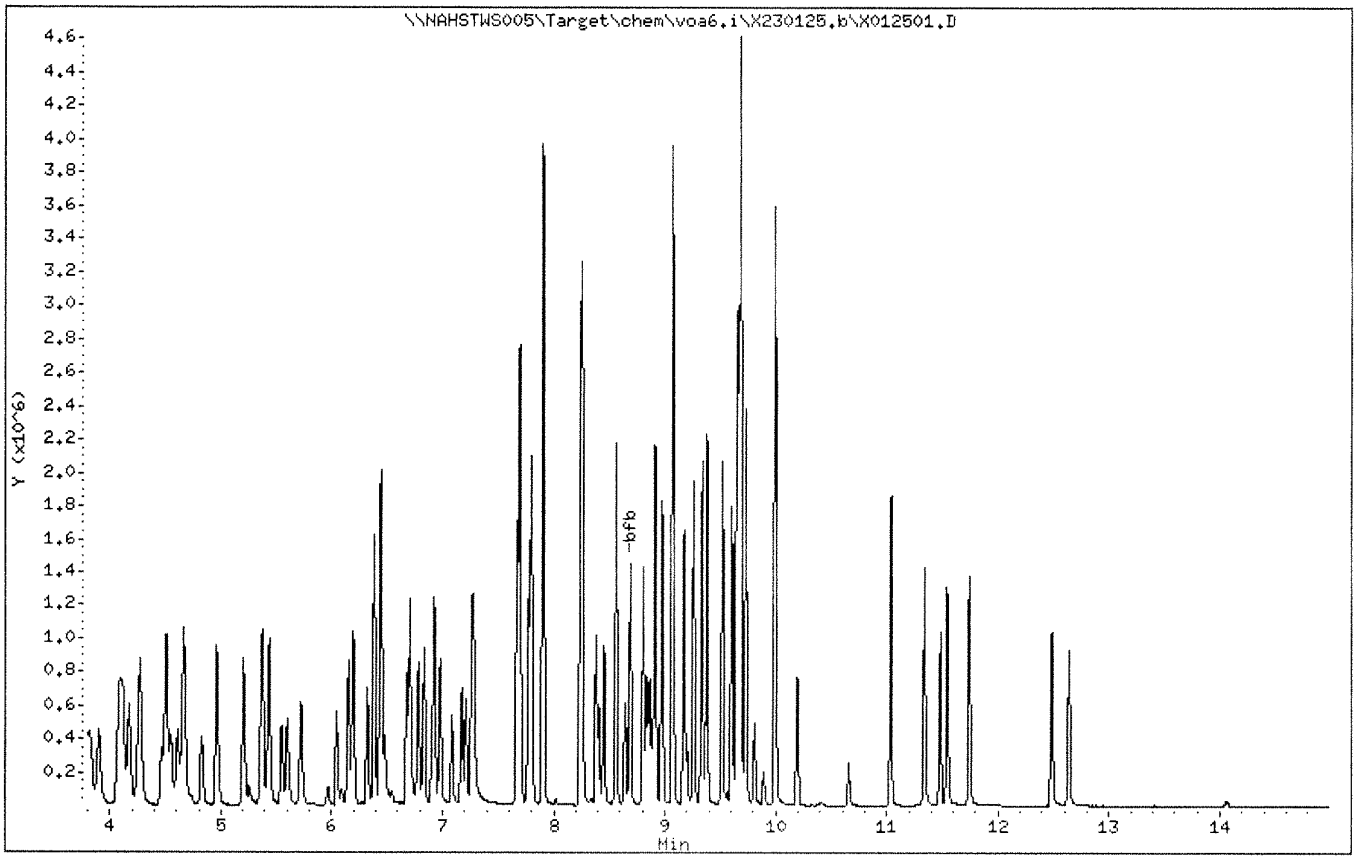
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: FT

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012501.D Page 2

Date : 25-JAN-2023 07:18

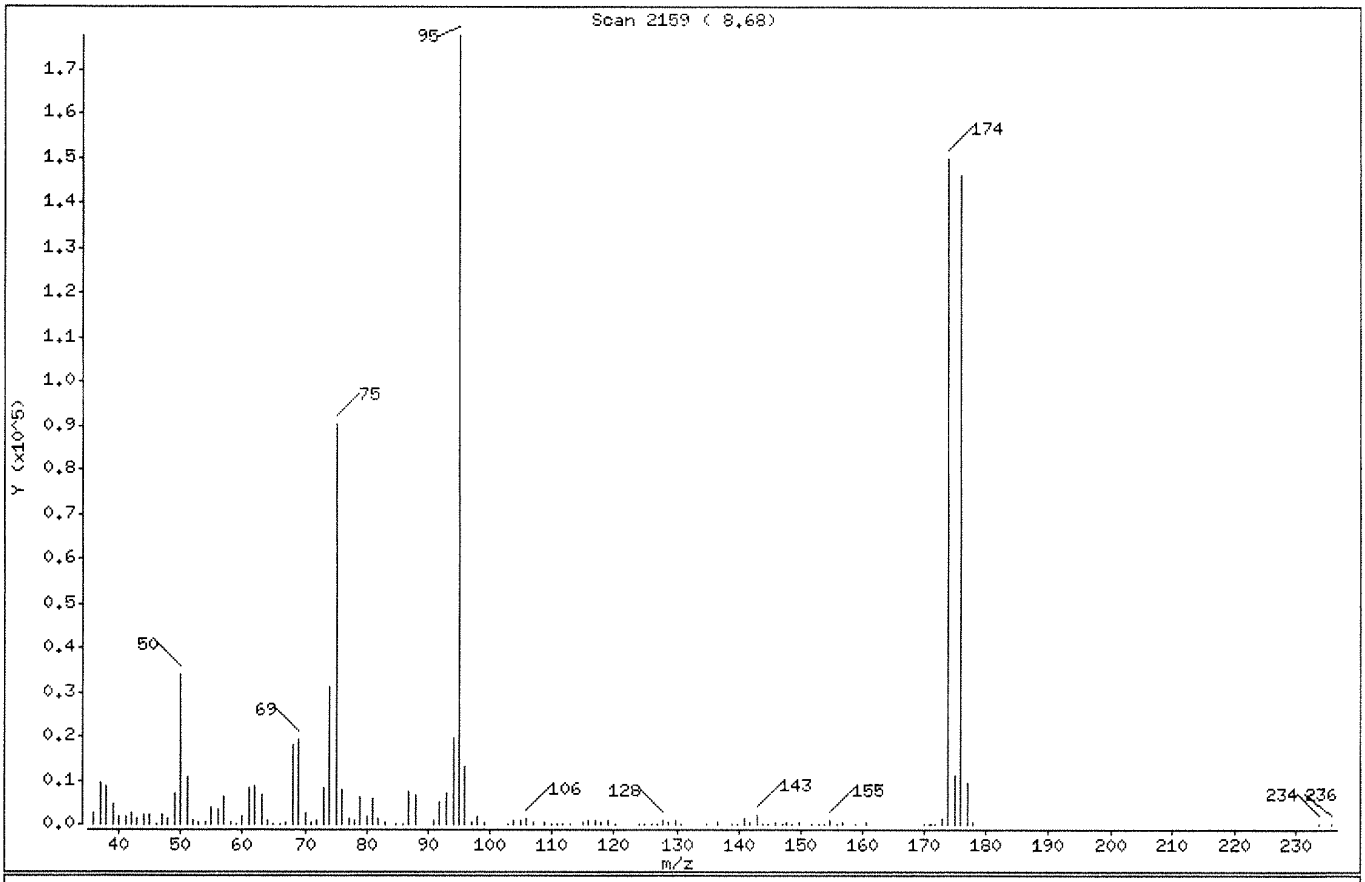
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

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	19.09
75	30.00 - 60.00% of mass 95	50.86
96	5.00 - 9.00% of mass 95	7.30
173	Less than 2.00% of mass 174	0.78 (0.92)
174	Greater than 50.00% of mass 95	84.36
175	5.00 - 9.00% of mass 174	6.10 (7.23)
176	95.00 - 101.00% of mass 174	82.34 (97.61)
177	5.00 - 9.00% of mass 176	5.33 (6.48)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012501.D

Date : 25-JAN-2023 07:18

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25

Data File: X012501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2253	66.00	174	99.10	245	141.90	248
37.00	9333	67.00	577	103.00	121	142.90	2055
38.00	8745	68.00	17944	103.90	773	144.00	77
39.00	4614	69.00	19064	105.00	707	144.70	115
40.00	1694	70.00	2308	105.90	1053	146.00	246
41.10	1835	70.90	286	106.90	427	147.00	182
42.00	2387	72.00	811	108.80	285	147.80	464
42.90	1385	73.00	8213	109.80	75	148.60	136
44.00	2114	74.00	30976	110.70	192	149.70	208
45.00	1992	75.00	90328	111.80	142	151.80	71
46.00	178	76.00	7743	112.80	107	152.90	79
47.00	1843	77.10	1385	115.00	315	153.80	136
47.90	1119	77.90	856	115.80	659	154.80	627
49.00	7069	78.90	5965	117.00	996	155.80	54
50.00	33896	80.00	1711	117.90	576	156.80	419
51.00	10700	80.90	5857	118.90	973	158.70	178
52.00	661	81.90	1216	120.10	99	160.70	417
52.90	240	83.00	488	123.90	103	170.00	91
54.10	239	84.90	161	125.00	124	170.80	82
55.00	3786	85.80	187	125.90	115	171.10	82
56.00	3409	86.90	7194	126.90	142	171.80	90
57.00	5992	88.00	6349	127.90	760	173.00	1382
58.00	578	91.00	928	128.70	328	173.90	149824
58.90	124	91.90	4866	129.80	643	174.90	10828
60.00	1756	93.00	7041	130.80	146	175.90	146240
61.00	8161	94.00	19792	134.70	192	176.90	9470
62.00	8719	95.00	177600	136.70	297	177.90	291
63.10	6615	96.00	12967	138.90	68	233.70	60
63.90	815	97.00	516	139.80	126	235.70	81
64.80	119	97.90	1674	140.90	1426		

Data File : \\nahstws005\Target\chem\voa6.i\X230125.b\X012501.D
Inj Date : 25-JAN-2023 07:18
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012502.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012502.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JAN-2023 07:39
Operator : FT Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	518521	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	155523	50.0000	42.94
3 Chloromethane	50	1.074	1.074	(0.257)	204825	50.0000	43.94
4 Propionitrile	54	3.645	3.645	(0.873)	262037	500.000	495.27
5 Vinyl Chloride	62	1.141	1.141	(0.273)	212431	50.0000	46.89
6 Bromomethane	94	1.336	1.336	(0.320)	144856	50.0000	42.55
7 Chloroethane	64	1.400	1.400	(0.335)	138239	50.0000	43.84
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	345506	50.0000	54.50
9 Acrolein	56	1.441	1.441	(0.345)	34347	100.000	96.94
10 Acetone	43	1.966	1.966	(0.471)	136741	100.000	93.98
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	192302	50.0000	48.86
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	627349	1000.00	1075.66
13 Acetonitrile	39	2.195	2.195	(0.525)	262169	500.000	555.53
14 Allyl Chloride	41	2.195	2.195	(0.525)	452650	50.0000	50.36
15 Iodomethane	142	2.022	2.022	(0.484)	504847	100.000	97.52
16 Acrylonitrile	53	2.528	2.528	(0.605)	141286	100.000	105.85
17 Methylene Chloride	84	2.299	2.299	(0.550)	239078	50.0000	44.29
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	625481	50.0000	48.55
19 Carbon Disulfide	76	2.063	2.063	(0.494)	1039906	100.000	100.99
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	220813	50.0000	50.13

21 Vinyl Acetate	43	2.993	2.993 (0.716)	1213272	100.000	107.29
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	376145	50.0000	48.66

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012502.D Page 2
Report Date: 03-Feb-2023 10:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	1.767	1.767	(0.423)	83955	50.0000	47.61(M)
24	2-Butanone	43	3.570	3.570	(0.855)	157641	100.000	102.08
25	Methacrylonitrile	41	3.814	3.814	(0.913)	182615	50.0000	49.73(a)
26	2,2-Dichloropropane	77	3.503	3.503	(0.839)	361772	50.0000	55.12
27	cis-1,2-Dichloroethene	96	3.518	3.518	(0.842)	254143	50.0000	47.41
28	Chloroform	83	3.900	3.900	(0.934)	431364	50.0000	49.79
29	Bromochloromethane	128	3.791	3.791	(0.908)	131464	50.0000	44.79
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.980)	243385	50.0000	48.88
31	1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	378394	50.0000	55.04
32	1,1-Dichloropropene	75	4.275	4.275	(0.862)	317381	50.0000	58.77(M)
33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	337549	50.0000	54.16
34	Carbon Tetrachloride	117	4.260	4.260	(0.859)	322670	50.0000	55.95
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	277015	50.0000	52.69
* 36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	760669	50.0000	
37	Benzene	78	4.507	4.507	(0.909)	933643	50.0000	51.39
38	Trichloroethene	130	5.205	5.205	(1.049)	276303	50.0000	53.62
39	Bromodichloromethane	83	5.722	5.722	(1.153)	339233	50.0000	49.76
40	Methyl Methacrylate	41	5.602	5.602	(1.341)	189231	50.0000	53.52
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	215903	100.000	111.32
42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	237004	50.0000	49.04
43	2-Nitropropane	43	5.966	5.966	(1.428)	70071	50.0000	53.51
44	Dibromomethane	93	5.550	5.550	(1.119)	159966	50.0000	48.70
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	408675	100.000	104.20
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	414815	50.0000	51.81
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	733760	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	899442	50.0000	49.60
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	185118	50.0000	51.67
50	Toluene	91	6.445	6.445	(0.841)	1040804	50.0000	51.31
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	359516	50.0000	54.11
52	2-Hexanone	43	7.086	7.086	(0.924)	283240	100.000	106.14
53	1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	195678	50.0000	48.09
54	1,3-Dichloropropane	76	6.978	6.978	(0.910)	396641	50.0000	49.52
55	Dibromochloromethane	129	7.173	7.173	(0.935)	289849	50.0000	49.35
56	Tetrachloroethene	164	6.925	6.925	(0.903)	239078	50.0000	56.97
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	257178	50.0000	50.55
58	1-Chlorohexane	55	7.694	7.694	(1.551)	216487	50.0000	58.89(M)
59	Chlorobenzene	112	7.690	7.690	(1.003)	716434	50.0000	49.80
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	271898	50.0000	50.78
61	Ethylbenzene	106	7.799	7.799	(1.017)	374972	50.0000	55.33
62	m,p-Xylenes	106	7.904	7.904	(1.031)	944872	100.000	108.16
63	o-Xylene	106	8.241	8.241	(1.075)	450159	50.0000	52.21
64	Styrene	104	8.256	8.256	(1.077)	780573	50.0000	54.01
66	Bromoform	173	8.410	8.410	(1.097)	201206	50.0000	49.45
67	Isopropylbenzene	105	8.560	8.560	(1.116)	1175500	50.0000	59.67
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	319045	50.0000	47.31
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355286	50.0000	52.41
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	423046	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	241260	50.0000	51.25(M)
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	86551	50.0000	54.64
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1402243	50.0000	59.84
74	Bromobenzene	156	8.803	8.803	(0.911)	346006	50.0000	49.85
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1018794	50.0000	58.85

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	845832	50.0000	55.00
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	985999	50.0000	56.24

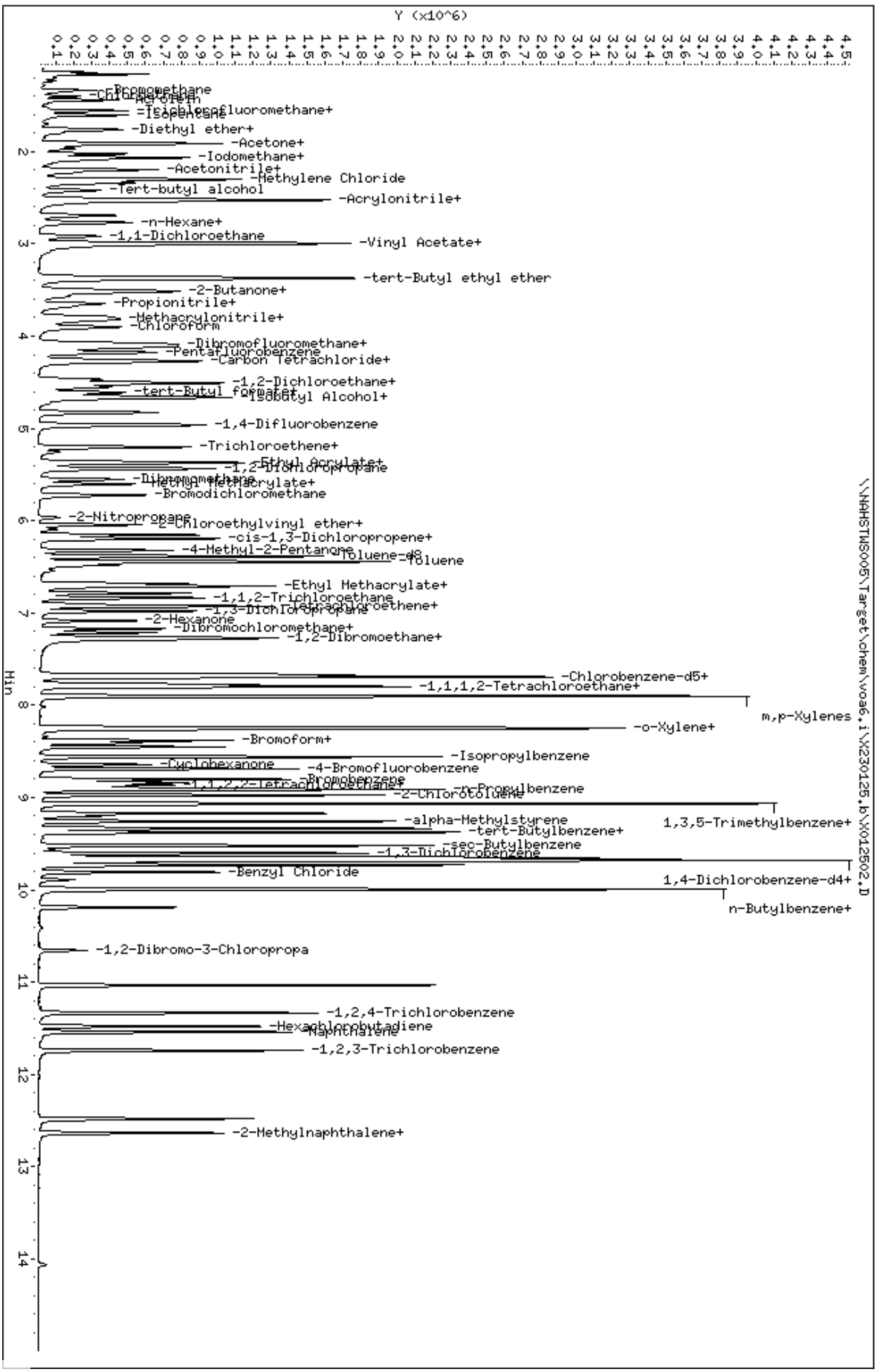
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	857670	50.0000	60.52
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1031275	50.0000	56.61
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1219683	50.0000	64.69
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1079764	50.0000	63.91
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	616324	50.0000	53.50
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	653904	50.0000	52.01
86	Benzyl Chloride	91	9.808	9.808	(1.279)	577645	50.0000	50.28
87	n-Butylbenzene	91	9.992	9.992	(1.034)	972004	50.0000	59.35
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	608551	50.0000	51.29
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54578	50.0000	50.62
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	441529	50.0000	58.96
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	207290	50.0000	62.29
92	Naphthalene	128	11.540	11.540	(1.194)	930814	50.0000	54.63
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	394678	50.0000	55.03
146	Methyl acetate	43	2.225	2.225	(0.533)	116654	50.0000	49.99
138	Freon TF	101	1.913	1.913	(0.458)	208429	50.0000	54.75
141	Cyclohexane	56	4.118	4.118	(0.986)	313337	50.0000	59.69
142	Tetrahydrofuran	42	3.836	3.836	(0.918)	60342	100.000	93.40
147	Methylcyclohexane	55	5.373	5.373	(1.083)	553206	50.0000	59.41(M)
135	1,4-Dioxane	88	5.595	5.595	(1.339)	51276	1000.00	1081.81
132	n-Butanol	56	5.253	5.253	(1.258)	66754	1000.00	1006.06
131	Methyl Acrylate	55	3.683	3.683	(0.882)	222447	50.0000	63.18
133	Ethyl Acrylate	55	5.373	5.373	(1.286)	568929	50.0000	55.77
136	n-Hexane	57	2.768	2.768	(0.663)	247408	50.0000	66.26
139	Diethyl ether	59	1.752	1.752	(0.419)	148169	50.0000	42.76
148	Tert-butyl alcohol	59	2.419	2.419	(0.579)	377965	1000.00	1052.70
149	Isopropyl alcohol	45	2.090	2.090	(0.500)	204601	1000.00	1091.15
156	Diisopropyl ether	45	2.993	2.993	(0.716)	669544	50.0000	49.77
160	2-Methylnaphthalene	142	12.634	12.634	(1.308)	431512	50.0000	52.57
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1084628	50.0000	53.24
167	Ethanol	45	1.696	1.696	(0.406)	34024	1000.00	1007.28
172	tert-Butyl formate	59	4.612	4.612	(1.104)	296380	100.000	107.71
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	365985	1000.00	1054.19
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	722423	50.0000	48.33
175	tert-Butyl ethyl ether	59	3.368	3.368	(0.806)	703116	50.0000	49.19
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	296380	1000.00	1064.26
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	761954	1000.00	1058.32
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	431512	50.0000	(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	171209	50.0000	48.10
152	Amyl alcohol	42	6.903	6.903	(0.900)	74779	1000.00	1030.59
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	29038	50.0000	43.25
159	Propylene oxide	43	1.752	1.752	(0.419)	30303	100.000	92.93
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	81625	1000.00	1125.15
162	Butyl acrylate	55	8.249	8.249	(1.076)	514604	50.0000	53.68
182	Epichlorohydrin	57	6.093	6.093	(1.228)	71930	200.000	211.00
M 94	1,2-Dichloroethylene (total)	96				474956	100.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	485289	50.0000	51.77
130	Ethyl Acetate	43	3.649	3.649	(0.873)	202944	50.0000	50.15
134	Cyclohexanone	55	8.642	8.642	(0.894)	209208	1000.00	1185.52
185	Isoprene	39	1.767	1.767	(0.423)	72538	50.0000	52.51
186	Isopentane	42	1.606	1.606	(0.385)	136194	50.0000	(a)
188	Isopropyl acetate	43	4.672	4.672	(0.942)	627349	50.0000	53.08

187 n-Amyl acetate	43	8.451	8.451 (1.102)	434896	50.0000	50.82
189 n-Butyl acetate	43	7.210	7.210 (0.940)	351609	50.0000	55.78

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	247408	1000.00	1298.14
194 Acetaldehyde	44	1.209	1.209	(0.289)	59193	200.000	177.91
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	500691	50.0000	51.32
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	494411	50.0000	49.78
168 1-Propanol	59	2.993	2.993	(0.716)	77882	1000.00	919.07

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
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Instrument: voa6,i
Operator: FT
Column diameter: 0.18
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Acrolein
Isopentane
Dichlorofluoromethane+
Diethyl ether+
Acetone+
Iodomethane+
Acetonitrile+
Methylene Chloride
Tert-butyl alcohol
Acrylonitrile+
n-Hexane+
1,1-Dichloroethane
Vinyl Acetate+
tert-Butyl ethyl ether
2-Butanone+
Propionitrile+
Methacrylonitrile+
Chloroform
Dibromofluoromethane+
Pentafluorobenzene
Carbon Tetrachloride+
1,2-Dichloroethane+
tert-Butyl formate+
Isobutyl Alcohol+
1,4-Difluorobenzene
Trichloroethene+
Ethyl Acrylate+
1,2-Dichloropropane
Dibromomethane
Methyl Methacrylate+
Bromodichloromethane
2-Nitropropane
2-Chloroethylvinyl ether+
cis-1,3-Dichloropropene+
4-Methyl-2-Pentanone
Toluene-d8
Toluene
Ethyl Methacrylate+
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Isopropylbenzene
Cyclohexanone
4-Bromofluorobenzene
Bromobenzene
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n-Propylbenzene
2-Chlorotoluene
1,3,5-Trimethylbenzene+
alpha-Methylstyrene
tert-Butylbenzene+
sec-Butylbenzene
1,3-Dichlorobenzene
Benzyl Chloride
1,4-Dichlorobenzene-d4+
n-Butylbenzene+
1,2-Dibromo-3-Chloropropa
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Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
2-Methylnaphthalene+

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InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

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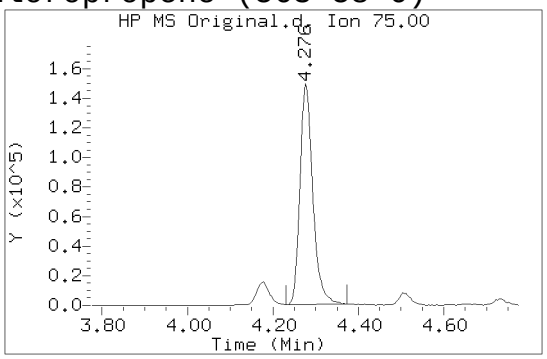

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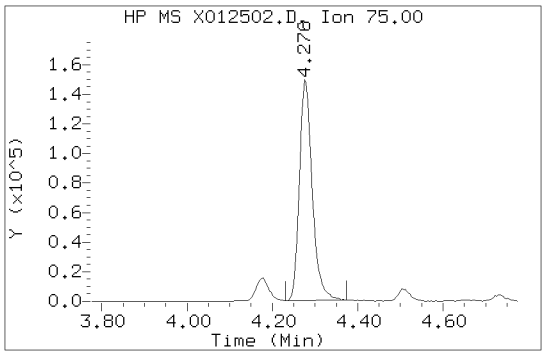

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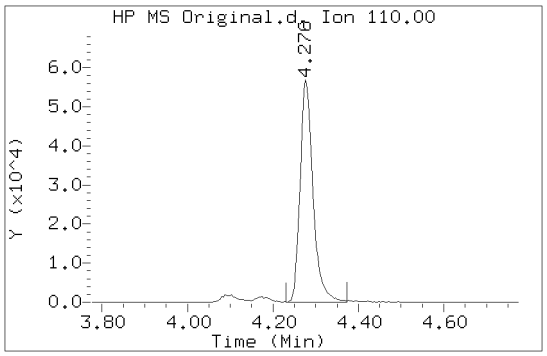

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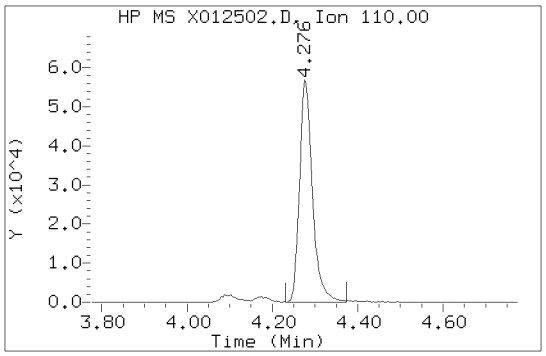

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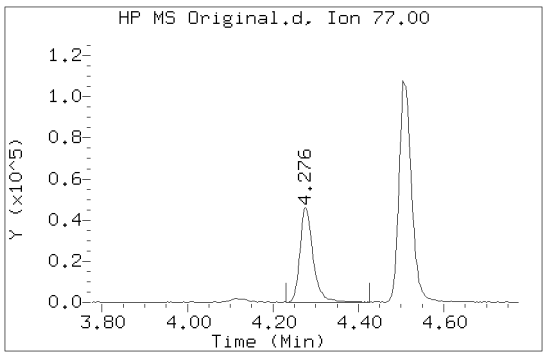

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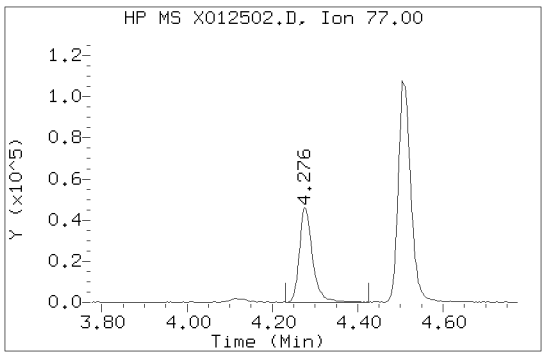

1-Chlorohexane (544-10-5)

Reason Code:

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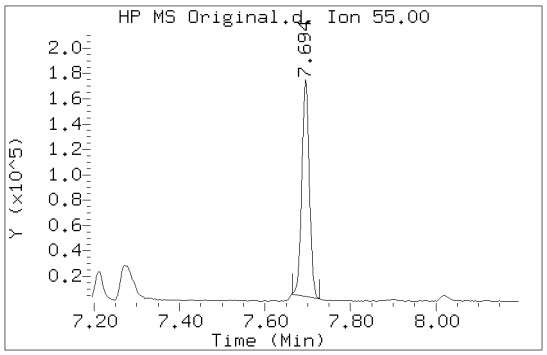

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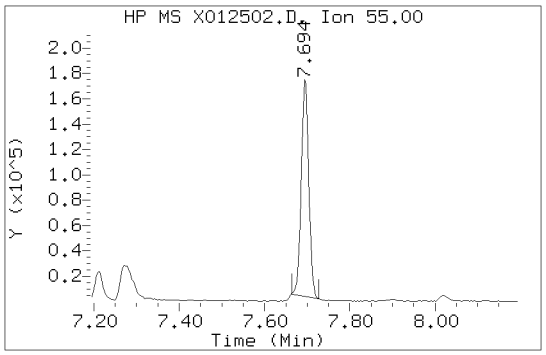

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InstruID : voa6.i
LabSampID : CCV

1-Chlorohexane (544-10-5)

Reason Code:

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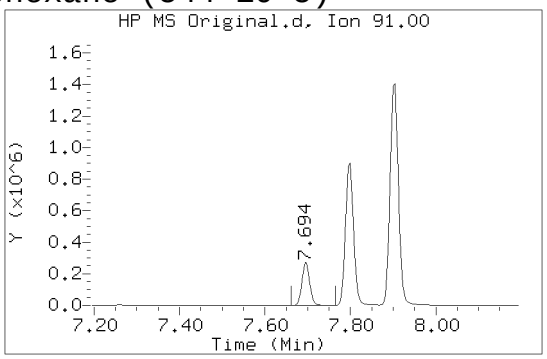

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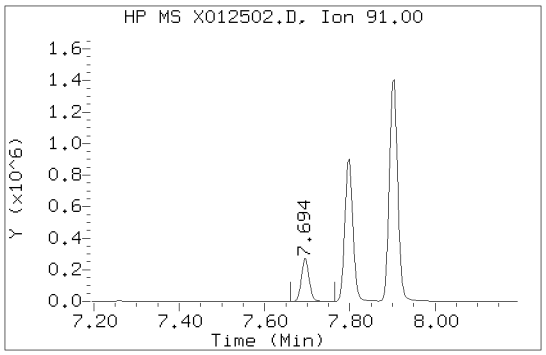

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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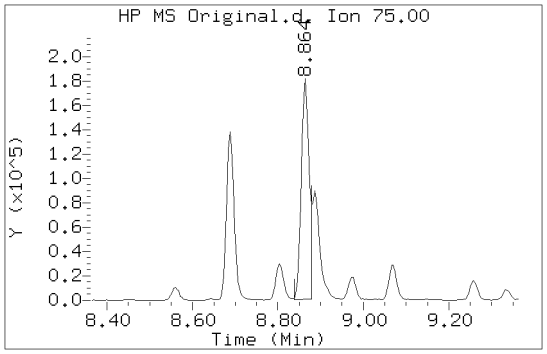

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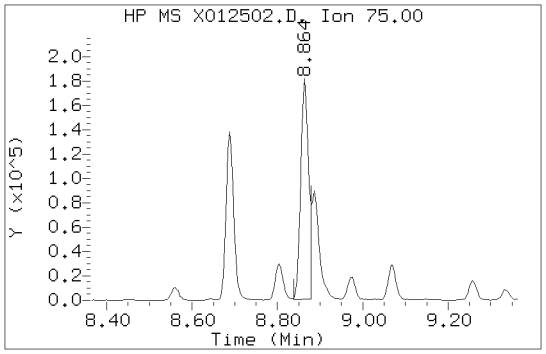

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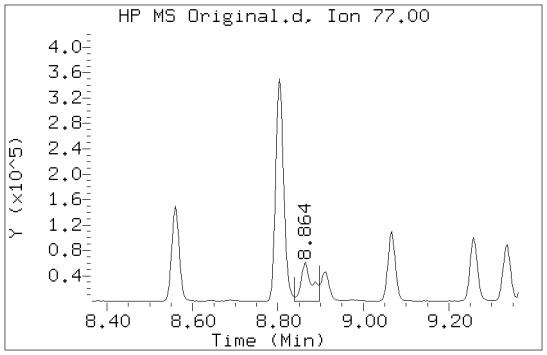

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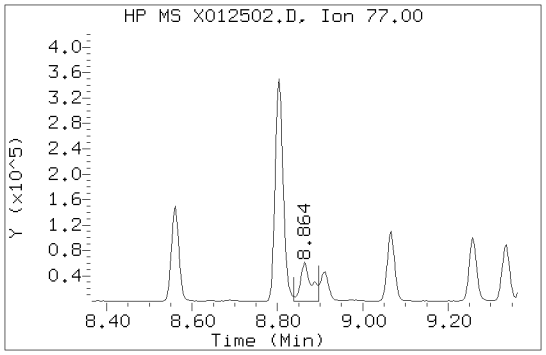

Chloroprene (126-99-8)

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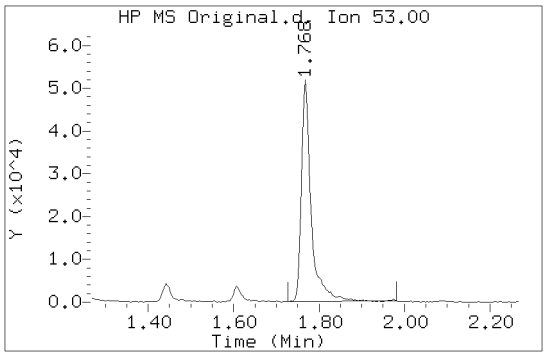

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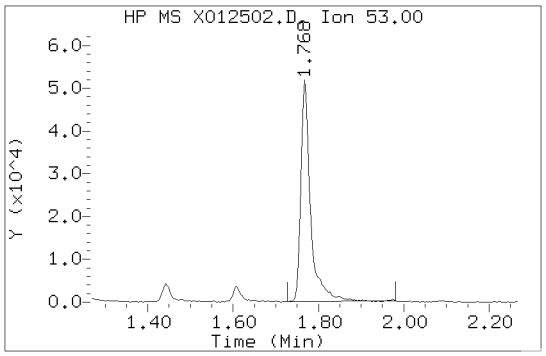

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Chloroprene (126-99-8)

Reason Code:

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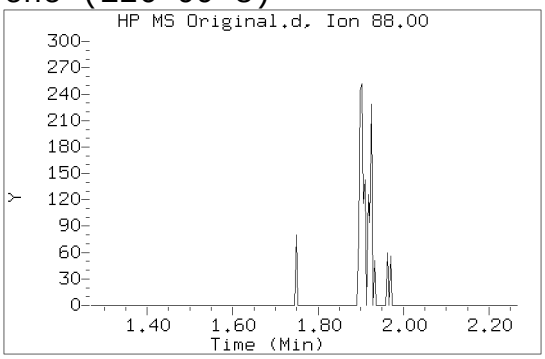

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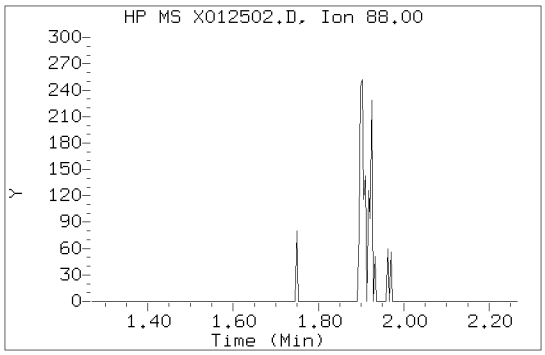

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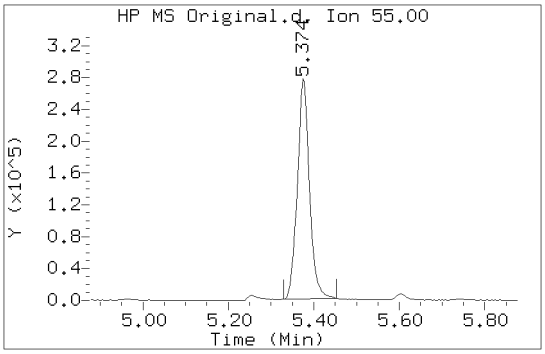

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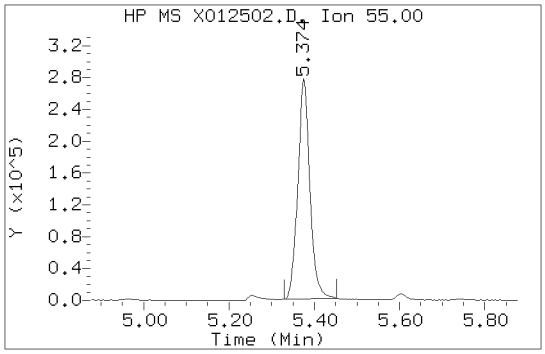

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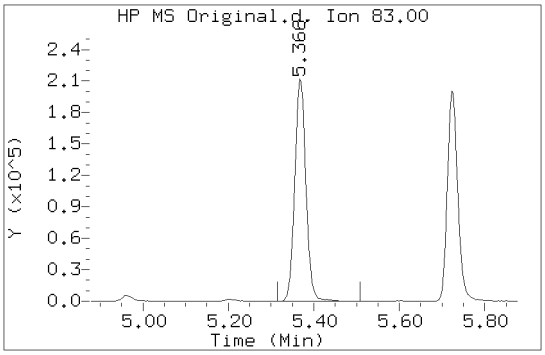

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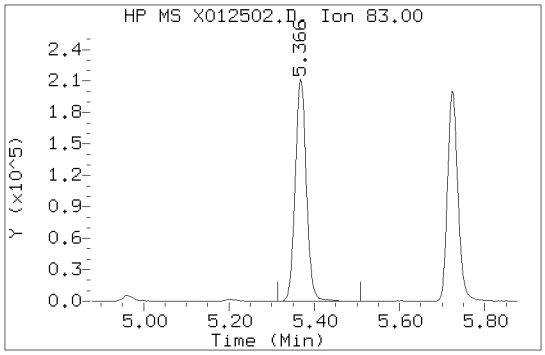

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012504.D
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Inj Date : 25-JAN-2023 08:42
Operator : FT Inst ID: voa6.i
Smp Info : VLCSW-230125;VLCSW-230125;3;;LCS
Misc Info : V6;WATER;0;1;
Comment :
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Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	500560	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	58102	16.8584	16.85
3 Chloromethane	50	1.074	1.074	(0.257)	77964	18.6651	18.66
4 Propionitrile	54	3.649	3.645	(0.874)	94823	185.654	185.65(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	80772	18.4720	18.47
6 Bromomethane	94	1.336	1.336	(0.320)	60028	19.2740	19.27
7 Chloroethane	64	1.400	1.400	(0.335)	53237	17.4919	17.49
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	128371	20.9788	20.97
9 Acrolein	56	1.441	1.441	(0.345)	11817	36.3667	36.36
10 Acetone	43	1.969	1.966	(0.472)	56289	40.0563	40.05
11 1,1-Dichloroethene	96	1.909	1.910	(0.458)	71528	18.8280	18.82
12 Isobutyl Alcohol	43	4.672	4.672	(1.119)	241151	428.317	428.31(a)
13 Acetonitrile	39	2.194	2.195	(0.526)	89588	196.649	196.64(a)
14 Allyl Chloride	41	2.194	2.195	(0.526)	162924	18.7772	18.77(a)
15 Iodomethane	142	2.022	2.022	(0.485)	172604	37.5550	37.55
16 Acrylonitrile	53	2.532	2.528	(0.607)	51527	39.9906	39.99
17 Methylene Chloride	84	2.299	2.299	(0.551)	95857	18.3950	18.39
18 Methyl tert-butyl ether	73	2.532	2.528	(0.607)	224063	18.0188	18.01
19 Carbon Disulfide	76	2.067	2.063	(0.495)	385111	38.7450	38.74
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	81438	19.1538	19.15

21 Vinyl Acetate	43	2.993	2.993 (0.717)	454083	41.5984	41.59
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	143741	19.2631	19.26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	31586	18.5585	18.55(M)
	24 2-Butanone	43	3.581	3.570	(0.858)	56646	39.8975	39.89
	25 Methacrylonitrile	41	3.825	3.814	(0.916)	67374	19.0086	19.00(a)
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	133716	21.1054	21.10
	27 cis-1,2-Dichloroethene	96	3.521	3.518	(0.844)	90823	17.5525	17.55
	28 Chloroform	83	3.904	3.900	(0.935)	159752	19.1011	19.10
	29 Bromochloromethane	128	3.791	3.791	(0.908)	49642	17.5223	17.52
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	240632	50.0655	50.06
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	138918	20.9350	20.93
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	119854	22.5685	22.56
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	123151	20.0935	20.09
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	118780	20.9450	20.94
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	290294	57.1837	57.18
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	748036	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	346195	19.3806	19.38
	38 Trichloroethene	130	5.205	5.205	(1.049)	102547	20.2402	20.24
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	126582	18.8821	18.88
	40 Methyl Methacrylate	41	5.606	5.602	(1.343)	65230	19.1117	19.11(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	80217	42.0600	42.05
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	88209	18.5639	18.56
	43 2-Nitropropane	43	5.969	5.966	(1.430)	24703	19.5430	19.54
	44 Dibromomethane	93	5.553	5.550	(1.119)	61297	18.9792	18.97
	45 4-Methyl-2-Pentanone	43	6.325	6.322	(0.825)	155646	41.3057	41.30
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	150359	19.0978	19.09
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	704985	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	902781	51.8224	51.82
	49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	70323	19.9637	19.96(a)
	50 Toluene	91	6.445	6.445	(0.841)	385056	19.7607	19.76
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	130343	19.9492	19.94
	52 2-Hexanone	43	7.086	7.086	(0.924)	112836	44.0126	44.01
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	75254	19.2504	19.25
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	148834	19.3426	19.34
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	107999	19.1416	19.14
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	87789	21.7745	21.77
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	95798	19.5998	19.59
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	74809	20.6940	20.69(M)
	59 Chlorobenzene	112	7.694	7.690	(1.003)	266989	19.3172	19.31
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	97688	18.9923	18.99
	61 Ethylbenzene	106	7.799	7.799	(1.017)	137251	21.0813	21.08
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	345150	41.1242	41.12
	63 o-Xylene	106	8.241	8.241	(1.075)	167192	20.1833	20.18
	64 Styrene	104	8.260	8.256	(1.077)	279485	20.1294	20.12
	66 Bromoform	173	8.410	8.410	(1.097)	71875	18.3882	18.38
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	432601	22.8585	22.85
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	121485	18.8726	18.87
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	348912	53.5785	53.57
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	403871	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	91194	20.2928	20.29(M)
	72 trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	31311	20.5738	20.57(a)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	508543	22.7324	22.73
	74 Bromobenzene	156	8.803	8.803	(0.911)	127167	19.1918	19.19
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	369105	22.3347	22.33

76	2-Chlorotoluene	91	8.976	8.972 (0.929)	307477	20.9453	20.94
77	4-Chlorotoluene	91	9.069	9.070 (0.939)	353351	21.1145	21.11

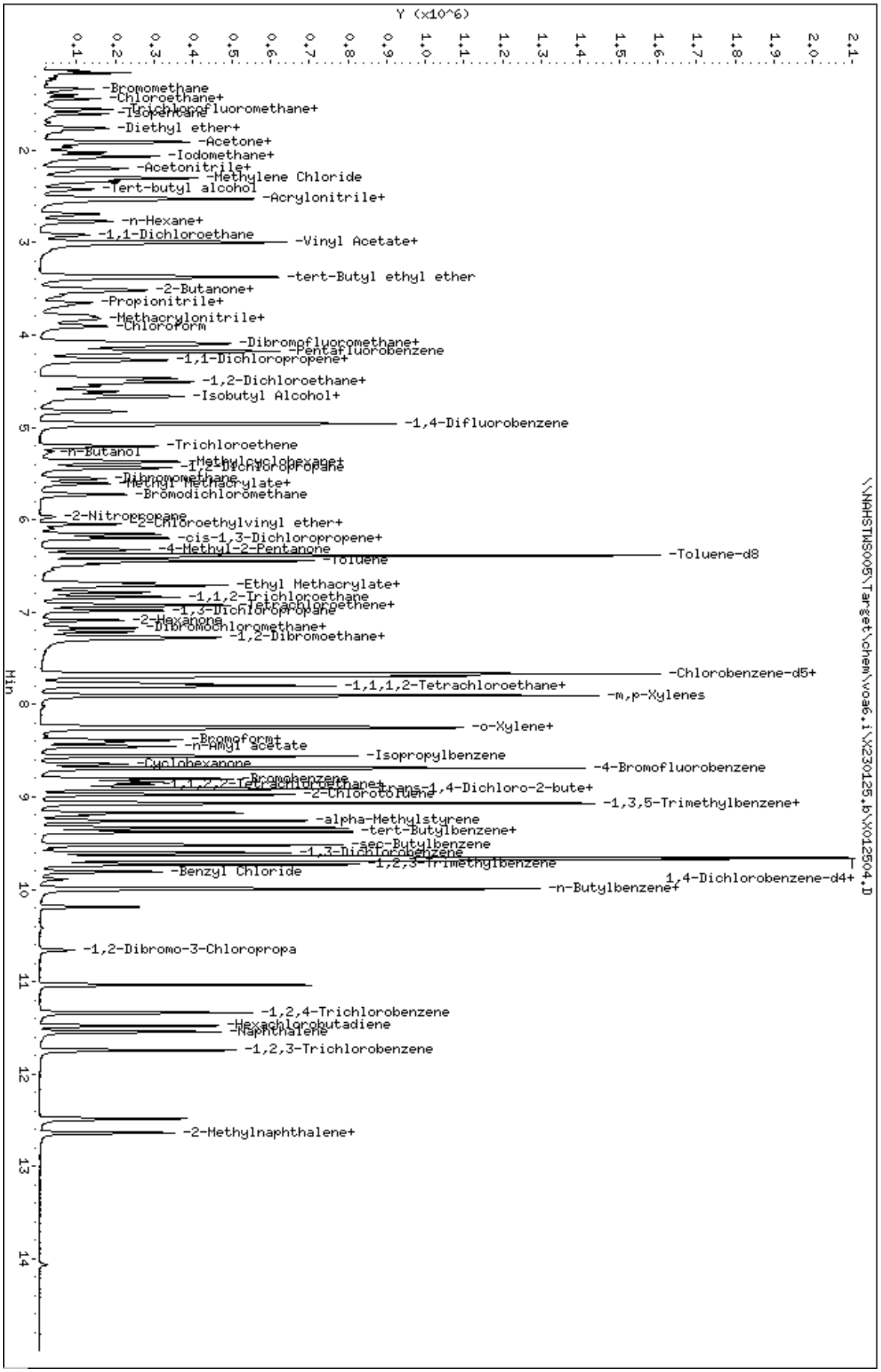
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	312563	23.1055	23.10
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	369439	21.2458	21.24
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	440103	24.4515	24.45
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	388937	24.1143	24.11
83	1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	223225	20.2972	20.29
84	1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	239001	19.9149	19.91
86	Benzyl Chloride	91	9.808	9.808	(1.279)	188980	18.9002	18.90
87	n-Butylbenzene	91	9.995	9.992	(1.035)	345863	23.2357	23.23
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	221634	19.5676	19.56
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	19712	19.2107	19.21
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	157201	21.9921	21.99
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	76005	24.1139	24.11
92	Naphthalene	128	11.544	11.540	(1.195)	340798	20.9546	20.95
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	142560	20.8239	20.82
146	Methyl acetate	43	2.228	2.225	(0.534)	44007	19.5378	19.53
138	Freon TF	101	1.909	1.913	(0.458)	79786	21.7139	21.71
141	Cyclohexane	56	4.117	4.118	(0.987)	124391	25.2928	25.29
142	Tetrahydrofuran	42	3.836	3.836	(0.919)	23654	36.0489	36.04
147	Methylcyclohexane	55	5.381	5.373	(1.085)	199934	21.8350	21.83
135	1,4-Dioxane	88	5.606	5.595	(1.343)	18241	398.655	398.65
132	n-Butanol	56	5.265	5.253	(1.261)	20794	362.557	362.55(a)
131	Methyl Acrylate	55	3.690	3.683	(0.884)	80680	23.7409	23.74
133	Ethyl Acrylate	55	5.381	5.373	(1.289)	199934	21.4694	21.46
136	n-Hexane	57	2.768	2.768	(0.663)	89810	24.9189	24.91
139	Diethyl ether	59	1.752	1.752	(0.420)	52897	15.8154	15.81
148	Tert-butyl alcohol	59	2.419	2.419	(0.580)	160526	463.140	463.13
149	Isopropyl alcohol	45	2.089	2.090	(0.501)	84296	465.689	465.68
156	Diisopropyl ether	45	2.997	2.993	(0.718)	232079	17.8729	17.87
160	2-Methylnaphthalene	142	12.638	12.634	(1.308)	158438	20.2201	20.22
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	365806	18.8090	18.80
167	Ethanol	45	1.696	1.696	(0.406)	14417	440.282	440.28
172	tert-Butyl formate	59	4.612	4.612	(1.105)	123453	46.4786	46.47
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	142490	427.187	427.18
174	tert-Amyl methyl ether	73	4.661	4.661	(1.117)	270138	18.7221	18.72
175	tert-Butyl ethyl ether	59	3.371	3.368	(0.808)	246515	17.8664	17.86
176	tert-Amyl alcohol	59	4.612	4.612	(1.105)	123453	459.214	459.21
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	295694	417.645	417.64
180	1-Methylnaphthalene	142	12.638	12.634	(1.308)	158438		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	63631	18.5220	18.52
152	Amyl alcohol	42	6.906	6.903	(0.901)	24526	351.812	351.81
158	Dichlorofluoromethane	67	1.531	1.527	(0.367)	11582	17.8698	17.86
159	Propylene oxide	43	1.752	1.752	(0.420)	11215	35.6288	35.62
161	3-Methyl-1-butanol	55	6.906	6.903	(0.901)	26789	384.345	384.34
162	Butyl acrylate	55	8.252	8.249	(1.076)	179243	19.4638	19.46
182	Epichlorohydrin	57	6.097	6.093	(1.229)	26494	80.5970	80.59
M 94	1,2-Dichloroethylene (total)	96				172261	36.7063	36.70
M 95	Xylenes (total)	106				512342	61.3075	61.30
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	170664	19.0714	19.07
130	Ethyl Acetate	43	3.649	3.649	(0.874)	86826	22.2291	22.22
134	Cyclohexanone	55	8.642	8.642	(0.894)	73448	435.970	435.96(a)
185	Isoprene	39	1.767	1.767	(0.423)	29172	21.8762	21.87
186	Isopentane	42	1.606	1.606	(0.385)	47504		(a)

188 Isopropyl acetate	43	4.672	4.672 (0.942)	241722	20.7991	20.79
187 n-Amyl acetate	43	8.455	8.451 (1.103)	167448	20.3693	20.36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	135699	22.4074	22.40
150 Allyl alcohol	57	2.768	2.768	(0.663)	89810	488.141	488.14
194 Acetaldehyde	44	1.209	1.209	(0.290)	70479	224.867	224.86
195 Methyl Amyl Ketone	43	8.383	8.380	(1.093)	180161	19.2210	19.22
200 Dimethyl Disulfide	94	6.198	6.194	(0.808)	164007	17.1891	17.18
168 1-Propanol	59	2.993	2.993	(0.717)	26745	326.941	326.94

QC Flag Legend

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



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Sample Info: VLCSW-230125;VLCSW-230125;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 25-JAN-2023 08:42
InstruID : voa6.i
LabSampID : VLCSW-230125

1-Chlorohexane (544-10-5)

Reason Code:

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03-Feb-2023
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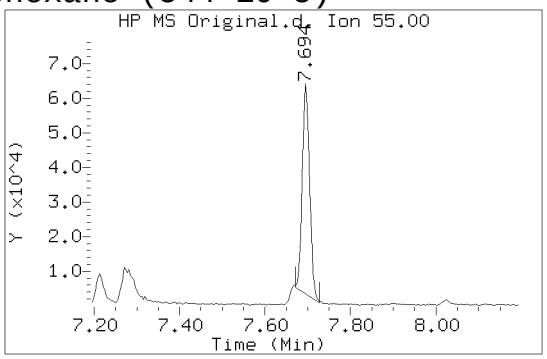

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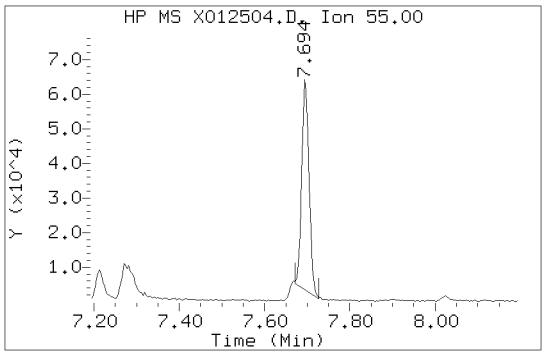

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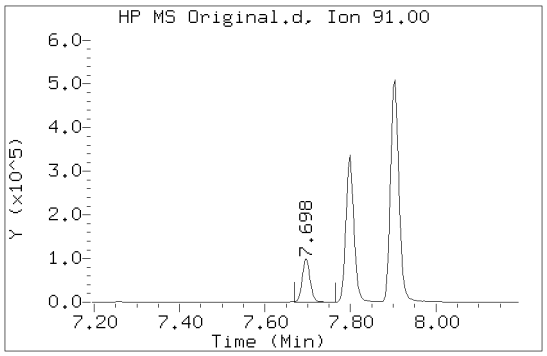
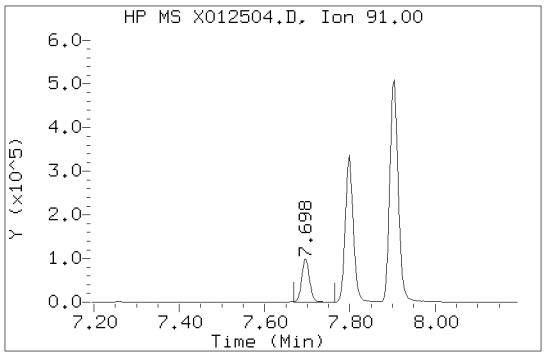


AFTER
MASS
91
AREA
129921
HEIGHT
98737
03-Feb-2023
10:53
linh
pham



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

Reason Code:

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MASS
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AREA
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HEIGHT
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10:53
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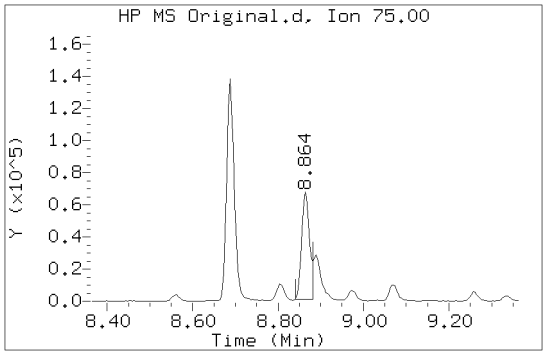
pham



AFTER
MASS
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91194
HEIGHT
66631
03-Feb-2023
10:53
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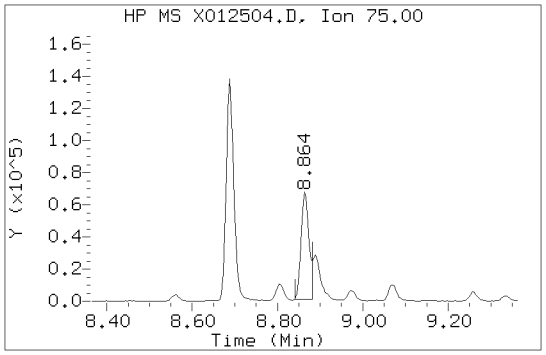
pham



BEFORE
MASS
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AREA
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HEIGHT
22312
03-Feb-2023
10:53
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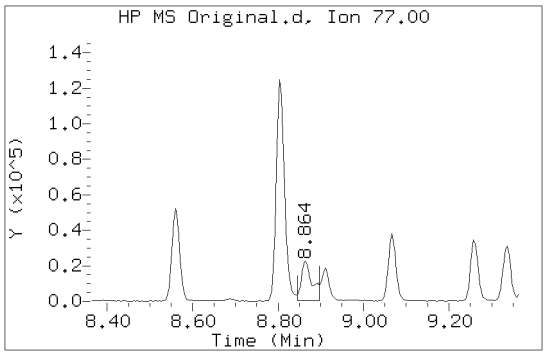
pham



AFTER
MASS
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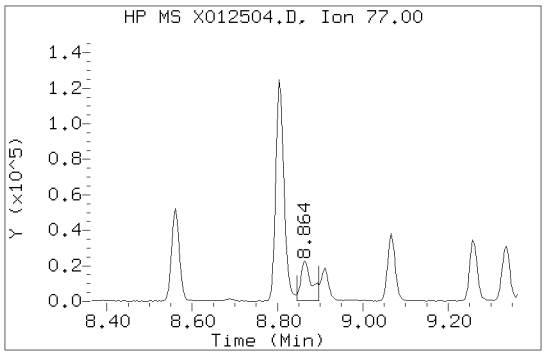
AREA
41308
HEIGHT
22312
03-Feb-2023
10:53
linh
pham



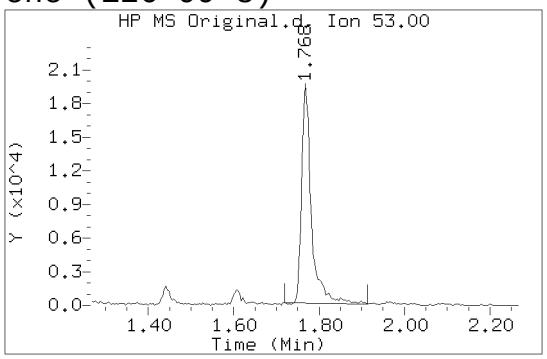
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012504.D
Inj Date : 25-JAN-2023 08:42
InstruID : voa6.i
LabSampID : VLCSW-230125

Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
53
AREA
31586
HEIGHT
19577
03-Feb-2023
10:53
linh
pham



AFTER

MASS
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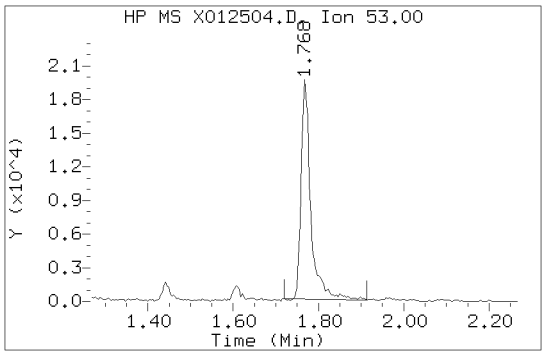
AREA
31586
HEIGHT
19577
03-Feb-2023
10:53
linh
pham



BEFORE

MASS
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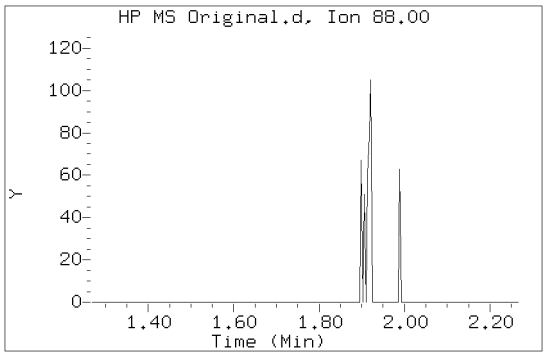
AREA
0
HEIGHT
0
03-Feb-2023
10:53
linh
pham



AFTER

MASS
88
AREA
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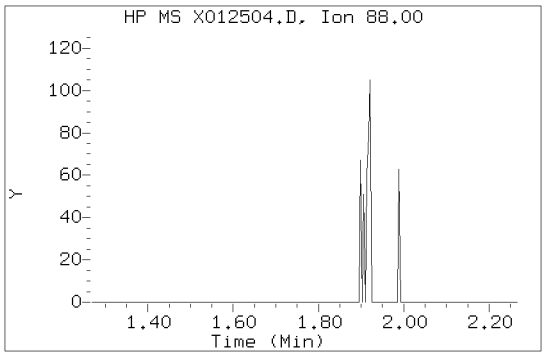
HEIGHT
0
03-Feb-2023
10:53
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012506.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012506.D
Lab Smp Id: VBLKW-230125 Client Smp ID: VBLKW-230125
Inj Date : 25-JAN-2023 09:24
Operator : FT Inst ID: voa6.i
Smp Info : VBLKW-230125;VBLKW-230125;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	637607	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	279017	45.5593	45.55
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	314418	48.6639	48.66
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	893865	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	802467	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1042794	52.5879	52.58
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	372513	50.2578	50.25
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	420093	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012506.D

Date : 25-JAN-2023 09:24

Client ID: VBLKW-230125

Instrument: voa6.i

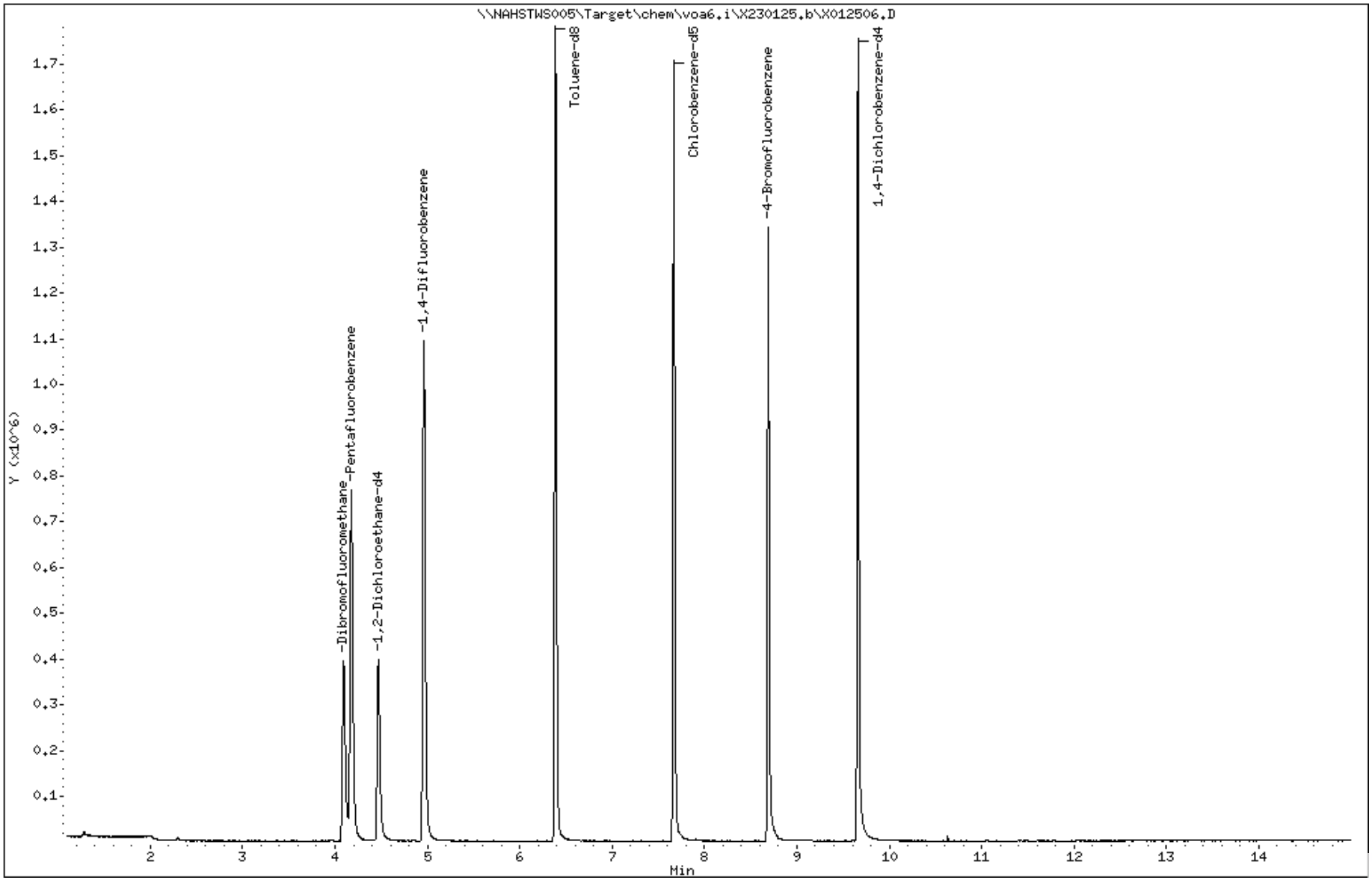
Sample Info: VBLKW-230125;VBLKW-230125;3;;BLANK

Purge Volume: 5.0

Operator: FT

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012506.D
Inj Date : 25-JAN-2023 09:24
InstruID : voa6.i
LabSampID : VBLKW-230125

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012508.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012508.D
Lab Smp Id: HS23010982-02 Client Smp ID: HS23010982-02
Inj Date : 25-JAN-2023 10:06
Operator : FT Inst ID: voa6.i
Smp Info : HS23010982-02;HS23010982-02;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 9
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

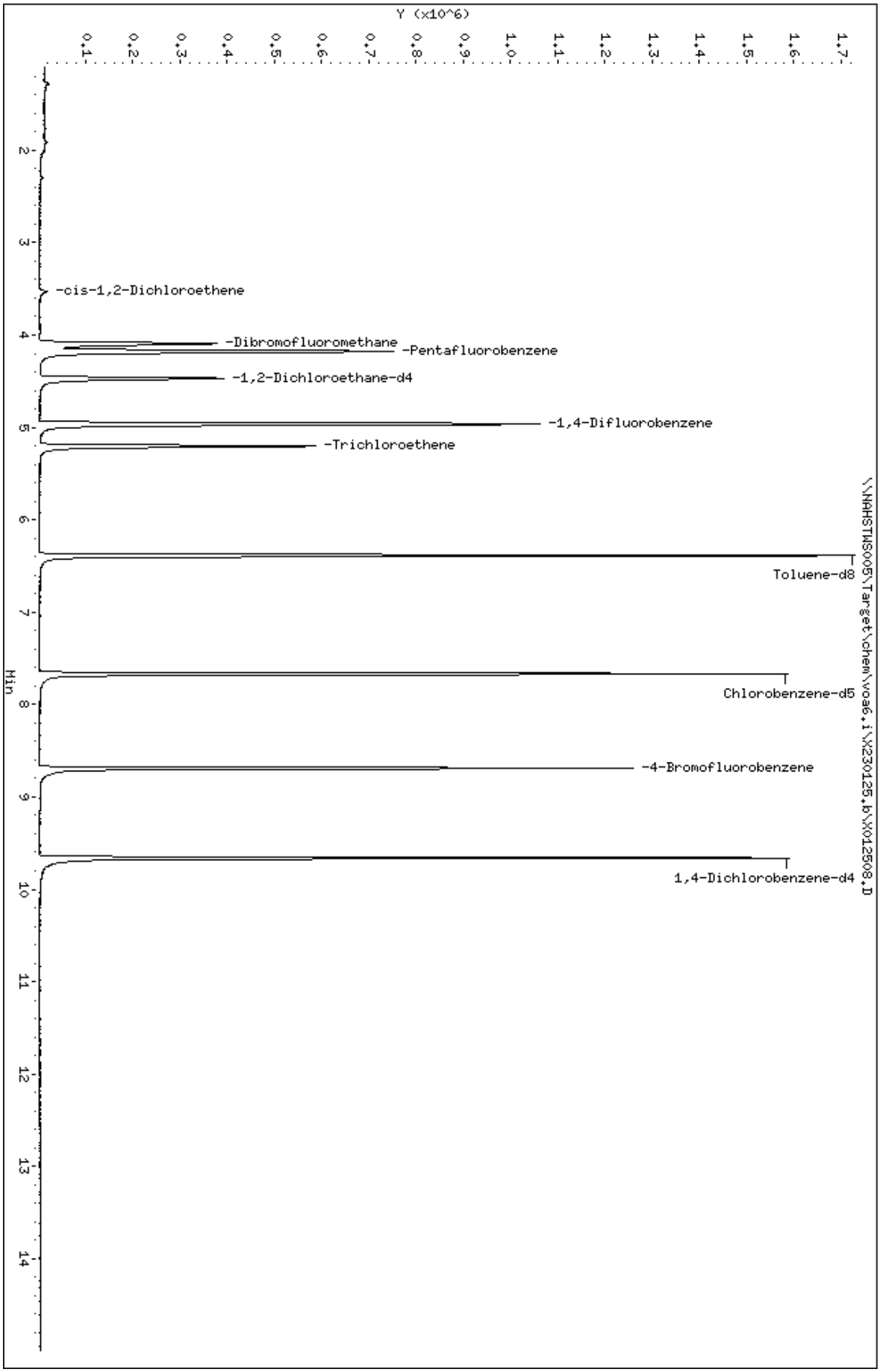
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.174	4.178	(1.000)	624585	50.0000	
	27 cis-1,2-Dichloroethene	96	3.529	3.518	(0.846)	9384	1.45343	145.34
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	269020	44.8401	44.84
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	308502	48.7434	48.74
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	878662	50.0000	
	38 Trichloroethene	130	5.201	5.205	(1.048)	196976	33.0983	3309.83
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	772893	50.0000	
$	48 Toluene-d8	98	6.386	6.385	(0.833)	1011075	52.9394	52.93
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	350597	49.1124	49.11
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	387821	50.0000	
M	94 1,2-Dichloroethylene (total)	96				9384	1.45343	145.34(a)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012508.D
Date : 25-JAN-2023 10:06
Client ID: HS230109B2-02
Sample Info: HS230109B2-02:HS230109B2-02:::
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012508.D Page 2

Date : 25-JAN-2023 10:06

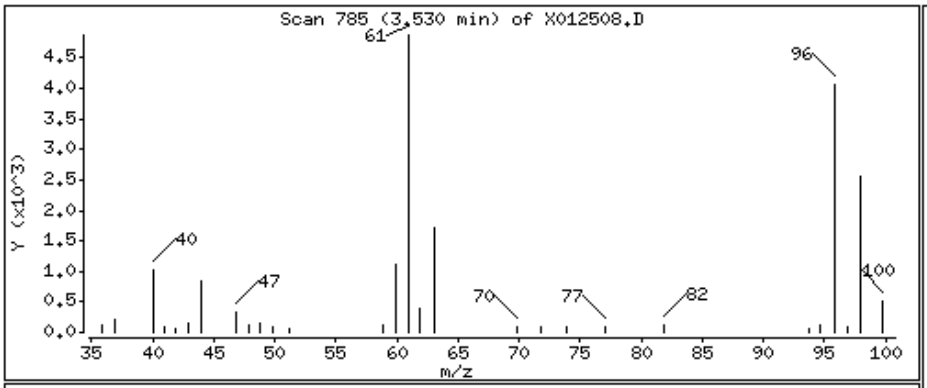
Client ID: HS23010982-02 Instrument: voa6.i

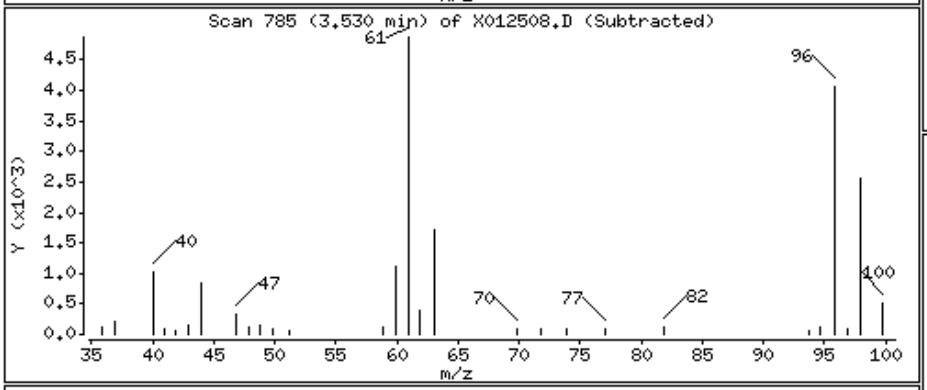
Sample Info: HS23010982-02;HS23010982-02;;;

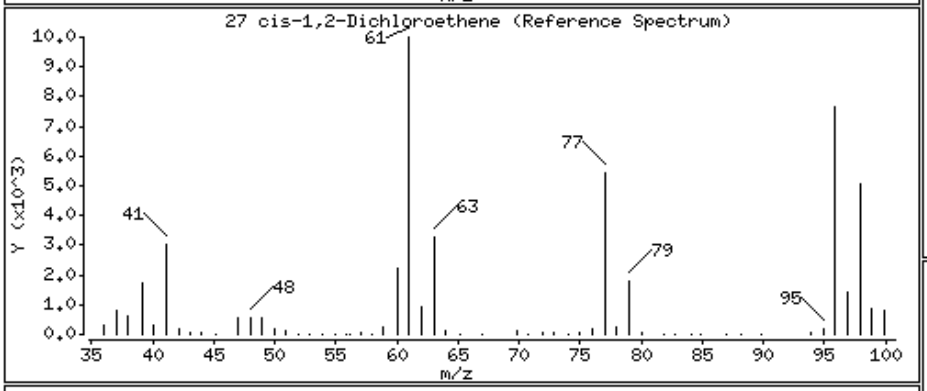
Purge Volume: 5.0 Operator: FT

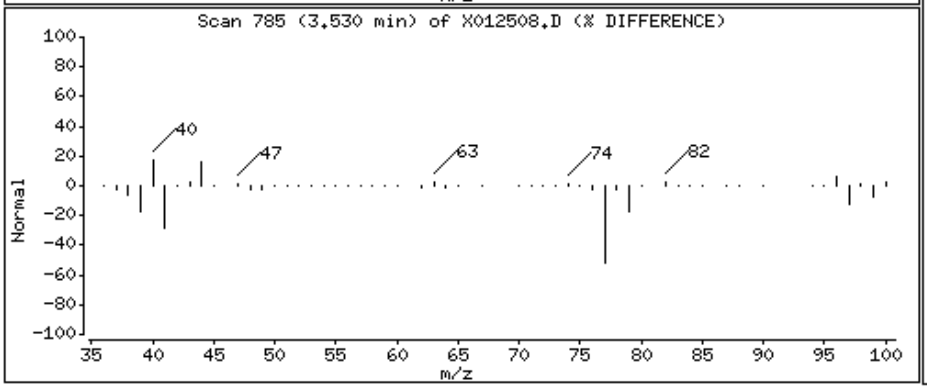
Column phase: DB624 Column diameter: 0.18

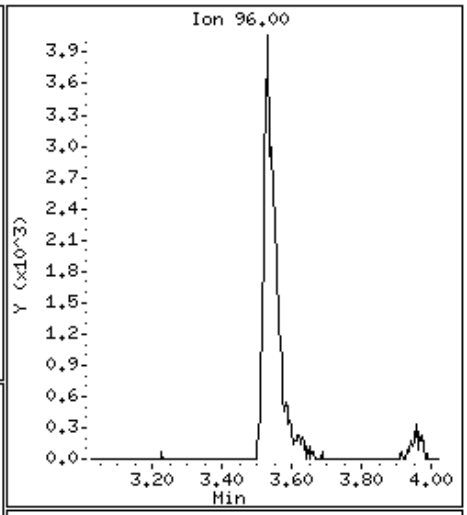
27 cis-1,2-Dichloroethene Concentration: 145.34 ug/l

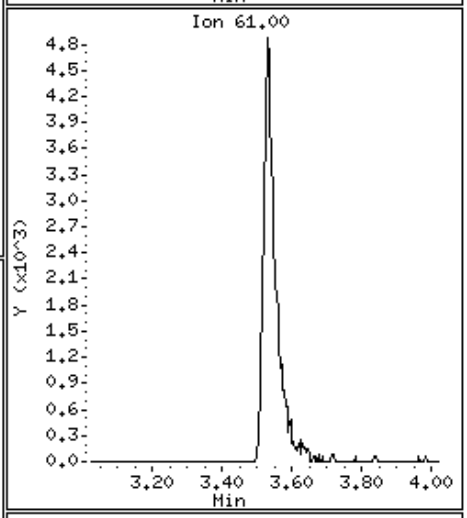


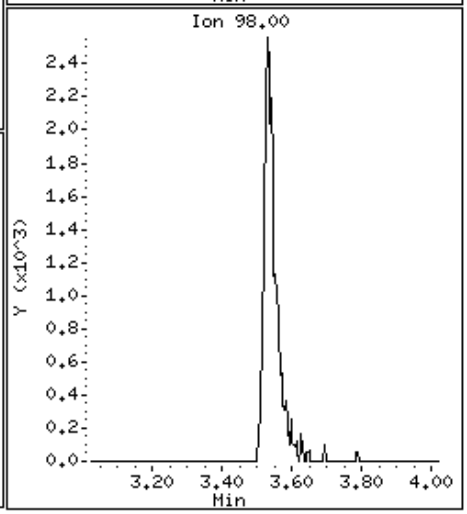












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012508.D

Date : 25-JAN-2023 10:06

Client ID: HS23010982-02

Instrument: voa6.i

Sample Info: HS23010982-02;HS23010982-02;;;

Purge Volume: 5.0

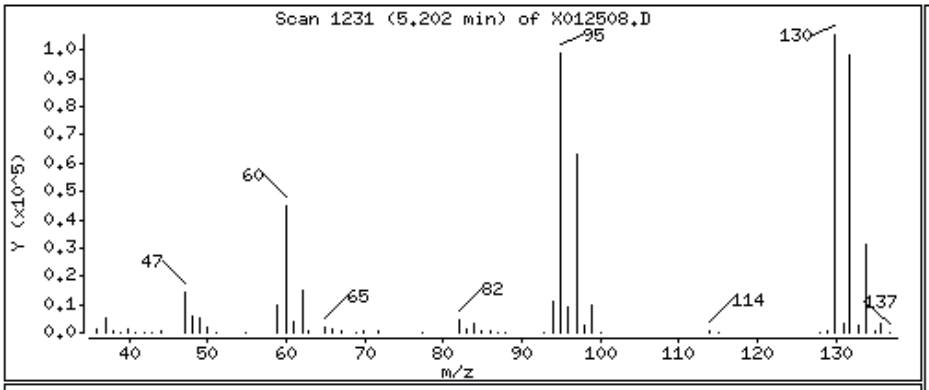
Operator: FT

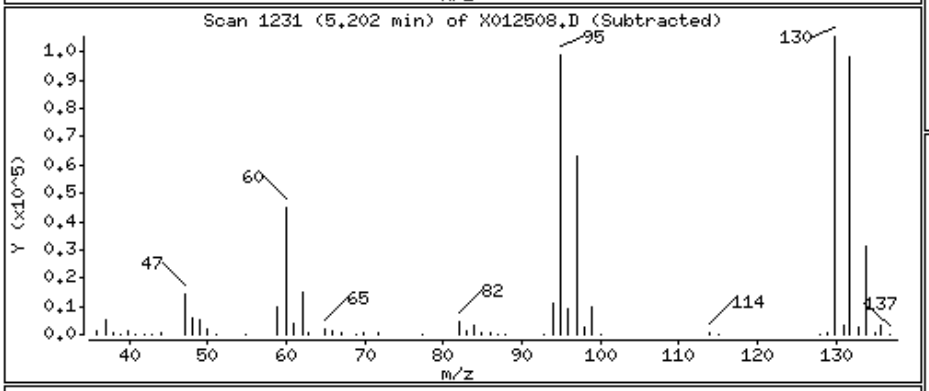
Column phase: DB624

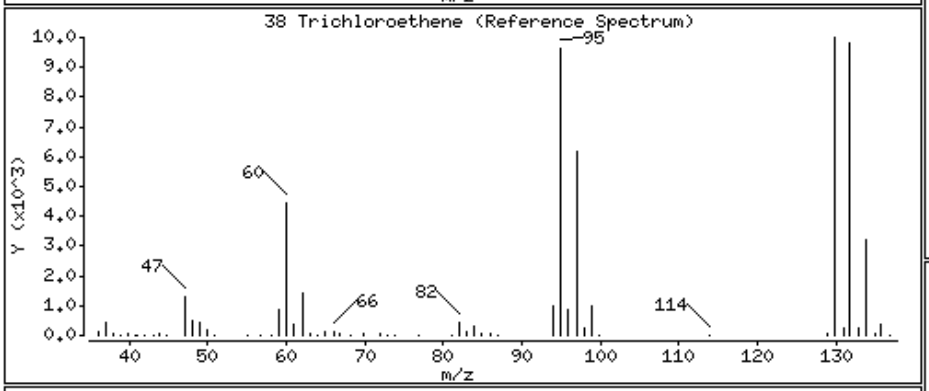
Column diameter: 0.18

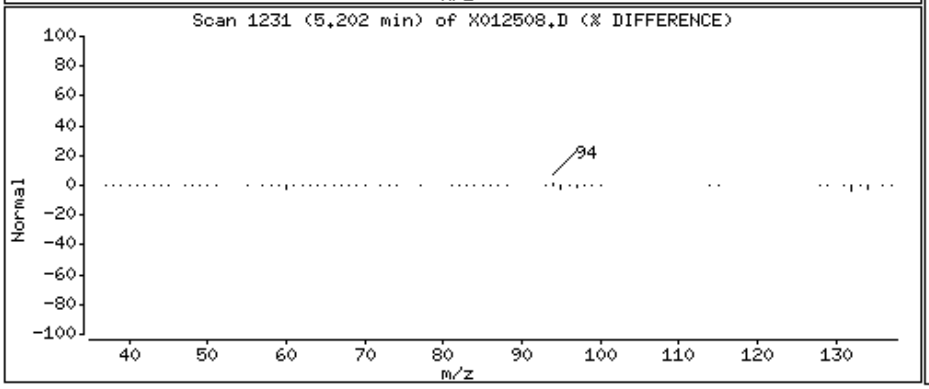
38 Trichloroethene

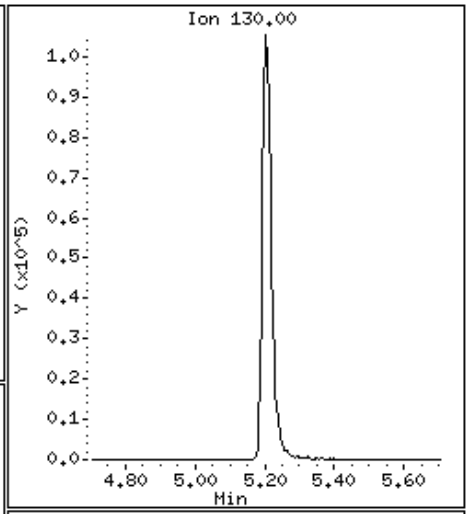
Concentration: 3309.83 ug/l

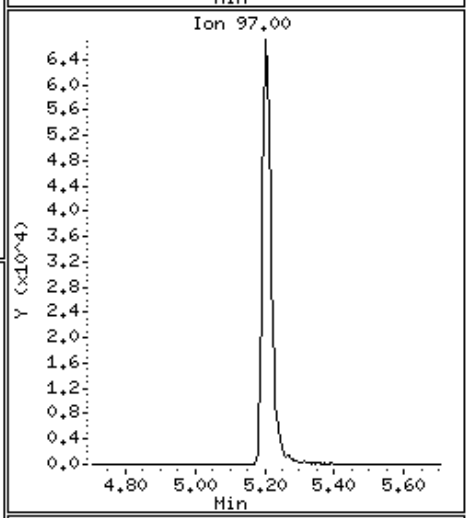


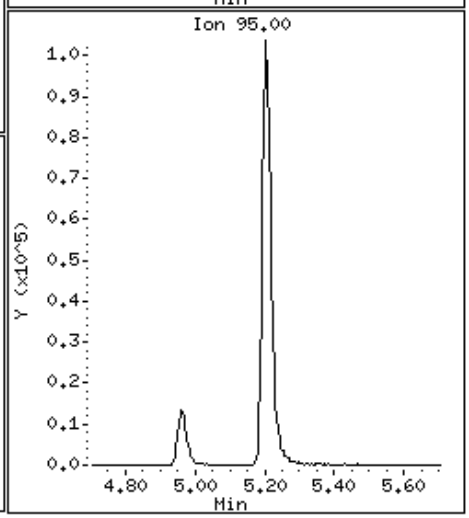












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012508.D
Inj Date : 25-JAN-2023 10:06
InstruID : voa6.i
LabSampID : HS23010982-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012509.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012509.D
Lab Smp Id: HS23010982-02MS Client Smp ID: HS23010982-02MS
Inj Date : 25-JAN-2023 10:27
Operator : FT Inst ID: voa6.i
Smp Info : HS23010982-02MS;HS23010982-02MS;3;;MS
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.174	4.178	(1.000)	626410	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	58311	13.5977	1359.77
3	Chloromethane	50	1.074	1.074	(0.257)	77240	15.2374	1523.73
4	Propionitrile	54	3.645	3.645	(0.873)	111110	173.837	17383.66(a)
5	Vinyl Chloride	62	1.141	1.141	(0.273)	84724	15.4831	1548.30
6	Bromomethane	94	1.336	1.336	(0.320)	63753	16.6244	1662.44
7	Chloroethane	64	1.400	1.400	(0.335)	54181	14.2255	1422.55
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	141816	18.5198	1851.97
9	Acrolein	56	1.441	1.441	(0.345)	16423	40.0755	4007.55
10	Acetone	43	1.970	1.966	(0.472)	43279	24.5974	2459.73
11	1,1-Dichloroethene	96	1.910	1.910	(0.458)	77833	16.3715	1637.15
12	Isobutyl Alcohol	43	4.672	4.672	(1.119)	249489	354.099	35409.94(a)
13	Acetonitrile	39	2.194	2.195	(0.526)	115716	202.971	20297.07(a)
14	Allyl Chloride	41	2.194	2.195	(0.526)	198552	18.2860	1828.59(a)
15	Iodomethane	142	2.022	2.022	(0.485)	165580	29.6492	2964.92
16	Acrylonitrile	53	2.532	2.528	(0.607)	54651	33.8936	3389.36
17	Methylene Chloride	84	2.299	2.299	(0.551)	92265	14.1485	1414.85
18	Methyl tert-butyl ether	73	2.528	2.528	(0.606)	270567	17.3871	1738.70
19	Carbon Disulfide	76	2.063	2.063	(0.494)	412065	33.1278	3312.78
20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	87056	16.3615	1636.15

21 Vinyl Acetate	43	2.993	2.993 (0.717)	472551	34.5929	3459.29
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	141489	15.1519	1515.18

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012509.D Page 2
Report Date: 03-Feb-2023 10:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	36667	17.2156	1721.55(M)
	24 2-Butanone	43	3.574	3.570	(0.856)	49346	28.6925	2869.25
	25 Methacrylonitrile	41	3.818	3.814	(0.915)	73869	16.6540	1665.39(a)
	26 2,2-Dichloropropane	77	3.506	3.503	(0.840)	139883	17.6430	1764.29
	27 cis-1,2-Dichloroethene	96	3.521	3.518	(0.844)	104263	16.1016	1610.16
	28 Chloroform	83	3.904	3.900	(0.935)	164111	15.6801	1568.00
	29 Bromochloromethane	128	3.788	3.791	(0.907)	50653	14.2871	1428.70
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	267502	44.4558	44.45
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	149190	17.9660	1796.60
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	124689	20.1273	2012.72
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	127874	17.8857	1788.56
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	129292	19.5441	1954.40
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	309465	48.7530	48.75
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	872602	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	359547	17.2548	1725.47
	38 Trichloroethene	130	5.205	5.205	(1.049)	309209	52.3179	5231.79
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	128172	16.3899	1638.99
	40 Methyl Methacrylate	41	5.602	5.602	(1.342)	76130	17.8240	1782.40(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	62675	28.1710	2817.10
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	90573	16.3404	1634.03
	43 2-Nitropropane	43	5.966	5.966	(1.429)	26071	16.4815	1648.14
	44 Dibromomethane	93	5.549	5.550	(1.119)	62046	16.4687	1646.86
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	145959	34.2330	3423.30
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	152472	16.6016	1660.16
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	797697	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	1026458	52.0736	52.07
	49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	68211	16.5998	1659.98(a)
	50 Toluene	91	6.445	6.445	(0.841)	404282	18.3360	1833.59
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	128081	16.8046	1680.46
	52 2-Hexanone	43	7.086	7.086	(0.924)	96285	33.1917	3319.17
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	72710	16.4379	1643.78
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	148922	17.1046	1710.46
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	105925	16.5920	1659.19
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	93665	20.5319	2053.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	95245	17.2219	1722.18
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	100828	23.9099	2390.98
	59 Chlorobenzene	112	7.694	7.690	(1.003)	274218	17.5343	1753.43
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	99237	17.0510	1705.10
	61 Ethylbenzene	106	7.799	7.799	(1.017)	142652	19.3643	1936.42
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	361570	38.0736	3807.36
	63 o-Xylene	106	8.241	8.241	(1.075)	171317	18.2776	1827.75
	64 Styrene	104	8.260	8.256	(1.077)	287098	18.2744	1827.44
	66 Bromoform	173	8.410	8.410	(1.097)	70090	15.8474	1584.74
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	450574	21.0411	2104.11
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	118286	16.6484	1664.83
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	380141	51.5919	51.59
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	445771	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	125906	25.3835	2538.35
	72 trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	29802	17.3063	1730.63(a)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	530723	21.4939	2149.39
	74 Bromobenzene	156	8.803	8.803	(0.911)	129497	17.7065	1770.64
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	382531	20.9714	2097.14

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	321393	19.8354	1983.54
77	4-Chlorotoluene	91	9.069	9.070 (0.939)	368587	19.9547	1995.46

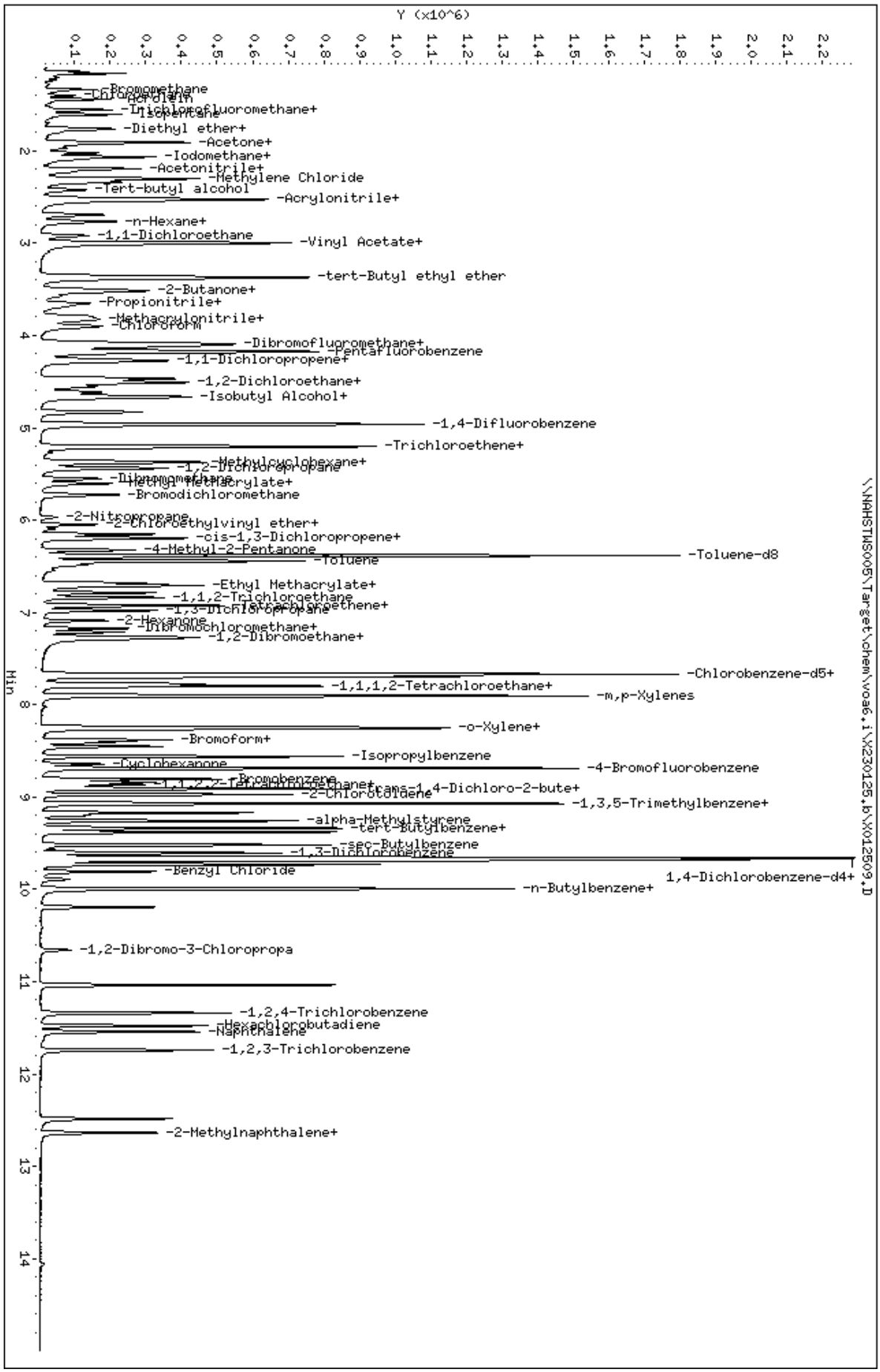
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	325176	21.7784	2177.84
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	381672	19.8862	1988.61
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	463660	23.3389	2333.89
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	406021	22.8074	2280.73
83	1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	227898	18.7743	1877.43
84	1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	241824	18.2561	1825.60
86	Benzyl Chloride	91	9.808	9.808	(1.279)	185241	16.7332	1673.31
87	n-Butylbenzene	91	9.995	9.992	(1.035)	360426	22.0373	2203.72
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	223454	17.8739	1787.39
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	18561	16.4023	1640.22
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	159274	20.1877	2018.77
91	Hexachlorobutadiene	225	11.476	11.480	(1.188)	76456	21.9834	2198.34
92	Naphthalene	128	11.544	11.540	(1.195)	321623	17.9168	1791.68
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	141439	18.7182	1871.81
146	Methyl acetate	43	2.228	2.225	(0.534)	44452	15.7704	1577.03
138	Freon TF	101	1.910	1.913	(0.458)	88921	19.3380	1933.80
141	Cyclohexane	56	4.117	4.118	(0.987)	141893	23.1666	2316.66
142	Tetrahydrofuran	42	3.844	3.836	(0.921)	27078	32.7063	3270.63
147	Methylcyclohexane	55	5.377	5.373	(1.084)	238673	22.3448	2234.47
135	1,4-Dioxane	88	5.598	5.595	(1.341)	18376	320.920	32091.97
132	n-Butanol	56	5.265	5.253	(1.261)	18418	269.417	26941.70(a)
131	Methyl Acrylate	55	3.686	3.683	(0.883)	67558	15.8856	1588.56
133	Ethyl Acrylate	55	5.377	5.373	(1.288)	238673	20.5645	2056.45
136	n-Hexane	57	2.768	2.768	(0.663)	104178	23.0982	2309.82
139	Diethyl ether	59	1.752	1.752	(0.420)	65763	15.7119	1571.19
148	Tert-butyl alcohol	59	2.423	2.419	(0.581)	142924	329.510	32951.03
149	Isopropyl alcohol	45	2.089	2.090	(0.501)	75912	335.118	33511.76
156	Diisopropyl ether	45	2.997	2.993	(0.718)	287410	17.6872	1768.71
160	2-Methylnaphthalene	142	12.638	12.634	(1.308)	148430	17.1624	1716.23
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	424374	19.7695	1976.94
167	Ethanol	45	1.700	1.696	(0.407)	11888	288.985	28898.48
172	tert-Butyl formate	59	4.616	4.612	(1.106)	104539	31.4505	3145.04
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	127279	337.235	33723.46
174	tert-Amyl methyl ether	73	4.661	4.661	(1.117)	312908	17.3293	1732.93
175	tert-Butyl ethyl ether	59	3.371	3.368	(0.808)	300701	17.4151	1741.50
176	tert-Amyl alcohol	59	4.616	4.612	(1.106)	104539	310.734	31073.40
151	4-Methyl-2-pentanol	45	6.712	6.708	(1.353)	245618	297.393	29739.30
180	1-Methylnaphthalene	142	12.638	12.634	(1.308)	148430		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	64921	15.1008	1510.08
152	Amyl alcohol	42	6.906	6.903	(0.901)	19876	251.973	25197.33
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	13540	16.6937	1669.36
159	Propylene oxide	43	1.752	1.752	(0.420)	13277	33.7054	3370.53
161	3-Methyl-1-butanol	55	6.910	6.903	(0.901)	22134	280.651	28065.10
162	Butyl acrylate	55	8.252	8.249	(1.076)	198091	19.0104	1901.03
182	Epichlorohydrin	57	6.097	6.093	(1.229)	27198	71.2273	7122.73
M 94	1,2-Dichloroethylene (total)	96				191319	32.4632	3246.31
M 95	Xylenes (total)	106				532887	56.3512	5635.12
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	181870	18.4133	1841.33
130	Ethyl Acetate	43	3.656	3.649	(0.876)	80368	16.4419	1644.19
134	Cyclohexanone	55	8.642	8.642	(0.894)	58798	316.206	31620.56(a)
185	Isoprene	39	1.767	1.767	(0.423)	31738	19.0188	1901.87
186	Isopentane	42	1.606	1.606	(0.385)	61743		(a)

188 Isopropyl acetate	43	4.672	4.672 (0.942)	250591	18.4842	1848.41
187 n-Amyl acetate	43	8.451	8.451 (1.102)	159497	17.1471	1714.71

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	130084	18.9837	1898.37
150 Allyl alcohol	57	2.768	2.768	(0.663)	104178	452.474	45247.43
194 Acetaldehyde	44	1.209	1.209	(0.290)	36110	78.3117	7831.16
195 Methyl Amyl Ketone	43	8.383	8.380	(1.093)	184039	17.3527	1735.26
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	204932	18.9820	1898.19
168 1-Propanol	59	2.993	2.993	(0.717)	31924	311.847	31184.65

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Sample Info: HS23010982-02MS;HS23010982-02MS;3;;MS
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: FT
Column diameter: 0.18
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Chloroethane
Acrolein
Trichlorofluoromethane+
Isopentane
Diethyl ether+
Acetone+
Iodomethane+
Acetonitrile+
Methylene Chloride
Tert-butyl alcohol
Acrylonitrile+
n-Hexane+
1,1-Dichloroethane
Vinyl Acetate+
tert-Butyl ethyl ether
2-Butanone+
Propionitrile+
Methacrylonitrile+
Chloroform
Dibromofluoromethane+
Pentafluorobenzene
1,1-Dichloropropene+
1,2-Dichloroethane+
Isobutyl Alcohol+
1,4-Difluorobenzene
Trichloroethene+
Methylcyclohexane+
1,2-Dichloropropane
Dibromomethane
Methyl Methacrylate+
Bromodichloromethane
2-Nitropropane
2-Chloroethylvinyl ether+
cis-1,3-Dichloropropene+
4-Methyl-2-Pentanone
Toluene-d8
Toluene
Ethyl Methacrylate+
1,1,2-Trichloroethane
Tetrachloroethene+
1,3-Dichloropropane
2-Hexanone
Dibromochloromethane+
1,2-Dibromoethane+
Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
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o-Xylene+
Bromoform+
Isopropylbenzene
Cyclohexanone
4-Bromofluorobenzene
Bromobenzene
1,1,2,2-Tetrachloroethane
trans-1,4-Dichloro-2-bute+
2-Chlorotoluene
1,3,5-Trimethylbenzene+
alpha-Methylstyrene
tert-Butylbenzene+
sec-Butylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
Benzyl Chloride
n-Butylbenzene+
1,2-Dibromo-3-Chloropropa
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Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
2-Methylnaphthalene+

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Inj Date : 25-JAN-2023 10:27
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LabSampID : HS23010982-02MS

Chloroprene (126-99-8)

Reason Code:

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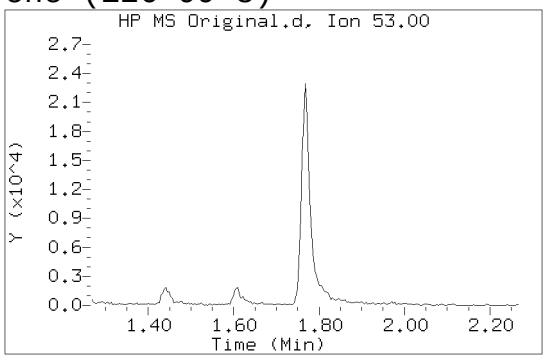

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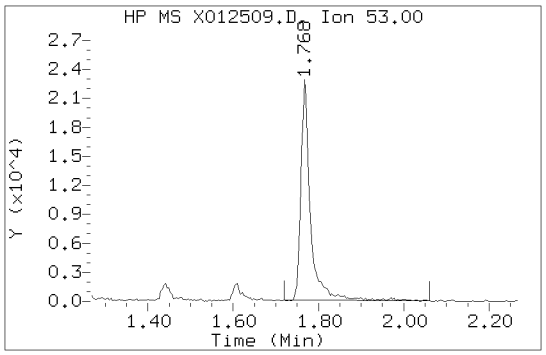

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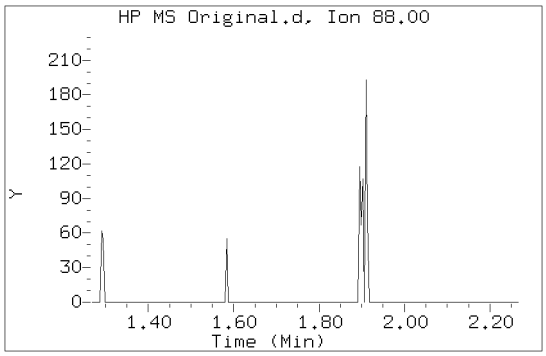

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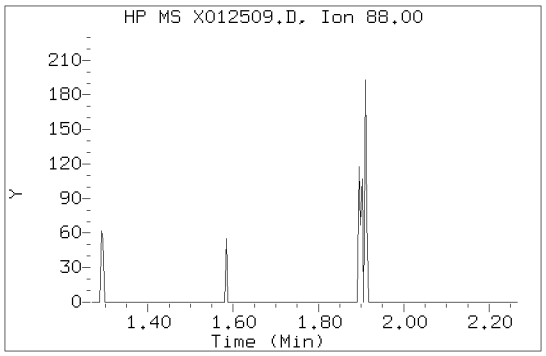

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

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Operator : FT Inst ID: voa6.i
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Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.177	4.178	(1.000)	632455	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	50356	11.6872	1168.72
3	Chloromethane	50	1.074	1.074	(0.257)	72365	14.2986	1429.86
4	Propionitrile	54	3.649	3.645	(0.873)	103989	161.140	16114.04(a)
5	Vinyl Chloride	62	1.141	1.141	(0.273)	75145	13.6013	1360.12
6	Bromomethane	94	1.336	1.336	(0.320)	57240	14.9788	1497.87
7	Chloroethane	64	1.400	1.400	(0.335)	50290	13.0777	1307.77
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	125840	16.2764	1627.63
9	Acrolein	56	1.441	1.441	(0.345)	13732	33.6736	3367.35
10	Acetone	43	1.970	1.966	(0.472)	40961	23.0553	2305.52
11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	69366	14.4511	1445.10
12	Isobutyl Alcohol	43	4.672	4.672	(1.118)	235824	331.506	33150.56(a)
13	Acetonitrile	39	2.194	2.195	(0.525)	101610	176.525	17652.47(a)
14	Allyl Chloride	41	2.194	2.195	(0.525)	179427	16.3667	1636.66(a)
15	Iodomethane	142	2.026	2.022	(0.485)	162412	28.9064	2890.63
16	Acrylonitrile	53	2.528	2.528	(0.605)	50045	30.7404	3074.04
17	Methylene Chloride	84	2.299	2.299	(0.550)	86384	13.1201	1312.00
18	Methyl tert-butyl ether	73	2.528	2.528	(0.605)	251787	16.0256	1602.56
19	Carbon Disulfide	76	2.067	2.063	(0.495)	374618	29.8294	2982.94
20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	78709	14.6514	1465.13

21 Vinyl Acetate	43	2.993	2.993 (0.716)	443804	32.1780	3217.80
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	137617	14.5964	1459.63

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012510.D Page 2
Report Date: 03-Feb-2023 10:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	33173	15.4262	1542.62(M)
	24 2-Butanone	43	3.578	3.570	(0.856)	43625	25.4999	2549.98
	25 Methacrylonitrile	41	3.825	3.814	(0.916)	68886	15.3821	1538.21(a)
	26 2,2-Dichloropropane	77	3.506	3.503	(0.839)	131279	16.3995	1639.95
	27 cis-1,2-Dichloroethene	96	3.521	3.518	(0.843)	98349	15.0432	1504.31
	28 Chloroform	83	3.904	3.900	(0.935)	155081	14.6757	1467.56
	29 Bromochloromethane	128	3.795	3.791	(0.908)	47646	13.3105	1331.04
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	271287	44.6546	44.65
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	139045	16.5843	1658.42
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	116522	18.5516	1855.16
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	126431	17.4419	1744.18
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	118310	17.6393	1763.93
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	310087	48.3861	48.38
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	884706	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	332700	15.7479	1574.79
	38 Trichloroethene	130	5.205	5.205	(1.049)	292146	48.7546	4875.45
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	121126	15.2770	1527.70
	40 Methyl Methacrylate	41	5.606	5.602	(1.342)	67421	15.6341	1563.41(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	55168	24.4576	2445.75
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	85609	15.2335	1523.34
	43 2-Nitropropane	43	5.969	5.966	(1.429)	24143	15.1168	1511.67
	44 Dibromomethane	93	5.549	5.550	(1.119)	58076	15.2040	1520.40
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	138341	32.1056	3210.56
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	145914	15.6702	1567.02
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	806161	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1038595	52.1362	52.13
	49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	61598	14.7854	1478.53(a)
	50 Toluene	91	6.445	6.445	(0.841)	371749	16.6834	1668.34
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	123452	15.9757	1597.56
	52 2-Hexanone	43	7.086	7.086	(0.924)	93546	31.9089	3190.89
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	70094	15.6801	1568.00
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	140924	16.0161	1601.60
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	100143	15.5216	1552.16
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	85300	18.5019	1850.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	91103	16.3000	1629.99
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	91685	21.4443	2144.42
	59 Chlorobenzene	112	7.694	7.690	(1.003)	253762	16.0559	1605.59
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	93672	15.9259	1592.58
	61 Ethylbenzene	106	7.799	7.799	(1.017)	132598	17.8105	1781.05
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	336613	35.0735	3507.34
	63 o-Xylene	106	8.241	8.241	(1.075)	158693	16.7530	1675.29
	64 Styrene	104	8.260	8.256	(1.077)	265706	16.7352	1673.51
	66 Bromoform	173	8.410	8.410	(1.097)	66572	14.8940	1489.39
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	415139	19.1828	1918.28
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	111821	15.9223	1592.23
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	379681	50.9892	50.98
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	440623	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	116021	23.6639	2366.39
	72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	29035	16.6839	1668.38(a)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	495046	20.2833	2028.32
	74 Bromobenzene	156	8.803	8.803	(0.911)	120020	16.6024	1660.23
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	353139	19.5863	1958.62

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	295544	18.4532	1845.31
77	4-Chlorotoluene	91	9.069	9.070 (0.939)	343139	18.7940	1879.39

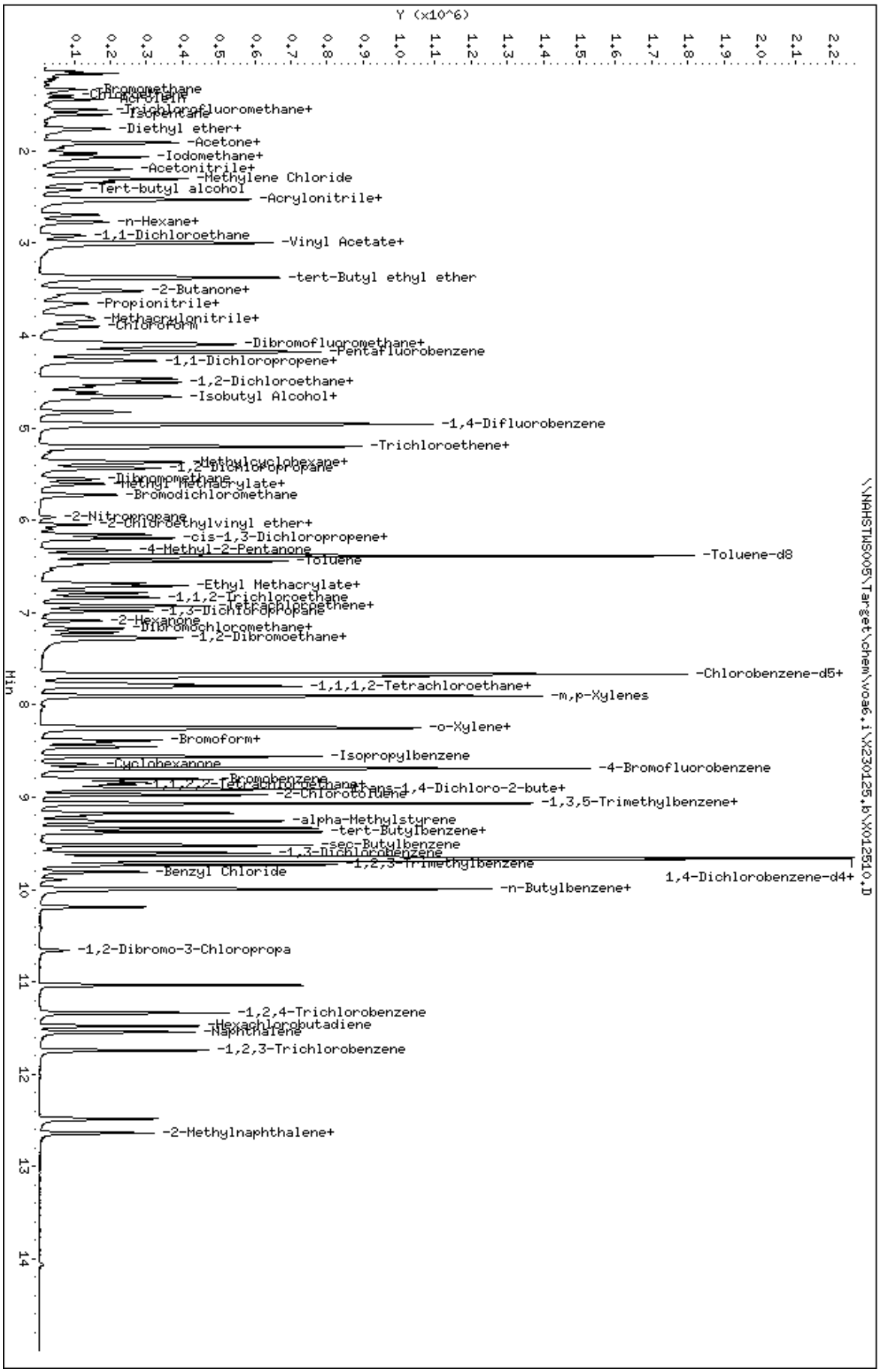
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	302910	20.5242	2052.41
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	352954	18.6048	1860.47
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	425079	21.6469	2164.68
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	376663	21.4055	2140.54
83	1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	214019	17.8369	1783.69
84	1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	228023	17.4153	1741.53
86	Benzyl Chloride	91	9.808	9.808	(1.279)	174440	15.7757	1577.57
87	n-Butylbenzene	91	9.995	9.992	(1.035)	333958	20.7687	2076.86
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	212806	17.2211	1722.10
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	18031	16.1217	1612.16
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	145358	18.6391	1863.91
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	71697	20.8588	2085.87
92	Naphthalene	128	11.544	11.540	(1.195)	306540	17.2761	1727.60
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	133231	17.8379	1783.79
146	Methyl acetate	43	2.228	2.225	(0.533)	42423	14.9067	1490.66
138	Freon TF	101	1.913	1.913	(0.458)	79143	17.0471	1704.70
141	Cyclohexane	56	4.121	4.118	(0.987)	128815	20.9575	2095.75
142	Tetrahydrofuran	42	3.848	3.836	(0.921)	23991	28.3129	2831.28
147	Methylcyclohexane	55	5.377	5.373	(1.084)	213209	19.6877	1968.77
135	1,4-Dioxane	88	5.602	5.595	(1.341)	16834	291.180	29118.02
132	n-Butanol	56	5.272	5.253	(1.262)	16509	243.951	24395.11(a)
131	Methyl Acrylate	55	3.686	3.683	(0.882)	67448	15.7082	1570.81
133	Ethyl Acrylate	55	5.377	5.373	(1.287)	213209	18.4058	1840.58
136	n-Hexane	57	2.772	2.768	(0.664)	92585	20.3316	2033.16
139	Diethyl ether	59	1.756	1.752	(0.420)	60245	14.2560	1425.59
148	Tert-butyl alcohol	59	2.423	2.419	(0.580)	130243	297.404	29740.43
149	Isopropyl alcohol	45	2.089	2.090	(0.500)	72113	315.304	31530.40
156	Diisopropyl ether	45	2.993	2.993	(0.716)	262805	16.0184	1601.84
160	2-Methylnaphthalene	142	12.638	12.634	(1.308)	138918	16.2502	1625.02
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	381219	17.9666	1796.65
167	Ethanol	45	1.703	1.696	(0.408)	12630	304.260	30425.99
172	tert-Butyl formate	59	4.612	4.612	(1.104)	97750	29.1269	2912.69
173	3,3-Dimethyl-1-butanol	57	7.289	7.285	(0.951)	110013	288.427	28842.67
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	287932	15.7937	1579.37
175	tert-Butyl ethyl ether	59	3.368	3.368	(0.806)	272437	15.6273	1562.73
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	97750	287.777	28777.71
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	224228	267.780	26777.96
180	1-Methylnaphthalene	142	12.638	12.634	(1.308)	138918		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	59453	13.6968	1369.67
152	Amyl alcohol	42	6.910	6.903	(0.901)	18742	235.103	23510.27
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	11777	14.3813	1438.12
159	Propylene oxide	43	1.752	1.752	(0.419)	11473	28.8473	2884.72
161	3-Methyl-1-butanol	55	6.910	6.903	(0.901)	22658	284.279	28427.88
162	Butyl acrylate	55	8.252	8.249	(1.076)	176886	16.7972	1679.71
182	Epichlorohydrin	57	6.093	6.093	(1.228)	26808	69.3150	6931.50
M 94	1,2-Dichloroethylene (total)	96				177058	29.6945	2969.45
M 95	Xylenes (total)	106				495306	51.8265	5182.64
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	172091	17.6268	1762.68
130	Ethyl Acetate	43	3.653	3.649	(0.874)	84036	17.0280	1702.80
134	Cyclohexanone	55	8.642	8.642	(0.894)	53284	289.900	28990.01(a)
185	Isoprene	39	1.767	1.767	(0.423)	28626	16.9900	1698.99
186	Isopentane	42	1.606	1.606	(0.384)	55659		(a)

188 Isopropyl acetate	43	4.672	4.672 (0.942)	236539	17.2090	1720.89
187 n-Amyl acetate	43	8.451	8.451 (1.102)	150389	15.9982	1599.81

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	122436	17.6800	1768.00
150 Allyl alcohol	57	2.772	2.768	(0.664)	92585	398.279	39827.91
195 Methyl Amyl Ketone	43	8.383	8.380	(1.093)	168599	15.7300	1572.99
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	190098	17.4231	1742.31
168 1-Propanol	59	2.993	2.993	(0.716)	28203	272.865	27286.50

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012510.D
Date : 25-JAN-2023 10:48
Client ID: HS230109B2-02MSD
Sample Info: HS230109B2-02MSD;HS230109B2-02MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: FT
Column diameter: 0.18
Bromomethane
Chloroethane
Acrolein
Trichlorofluoromethane+
Isopentane
Diethyl ether+
Acetone+
Iodomethane+
Acetonitrile+
Methylene Chloride
Tert-butyl alcohol
Acrylonitrile+
n-Hexane+
1,1-Dichloroethane
Vinyl Acetate+
tert-Butyl ethyl ether
2-Butanone+
Propionitrile+
Methacrylonitrile+
Chloroform
Dibromofluoromethane+
Pentafluorobenzene
1,1-Dichloropropene+
1,2-Dichloroethane+
Isobutyl Alcohol+
1,4-Difluorobenzene
Trichloroethene+
Methylcyclohexane+
1,2-Dichloropropane
Dibromomethane
Methyl Methacrylate+
Bromodichloromethane
2-Nitropropane
2-Chloroethylvinyl ether+
cis-1,3-Dichloropropene+
4-Methyl-2-Pentanone
Toluene-d8
Toluene
Ethyl Methacrylate+
1,1,2-Trichloroethane
Tetrachloroethene+
1,3-Dichloropropane
2-Hexanone
Dibromochloromethane+
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Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
Bromoform+
Isopropylbenzene
Cyclohexanone
4-Bromofluorobenzene
Bromobenzene
1,1,2,2-Tetrachloroethane+
trans-1,4-Dichloro-2-bute+
2-Chlorotoluene
1,3,5-Trimethylbenzene+
alpha-Methylstyrene
tert-Butylbenzene+
sec-Butylbenzene
1,3-Dichlorobenzene
1,2,3-Trimethylbenzene
1,4-Dichlorobenzene-d4+
Benzyl Chloride
n-Butylbenzene+
1,2-Dibromo-3-Chloropropa
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
2-Methylnaphthalene+

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Inj Date : 25-JAN-2023 10:48
InstruID : voa6.i
LabSampID : HS23010982-02MSD

Chloroprene (126-99-8)

Reason Code:

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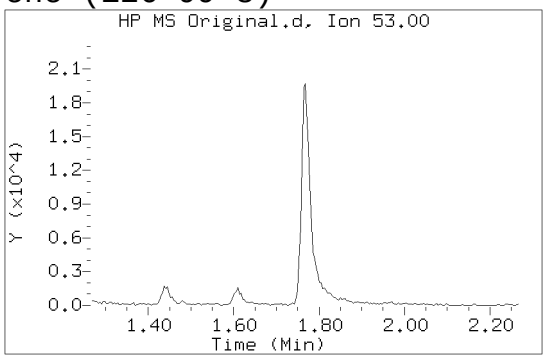

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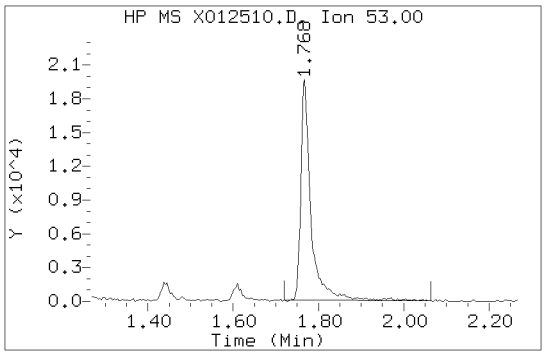

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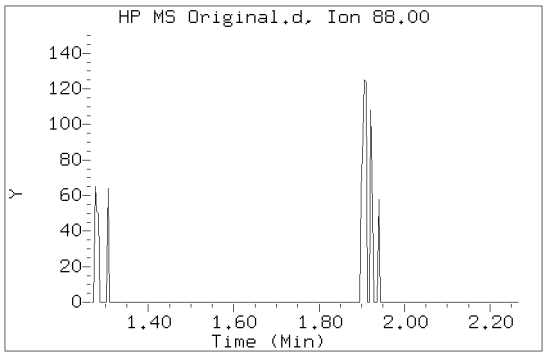

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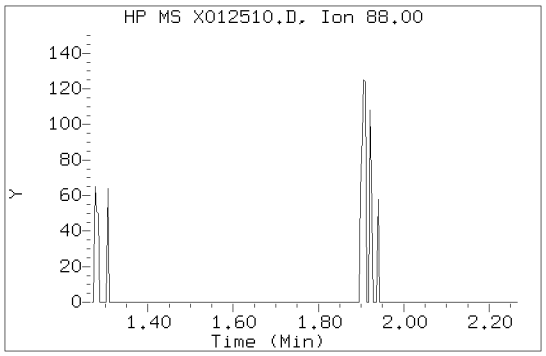

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012511.D
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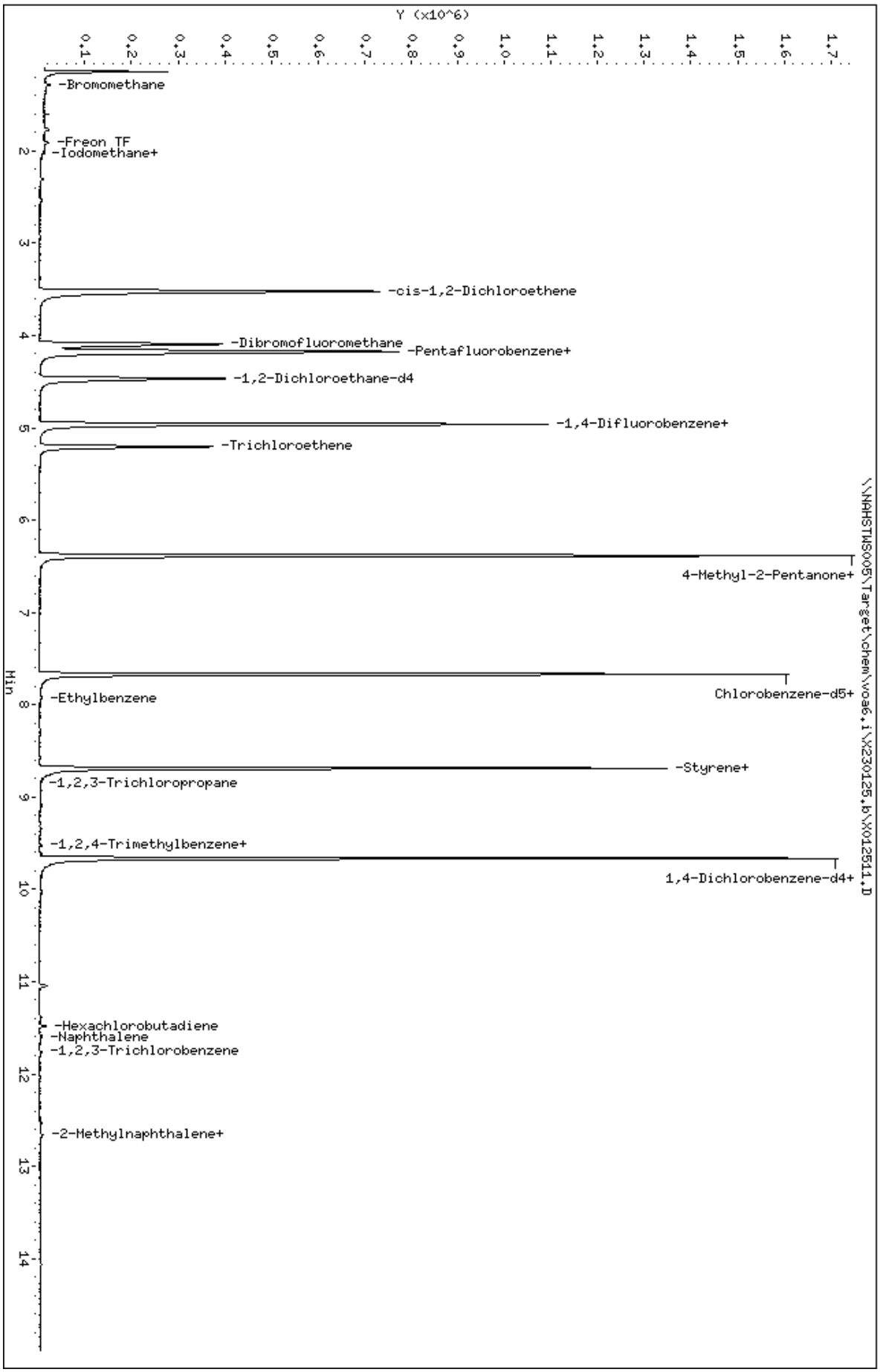
Inj Date : 25-JAN-2023 11:09
Operator : FT Inst ID: voa6.i
Smp Info : HS23010982-06;HS23010982-06;;;
Misc Info : V6;WATER;0;20;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 11
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: 8260-dryclean.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	20.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.178	(1.000)	634410	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	275230	45.1659	45.16
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	316951	49.2996	49.29
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	889005	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	793076	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1024432	52.2737	52.27
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	363016	49.5573	49.55
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	417256	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	174345	31.4593	629.18
27 cis-1,2-Dichloroethene	96	3.521	3.518	(0.843)	396678	60.4876	1209.75
38 Trichloroethene	130	5.205	5.205	(1.049)	125673	20.8714	417.42



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Sample Info: HS230109B2-06;HS230109B2-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012511.D

Date : 25-JAN-2023 11:09

Client ID: HS23010982-06

Instrument: voa6.i

Sample Info: HS23010982-06;HS23010982-06;;;

Purge Volume: 5.0

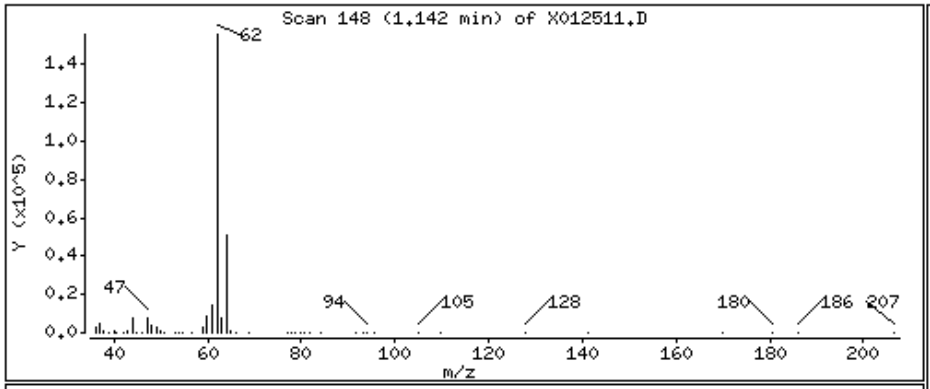
Operator: FT

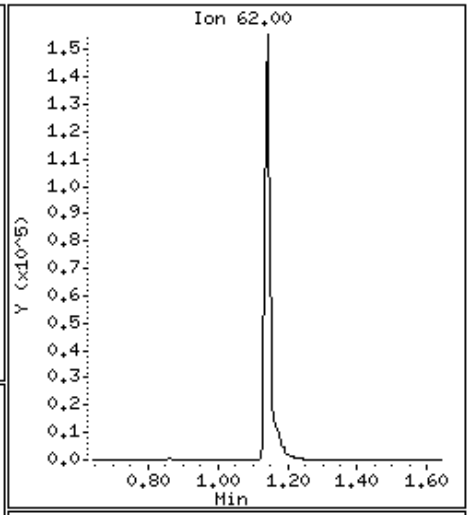
Column phase: DB624

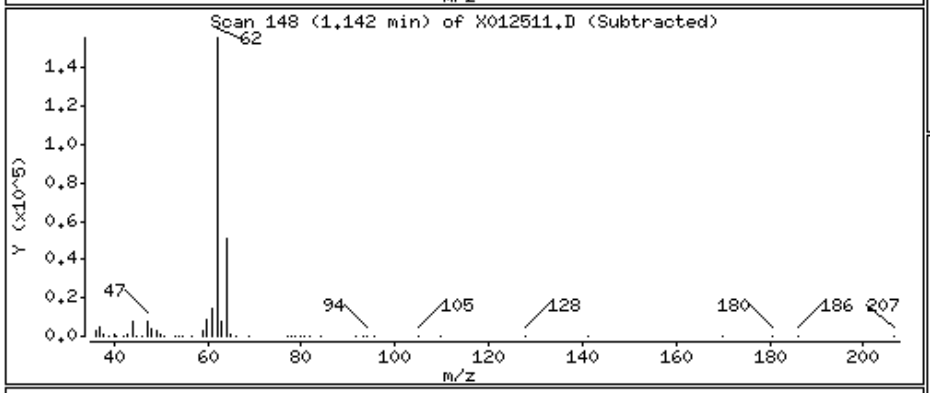
Column diameter: 0.18

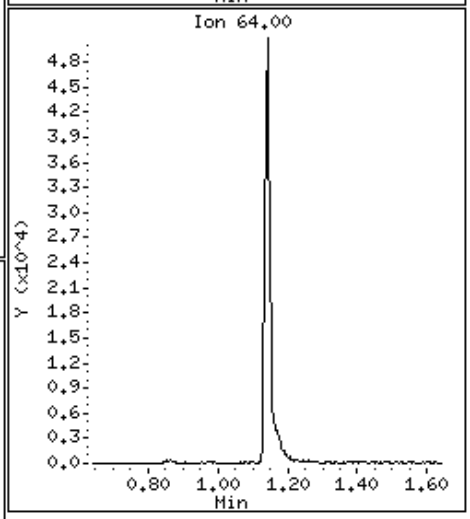
5 Vinyl Chloride

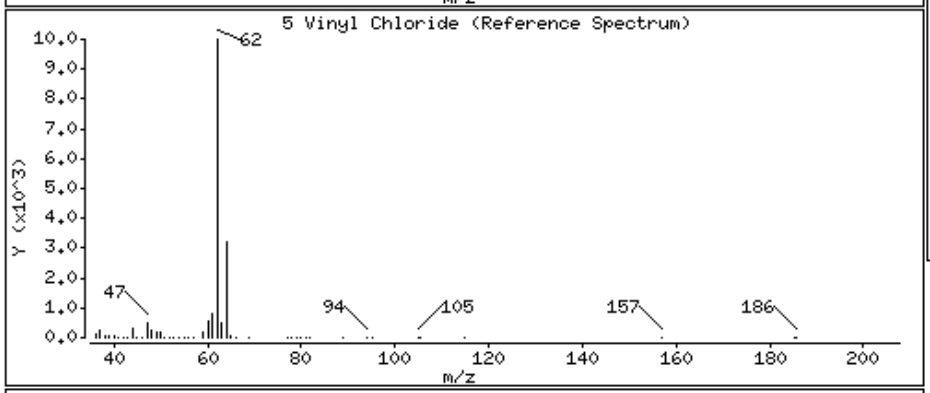
Concentration: 629.18 ug/l

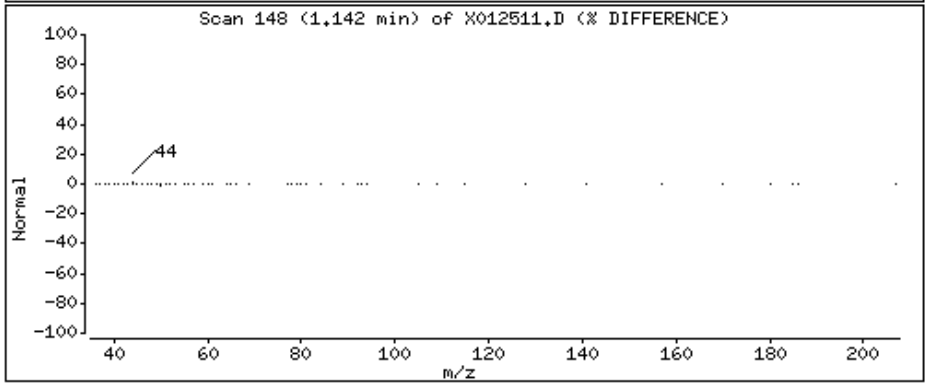












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012511.D Page 3

Date : 25-JAN-2023 11:09

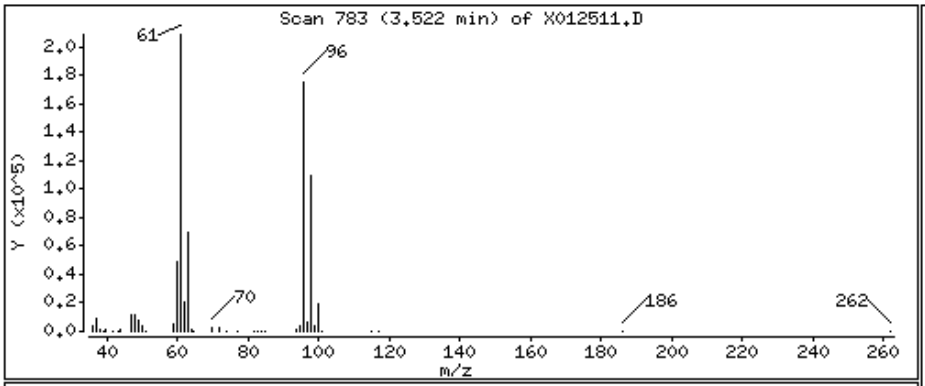
Client ID: HS23010982-06 Instrument: voa6.i

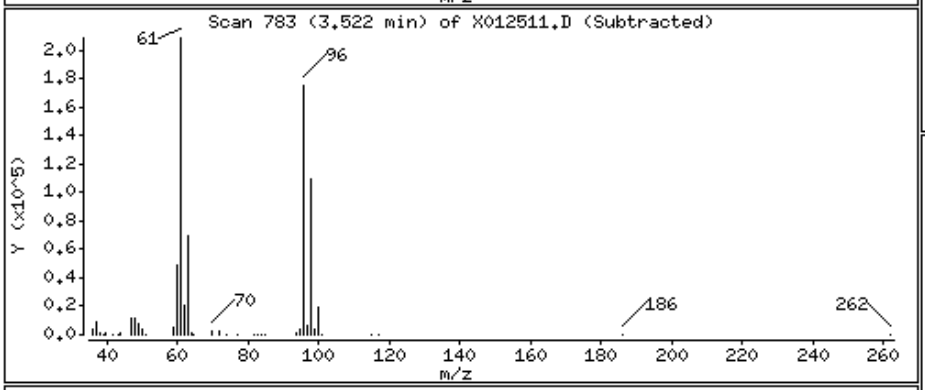
Sample Info: HS23010982-06;HS23010982-06;;;

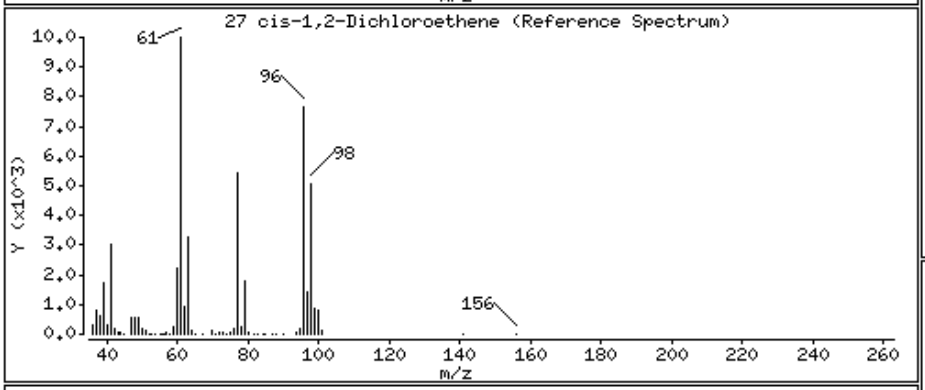
Purge Volume: 5.0 Operator: FT

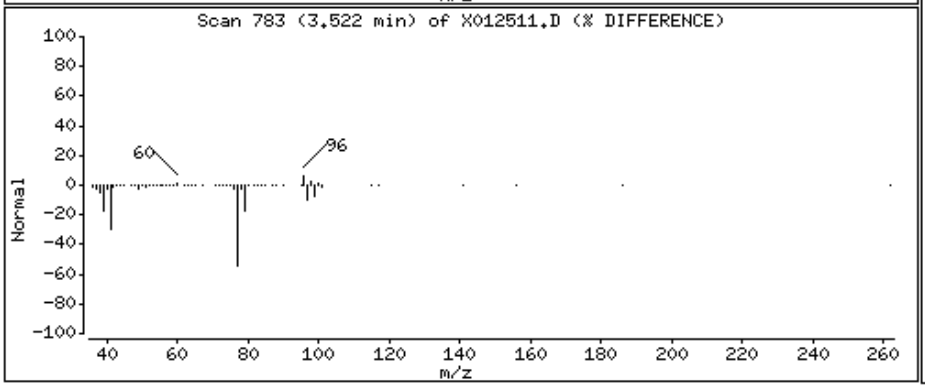
Column phase: DB624 Column diameter: 0.18

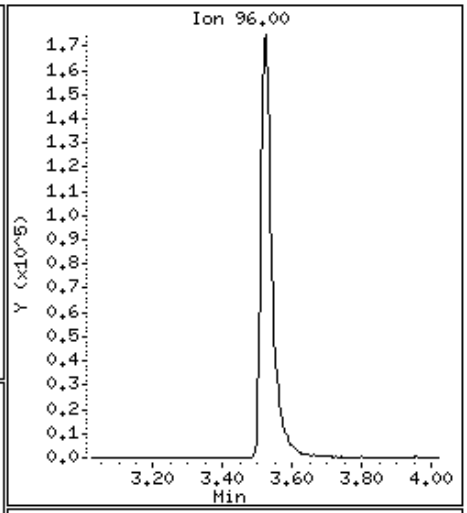
27 cis-1,2-Dichloroethene Concentration: 1209.75 ug/l

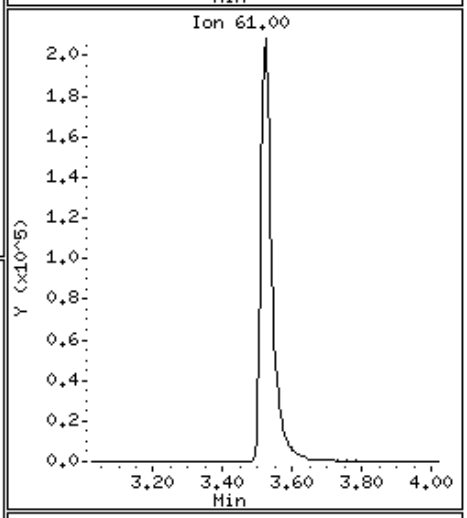


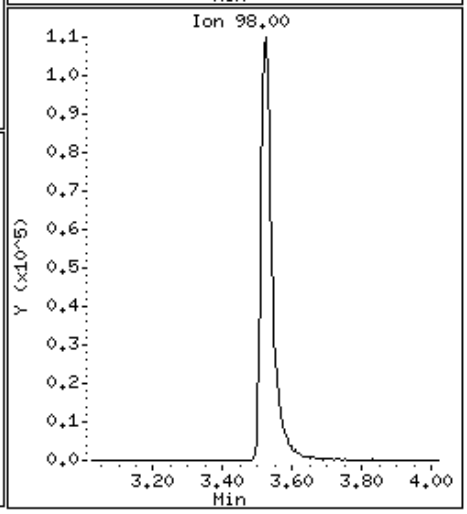












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012511.D Page 4

Date : 25-JAN-2023 11:09

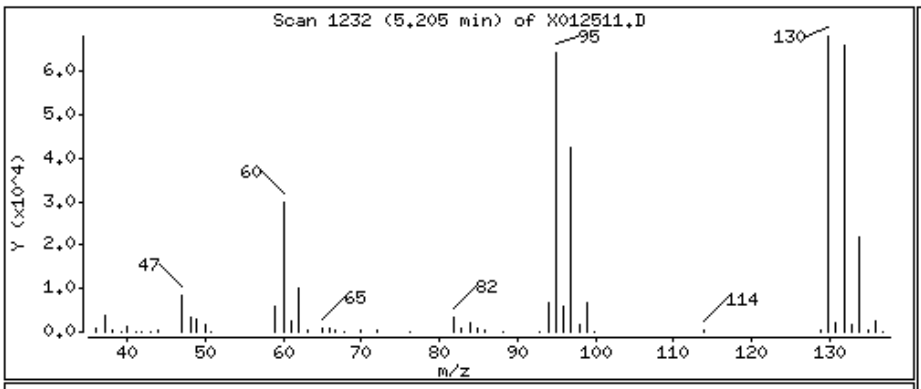
Client ID: HS23010982-06 Instrument: voa6.i

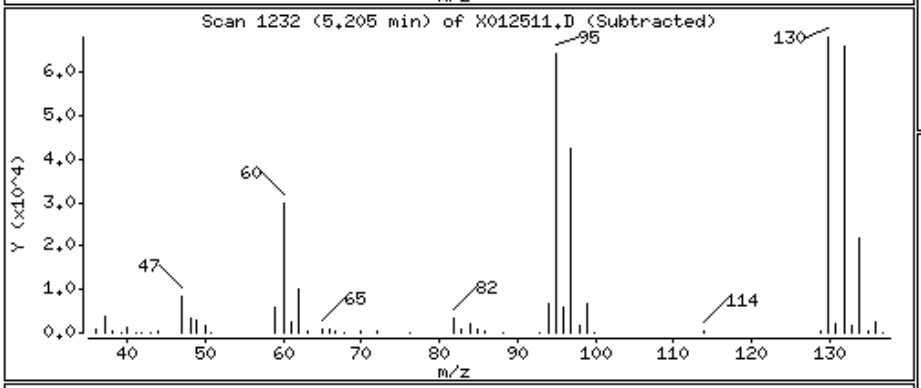
Sample Info: HS23010982-06;HS23010982-06;;;

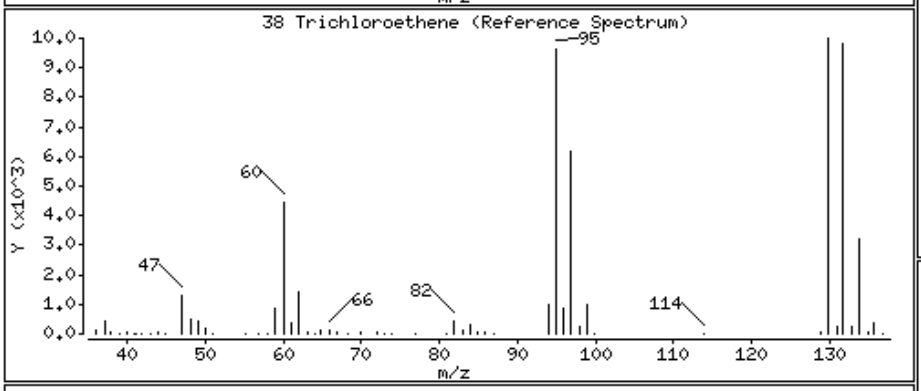
Purge Volume: 5.0 Operator: FT

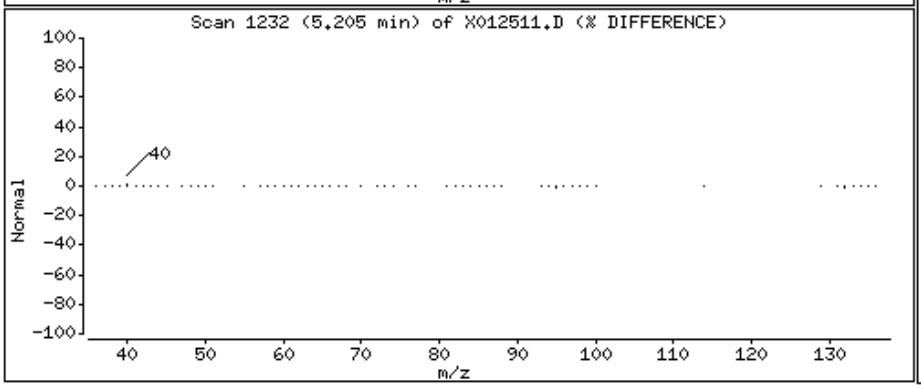
Column phase: DB624 Column diameter: 0.18

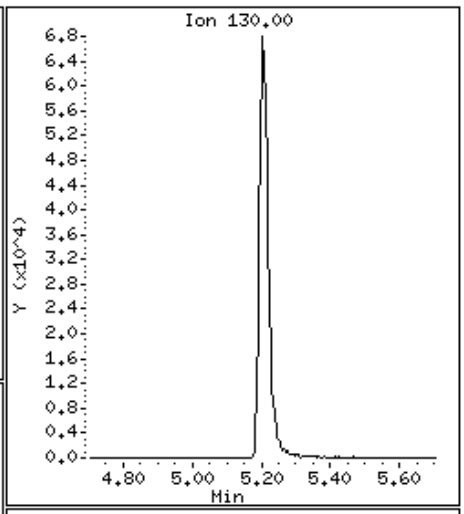
38 Trichloroethene Concentration: 417.42 ug/l

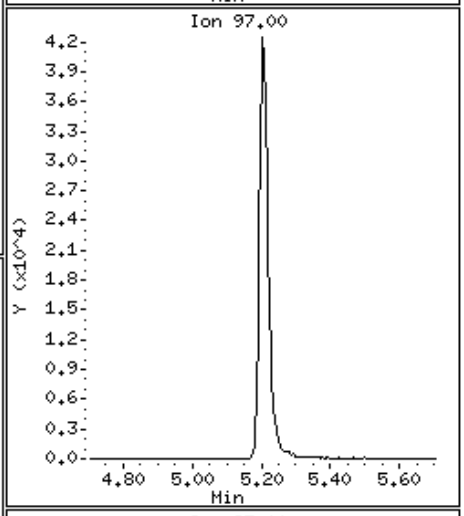


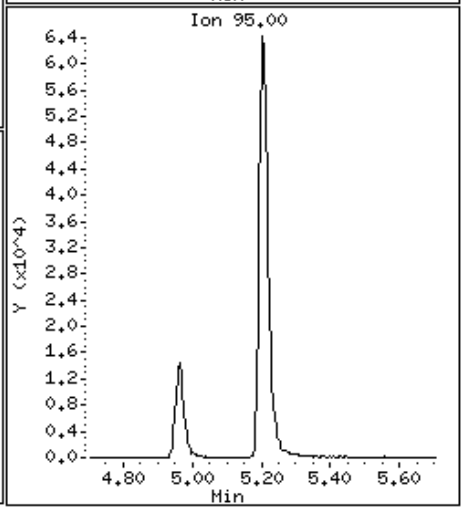












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Inj Date : 25-JAN-2023 11:09
InstruID : voa6.i
LabSampID : HS23010982-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 25-JAN-2023 15:00
Operator : FT Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.174	(1.000)	525517	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	156191	50.0000	42.55
3 Chloromethane	50	1.074	1.074	(0.257)	205461	50.0000	43.51
4 Propionitrile	54	3.645	3.645	(0.873)	270829	500.000	505.07
5 Vinyl Chloride	62	1.137	1.137	(0.273)	217588	50.0000	47.39
6 Bromomethane	94	1.336	1.336	(0.320)	158291	50.0000	45.74
7 Chloroethane	64	1.400	1.400	(0.335)	140405	50.0000	43.94
8 Trichlorofluoromethane	101	1.553	1.553	(0.372)	337654	50.0000	52.55
9 Acrolein	56	1.441	1.441	(0.345)	31844	100.000	88.92
10 Acetone	43	1.966	1.966	(0.471)	129779	100.000	88.00
11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	188946	50.0000	47.37
12 Isobutyl Alcohol	43	4.669	4.669	(1.119)	651619	1000.00	1102.40
13 Acetonitrile	39	2.191	2.191	(0.525)	255778	500.000	534.77
14 Allyl Chloride	41	2.194	2.194	(0.526)	455184	50.0000	49.96
15 Iodomethane	142	2.022	2.022	(0.485)	477326	100.000	91.44
16 Acrylonitrile	53	2.528	2.528	(0.606)	144106	100.000	106.53
17 Methylene Chloride	84	2.299	2.299	(0.551)	245424	50.0000	44.86
18 Methyl tert-butyl ether	73	2.528	2.528	(0.606)	632732	50.0000	48.46
19 Carbon Disulfide	76	2.063	2.063	(0.494)	1027017	100.000	98.41
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	218048	50.0000	48.84

21 Vinyl Acetate	43	2.993	2.993 (0.717)	1168425	100.000	101.95
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	371416	50.0000	47.41

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D Page 2
Report Date: 03-Feb-2023 10:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	82584	50.0000	46.21(M)
	24 2-Butanone	43	3.570	3.570	(0.855)	156320	100.000	99.94
	25 Methacrylonitrile	41	3.814	3.814	(0.914)	191622	50.0000	51.49(a)
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	331850	50.0000	49.89
	27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.844)	249841	50.0000	45.99
	28 Chloroform	83	3.900	3.900	(0.934)	427491	50.0000	48.68
	29 Bromochloromethane	128	3.788	3.788	(0.907)	133341	50.0000	44.83
$	30 Dibromofluoromethane	113	4.091	4.091	(0.980)	238645	50.0000	47.28
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	379778	50.0000	54.51
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	323614	50.0000	58.17
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	339716	50.0000	52.91
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	321188	50.0000	54.06
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	277434	50.0000	52.07
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	783584	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	948708	50.0000	50.70
	38 Trichloroethene	130	5.201	5.201	(1.048)	281442	50.0000	53.02
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	345955	50.0000	49.26
	40 Methyl Methacrylate	41	5.602	5.602	(1.342)	197004	50.0000	54.97
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	222087	100.000	111.16
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	239880	50.0000	48.19
	43 2-Nitropropane	43	5.966	5.966	(1.429)	70843	50.0000	53.38
	44 Dibromomethane	93	5.549	5.549	(1.119)	161557	50.0000	47.75
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	426745	100.000	104.90
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	413082	50.0000	50.08
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	761044	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	908604	50.0000	48.31
	49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	200079	50.0000	54.22
	50 Toluene	91	6.445	6.445	(0.841)	1071178	50.0000	50.92
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	357102	50.0000	52.17
	52 2-Hexanone	43	7.083	7.083	(0.924)	296476	100.000	107.12
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	201667	50.0000	47.78
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	404206	50.0000	48.66
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	298385	50.0000	48.98
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	241757	50.0000	55.54
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	265533	50.0000	50.32
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	235733	50.0000	62.25
	59 Chlorobenzene	112	7.694	7.694	(1.003)	733713	50.0000	49.17
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	280573	50.0000	50.53
	61 Ethylbenzene	106	7.799	7.799	(1.017)	379869	50.0000	54.04
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	969089	100.000	106.96
	63 o-Xylene	106	8.241	8.241	(1.075)	459925	50.0000	51.43
	64 Styrene	104	8.256	8.256	(1.077)	796355	50.0000	53.13
	66 Bromoform	173	8.410	8.410	(1.097)	209153	50.0000	49.56
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1206352	50.0000	59.04
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	326084	50.0000	46.10
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	358449	50.0000	50.99
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	443732	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	360102	50.0000	72.93
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	88679	50.0000	53.97
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1417870	50.0000	57.68
	74 Bromobenzene	156	8.803	8.803	(0.911)	354733	50.0000	48.72
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1037753	50.0000	57.15

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	854846	50.0000	53.00
77	4-Chlorotoluene	91	9.069	9.069 (0.939)	1005978	50.0000	54.71

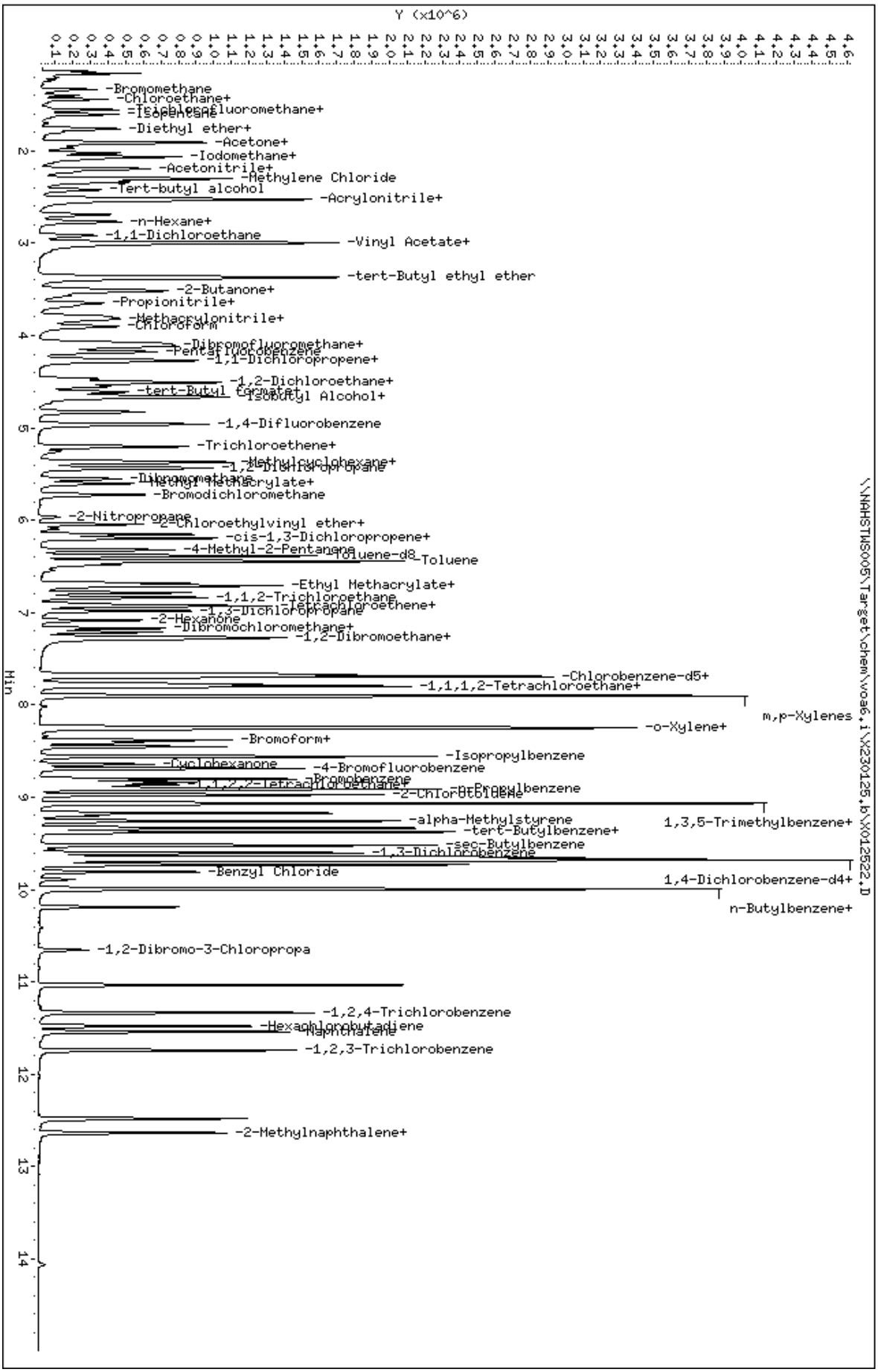
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	876537	50.0000	58.97
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1046266	50.0000	54.76
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1237087	50.0000	62.55
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1095465	50.0000	61.81
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	630434	50.0000	52.17
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	658929	50.0000	49.97
86	Benzyl Chloride	91	9.808	9.808	(1.279)	524192	50.0000	44.33
87	n-Butylbenzene	91	9.992	9.992	(1.034)	966372	50.0000	56.35
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	625563	50.0000	50.26
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	57255	50.0000	50.63
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	442748	50.0000	56.37
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	200047	50.0000	57.37
92	Naphthalene	128	11.540	11.540	(1.194)	969360	50.0000	54.24
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	403182	50.0000	53.60
146	Methyl acetate	43	2.224	2.224	(0.533)	122147	50.0000	51.65
138	Freon TF	101	1.910	1.910	(0.458)	200241	50.0000	51.90
141	Cyclohexane	56	4.118	4.118	(0.987)	312817	50.0000	58.82
142	Tetrahydrofuran	42	3.836	3.836	(0.919)	62570	100.000	95.64
147	Methylcyclohexane	55	5.377	5.377	(1.084)	578316	50.0000	60.29
135	1,4-Dioxane	88	5.598	5.598	(1.341)	52032	1000.00	1083.14
132	n-Butanol	56	5.253	5.253	(1.259)	68180	1000.00	1013.18
131	Methyl Acrylate	55	3.679	3.679	(0.881)	228607	50.0000	64.07
133	Ethyl Acrylate	55	5.377	5.377	(1.288)	578316	50.0000	55.93
136	n-Hexane	57	2.768	2.768	(0.663)	231122	50.0000	61.08
139	Diethyl ether	59	1.752	1.752	(0.420)	150266	50.0000	42.79
148	Tert-butyl alcohol	59	2.423	2.423	(0.581)	400450	1000.00	1100.48
149	Isopropyl alcohol	45	2.089	2.089	(0.501)	215815	1000.00	1135.63
156	Diisopropyl ether	45	2.997	2.997	(0.718)	678230	50.0000	49.75
160	2-Methylnaphthalene	142	12.634	12.634	(1.308)	440976	50.0000	51.22
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1107096	50.0000	51.81
167	Ethanol	45	1.696	1.696	(0.406)	36519	1000.00	1066.95
172	tert-Butyl formate	59	4.612	4.612	(1.105)	313235	100.000	112.32
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	374018	1000.00	1038.71
174	tert-Amyl methyl ether	73	4.661	4.661	(1.117)	741947	50.0000	48.97
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.808)	712689	50.0000	49.19
176	tert-Amyl alcohol	59	4.612	4.612	(1.105)	313235	1000.00	1109.82
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	803207	1000.00	1083.00
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	440976	50.0000	(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	166071	50.0000	46.04
152	Amyl alcohol	42	6.903	6.903	(0.900)	81207	1000.00	1079.06
158	Dichlorofluoromethane	67	1.523	1.523	(0.365)	30377	50.0000	44.64
159	Propylene oxide	43	1.752	1.752	(0.420)	31347	100.000	94.85
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	84936	1000.00	1128.82
162	Butyl acrylate	55	8.249	8.249	(1.076)	527701	50.0000	53.08
182	Epichlorohydrin	57	6.093	6.093	(1.228)	76000	200.000	216.36
M 94	1,2-Dichloroethylene (total)	96				467889	100.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	494264	50.0000	50.27
130	Ethyl Acetate	43	3.649	3.649	(0.874)	225131	50.0000	54.90
134	Cyclohexanone	55	8.642	8.642	(0.894)	204665	1000.00	1105.71
185	Isoprene	39	1.767	1.767	(0.423)	72615	50.0000	51.86
186	Isopentane	42	1.606	1.606	(0.385)	127688	50.0000	(a)
188	Isopropyl acetate	43	4.669	4.669	(0.941)	653036	50.0000	53.64

187 n-Amyl acetate	43	8.451	8.451 (1.102)	448604	50.0000	50.55
189 n-Butyl acetate	43	7.210	7.210 (0.940)	366571	50.0000	56.07

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	231122	1000.00	1196.55
194 Acetaldehyde	44	1.209	1.209	(0.290)	69519	200.000	209.86
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	512676	50.0000	50.66
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	509010	50.0000	49.41
168 1-Propanol	59	2.993	2.993	(0.717)	78026	1000.00	908.52

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D
Date : 25-JAN-2023 15:00
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

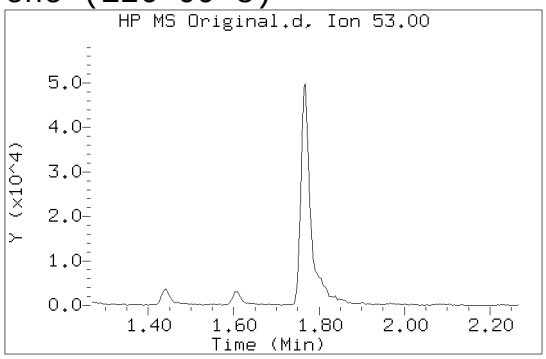
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D
Inj Date : 25-JAN-2023 15:00
InstruID : voa6.i
LabSampID : CCV-END

Chloroprene (126-99-8)

Reason Code:

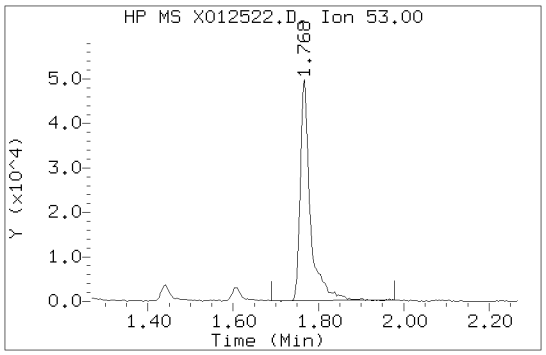
BEFORE

MASS
53
AREA
0
HEIGHT
0
25-Jan-2023
15:16
ALSHS
Server



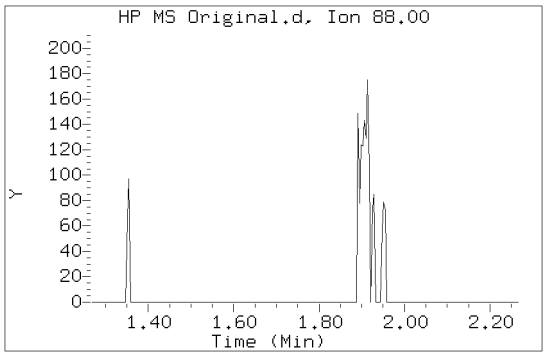
AFTER

MASS
53
AREA
82584
HEIGHT
49606
03-Feb-2023
10:54
ALSHS
Ser



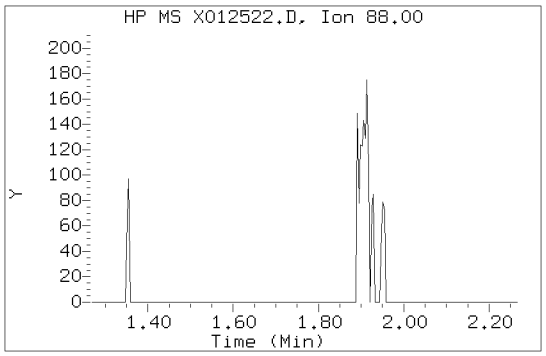
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Jan-2023
15:16
ALSHS
Server



AFTER

MASS
88
AREA
0
HEIGHT
0
03-Feb-2023
10:54
ALSHS
Ser



HS23010982-GCSEMI-RSK-175

ALS WO# HS23010982

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Form 1

Organic Analysis Data Sheet

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

HS23010982-01		Collected	Received	Matrix	Basis
16WW48-230119		01/19/23 08:25	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 09:45	FID-4_426956	004
Ethene	mg/L	0.0156		0.000234	0.00100	0.00100	1	01/27/23 09:45	FID-4_426956	004
Methane	mg/L	0.0258		0.000107	0.000500	0.000500	1	01/27/23 09:45	FID-4_426956	004

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

HS23010982-02	Collected	Received	Matrix	Basis
16RW04-230119	01/19/23 09:10	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00186		0.000144	0.00100	0.00100	1	01/27/23 09:53	FID-4_426956	005
Ethene	mg/L	0.00170		0.000234	0.00100	0.00100	1	01/27/23 09:53	FID-4_426956	005
Methane	mg/L	0.101		0.000535	0.00250	0.00250	5	01/27/23 12:29	FID-4_426956	020

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

HS23010982-03		Collected	Received	Matrix	Basis
16IW09-230119		01/19/23 09:55	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 10:03	FID-4_426956	006
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	01/27/23 10:03	FID-4_426956	006
Methane	mg/L	9.72		0.0535	0.250	0.250	500	01/27/23 13:02	FID-4_426956	023

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

HS23010982-04		Collected	Received	Matrix	Basis
16IW20-230119		01/19/23 10:45	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 10:11	FID-4_426956	007
Ethene	mg/L	0.0336		0.000234	0.00100	0.00100	1	01/27/23 10:11	FID-4_426956	007
Methane	mg/L	6.27		0.0535	0.250	0.250	500	01/27/23 13:10	FID-4_426956	024

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

HS23010982-05		Collected	Received	Matrix	Basis
16EW02-230119		01/19/23 11:35	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 10:22	FID-4_426956	008
Ethene	mg/L	0.436		0.00585	0.0250	0.0250	25	01/27/23 13:19	FID-4_426956	025
Methane	mg/L	0.437		0.00268	0.0125	0.0125	25	01/27/23 13:19	FID-4_426956	025

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

HS23010982-06		Collected	Received	Matrix	Basis
16EW03-230119		01/19/23 12:35	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 11:00	FID-4_426956	012
Ethene	mg/L	0.354		0.0234	0.100	0.100	100	01/27/23 13:28	FID-4_426956	026
Methane	mg/L	2.16		0.0107	0.0500	0.0500	100	01/27/23 13:28	FID-4_426956	026

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

MBLK-230127

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

MBLK-230127

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 09:29	FID-4_426956	002
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	01/27/23 09:29	FID-4_426956	002
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	01/27/23 09:29	FID-4_426956	002

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23010982**

16EW02-230119			HS23010982-05		HS23010982-05MS				HS23010982-05MSD						
Sample Matrix	Aqueous	Run Date	01/27/23		01/27/23				01/27/23						
Units	ug/L	Run Time	10:22		10:31				10:40						
		Data File	008.D		009.D				010.D						
Analyte	%R Limits	DF	Result		MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0		45.78	18.04	254	*	41.83	18.04	232	*	30	9.00	
Ethene	75-125	1	470.1		450.6	16.80	-116	*	450.4	16.80	-117	*	30	0	
Methane	75-125	1	413.4		394.3	9.647	-198	*	391.3	9.647	-229	*	30	0.800	

			HS23010986-05		HS23010986-05MS				HS23010986-05MSD						
Sample Matrix	Aqueous	Run Date	01/27/23		01/27/23				01/27/23						
Units	ug/L	Run Time	11:37		11:47				11:56						
		Data File	015.D		016.D				017.D						
Analyte	%R Limits	DF	Result		MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0		28.71	18.04	159	*	27.45	18.04	152	*	30	4.50	
Ethene	75-125	1	7.751		28.21	16.80	122		28.76	16.80	125	*	30	1.90	
Methane	75-125	1	64.70		60.97	9.647	-39	*	60.43	9.647	-44	*	30	0.900	

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

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Form 3B

Laboratory Control Sample Recovery

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

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Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

FID-4_426956		QC ID	LCS-230127			
QC Matrix Aqueous	Units	Run Date	01/27/23			
	mg/L	Run Time	09:37			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
Ethane	75-125	0.01804	0.0203	112		
Ethene	75-125	0.0168	0.0194	116		
Methane	75-125	0.009647	0.00914	95		

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

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Form 4

Method Blank Summary

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230127	002.D	01/27/23 09:29	FID-4_426956
LCS-230127	LCS	LCS-230127	003.D	01/27/23 09:37	FID-4_426956
16WW48-230119	SAMP	HS23010982-01	004.D	01/27/23 09:45	FID-4_426956
16RW04-230119	SAMP	HS23010982-02	005.D	01/27/23 09:53	FID-4_426956
16IW09-230119	SAMP	HS23010982-03	006.D	01/27/23 10:03	FID-4_426956
16IW20-230119	SAMP	HS23010982-04	007.D	01/27/23 10:11	FID-4_426956
16EW02-230119	SAMP	HS23010982-05	008.D	01/27/23 10:22	FID-4_426956
16EW02-230119	MS	HS23010982-05MS	009.D	01/27/23 10:31	FID-4_426956
16EW02-230119	MSD	HS23010982-05MSD	010.D	01/27/23 10:40	FID-4_426956
16EW03-230119	SAMP	HS23010982-06	012.D	01/27/23 11:00	FID-4_426956
BatchQC	MS	HS23010986-05MS	016.D	01/27/23 11:47	FID-4_426956
BatchQC	MSD	HS23010986-05MSD	017.D	01/27/23 11:56	FID-4_426956
16RW04-230119	SAMP	HS23010982-02	020.D	01/27/23 12:29	FID-4_426956
16IW09-230119	SAMP	HS23010982-03	023.D	01/27/23 13:02	FID-4_426956
16IW20-230119	SAMP	HS23010982-04	024.D	01/27/23 13:10	FID-4_426956
16EW02-230119	SAMP	HS23010982-05	025.D	01/27/23 13:19	FID-4_426956
16EW03-230119	SAMP	HS23010982-06	026.D	01/27/23 13:28	FID-4_426956

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Form 6

Initial Calibration Data

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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10450 Stancliff Road, Suite 210, Houston, TX 77099
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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID FID-4_322102

Semi-Volatiles by RSK-175

ICAL Start Date 24-JAN-2017 0906
ICAL End Date 24-JAN-2017 1113

Calibration Files

Calibration File Names

Level 1 ..FID-4.i\170124.b\001.D
Level 2 ..FID-4.i\170124.b\002.D
Level 3 ..FID-4.i\170124.b\003.D
Level 4 ..FID-4.i\170124.b\004.D
Level 5 ..FID-4.i\170124.b\005.D
Level 6 ..FID-4.i\170124.b\006.D
Level 7 ..FID-4.i\170124.b\007.D

Compound	Level 1 10.00 Level 7 1000.0	Level 2 25.00	Level 3 50.00	Level 4 100.00	Level 5 250.00	Level 6 500.00	Curve	b	m1	m2	%RSD or R^2	Q
Methane	969 1082	978	1020	881	961	931	AVRG		974		6.55041	
Ethene	536 829	567	565	516	665	426	AVRG		586		21.93197	
Ethane	602 999	670	659	597	809	818	AVRG		736		19.88517	
Propane	500 96509	1279	2602	4785	18294	38286	QUAD	0.97987	0.00153	-4.583e-00	0.99914	
N-Butane	438 114164	936	2034	3864	18446	42817	QUAD	2.46870	0.00183	-5.537e-00	0.99808	
Pentane	115 488	3945	2080	950	501	412	AVRG		1213		112	*

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

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Form 6I

Initial Calibration Verification (ICV)

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23010982

RunID FID-4_322102

Semi-Volatiles by RSK-175

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
Methane	9.647	9.597	99.49	75-125	
Ethene	16.800	19.090	113.63	75-125	
Ethane	18.043	19.657	108.95	75-125	
Propane	26.463	27.238	102.93	75-125	
N-Butane	34.955	36.010	103.02	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Phone (281) 530-5656 Fax (281) 530-5887
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Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 0918
Lab File ID 001.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	991	991	0.010	-1.66121	20.0	Averaged	
Ethene	586	698	698	0.010	-19.16843	20.0	Averaged	
Ethane	719	858	858	0.010	-19.31363	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 1050
Lab File ID 011.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	941	941	0.010	3.44205	20.0	Averaged	
Ethene	586	629	629	0.010	-7.41572	20.0	Averaged	
Ethane	719	779	779	0.010	-8.33668	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 1254
Lab File ID 022.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	909	909	0.010	6.72728	20.0	Averaged	
Ethene	586	666	666	0.010	-13.68721	20.0	Averaged	
Ethane	719	771	771	0.010	-7.18122	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010982

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 1413
Lab File ID 031.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	889	889	0.010	8.81111	20.0	Averaged	
Ethene	586	670	670	0.010	-14.41669	20.0	Averaged	
Ethane	719	783	783	0.010	-8.84509	20.0	Averaged	

right solutions.
right partner.

Analysis Run Log

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

FID04 -Logbook

Batch: 26730 **Analyst:** Nosa Izekor

Date: 01-24-2017 **Reviewer:**

Method: RSK 175 ICAL **Laboratory:** Houston

Comments: Target Sequence 170124

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	ICAL1	CALIB_1	01-24-2017 09:06 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	NA
2	ICAL2	CALIB_2	01-24-2017 09:30 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	NA
3	ICAL3	CALIB_3	01-24-2017 09:59 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	NA
4	ICAL4	CALIB_4	01-24-2017 10:15 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	NA
5	ICAL5	CALIB_5	01-24-2017 10:39 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	NA
6	ICAL6	CALIB_6	01-24-2017 10:57 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	NA
7	ICAL7	CALIB_7	01-24-2017 11:13 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	NA
8	ICV	METHSPIKI	01-24-2017 12:05 pm	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	NA
9	LCS-170124	LCS	01-24-2017 12:24 pm	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	NA
10	LCSD-170124	LCSD	01-24-2017 12:40 pm	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	NA
11	MBLK-170124	MBLK	01-24-2017 12:57 pm	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	NA
12	HS17010778-01	SAMP	01-24-2017 01:14 pm	1.00	0.00 mL	0.00 mL	012.D	Liquid	Y	NA
13	HS17010779-01	SAMP	01-24-2017 01:31 pm	1.00	0.00 mL	0.00 mL	013.D	Liquid	Y	NA
14	HS17010779-01DUP	SAMP	01-24-2017 01:47 pm	1.00	0.00 mL	0.00 mL	014.D	Liquid	Y	NA
15	CCV	CCV	01-24-2017 02:01 pm	1.00	0.00 mL	0.00 mL	015.D	Liquid	Y	NA

Chemical	Value
ICAL STD ID	30010700217
ICV STD ID	30010700610

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010982

Semi-Volatiles by RSK-175

RUNID
FID-4_426956

Run ID FID-4_426956 **Start Date** 01/27/23 **EndDate** 01/27/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
RSK-CCV	CCV	RSK-CCV	001.D	01/27/23 09:18	1
MBLK-230127	MBLK	MBLK-230127	002.D	01/27/23 09:29	1
LCS-230127	LCS	LCS-230127	003.D	01/27/23 09:37	1
16WW48-230119	SAMP	HS23010982-01	004.D	01/27/23 09:45	1
16RW04-230119	SAMP	HS23010982-02	005.D	01/27/23 09:53	1
16IW09-230119	SAMP	HS23010982-03	006.D	01/27/23 10:03	1
16IW20-230119	SAMP	HS23010982-04	007.D	01/27/23 10:11	1
16EW02-230119	SAMP	HS23010982-05	008.D	01/27/23 10:22	1
16EW02-230119	MS	HS23010982-05MS	009.D	01/27/23 10:31	1
16EW02-230119	MSD	HS23010982-05MSD	010.D	01/27/23 10:40	1
RSK-CCV	CCV	RSK-CCV	011.D	01/27/23 10:50	1
16EW03-230119	SAMP	HS23010982-06	012.D	01/27/23 11:00	1
BatchQC	MS	HS23010986-05MS	016.D	01/27/23 11:47	1
BatchQC	MSD	HS23010986-05MSD	017.D	01/27/23 11:56	1
16RW04-230119	SAMP	HS23010982-02	020.D	01/27/23 12:29	5
RSK-CCV	CCV	RSK-CCV	022.D	01/27/23 12:54	1
16IW09-230119	SAMP	HS23010982-03	023.D	01/27/23 13:02	500
16IW20-230119	SAMP	HS23010982-04	024.D	01/27/23 13:10	500
16EW02-230119	SAMP	HS23010982-05	025.D	01/27/23 13:19	25
16EW03-230119	SAMP	HS23010982-06	026.D	01/27/23 13:28	100
RSK-CCV	CCV	RSK-CCV	031.D	01/27/23 14:13	1

right solutions.
right partner.

Raw Data FID-4 322102

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	438	1.39800	3.271

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D

Date : 24-JAN-2017 09:06

Client ID: ICAL1

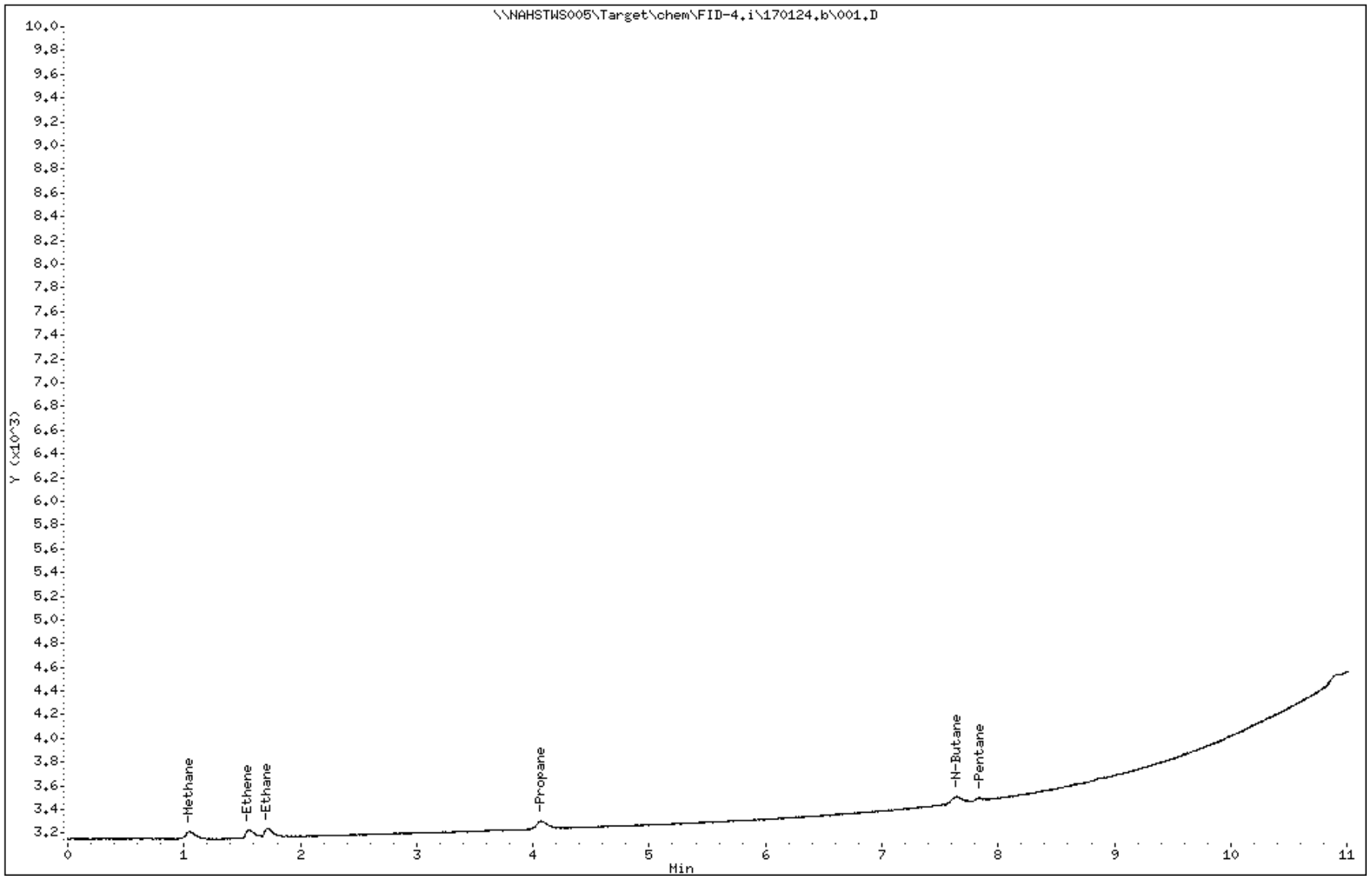
Instrument: FID-4.i

Sample Info: ICAL1;ICAL1;;;

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Inj Date : 24-JAN-2017 09:06
InstruID : FID-4.i
LabSampID : ICAL1

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	944	0.96500	0.968
2 Ethene	1.560	1.560	0.000	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.123	0.000	1279	2.64600	2.927
5 N-Butane	7.716	7.716	0.000	936	3.49600	4.180

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D

Date : 24-JAN-2017 09:30

Client ID: ICAL2

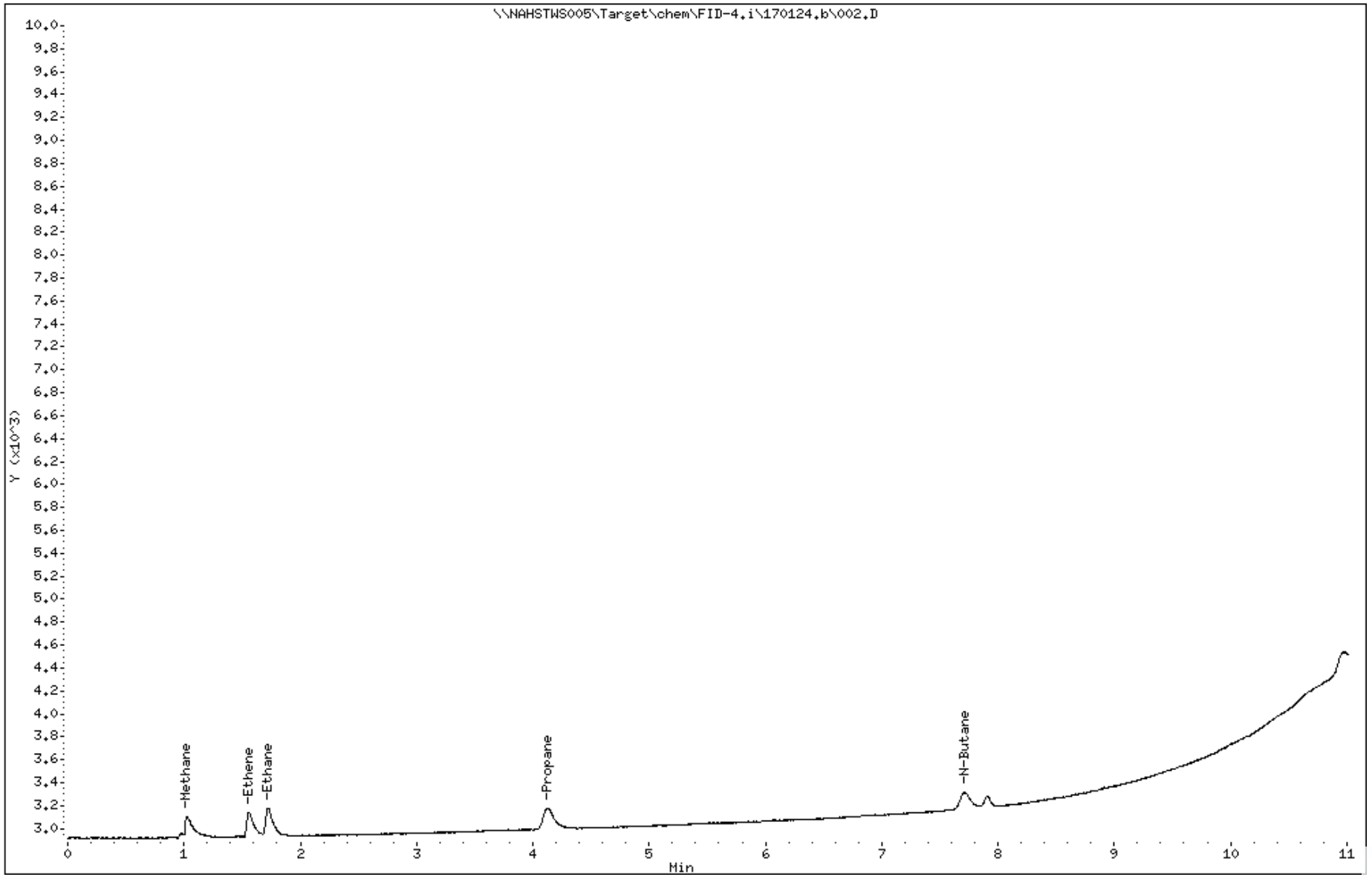
Instrument: FID-4.i

Sample Info: ICAL2;ICAL2;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Inj Date : 24-JAN-2017 09:30
InstruID : FID-4.i
LabSampID : ICAL2

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	1967	1.92900	2.018
2 Ethene	1.570	1.570	0.000	1904	3.37000	3.247
3 Ethane	1.736	1.736	0.000	2378	3.60900	3.229
4 Propane	4.123	4.123	0.000	2602	5.29300	4.926
5 N-Butane	7.703	7.703	0.000	2034	6.99100	6.176

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D

Date : 24-JAN-2017 09:59

Client ID: ICAL3

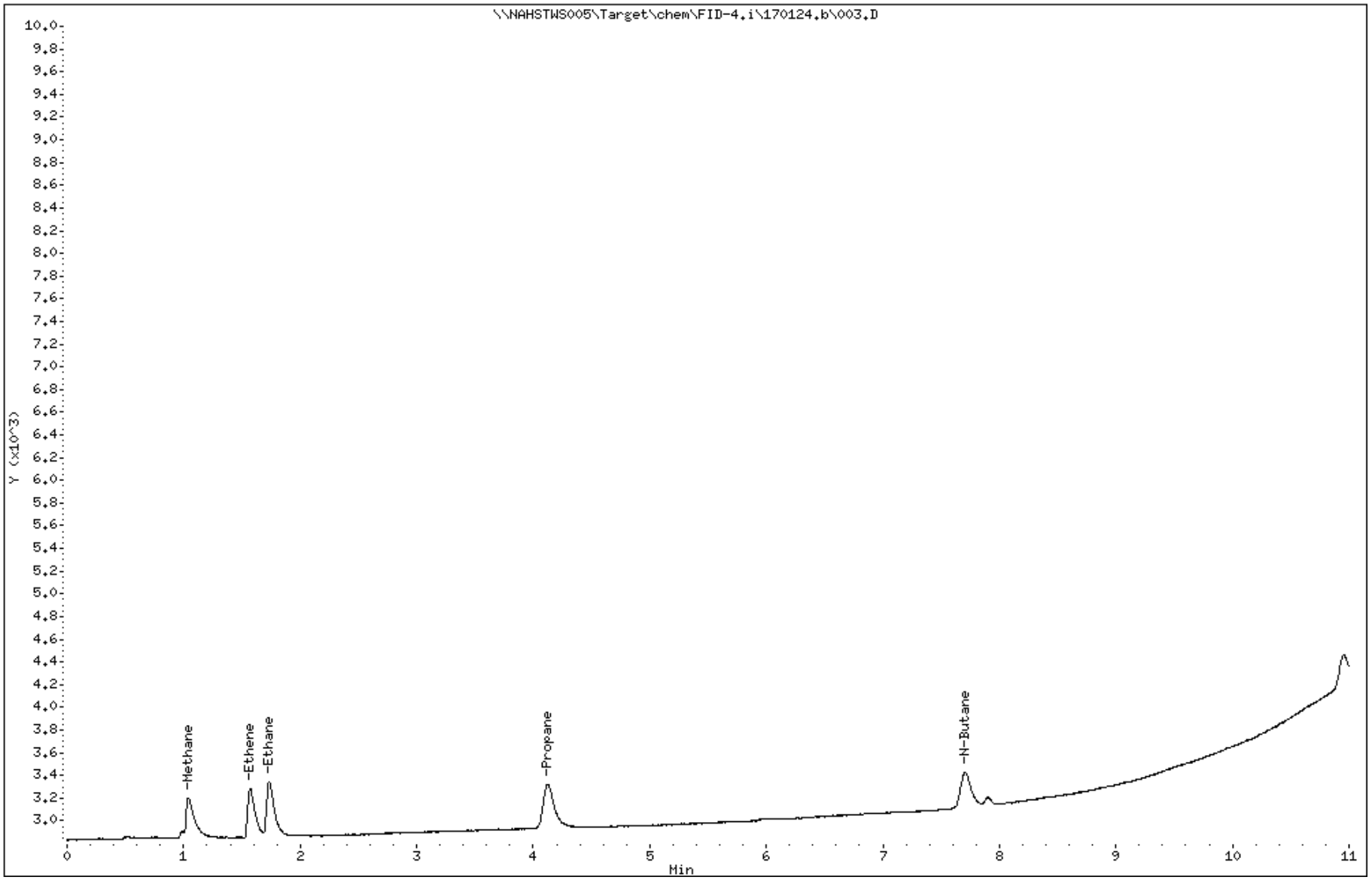
Instrument: FID-4.i

Sample Info: ICAL3;ICAL3;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Inj Date : 24-JAN-2017 09:59
InstruID : FID-4.i
LabSampID : ICAL3

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D Page 1
Report Date: 28-Sep-2022 10:02

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

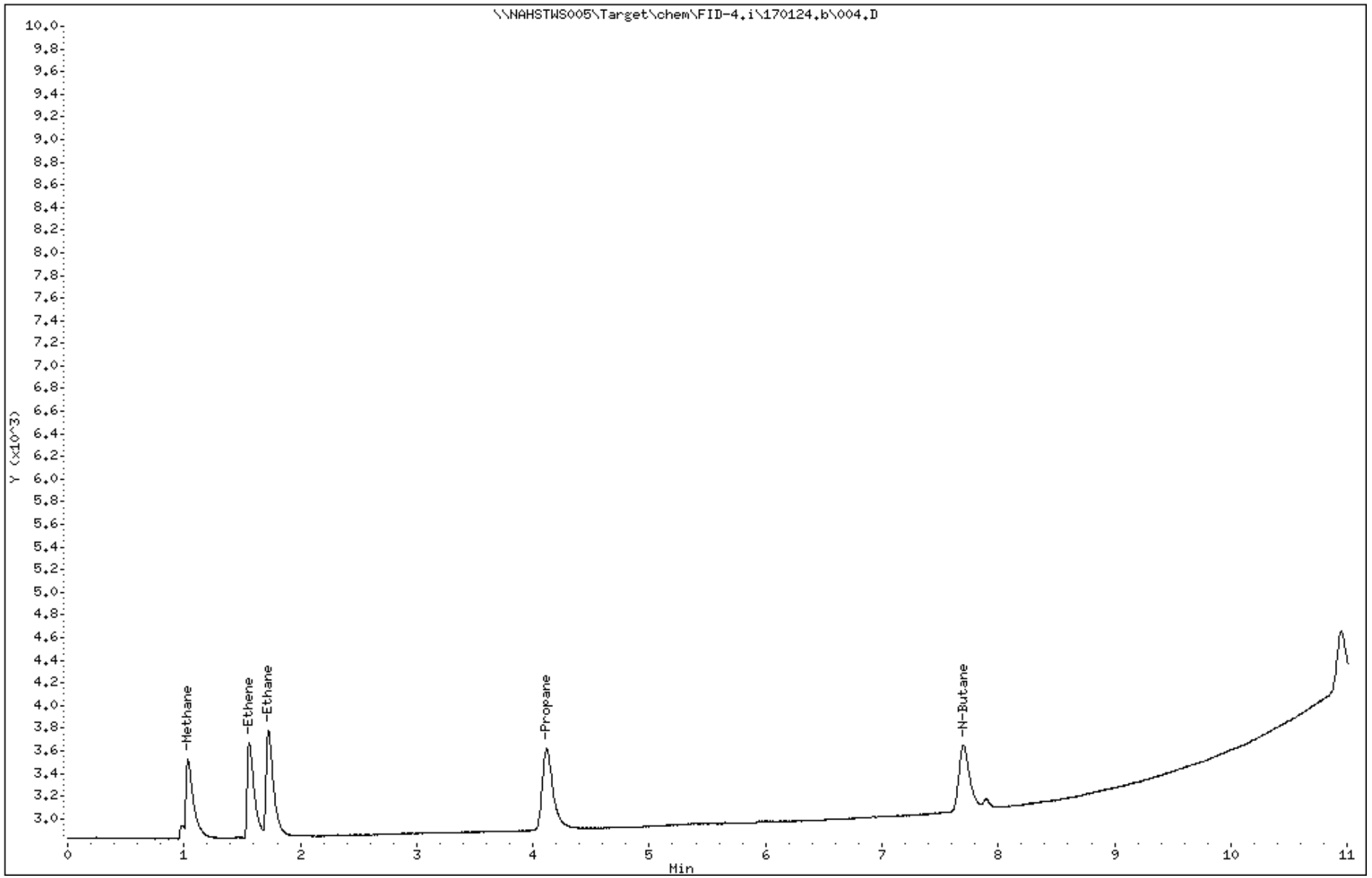
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



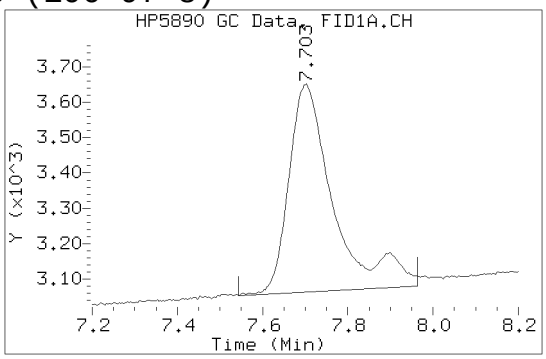
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

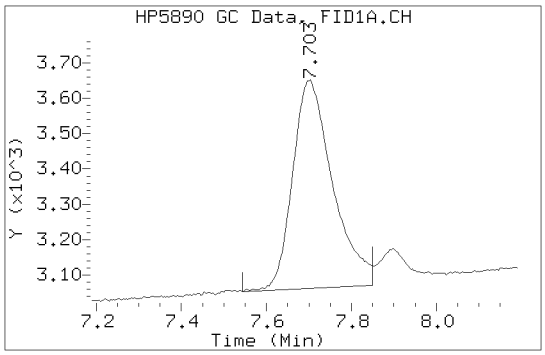
BEFORE

MASS
100
AREA
4292
HEIGHT
591
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
3864
HEIGHT
591
28-Sep-2022
10:02
linh
pham



Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D Page 1
Report Date: 28-Sep-2022 10:02

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	9268	9.64700	9.511
2 Ethene	1.570	1.570	0.000	11210	16.8500	19.121
3 Ethane	1.733	1.733	0.000	14588	18.0430	19.811
4 Propane	4.120	4.120	0.000	18294	26.4630	27.415
5 N-Butane	7.700	7.700	0.000	18446	34.9550	34.419(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D

Date : 24-JAN-2017 10:39

Client ID: ICAL5

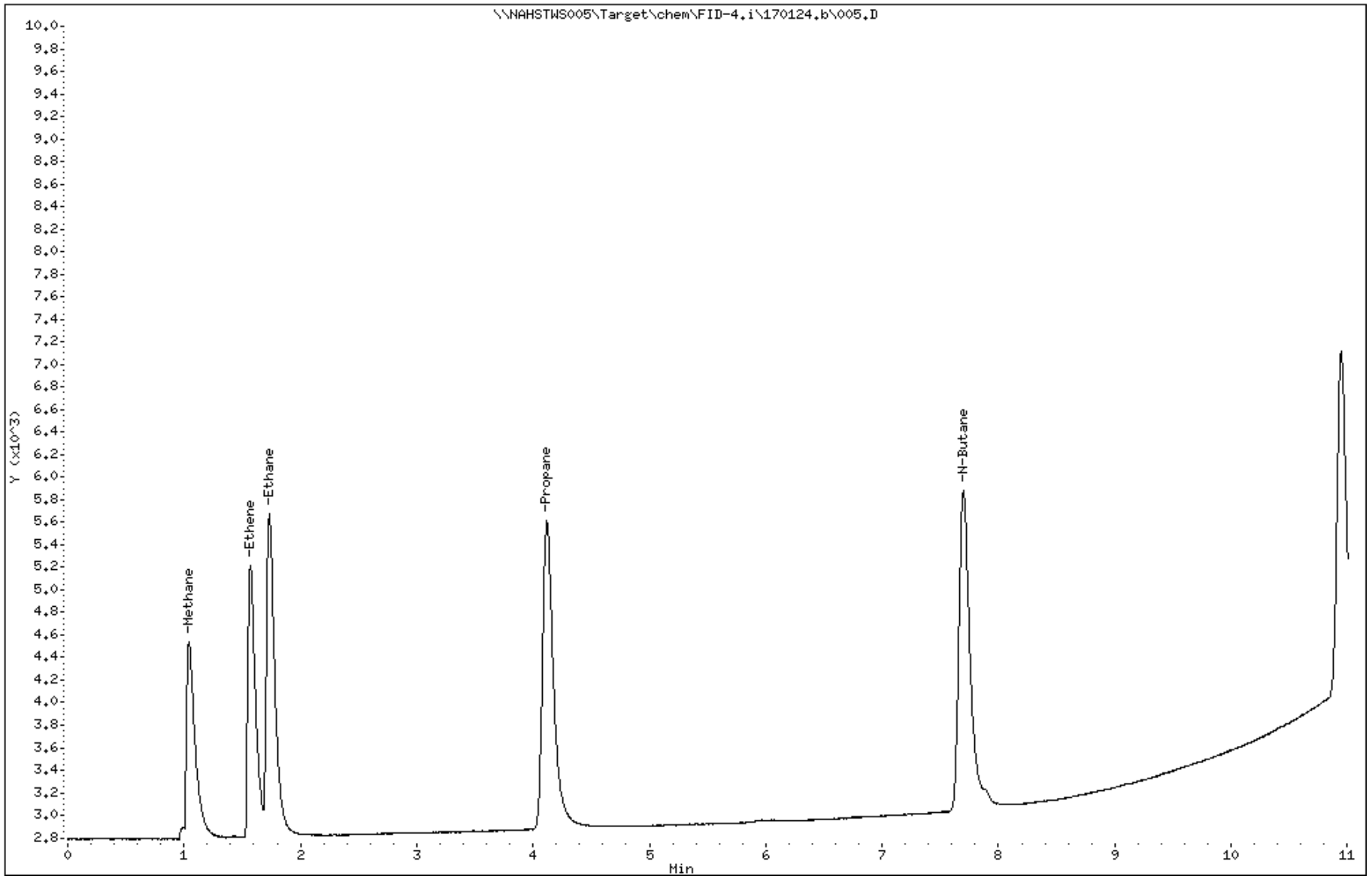
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



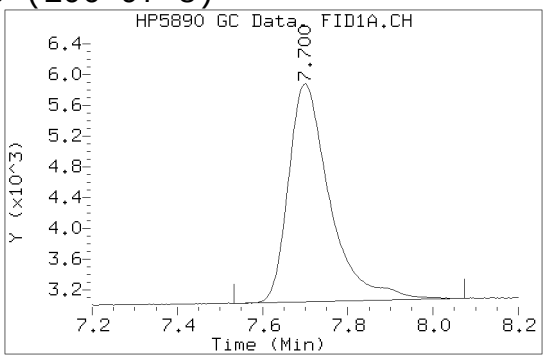
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

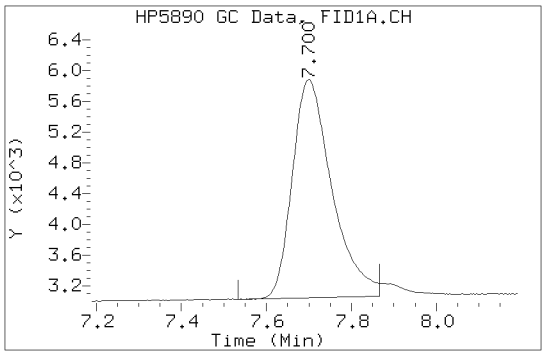
BEFORE

MASS
100
AREA
19142
HEIGHT
2839
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
18446
HEIGHT
2838
28-Sep-2022
10:02
linh
pham



Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

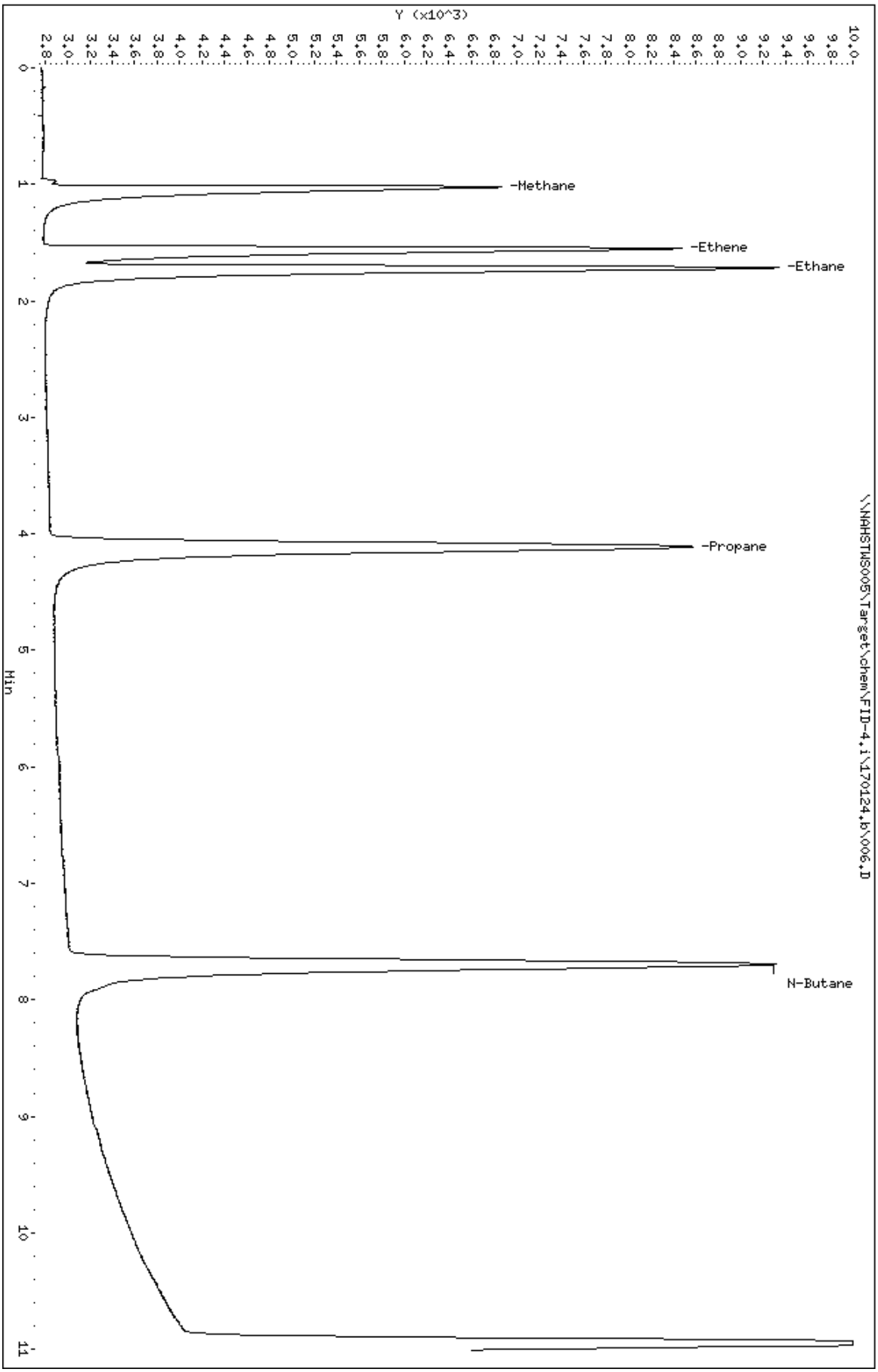
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	17957	19.2940	18.429
2 Ethene	1.550	1.550	0.000	22910	53.8200	39.078
3 Ethane	1.716	1.716	0.000	29505	36.0860	40.070
4 Propane	4.110	4.110	0.000	38286	52.9260	52.796
5 N-Butane	7.696	7.696	0.000	42817	69.9110	70.855

Data File: \\NAHSTWS005\Target\chem\FID-4,i\170124,b\006.D
Date : 24-JAN-2017 10:57
Client ID: ICAL6
Sample Info: ICAL6;ICAL6;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

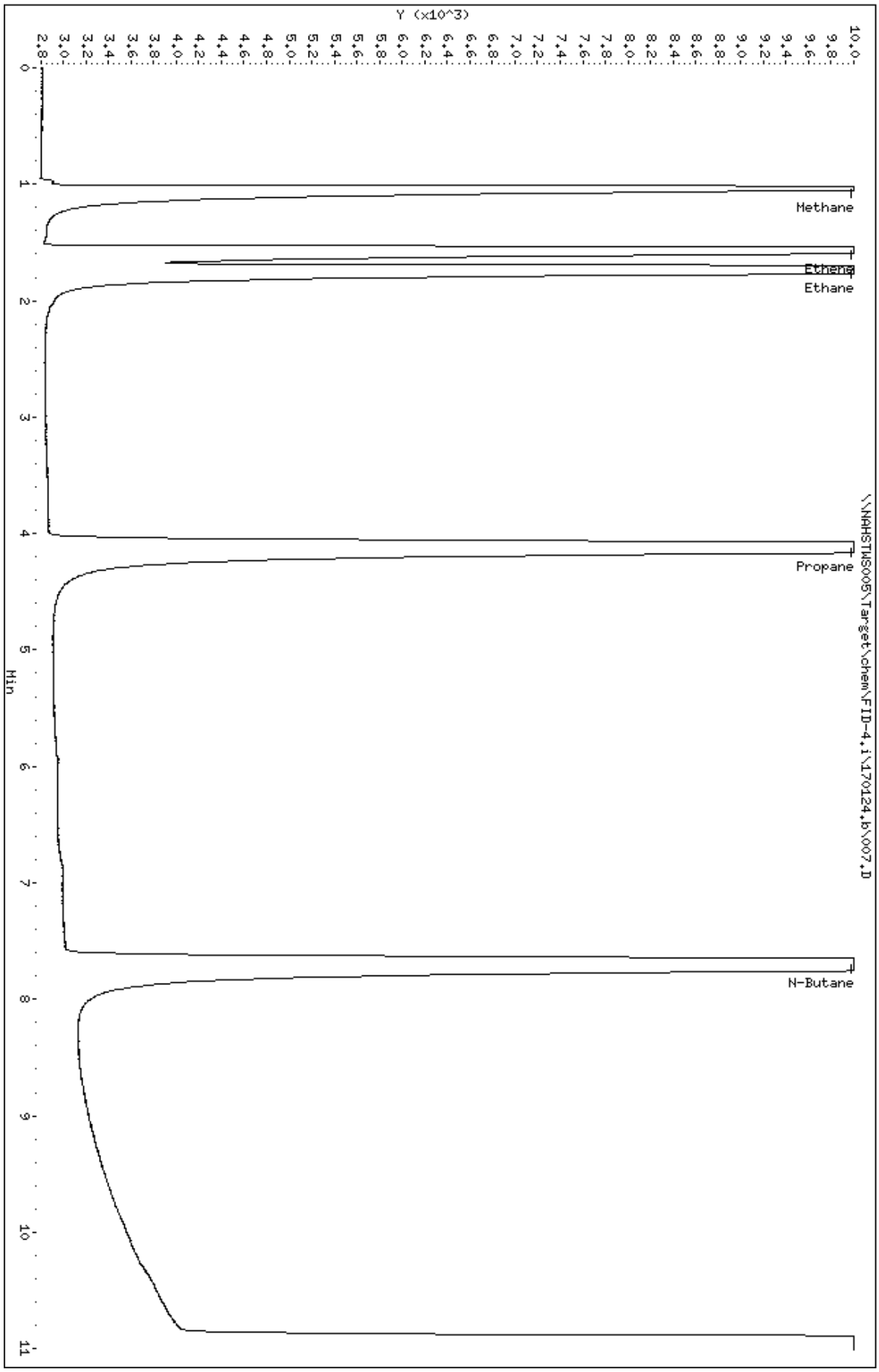
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.


Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Date : 24-JAN-2017 11:13
Client ID: ICAL7
Sample Info: ICAL7:ICAL7:::
Column phase: Rtx-PLOT
Instrument: FID-4.i
Operator: MA
Column diameter: 0.53
Page 1
Y (x10^3)
Methane
Ethene
Ethane
Propane
N-Butane
Min
\\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D

Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Inj Date : 24-JAN-2017 11:13
InstruID : FID-4.i
LabSampID : ICAL7

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D

Date : 24-JAN-2017 12:05

Client ID: ICV

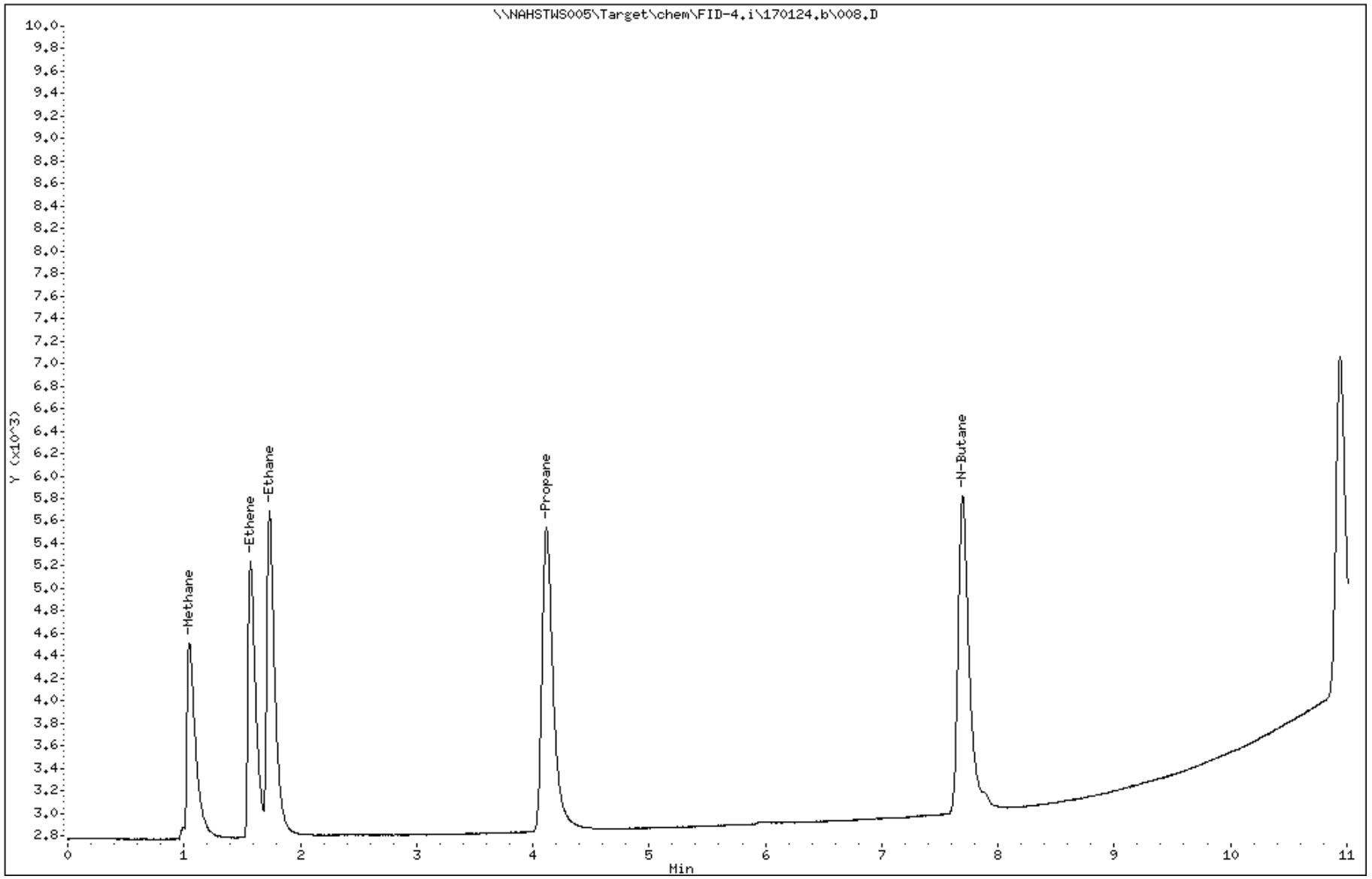
Instrument: FID-4.i

Sample Info: ICV;ICV;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Inj Date : 24-JAN-2017 12:05
InstruID : FID-4.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

right solutions.
right partner.

Raw Data FID-4 426956

Semi-Volatiles by RSK-175

Workorder

HS23010982

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D Page 1
Report Date: 16-Feb-2023 13:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 09:18
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 16-Feb-2023 13:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	9562	9.64700	9.807
2 Ethene	0.653	0.653	0.000	11762	16.8500	20.079
3 Ethane	0.723	0.723	0.000	15489	18.0430	21.527(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D

Date : 27-JAN-2023 09:18

Client ID: RSK-CCV

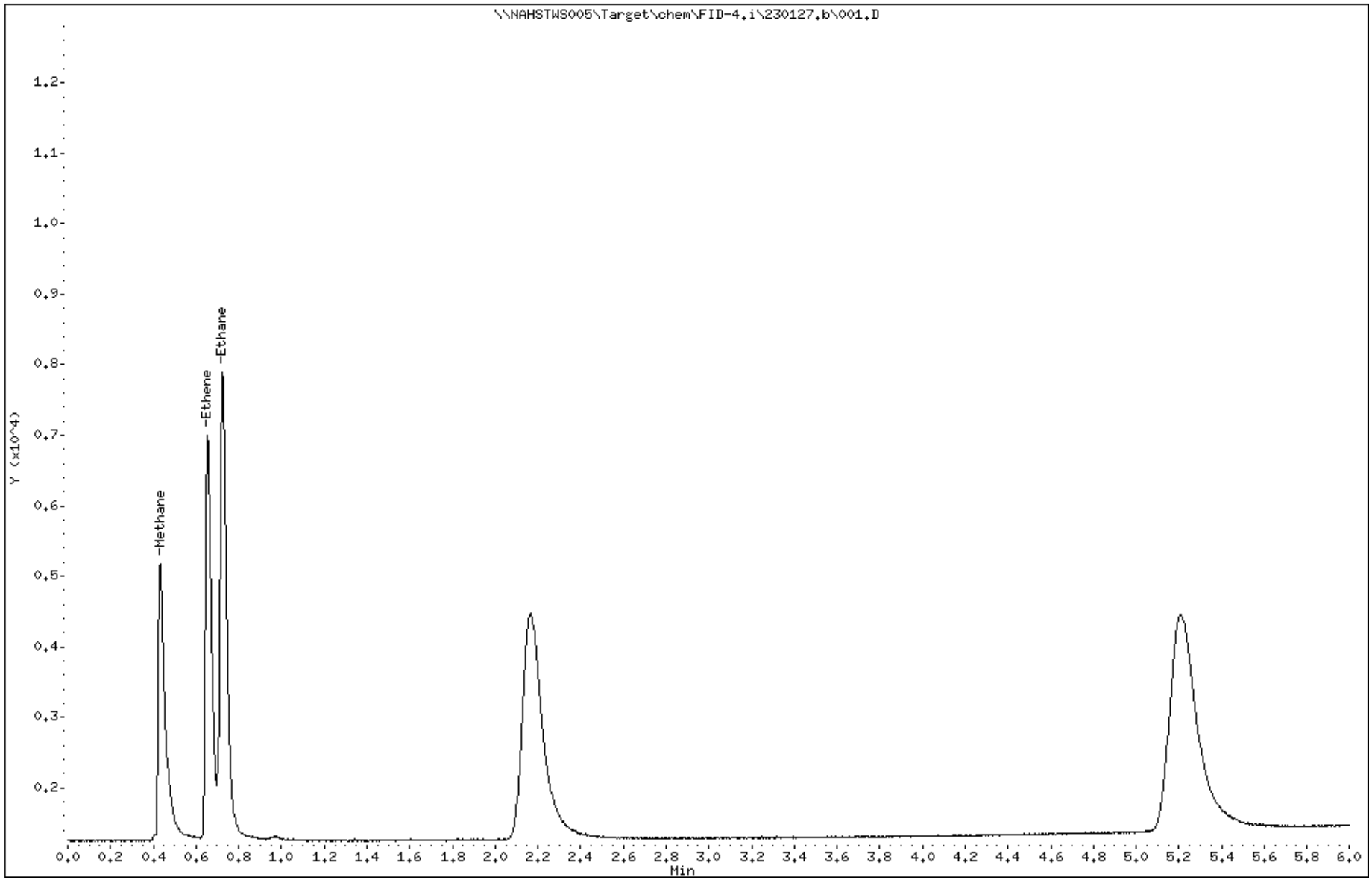
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



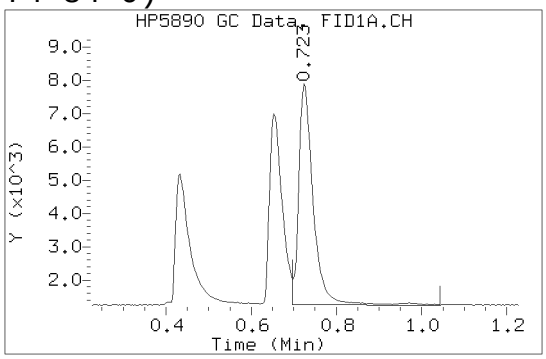
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D
Inj Date : 27-JAN-2023 09:18
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

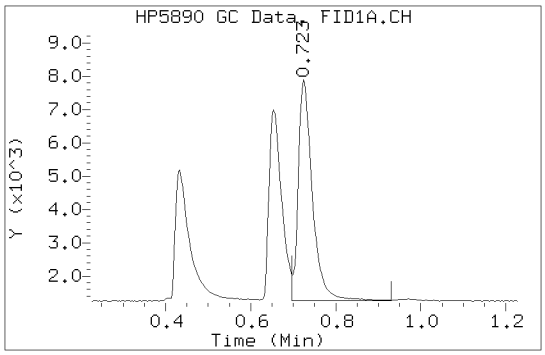
BEFORE

MASS
44
AREA
15617
HEIGHT
6635
27-Jan-2023
09:25
ALSHS
Server



AFTER

MASS
44
AREA
15489
HEIGHT
6634
16-Feb-2023
13:00
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D Page 1
Report Date: 27-Jan-2023 10:13

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D
Lab Smp Id: MBLK-230127 Client Smp ID: MBLK-230127
Inj Date : 27-JAN-2023 09:29
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230127;MBLK-230127;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 09:28 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D

Date : 27-JAN-2023 09:29

Client ID: MBLK-230127

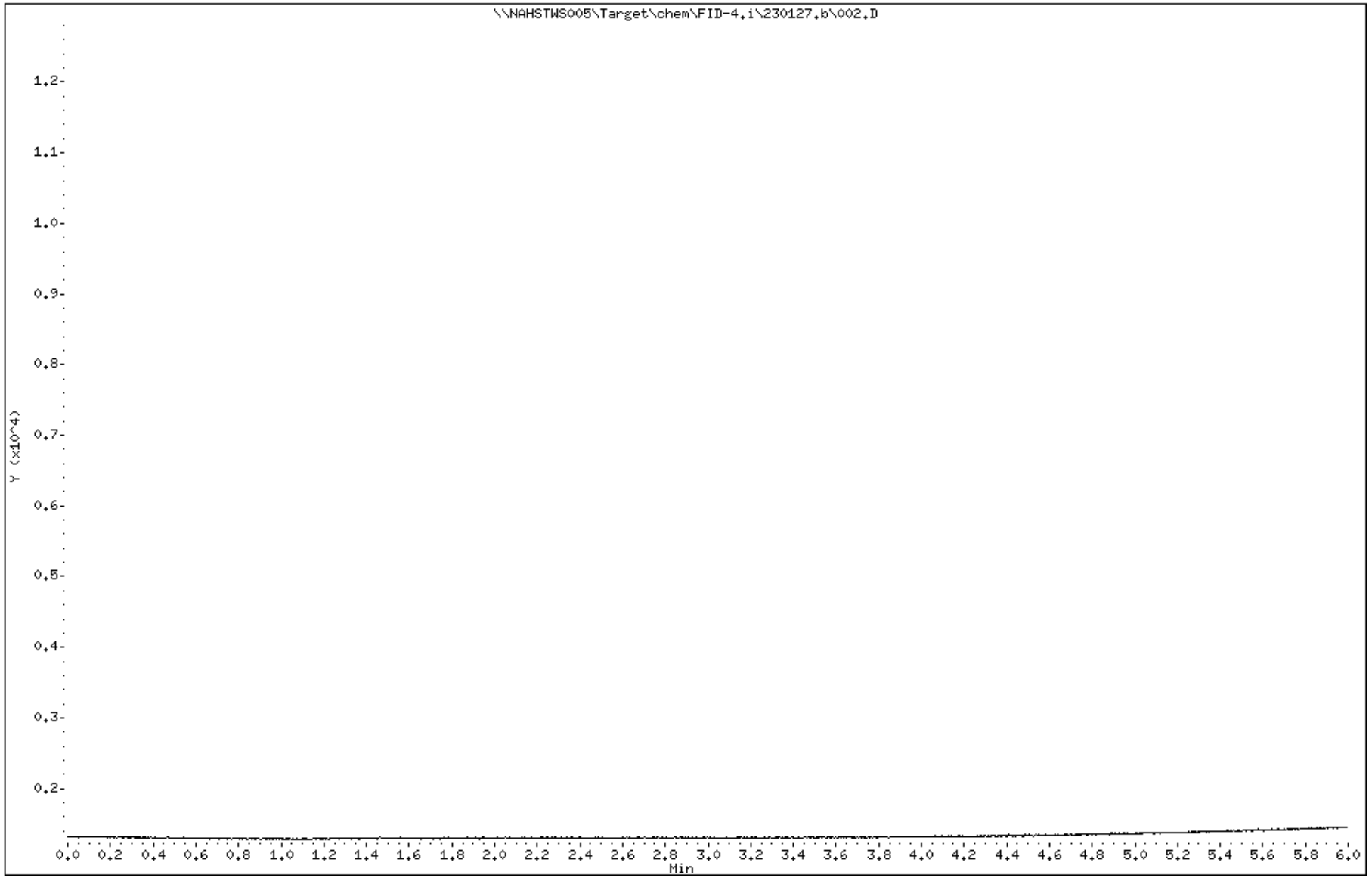
Instrument: FID-4.i

Sample Info: MBLK-230127;MBLK-230127;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D
Inj Date : 27-JAN-2023 09:29
InstruID : FID-4.i
LabSampID : MBLK-230127

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D Page 1
Report Date: 31-Jan-2023 14:19

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D
Lab Smp Id: LCS-230127
Inj Date : 27-JAN-2023 09:37
Operator : JA Inst ID: FID-4.i
Smp Info : LCS-230127;LCS-230127;3;;LCS
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.433	-0.003	8916	9.14469	9.144
2 Ethene	0.650	0.653	-0.003	11388	19.4414	19.441
3 Ethane	0.723	0.723	0.000	14576	20.2588	20.258(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D

Date : 27-JAN-2023 09:37

Client ID:

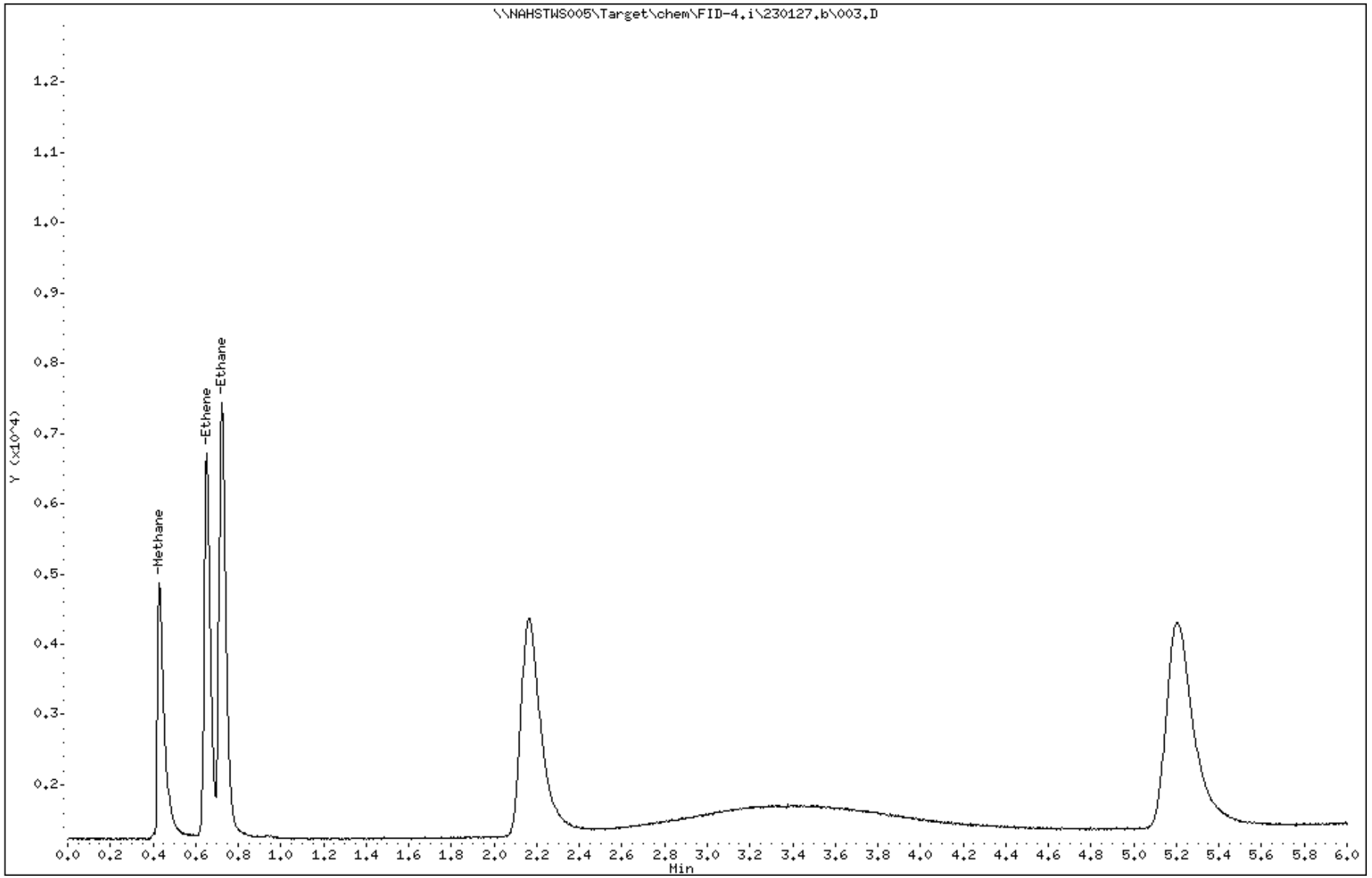
Instrument: FID-4.i

Sample Info: LCS-230127;LCS-230127;3;;LCS

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



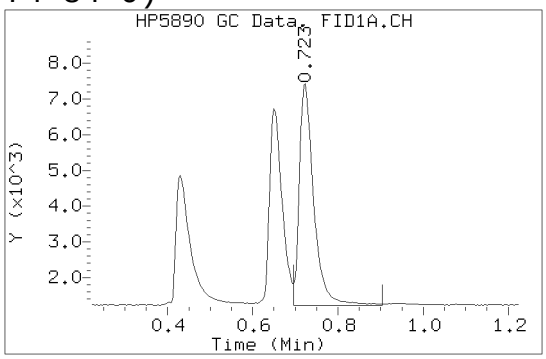
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D
Inj Date : 27-JAN-2023 09:37
InstruID : FID-4.i
LabSampID : LCS-230127

Ethane (74-84-0)

Reason Code:

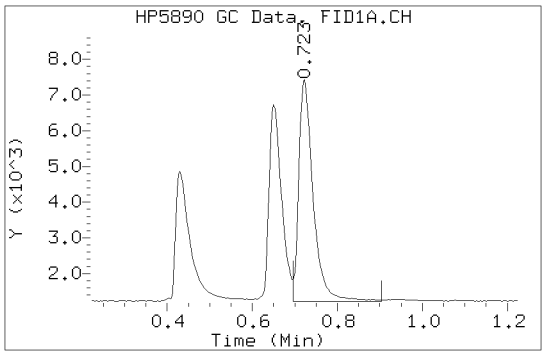
BEFORE

MASS
44
AREA
14576
HEIGHT
6200
31-Jan-2023
14:19
purvi
lad



AFTER

MASS
44
AREA
14576
HEIGHT
6200
31-Jan-2023
14:19
purvi
lad



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\004.D
Lab Smp Id: HS23010982-01
Inj Date : 27-JAN-2023 09:45
Operator : JA Inst ID: FID-4.i
Smp Info : HS23010982-01;HS23010982-01
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.426	0.433	-0.007	25171	25.8166	25.816(M)
2 Ethene	0.646	0.653	-0.007	9117	15.5644	15.564(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\004.D

Date : 27-JAN-2023 09:45

Client ID:

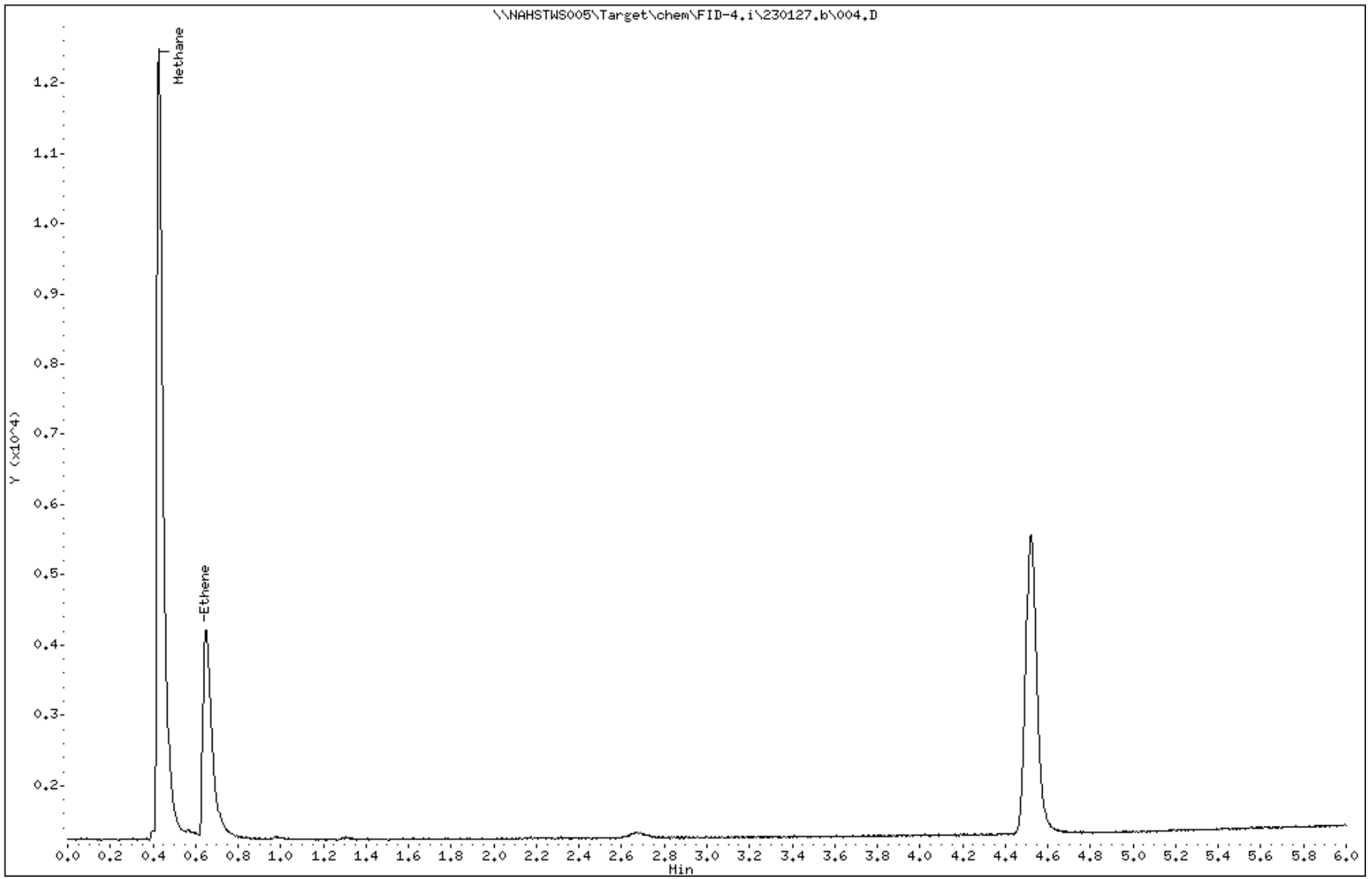
Instrument: FID-4.i

Sample Info: HS23010982-01;HS23010982-01

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



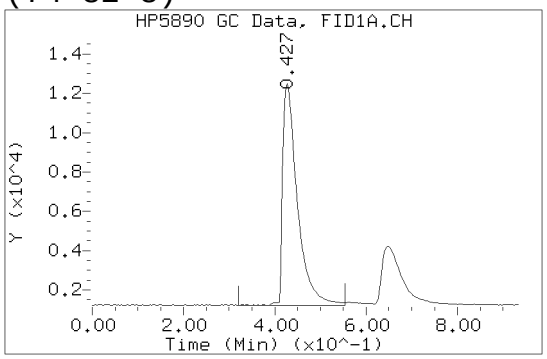
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\004.D
Inj Date : 27-JAN-2023 09:45
InstruID : FID-4.i
LabSampID : HS23010982-01

Methane (74-82-8)

Reason Code:

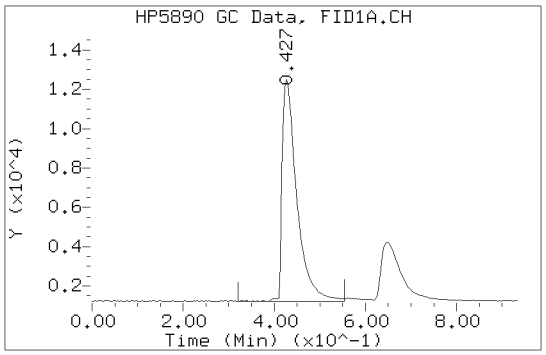
BEFORE

MASS
100
AREA
25171
HEIGHT
11263
31-Jan-2023
14:20
purvi
lad



AFTER

MASS
100
AREA
25171
HEIGHT
11263
31-Jan-2023
14:20
purvi
lad

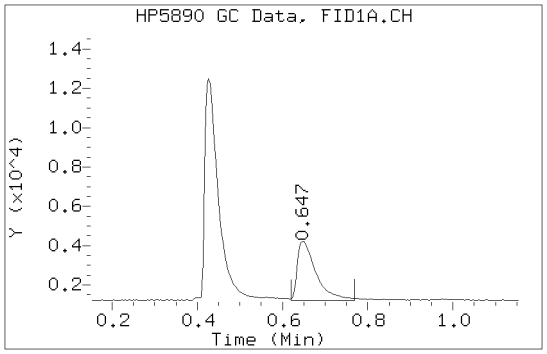


Ethene (74-85-1)

Reason Code:

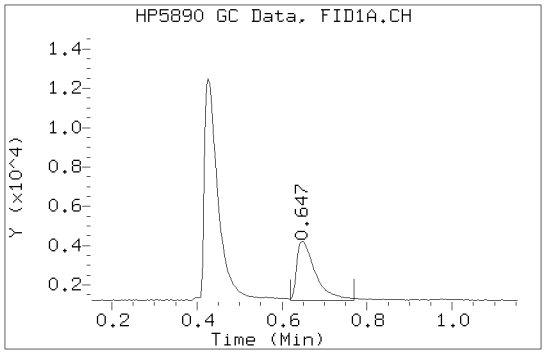
BEFORE

MASS
100
AREA
9117
HEIGHT
2984
31-Jan-2023
14:20
purvi
lad



AFTER

MASS
100
AREA
9117
HEIGHT
2984
31-Jan-2023
14:20
purvi
lad



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\005.D
Lab Smp Id: HS23010982-02
Inj Date : 27-JAN-2023 09:53
Operator : JA Inst ID: FID-4.i
Smp Info : HS23010982-02;HS23010982-02
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.426	0.433	-0.007	94790	97.2213	97.221(A)
2 Ethene	0.646	0.653	-0.007	997	1.70206	1.702(M)
3 Ethane	0.703	0.723	-0.020	1338	1.85965	1.859(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\005.D

Date : 27-JAN-2023 09:53

Client ID:

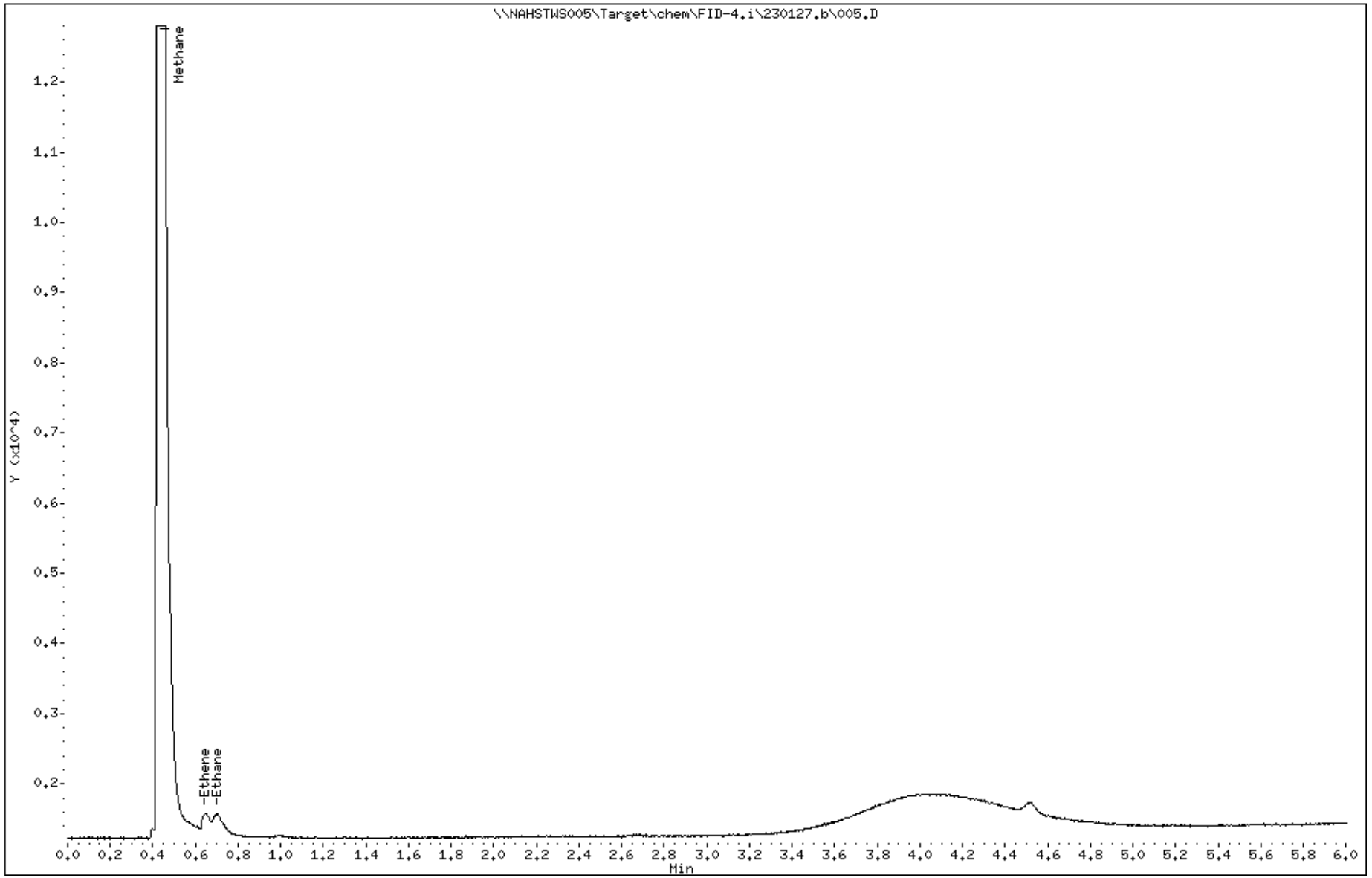
Instrument: FID-4.i

Sample Info: HS23010982-02;HS23010982-02

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



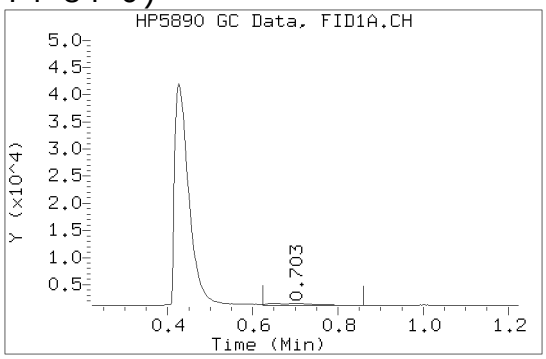
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\005.D
Inj Date : 27-JAN-2023 09:53
InstruID : FID-4.i
LabSampID : HS23010982-02

Ethane (74-84-0)

Reason Code:

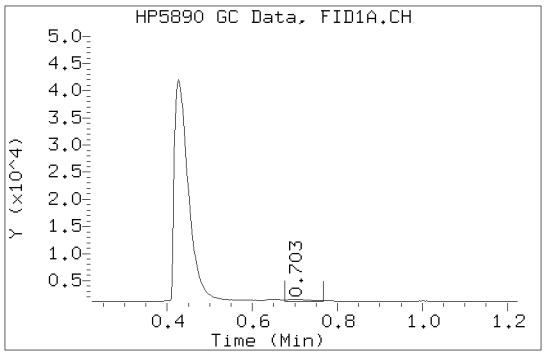
BEFORE

MASS
44
AREA
2389
HEIGHT
360
27-Jan-2023
10:14
purvi
lad



AFTER

MASS
44
AREA
1338
HEIGHT
370
31-Jan-2023
14:20
purvi
lad

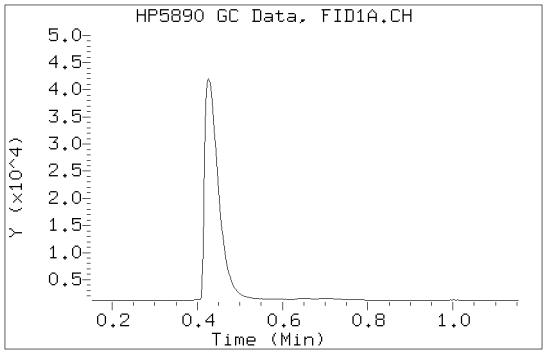


Ethene (74-85-1)

Reason Code:

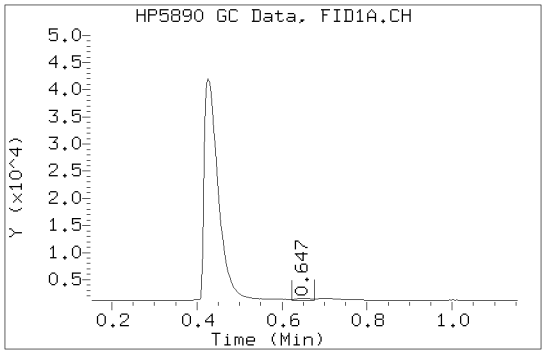
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
10:14
purvi
lad



AFTER

MASS
100
AREA
997
HEIGHT
376
31-Jan-2023
14:20
purvi
lad



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\006.D
Lab Smp Id: HS23010982-03
Inj Date : 27-JAN-2023 10:03
Operator : JA Inst ID: FID-4.i
Smp Info : HS23010982-03;HS23010982-03
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.433	-0.003	8666541	8888.83	8888.829(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\006.D

Date : 27-JAN-2023 10:03

Client ID:

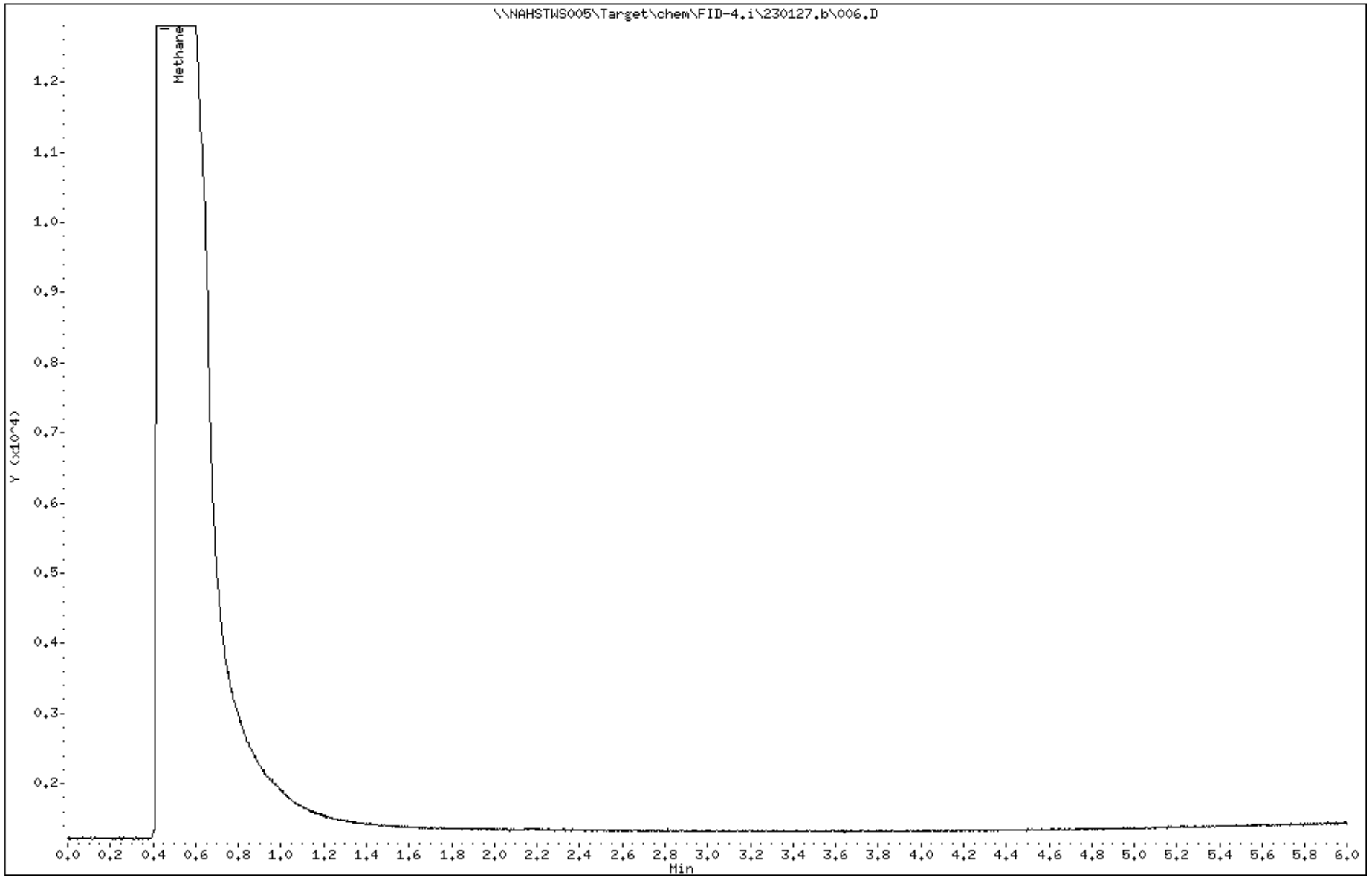
Instrument: FID-4.i

Sample Info: HS23010982-03;HS23010982-03

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\006.D
Inj Date : 27-JAN-2023 10:03
InstruID : FID-4.i
LabSampID : HS23010982-03

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\007.D
Lab Smp Id: HS23010982-04
Inj Date : 27-JAN-2023 10:11
Operator : JA Inst ID: FID-4.i
Smp Info : HS23010982-04;HS23010982-04
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.433	0.003	6291943	6453.33	6453.325(AM)
2 Ethene	0.643	0.653	-0.010	19680	33.5974	33.597(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\007.D

Date : 27-JAN-2023 10:11

Client ID:

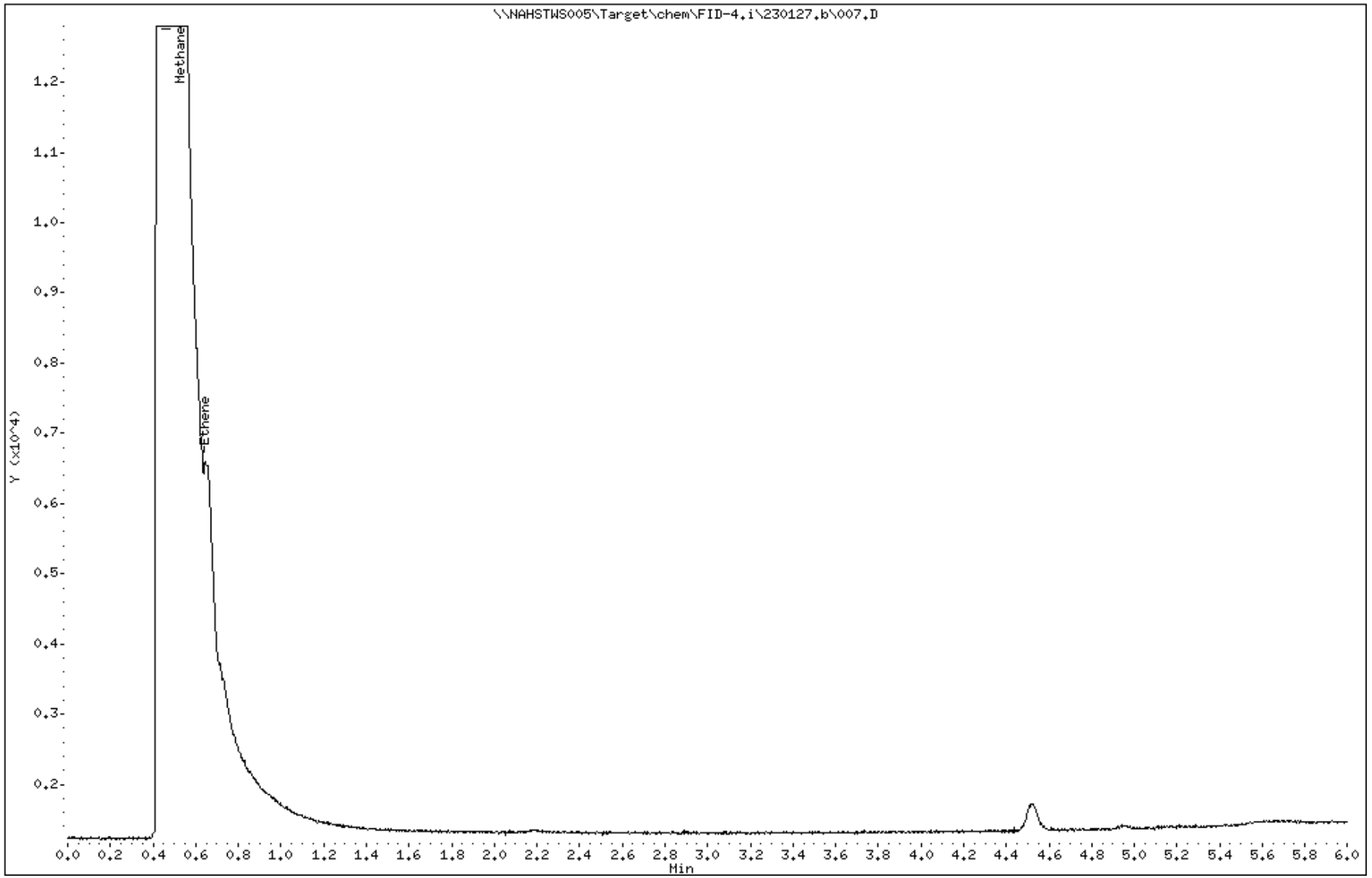
Instrument: FID-4.i

Sample Info: HS23010982-04;HS23010982-04

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53

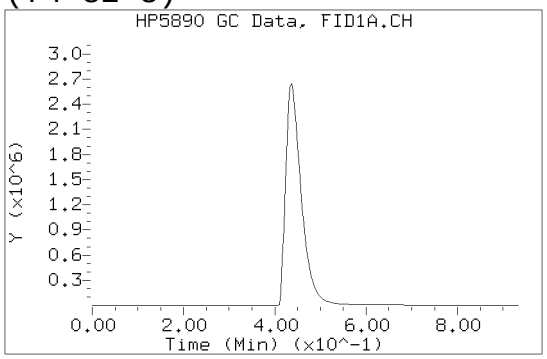


Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\007.D
Inj Date : 27-JAN-2023 10:11
InstruID : FID-4.i
LabSampID : HS23010982-04

Methane (74-82-8)

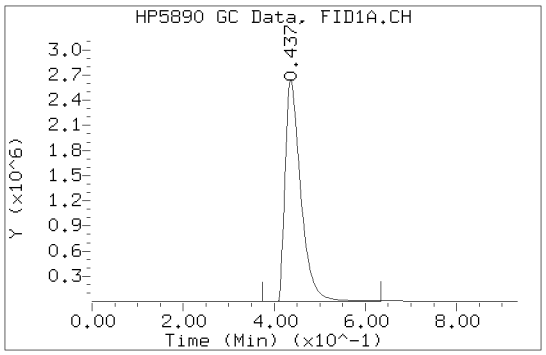
BEFORE

MASS
100
AREA
6335270
HEIGHT
2642788
27-Jan-2023
10:29
purvi
lad



AFTER

MASS
100
AREA
6291943
HEIGHT
2642787
16-Feb-2023
12:45
purvi
lad

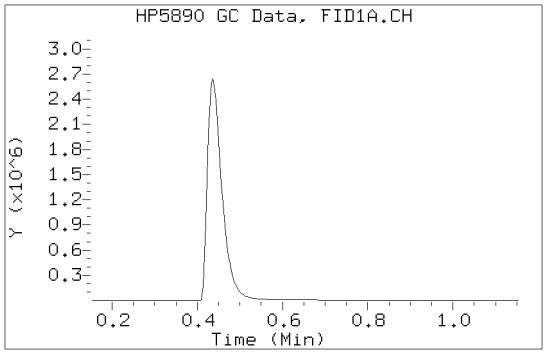


Reason Code:

Ethene (74-85-1)

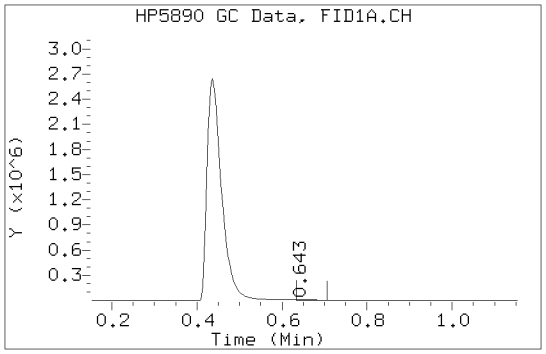
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
10:29
purvi
lad



AFTER

MASS
100
AREA
19680
HEIGHT
5367
16-Feb-2023
12:45
purvi
lad



Reason Code:

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\008.D
Lab Smp Id: HS23010982-05
Inj Date : 27-JAN-2023 10:22
Operator : JA Inst ID: FID-4.i
Smp Info : HS23010982-05;HS23010982-05
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.433	-0.010	403092	413.431	413.430(A)
2 Ethene	0.640	0.653	-0.013	275351	470.074	470.074(AM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\008.D

Date : 27-JAN-2023 10:22

Client ID:

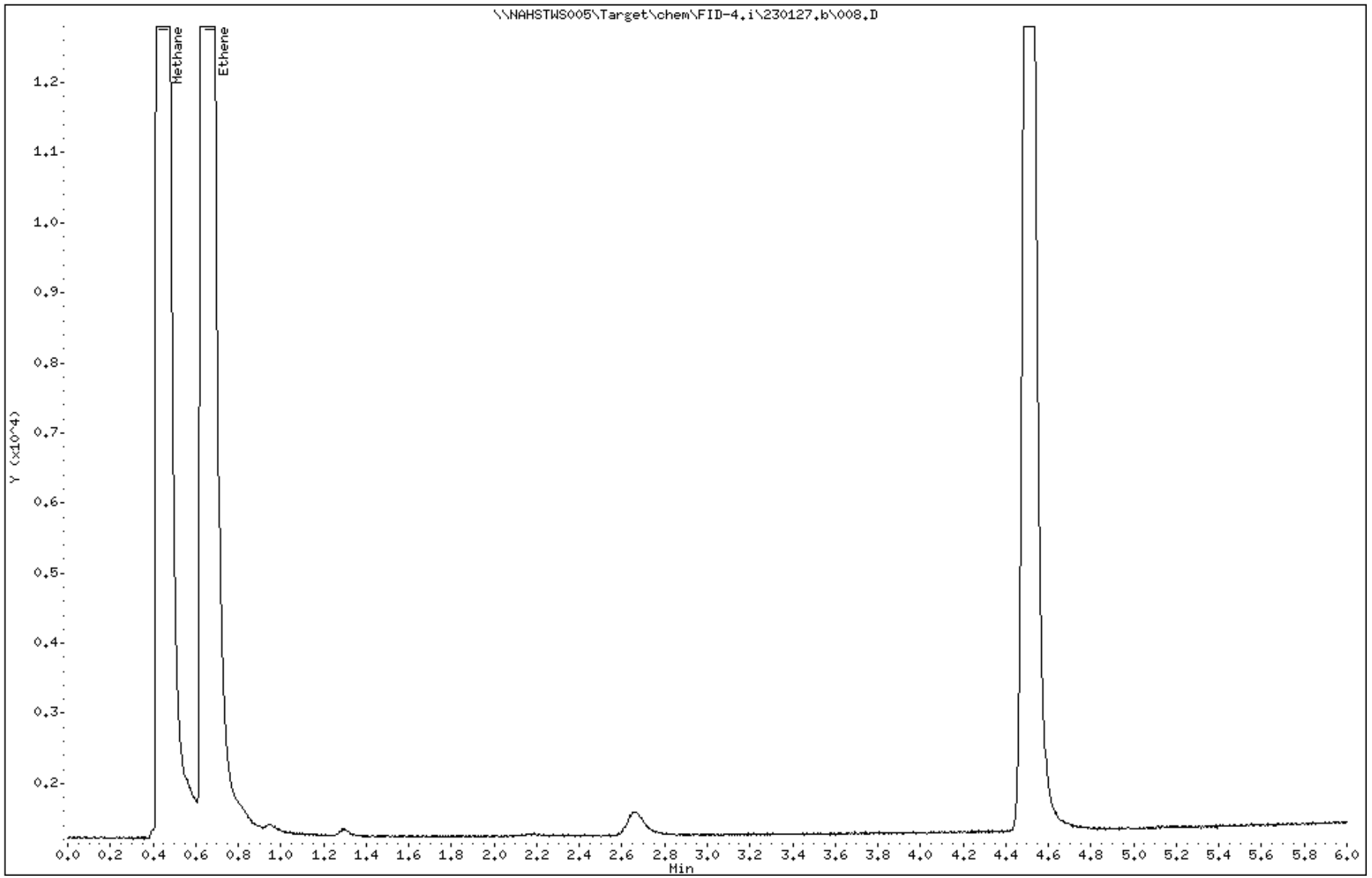
Instrument: FID-4.i

Sample Info: HS23010982-05;HS23010982-05

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



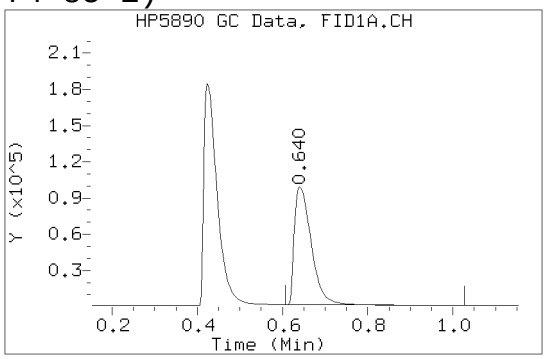
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\008.D
Inj Date : 27-JAN-2023 10:22
InstruID : FID-4.i
LabSampID : HS23010982-05

Ethene (74-85-1)

Reason Code:

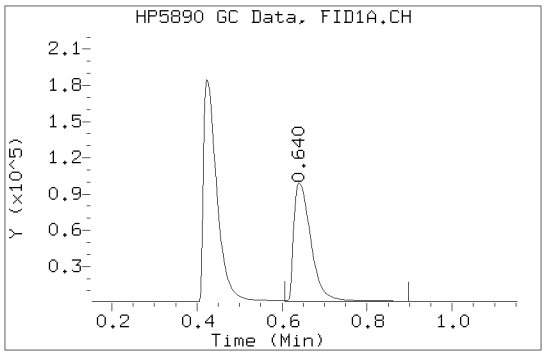
BEFORE

MASS
100
AREA
272386
HEIGHT
97938
27-Jan-2023
10:29
purvi
lad



AFTER

MASS
100
AREA
275351
HEIGHT
98168
31-Jan-2023
14:21
purvi
lad



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\009.D
Lab Smp Id: HS23010982-05MS Client Smp ID: HS23010982-05MS
Inj Date : 27-JAN-2023 10:31
Operator : JA Inst ID: FID-4.i
Smp Info : HS23010982-05MS;HS23010982-05MS
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 09:28 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.420	0.433	-0.013	384433	394.293	394.293(AR)
2 Ethene	0.636	0.653	-0.017	263936	450.587	450.586(ARM)
3 Ethane	0.693	0.723	-0.030	32937	45.7783	45.778(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\009.D

Date : 27-JAN-2023 10:31

Client ID: HS23010982-05MS

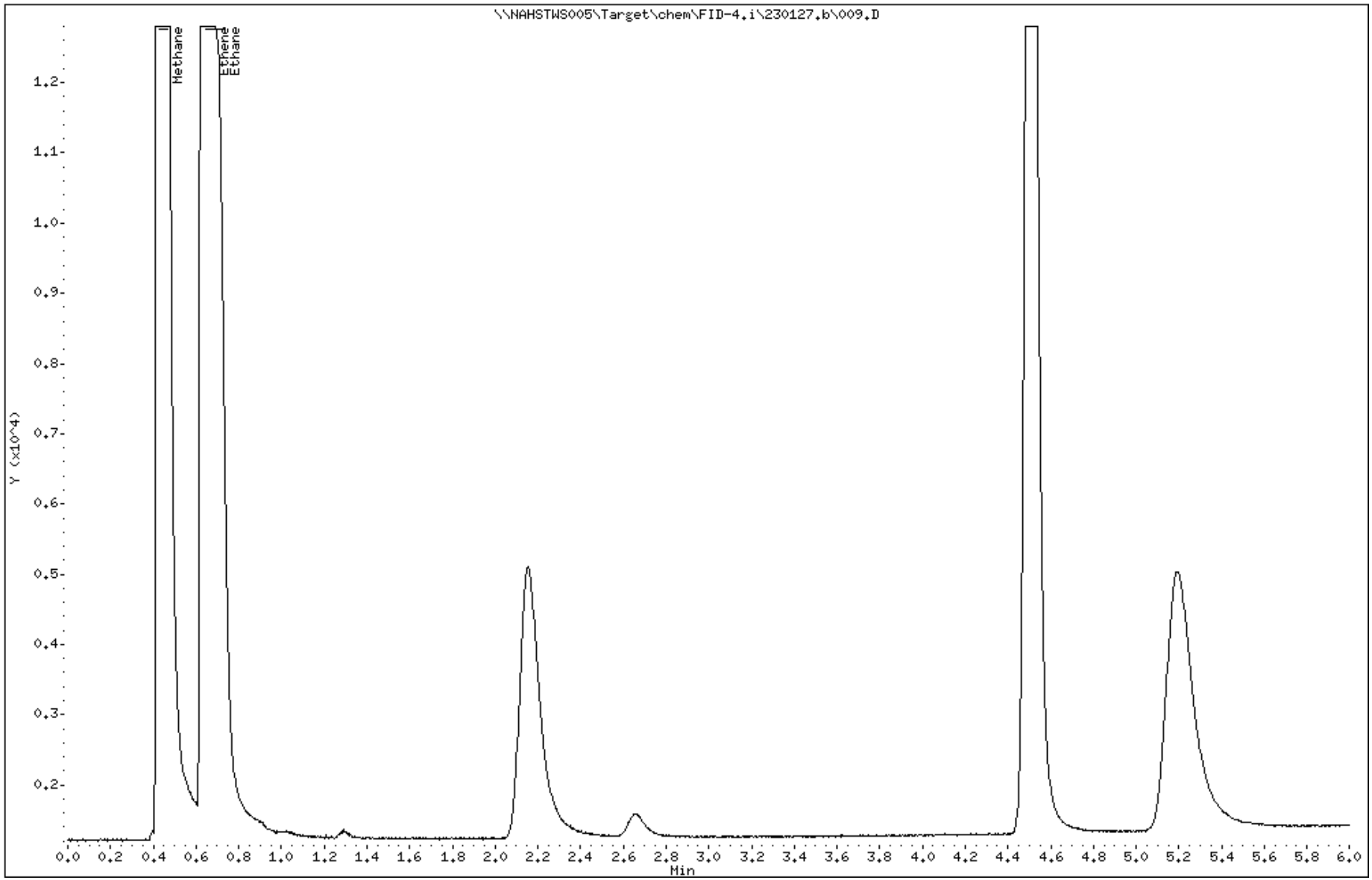
Instrument: FID-4.i

Sample Info: HS23010982-05MS;HS23010982-05MS

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



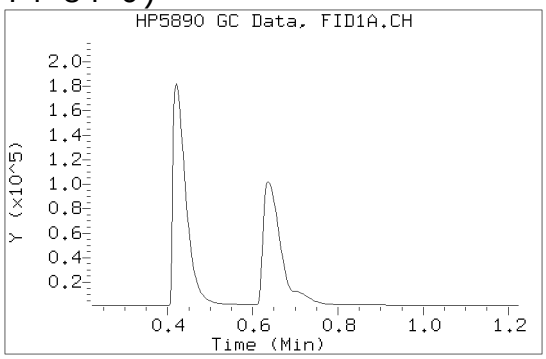
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\009.D
Inj Date : 27-JAN-2023 10:31
InstruID : FID-4.i
LabSampID : HS23010982-05MS

Ethane (74-84-0)

Reason Code:

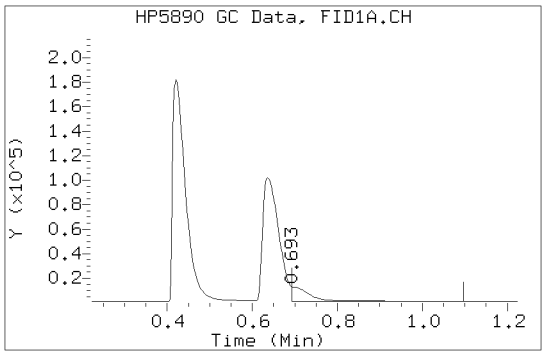
BEFORE

MASS
44
AREA
0
HEIGHT
0
27-Jan-2023
10:44
purvi
lad



AFTER

MASS
44
AREA
32937
HEIGHT
11543
27-Jan-2023
10:45
purvi
lad

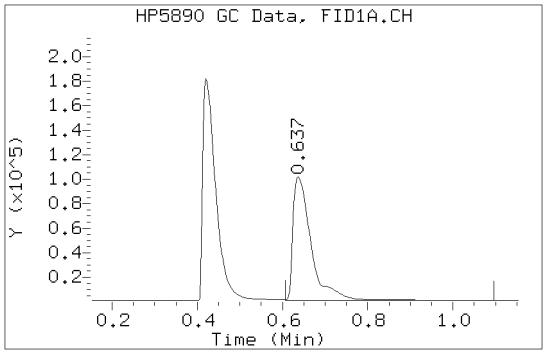


Ethene (74-85-1)

Reason Code:

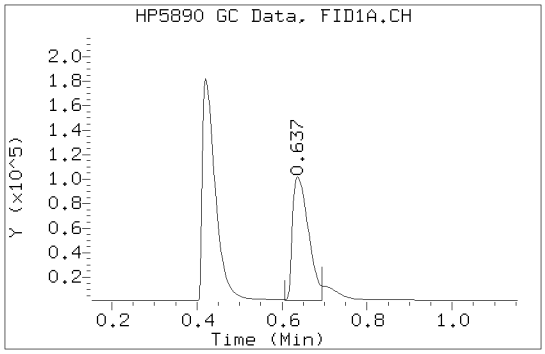
BEFORE

MASS
100
AREA
294544
HEIGHT
100672
27-Jan-2023
10:44
purvi
lad



AFTER

MASS
100
AREA
263936
HEIGHT
100671
27-Jan-2023
10:45
purvi
lad



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D Page 1
Report Date: 27-Jan-2023 10:59

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D
Lab Smp Id: HS23010982-05MSD Client Smp ID: HS23010982-05MSD
Inj Date : 27-JAN-2023 10:40
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-05MSD;HS23010982-05MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 09:28 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.420	0.433	-0.013	381530	391.316	391.315(AR)
2 Ethene	0.636	0.653	-0.017	263825	450.397	450.397(ARM)
3 Ethane	0.696	0.723	-0.027	30095	41.8283	41.828(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D

Date : 27-JAN-2023 10:40

Client ID: HS23010982-05MSD

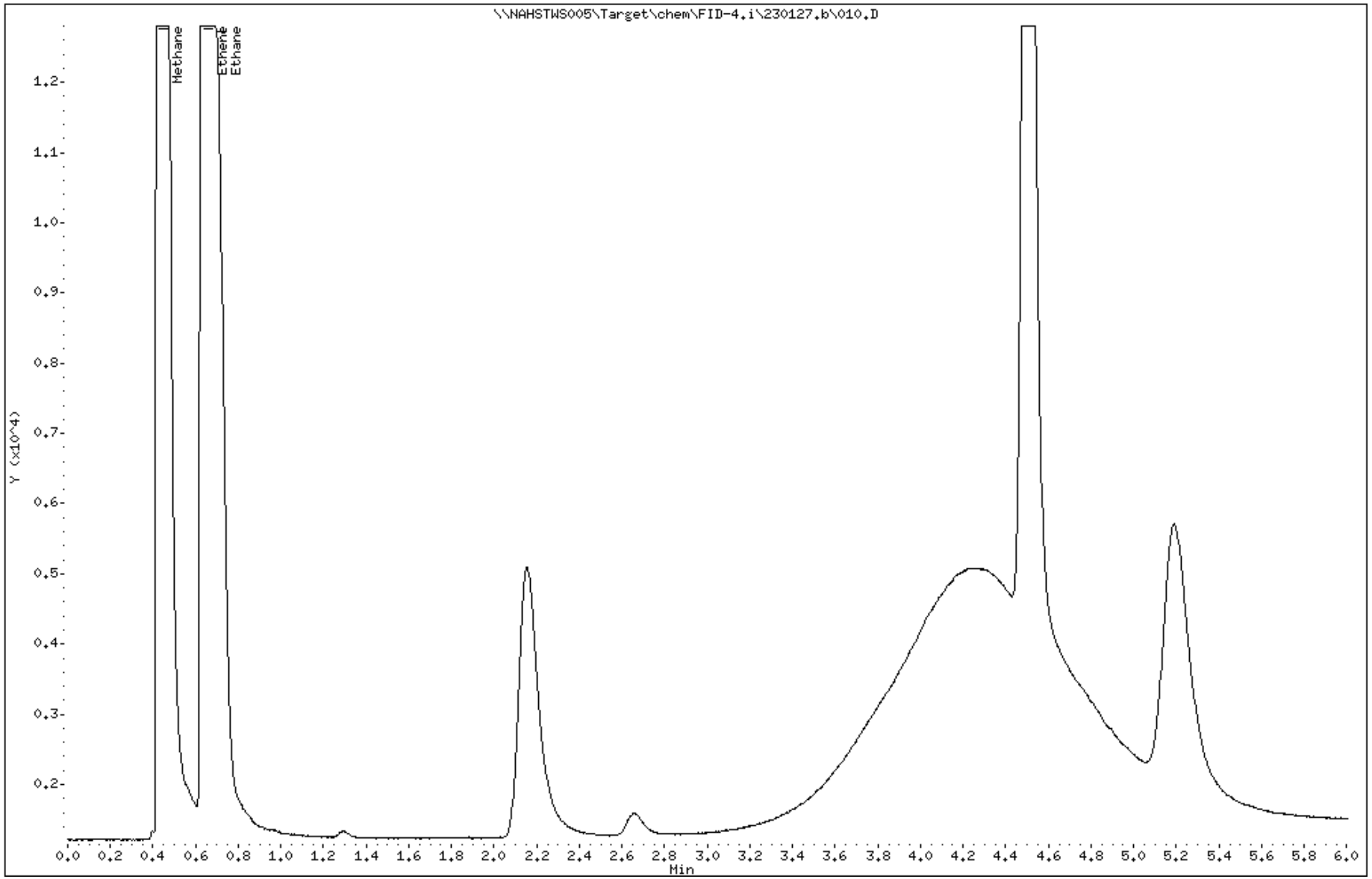
Instrument: FID-4.i

Sample Info: HS23010982-05MSD;HS23010982-05MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



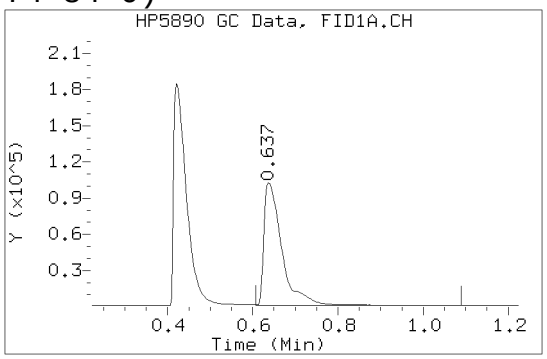
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D
Inj Date : 27-JAN-2023 10:40
InstruID : FID-4.i
LabSampID : HS23010982-05MSD

Ethane (74-84-0)

Reason Code:

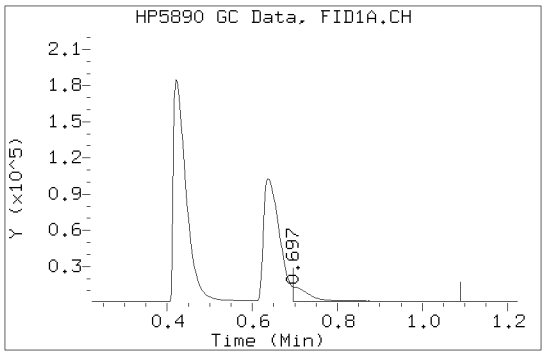
BEFORE

MASS
44
AREA
291637
HEIGHT
101439
27-Jan-2023
10:56
ALSHS
Server



AFTER

MASS
44
AREA
30095
HEIGHT
11340
27-Jan-2023
10:59
ALSHS
Ser

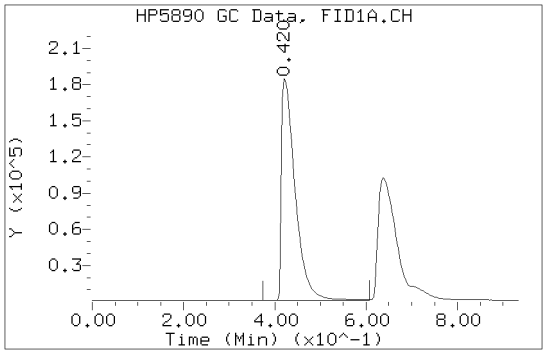


Ethene (74-85-1)

Reason Code:

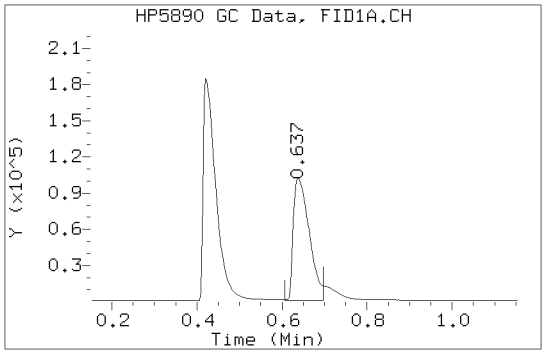
BEFORE

MASS
100
AREA
141968
HEIGHT
3699
27-Jan-2023
10:56
ALSHS
Server



AFTER

MASS
100
AREA
263825
HEIGHT
101438
27-Jan-2023
10:59
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D Page 1
Report Date: 16-Feb-2023 12:53

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 10:50
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 16-Feb-2023 12:53 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.433	0.433	0.000	9082	9.64700	9.314
2 Ethene	0.653	0.653	0.000	10602	16.8500	18.099
3 Ethane	0.726	0.726	0.000	14064	18.0430	19.547

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D

Date : 27-JAN-2023 10:50

Client ID: RSK-CCV

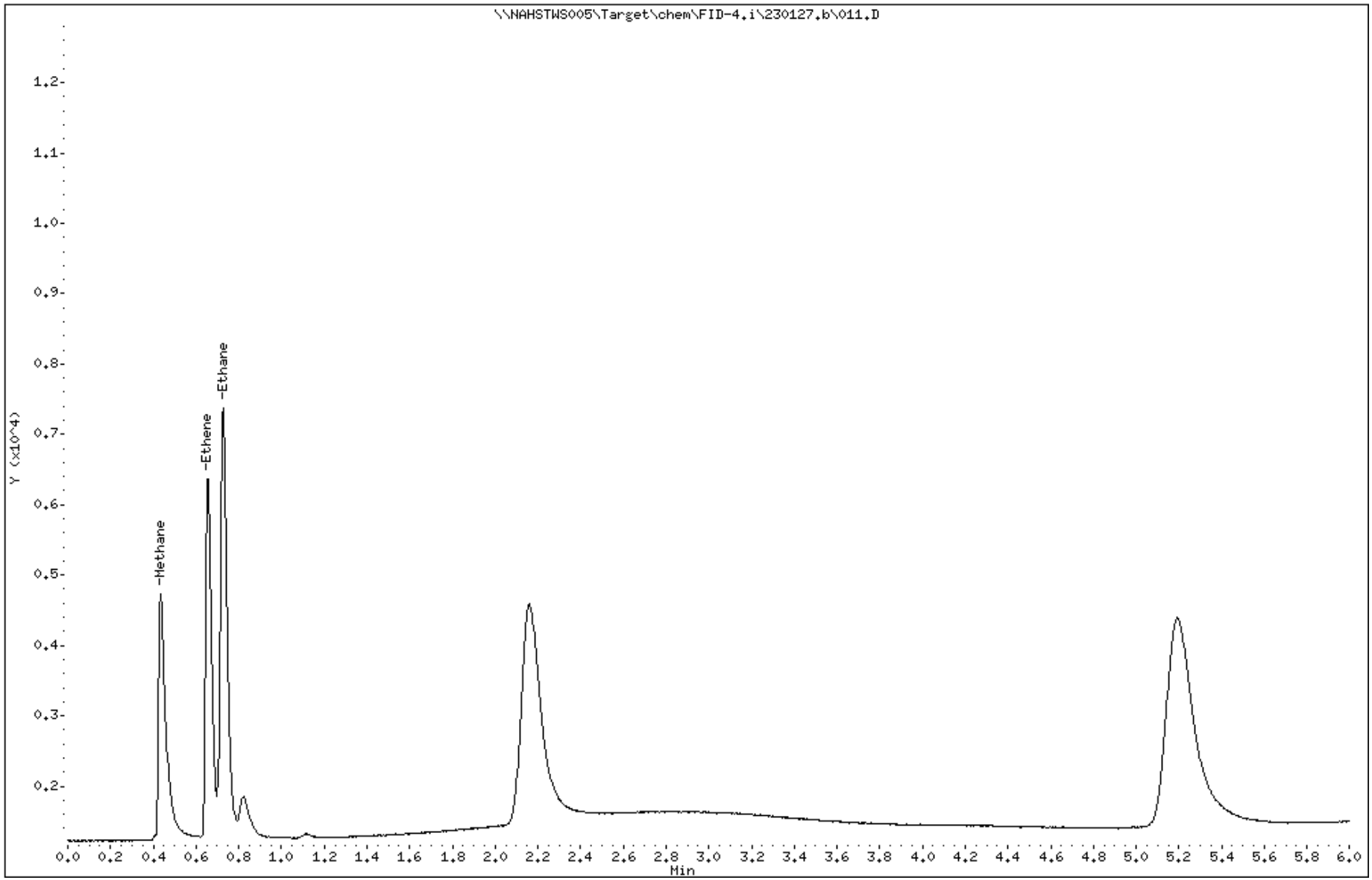
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D
Inj Date : 27-JAN-2023 10:50
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\012.D Page 1
Report Date: 27-Jan-2023 11:26

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\012.D
Lab Smp Id: HS23010982-06 Client Smp ID: HS23010982-06
Inj Date : 27-JAN-2023 11:00
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-06;HS23010982-06
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 10:59 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.433	0.000	2142844	2197.81	2197.805(A)
2 Ethene	0.646	0.653	-0.007	201915	344.706	344.705(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\012.D

Date : 27-JAN-2023 11:00

Client ID: HS23010982-06

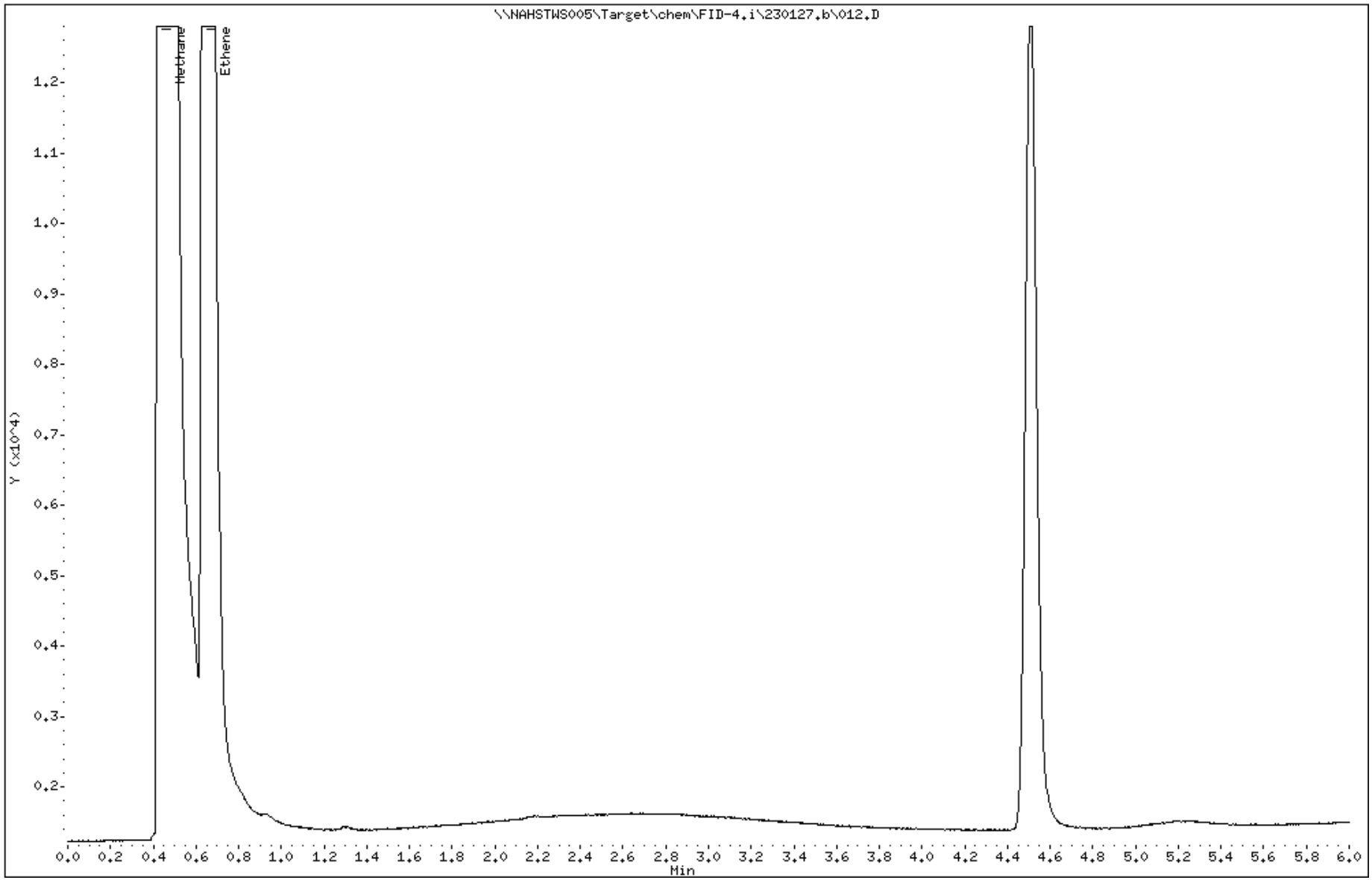
Instrument: FID-4.i

Sample Info: HS23010982-06;HS23010982-06

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\012.D
Inj Date : 27-JAN-2023 11:00
InstruID : FID-4.i
LabSampID : HS23010982-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D Page 1
Report Date: 16-Feb-2023 12:45

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D
Lab Smp Id: HS23010986-05MS Client Smp ID: HS23010986-05MS
Inj Date : 27-JAN-2023 11:47
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-05MS;HS23010986-05MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 16 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.433	-0.003	59449	60.9738	60.973(ARM)
2 Ethene	0.643	0.653	-0.010	16526	28.2129	28.212(R)
3 Ethane	0.716	0.726	-0.010	20660	28.7148	28.714(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D

Date : 27-JAN-2023 11:47

Client ID: HS23010986-05MS

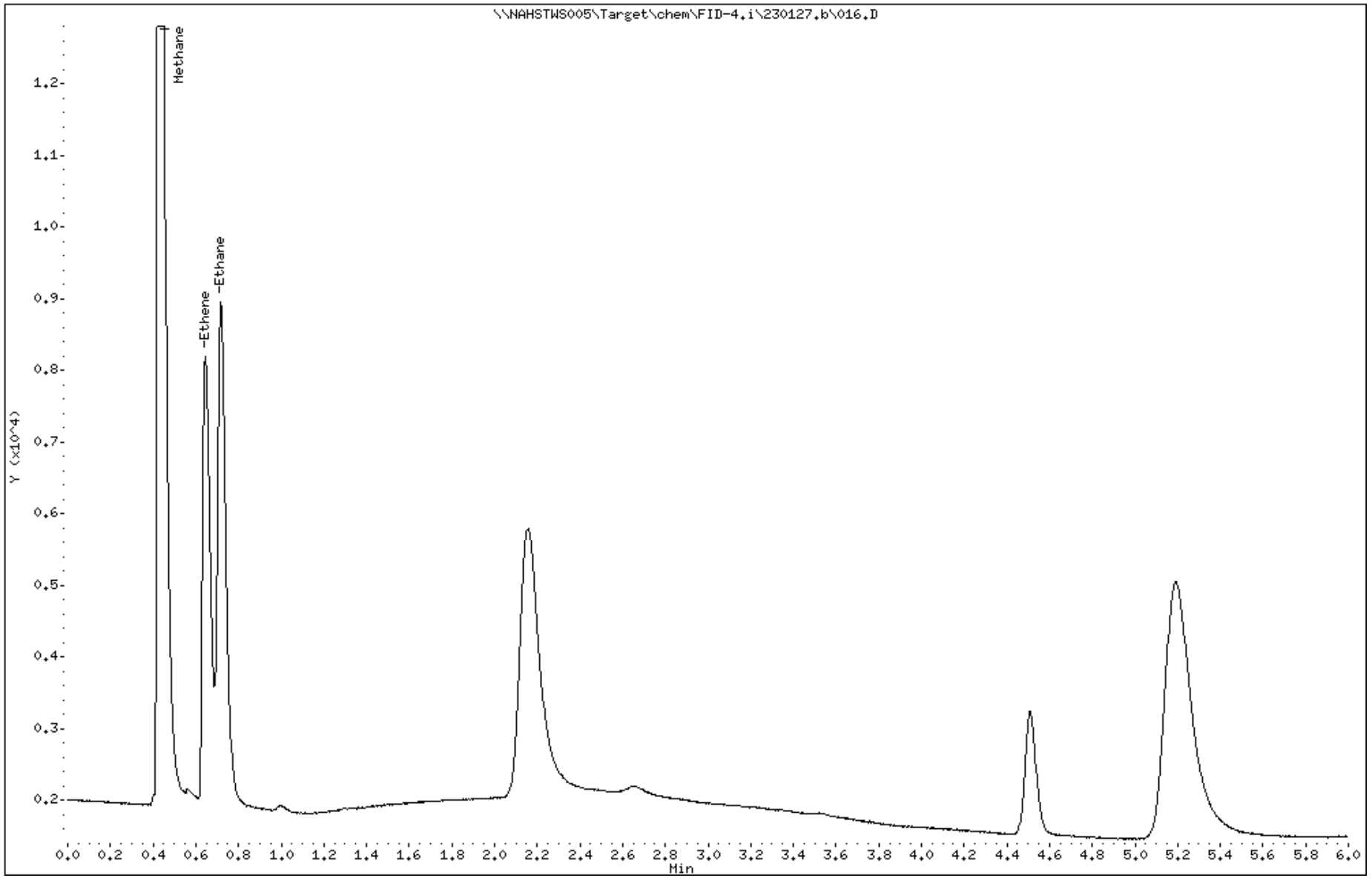
Instrument: FID-4.i

Sample Info: HS23010986-05MS;HS23010986-05MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



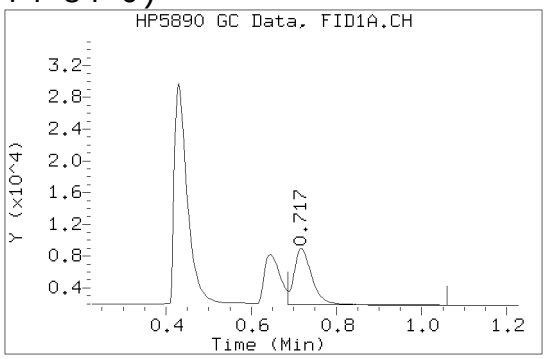
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D
Inj Date : 27-JAN-2023 11:47
InstruID : FID-4.i
LabSampID : HS23010986-05MS

Ethane (74-84-0)

Reason Code:

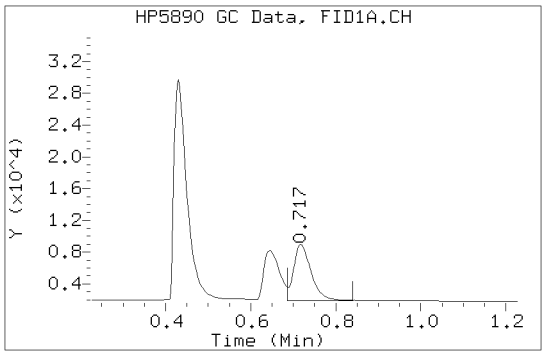
BEFORE

MASS
44
AREA
21048
HEIGHT
7084
27-Jan-2023
11:54
ALSHS
Server



AFTER

MASS
44
AREA
20660
HEIGHT
7082
16-Feb-2023
12:45
ALSHS
Ser

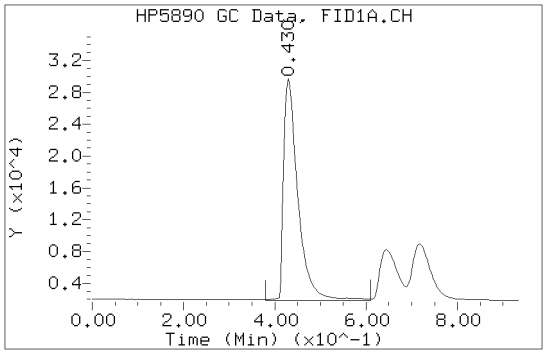


Methane (74-82-8)

Reason Code:

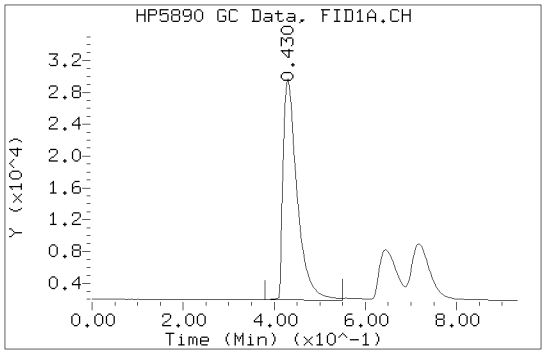
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
11:54
ALSHS
Server



AFTER

MASS
100
AREA
59449
HEIGHT
27801
16-Feb-2023
12:45
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\017.D
Lab Smp Id: HS23010986-05MSD Client Smp ID: HS23010986-05MSD
Inj Date : 27-JAN-2023 11:56
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-05MSD;HS23010986-05MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.423	0.433	-0.010	58914	60.4251	60.425(ARM)
2 Ethene	0.636	0.653	-0.017	16846	28.7592	28.759(RM)
3 Ethane	0.710	0.723	-0.013	19748	27.4472	27.447(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\017.D

Date : 27-JAN-2023 11:56

Client ID: HS23010986-05MSD

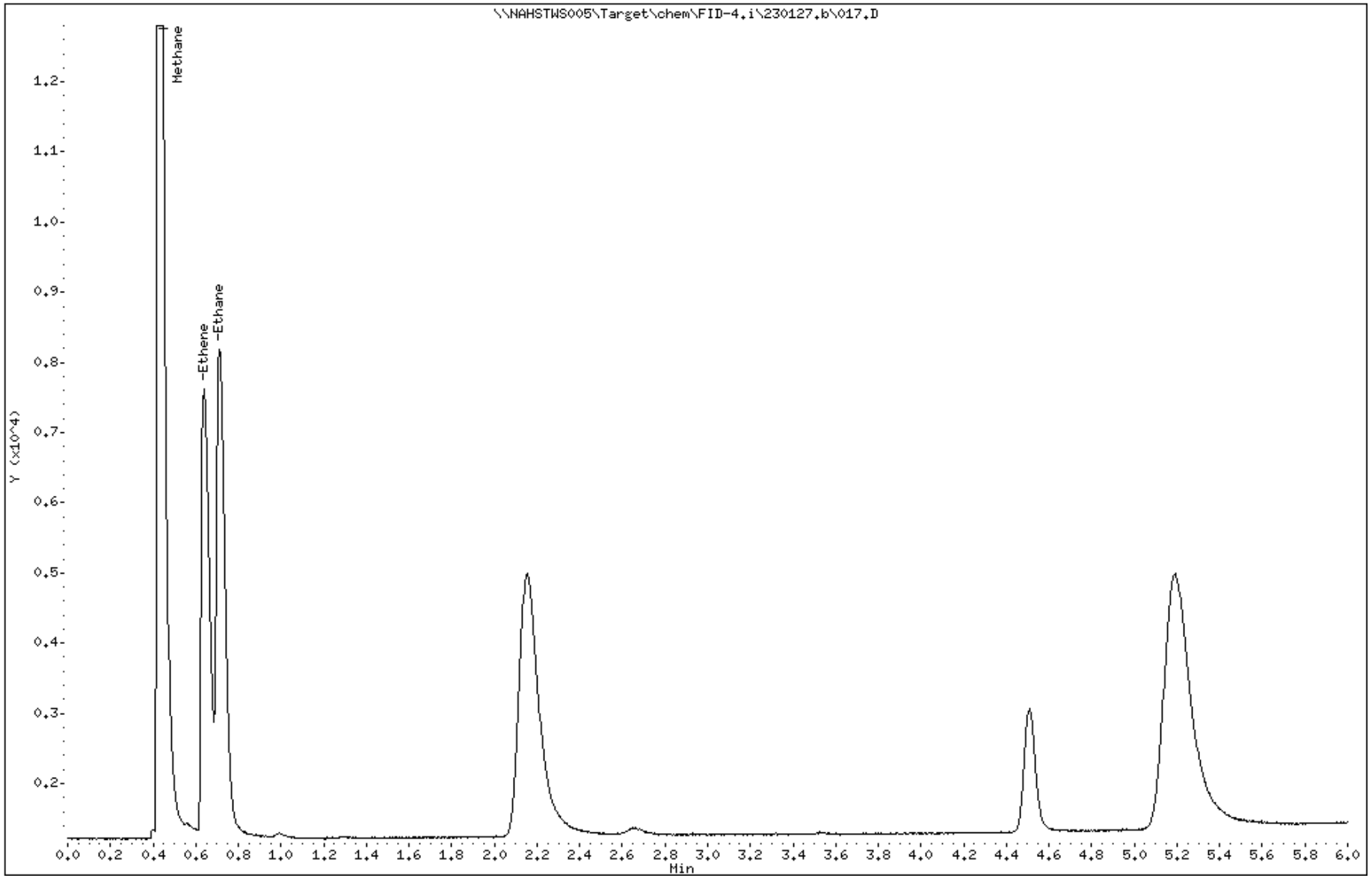
Instrument: FID-4.i

Sample Info: HS23010986-05MSD;HS23010986-05MSD

Operator: PL

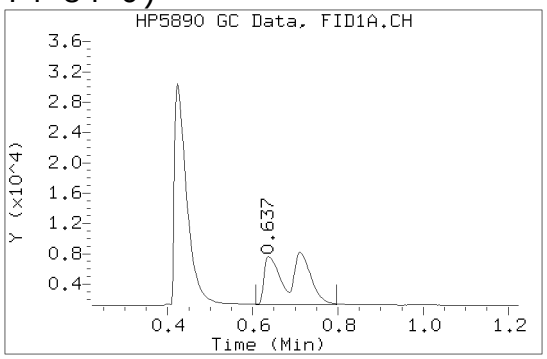
Column phase: Rtx-PLOT

Column diameter: 0.53



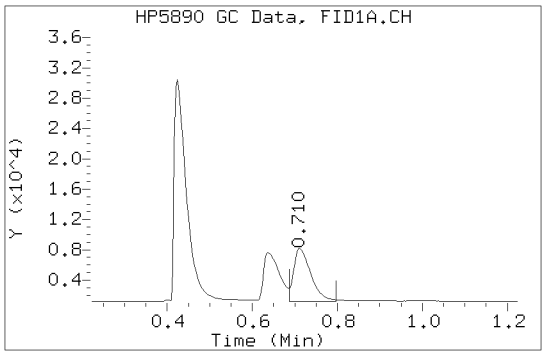
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\017.D
Inj Date : 27-JAN-2023 11:56
InstruID : FID-4.i
LabSampID : HS23010986-05MSD

Ethane (74-84-0)



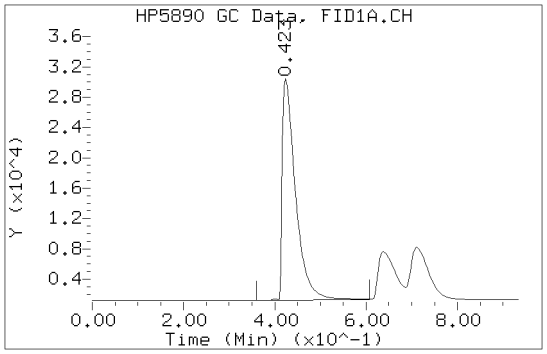
BEFORE
MASS
44
AREA
35378
HEIGHT
6340
27-Jan-2023
12:04
ALSHS
Server

Reason Code:



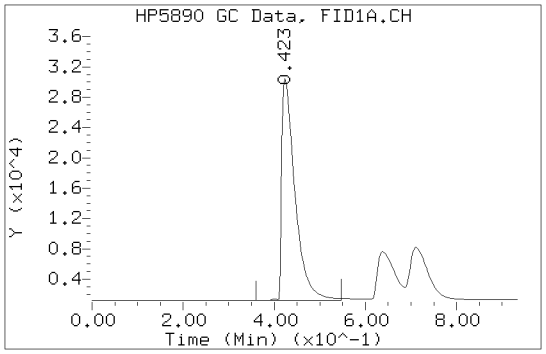
AFTER
MASS
44
AREA
19748
HEIGHT
6987
31-Jan-2023
14:23
ALSHS
Ser

Methane (74-82-8)



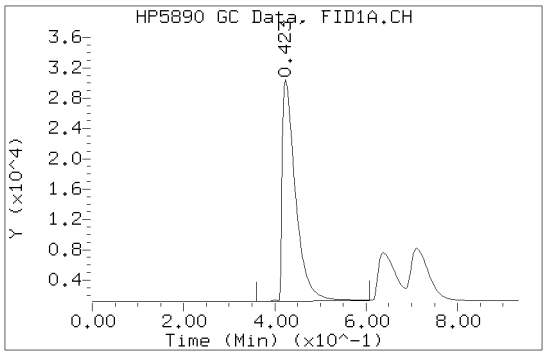
BEFORE
MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:04
ALSHS
Server

Reason Code:



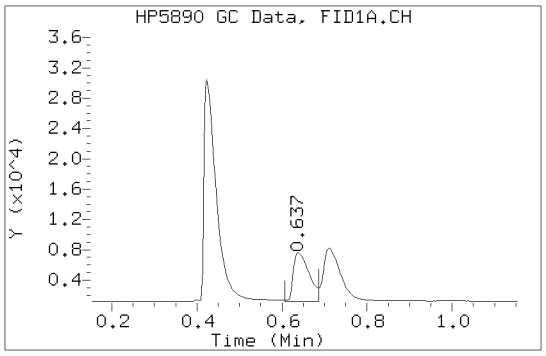
AFTER
MASS
100
AREA
58914
HEIGHT
29228
31-Jan-2023
14:23
ALSHS
Ser

Ethene (74-85-1)



BEFORE
MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:04
ALSHS
Server

Reason Code:



AFTER
MASS
100
AREA
16846
HEIGHT
6418
31-Jan-2023
14:23
ALSHS
Ser

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\020.D Page 1
Report Date: 27-Jan-2023 12:42

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\020.D
Lab Smp Id: HS23010982-02 Client Smp ID: HS23010982-02
Inj Date : 27-JAN-2023 12:29
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-02;HS23010982-02
Misc Info : ;1;0;5
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 10:59 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 20
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.433	0.003	19650	20.1540	100.770
2 Ethene	0.646	0.653	-0.007	1832	3.12756	15.637

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\020.D

Date : 27-JAN-2023 12:29

Client ID: HS23010982-02

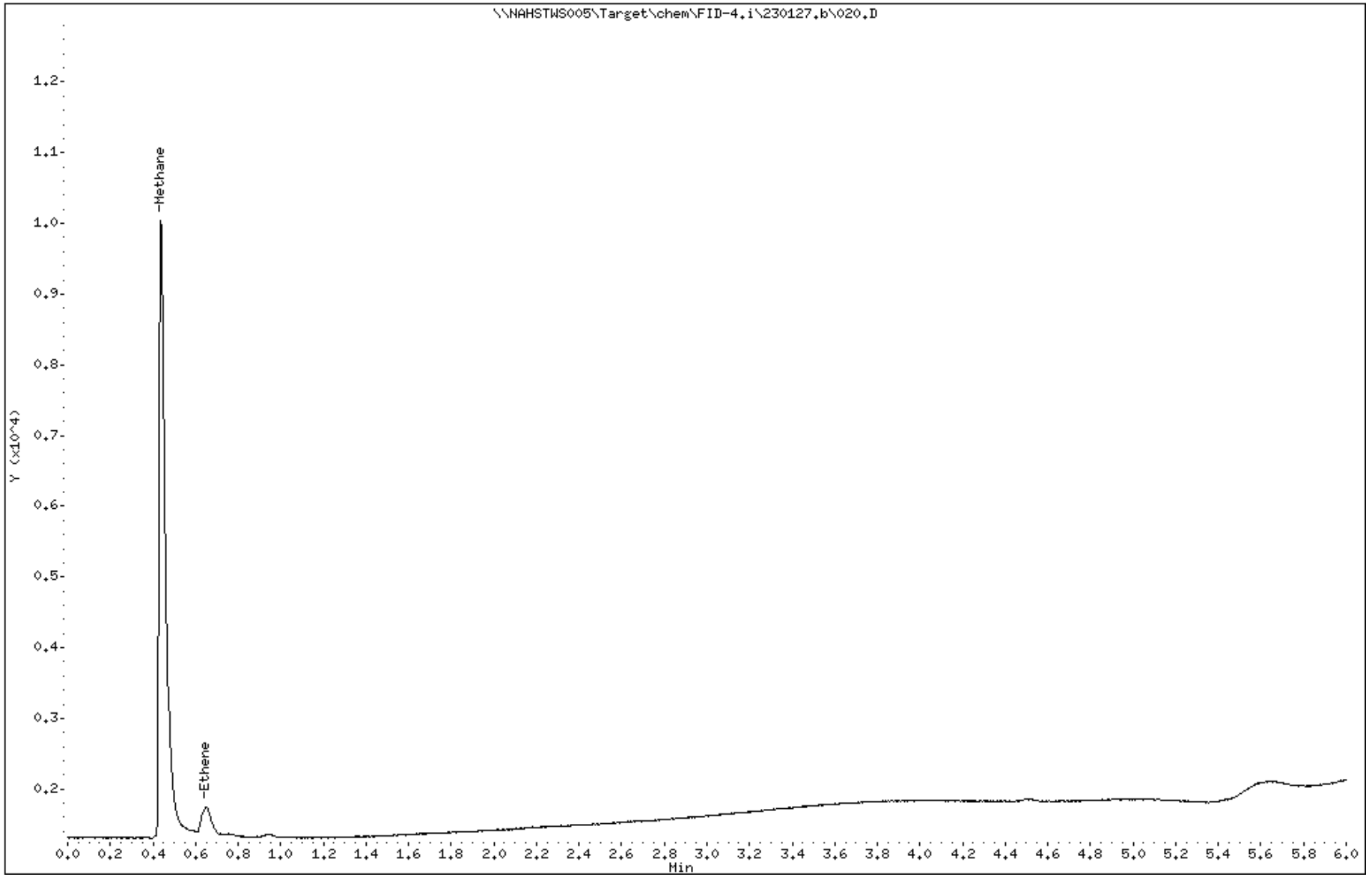
Instrument: FID-4.i

Sample Info: HS23010982-02;HS23010982-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\020.D
Inj Date : 27-JAN-2023 12:29
InstruID : FID-4.i
LabSampID : HS23010982-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\022.D Page 1
Report Date: 27-Jan-2023 14:23

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 12:54
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:23 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.426	0.426	0.000	8773	9.64700	8.998
2 Ethene	0.646	0.646	0.000	11221	16.8500	19.156
3 Ethane	0.716	0.716	0.000	13914	18.0430	19.338

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\022.D

Date : 27-JAN-2023 12:54

Client ID: RSK-CCV

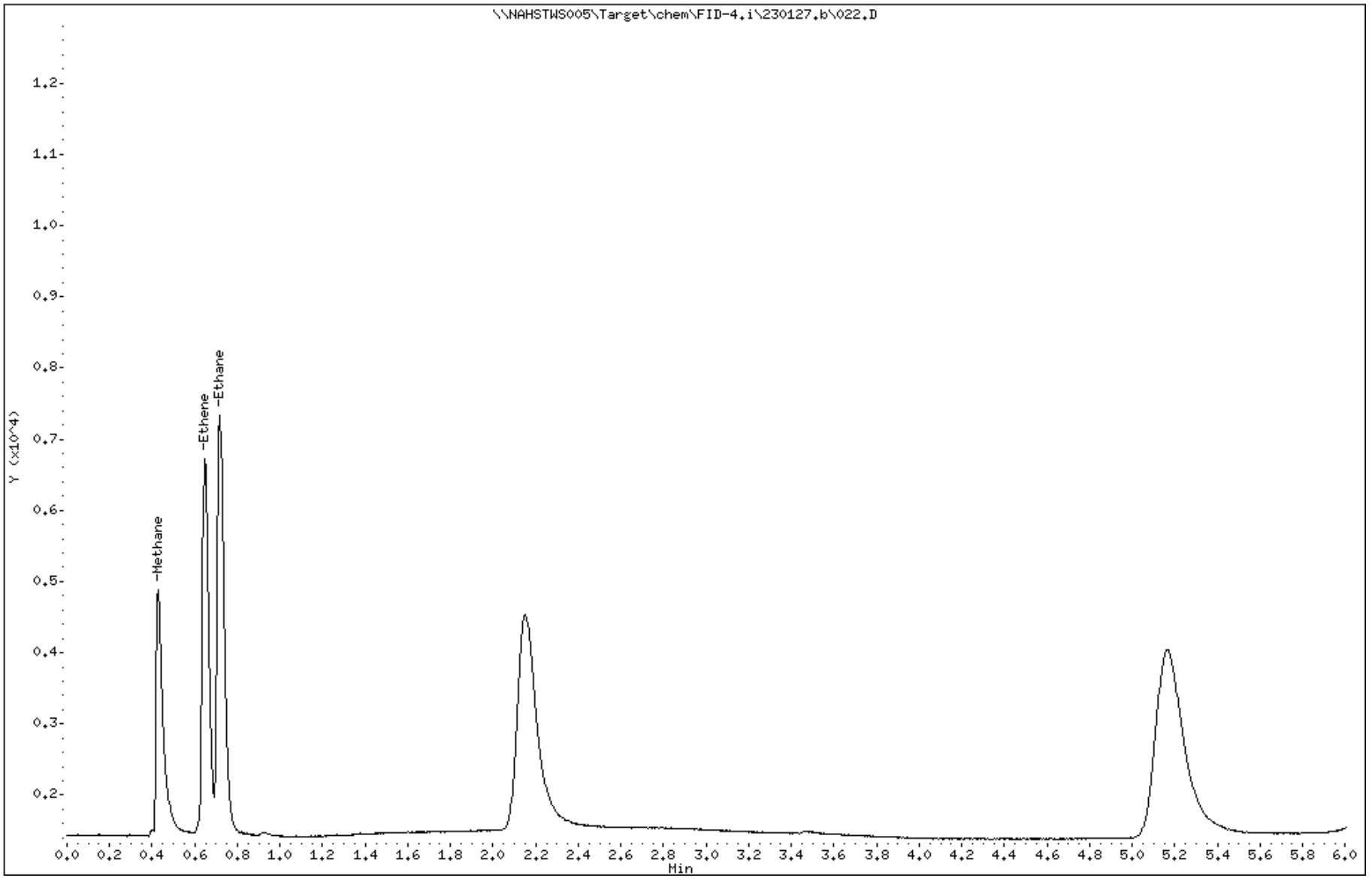
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\022.D
Inj Date : 27-JAN-2023 12:54
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\023.D Page 1
Report Date: 31-Jan-2023 14:27

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\023.D
Lab Smp Id: HS23010982-03 Client Smp ID: HS23010982-03
Inj Date : 27-JAN-2023 13:02
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-03;HS23010982-03
Misc Info : ;1;0;500
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 23
Dil Factor: 500.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.466	0.433	0.033	18949	19.4350	9717.512(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\023.D

Date : 27-JAN-2023 13:02

Client ID: HS23010982-03

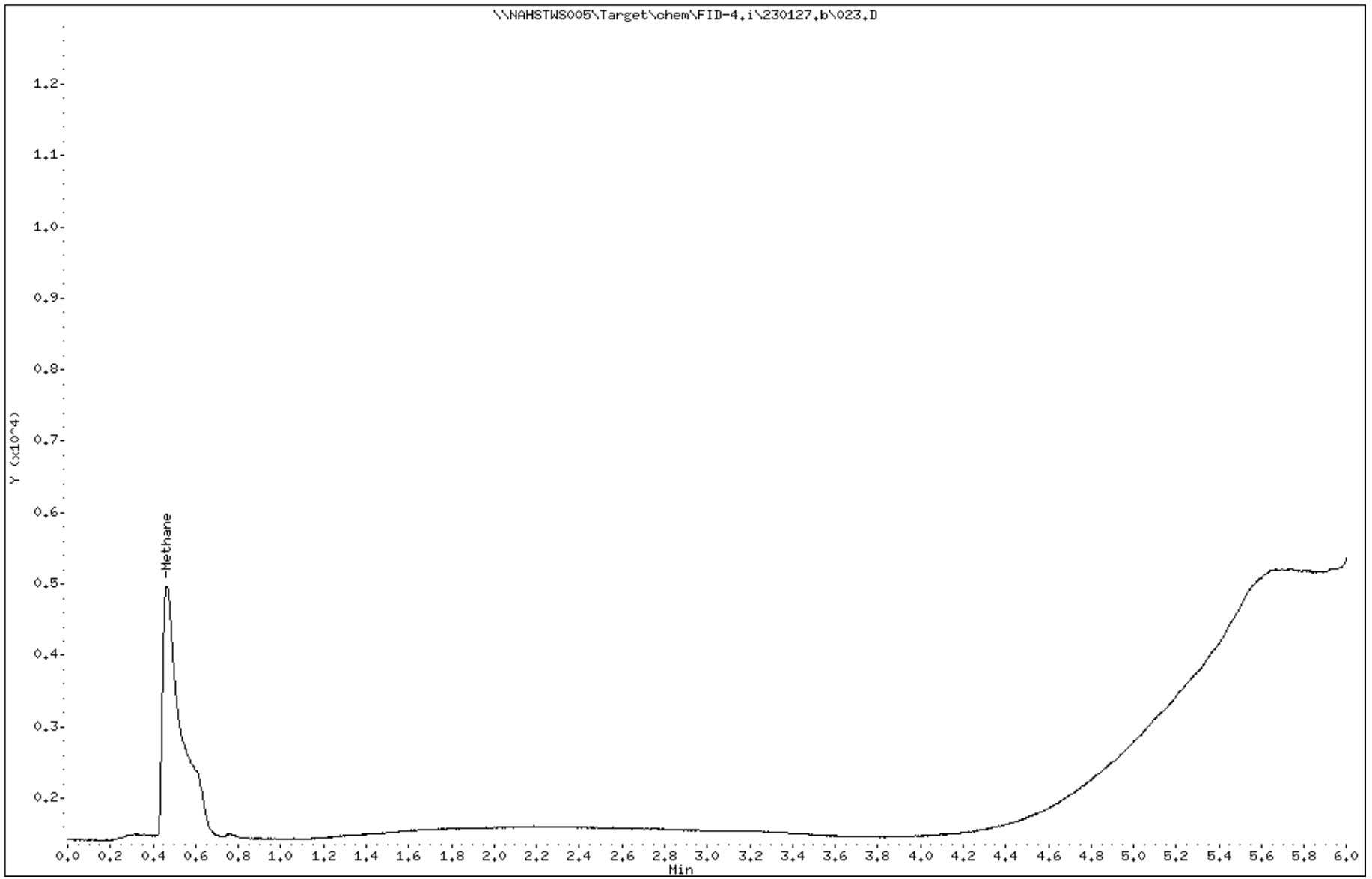
Instrument: FID-4.i

Sample Info: HS23010982-03;HS23010982-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



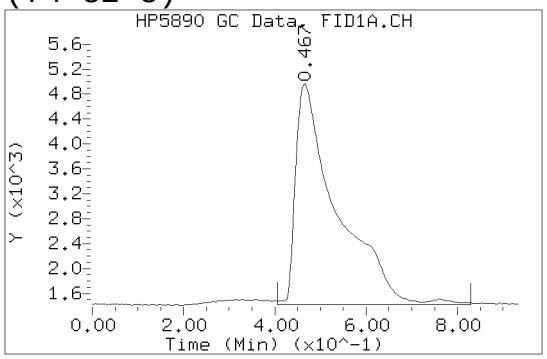
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\023.D
Inj Date : 27-JAN-2023 13:02
InstruID : FID-4.i
LabSampID : HS23010982-03

Methane (74-82-8)

Reason Code:

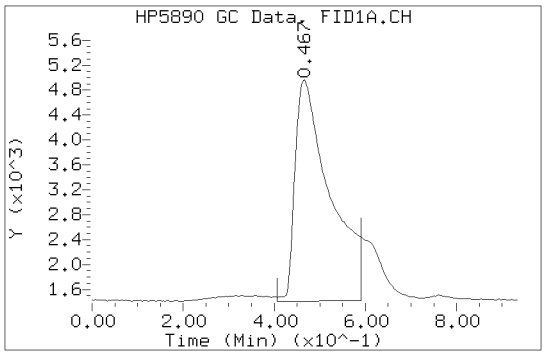
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
13:11
ALSHS
Server



AFTER

MASS
100
AREA
18949
HEIGHT
3551
31-Jan-2023
14:27
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\024.D
Lab Smp Id: HS23010982-04 Client Smp ID: HS23010982-04
Inj Date : 27-JAN-2023 13:10
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-04;HS23010982-04
Misc Info : ;1;0;500
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 24
Dil Factor: 500.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.466	0.433	0.033	12220	12.5334	6266.715(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\024.D

Date : 27-JAN-2023 13:10

Client ID: HS23010982-04

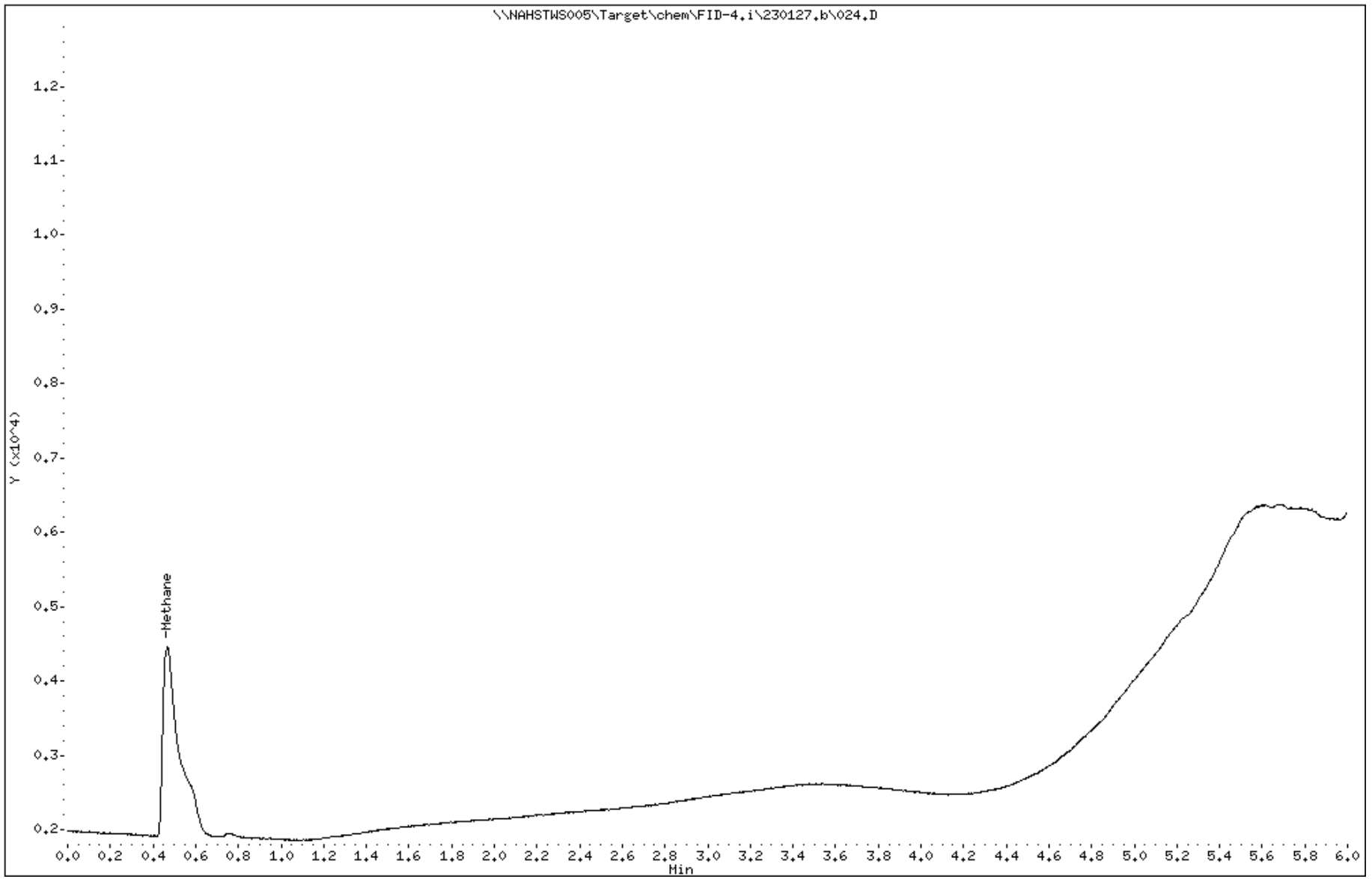
Instrument: FID-4.i

Sample Info: HS23010982-04;HS23010982-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



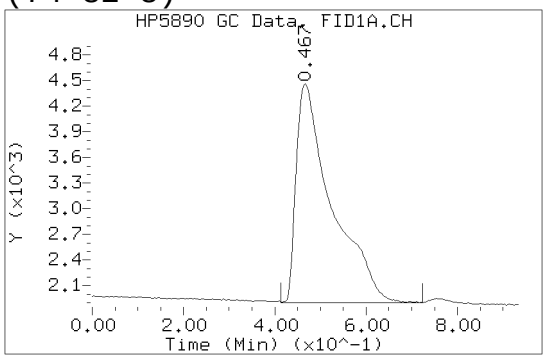
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\024.D
Inj Date : 27-JAN-2023 13:10
InstruID : FID-4.i
LabSampID : HS23010982-04

Methane (74-82-8)

Reason Code:

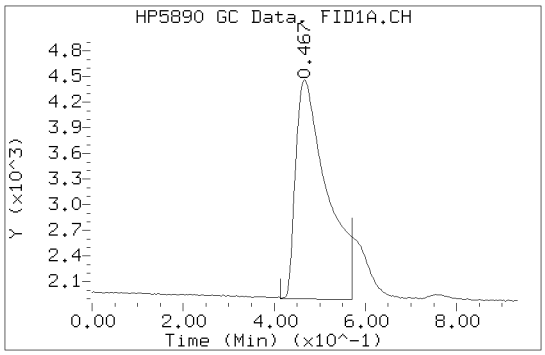
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
13:19
ALSHS
Server



AFTER

MASS
100
AREA
12220
HEIGHT
2565
31-Jan-2023
14:28
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\025.D
Lab Smp Id: HS23010982-05 Client Smp ID: HS23010982-05
Inj Date : 27-JAN-2023 13:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-05;HS23010982-05
Misc Info : ;1;0;25
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 25
Dil Factor: 25.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.433	0.017	17060	17.4976	437.439
2 Ethene	0.670	0.653	0.017	10209	17.4286	435.715(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\025.D

Date : 27-JAN-2023 13:19

Client ID: HS23010982-05

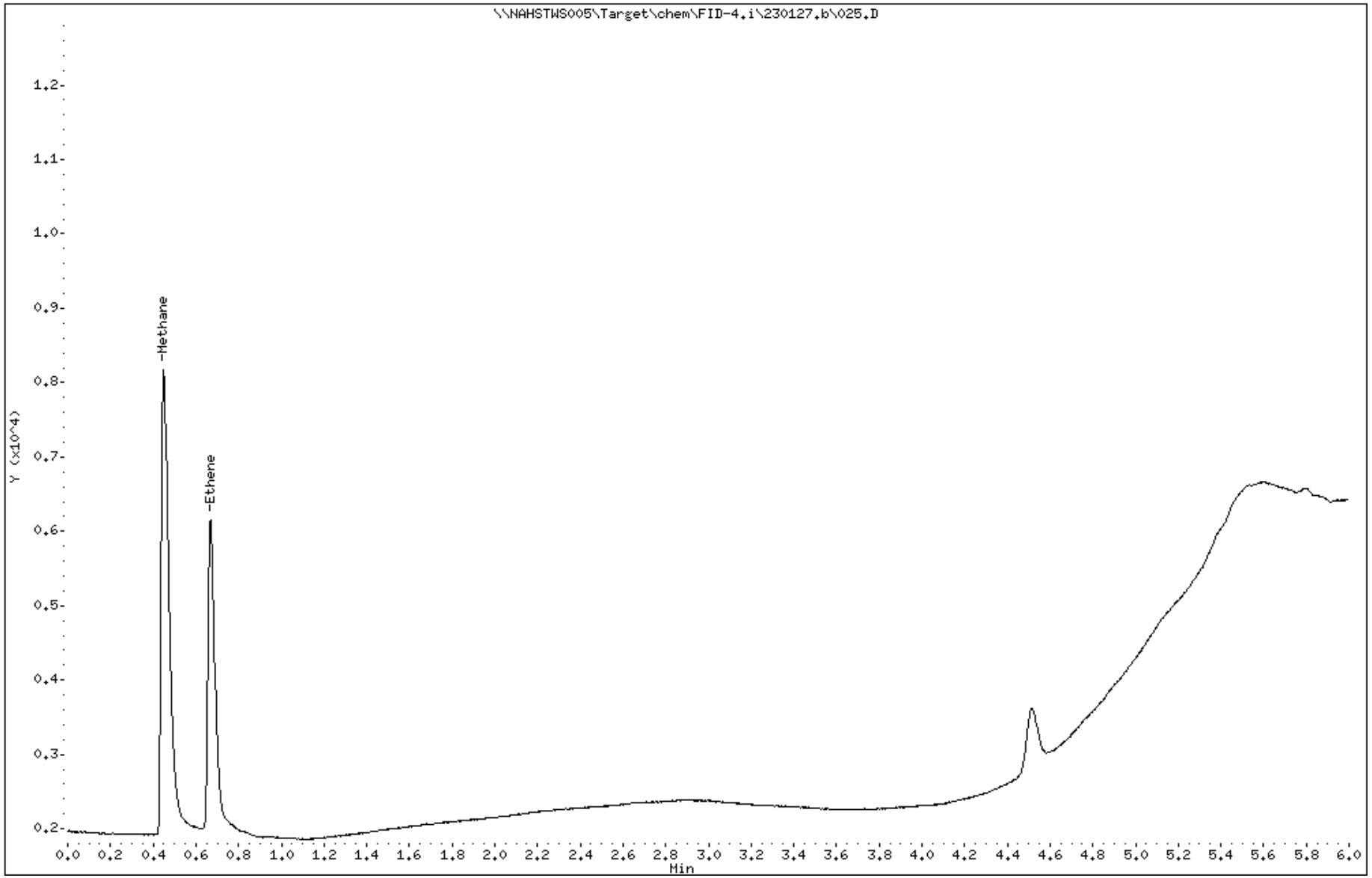
Instrument: FID-4.i

Sample Info: HS23010982-05;HS23010982-05

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



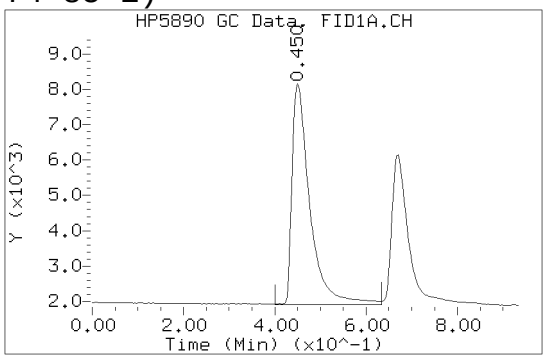
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\025.D
Inj Date : 27-JAN-2023 13:19
InstruID : FID-4.i
LabSampID : HS23010982-05

Ethene (74-85-1)

Reason Code:

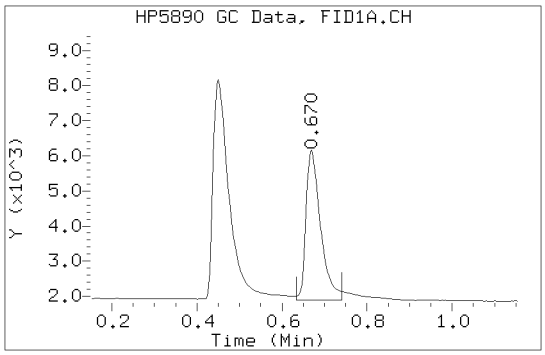
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
13:27
ALSHS
Server



AFTER

MASS
100
AREA
10209
HEIGHT
4262
31-Jan-2023
14:25
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\026.D Page 1
Report Date: 27-Jan-2023 14:24

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\026.D
Lab Smp Id: HS23010982-06 Client Smp ID: HS23010982-06
Inj Date : 27-JAN-2023 13:28
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-06;HS23010982-06
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:23 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 26
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.453	0.426	0.027	21042	21.5817	2158.170
2 Ethene	0.670	0.646	0.024	2075	3.54240	354.240(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\026.D

Date : 27-JAN-2023 13:28

Client ID: HS23010982-06

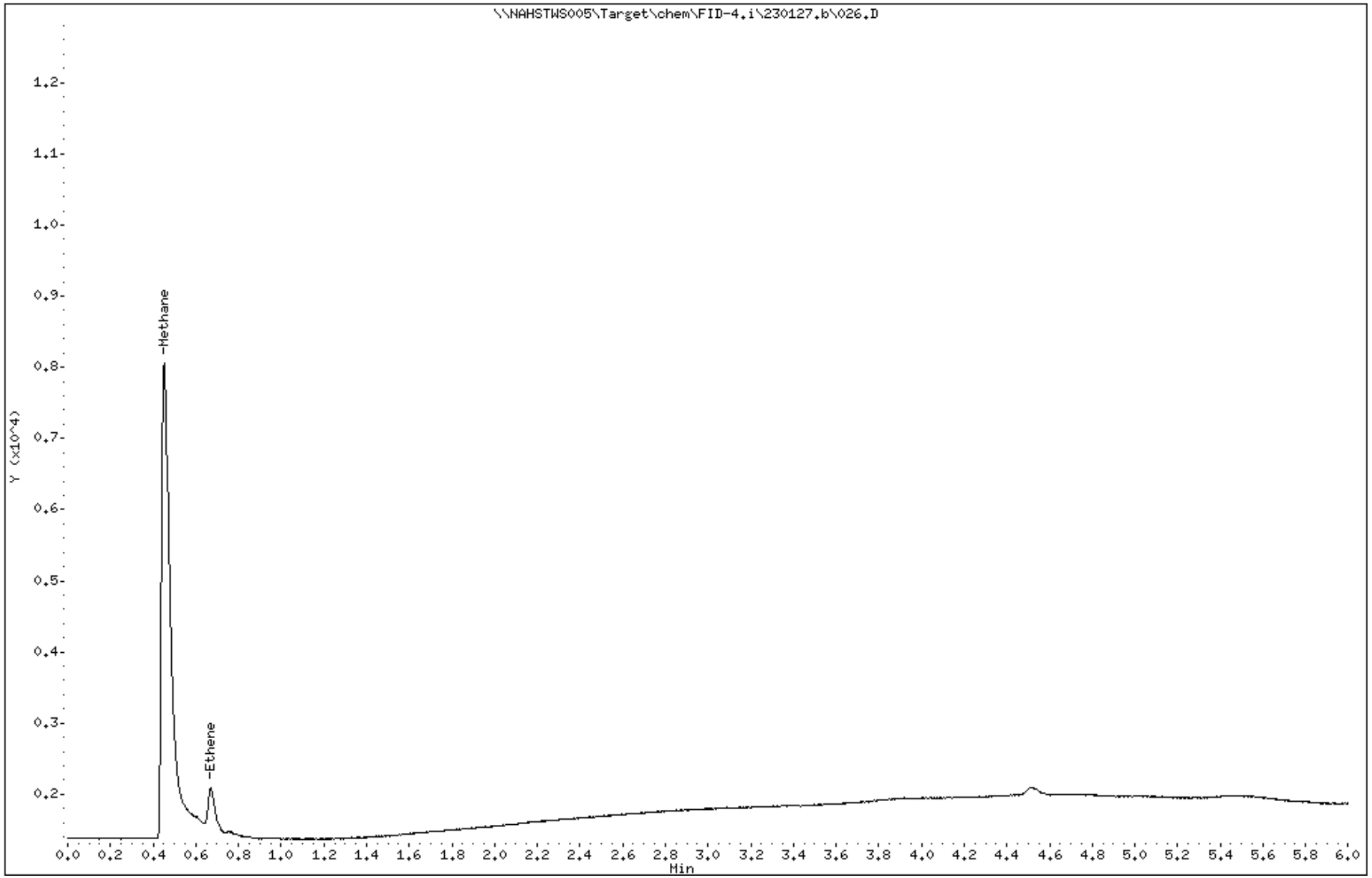
Instrument: FID-4.i

Sample Info: HS23010982-06;HS23010982-06

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



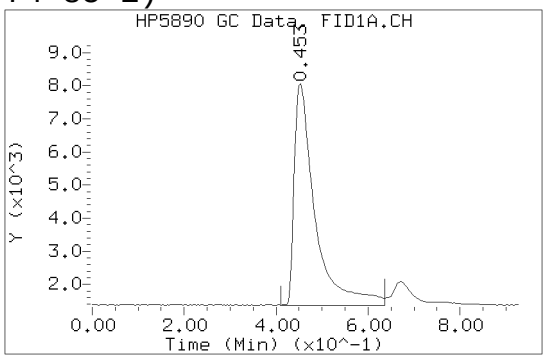
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\026.D
Inj Date : 27-JAN-2023 13:28
InstruID : FID-4.i
LabSampID : HS23010982-06

Ethene (74-85-1)

Reason Code:

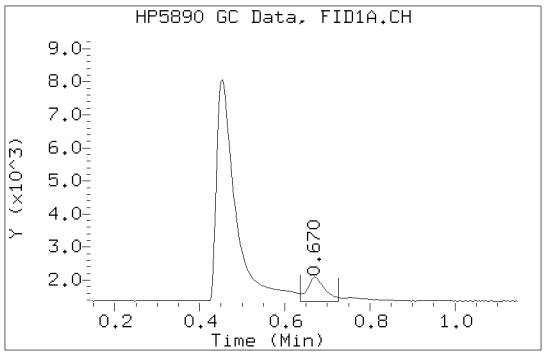
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
13:37
ALSHS
Server



AFTER

MASS
100
AREA
2075
HEIGHT
722
27-Jan-2023
14:24
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D Page 1
Report Date: 31-Jan-2023 14:29

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 14:13
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	8577	9.64700	8.796
2 Ethene	0.653	0.653	0.000	11293	16.8500	19.279
3 Ethane	0.726	0.726	0.000	14130	18.0430	19.638(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D

Date : 27-JAN-2023 14:13

Client ID: RSK-CCV

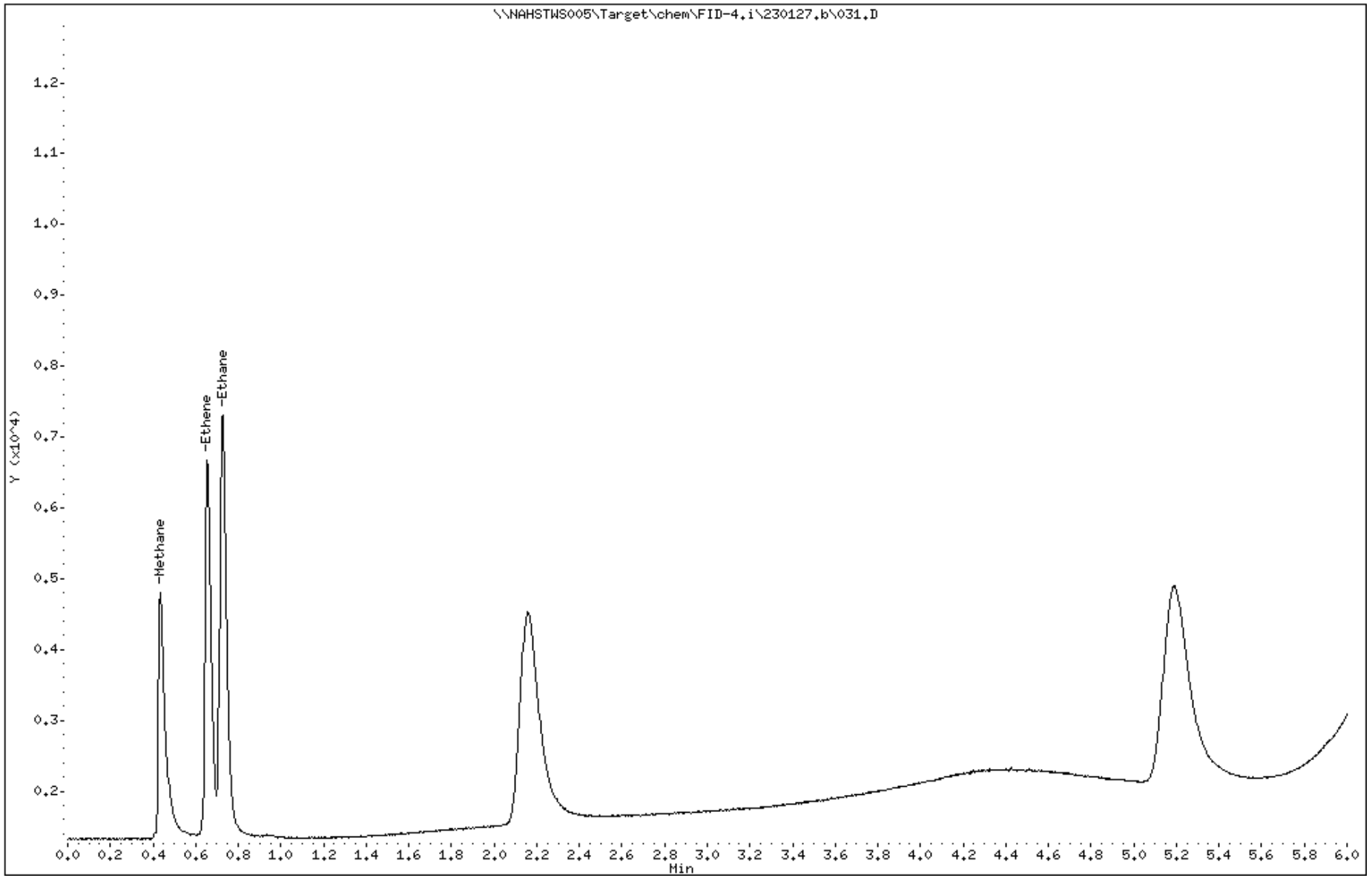
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



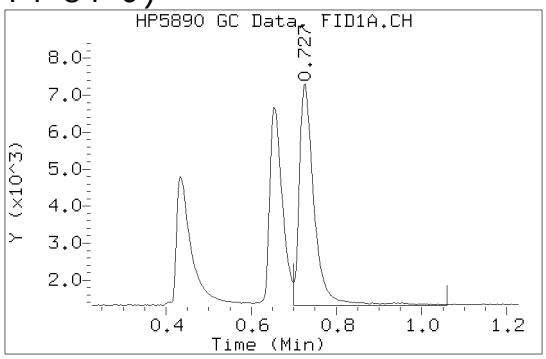
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D
Inj Date : 27-JAN-2023 14:13
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

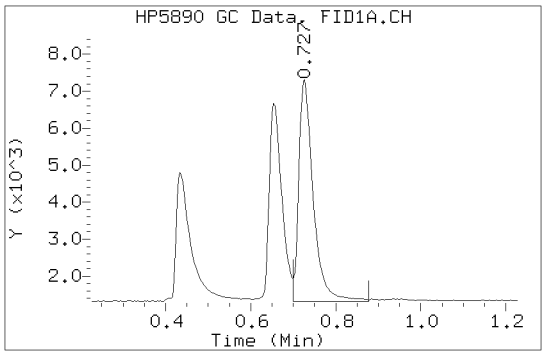
BEFORE

MASS
44
AREA
14464
HEIGHT
5986
27-Jan-2023
14:21
ALSHS
Server



AFTER

MASS
44
AREA
14130
HEIGHT
5986
31-Jan-2023
14:29
ALSHS
Ser



HS23010982 Wet Chemistry

ALS WO# HS23010982

C:\TOC-L\Data\2022_12_22_001_CAL.tlx

HS23010982

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Standard	NPOC	CAL	3100606518	12_22_2022	1.000		
2	Unknown	NPOC	ICV	3100606203	12_22_2022	1.000	NPOC:10.45mg/L	
3	Unknown	NPOC	ICB		12_22_2022	1.000	NPOC:0.3762mg/	

C:\TOC-L\Data\2022_12_22_001_CAL.tlx

	Status	Date / Time	Vial
1	Completed	12/22/2022 1:40:24	1, 2, 3, 4, 5,
2	Completed	12/22/2022 1:53:55	8
3	Completed	12/22/2022 2:06:25	1

TOC-Control L Report

2022_12_22_001_CAL.tlx

Instr.Information

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

Cal. Curve

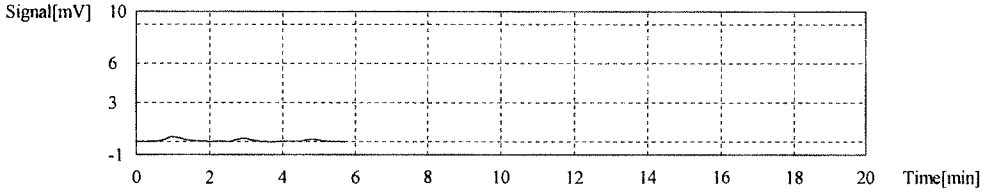
Sample Name:	CAL
Sample ID:	3100606518
Cal. Curve:	12_22_2022_CAL.2022_12_22_12_06_45.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.9953	50uL	1.000	*******		12/22/2022 12:15:19 PM
2	0.6996	50uL	1.000	*******		12/22/2022 12:17:28 PM
3	0.3943	50uL	1.000	*******		12/22/2022 12:19:35 PM

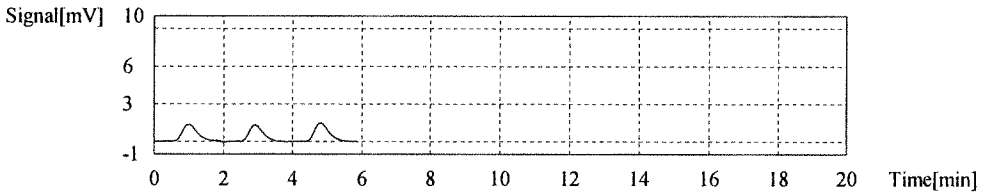
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.6964



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.828	50uL	1.000	*******		12/22/2022 12:27:39 PM
2	3.692	50uL	1.000	*******		12/22/2022 12:29:46 PM
3	4.395	50uL	1.000	*******		12/22/2022 12:32:03 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	3.972



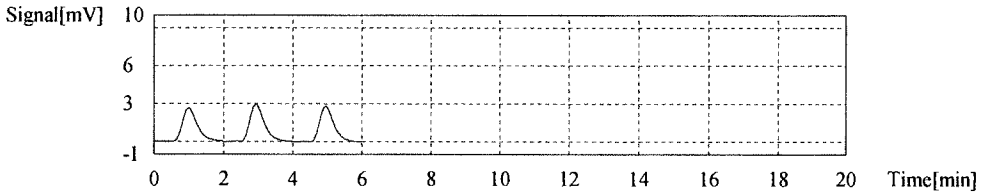
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.632	50uL	1.000	*******		12/22/2022 12:40:09 PM
2	8.569	50uL	1.000	*******		12/22/2022 12:42:24 PM
3	8.142	50uL	1.000	*******		12/22/2022 12:44:38 PM

TOC-Control L Report

2022_12_22_001_CAL.tlx

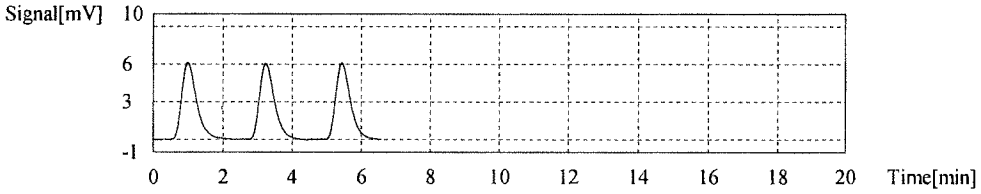
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 8.114



Conc: 5.000mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	18.24	50uL	1.000	*******		12/22/2022 12:53:02 PM
2	18.17	50uL	1.000	*******		12/22/2022 12:55:30 PM
3	18.13	50uL	1.000	*******		12/22/2022 12:57:50 PM

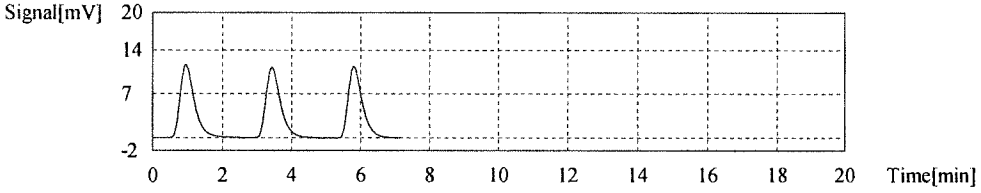
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 18.18



Conc: 10.00mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	33.16	50uL	1.000	*******		12/22/2022 1:06:28 PM
2	32.94	50uL	1.000	*******		12/22/2022 1:09:05 PM
3	32.73	50uL	1.000	*******		12/22/2022 1:11:32 PM

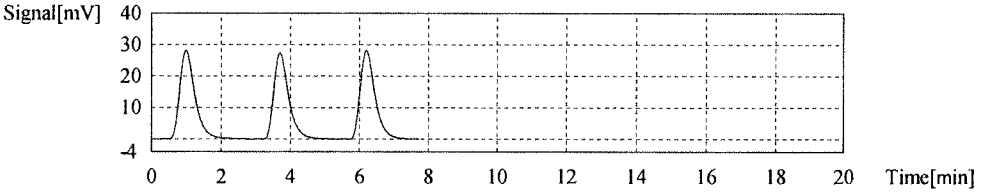
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 32.94



Conc: 25.00mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	85.96	50uL	1.000	*******		12/22/2022 1:20:24 PM
2	82.23	50uL	1.000	*******		12/22/2022 1:23:09 PM
3	84.99	50uL	1.000	*******		12/22/2022 1:25:54 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 84.39



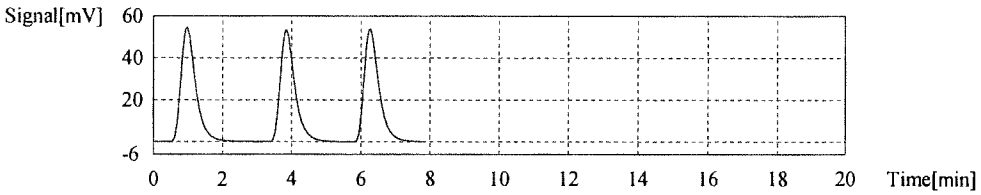
Conc: 50.00mg/L

TOC-Control L Report

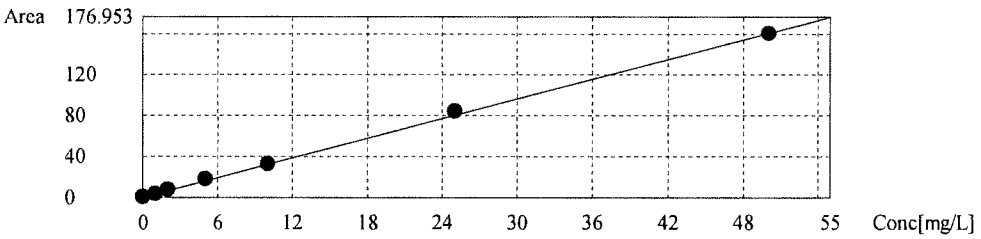
2022_12_22_001_CAL.tlx

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	162.0	50uL	1.000	*******		12/22/2022 1:34:55 PM
2	160.0	50uL	1.000	*******		12/22/2022 1:37:37 PM
3	160.6	50uL	1.000	*******		12/22/2022 1:40:24 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 160.9



Slope: 3.212
Intercept 0.000
r^2 0.9995
r 0.9998
RSE(%) N/A
Zero Shift Yes



Sample

Sample Name: ICV
Sample ID: 3100606203
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

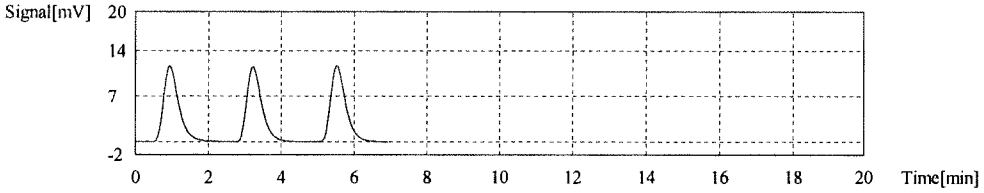
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.43	10.41mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 1:48:50 PM
2	33.28	10.36mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 1:51:22 PM
3	33.98	10.58mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 1:53:55 PM

Mean Area 33.56
Mean Conc. 10.45mg/L



Sample

TOC-Control L Report

Sample Name: ICB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

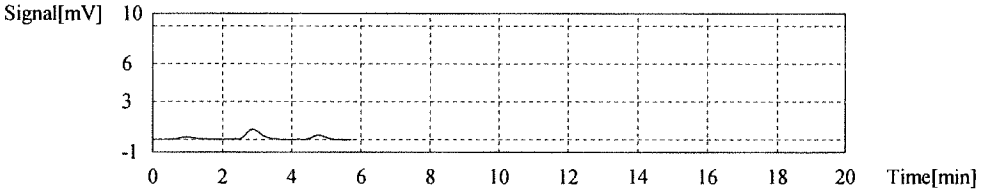
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3762mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3846	0.1197mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 2:02:10 PM
2	2.321	0.7226mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 2:04:18 PM
3	0.9197	0.2863mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 2:06:25 PM

Mean Area 1.208
Mean Conc. 0.3762mg/L



C:\TOC-L\Data\2023_01_30_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Unknown	NPOC	CCV	321101806	12_22_2022	1.000	NPOC:24.95mg/L	
2	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.2868mg/	
3	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.1758mg/	
4	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:10.44mg/L	
5	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:10.41mg/L	
6	Unknown	NPOC	HS23011256-04		12_22_2022	1.000	NPOC:90.54mg/L	
7	Unknown	NPOC	HS23011192-04DF10		12_22_2022	1.000	NPOC:35.25mg/L	
8	Unknown	NPOC	HS23011210-01		12_22_2022	1.000	NPOC:8.447mg/L	
9	Unknown	NPOC	HS23011437-01		12_22_2022	1.000	NPOC:0.9185mg/	
10	Unknown	NPOC	HS23011437-02		12_22_2022	1.000	NPOC:1.320mg/L	
11	Unknown	NPOC	HS23011437-03		12_22_2022	1.000	NPOC:4.003mg/L	
12	Unknown	NPOC	HS23010982-03		12_22_2022	1.000	NPOC:114.1mg/L	
13	Unknown	NPOC	CCV	321101806	12_22_2022	1.000	NPOC:26.52mg/L	
14	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.4401mg/	
15	Unknown	NPOC	HS23010982-04		12_22_2022	1.000	NPOC:8.996mg/L	
16	Unknown	NPOC	HS23010982-05		12_22_2022	1.000	NPOC:10.94mg/L	
17	Unknown	NPOC	HS23010982-05MS		12_22_2022	1.000	NPOC:22.11mg/L	
18	Unknown	NPOC	HS23010982-06		12_22_2022	1.000	NPOC:15.69mg/L	
19	Unknown	NPOC	CCV	321101806	12_22_2022	1.000	NPOC:26.02mg/L	
20	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.4919mg/	
21	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.3309mg/	
22	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:10.43mg/L	
23	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:10.36mg/L	
24	Unknown	NPOC	HS23010986-01		12_22_2022	1.000	NPOC:48.39mg/L	
25	Unknown	NPOC	HS23010986-04		12_22_2022	1.000	NPOC:5.565mg/L	
26	Unknown	NPOC	HS23010986-05		12_22_2022	1.000	NPOC:42.78mg/L	
27	Unknown	NPOC	HS23010986-05MS		12_22_2022	1.000	NPOC:53.03mg/L	
28	Unknown	NPOC	HS23010986-06		12_22_2022	1.000	NPOC:5.174mg/L	
29	Unknown	NPOC	HS23010986-07		12_22_2022	1.000	NPOC:5.053mg/L	
30	Unknown	NPOC	HS23010991-01		12_22_2022	1.000	NPOC:17.31mg/L	
31	Unknown	NPOC	CCV	321101806	12_22_2022	1.000	NPOC:25.67mg/L	
32	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.6257mg/	
33	Unknown	NPOC	HS23011352-01		12_22_2022	1.000	NPOC:8.713mg/L	
34	Unknown	NPOC	HS23011389-01		12_22_2022	1.000	NPOC:3.734mg/L	
35	Unknown	NPOC	HS23011389-02		12_22_2022	1.000	NPOC:2.577mg/L	
36	Unknown	NPOC	HS23011389-03		12_22_2022	1.000	NPOC:1.459mg/L	
37	Unknown	NPOC	CCV	321101806	12_22_2022	1.000	NPOC:25.21mg/L	
38	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.3784mg/	

C:\TOC-L\Data\2023_01_30_001.tlx

	Status	Date / Time	Vial
1	Completed	1/30/2023 3:12:35	1
2	Completed	1/30/2023 3:24:52	2
3	Completed	1/30/2023 3:37:09	3
4	Completed	1/30/2023 3:51:12	4
5	Completed	1/30/2023 4:05:00	5
6	Completed	1/30/2023 4:20:12	6
7	Completed	1/30/2023 4:34:41	7
8	Completed	1/30/2023 4:48:36	8
9	Completed	1/30/2023 5:01:06	9
10	Completed	1/30/2023 5:13:49	10
11	Completed	1/30/2023 5:27:10	11
12	Completed	1/30/2023 5:42:28	12
13	Completed	1/30/2023 5:57:09	1
14	Completed	1/30/2023 6:09:26	2
15	Completed	1/30/2023 6:23:28	13
16	Completed	1/30/2023 6:37:51	14
17	Completed	1/30/2023 6:52:25	15
18	Completed	1/30/2023 7:06:52	16
19	Completed	1/30/2023 7:21:39	1
20	Completed	1/30/2023 7:33:56	2
21	Completed	1/30/2023 7:46:13	3
22	Completed	1/30/2023 8:00:13	4
23	Completed	1/30/2023 8:13:54	5
24	Completed	1/30/2023 8:28:50	17
25	Completed	1/30/2023 8:42:25	18
26	Completed	1/30/2023 8:57:27	19
27	Completed	1/30/2023 9:12:24	20
28	Completed	1/30/2023 9:26:03	21
29	Completed	1/30/2023 9:39:30	22
30	Completed	1/30/2023 9:53:58	23
31	Completed	1/30/2023 10:08:34	24
32	Completed	1/30/2023 10:20:54	25
33	Completed	1/30/2023 10:34:54	26
34	Completed	1/30/2023 10:48:25	27
35	Completed	1/30/2023 11:01:27	28
36	Completed	1/30/2023 11:14:02	29
37	Completed	1/30/2023 11:29:11	24
38	Completed	1/30/2023 11:41:46	25

TOC-Control L Report

2023_01_30_001.tlx

Instr.Information

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

Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status: Completed
Chk. Result

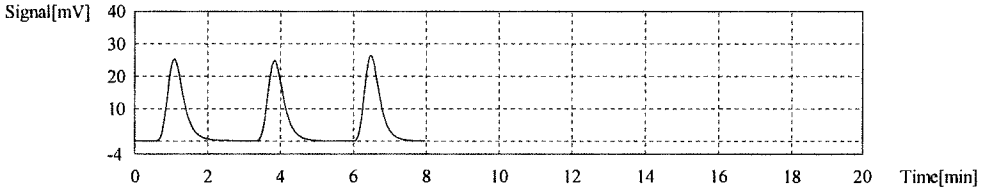
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.95mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.73	25.13mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:06:55 PM
2	79.29	24.69mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:09:50 PM
3	80.40	25.03mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:12:35 PM

Mean Area: 80.14
Mean Conc.: 24.95mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2868mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.060	0.3300mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:20:38 PM
2	0.8884	0.2766mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:22:45 PM
3	0.8149	0.2537mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:24:52 PM

TOC-Control L Report

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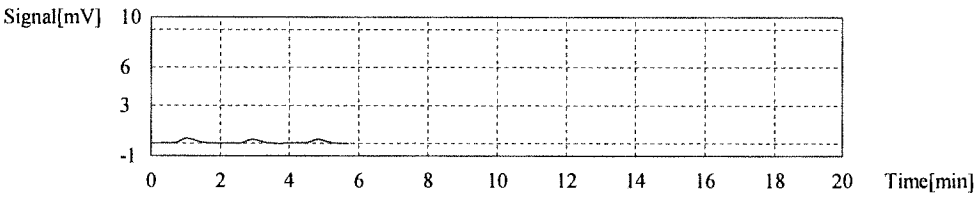
Mean Area 0.9211
Mean Conc. 0.2868mg/L



Sample

Sample Name: MBLK-01302023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

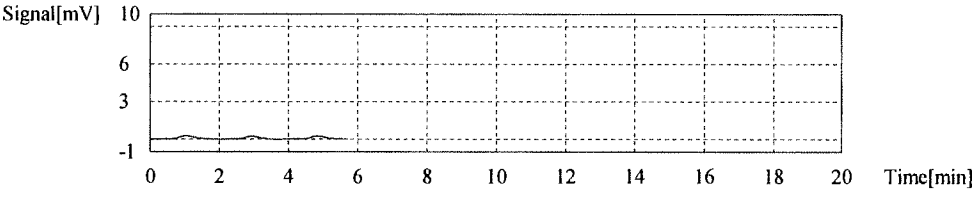
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1758mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6219	0.1936mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:32:55 PM
2	0.5170	0.1610mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:35:02 PM
3	0.5553	0.1729mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:37:09 PM

Mean Area 0.5647
Mean Conc. 0.1758mg/L



Sample

Sample Name: LCS-01302023
Sample ID: 3100606203
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.44mg/L

1. Det

Anal.: NPOC

TOC-Control L Report

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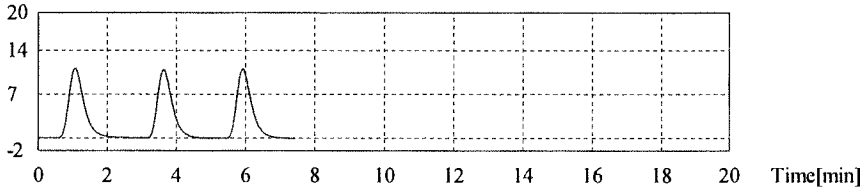
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.20	10.65mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:45:54 PM
2	32.75	10.20mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:48:26 PM
3	33.65	10.48mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:51:12 PM

Mean Area 33.53
Mean Conc. 10.44mg/L



Sample

Sample Name: LCSD-01302023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

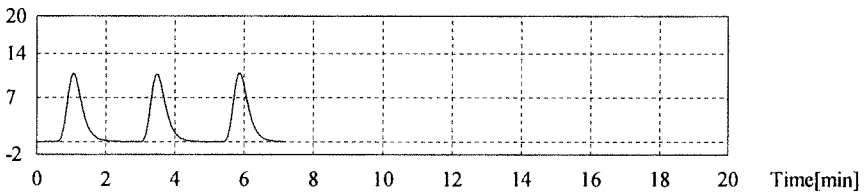
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.25	10.35mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 3:59:46 PM
2	33.12	10.31mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 4:02:24 PM
3	33.96	10.57mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 4:05:00 PM

Mean Area 33.44
Mean Conc. 10.41mg/L



Sample

Sample Name: HS23010982-03
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:114.1mg/L

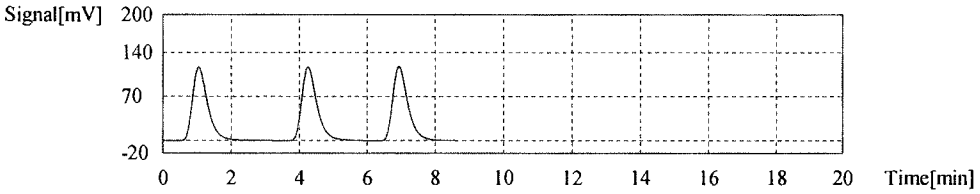
1. Det

TOC-Control L Report

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	363.9	113.3mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:36:31 PM
2	364.8	113.6mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:39:27 PM
3	371.0	115.5mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:42:28 PM

Mean Area 366.6
Mean Conc. 114.1mg/L



Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

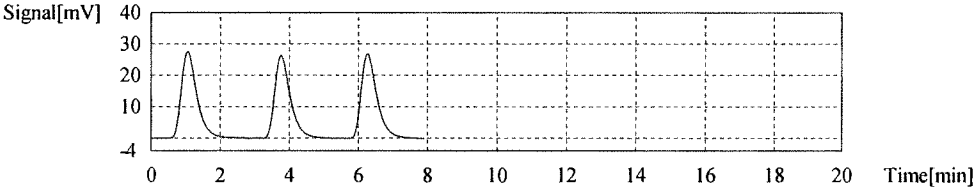
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.52mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.33	26.88mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:51:28 PM
2	83.61	26.03mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:54:14 PM
3	85.62	26.66mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:57:09 PM

Mean Area 85.19
Mean Conc. 26.52mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4401mg/L

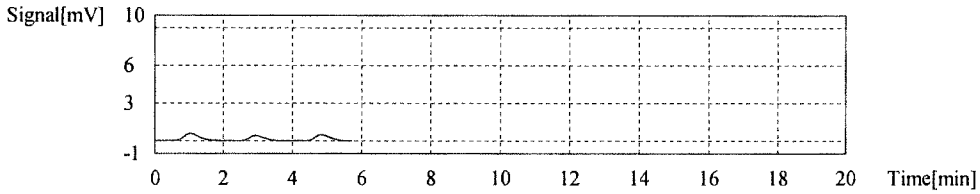
TOC-Control L Report

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.613	0.5022mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:05:12 PM
2	1.172	0.3649mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:07:19 PM
3	1.456	0.4533mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:09:26 PM

Mean Area 1.414
Mean Conc. 0.4401mg/L



Sample

Sample Name: HS23010982-04
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

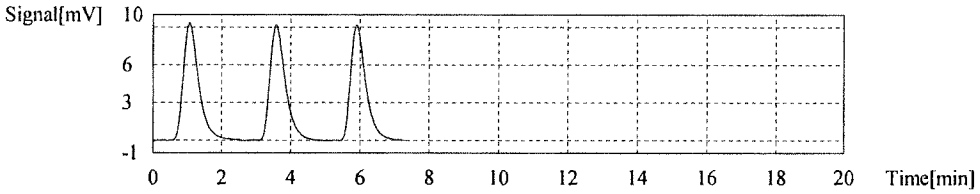
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.996mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.60	9.216mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:18:14 PM
2	28.58	8.898mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:20:49 PM
3	28.50	8.873mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:23:28 PM

Mean Area 28.89
Mean Conc. 8.996mg/L



Sample

Sample Name: HS23010982-05
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

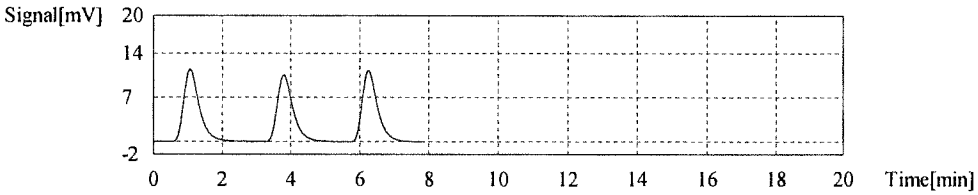
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.94mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.11	11.24mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:32:20 PM
2	34.06	10.60mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:35:04 PM
3	35.24	10.97mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:37:51 PM

Mean Area 35.14
Mean Conc. 10.94mg/L



Sample

Sample Name: HS23010982-05MS
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

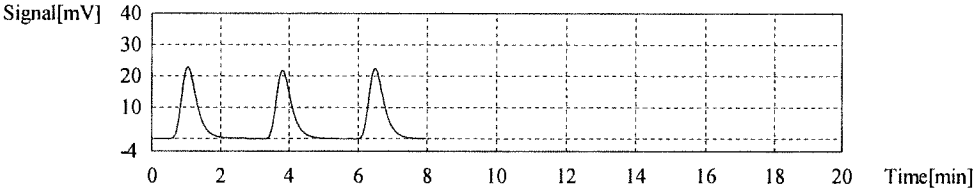
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.20	22.48mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:46:45 PM
2	69.61	21.67mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:49:41 PM
3	71.20	22.17mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:52:25 PM

Mean Area 71.00
Mean Conc. 22.11mg/L



Sample

TOC-Control L Report

2023_01_30_001.tlx

Sample Name: HS23010982-06
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

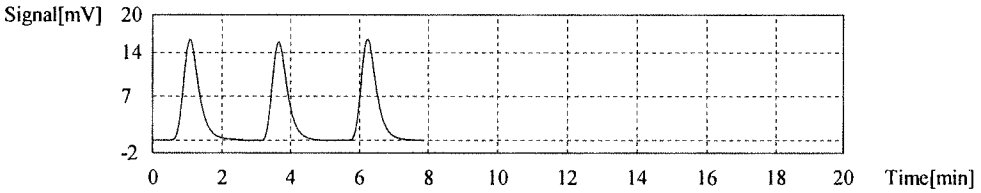
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.80	15.82mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:01:10 PM
2	49.32	15.36mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:03:59 PM
3	51.08	15.90mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:06:52 PM

Mean Area 50.40
Mean Conc. 15.69mg/L



Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

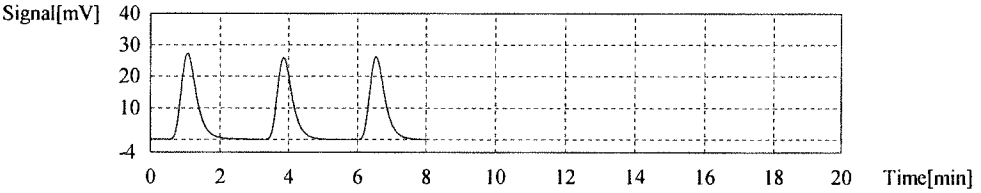
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.02mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.27	26.86mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:15:55 PM
2	81.72	25.44mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:18:52 PM
3	82.69	25.74mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:21:39 PM

Mean Area 83.56
Mean Conc. 26.02mg/L



TOC-Control L Report

Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

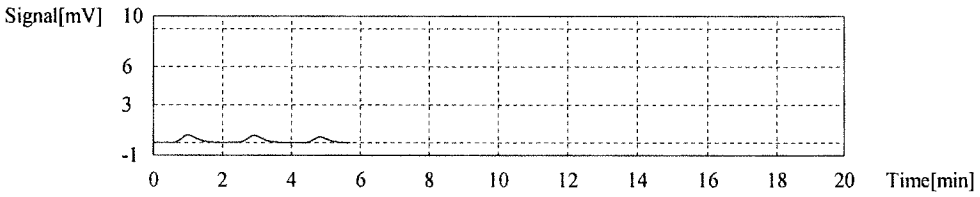
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4919mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex	Cal. Curve	Date / Time
1	1.793	0.5582mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:29:42 PM
2	1.651	0.5140mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:31:49 PM
3	1.296	0.4035mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:33:56 PM

Mean Area 1.580
Mean Conc. 0.4919mg/L



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	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Unknown	NPOC	CCV	321101806	12_22_2022	1.000	NPOC:25.32mg/L	
2	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.2570mg/	
3	Unknown	NPOC	MBLK-02032023		12_22_2022	1.000	NPOC:0.1519mg/	
4	Unknown	NPOC	LCS-02032023	3100606203	12_22_2022	1.000	NPOC:10.16mg/L	
5	Unknown	NPOC	LCSD-02032023		12_22_2022	1.000	NPOC:10.35mg/L	
6	Unknown	NPOC	HS23010982-03DF10		12_22_2022	1.000	NPOC:10.26mg/L	
7	Unknown	NPOC	HS23011461-14		12_22_2022	1.000	NPOC:0.4261mg/	
8	Unknown	NPOC	HS23011461-14MS		12_22_2022	1.000	NPOC:10.42mg/L	
9	Unknown	NPOC	HS23011461-16		12_22_2022	1.000	NPOC:1.988mg/L	
10	Unknown	NPOC	HS23011461-36		12_22_2022	1.000	NPOC:5.618mg/L	
11	Unknown	NPOC	HS23011461-38		12_22_2022	1.000	NPOC:3.076mg/L	
12	Unknown	NPOC	CCV	321101806	12_22_2022	1.000	NPOC:25.19mg/L	
13	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.3859mg/	

C:\TOC-L\Data\2023_02_03_001.tlx

	Status	Date / Time	Vial
1	Completed	2/3/2023 12:16:22	1
2	Completed	2/3/2023 12:28:40	2
3	Completed	2/3/2023 12:40:57	3
4	Completed	2/3/2023 12:54:42	4
5	Completed	2/3/2023 1:08:25 P	5
6	Completed	2/3/2023 1:22:19 P	6
7	Completed	2/3/2023 1:34:41 P	7
8	Completed	2/3/2023 1:48:42 P	8
9	Completed	2/3/2023 2:01:26 P	9
10	Completed	2/3/2023 2:14:51 P	10
11	Completed	2/3/2023 2:27:45 P	11
12	Completed	2/3/2023 2:42:54 P	1
13	Completed	2/3/2023 2:55:11 P	2

TOC-Control L Report

2023_02_03_001.tlx

Instr.Information

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

Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status: Completed
Chk. Result

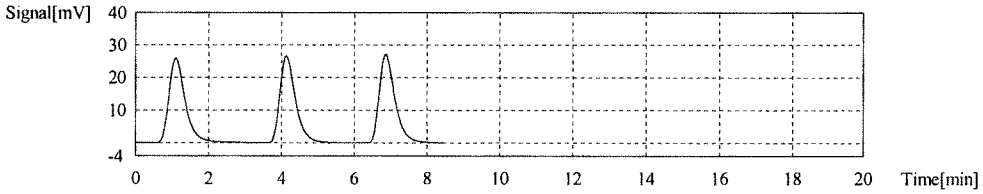
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.10	25.25mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:10:31 PM
2	80.47	25.05mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:13:31 PM
3	82.43	25.66mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:16:22 PM

Mean Area: 81.33
Mean Conc.: 25.32mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2570mg/L

1. Det

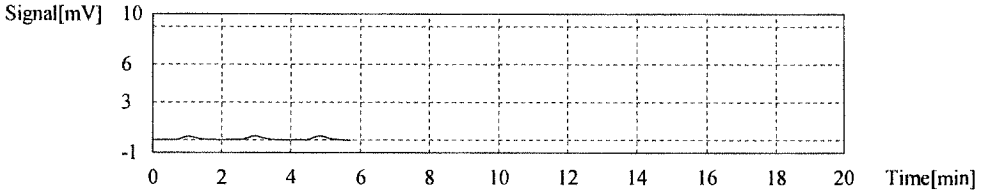
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6506	0.2026mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:24:25 PM
2	0.8279	0.2578mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:26:32 PM
3	0.9974	0.3105mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:28:40 PM

TOC-Control L Report

2023_02_03_001.tlx

Mean Area 0.8253
Mean Conc. 0.2570mg/L



Sample

Sample Name: MBLK-02032023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

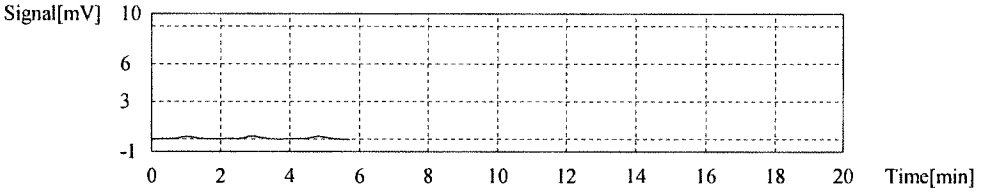
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1519mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4553	0.1418mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:36:43 PM
2	0.5722	0.1781mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:38:50 PM
3	0.4361	0.1358mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:40:57 PM

Mean Area 0.4879
Mean Conc. 0.1519mg/L



Sample

Sample Name: LCS-02032023
Sample ID: 3100606203
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.16mg/L

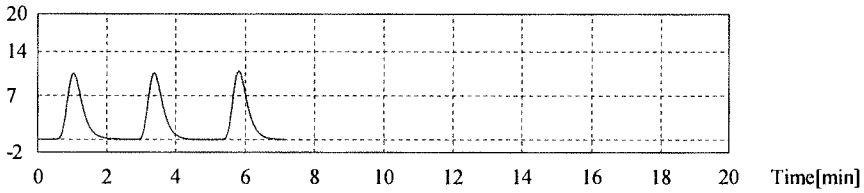
1. Det

Anal.: NPOC

TOC-Control L Report

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.67	10.17mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:49:28 PM
2	32.25	10.04mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:52:10 PM
3	33.01	10.28mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 12:54:42 PM

Mean Area 32.64
Mean Conc. 10.16mg/L



Sample

Sample Name: LCSD-02032023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

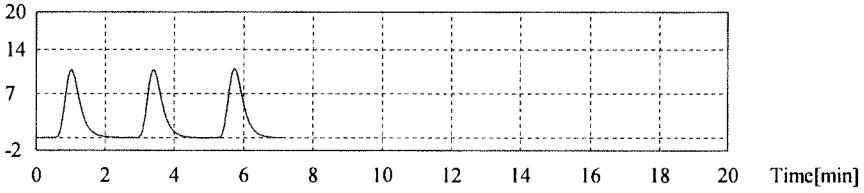
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.35mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.04	10.29mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:03:14 PM
2	32.83	10.22mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:05:49 PM
3	33.86	10.54mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:08:25 PM

Mean Area 33.24
Mean Conc. 10.35mg/L



Sample

Sample Name: HS23010982-03DF10
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.26mg/L

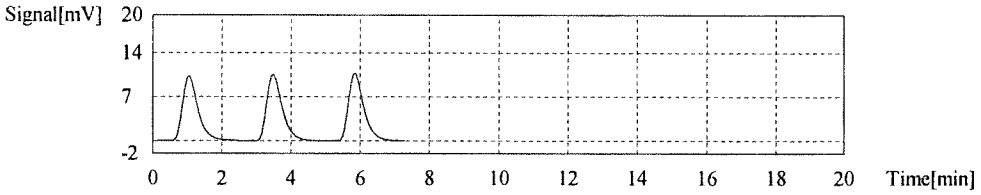
1. Det

TOC-Control L Report

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.06	9.982mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:17:02 PM
2	32.99	10.27mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:19:37 PM
3	33.86	10.54mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:22:19 PM

Mean Area 32.97
Mean Conc. 10.26mg/L



Sample

Sample Name: HS23011461-14
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

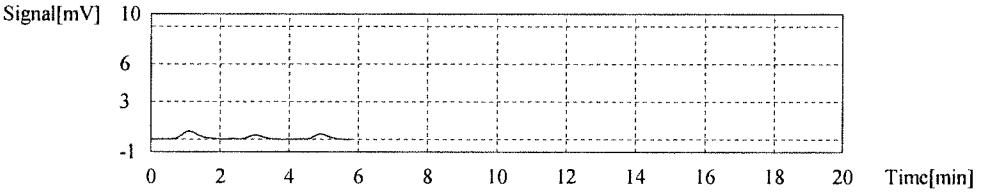
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4261mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.974	0.6146mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:30:27 PM
2	0.9414	0.2931mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:32:34 PM
3	1.190	0.3705mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:34:41 PM

Mean Area 1.368
Mean Conc. 0.4261mg/L



Sample

Sample Name: HS23011461-14MS
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.42mg/L

TOC-Control L Report

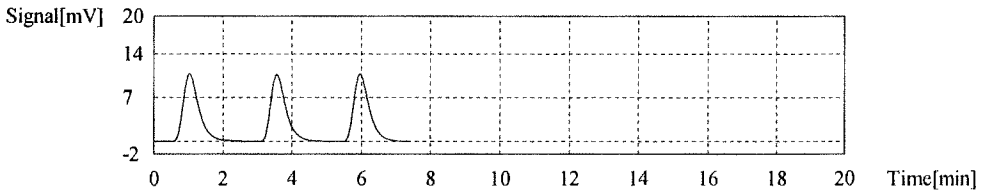
2023_02_03_001.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.78	10.52mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:43:22 PM
2	32.90	10.24mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:46:01 PM
3	33.74	10.50mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 1:48:42 PM

Mean Area 33.47
Mean Conc. 10.42mg/L



Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

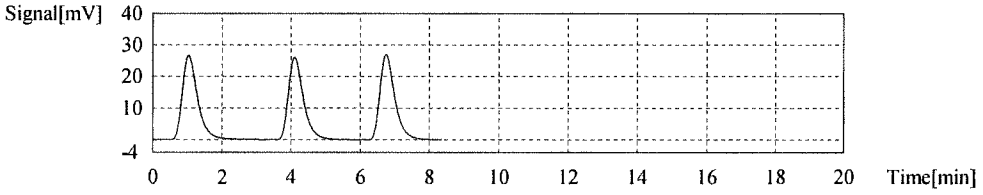
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.19mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.44	25.36mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 2:37:08 PM
2	79.30	24.69mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 2:40:02 PM
3	81.99	25.53mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 2:42:54 PM

Mean Area 80.91
Mean Conc. 25.19mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

2023_02_03_001.tlx

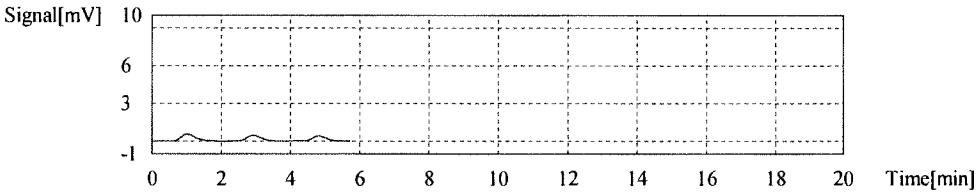
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3859mg/L

1. Det

Anal.: NPOC

No.	Area	Conc	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.493	0.4648mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 2:50:57 PM
2	1.209	0.3764mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 2:53:04 PM
3	1.016	0.3163mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/3/2023 2:55:11 PM

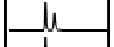
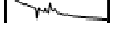
Mean Area 1.239
Mean Conc. 0.3859mg/L



HS23010982 9056_W IC

ALS WO# HS23010982

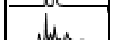
Sequence: 012623
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratio	BA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratio	BA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratio	BA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratio	BA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratio	BA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratio	BA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	BA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	9056-W-SH	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS		Unknown	G2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23011253-02		Unknown	RE7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23011253-02MS		Unknown	RE8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23011253-02MSD		Unknown	GA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-01DF100		Unknown	GC2	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-03		Unknown	GC3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-04DF5		Unknown	GC4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-05DF100		Unknown	GC5	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-06DF50		Unknown	GC6	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	G3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 012623
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method

Sequence: 012623
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	1/23/2023 2:36:57 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/23/2023 2:42:45 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/23/2023 2:48:34 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/23/2023 2:54:22 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/23/2023 3:00:10 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/23/2023 3:05:59 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/23/2023 3:11:47 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/23/2023 3:17:35 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/26/2023 2:51:52 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 2:57:39 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/26/2023 3:43:57 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/26/2023 3:49:44 PM -06:00
Anions Processing Method ISO		HS23011253-02	5.0	Finished	1/26/2023 3:55:32 PM -06:00
Anions Processing Method ISO		HS23011253-02MS	5.0	Finished	1/26/2023 4:01:19 PM -06:00
Anions Processing Method ISO		HS23011253-02MSD	5.0	Finished	1/26/2023 4:07:17 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/26/2023 4:24:39 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 4:36:13 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/26/2023 5:51:23 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 6:02:57 PM -06:00
Anions Processing Method ISO		HS23010982-01DF100	5.0	Finished	1/26/2023 6:43:35 PM -06:00
Anions Processing Method ISO		HS23010982-03	5.0	Finished	1/26/2023 6:49:33 PM -06:00
Anions Processing Method ISO		HS23010982-04DF5	5.0	Finished	1/26/2023 6:55:19 PM -06:00
Anions Processing Method ISO		HS23010982-05DF100	5.0	Finished	1/26/2023 7:01:06 PM -06:00
Anions Processing Method ISO		HS23010982-06DF50	5.0	Finished	1/26/2023 7:06:53 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/26/2023 7:24:13 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 7:35:46 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/26/2023 9:14:02 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 9:19:49 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/27/2023 4:21:52 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/27/2023 4:27:39 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/27/2023 7:32:36 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/27/2023 7:38:22 AM -06:00

Sequence: 012623
Last Update Operator: alshs.nouser

Processing Method	CD	Name	Volume	Status	Inject Time

Sequence: 012623
Injection #6: STD6

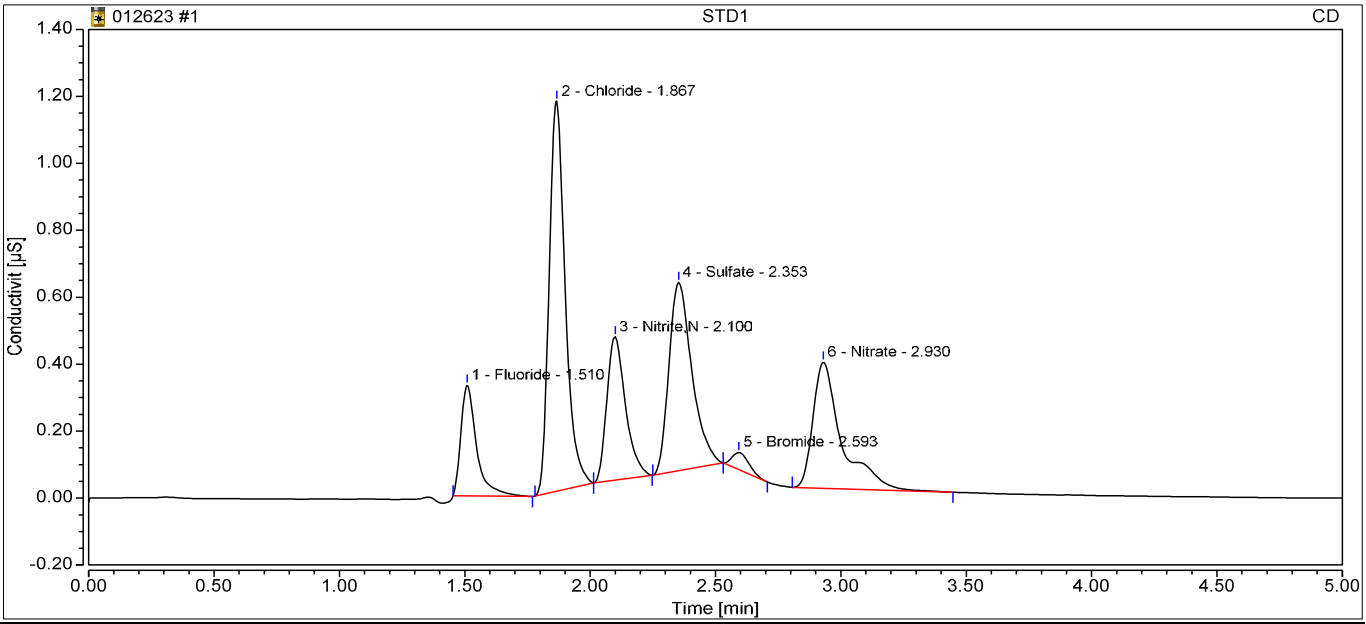
Calibration

Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***18.2600***	***0.99823***	***0.0003***	***0.2594***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	3.9326	0.99992	-0.0034	0.1716	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	6.5665	0.99976	0.0001	0.3625	-0.0059
4	Sulfate	Lin, WithOffset, 1/A	Area	6	7.0089	0.99974	0.0018	0.1125	0.0000
5	Bromide	Lin, WithOffset, 1/A	Area	6	21.3247	0.99813	-0.0031	0.0579	0.0000
6	Nitrate	Lin, WithOffset, 1/A	Area	6	8.6115	0.99956	0.0097	0.3471	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	5	14.8871	0.99687	-0.0004	0.0060	-0.0001
8	Phosphate	Lin, WithOffset, 1/A	Area	2	n.a.	1.00000	-0.4901	0.1278	0.0000
Maximum					**21.3247**	1.00000			
Minimum					3.9326	**0.99687**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**BA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:36**	*Sample Weight:*	**1.0000**

Run Time:



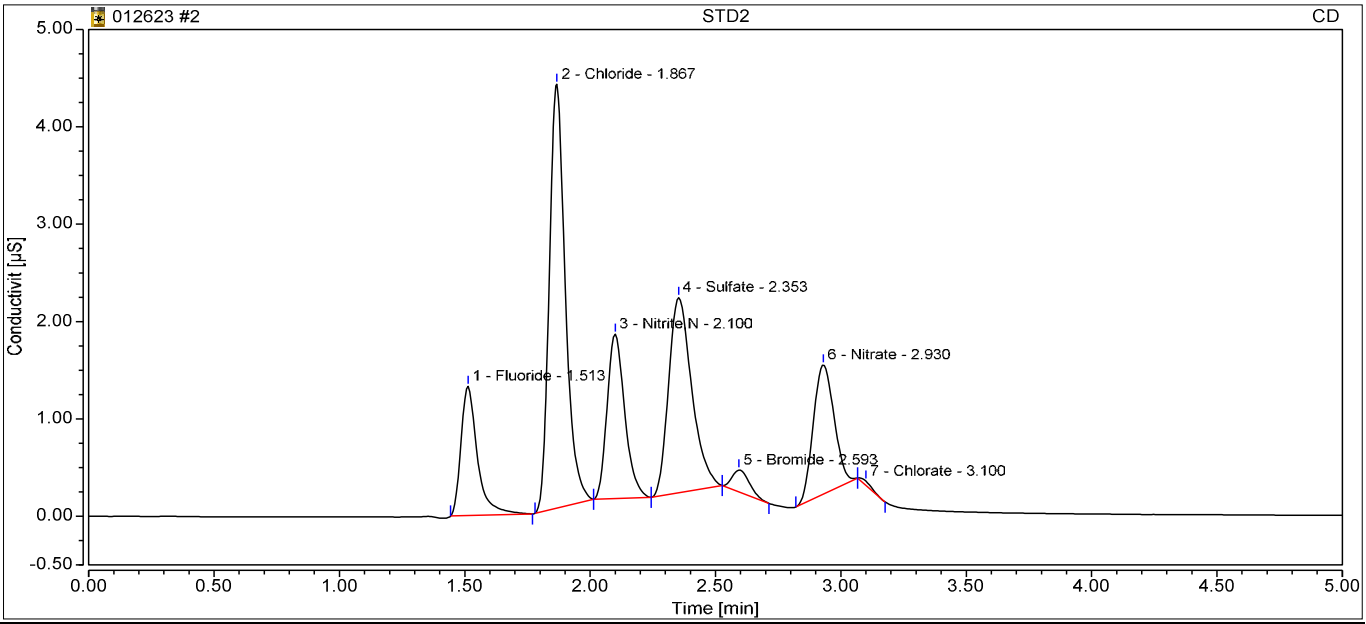
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.024	0.0916	0.0916	1.0000
2	1.87	Chloride	BMB	0.087	0.5248	0.5248	1.0000
3	2.10	Nitrite,N	BMB	0.037	0.1020	0.1020	1.0000
4	2.35	Sulfate	BMB	0.060	0.5165	0.5165	1.0000
5	2.59	Bromide	BMB	0.004	0.1232	0.1232	1.0000
6	2.93	Nitrate	BMB	0.050	0.1161	0.1161	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.262**		**1.47**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**BA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:42**	*Sample Weight:*	**1.0000**

Run Time:



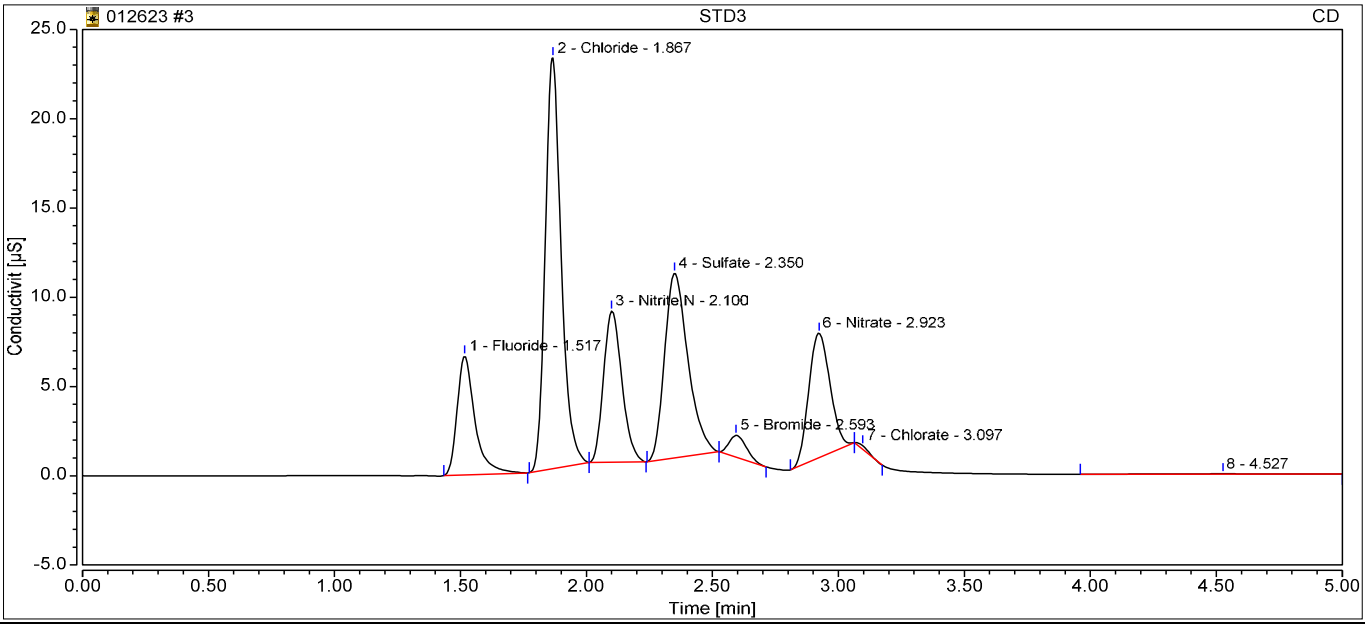
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.101	0.3891	0.3891	1.0000
2	1.87	Chloride	BMB	0.323	1.9022	1.9022	1.0000
3	2.10	Nitrite,N	BMB	0.138	0.3825	0.3825	1.0000
4	2.35	Sulfate	BMB	0.215	1.8922	1.8922	1.0000
5	2.59	Bromide	BMB	0.018	0.3682	0.3682	1.0000
6	2.93	Nitrate	BMB	0.128	0.3409	0.3409	1.0000
7	3.10	Chlorate	BMB	0.002	0.4193	0.4193	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.925**		**5.69**	

3 STD3

Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**BA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:48**	*Sample Weight:*	**1.0000**

Run Time:



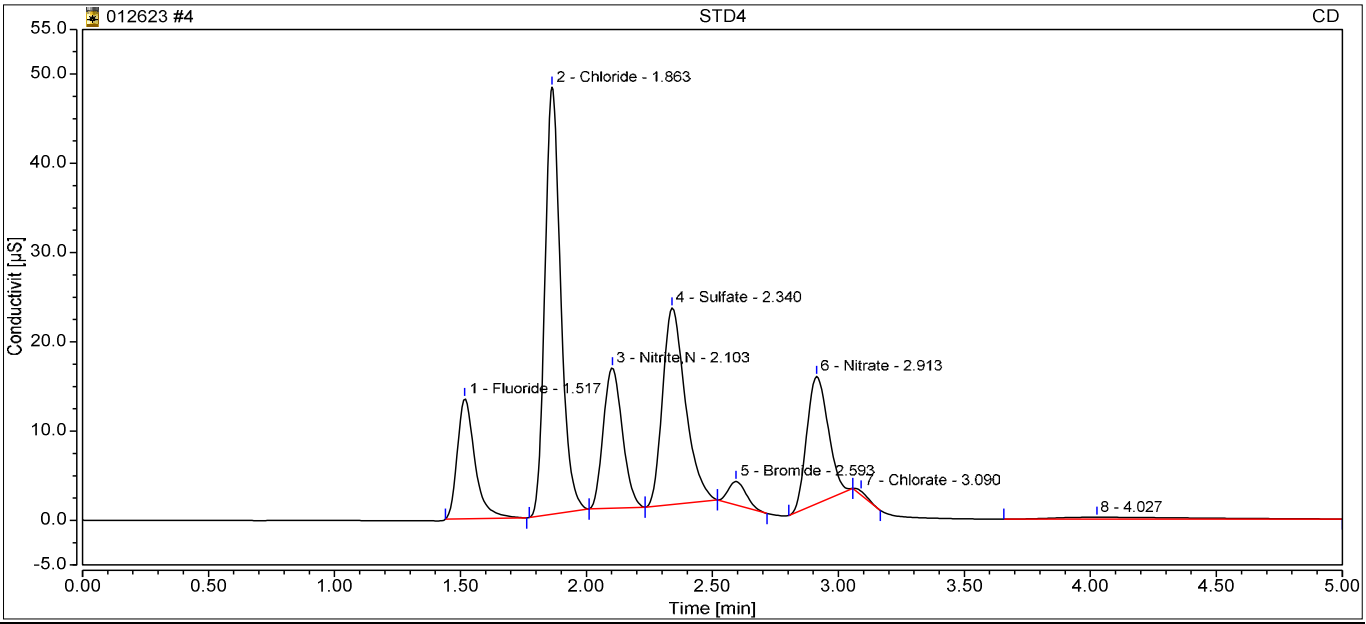
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.545	2.1003	2.1003	1.0000
2	1.87	Chloride	BMB	1.685	9.8413	9.8413	1.0000
3	2.10	Nitrite,N	BMB	0.715	2.0394	2.0394	1.0000
4	2.35	Sulfate	BMB	1.114	9.8924	9.8924	1.0000
5	2.59	Bromide	BMB	0.099	1.7671	1.7671	1.0000
6	2.92	Nitrate	BMB	0.683	1.9402	1.9402	1.0000
7	3.10	Chlorate	BMB	0.010	1.7695	1.7695	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.851**		**29.35**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**BA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:54**	*Sample Weight:*	**1.0000**

Run Time:



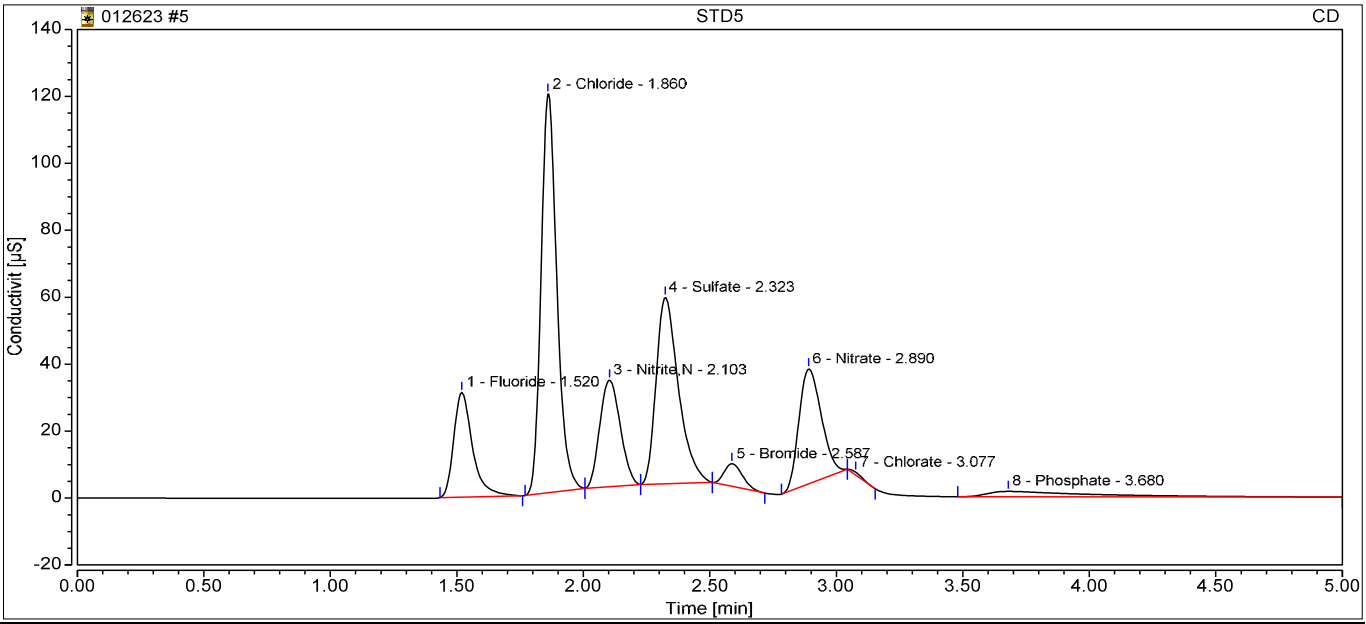
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.096	4.2257	4.2257	1.0000
2	1.86	Chloride	BMB	3.473	20.2647	20.2647	1.0000
3	2.10	Nitrite,N	BMB	1.379	4.0759	4.0759	1.0000
4	2.34	Sulfate	BMB	2.316	20.5697	20.5697	1.0000
5	2.59	Bromide	BMB	0.216	3.7890	3.7890	1.0000
6	2.91	Nitrate	BMB	1.408	4.0269	4.0269	1.0000
7	3.09	Chlorate	BMB	0.023	4.3199	4.3199	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.911**		**61.27**	

5 STD5

Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**BA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:00**	*Sample Weight:*	**1.0000**

Run Time:



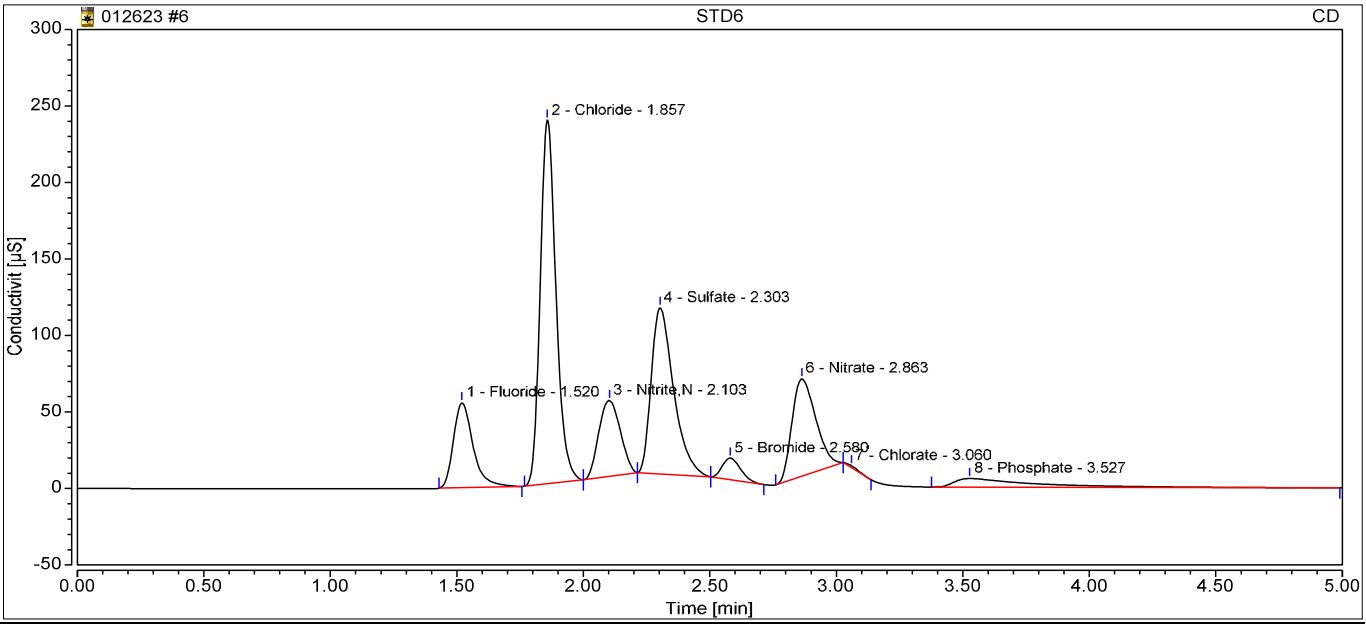
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.698	10.4020	10.4020	1.0000
2	1.86	Chloride	BMB	8.612	50.2171	50.2171	1.0000
3	2.10	Nitrite,N	BMB	2.980	9.7904	9.7904	1.0000
4	2.32	Sulfate	BMB	5.704	50.6918	50.6918	1.0000
5	2.59	Bromide	BMB	0.569	9.8884	9.8884	1.0000
6	2.89	Nitrate	BMB	3.525	10.1264	10.1264	1.0000
7	3.08	Chlorate	BMB	0.047	9.8667	9.8667	1.0000
8	3.68	Phosphate	BMB	0.787	10.0000	10.0000	1.0000
Total:			**0.000**	**24.922**		**160.98**	

6 STD6

Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**BA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:05**	*Sample Weight:*	**1.0000**

Run Time:



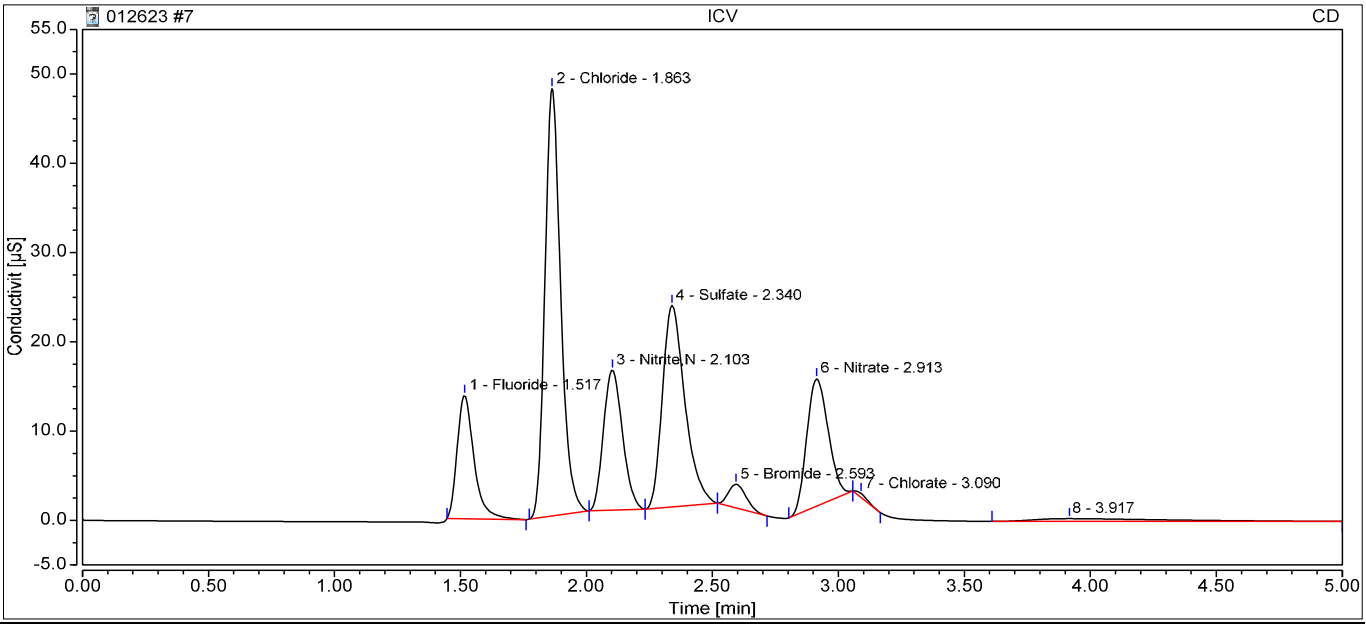
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	5.004	19.2913	19.2913	1.0000
2	1.86	Chloride	BMB	17.110	99.7497	99.7497	1.0000
3	2.10	Nitrite,N	BMB	4.894	20.1587	20.1587	1.0000
4	2.30	Sulfate	BMB	11.131	98.9373	98.9373	1.0000
5	2.58	Bromide	BMB	1.187	20.5641	20.5641	1.0000
6	2.86	Nitrate	BMB	6.935	19.9496	19.9496	1.0000
7	3.06	Chlorate	BMB	0.069	20.0446	20.0446	1.0000
8	3.53	Phosphate	BMB	2.065	20.0000	20.0000	1.0000
Total:			**0.000**	**48.395**		**318.70**	

7 ICV

Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**BA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:11**	*Sample Weight:*	**1.0000**

Run Time:



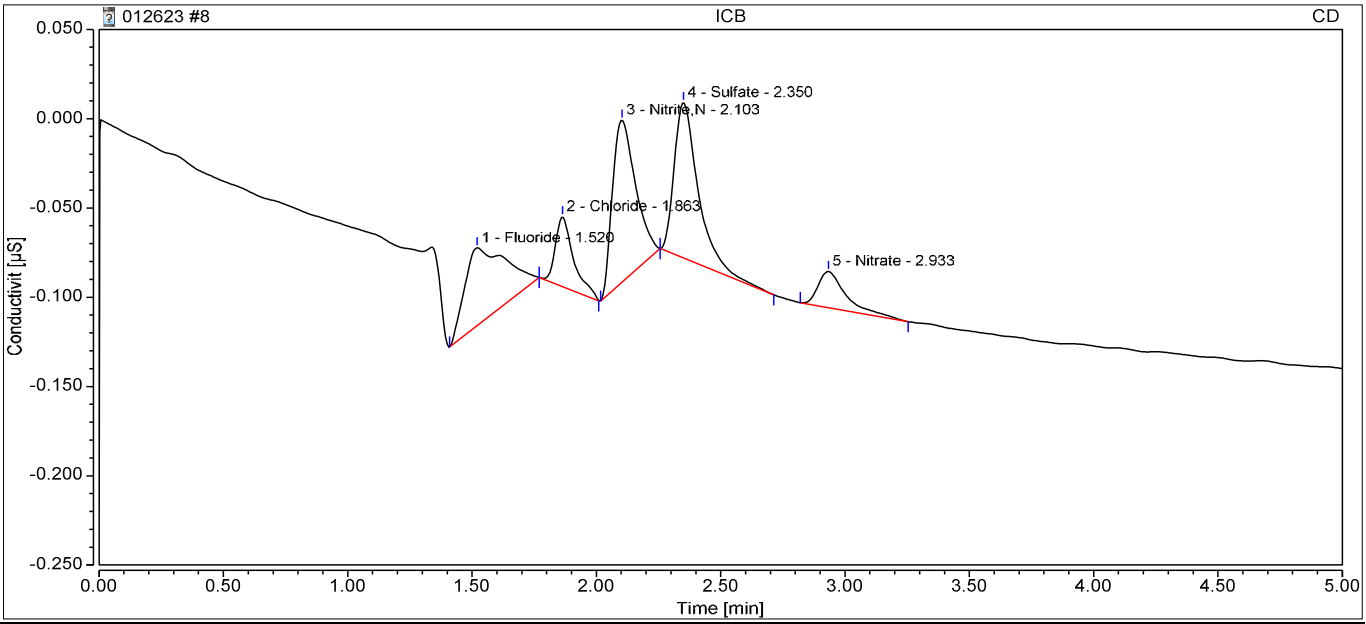
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.076	4.1460	4.1460	1.0000
2	1.86	Chloride	BMB	3.476	20.2807	20.2807	1.0000
3	2.10	Nitrite,N	BMB	1.374	4.0608	4.0608	1.0000
4	2.34	Sulfate	BMB	2.342	20.8027	20.8027	1.0000
5	2.59	Bromide	BMB	0.218	3.8222	3.8222	1.0000
6	2.91	Nitrate	BMB	1.407	4.0267	4.0267	1.0000
7	3.09	Chlorate	BMB	0.023	4.2714	4.2714	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.916**		**61.41**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**BA8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:17**	*Sample Weight:*	**1.0000**

Run Time:



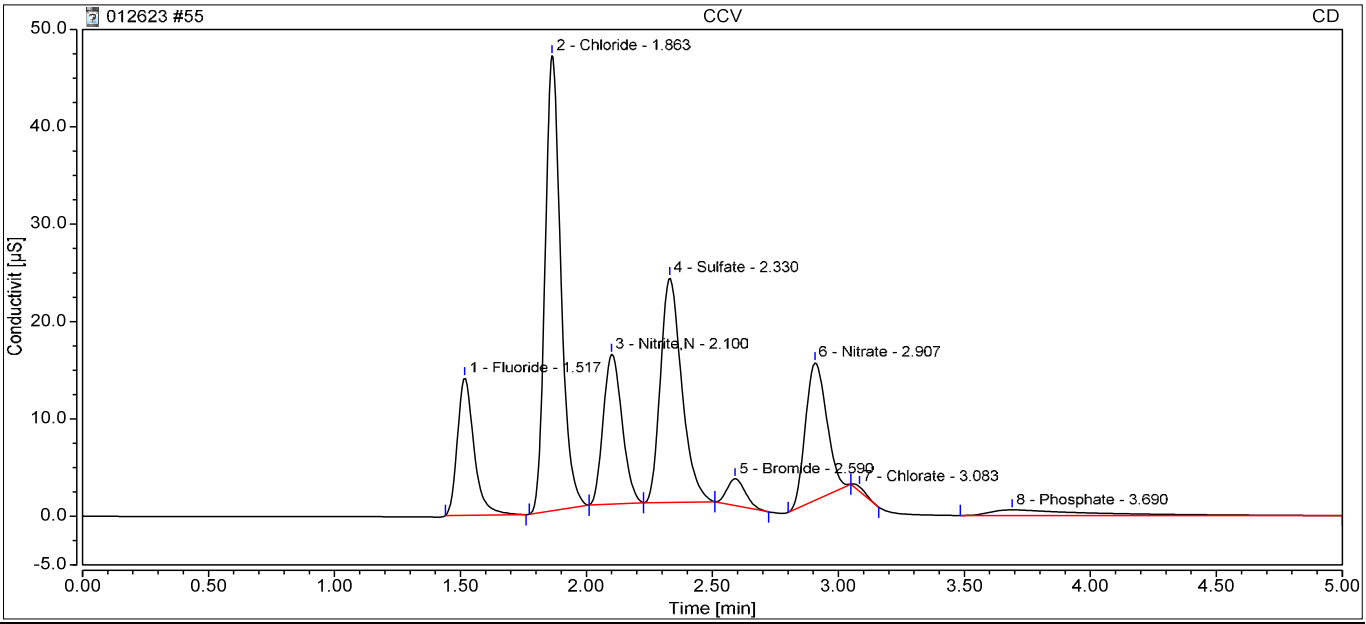
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.008	0.0297	0.0297	1.0000
2	1.86	Chloride	BMB	0.003	0.0390	0.0390	1.0000
3	2.10	Nitrite,N	BMB	0.010	0.0268	0.0268	1.0000
4	2.35	Sulfate	BMB	0.010	0.0714	0.0714	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
5	2.93	Nitrate	BMB	0.003	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.034**		**0.17**	

55 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 14:51**	*Sample Weight:*	**1.0000**

Run Time:



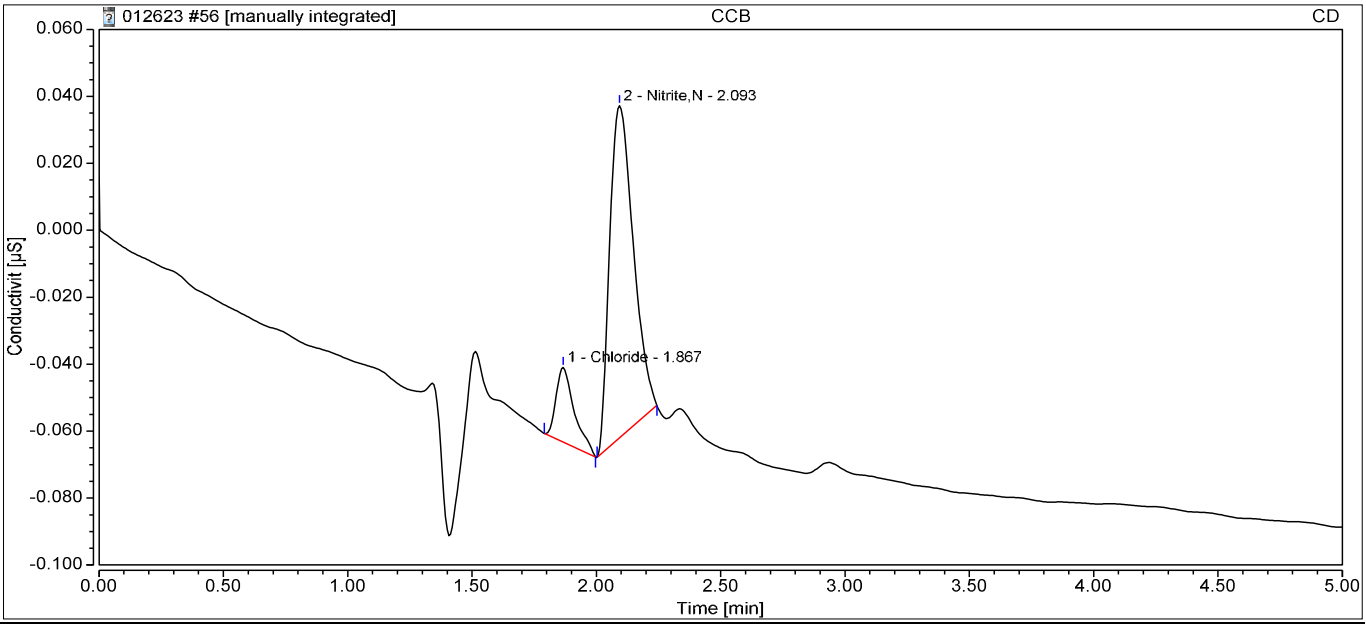
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.081	4.1650	4.1650	1.0000
2	1.86	Chloride	BMB	3.391	19.7874	19.7874	1.0000
3	2.10	Nitrite,N	BMB	1.335	3.9359	3.9359	1.0000
4	2.33	Sulfate	BMB	2.258	20.0618	20.0618	1.0000
5	2.59	Bromide	BMB	0.231	4.0448	4.0448	1.0000
6	2.91	Nitrate	BMB	1.384	3.9600	3.9600	1.0000
7	3.08	Chlorate	BMB	0.024	4.3901	4.3901	1.0000
8	3.69	Phosphate	BMB	0.273	5.9698	5.9698	1.0000
Total:			**0.000**	**9.977**		**66.31**	

56 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 14:57**	*Sample Weight:*	**1.0000**

Run Time:



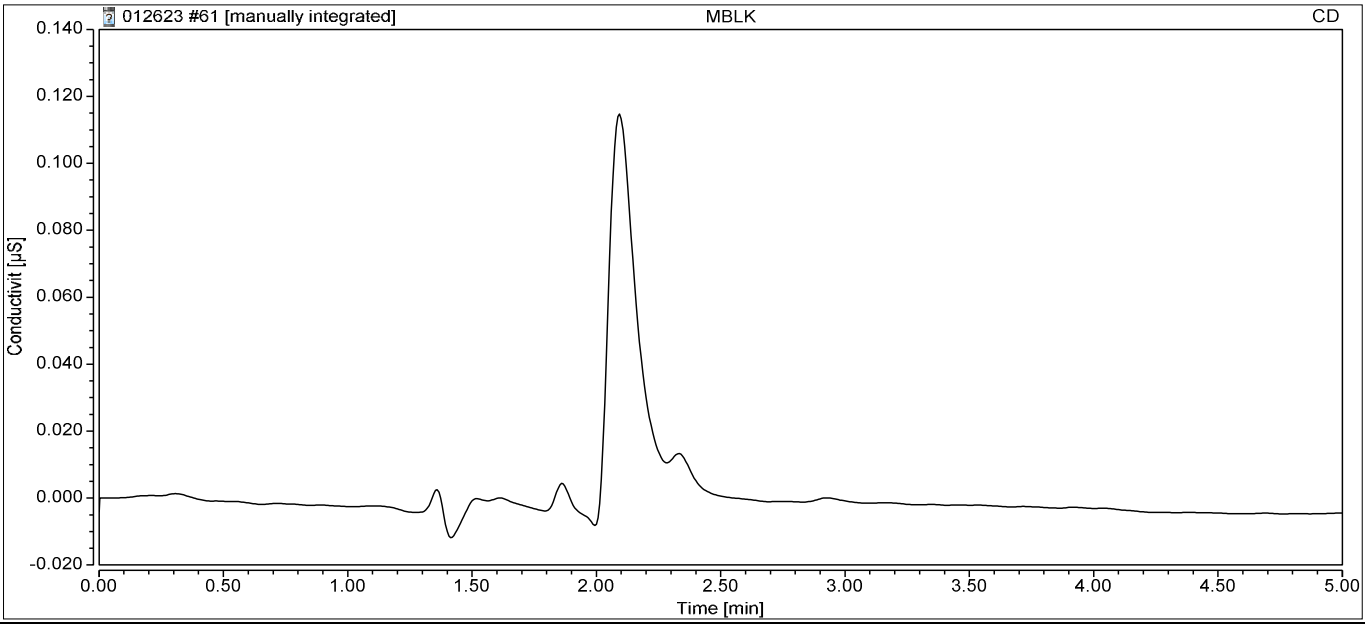
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.002	0.0308	0.0308	1.0000
2	2.09	Nitrite,N	BMB*	0.011	0.0299	0.0299	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.013**		**0.06**	

61 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 15:43**	*Sample Weight:*	**1.0000**

Run Time:



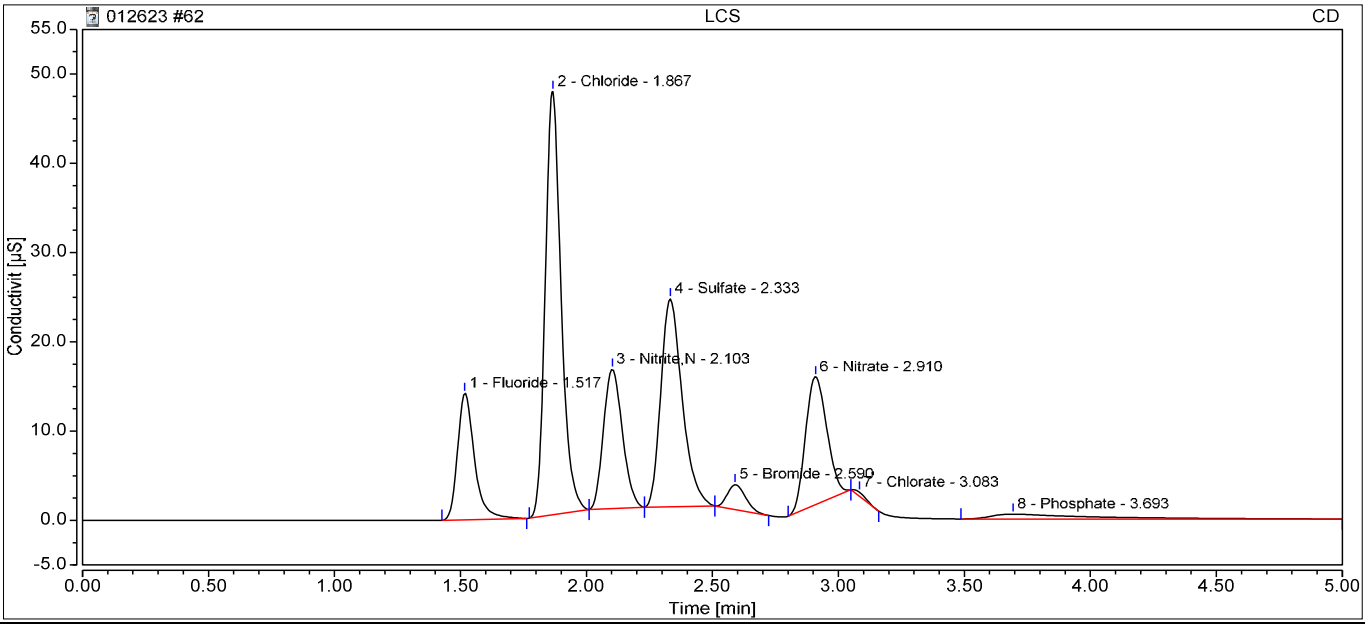
Integration Results

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

62 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**G2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 15:49**	*Sample Weight:*	**1.0000**

Run Time:



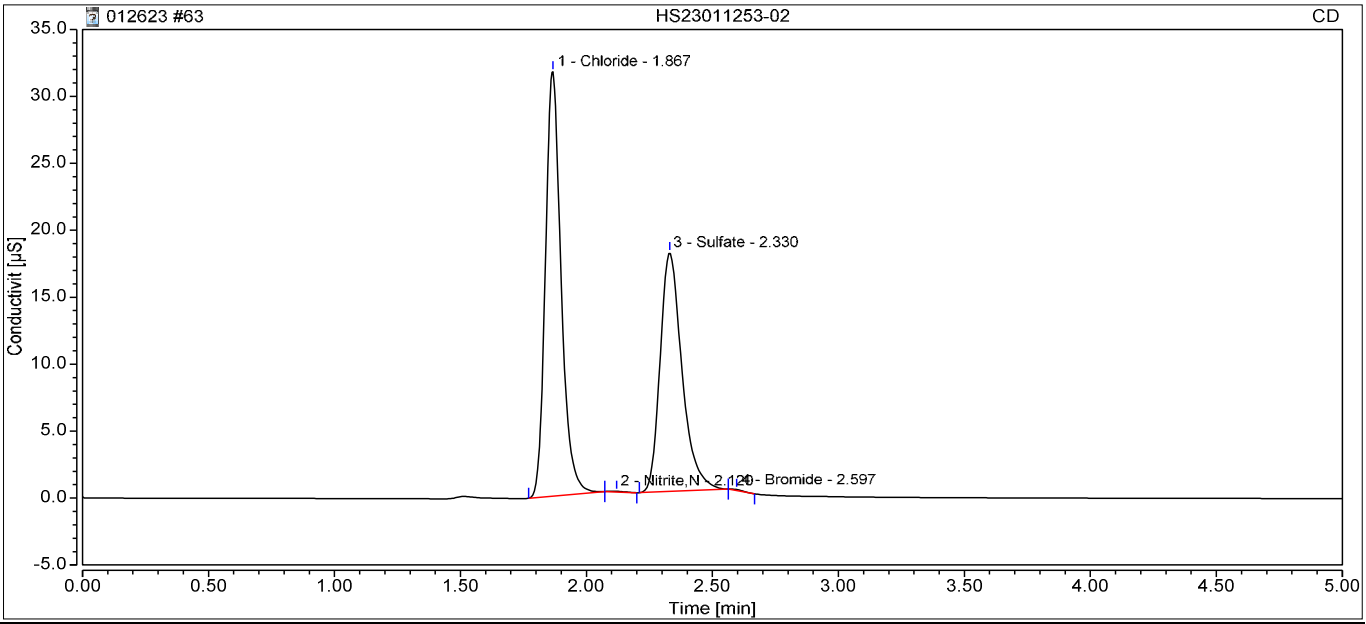
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.106	4.2612	4.2612	1.0000
2	1.87	Chloride	BMB	3.451	20.1322	20.1322	1.0000
3	2.10	Nitrite,N	BMB	1.356	4.0034	4.0034	1.0000
4	2.33	Sulfate	BMB	2.291	20.3473	20.3473	1.0000
5	2.59	Bromide	BMB	0.235	4.1068	4.1068	1.0000
6	2.91	Nitrate	BMB	1.407	4.0242	4.0242	1.0000
7	3.08	Chlorate	BMB	0.024	4.5351	4.5351	1.0000
8	3.69	Phosphate	BMB	0.254	5.8281	5.8281	1.0000
Total:			**0.000**	**10.123**		**67.24**	

63 HS23011253-02

Sample Name:	**HS23011253-02**	*Injection Volume:*	**5.00**
Vial Number:	**RE7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 15:55**	*Sample Weight:*	**1.0000**

Run Time:



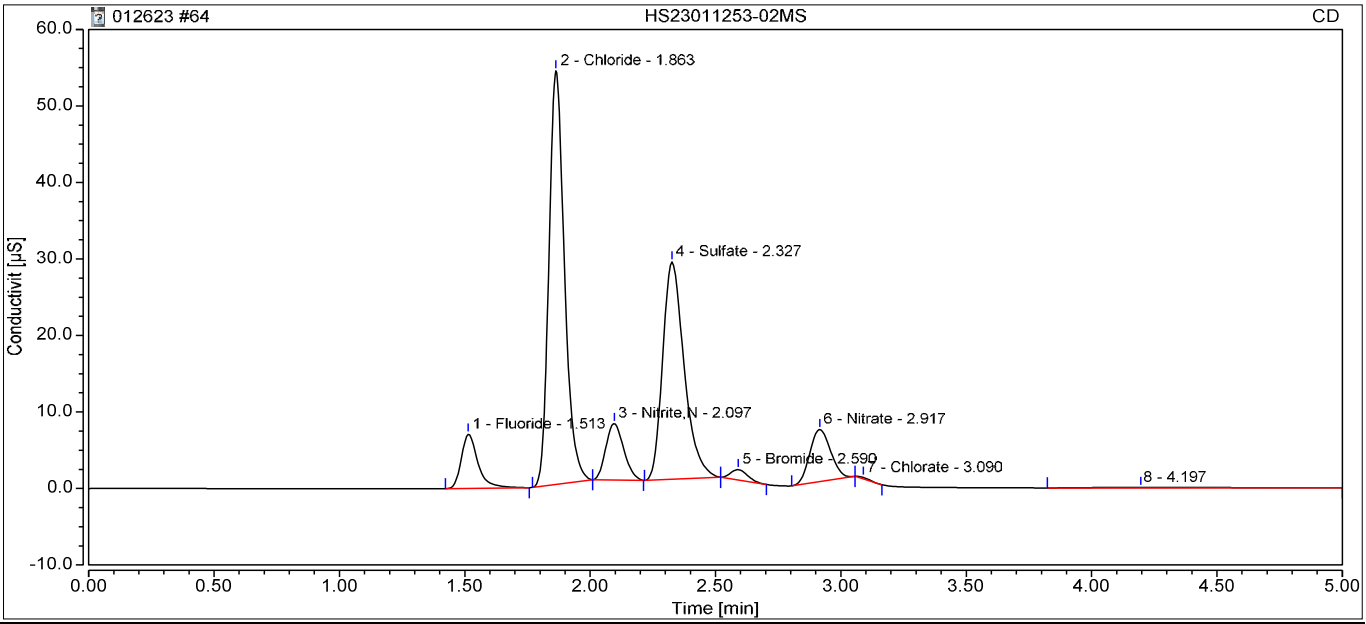
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	2.290	13.3675	13.3675	1.0000
2	2.12	Nitrite,N	BMB	0.003	0.0082	0.0082	1.0000
3	2.33	Sulfate	BMB	1.794	15.9348	15.9348	1.0000
4	2.60	Bromide	BMB	0.004	0.1200	0.1200	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.091**		**29.43**	

64 HS23011253-02MS

Sample Name:	**HS23011253-02MS**	*Injection Volume:*	**5.00**
Vial Number:	**RE8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:01**	*Sample Weight:*	**1.0000**

Run Time:



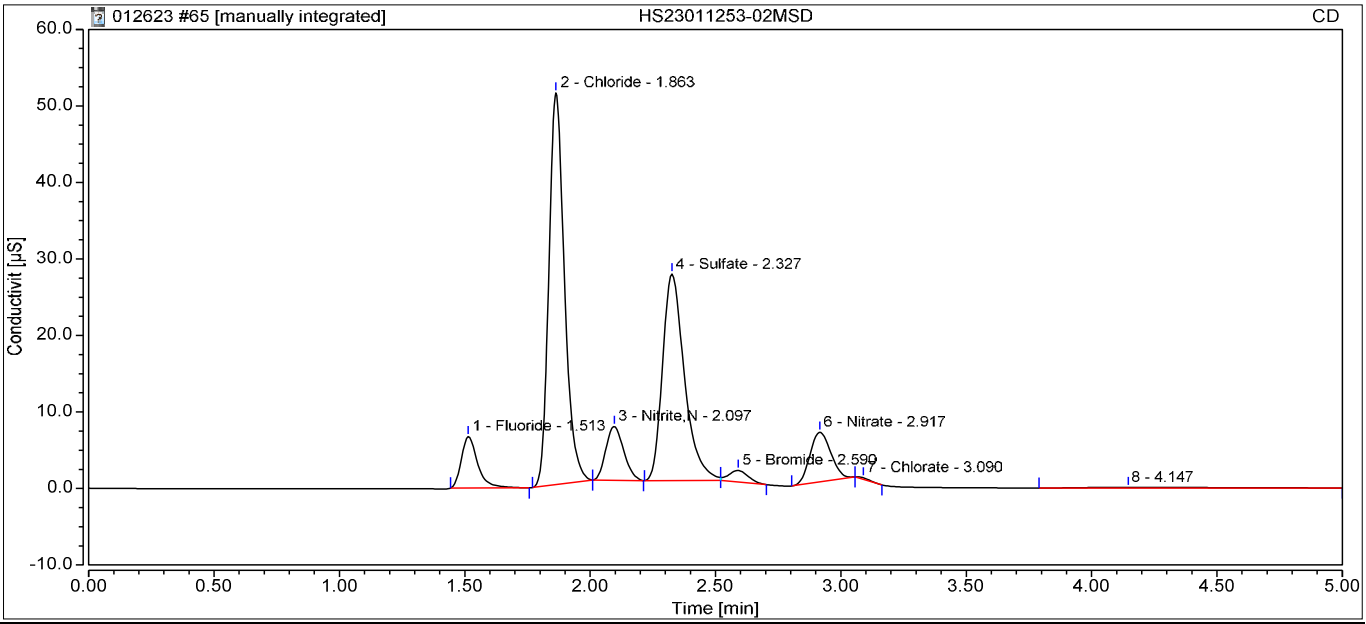
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.547	2.1077	2.1077	1.0000
2	1.86	Chloride	BMB	3.884	22.6602	22.6602	1.0000
3	2.10	Nitrite,N	BMB	0.611	1.7340	1.7340	1.0000
4	2.33	Sulfate	BMB	2.831	25.1498	25.1498	1.0000
5	2.59	Bromide	BMB	0.106	1.8922	1.8922	1.0000
6	2.92	Nitrate	BMB	0.655	1.8597	1.8597	1.0000
7	3.09	Chlorate	BMB	0.010	1.8060	1.8060	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.644**		**57.21**	

65 HS23011253-02MSD

Sample Name:	**HS23011253-02MSD**	*Injection Volume:*	**5.00**
Vial Number:	**GA1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:07**	*Sample Weight:*	**1.0000**

Run Time:



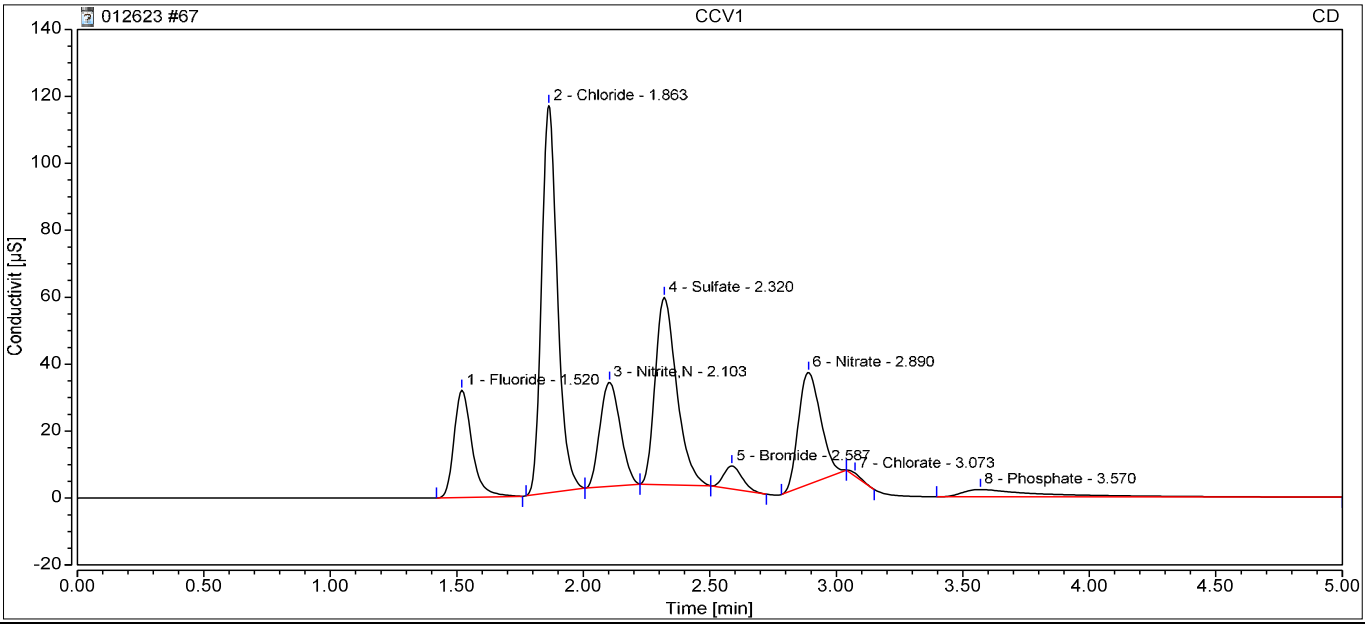
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.506	1.9484	1.9484	1.0000
2	1.86	Chloride	BMB	3.695	21.5588	21.5588	1.0000
3	2.10	Nitrite,N	BMB	0.582	1.6495	1.6495	1.0000
4	2.33	Sulfate	BM *	2.744	24.3798	24.3798	1.0000
5	2.59	Bromide	MB*	0.137	2.4153	2.4153	1.0000
6	2.92	Nitrate	BMB	0.625	1.7724	1.7724	1.0000
7	3.09	Chlorate	BMB	0.010	1.7259	1.7259	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.298**		**55.45**	

67 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:24**	*Sample Weight:*	**1.0000**

Run Time:



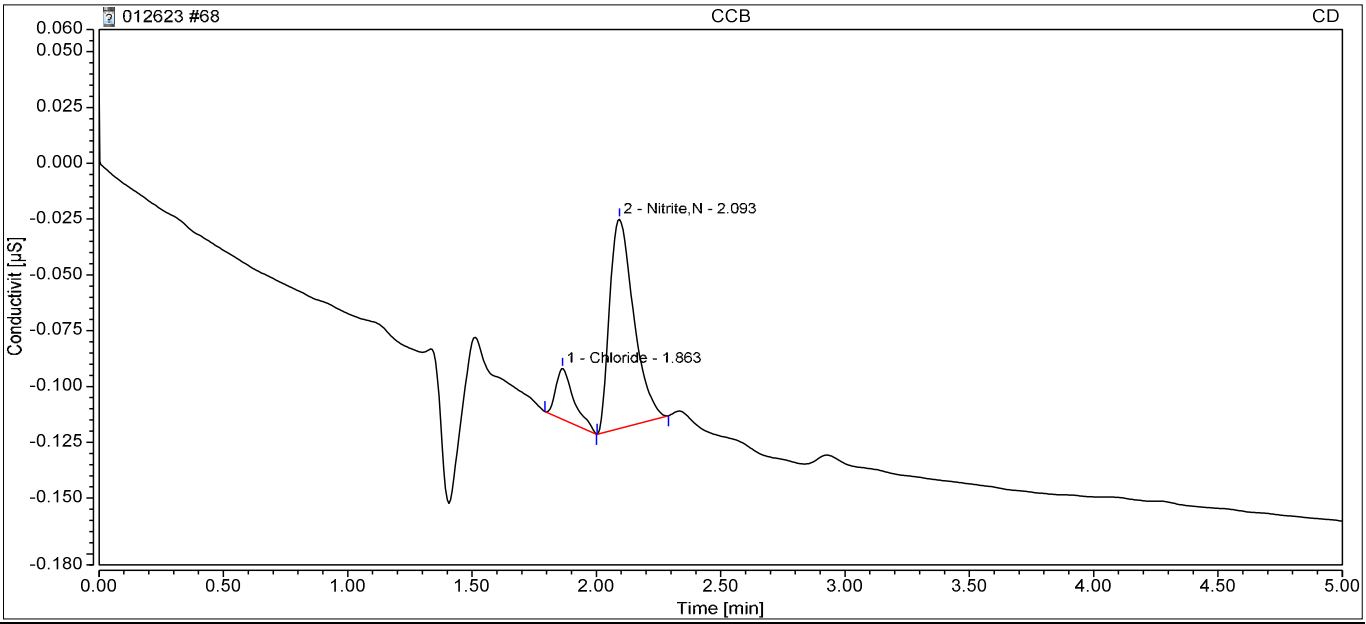
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.640	10.1792	10.1792	1.0000
2	1.86	Chloride	BMB	8.409	49.0312	49.0312	1.0000
3	2.10	Nitrite,N	BMB	2.886	9.4126	9.4126	1.0000
4	2.32	Sulfate	BMB	5.520	49.0616	49.0616	1.0000
5	2.59	Bromide	BMB	0.583	10.1235	10.1235	1.0000
6	2.89	Nitrate	BMB	3.420	9.8237	9.8237	1.0000
7	3.07	Chlorate	BMB	0.044	9.2707	9.2707	1.0000
8	3.57	Phosphate	BMB	0.818	10.2352	10.2352	1.0000
Total:			**0.000**	**24.320**		**157.14**	

68 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:36**	*Sample Weight:*	**1.0000**

Run Time:



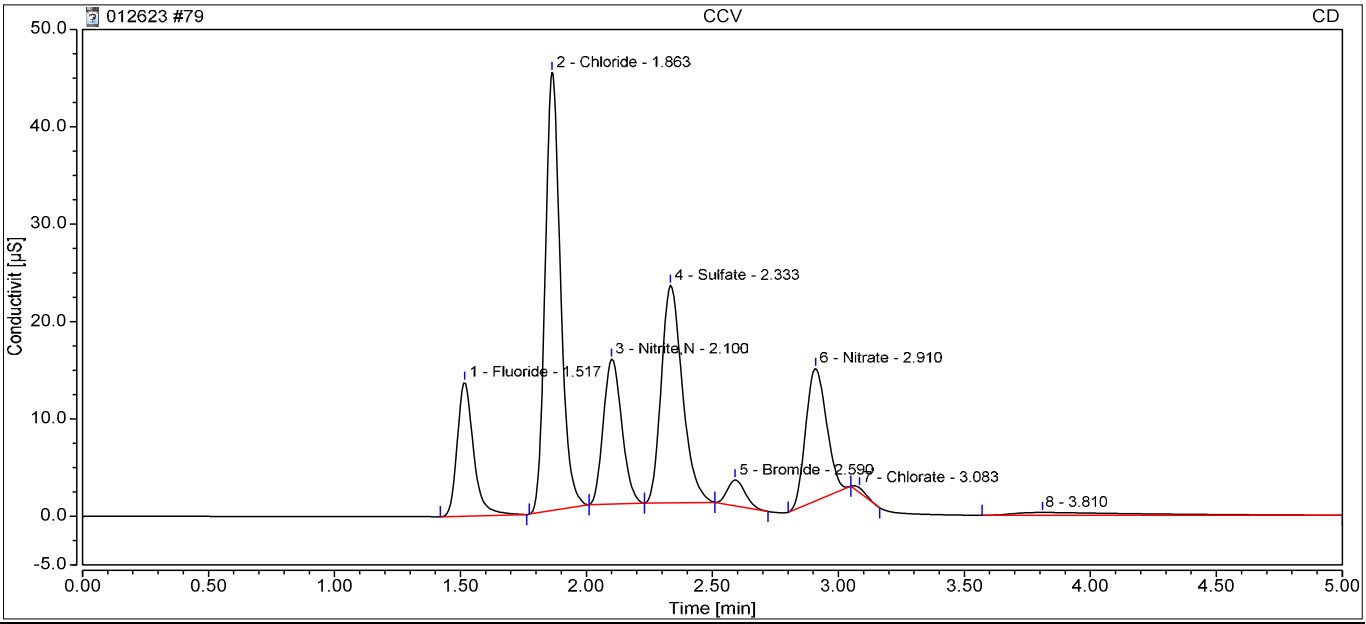
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.86	Chloride	BMB	0.002	0.0311	0.0311	1.0000
2	2.09	Nitrite,N	BMB	0.011	0.0290	0.0290	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.013**		**0.06**	

79 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 17:51**	*Sample Weight:*	**1.0000**

Run Time:



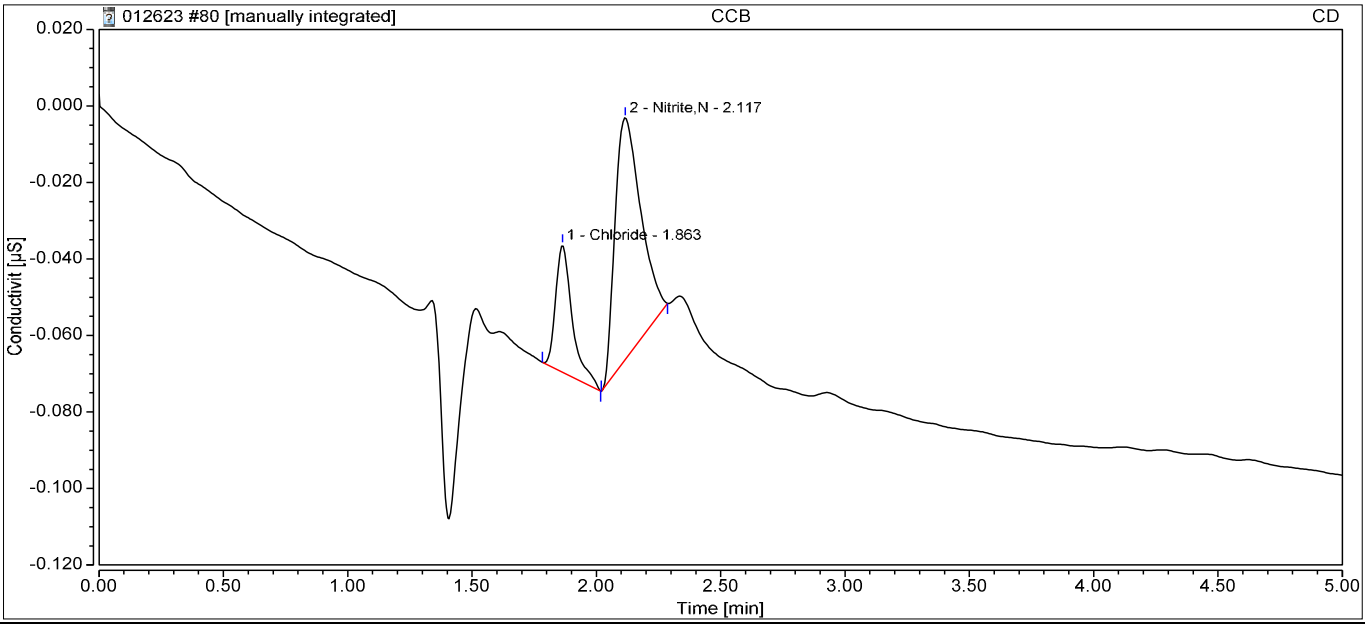
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.035	3.9878	3.9878	1.0000
2	1.86	Chloride	BMB	3.175	18.5255	18.5255	1.0000
3	2.10	Nitrite,N	BMB	1.264	3.7114	3.7114	1.0000
4	2.33	Sulfate	BMB	2.171	19.2805	19.2805	1.0000
5	2.59	Bromide	BMB	0.219	3.8421	3.8421	1.0000
6	2.91	Nitrate	BMB	1.302	3.7234	3.7234	1.0000
7	3.08	Chlorate	BMB	0.025	4.7458	4.7458	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.190**		**57.82**	

80 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 18:02**	*Sample Weight:*	**1.0000**

Run Time:



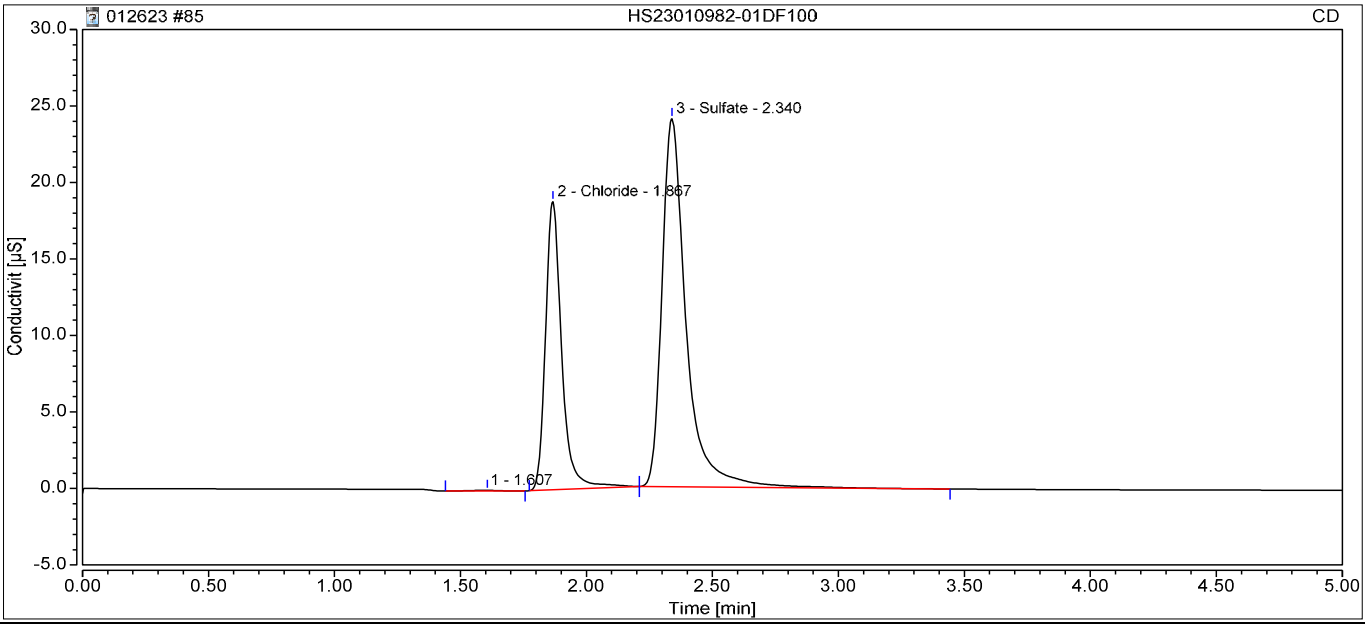
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.86	Chloride	BMB	0.003	0.0348	0.0348	1.0000
2	2.12	Nitrite,N	BMB*	0.008	0.0206	0.0206	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.06**	

85 HS23010982-01DF100

Sample Name:	**HS23010982-01DF100**	*Injection Volume:*	**5.00**
Vial Number:	**GC2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**100.0000**
Recording Time:	**01/26/2023 18:43**	*Sample Weight:*	**1.0000**

Run Time:



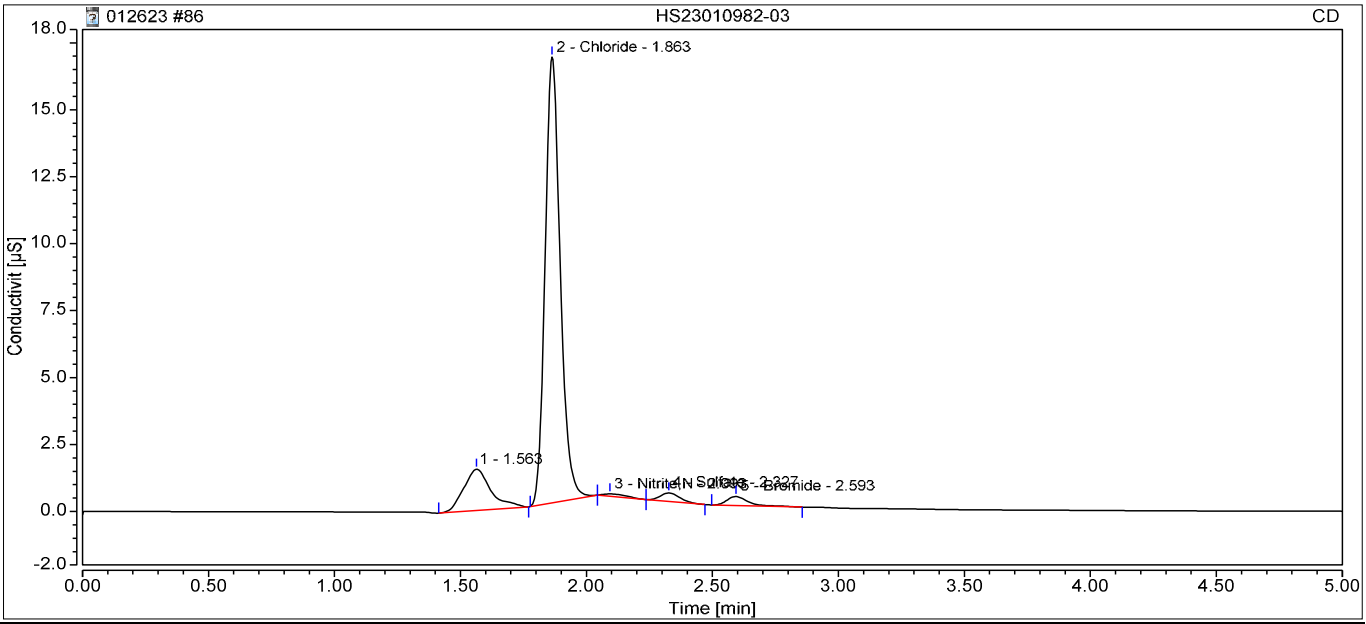
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	100.0000
2	1.87	Chloride	BMB	1.403	8.1965	819.6482	100.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	100.0000
3	2.34	Sulfate	BMB	2.675	23.7635	2376.3533	100.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	100.0000
Total:			**0.000**	**4.078**		**3196.00**	

86 HS23010982-03

Sample Name:	**HS23010982-03**	*Injection Volume:*	**5.00**
Vial Number:	**GC3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 18:49**	*Sample Weight:*	**1.0000**

Run Time:



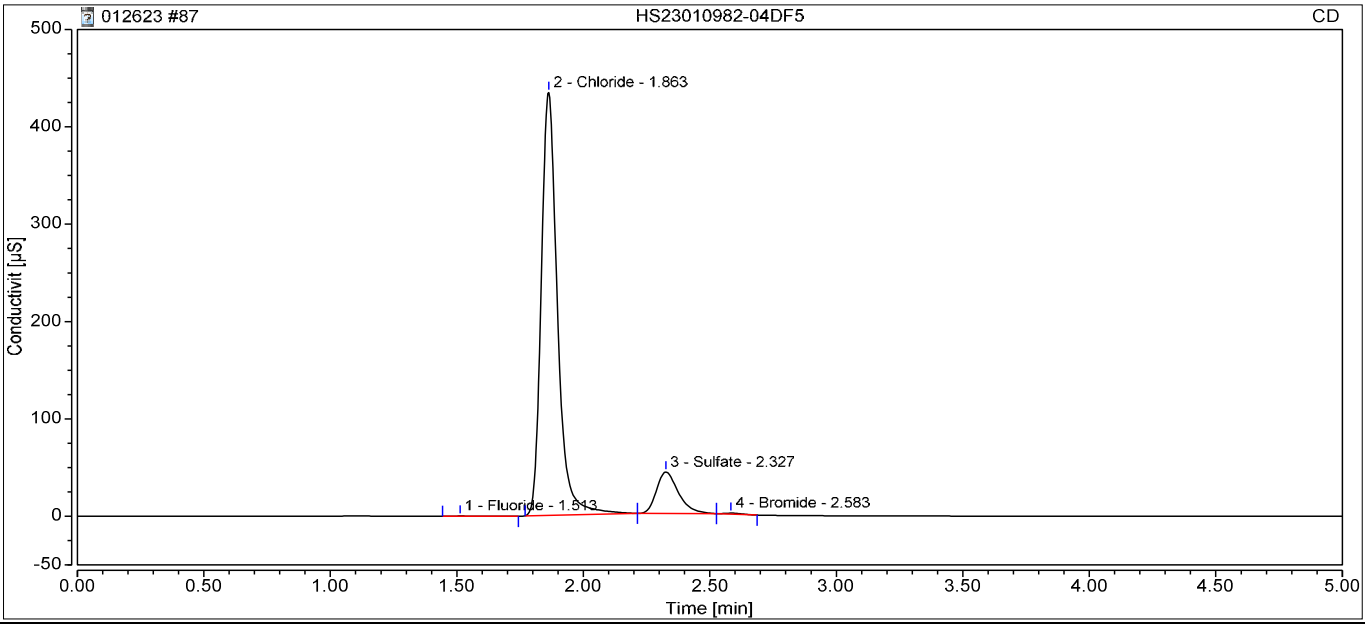
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
2	1.86	Chloride	BMB	1.159	6.7781	6.7781	1.0000
3	2.09	Nitrite,N	BMB	0.010	0.0272	0.0272	1.0000
4	2.33	Sulfate	BMB	0.029	0.2414	0.2414	1.0000
5	2.59	Bromide	BMB	0.033	0.6232	0.6232	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**1.231**		**7.67**	

87 HS23010982-04DF5

Sample Name:	**HS23010982-04DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GC4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/26/2023 18:55**	*Sample Weight:*	**1.0000**

Run Time:



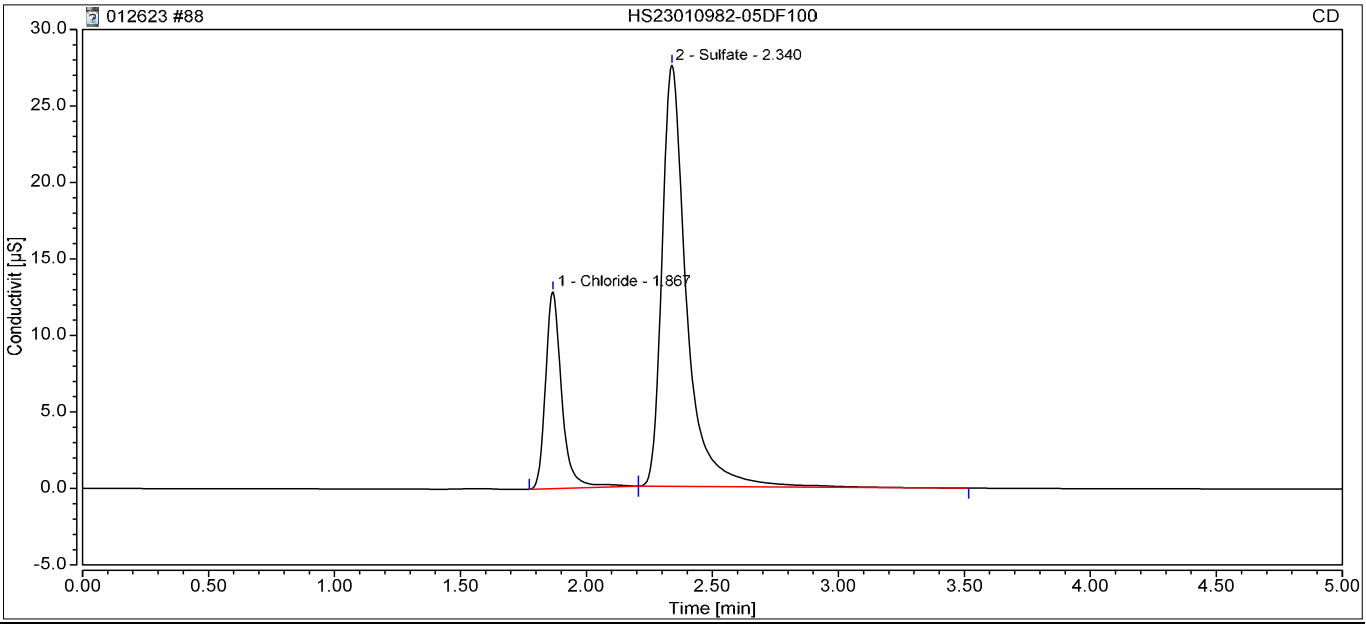
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.028	0.1082	0.5408	5.0000
2	1.86	Chloride	BMB	32.209	187.7574	938.7869	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
3	2.33	Sulfate	BMB	4.268	37.9263	189.6315	5.0000
4	2.58	Bromide	BMB	0.076	1.3614	6.8069	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**36.581**		**1135.77**	

88 HS23010982-05DF100

Sample Name:	**HS23010982-05DF100**	*Injection Volume:*	**5.00**
Vial Number:	**GC5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**100.0000**
Recording Time:	**01/26/2023 19:01**	*Sample Weight:*	**1.0000**

Run Time:



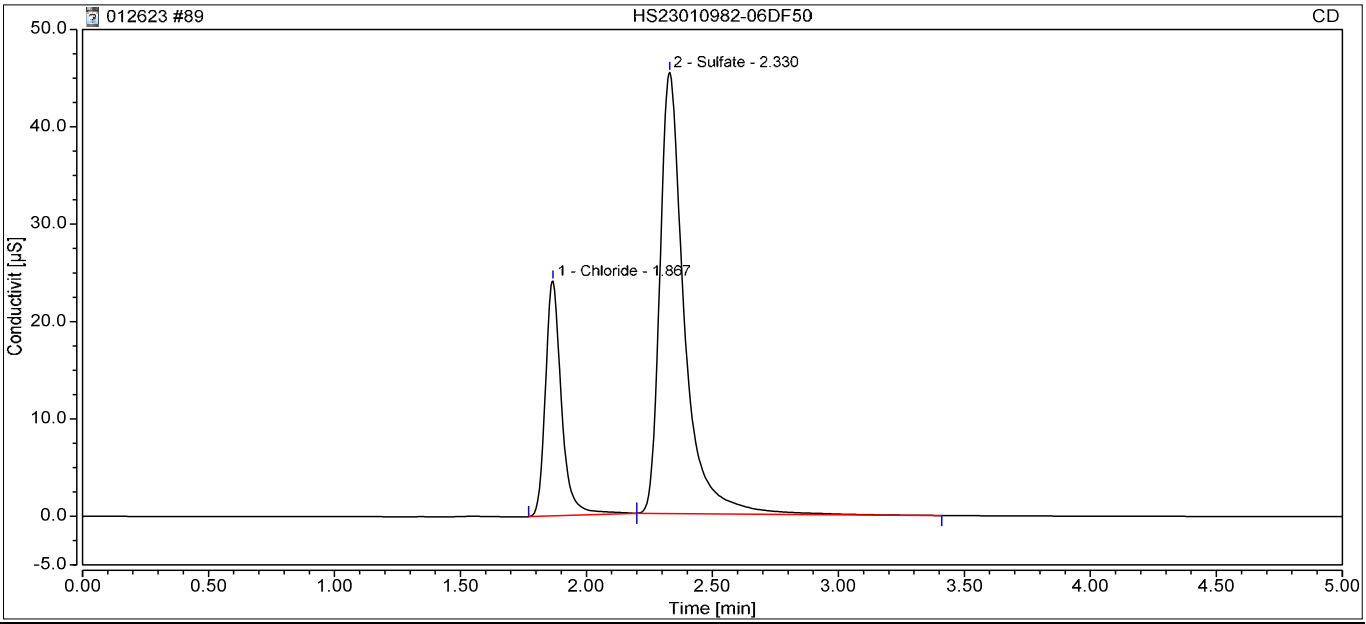
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	100.0000
1	1.87	Chloride	BMB	0.958	5.6048	560.4843	100.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	100.0000
2	2.34	Sulfate	BMB	3.121	27.7316	2773.1555	100.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	100.0000
Total:			**0.000**	**4.079**		**3333.64**	

89 HS23010982-06DF50

Sample Name:	**HS23010982-06DF50**	*Injection Volume:*	**5.00**
Vial Number:	**GC6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**01/26/2023 19:06**	*Sample Weight:*	**1.0000**

Run Time:



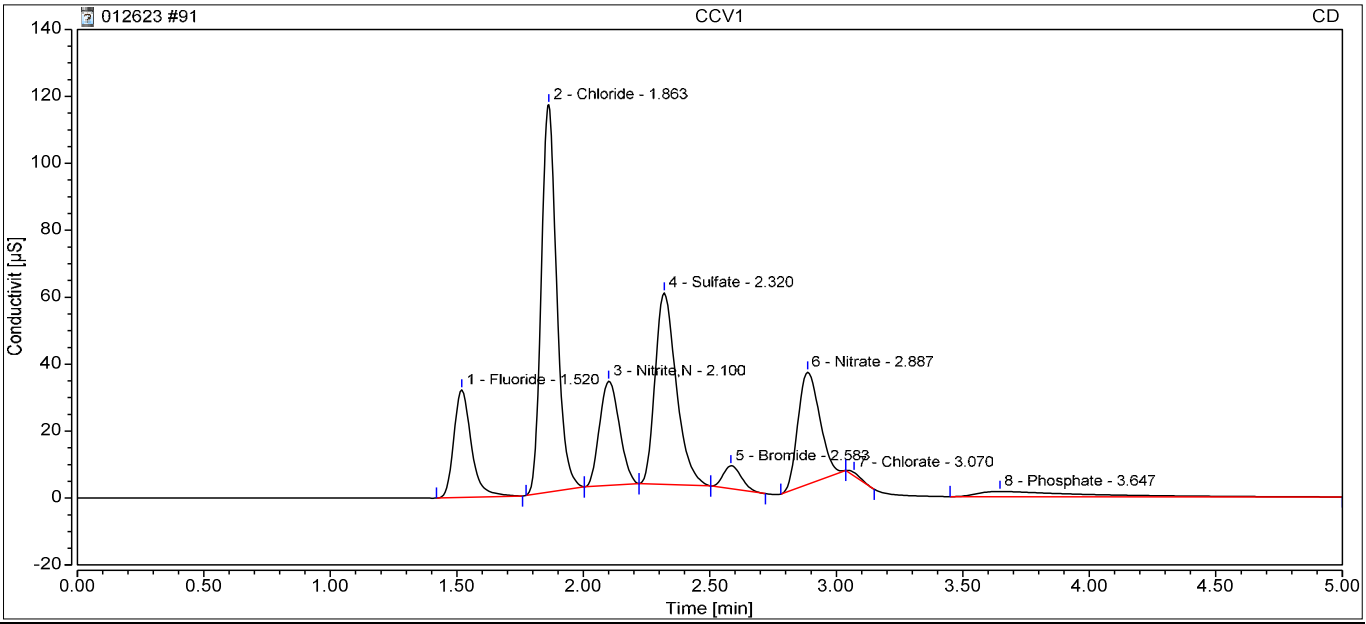
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
1	1.87	Chloride	BMB	1.786	10.4287	521.4340	50.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	50.0000
2	2.33	Sulfate	BMB	5.102	45.3394	2266.9696	50.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	50.0000
Total:			**0.000**	**6.888**		**2788.40**	

91 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**G3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 19:24**	*Sample Weight:*	**1.0000**

Run Time:



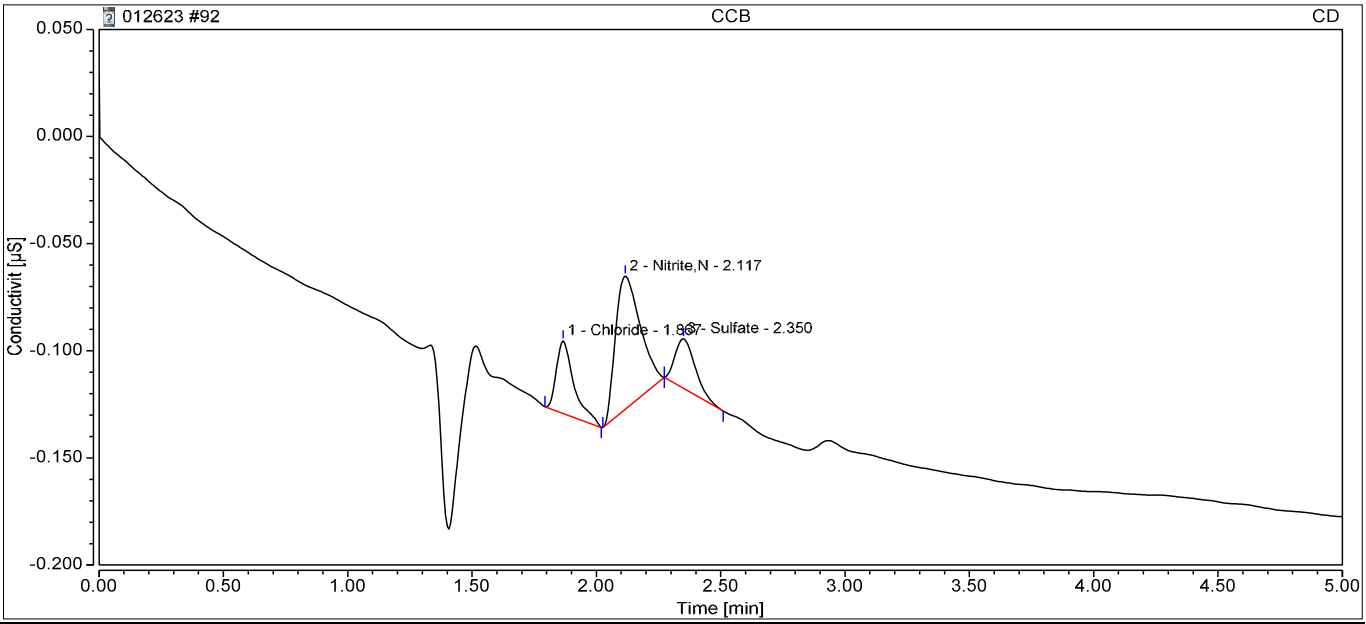
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.587	9.9744	9.9744	1.0000
2	1.86	Chloride	BMB	8.175	47.6679	47.6679	1.0000
3	2.10	Nitrite,N	BMB	2.836	9.2149	9.2149	1.0000
4	2.32	Sulfate	BMB	5.567	49.4791	49.4791	1.0000
5	2.58	Bromide	BMB	0.578	10.0397	10.0397	1.0000
6	2.89	Nitrate	BMB	3.347	9.6130	9.6130	1.0000
7	3.07	Chlorate	BMB	0.056	12.8035	12.8035	1.0000
8	3.65	Phosphate	BMB	0.763	9.8072	9.8072	1.0000
Total:			**0.000**	**23.909**		**158.60**	

92 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 19:35**	*Sample Weight:*	**1.0000**

Run Time:



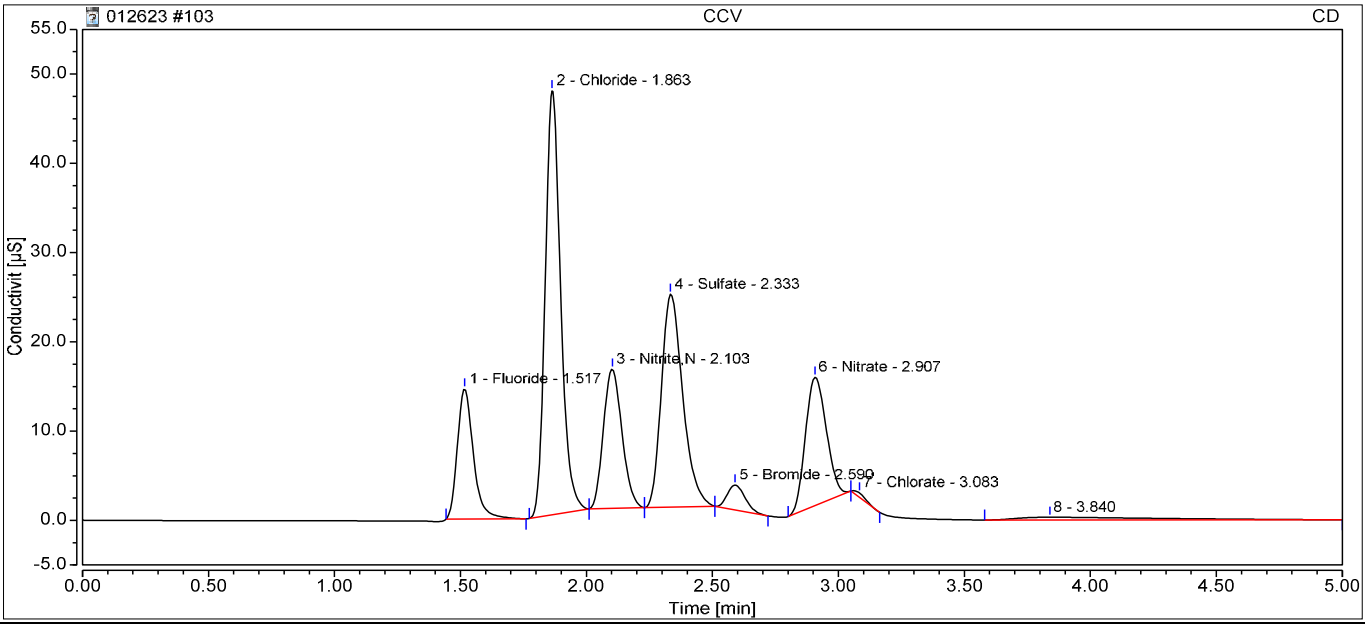
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.003	0.0360	0.0360	1.0000
2	2.12	Nitrite,N	BMB	0.007	0.0194	0.0194	1.0000
3	2.35	Sulfate	BMB	0.002	0.0039	0.0039	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.012**		**0.06**	

103 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 21:14**	*Sample Weight:*	**1.0000**

Run Time:



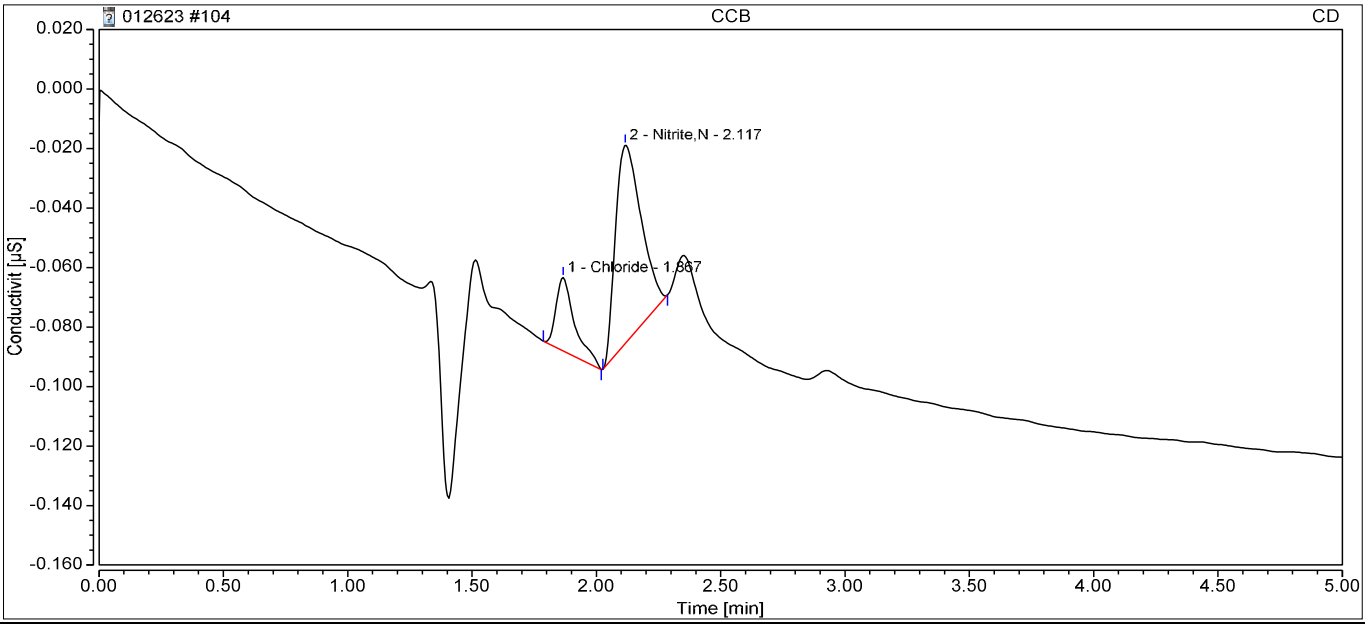
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.079	4.1601	4.1601	1.0000
2	1.86	Chloride	BMB	3.367	19.6439	19.6439	1.0000
3	2.10	Nitrite,N	BMB	1.332	3.9266	3.9266	1.0000
4	2.33	Sulfate	BMB	2.344	20.8189	20.8189	1.0000
5	2.59	Bromide	BMB	0.229	4.0118	4.0118	1.0000
6	2.91	Nitrate	BMB	1.383	3.9576	3.9576	1.0000
7	3.08	Chlorate	BMB	0.024	4.5016	4.5016	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.758**		**61.02**	

104 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 21:19**	*Sample Weight:*	**1.0000**

Run Time:



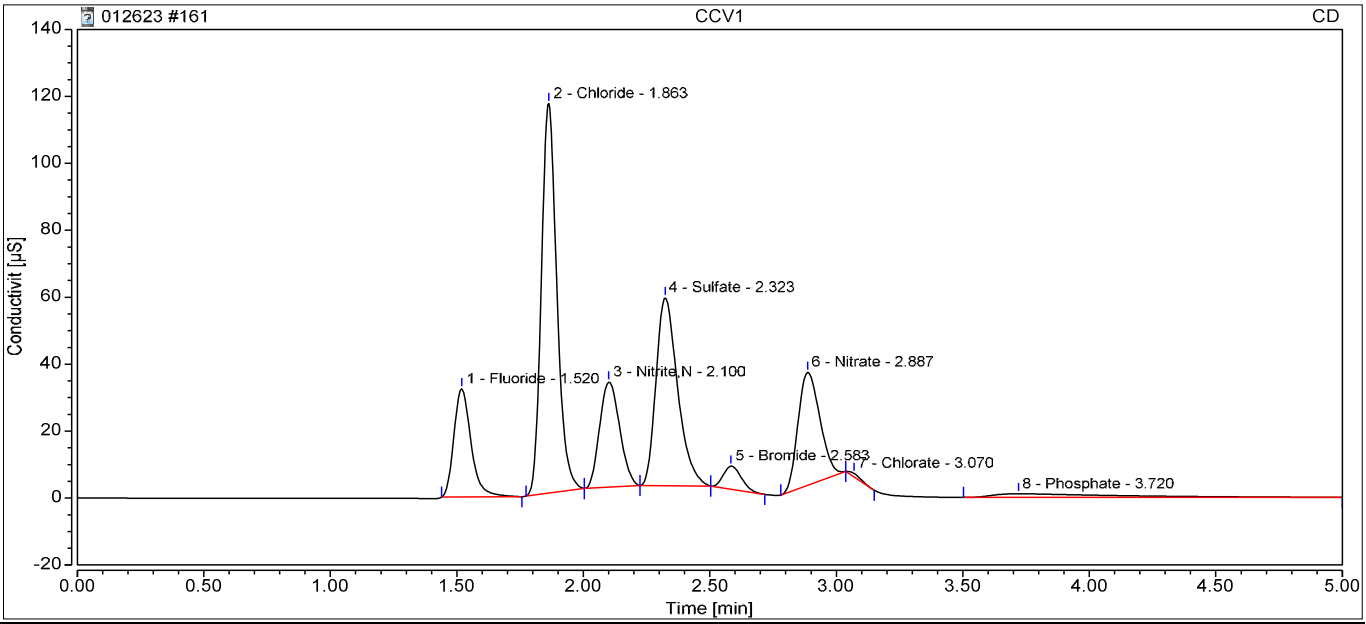
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.002	0.0322	0.0322	1.0000
2	2.12	Nitrite,N	BMB	0.008	0.0216	0.0216	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.05**	

161 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 04:21**	*Sample Weight:*	**1.0000**

Run Time:



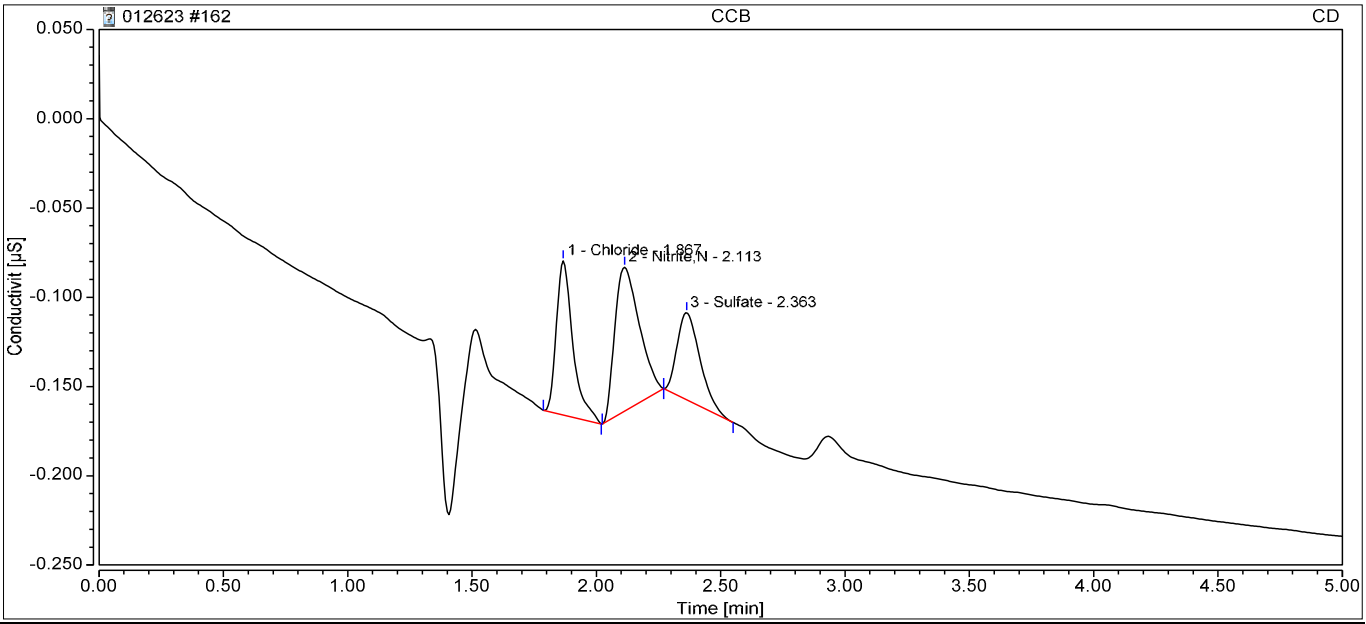
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.549	9.8254	9.8254	1.0000
2	1.86	Chloride	BMB	8.235	48.0198	48.0198	1.0000
3	2.10	Nitrite,N	BMB	2.881	9.3939	9.3939	1.0000
4	2.32	Sulfate	BMB	5.565	49.4608	49.4608	1.0000
5	2.58	Bromide	BMB	0.570	9.8999	9.8999	1.0000
6	2.89	Nitrate	BMB	3.373	9.6902	9.6902	1.0000
7	3.07	Chlorate	BMB	0.056	12.8201	12.8201	1.0000
8	3.72	Phosphate	BMB	0.650	8.9239	8.9239	1.0000
Total:			**0.000**	**23.879**		**158.03**	

162 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 04:27**	*Sample Weight:*	**1.0000**

Run Time:



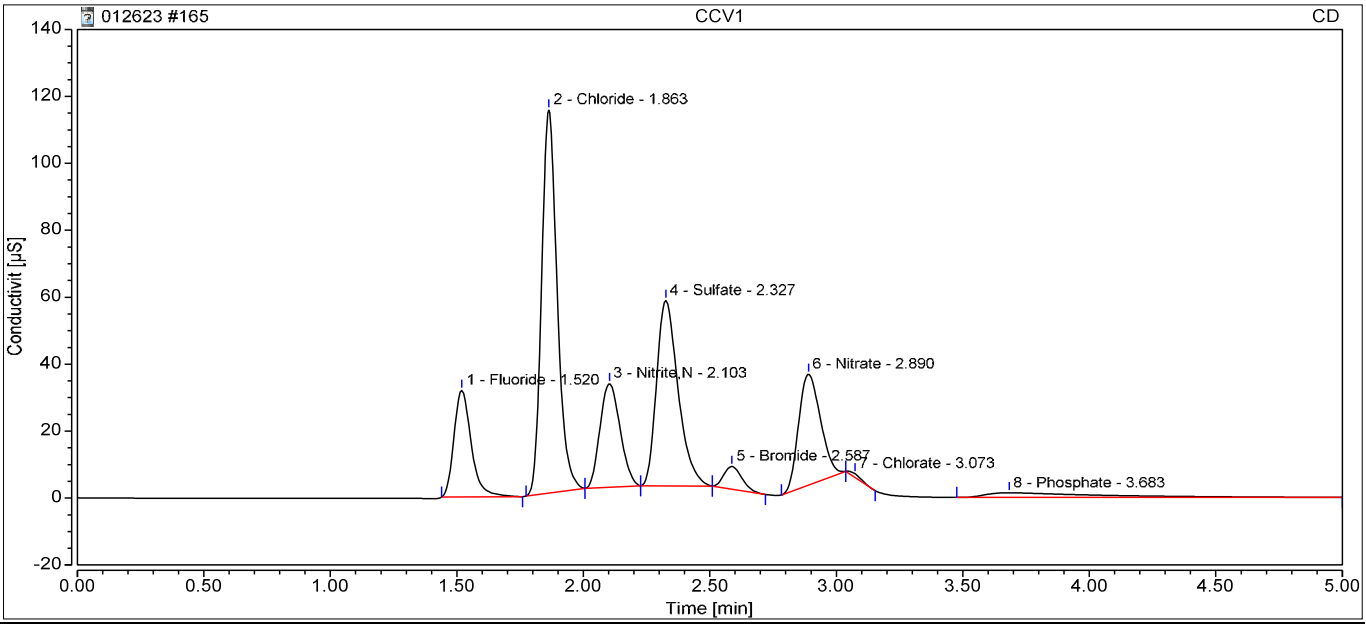
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.007	0.0586	0.0586	1.0000
2	2.11	Nitrite,N	BMB	0.009	0.0251	0.0251	1.0000
3	2.36	Sulfate	BMB	0.005	0.0310	0.0310	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.021**		**0.11**	

165 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 07:32**	*Sample Weight:*	**1.0000**

Run Time:



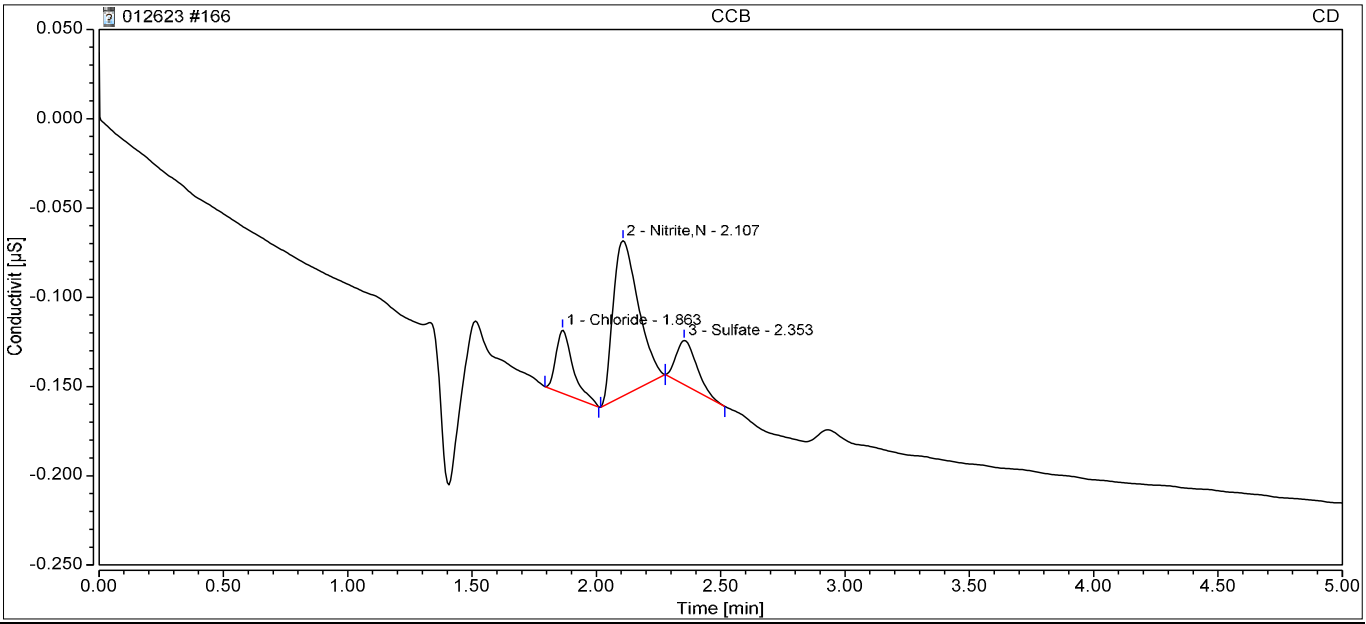
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.533	9.7648	9.7648	1.0000
2	1.86	Chloride	BMB	8.168	47.6301	47.6301	1.0000
3	2.10	Nitrite,N	BMB	2.849	9.2643	9.2643	1.0000
4	2.33	Sulfate	BMB	5.470	48.6098	48.6098	1.0000
5	2.59	Bromide	BMB	0.562	9.7536	9.7536	1.0000
6	2.89	Nitrate	BMB	3.319	9.5343	9.5343	1.0000
7	3.07	Chlorate	BMB	0.058	13.5218	13.5218	1.0000
8	3.68	Phosphate	BMB	0.751	9.7175	9.7175	1.0000
Total:			**0.000**	**23.709**		**157.80**	

166 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 07:38**	*Sample Weight:*	**1.0000**

Run Time:



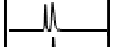
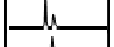
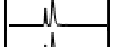
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.86	Chloride	BMB	0.003	0.0363	0.0363	1.0000
2	2.11	Nitrite,N	BMB	0.010	0.0279	0.0279	1.0000
3	2.35	Sulfate	BMB	0.002	0.0060	0.0060	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.015**		**0.07**	

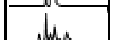
HS23010982 9056_W_Nitrate Nitrite IC

ALS WO# HS23010982

Sequence: 013023
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratic	BA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratic	BA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratic	BA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratic	BA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratic	BA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratic	BA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	BA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	9056-W-N02/NO3	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS	9056-W-N02/NO3	Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-01DF5		Unknown	GC4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-03DF5		Unknown	GC5	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-04DF5		Unknown	GC6	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-06DF5		Unknown	GC7	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-05DF5		Unknown	GC8	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-05MSDF5		Unknown	GD1	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-05MSDDF		Unknown	GD2	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-05DF5		Unknown	GD5	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-05MSDF5		Unknown	GD6	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-05MSDDF		Unknown	GD7	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 013023
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	1/23/2023 2:36:57 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/23/2023 2:42:45 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/23/2023 2:48:34 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/23/2023 2:54:22 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/23/2023 3:00:10 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/23/2023 3:05:59 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/23/2023 3:11:47 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/23/2023 3:17:35 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/30/2023 9:45:27 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/30/2023 9:51:13 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/30/2023 10:25:48 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/30/2023 10:54:49 PM -06:00
Anions Processing Method ISO		HS23010982-01DF5	5.0	Finished	1/30/2023 11:12:06 PM -06:00
Anions Processing Method ISO		HS23010982-03DF5	5.0	Finished	1/30/2023 11:17:52 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/30/2023 11:41:05 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/30/2023 11:46:51 PM -06:00
Anions Processing Method ISO		HS23010982-04DF5	5.0	Finished	1/30/2023 11:58:22 PM -06:00
Anions Processing Method ISO		HS23010982-06DF5	5.0	Finished	1/31/2023 12:04:08 AM -06:00
Anions Processing Method ISO		HS23010982-05DF5	5.0	Finished	1/31/2023 12:09:53 AM -06:00
Anions Processing Method ISO		HS23010982-05MSDF5	5.0	Finished	1/31/2023 12:15:38 AM -06:00
Anions Processing Method ISO		HS23010982-05MSDDF	5.0	Finished	1/31/2023 12:21:22 AM -06:00
Anions Processing Method ISO		HS23010986-05DF5	5.0	Finished	1/31/2023 12:38:34 AM -06:00
Anions Processing Method ISO		HS23010986-05MSDF5	5.0	Finished	1/31/2023 12:44:28 AM -06:00
Anions Processing Method ISO		HS23010986-05MSDDF	5.0	Finished	1/31/2023 12:50:23 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/31/2023 1:14:00 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/31/2023 1:19:55 AM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/31/2023 2:41:41 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/31/2023 2:53:29 AM -06:00

Sequence: 012623
Injection #6: STD6

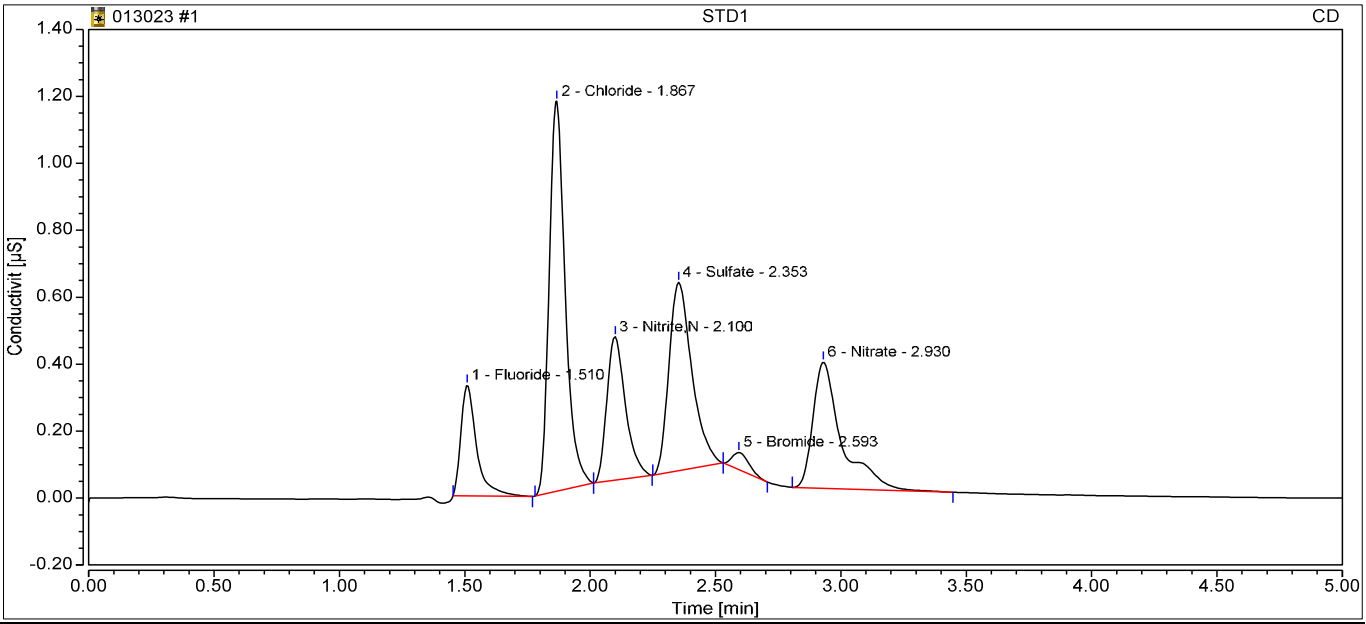
Calibration

Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***18.2600***	***0.99823***	***0.0003***	***0.2594***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	3.9326	0.99992	-0.0034	0.1716	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	6.5665	0.99976	0.0001	0.3625	-0.0059
4	Sulfate	Lin, WithOffset, 1/A	Area	6	7.0089	0.99974	0.0018	0.1125	0.0000
5	Bromide	Lin, WithOffset, 1/A	Area	6	21.3247	0.99813	-0.0031	0.0579	0.0000
6	Nitrate	Lin, WithOffset, 1/A	Area	6	8.6115	0.99956	0.0097	0.3471	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	5	14.8871	0.99687	-0.0004	0.0060	-0.0001
8	Phosphate	Lin, WithOffset, 1/A	Area	2	n.a.	1.00000	-0.4901	0.1278	0.0000
Maximum					**21.3247**	1.00000			
Minimum					3.9326	**0.99687**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**BA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:36**	*Sample Weight:*	**1.0000**

Run Time:



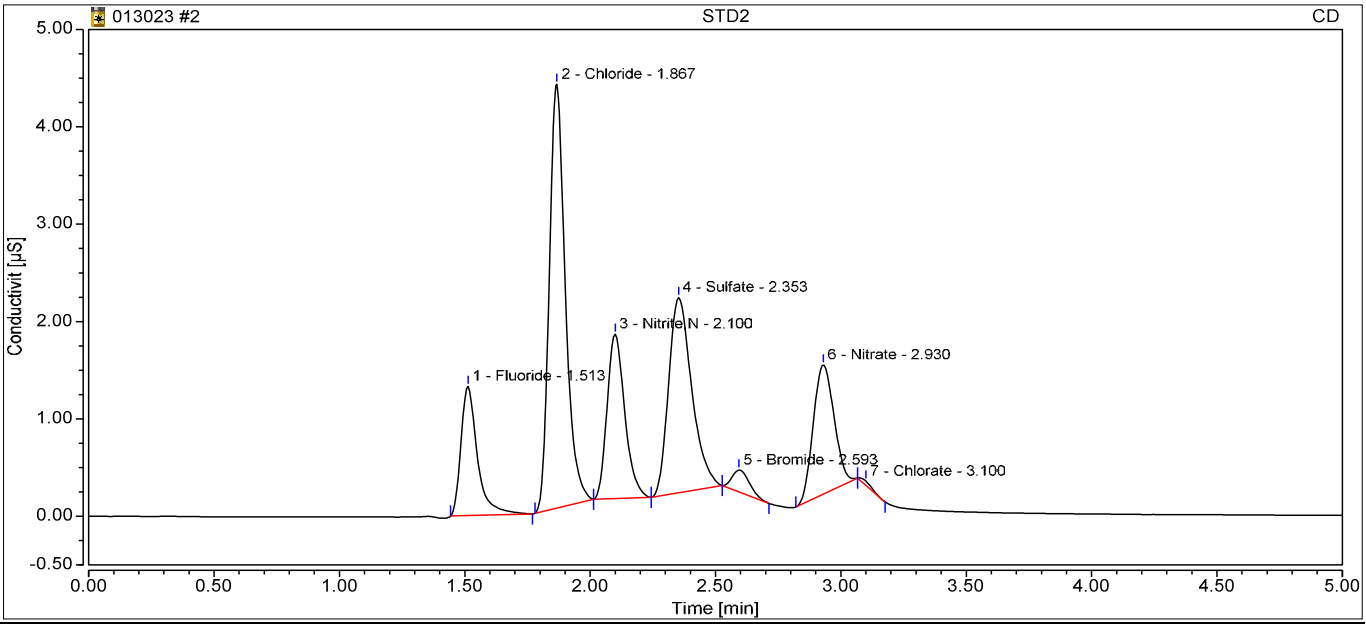
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.024	0.0916	0.0916	1.0000
2	1.87	Chloride	BMB	0.087	0.5248	0.5248	1.0000
3	2.10	Nitrite,N	BMB	0.037	0.1020	0.1020	1.0000
4	2.35	Sulfate	BMB	0.060	0.5165	0.5165	1.0000
5	2.59	Bromide	BMB	0.004	0.1232	0.1232	1.0000
6	2.93	Nitrate	BMB	0.050	0.1161	0.1161	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.262**		**1.47**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**BA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:42**	*Sample Weight:*	**1.0000**

Run Time:



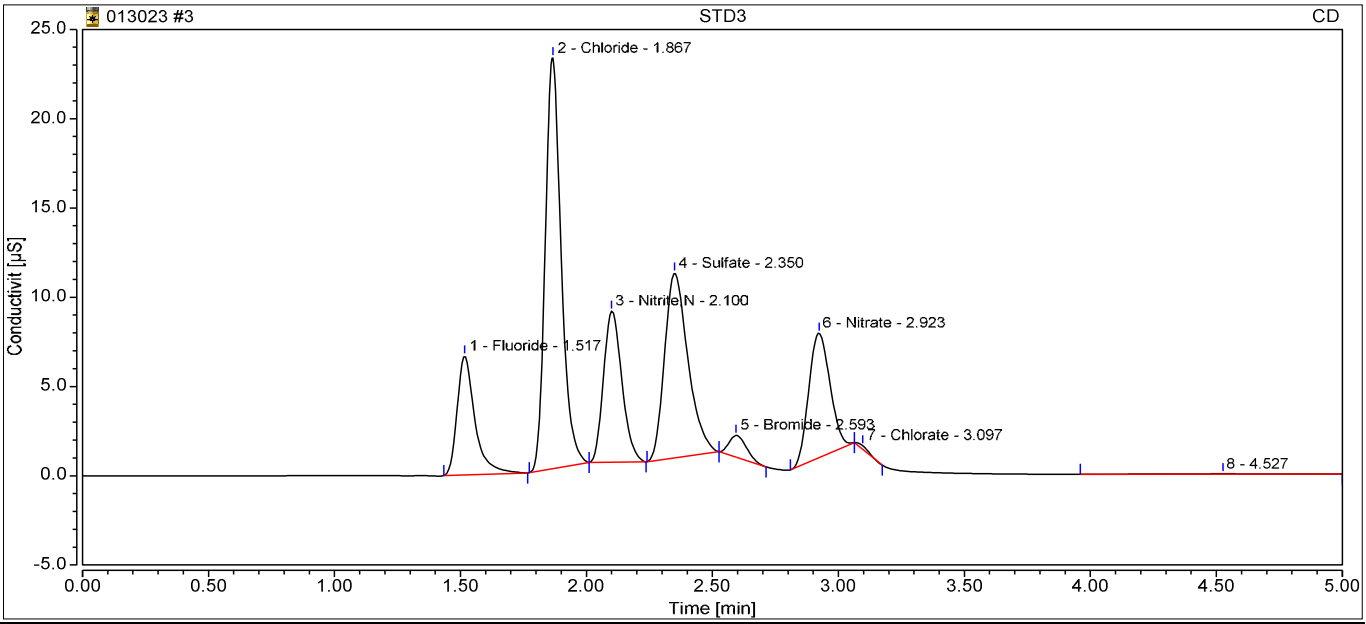
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.101	0.3891	0.3891	1.0000
2	1.87	Chloride	BMB	0.323	1.9022	1.9022	1.0000
3	2.10	Nitrite,N	BMB	0.138	0.3825	0.3825	1.0000
4	2.35	Sulfate	BMB	0.215	1.8922	1.8922	1.0000
5	2.59	Bromide	BMB	0.018	0.3682	0.3682	1.0000
6	2.93	Nitrate	BMB	0.128	0.3409	0.3409	1.0000
7	3.10	Chlorate	BMB	0.002	0.4193	0.4193	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.925**		**5.69**	

3 STD3

Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**BA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:48**	*Sample Weight:*	**1.0000**

Run Time:



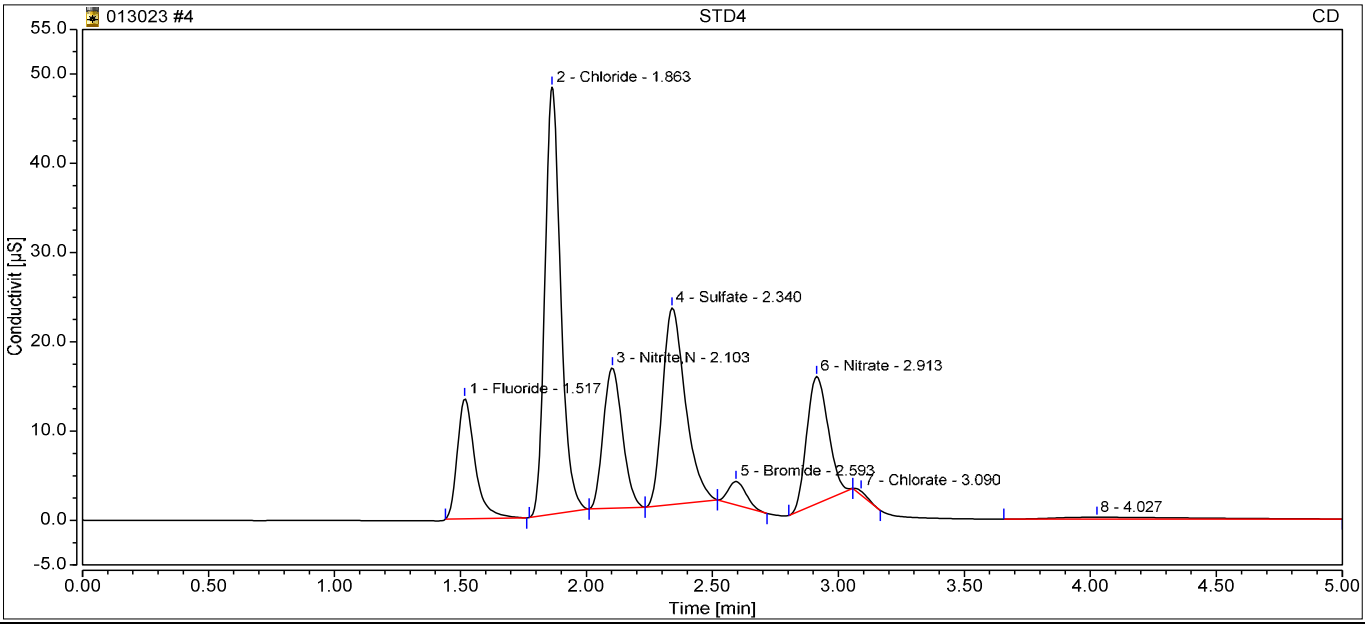
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.545	2.1003	2.1003	1.0000
2	1.87	Chloride	BMB	1.685	9.8413	9.8413	1.0000
3	2.10	Nitrite,N	BMB	0.715	2.0394	2.0394	1.0000
4	2.35	Sulfate	BMB	1.114	9.8924	9.8924	1.0000
5	2.59	Bromide	BMB	0.099	1.7671	1.7671	1.0000
6	2.92	Nitrate	BMB	0.683	1.9402	1.9402	1.0000
7	3.10	Chlorate	BMB	0.010	1.7695	1.7695	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.851**		**29.35**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**BA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:54**	*Sample Weight:*	**1.0000**

Run Time:



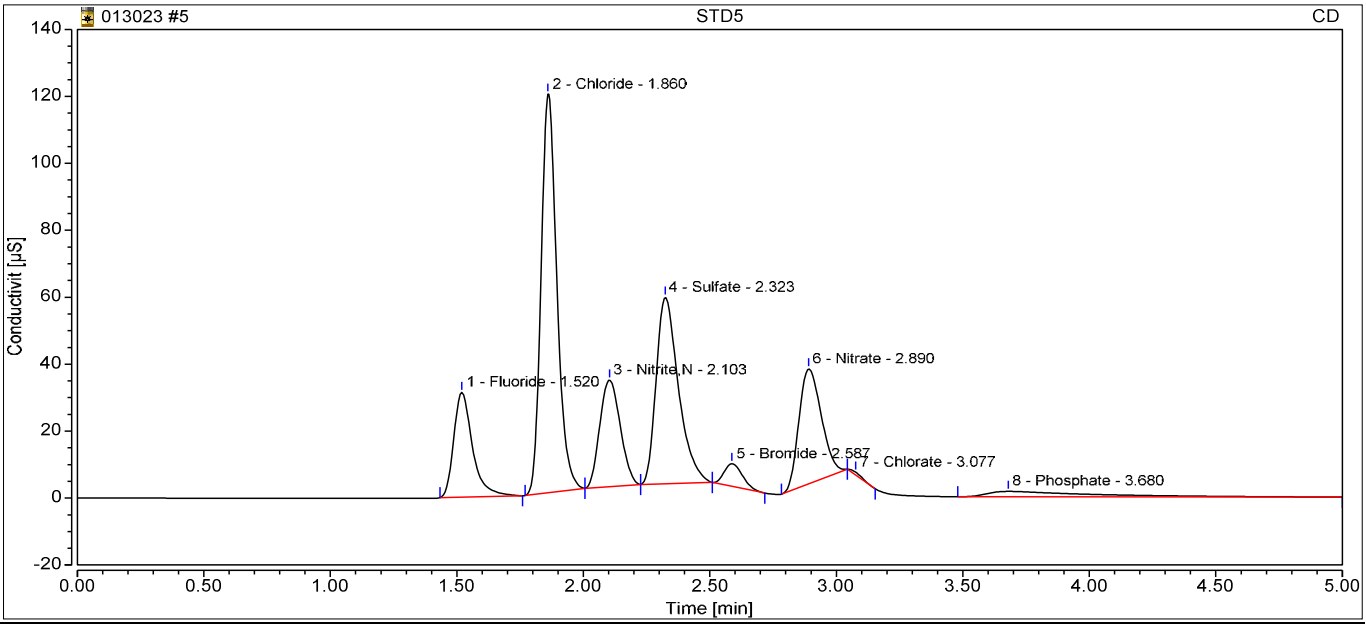
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.096	4.2257	4.2257	1.0000
2	1.86	Chloride	BMB	3.473	20.2647	20.2647	1.0000
3	2.10	Nitrite,N	BMB	1.379	4.0759	4.0759	1.0000
4	2.34	Sulfate	BMB	2.316	20.5697	20.5697	1.0000
5	2.59	Bromide	BMB	0.216	3.7890	3.7890	1.0000
6	2.91	Nitrate	BMB	1.408	4.0269	4.0269	1.0000
7	3.09	Chlorate	BMB	0.023	4.3199	4.3199	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.911**		**61.27**	

5 STD5

Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**BA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:00**	*Sample Weight:*	**1.0000**

Run Time:



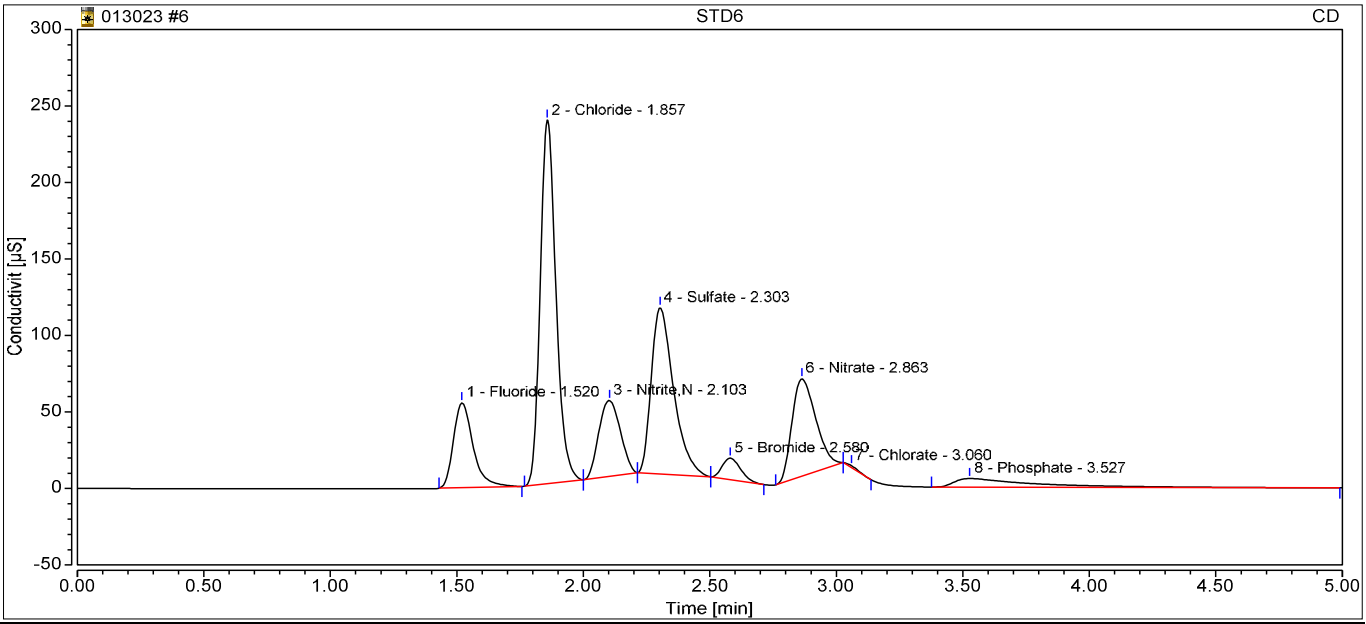
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.698	10.4020	10.4020	1.0000
2	1.86	Chloride	BMB	8.612	50.2171	50.2171	1.0000
3	2.10	Nitrite,N	BMB	2.980	9.7904	9.7904	1.0000
4	2.32	Sulfate	BMB	5.704	50.6918	50.6918	1.0000
5	2.59	Bromide	BMB	0.569	9.8884	9.8884	1.0000
6	2.89	Nitrate	BMB	3.525	10.1264	10.1264	1.0000
7	3.08	Chlorate	BMB	0.047	9.8667	9.8667	1.0000
8	3.68	Phosphate	BMB	0.787	10.0000	10.0000	1.0000
Total:			**0.000**	**24.922**		**160.98**	

6 STD6

Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**BA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:05**	*Sample Weight:*	**1.0000**

Run Time:



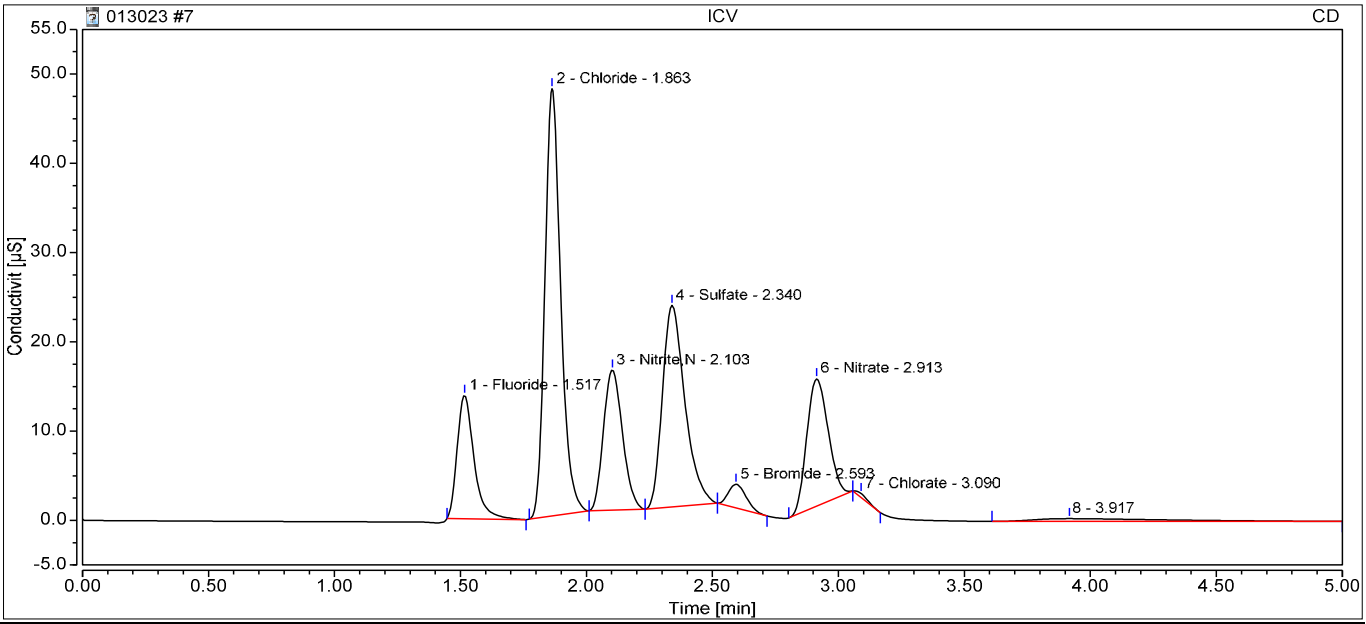
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	5.004	19.2913	19.2913	1.0000
2	1.86	Chloride	BMB	17.110	99.7497	99.7497	1.0000
3	2.10	Nitrite,N	BMB	4.894	20.1587	20.1587	1.0000
4	2.30	Sulfate	BMB	11.131	98.9373	98.9373	1.0000
5	2.58	Bromide	BMB	1.187	20.5641	20.5641	1.0000
6	2.86	Nitrate	BMB	6.935	19.9496	19.9496	1.0000
7	3.06	Chlorate	BMB	0.069	20.0446	20.0446	1.0000
8	3.53	Phosphate	BMB	2.065	20.0000	20.0000	1.0000
Total:			**0.000**	**48.395**		**318.70**	

7 *ICV*

Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**BA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:11**	*Sample Weight:*	**1.0000**

Run Time:



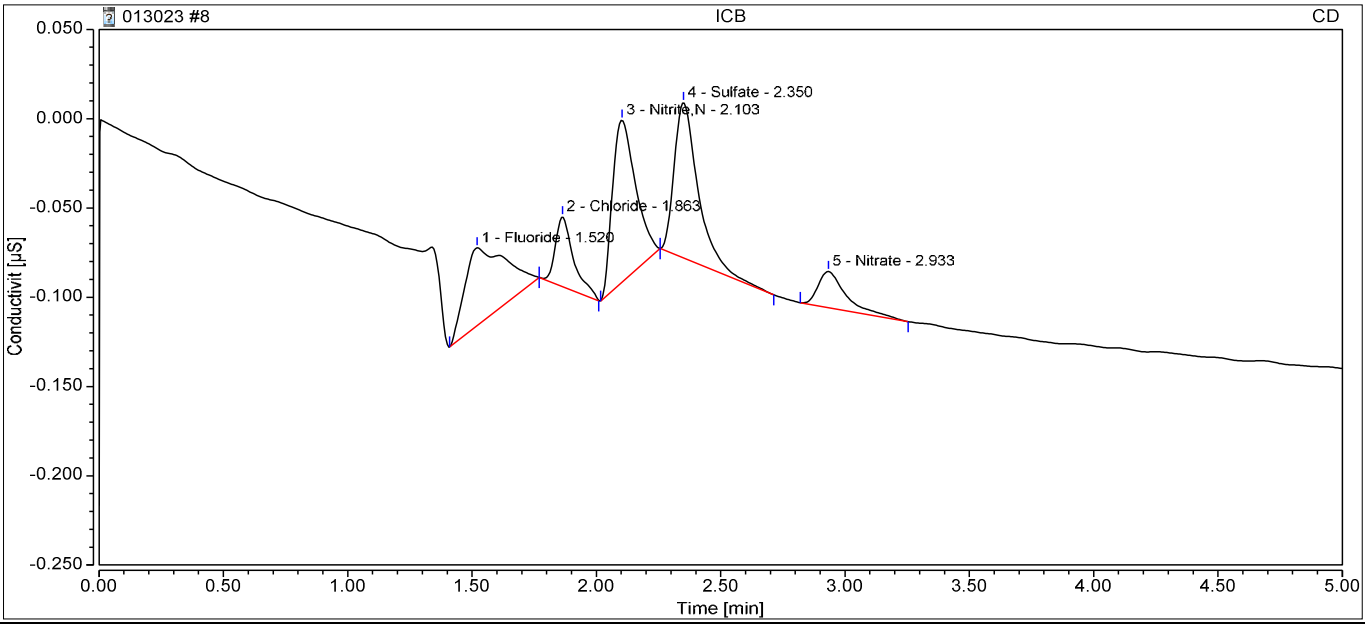
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.076	4.1460	4.1460	1.0000
2	1.86	Chloride	BMB	3.476	20.2807	20.2807	1.0000
3	2.10	Nitrite,N	BMB	1.374	4.0608	4.0608	1.0000
4	2.34	Sulfate	BMB	2.342	20.8027	20.8027	1.0000
5	2.59	Bromide	BMB	0.218	3.8222	3.8222	1.0000
6	2.91	Nitrate	BMB	1.407	4.0267	4.0267	1.0000
7	3.09	Chlorate	BMB	0.023	4.2714	4.2714	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.916**		**61.41**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**BA8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:17**	*Sample Weight:*	**1.0000**

Run Time:



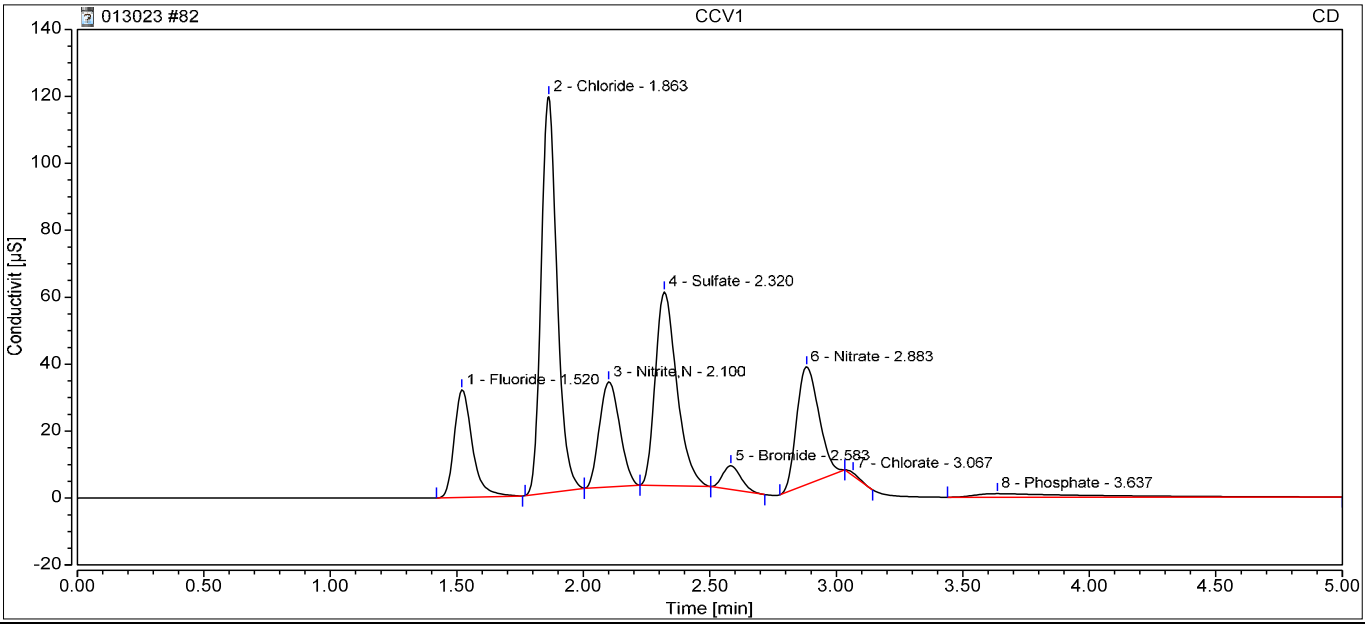
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.008	0.0297	0.0297	1.0000
2	1.86	Chloride	BMB	0.003	0.0390	0.0390	1.0000
3	2.10	Nitrite,N	BMB	0.010	0.0268	0.0268	1.0000
4	2.35	Sulfate	BMB	0.010	0.0714	0.0714	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
5	2.93	Nitrate	BMB	0.003	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.034**		**0.17**	

82 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 21:45**	*Sample Weight:*	**1.0000**

Run Time:



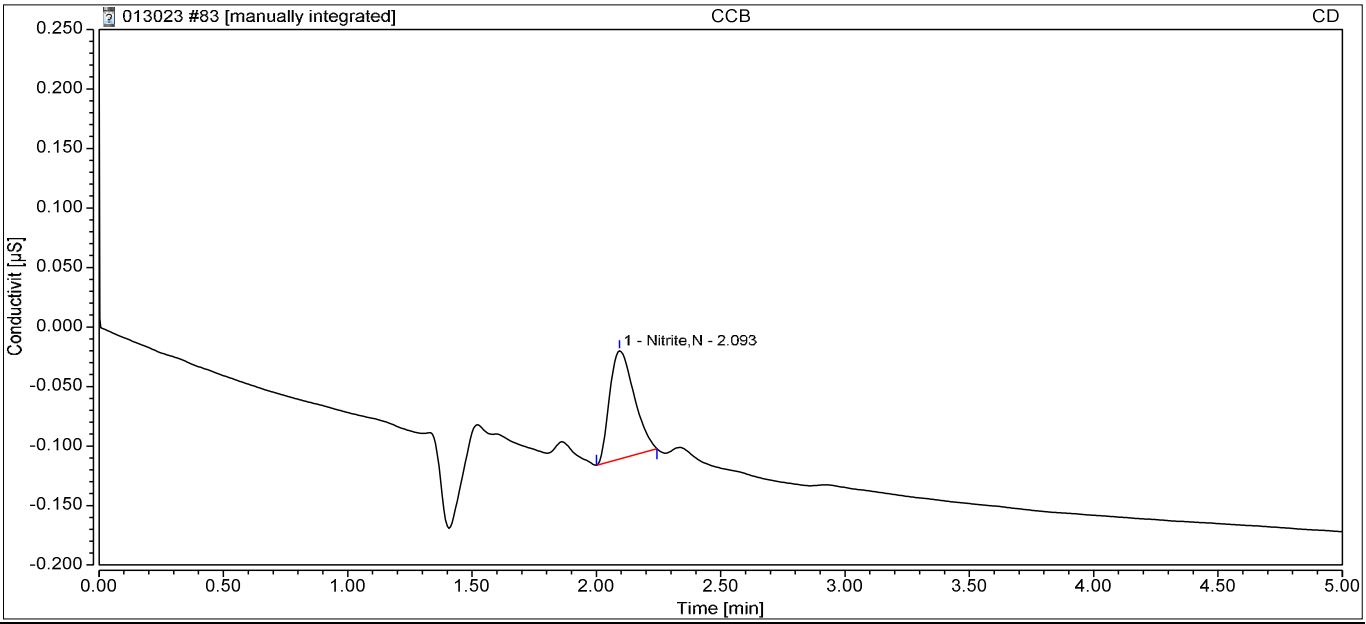
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.671	10.2974	10.2974	1.0000
2	1.86	Chloride	BMB	8.631	50.3286	50.3286	1.0000
3	2.10	Nitrite,N	BMB	2.922	9.5576	9.5576	1.0000
4	2.32	Sulfate	BMB	5.720	50.8325	50.8325	1.0000
5	2.58	Bromide	BMB	0.601	10.4397	10.4397	1.0000
6	2.88	Nitrate	BMB	3.595	10.3296	10.3296	1.0000
7	3.07	Chlorate	BMB	0.045	9.3293	9.3293	1.0000
8	3.64	Phosphate	BMB	0.578	8.3610	8.3610	1.0000
Total:			**0.000**	**24.763**		**159.48**	

83 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 21:51**	*Sample Weight:*	**1.0000**

Run Time:



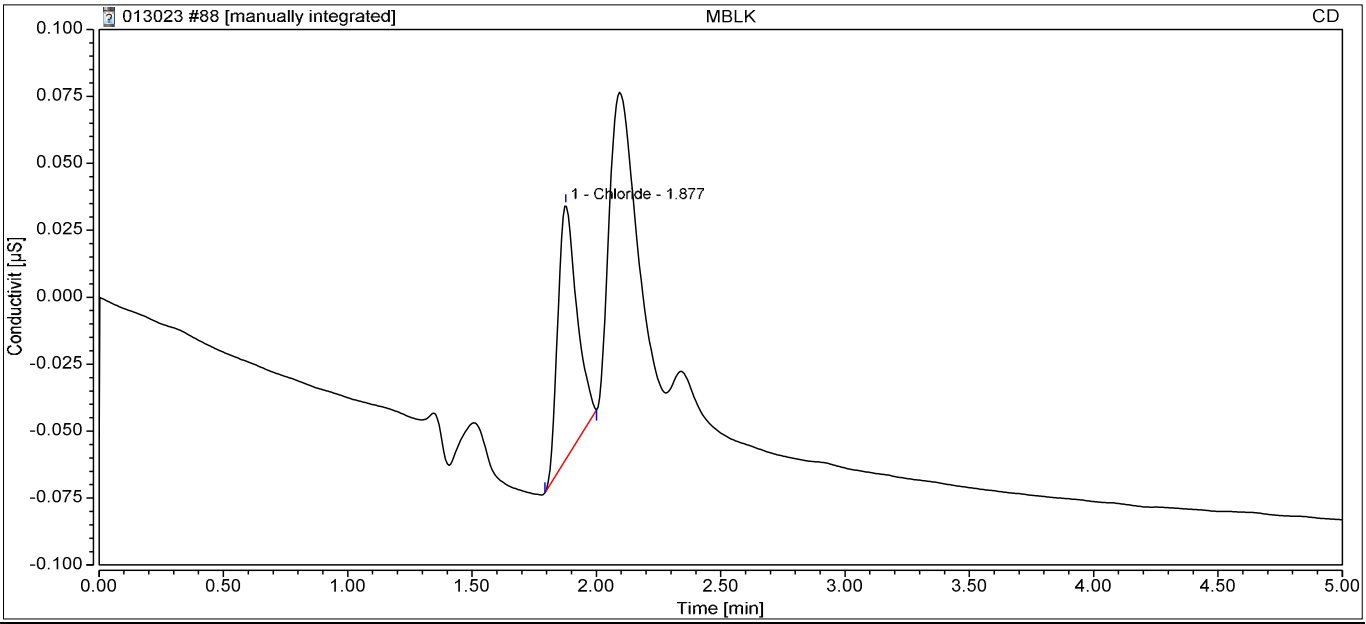
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.09	Nitrite,N	BMB*	0.010	0.0283	0.0283	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.03**	

88 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 22:25**	*Sample Weight:*	**1.0000**

Run Time:



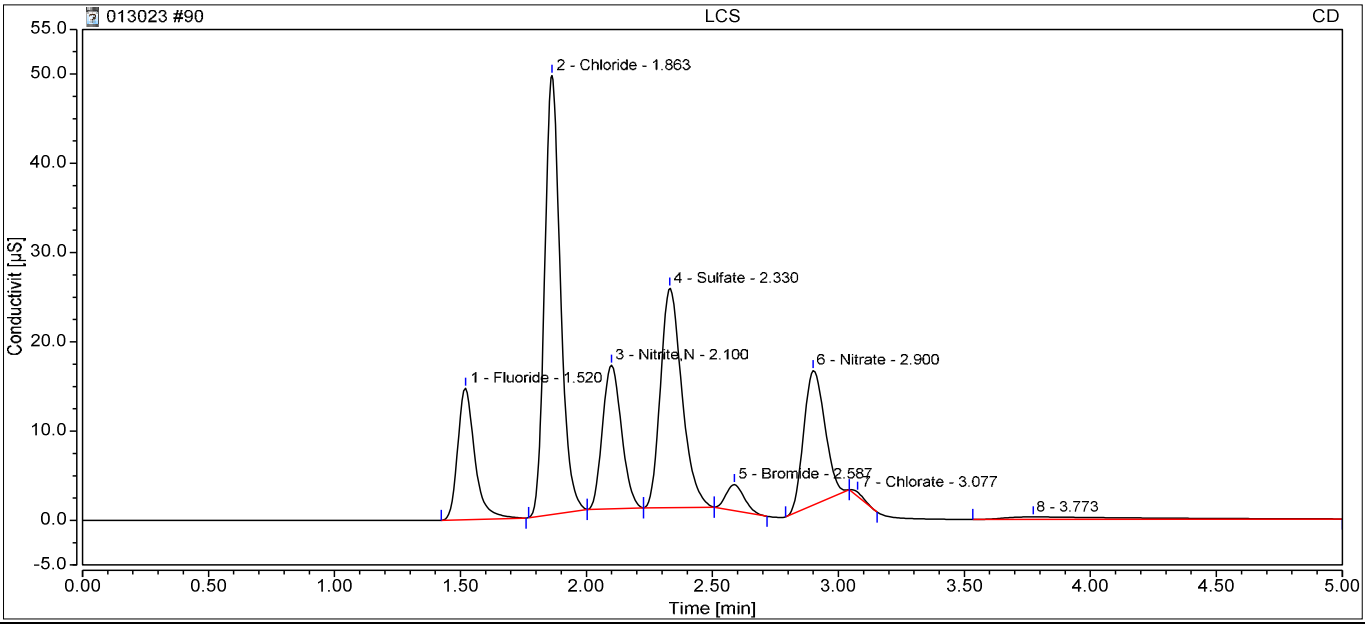
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.88	Chloride	BMB	0.008	0.0688	0.0688	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.008**		**0.07**	

90 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**R2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 22:54**	*Sample Weight:*	**1.0000**

Run Time:



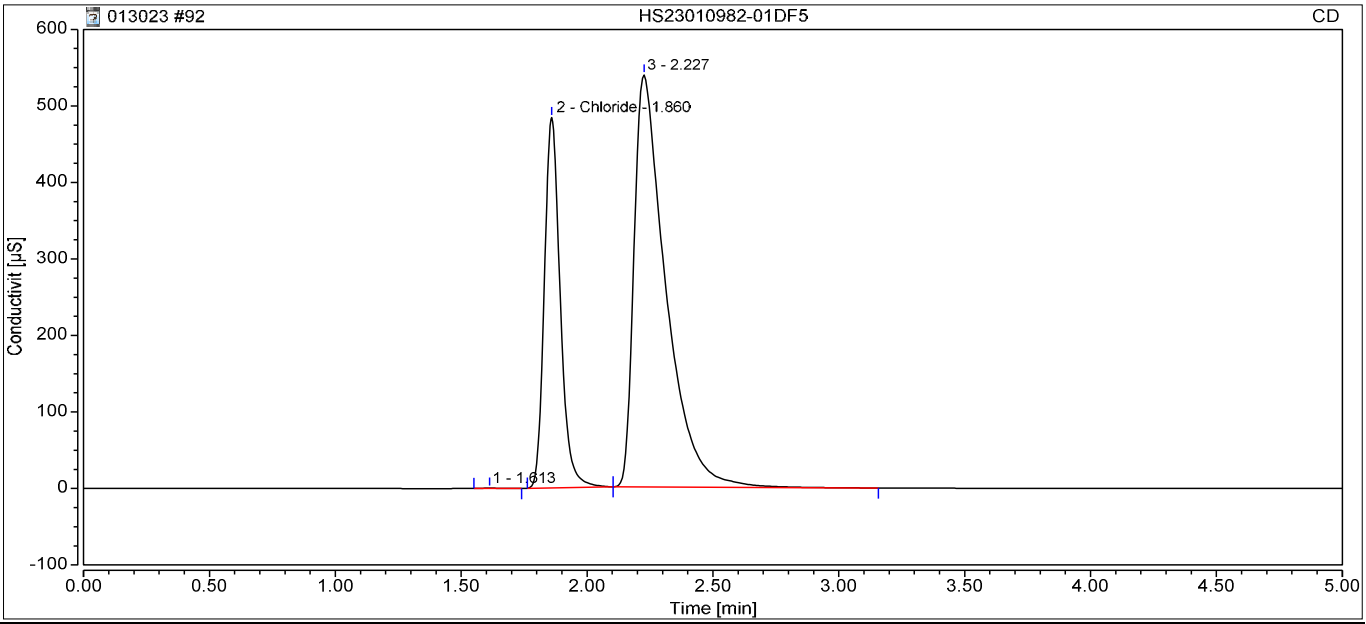
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.161	4.4736	4.4736	1.0000
2	1.86	Chloride	BMB	3.568	20.8160	20.8160	1.0000
3	2.10	Nitrite,N	BMB	1.403	4.1521	4.1521	1.0000
4	2.33	Sulfate	BMB	2.423	21.5263	21.5263	1.0000
5	2.59	Bromide	BMB	0.243	4.2510	4.2510	1.0000
6	2.90	Nitrate	BMB	1.469	4.2041	4.2041	1.0000
7	3.08	Chlorate	BMB	0.023	4.3833	4.3833	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**10.290**		**63.81**	

92 HS23010982-01DF5

Sample Name:	**HS23010982-01DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GC4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/30/2023 23:12**	*Sample Weight:*	**1.0000**

Run Time:



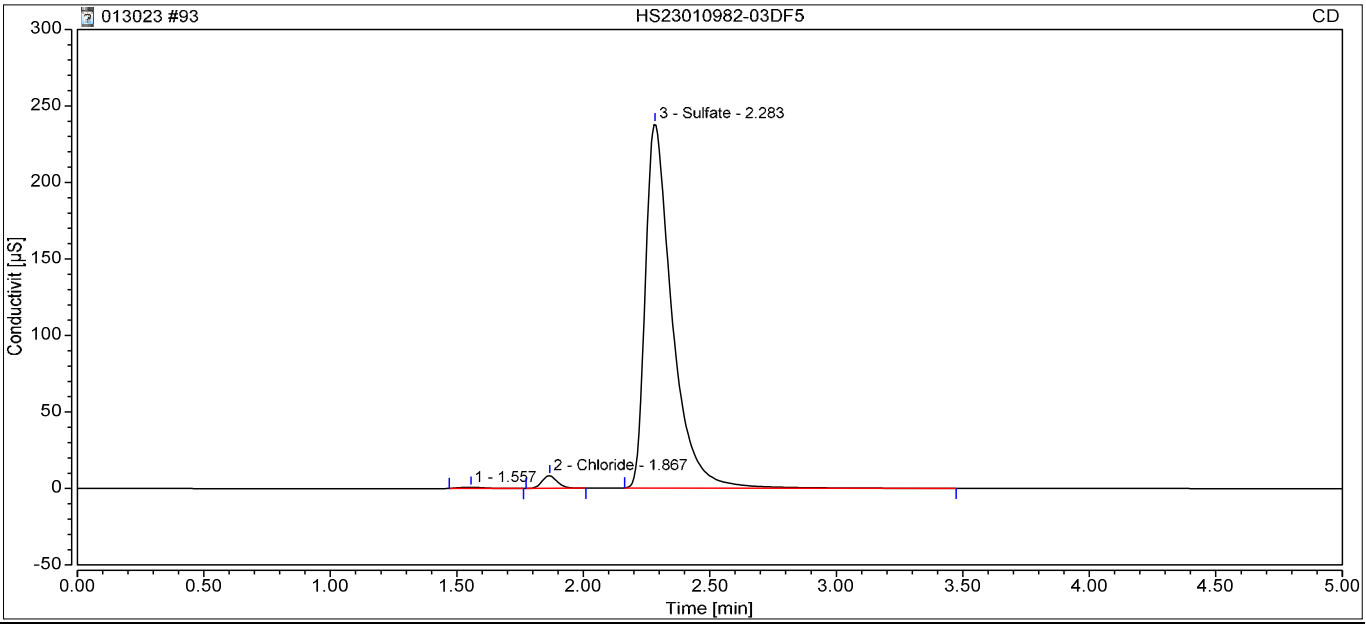
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.86	Chloride	BMB	35.413	206.4303	1032.1517	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**35.413**		**1032.15**	

93 HS23010982-03DF5

Sample Name:	**HS23010982-03DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GC5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/30/2023 23:17**	*Sample Weight:*	**1.0000**

Run Time:



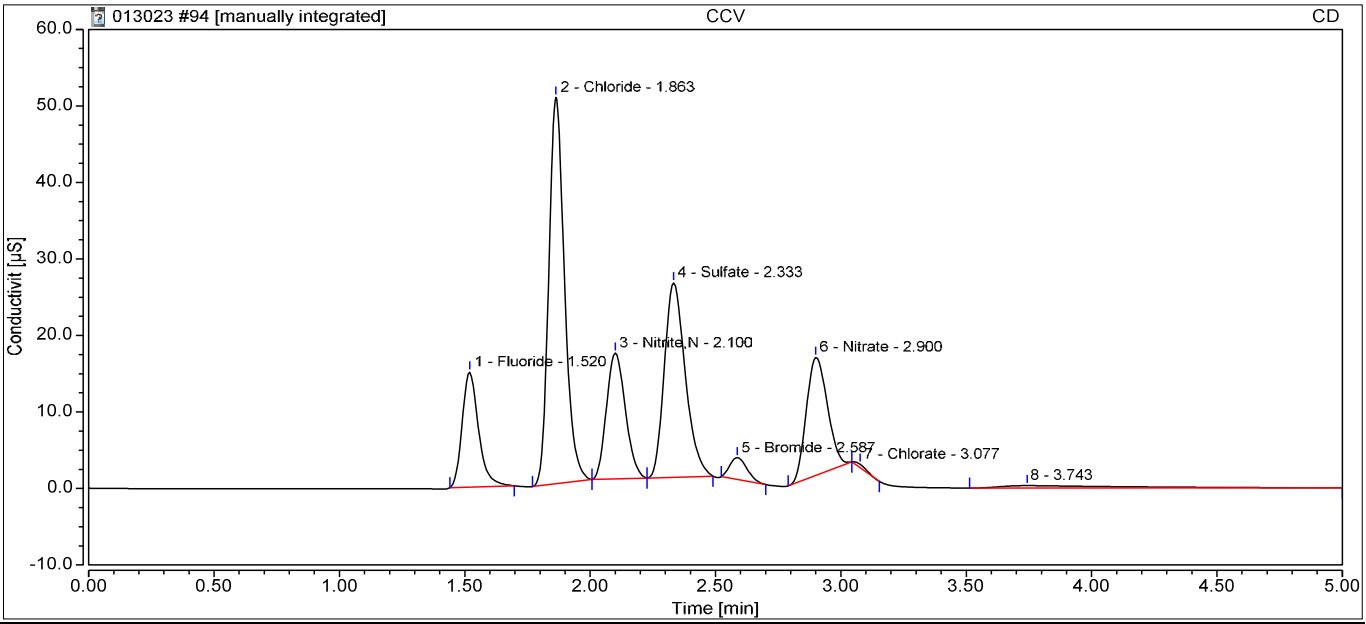
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.87	Chloride	BMB	0.579	3.3918	16.9590	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
3	2.28	Sulfate	BMB	29.085	258.5563	1292.7815	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**29.664**		**1309.74**	

94 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 23:41**	*Sample Weight:*	**1.0000**

Run Time:



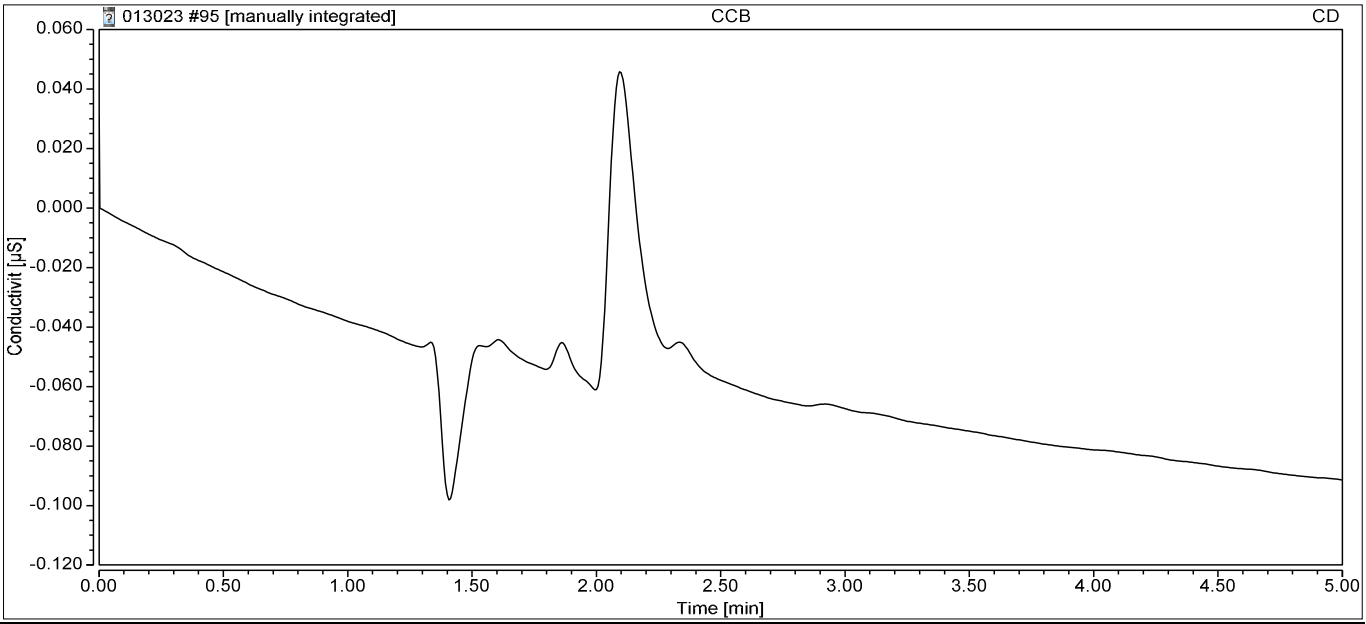
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB*	1.139	4.3897	4.3897	1.0000
2	1.86	Chloride	BMB	3.666	21.3877	21.3877	1.0000
3	2.10	Nitrite,N	BMb*	1.434	4.2535	4.2535	1.0000
4	2.33	Sulfate	bMB*	2.464	21.8916	21.8916	1.0000
5	2.59	Bromide	BMB*	0.228	3.9942	3.9942	1.0000
6	2.90	Nitrate	BMB	1.506	4.3115	4.3115	1.0000
7	3.08	Chlorate	BMB	0.024	4.4797	4.4797	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**10.462**		**64.71**	

95 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 23:46**	*Sample Weight:*	**1.0000**

Run Time:



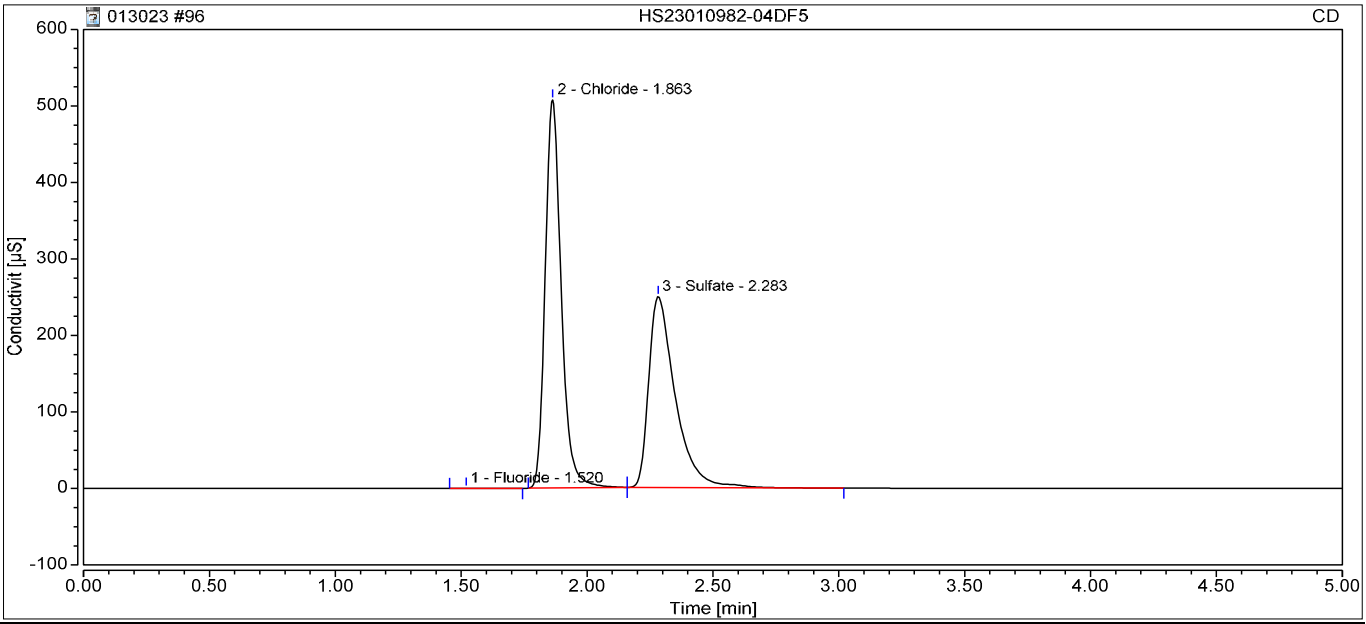
Integration Results

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

96 HS23010982-04DF5

Sample Name:	**HS23010982-04DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GC6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/30/2023 23:58**	*Sample Weight:*	**1.0000**

Run Time:



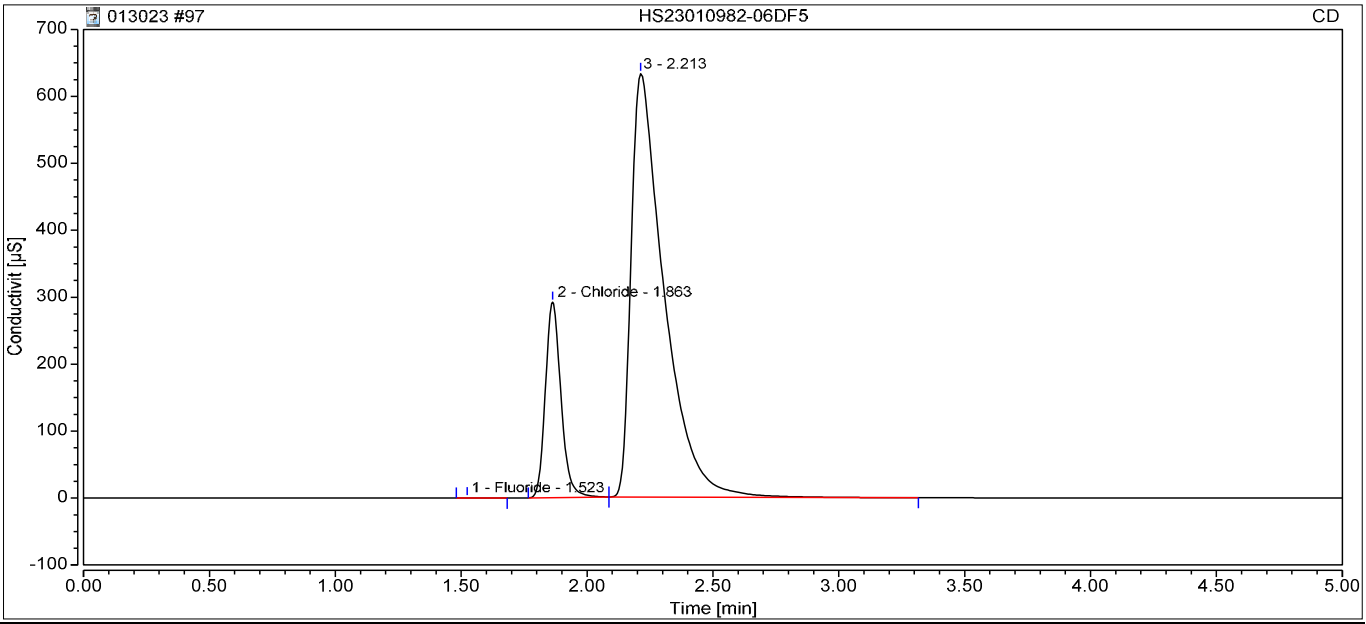
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.029	0.1120	0.5602	5.0000
2	1.86	Chloride	BMB	37.413	218.0919	1090.4593	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
3	2.28	Sulfate	BMB	30.367	269.9484	1349.7420	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**67.810**		**2440.76**	

97 HS23010982-06DF5

Sample Name:	**HS23010982-06DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GC7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:04**	*Sample Weight:*	**1.0000**

Run Time:



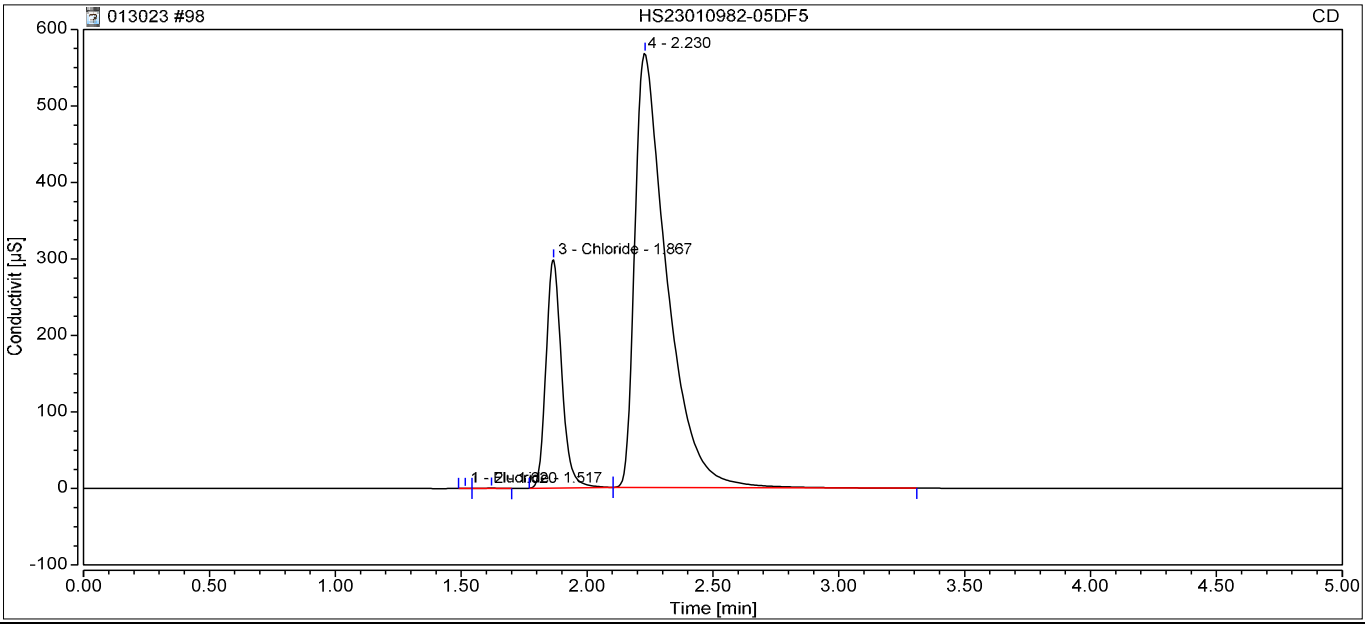
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.020	0.0741	0.3707	5.0000
2	1.86	Chloride	BMB	20.959	122.1842	610.9212	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**20.979**		**611.29**	

98 HS23010982-05DF5

Sample Name:	**HS23010982-05DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GC8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:09**	*Sample Weight:*	**1.0000**

Run Time:



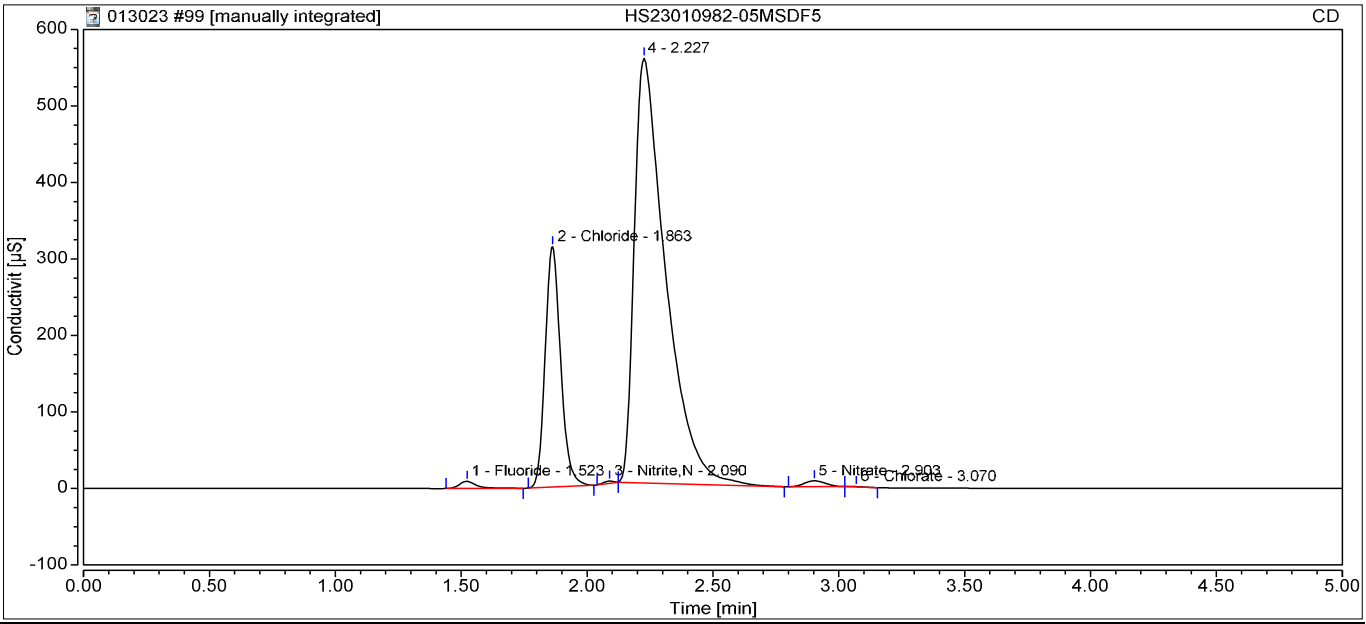
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.003	0.0086	0.0429	5.0000
3	1.87	Chloride	BMB	21.500	125.3397	626.6986	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**21.503**		**626.74**	

99 HS23010982-05MSDF5

Sample Name:	**HS23010982-05MSDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:15**	*Sample Weight:*	**1.0000**

Run Time:



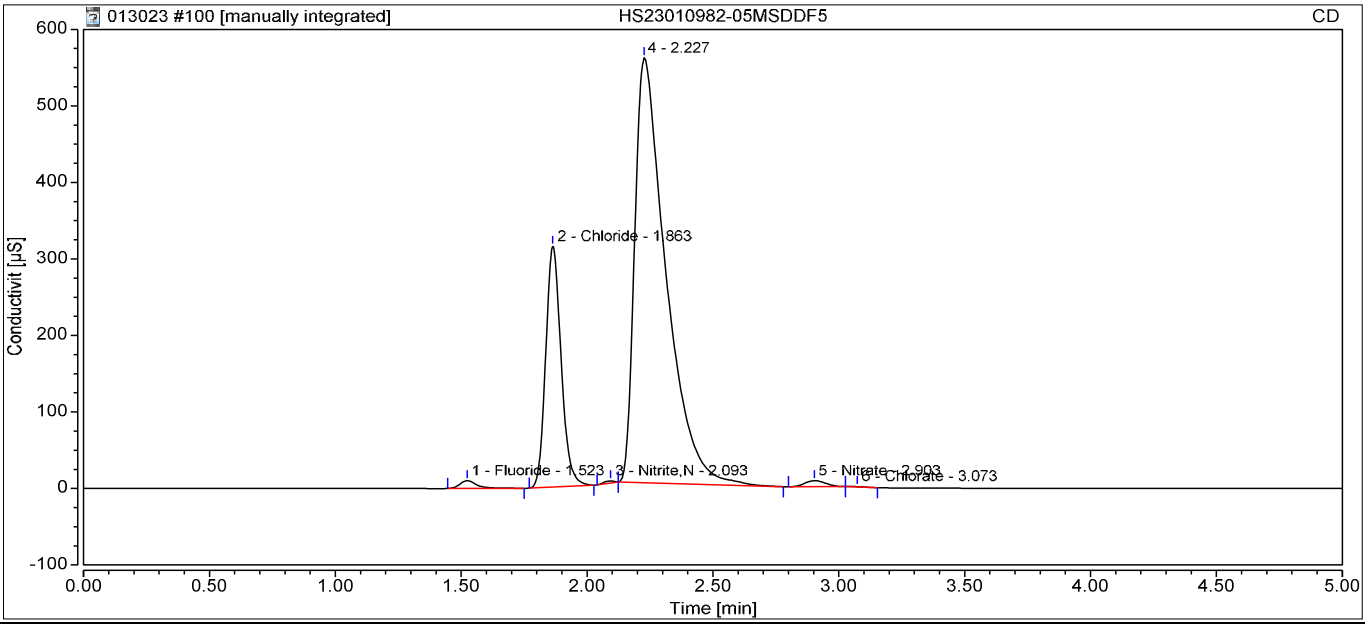
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.722	2.7814	13.9072	5.0000
2	1.86	Chloride	BMB	22.388	130.5124	652.5622	5.0000
3	2.09	Nitrite,N	BMB*	0.127	0.3515	1.7575	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
5	2.90	Nitrate	BMB	0.735	2.0900	10.4498	5.0000
6	3.07	Chlorate	BMB	0.028	5.3295	26.6475	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**24.000**		**705.32**	

100 HS23010982-05MSDDF5

Sample Name:	**HS23010982-05MSDDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:21**	*Sample Weight:*	**1.0000**

Run Time:



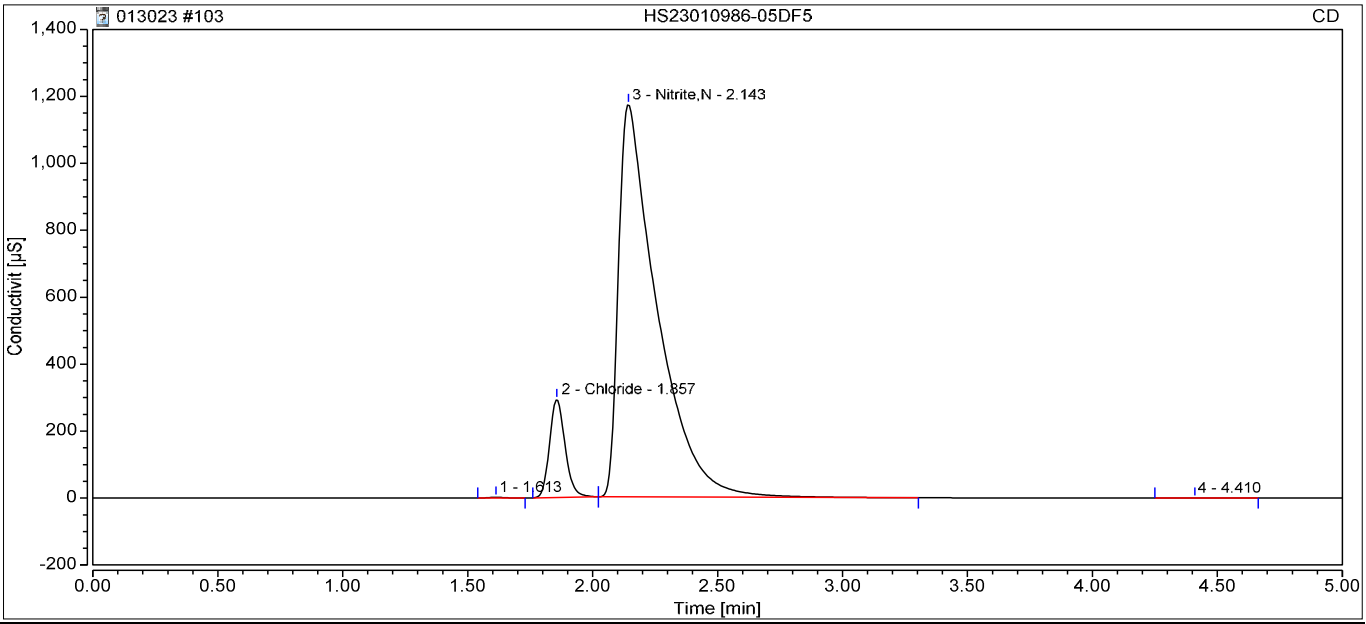
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.776	2.9917	14.9587	5.0000
2	1.86	Chloride	BMB	22.315	130.0866	650.4330	5.0000
3	2.09	Nitrite,N	BMB*	0.138	0.3835	1.9173	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
5	2.90	Nitrate	BMB	0.740	2.1035	10.5174	5.0000
6	3.07	Chlorate	BMB	0.027	5.1921	25.9606	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**23.997**		**703.79**	

103 HS23010986-05DF5

Sample Name:	**HS23010986-05DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:38**	*Sample Weight:*	**1.0000**

Run Time:



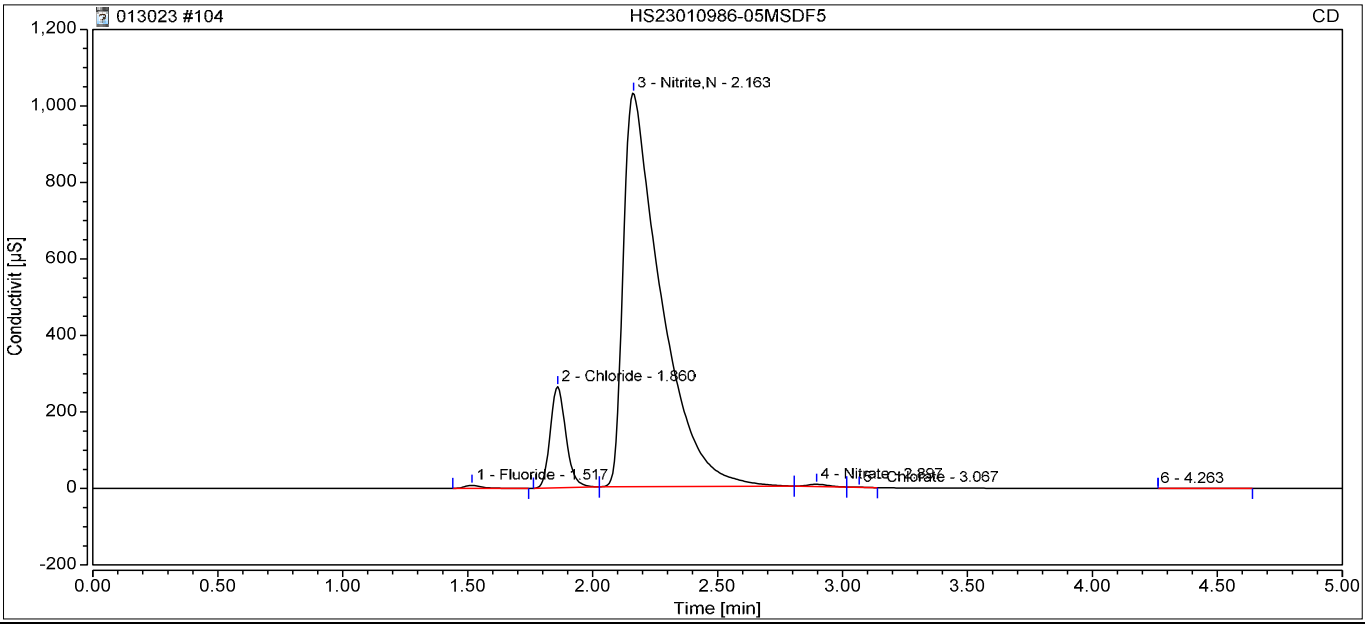
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.86	Chloride	BMB	21.174	123.4357	617.1783	5.0000
3	2.14	Nitrite,N	BMB	209.567	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**230.741**		**617.18**	

104 HS23010986-05MSDF5

Sample Name:	**HS23010986-05MSDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:44**	*Sample Weight:*	**1.0000**

Run Time:



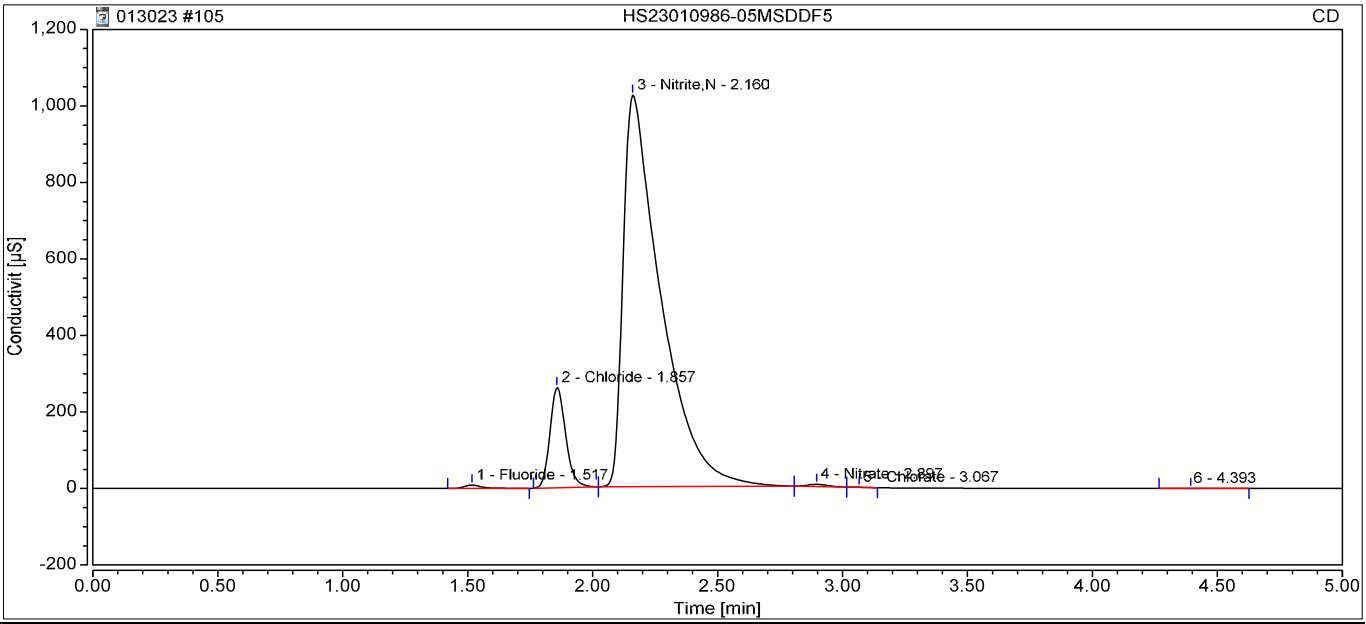
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.662	2.5511	12.7555	5.0000
2	1.86	Chloride	BMB	19.307	112.5537	562.7687	5.0000
3	2.16	Nitrite,N	BMB	179.776	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
4	2.90	Nitrate	BMB	0.538	1.5214	7.6069	5.0000
5	3.07	Chlorate	BMB	0.017	3.0206	15.1031	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**200.299**		**598.23**	

105 HS23010986-05MSDDF5

Sample Name:	**HS23010986-05MSDDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:50**	*Sample Weight:*	**1.0000**

Run Time:



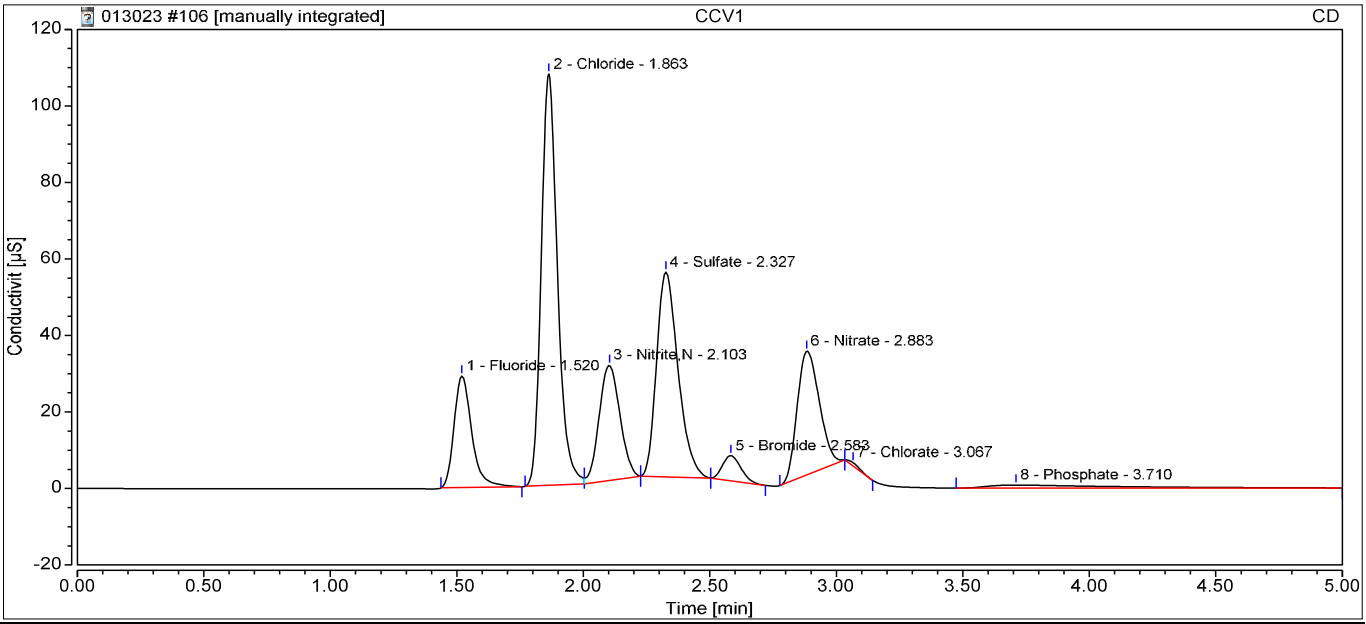
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.733	2.8268	14.1339	5.0000
2	1.86	Chloride	BMB	19.183	111.8298	559.1492	5.0000
3	2.16	Nitrite,N	BMB	178.632	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
4	2.90	Nitrate	BMB	0.537	1.5198	7.5990	5.0000
5	3.07	Chlorate	BMB	0.016	2.9785	14.8927	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**199.101**		**595.77**	

106 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 01:14**	*Sample Weight:*	**1.0000**

Run Time:



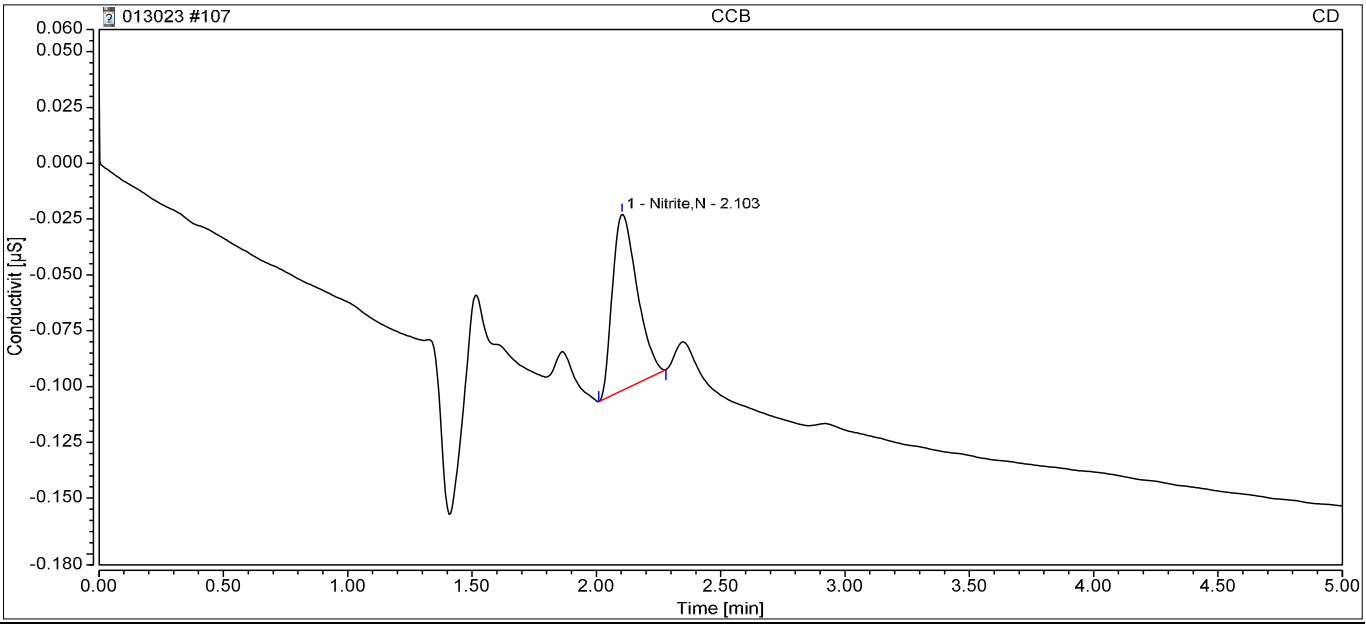
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.370	9.1378	9.1378	1.0000
2	1.86	Chloride	BM *	7.975	46.5017	46.5017	1.0000
3	2.10	Nitrite,N	MB*	2.870	9.3510	9.3510	1.0000
4	2.33	Sulfate	BMB	5.261	46.7529	46.7529	1.0000
5	2.58	Bromide	BMB	0.557	9.6697	9.6697	1.0000
6	2.88	Nitrate	BMB	3.273	9.4011	9.4011	1.0000
7	3.07	Chlorate	BMB	0.046	9.8252	9.8252	1.0000
8	3.71	Phosphate	BMB	0.461	7.4477	7.4477	1.0000
Total:			**0.000**	**22.814**		**148.09**	

107 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 01:19**	*Sample Weight:*	**1.0000**

Run Time:



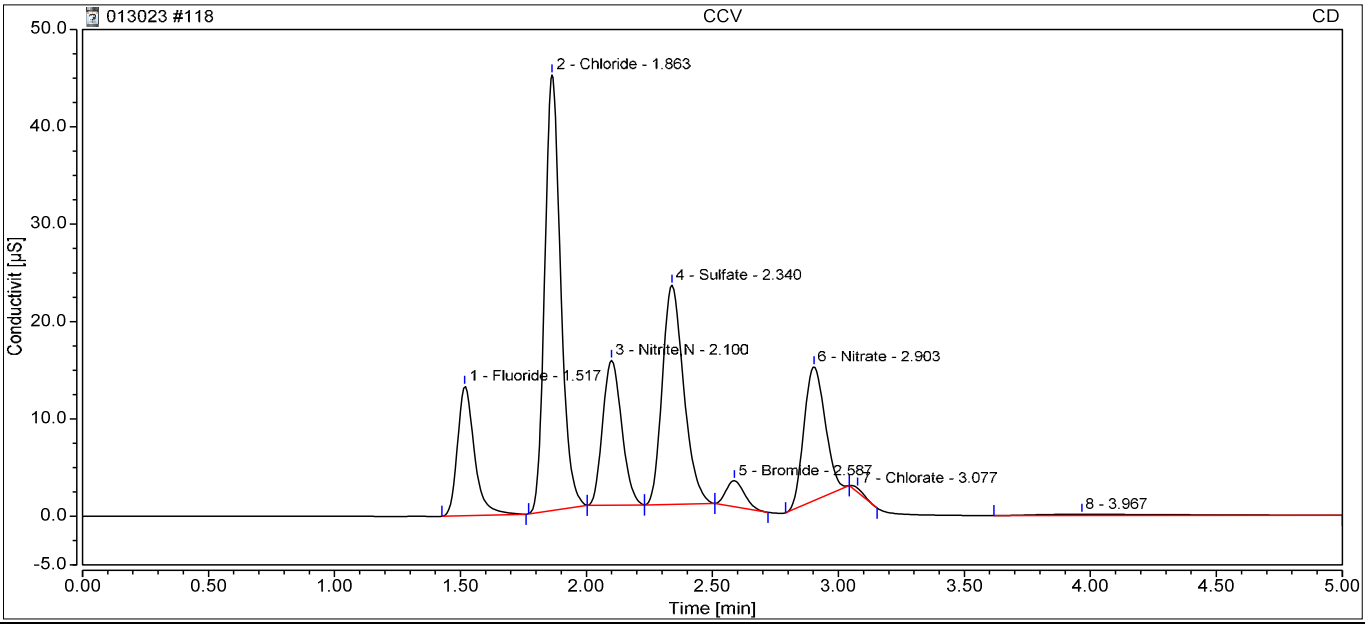
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.10	Nitrite,N	BMB	0.009	0.0248	0.0248	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.009**		**0.02**	

118 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 02:41**	*Sample Weight:*	**1.0000**

Run Time:



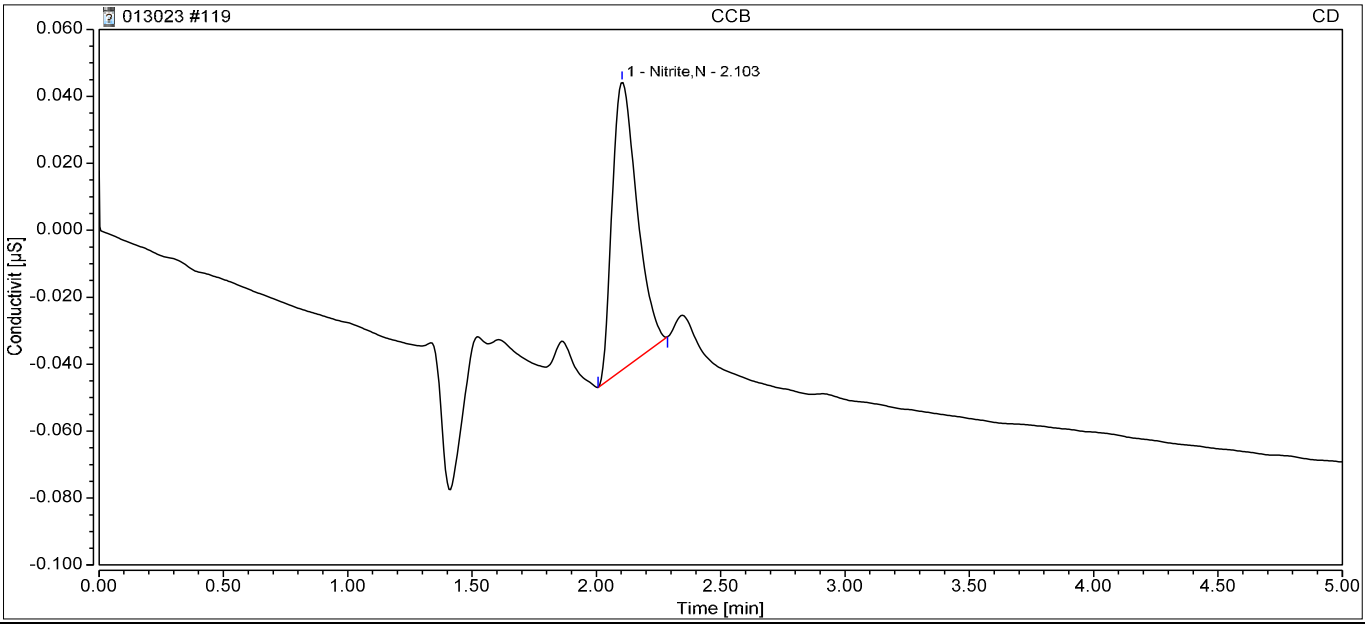
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.041	4.0112	4.0112	1.0000
2	1.86	Chloride	BMB	3.274	19.1033	19.1033	1.0000
3	2.10	Nitrite,N	BMB	1.301	3.8303	3.8303	1.0000
4	2.34	Sulfate	BMB	2.216	19.6883	19.6883	1.0000
5	2.59	Bromide	BMB	0.225	3.9340	3.9340	1.0000
6	2.90	Nitrate	BMB	1.343	3.8419	3.8419	1.0000
7	3.08	Chlorate	BMB	0.022	4.0119	4.0119	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.422**		**58.42**	

119 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 02:53**	*Sample Weight:*	**1.0000**

Run Time:



Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.10	Nitrite,N	BMB	0.010	0.0273	0.0273	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.03**	

HS23010982 Eurofin Lab J113149-1 Std_Tal_L4 Final Report

ALS WO# HS23010982

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dane Wacasey
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston TX 77099

Generated 1/30/2023 10:46 AM

JOB DESCRIPTION

HS23010982

JOB NUMBER

410-113149-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

my EOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
1/30/2023 10:46 AM

Authorized for release by
Kelly Bauer, Project Manager
Kelly.Bauer@et.eurofinsus.com
717 556-7262

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
cn	Refer to Case Narrative for further detail
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-113149-1

Receipt
The samples were received on 1/24/2023 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC VOA
Method RSK_175_CO2_D5: The continuing calibration verification (CCV) associated with batch 410-338435 recovered outside the 15% difference limit for Carbon dioxide. The CCV was confirmed 2 times and were within the control limits ; therefore, the data has been reported. The following items are affected: HS23010982-01 (410-113149-1), HS23010982-03 (410-113149-2), HS23010982-04 (410-113149-3), HS23010982-05 (410-113149-4) and HS23010982-06 (410-113149-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Client Sample ID: HS23010982-01 — Lab Sample ID: 410-113149-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M Q cn	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-03 — Lab Sample ID: 410-113149-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	150000	M Q cn	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-04 — Lab Sample ID: 410-113149-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	130000	Q cn	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-05 — Lab Sample ID: 410-113149-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M J1 Q cn	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010982-06 — Lab Sample ID: 410-113149-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M Q cn	12000		2600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Client Sample ID: HS23010982-01
Lab Sample ID: 410-113149-1
Date Collected: 01/19/23 08:25
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	170000	M Q cn	12000		2600	ug/L		01/25/23 10:06	1

Client Sample ID: HS23010982-03
Lab Sample ID: 410-113149-2
Date Collected: 01/19/23 09:55
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	150000	M Q cn	12000		2600	ug/L		01/25/23 10:14	1

Client Sample ID: HS23010982-04
Lab Sample ID: 410-113149-3
Date Collected: 01/19/23 10:45
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	130000	Q cn	12000		2600	ug/L		01/25/23 10:22	1

Client Sample ID: HS23010982-05
Lab Sample ID: 410-113149-4
Date Collected: 01/19/23 11:35
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	170000	M J1 Q cn	12000		2600	ug/L		01/25/23 10:30	1

Client Sample ID: HS23010982-06
Lab Sample ID: 410-113149-5
Date Collected: 01/19/23 12:35
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	170000	M Q cn	12000		2600	ug/L		01/25/23 10:53	1

Default Detection Limits

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Method: RSK-175 - Dissolved Gases (GC)

Prep: RSK-175

Analyte	LOQ	DL	Units
Carbon dioxide	12000	2600	ug/L

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-338469/1-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 338469

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	2600	U	12000		2600	ug/L		01/25/23 08:34	1

Lab Sample ID: LCS 410-338469/2-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 338469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide			35800	32400		ug/L		90	80 - 122		

Lab Sample ID: 410-113149-4 MS
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010982-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide	170000	M J1 Q cn	35800	208000	M J1 4	ug/L		118	80 - 122		

Lab Sample ID: 410-113149-4 MSD
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010982-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	170000	M J1 Q cn	35800	213000	M J1 4	ug/L		133	80 - 122	3	30

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

GC VOA

Analysis Batch: 338435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113149-1	HS23010982-01	Total/NA	Water	RSK-175	338469
410-113149-2	HS23010982-03	Total/NA	Water	RSK-175	338469
410-113149-3	HS23010982-04	Total/NA	Water	RSK-175	338469
410-113149-4	HS23010982-05	Total/NA	Water	RSK-175	338469
410-113149-5	HS23010982-06	Total/NA	Water	RSK-175	338469
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	338469
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	338469
410-113149-4 MS	HS23010982-05	Total/NA	Water	RSK-175	338469
410-113149-4 MSD	HS23010982-05	Total/NA	Water	RSK-175	338469

Prep Batch: 338469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113149-1	HS23010982-01	Total/NA	Water	RSK-175	
410-113149-2	HS23010982-03	Total/NA	Water	RSK-175	
410-113149-3	HS23010982-04	Total/NA	Water	RSK-175	
410-113149-4	HS23010982-05	Total/NA	Water	RSK-175	
410-113149-5	HS23010982-06	Total/NA	Water	RSK-175	
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-113149-4 MS	HS23010982-05	Total/NA	Water	RSK-175	
410-113149-4 MSD	HS23010982-05	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Client Sample ID: HS23010982-01
Date Collected: 01/19/23 08:25
Date Received: 01/24/23 10:20

Lab Sample ID: 410-113149-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:06

Client Sample ID: HS23010982-03
Date Collected: 01/19/23 09:55
Date Received: 01/24/23 10:20

Lab Sample ID: 410-113149-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:14

Client Sample ID: HS23010982-04
Date Collected: 01/19/23 10:45
Date Received: 01/24/23 10:20

Lab Sample ID: 410-113149-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:22

Client Sample ID: HS23010982-05
Date Collected: 01/19/23 11:35
Date Received: 01/24/23 10:20

Lab Sample ID: 410-113149-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:30

Client Sample ID: HS23010982-06
Date Collected: 01/19/23 12:35
Date Received: 01/24/23 10:20

Lab Sample ID: 410-113149-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 10:53

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Job ID: 410-113149-1
Project/Site: HS23010982

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	ELLE
RSK-175	Dissolved Gases Prep	RSK	ELLE

Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS23010982

Job ID: 410-113149-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-113149-1	HS23010982-01	Water	01/19/23 08:25	01/24/23 10:20
410-113149-2	HS23010982-03	Water	01/19/23 09:55	01/24/23 10:20
410-113149-3	HS23010982-04	Water	01/19/23 10:45	01/24/23 10:20
410-113149-4	HS23010982-05	Water	01/19/23 11:35	01/24/23 10:20
410-113149-5	HS23010982-06	Water	01/19/23 12:35	01/24/23 10:20

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-113149-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 331616

Lab Sample ID: IC 410-331616/6 Client Sample ID:

Date Analyzed: 12/30/22 17:05 Lab File ID: 312022_12_30B.0006.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.94	Peak assignment corrected	WN7O	12/30/22 17:19

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-113149-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 338435

Lab Sample ID: 410-113149-1 Client Sample ID: HS23010982-01

Date Analyzed: 01/25/23 10:06 Lab File ID: 312023_01_25BB.0016.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak assignment corrected	WN7O	01/25/23 10:15

Lab Sample ID: 410-113149-2 Client Sample ID: HS23010982-03

Date Analyzed: 01/25/23 10:14 Lab File ID: 312023_01_25BB.0017.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak assignment corrected	WN7O	01/25/23 10:37

Lab Sample ID: 410-113149-4 Client Sample ID: HS23010982-05

Date Analyzed: 01/25/23 10:30 Lab File ID: 312023_01_25BB.0019.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak assignment corrected	WN7O	01/25/23 10:38

Lab Sample ID: 410-113149-4 MS Client Sample ID: HS23010982-05 MS

Date Analyzed: 01/25/23 10:37 Lab File ID: 312023_01_25BB.0020.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.00	Peak assignment corrected	WN7O	01/25/23 10:43

Lab Sample ID: 410-113149-4 MSD Client Sample ID: HS23010982-05 MSD

Date Analyzed: 01/25/23 10:45 Lab File ID: 312023_01_25BB.0021.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.00	Peak assignment corrected	WN7O	01/25/23 10:51

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-113149-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 338435

Lab Sample ID: 410-113149-5 Client Sample ID: HS23010982-06

Date Analyzed: 01/25/23 10:53 Lab File ID: 312023_01_25BB.0022.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak assignment corrected	WN7O	01/25/23 11:03

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-113149-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
EPH_CO2ICV_00002	09/29/23	09/29/22	DI Water, Lot In House	1 mL	EPH_CO2XX_00002	0.0018 g	Carbon dioxide	547000 ppb
.EPH_CO2XX_00002	09/29/23	Air Products, Lot A214157			(Purchased Reagent)		Carbon dioxide	30.3889 %
EPH_CO2MS_00004	07/16/23	07/18/22	DI Water, Lot In House	1 g	EPH_CO2CRV_00002	0.0018 g	Carbon dioxide	1791000 ppb
.EPH_CO2CRV_00002	07/16/23	Praxair, Lot 4-11-18			(Purchased Reagent)		Carbon dioxide	99.5 %

Method RSK-175 CO2 DOD

Dissolved Gases (GC) by Method RSK_175_CO2 DOD

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_01_25BB.0007.d

Lab ID: LCS 410-338469/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon dioxide	35800	32400	90	80-122	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_01_25BB.0020.d

Lab ID: 410-113149-4 MS Client ID: HS23010982-05 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Carbon dioxide	35800	170000	208000	118	80-122	M J1 4

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_01_25BB.0021.d

Lab ID: 410-113149-4 MSD Client ID: HS23010982-05 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon dioxide	35800	213000	133	3	30	80-122	M J1 4

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Lab File ID: 312023_01_25BB.0006.d Lab Sample ID: MB 410-338469/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 01/25/2023 08:34

GC Column: HP Plot ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-338469/2-A	312023_01_25BB.0007.d	01/25/2023 08:42
HS23010982-01	410-113149-1	312023_01_25BB.0016.d	01/25/2023 10:06
HS23010982-03	410-113149-2	312023_01_25BB.0017.d	01/25/2023 10:14
HS23010982-04	410-113149-3	312023_01_25BB.0018.d	01/25/2023 10:22
HS23010982-05	410-113149-4	312023_01_25BB.0019.d	01/25/2023 10:30
HS23010982-05 MS	410-113149-4 MS	312023_01_25BB.0020.d	01/25/2023 10:37
HS23010982-05 MSD	410-113149-4 MSD	312023_01_25BB.0021.d	01/25/2023 10:45
HS23010982-06	410-113149-5	312023_01_25BB.0022.d	01/25/2023 10:53

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: HS23010982-01 Lab Sample ID: 410-113149-1

Matrix: Water Lab File ID: 312023_01_25BB.0016.d

Analysis Method: RSK-175 Date Collected: 01/19/2023 08:25

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 10:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	170000	M Q cn	12000	2600

Report Date: 25-Jan-2023 11:08:43

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0016.d				
Lims ID:	410-113149-A-1-A				
Client ID:	HS23010982-01				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 10:06:00	ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-016				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:03:51	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				
First Level Reviewer: WN7O		Date:	25-Jan-2023 10:37:50		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.009	2.048	-0.039	676850479H	170900	a

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
a - User Assigned ID

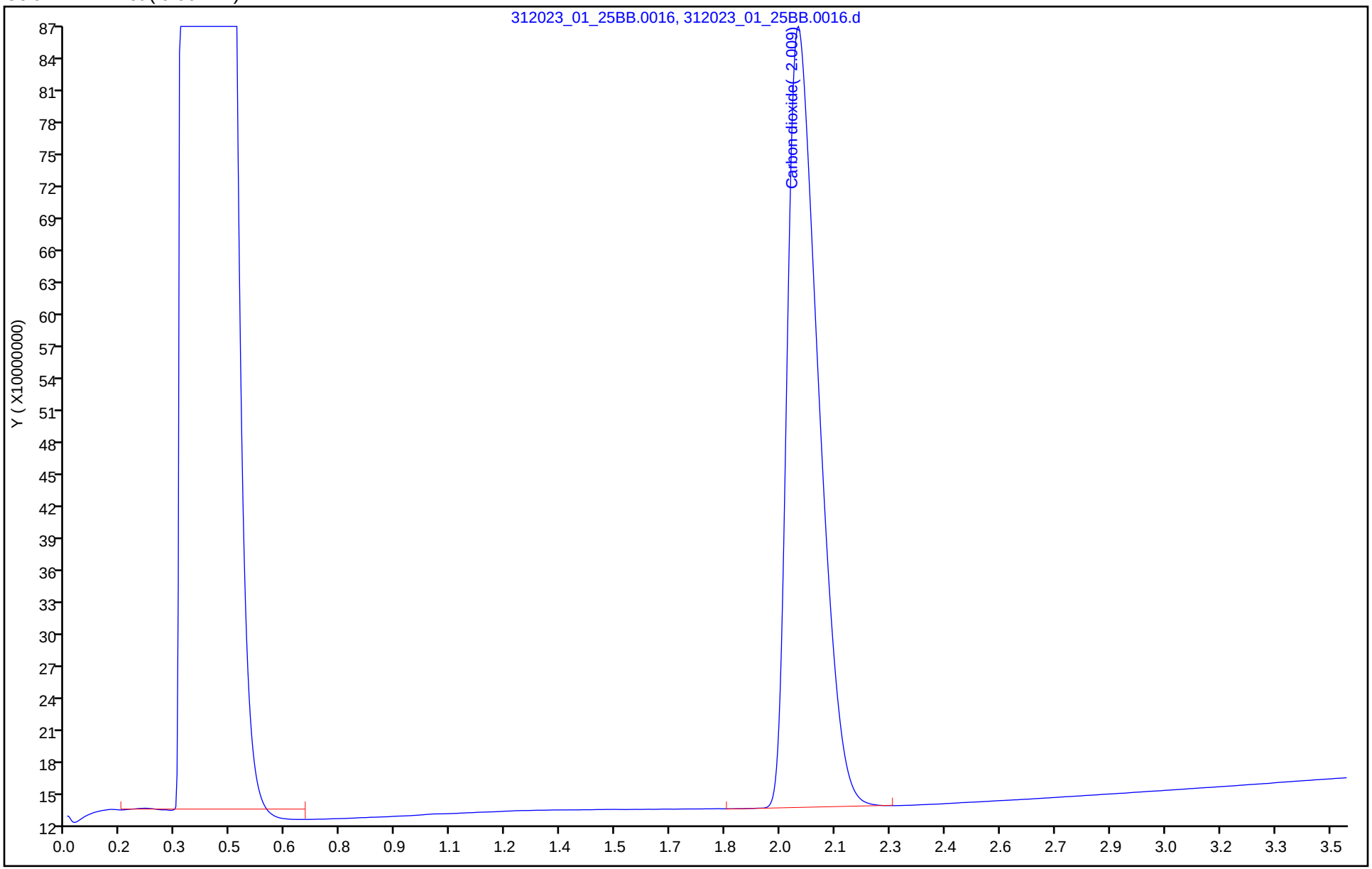
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 11:08:43 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0016.d				
Injection Date:	25-Jan-2023 10:06:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113149-A-1-A	Lab Sample ID:	410-113149-1	Worklist Smp#:	16
Client ID:	HS23010982-01				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 25-Jan-2023 11:08:43 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

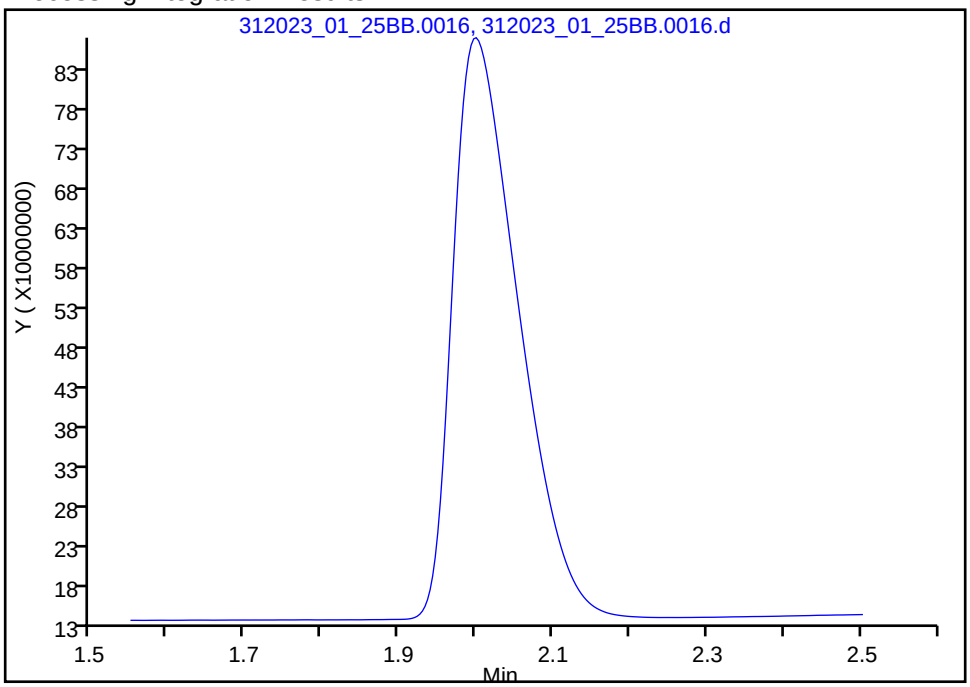
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0016.d		
Injection Date:	25-Jan-2023 10:06:00	Instrument ID:	19506-B
Lims ID:	410-113149-A-1-A	Lab Sample ID:	410-113149-1
Client ID:	HS23010982-01		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 16
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

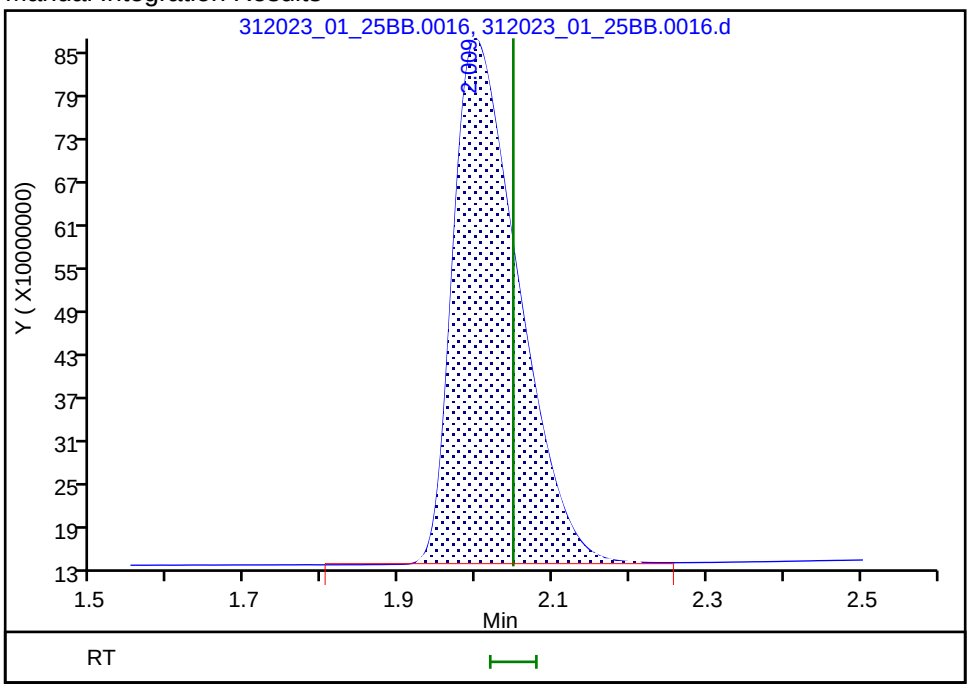
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 676850479
Amount: 170900
Amount Units: ug/l



Reviewer: WN7O, 25-Jan-2023 10:15:41
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: HS23010982-03 Lab Sample ID: 410-113149-2

Matrix: Water Lab File ID: 312023_01_25BB.0017.d

Analysis Method: RSK-175 Date Collected: 01/19/2023 09:55

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 10:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.5

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	150000	M Q cn	12000	2600

Report Date: 25-Jan-2023 11:08:43

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0017.d				
Lims ID:	410-113149-A-2-A				
Client ID:	HS23010982-03				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 10:14:00	ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-017				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:03:51	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				
First Level Reviewer: WN7O		Date:	25-Jan-2023 10:37:58		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.014	2.048	-0.034	603508609H	152382	a

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
a - User Assigned ID

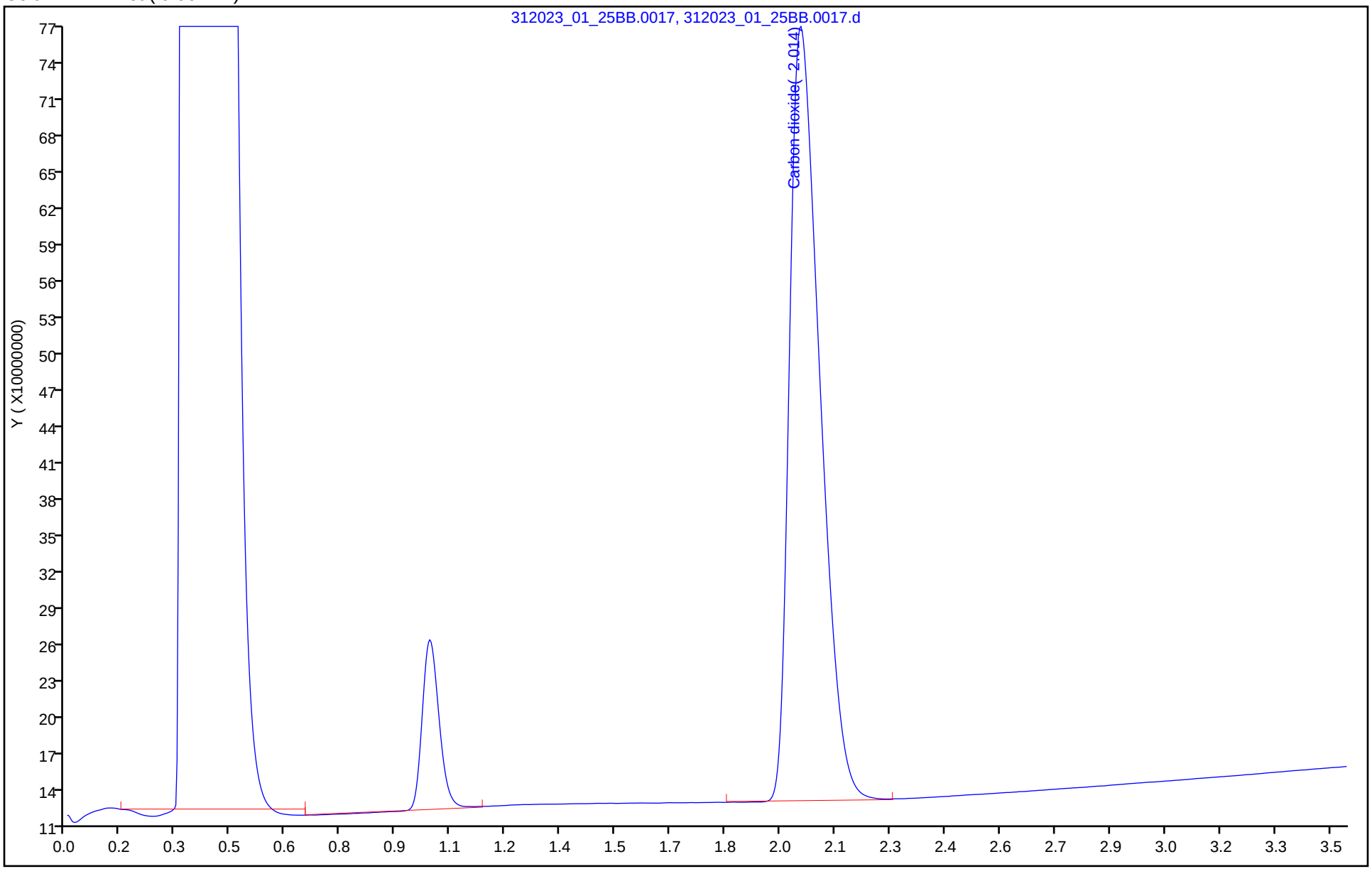
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 11:08:43 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0017.d				
Injection Date:	25-Jan-2023 10:14:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113149-A-2-A	Lab Sample ID:	410-113149-2	Worklist Smp#:	17
Client ID:	HS23010982-03				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 25-Jan-2023 11:08:43 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

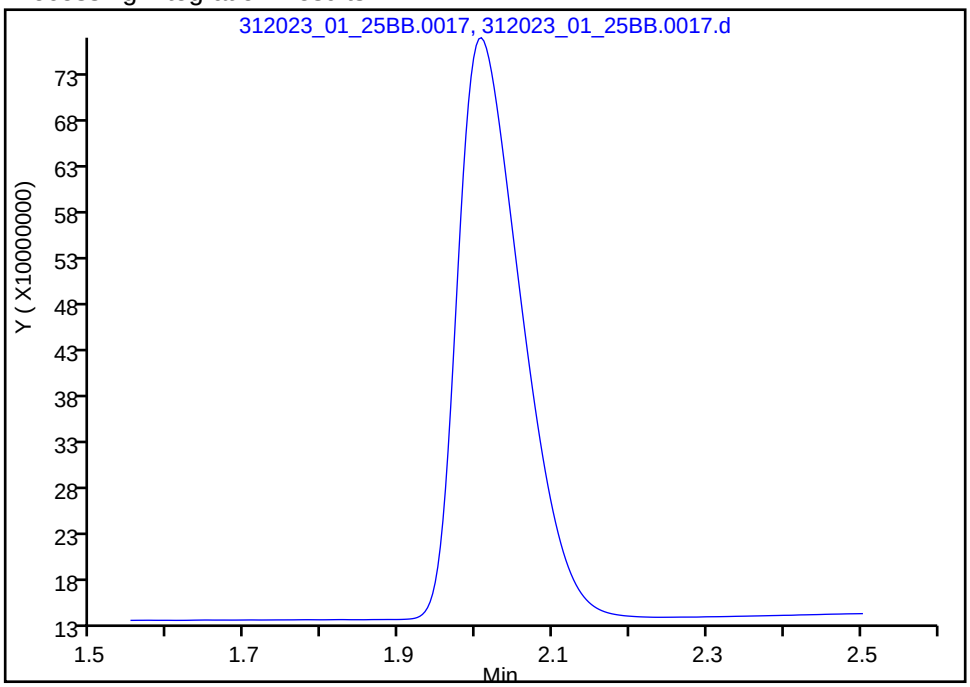
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0017.d				
Injection Date:	25-Jan-2023 10:14:00	Instrument ID:	19506-B		
Lims ID:	410-113149-A-2-A	Lab Sample ID:	410-113149-2		
Client ID:	HS23010982-03				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

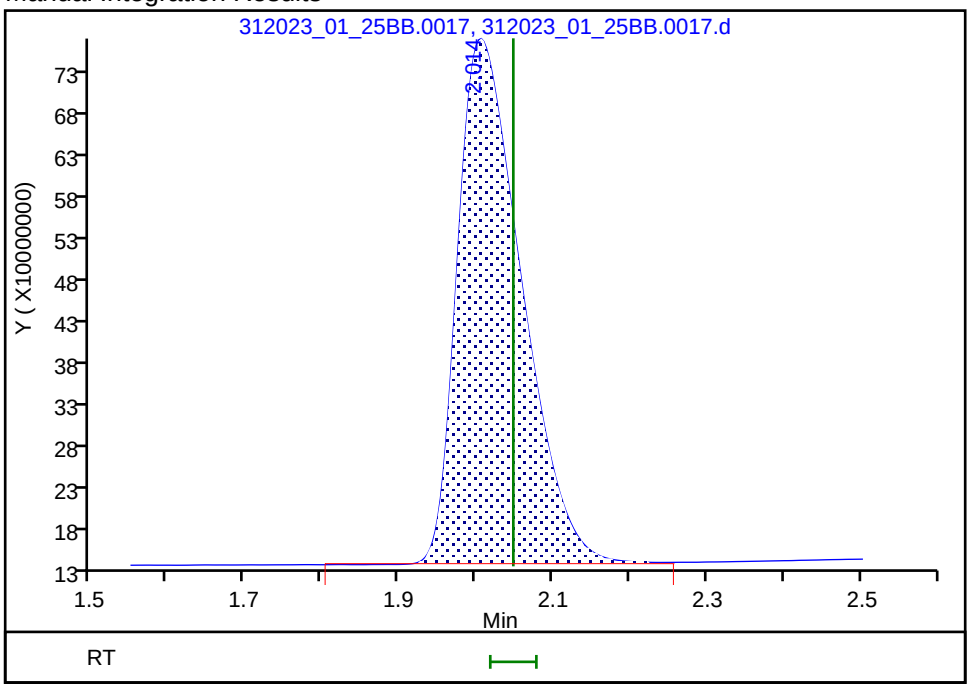
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 603508609
Amount: 152382
Amount Units: ug/l



Reviewer: WN7O, 25-Jan-2023 10:37:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-113149-1

SDG No.:

Client Sample ID: HS23010982-04
Lab Sample ID: 410-113149-3

Matrix: Water
Lab File ID: 312023_01_25BB.0018.d

Analysis Method: RSK-175
Date Collected: 01/19/2023 10:45

Sample wt/vol: 5(mL)
Date Analyzed: 01/25/2023 10:22

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 6.5

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 338435
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	130000	Q cn	12000	2600

Report Date: 25-Jan-2023 11:08:44

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0018.d				
Lims ID:	410-113149-A-3-A				
Client ID:	HS23010982-04				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 10:22:00	ALS Bottle#:	0	Worklist Smp#:	18
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-018				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:03:51	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.022	2.048	-0.026	509064735	128535	H

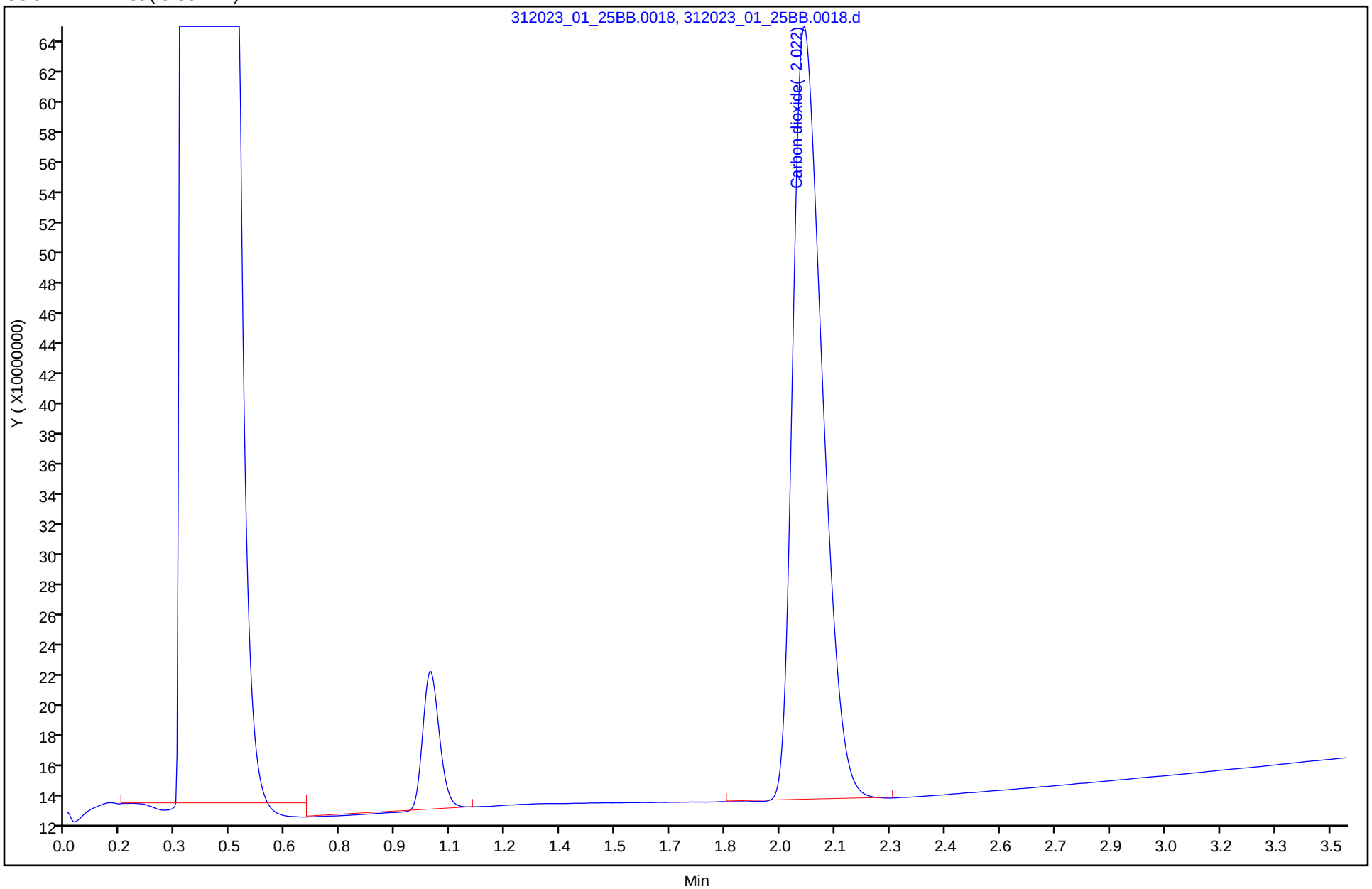
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 11:08:44 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0018.d				
Injection Date:	25-Jan-2023 10:22:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113149-A-3-A	Lab Sample ID:	410-113149-3	Worklist Smp#:	18
Client ID:	HS23010982-04				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: HS23010982-05 Lab Sample ID: 410-113149-4

Matrix: Water Lab File ID: 312023_01_25BB.0019.d

Analysis Method: RSK-175 Date Collected: 01/19/2023 11:35

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 10:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.5

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	170000	M J1 Q cn	12000	2600

Report Date: 25-Jan-2023 11:08:44

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0019.d				
Lims ID:	410-113149-A-4-A				
Client ID:	HS23010982-05				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 10:30:00	ALS Bottle#:	0	Worklist Smp#:	19
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-019				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:03:51	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				
First Level Reviewer: WN7O		Date:	25-Jan-2023 10:38:06		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.010	2.048	-0.038	655387528H	165481	a

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
a - User Assigned ID

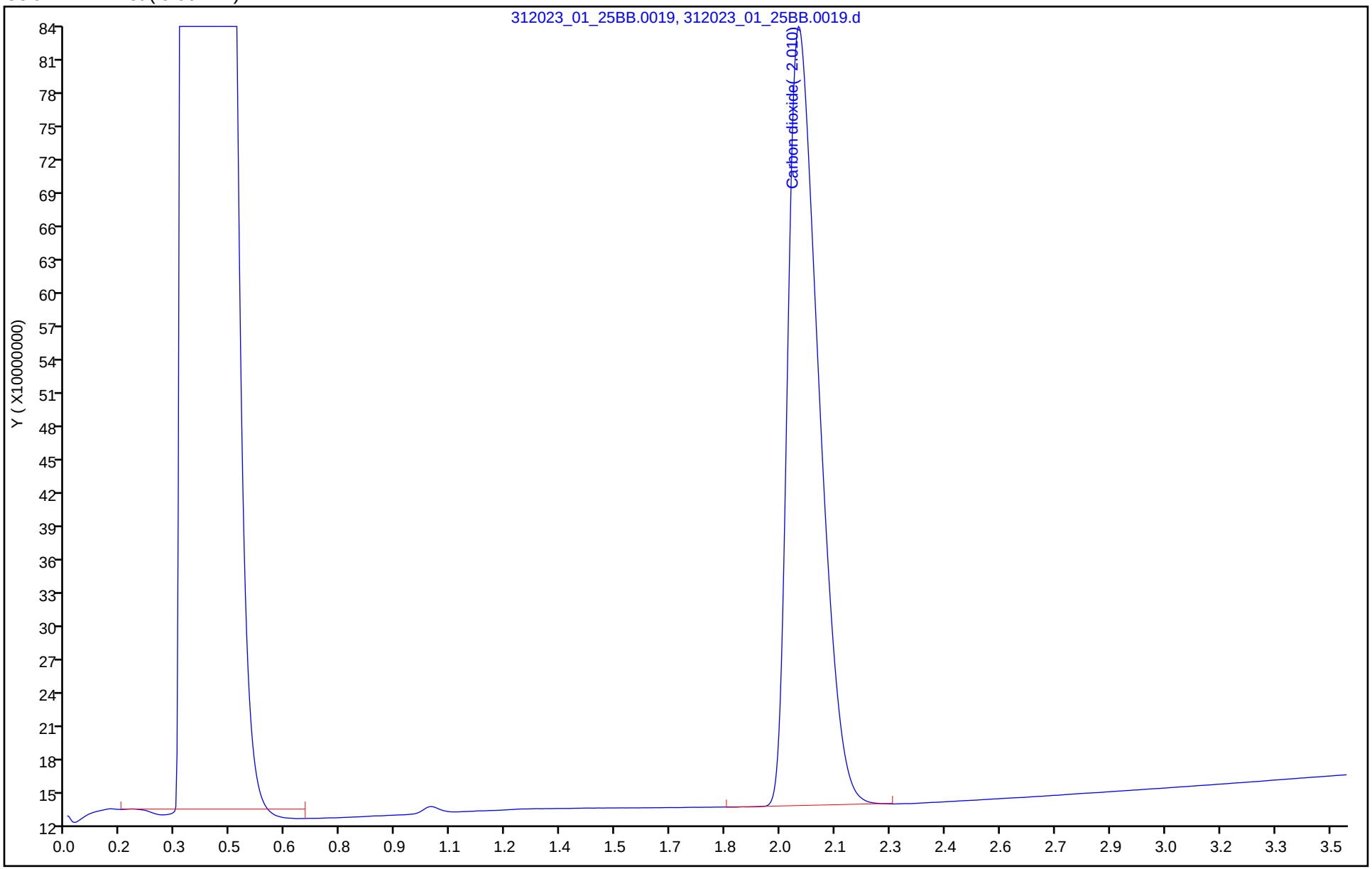
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 11:08:44 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0019.d				
Injection Date:	25-Jan-2023 10:30:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113149-A-4-A	Lab Sample ID:	410-113149-4	Worklist Smp#:	19
Client ID:	HS23010982-05				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 25-Jan-2023 11:08:44 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

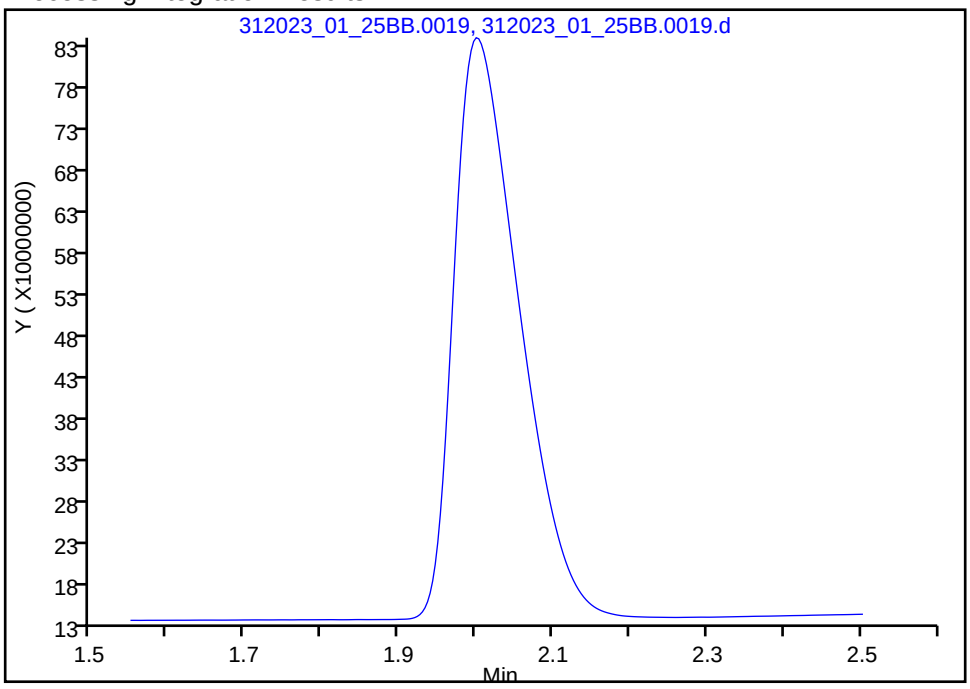
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0019.d		
Injection Date:	25-Jan-2023 10:30:00	Instrument ID:	19506-B
Lims ID:	410-113149-A-4-A	Lab Sample ID:	410-113149-4
Client ID:	HS23010982-05		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 19
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

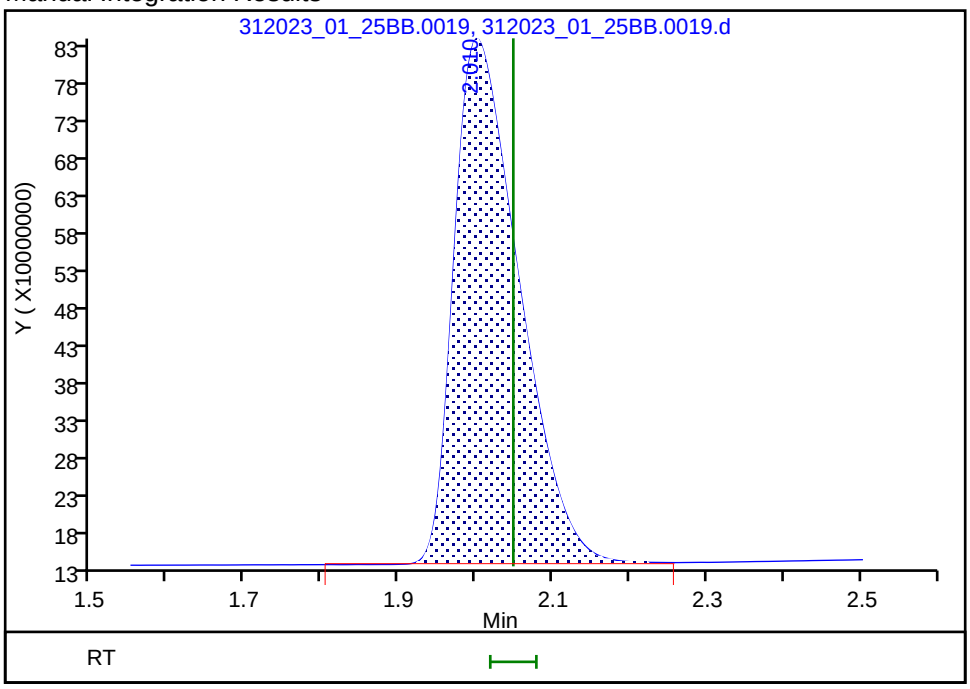
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 655387528
Amount: 165481
Amount Units: ug/l



Reviewer: WN7O, 25-Jan-2023 10:38:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: HS23010982-06 Lab Sample ID: 410-113149-5

Matrix: Water Lab File ID: 312023_01_25BB.0022.d

Analysis Method: RSK-175 Date Collected: 01/19/2023 12:35

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 10:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	170000	M Q cn	12000	2600

Report Date: 25-Jan-2023 11:08:46

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0022.d				
Lims ID:	410-113149-A-5-A				
Client ID:	HS23010982-06				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 10:53:00	ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-022				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:03:51	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				
First Level Reviewer: WN7O		Date:	25-Jan-2023 11:03:51		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.007	2.048	-0.041	678878955H	171412	a

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
a - User Assigned ID

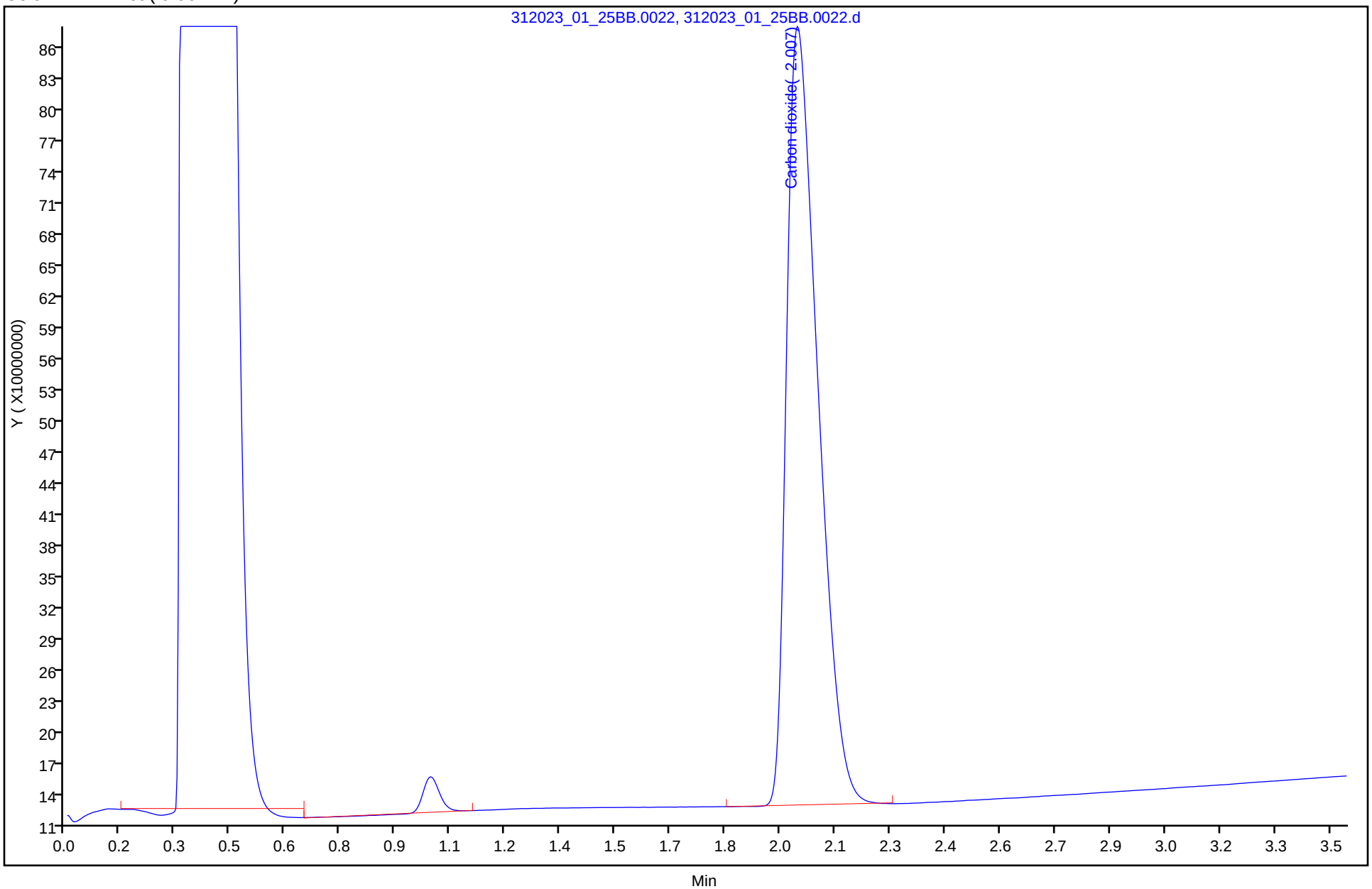
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 11:08:46 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0022.d				
Injection Date:	25-Jan-2023 10:53:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113149-A-5-A	Lab Sample ID:	410-113149-5	Worklist Smp#:	22
Client ID:	HS23010982-06				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 25-Jan-2023 11:08:46 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

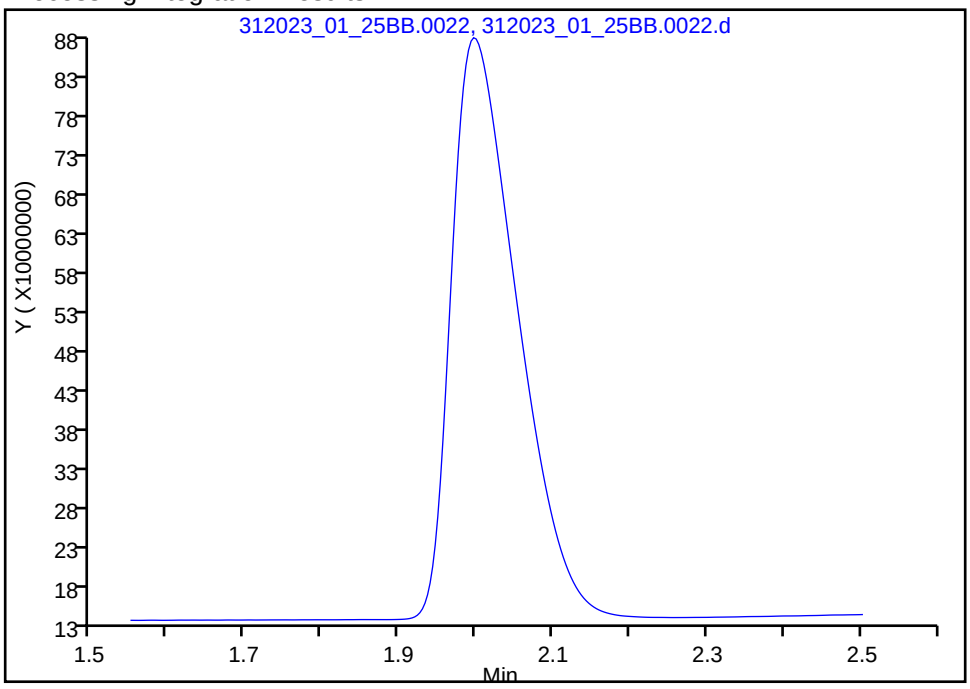
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0022.d		
Injection Date:	25-Jan-2023 10:53:00	Instrument ID:	19506-B
Lims ID:	410-113149-A-5-A	Lab Sample ID:	410-113149-5
Client ID:	HS23010982-06		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 22
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

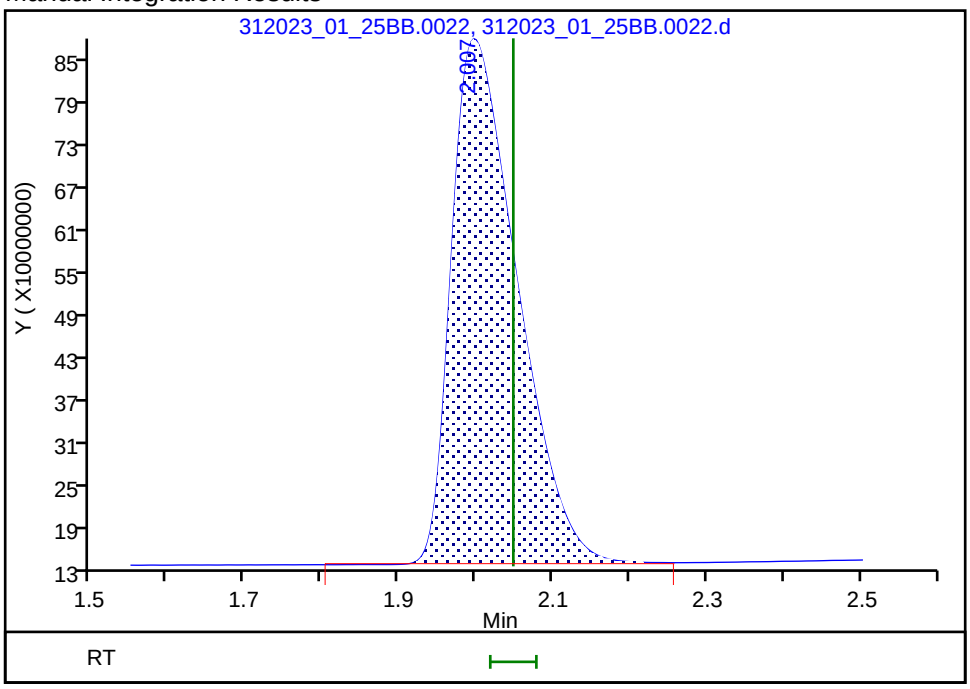
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 678878955
Amount: 171412
Amount Units: ug/l



Reviewer: WN7O, 25-Jan-2023 11:03:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-113149-1 Analy Batch No.: 331616

SDG No.:

Instrument ID: 19506-B GC Column: HP Plot ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/30/2022 16:32 Calibration End Date: 12/30/2022 17:13 Calibration ID: 45608

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-331616/2	312022_12_30B.0002.d
Level 2	IC 410-331616/3	312022_12_30B.0003.d
Level 3	ICRT 410-331616/4	312022_12_30B.0004.d
Level 4	IC 410-331616/5	312022_12_30B.0005.d
Level 5	IC 410-331616/6	312022_12_30B.0006.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Carbon dioxide	1.980	1.977	1.973	1.960	1.943						1.943 - 2.003	1.967

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1 Analy Batch No.: 331616

SDG No.:

Instrument ID: 19506-B GC Column: HP Plot ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/30/2022 16:32 Calibration End Date: 12/30/2022 17:13 Calibration ID: 45608

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-331616/2	312022_12_30B.0002.d
Level 2	IC 410-331616/3	312022_12_30B.0003.d
Level 3	ICRT 410-331616/4	312022_12_30B.0004.d
Level 4	IC 410-331616/5	312022_12_30B.0005.d
Level 5	IC 410-331616/6	312022_12_30B.0006.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Carbon dioxide	4382.9 3543.4	4049.0	3981.6	3845.7	Ave		3960.50209				7.7		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-113149-1 Analy Batch No.: 331616

SDG No.:

Instrument ID: 19506-B GC Column: HP Plot ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/30/2022 16:32 Calibration End Date: 12/30/2022 17:13 Calibration ID: 45608

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-331616/2	312022_12_30B.0002.d
Level 2	IC 410-331616/3	312022_12_30B.0003.d
Level 3	ICRT 410-331616/4	312022_12_30B.0004.d
Level 4	IC 410-331616/5	312022_12_30B.0005.d
Level 5	IC 410-331616/6	312022_12_30B.0006.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Carbon dioxide	Ave	47098229	87021455	142619437	344380785	634621588	10746	21492	35820	89550	179100

Curve Type Legend
Ave = Average by Height

Report Date: 03-Jan-2023 07:38:08

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0002.d				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	30-Dec-2022 16:32:00	ALS Bottle#:	0	Worklist Smp#:	2
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	410-0074294-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	03-Jan-2023 07:38:08	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1619				
First Level Reviewer: WN7O		Date:	03-Jan-2023 07:38:08		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.980	1.973	0.007	47098229H	10746	11892	

QC Flag Legend

Processing Flags

H - Response Measured by Height

Reagents:

EPH_CO2MS_00004 Amount Added: 30.00 Units: uL

Chrom Revision: 2.3 20-Dec-2022 14:14:06

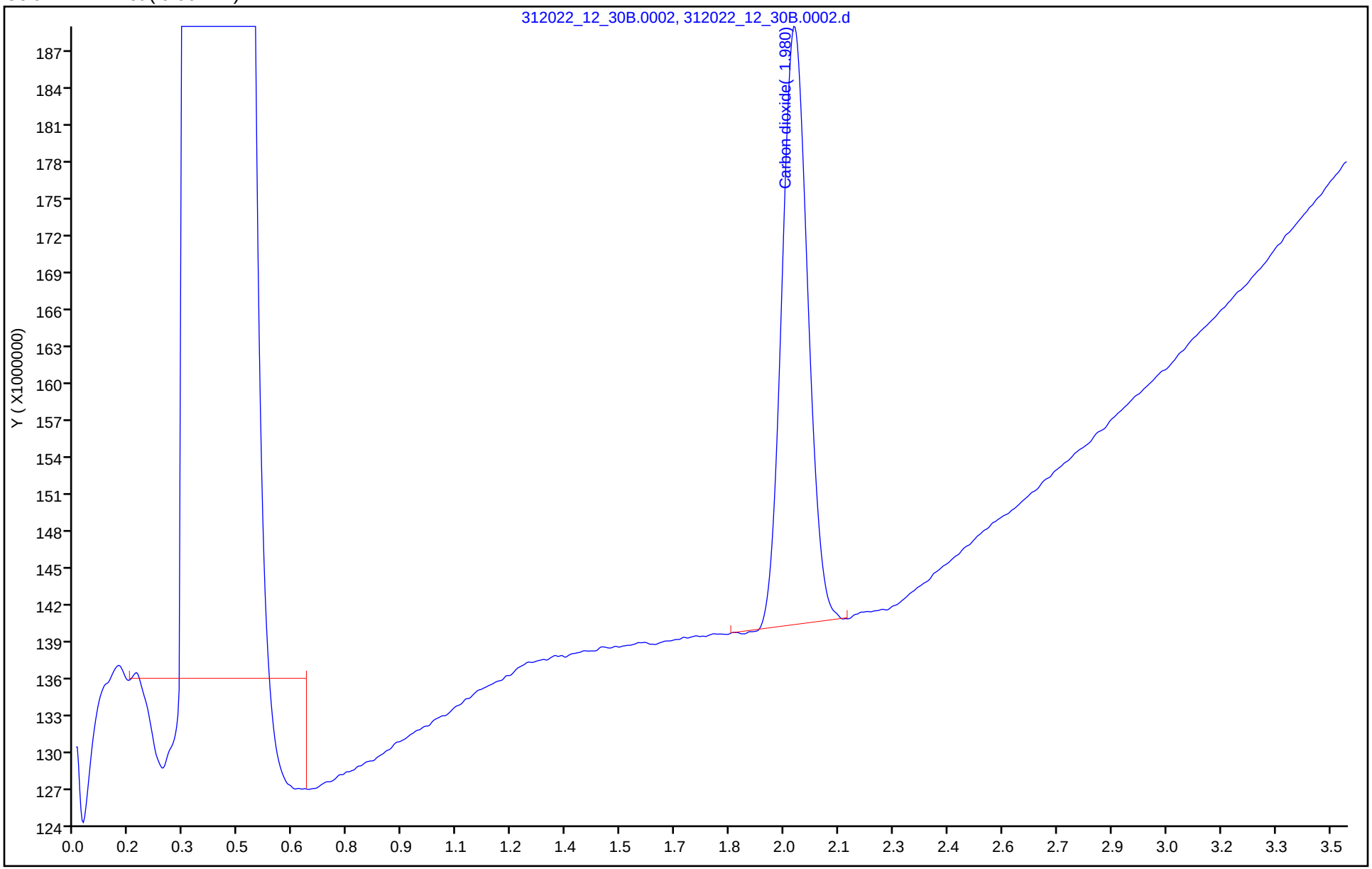
Report Date: 03-Jan-2023 07:38:08 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0002.d

Injection Date:	30-Dec-2022 16:32:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	IC			Worklist Smp#:	2
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 03-Jan-2023 07:31:24

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0003.d				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	30-Dec-2022 16:40:00	ALS Bottle#:	0	Worklist Smp#:	3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	410-0074294-003				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	03-Jan-2023 07:31:24	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1619				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.977	1.973	0.004	87021455H	21492	21972	

Reagents:

EPH_CO2MS_00004 Amount Added: 60.00 Units: uL

Chrom Revision: 2.3 20-Dec-2022 14:14:06

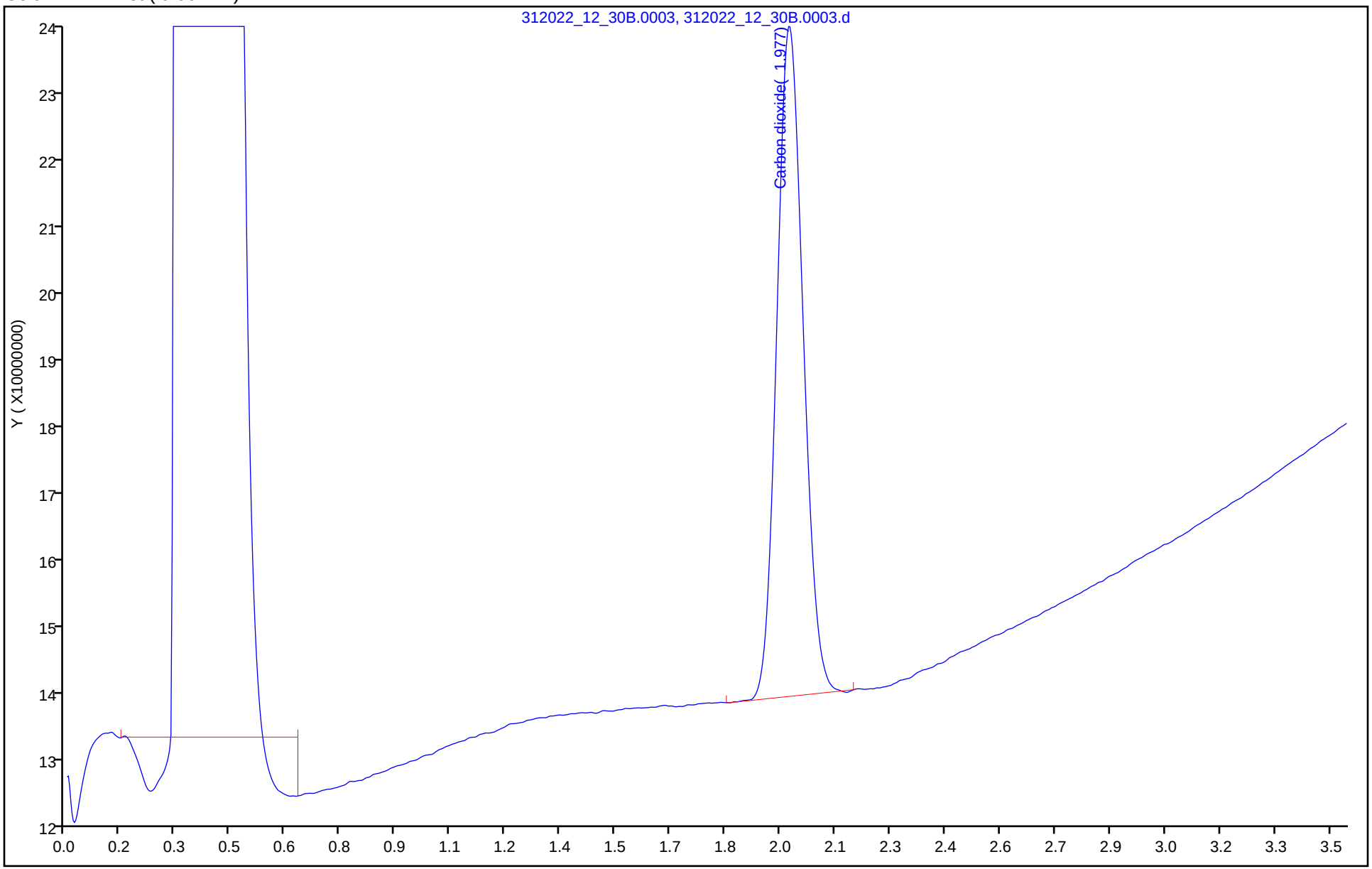
Report Date: 03-Jan-2023 07:31:24 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0003.d

Injection Date:	30-Dec-2022 16:40:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 03-Jan-2023 07:31:25

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0004.d				
Lims ID:	ICRT				
Client ID:					
Sample Type:	ICRT	Calib Level:	3		
Inject. Date:	30-Dec-2022 16:48:00	ALS Bottle#:	0	Worklist Smp#:	4
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	icrt				
Misc. Info.:	410-0074294-004				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	03-Jan-2023 07:31:25	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1619				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.973	1.973	0.000	142619437H	35820	36010	

Reagents:

EPH_CO2MS_00004 Amount Added: 100.00 Units: uL

Chrom Revision: 2.3 20-Dec-2022 14:14:06

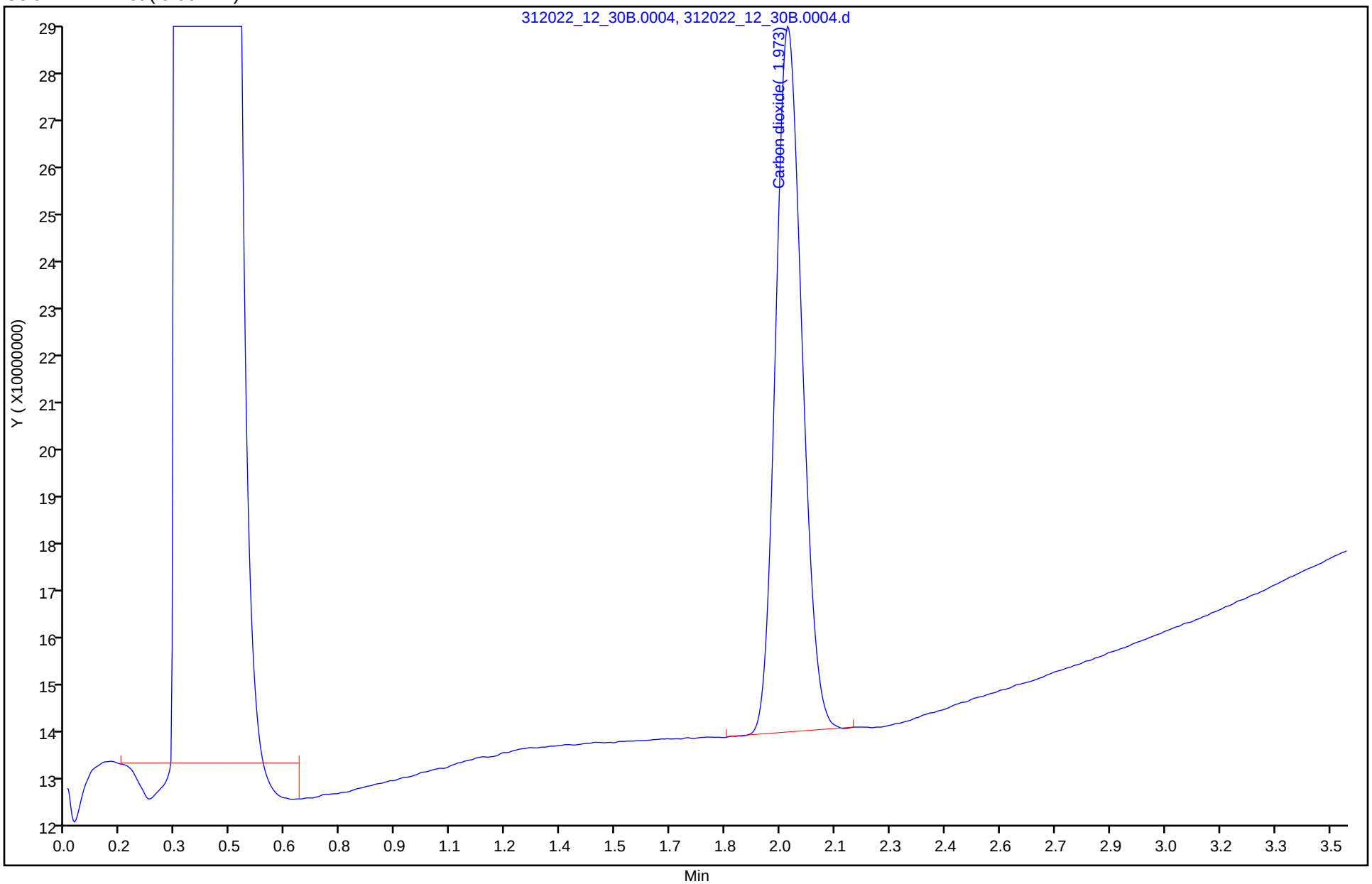
Report Date: 03-Jan-2023 07:31:25 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0004.d

Injection Date:	30-Dec-2022 16:48:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ICRT			Worklist Smp#:	4
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 03-Jan-2023 07:31:26

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0005.d				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	30-Dec-2022 16:56:00	ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	410-0074294-005				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	03-Jan-2023 07:31:26	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1619				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.960	1.973	-0.013	344380785	H 89550	86954	

Reagents:

EPH_CO2MS_00004 Amount Added: 250.00 Units: uL

Chrom Revision: 2.3 20-Dec-2022 14:14:06

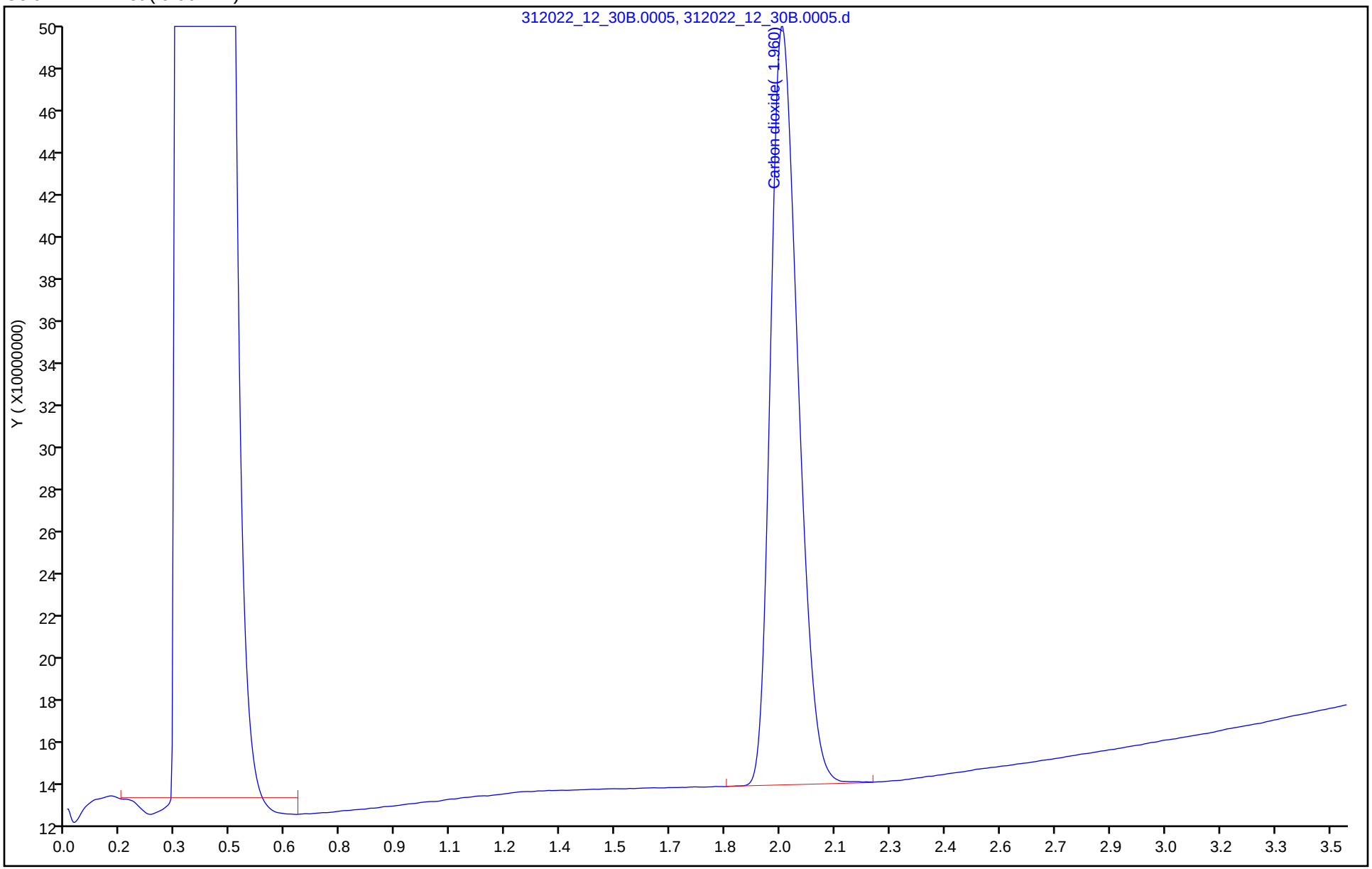
Report Date: 03-Jan-2023 07:31:26 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0005.d

Injection Date:	30-Dec-2022 16:56:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 03-Jan-2023 07:31:27

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	30-Dec-2022 17:05:00	ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Misc. Info.:	410-0074294-006				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	03-Jan-2023 07:31:27	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1619				
First Level Reviewer: WN7O		Date:	30-Dec-2022 17:19:32		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.943	1.973	-0.030	634621588H	179100	160238	a

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
a - User Assigned ID

Reagents:

EPH_CO2MS_00004 Amount Added: 500.00 Units: uL

Chrom Revision: 2.3 20-Dec-2022 14:14:06

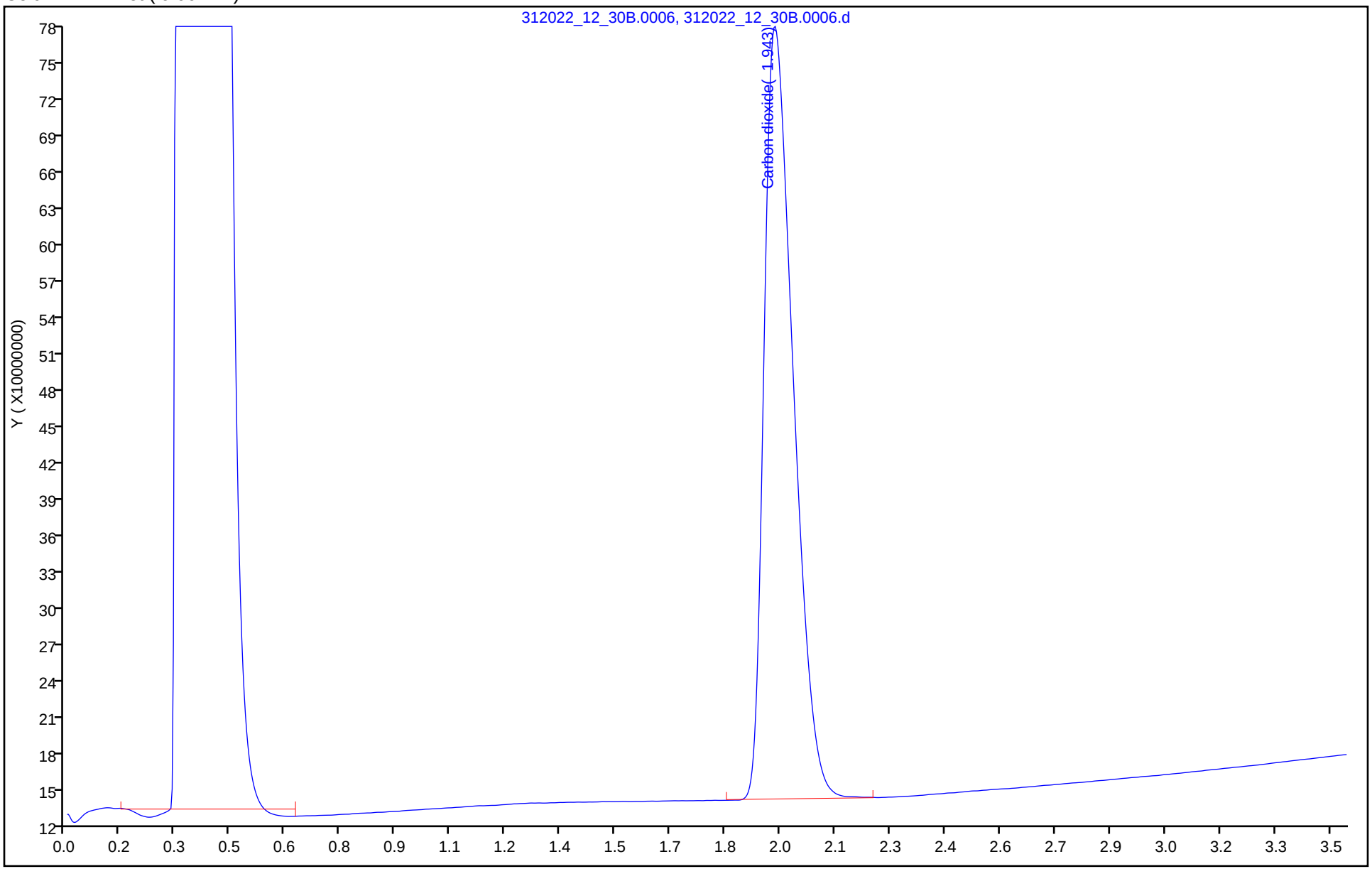
Report Date: 03-Jan-2023 07:31:27 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d

Injection Date:	30-Dec-2022 17:05:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 03-Jan-2023 07:31:27

Chrom Revision: 2.3 20-Dec-2022 14:14:06
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

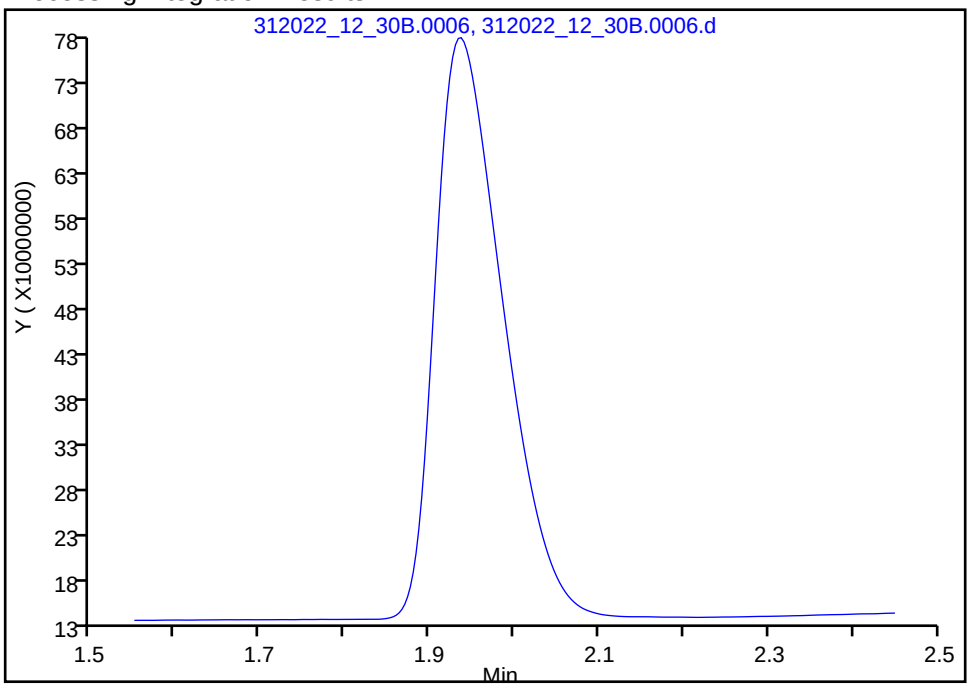
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d		
Injection Date:	30-Dec-2022 17:05:00	Instrument ID:	19506-B
Lims ID:	IC		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 6
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

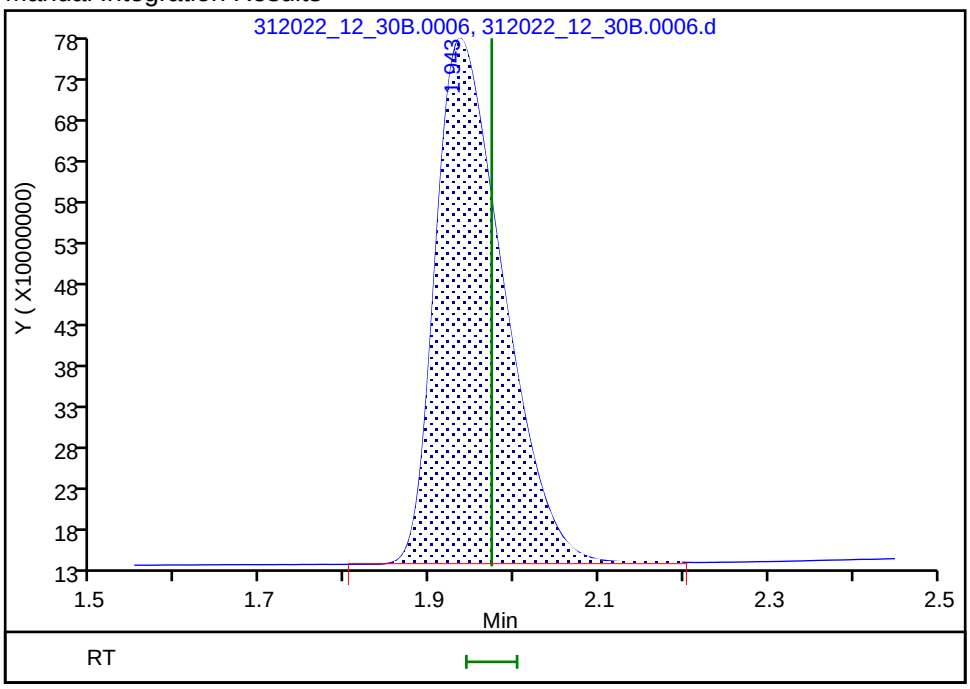
Not Detected
Expected RT: 1.97

Processing Integration Results



Manual Integration Results

RT: 1.94
Height: 634621588
Amount: 160238
Amount Units: ug/l



Reviewer: WN7O, 30-Dec-2022 17:19:26
Audit Action: Assigned Compound ID
Audit Reason: Peak assignment corrected

Calibration / Carbon dioxide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	HEIGHT
RF Rounding:	0

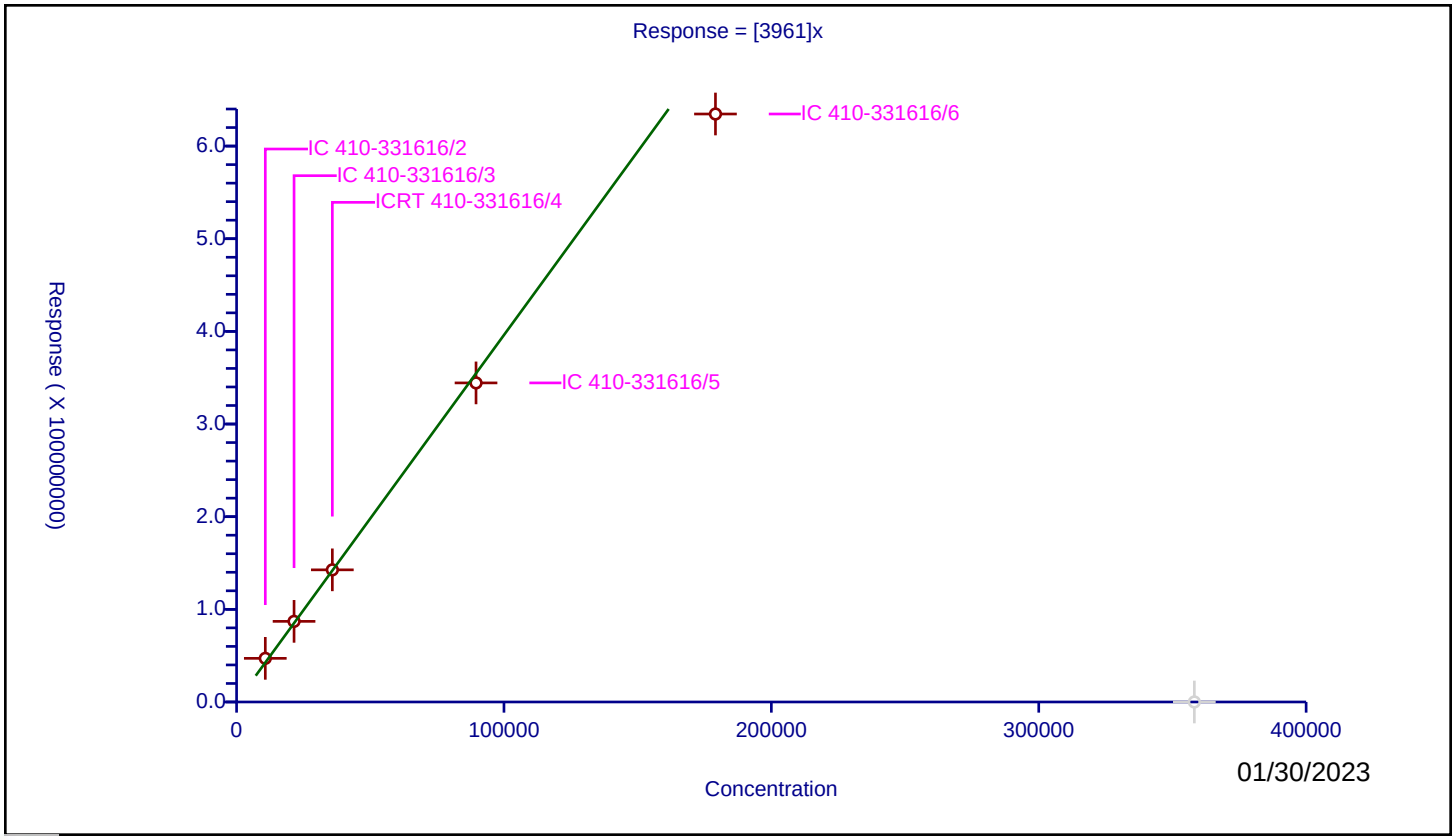
Curve Coefficients

Intercept:	0
Slope:	3961

Error Coefficients

Standard Error:	37800000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 410-331616/2	10746.0	47098229.0			4382.861437	Y
2	IC 410-331616/3	21492.0	87021455.0			4049.016146	Y
3	ICRT 410-331616/4	35820.0	142619437.0			3981.558822	Y
4	IC 410-331616/5	89550.0	344380785.0			3845.681575	Y
5	IC 410-331616/6	179100.0	634621588.0			3543.392451	Y
6	IC 410-331616/7	358200.0	0.0			0.0	N



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: ICV 410-331616/10 Calibration Date: 12/30/2022 17:37

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312022_12_30B.0010.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3961	3752		33200	35000	-5.3	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: ICV 410-331616/10 Calibration Date: 12/30/2022 17:37

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312022_12_30B.0010.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	1.98	1.94	2.00

Report Date: 03-Jan-2023 07:38:13

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0010.d				
Lims ID:	icv				
Client ID:					
Sample Type:	ICV				
Inject. Date:	30-Dec-2022 17:37:00	ALS Bottle#:	0	Worklist Smp#:	10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	icv				
Misc. Info.:	410-0074294-010				
Operator ID:		Instrument ID:	19506-B		
Sublist:					
Method:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	03-Jan-2023 07:38:08	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1619				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.977	1.973	0.004	131333027	H 35008	33161	

Reagents:

EPH_CO2ICV_00002 Amount Added: 0.32 Units: mL

Chrom Revision: 2.3 20-Dec-2022 14:14:06

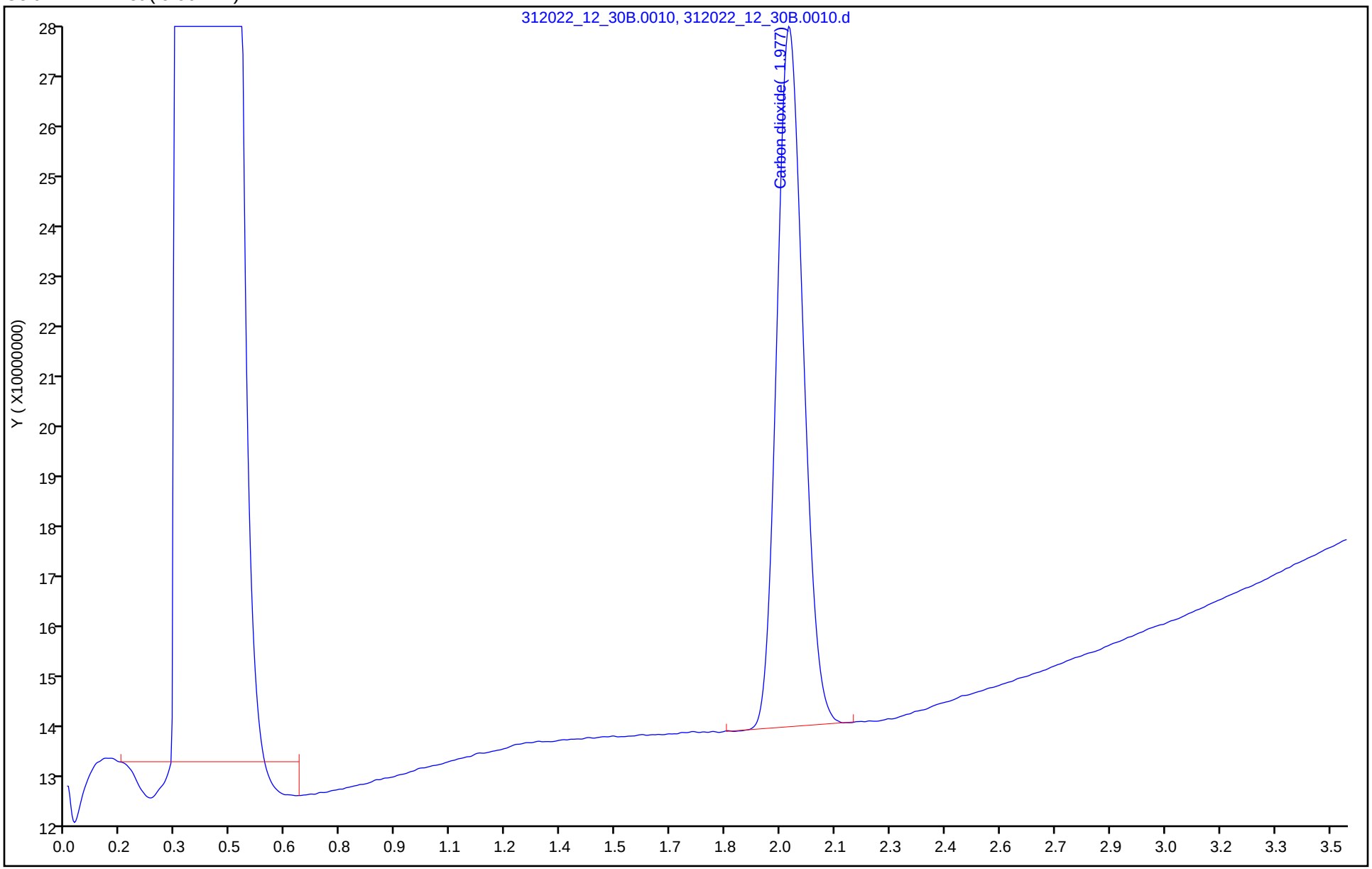
Report Date: 03-Jan-2023 07:38:13 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0010.d

Injection Date:	30-Dec-2022 17:37:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	icv			Worklist Smp#:	10
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCVRT 410-338435/4 Calibration Date: 01/25/2023 08:03

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0004.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3961	3728		33700	35800	-5.9	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCVRT 410-338435/4 Calibration Date: 01/25/2023 08:03

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0004.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.05	2.02	2.08

Report Date: 25-Jan-2023 10:15:57

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0004.d				
Lims ID:	ccvrt				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	25-Jan-2023 08:03:00	ALS Bottle#:	0	Worklist Smp#:	4
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	cond				
Misc. Info.:	410-0075742-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:15:57	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.048	2.048	0.000	133542116	H 35820	33718	

Reagents:

EPH_CO2MS_00004 Amount Added: 0.10 Units: mL

Chrom Revision: 2.3 17-Jan-2023 20:47:52

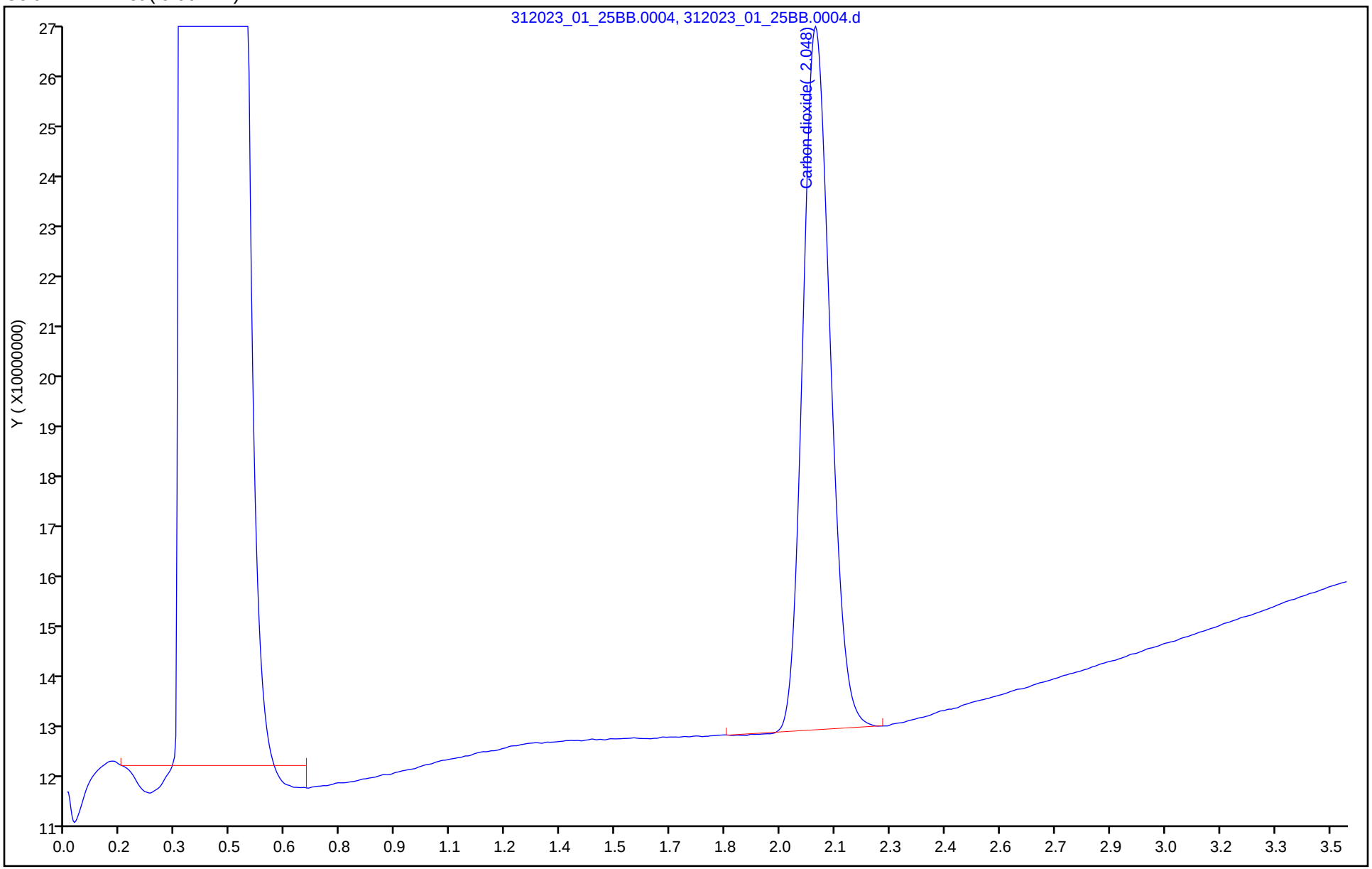
Report Date: 25-Jan-2023 10:15:57 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0004.d

Injection Date:	25-Jan-2023 08:03:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccvrt			Worklist Smp#:	4
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCV 410-338435/14 Calibration Date: 01/25/2023 09:46

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0014.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3961	3465		31300	35800	-12.5	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCV 410-338435/14 Calibration Date: 01/25/2023 09:46

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0014.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.05	2.02	2.08

Report Date: 25-Jan-2023 10:16:00

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0014.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	25-Jan-2023 09:46:00	ALS Bottle#:	0	Worklist Smp#:	14
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-014				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:16:00	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.049	2.048	0.001	124123563	H 35820	31340	

Reagents:

EPH_CO2MS_00004 Amount Added: 100.00 Units: uL

Chrom Revision: 2.3 17-Jan-2023 20:47:52

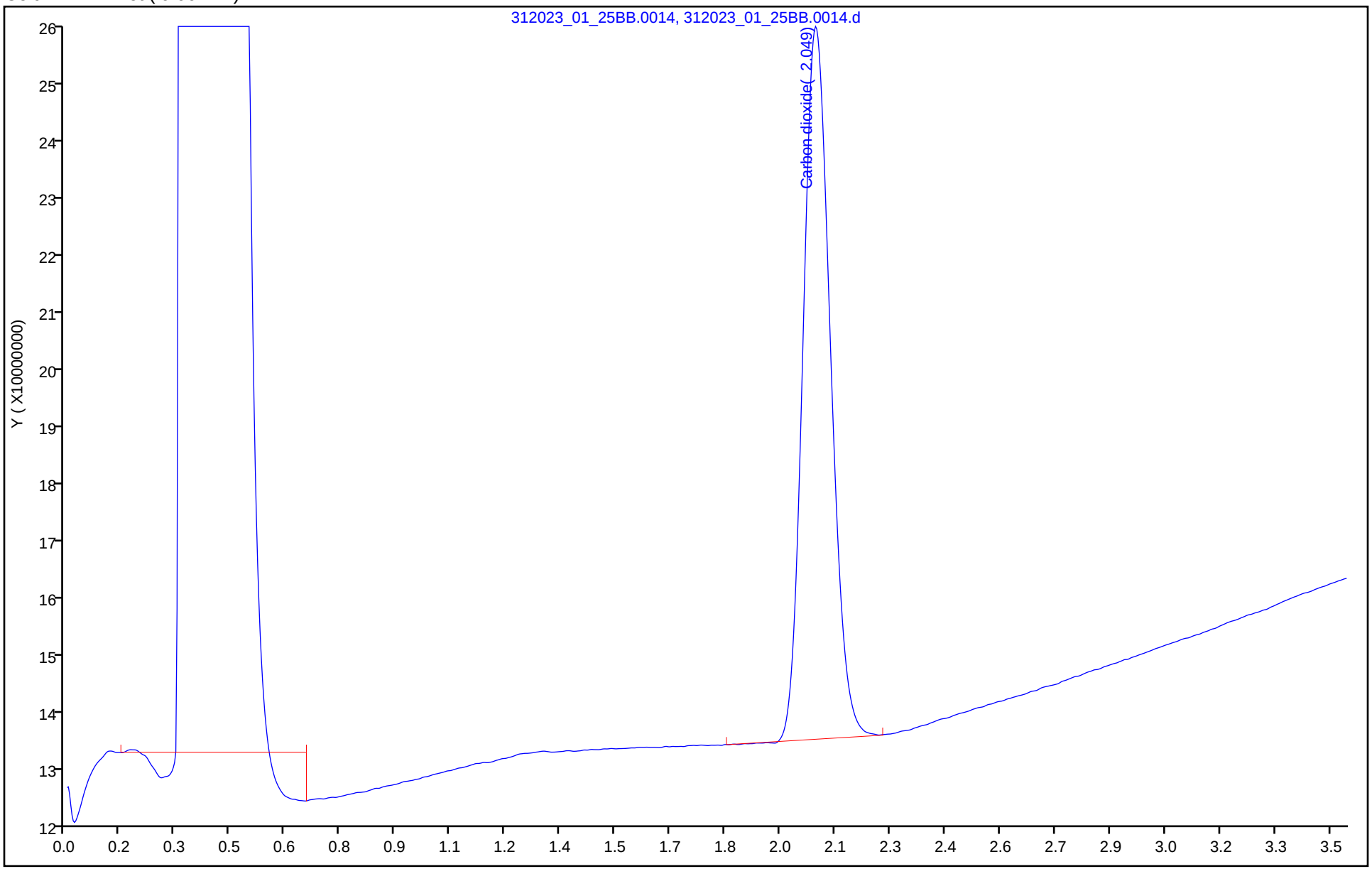
Report Date: 25-Jan-2023 10:16:01 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0014.d

Injection Date:	25-Jan-2023 09:46:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	14
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCV 410-338435/24 Calibration Date: 01/25/2023 11:29

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0024.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3961	3884		35100	35800	-1.9	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCV 410-338435/24 Calibration Date: 01/25/2023 11:29

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0024.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.05	2.02	2.08

Report Date: 25-Jan-2023 11:41:38

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0024.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	25-Jan-2023 11:29:00	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-024				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:41:38	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1618				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.045	2.048	-0.003	139141032	H 35820	35132	

Reagents:

EPH_CO2MS_00004 Amount Added: 100.00 Units: uL

Chrom Revision: 2.3 17-Jan-2023 20:47:52

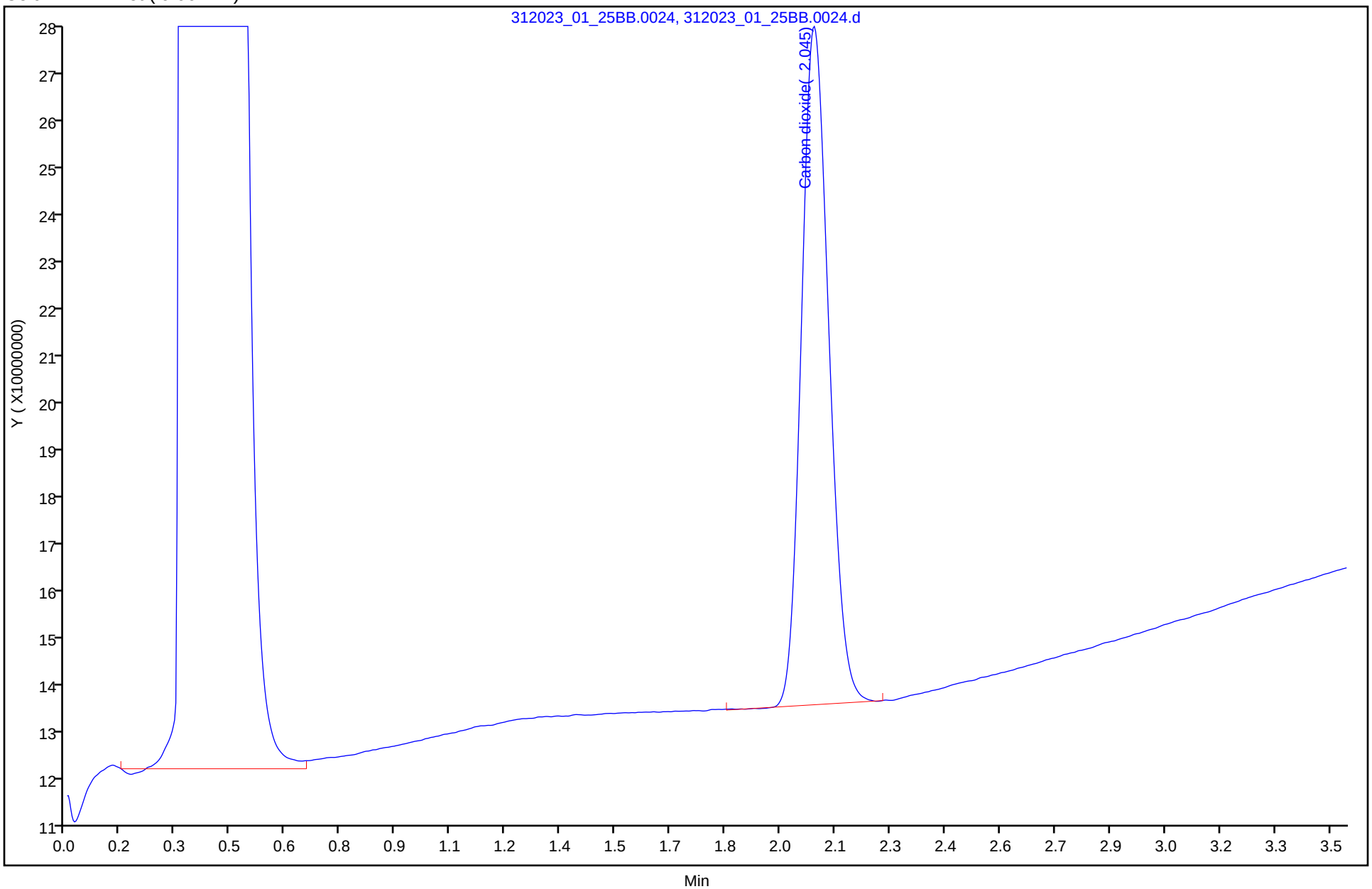
Report Date: 25-Jan-2023 11:41:39 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0024.d

Injection Date:	25-Jan-2023 11:29:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	24
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCV 410-338435/25 Calibration Date: 01/25/2023 11:37

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0025.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3961	3665		33200	35800	-7.5	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Lab Sample ID: CCV 410-338435/25 Calibration Date: 01/25/2023 11:37

Instrument ID: 19506-B Calib Start Date: 12/30/2022 16:32

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 12/30/2022 17:13

Lab File ID: 312023_01_25BB.0025.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.05	2.02	2.08

Report Date: 25-Jan-2023 11:41:39

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0025.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	25-Jan-2023 11:37:00	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-025				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:41:39	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1618				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.046	2.048	-0.002	131291278	H 35820	33150	

Reagents:

EPH_CO2MS_00004 Amount Added: 100.00 Units: uL

Chrom Revision: 2.3 17-Jan-2023 20:47:52

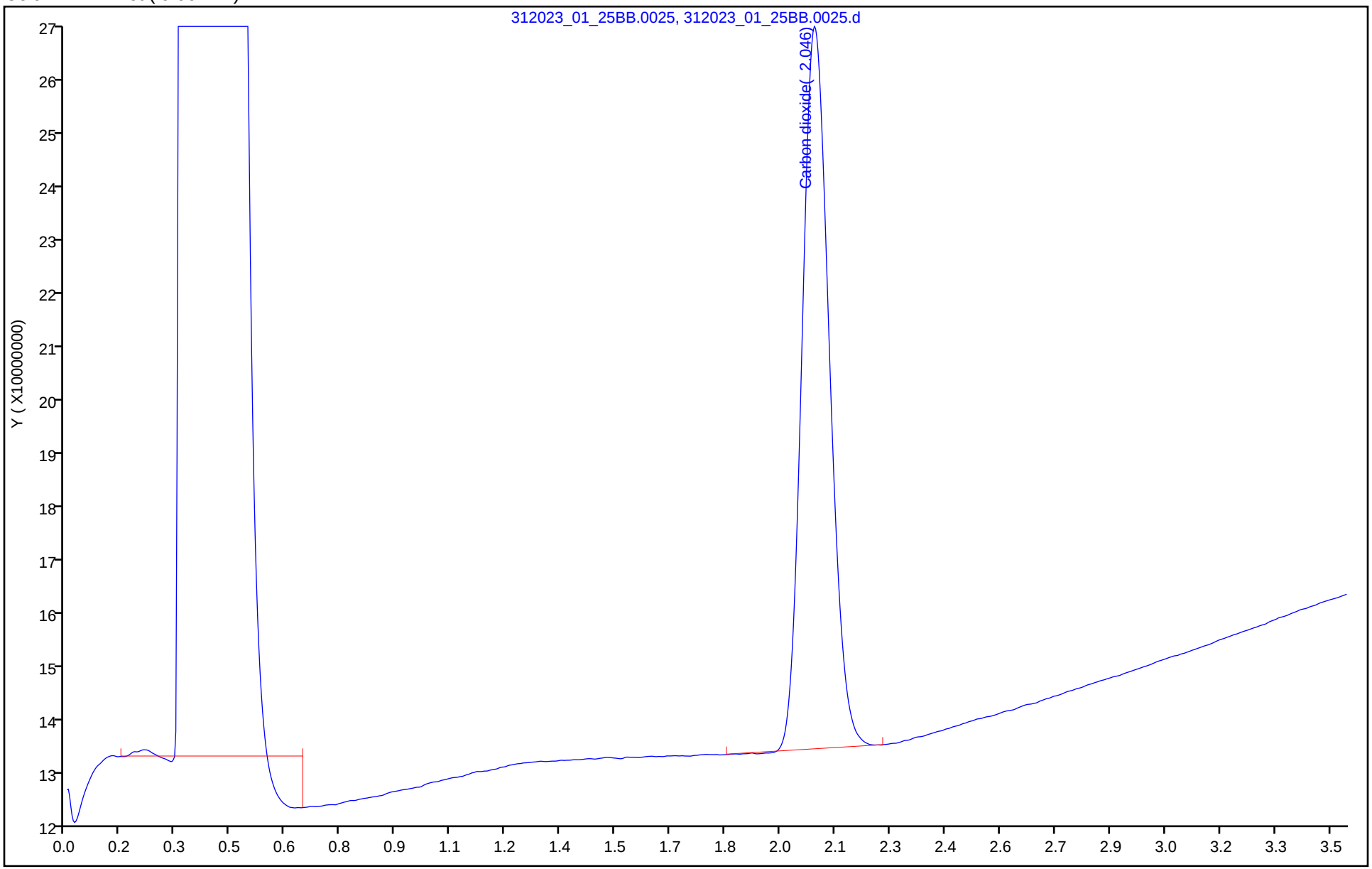
Report Date: 25-Jan-2023 11:41:39 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0025.d

Injection Date:	25-Jan-2023 11:37:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	25
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-338469/1-A

Matrix: Water Lab File ID: 312023_01_25BB.0006.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 08:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	2600	U	12000	2600

Report Date: 25-Jan-2023 10:15:58

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0006.d				
Lims ID:	MB 410-338469/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	25-Jan-2023 08:34:00	ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	MB				
Misc. Info.:	410-0075742-006				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:15:57	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide		2.048				ND	

Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 10:15:58 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0006.d

Injection Date: 25-Jan-2023 08:34:00 Instrument ID: 19506-B Operator ID:

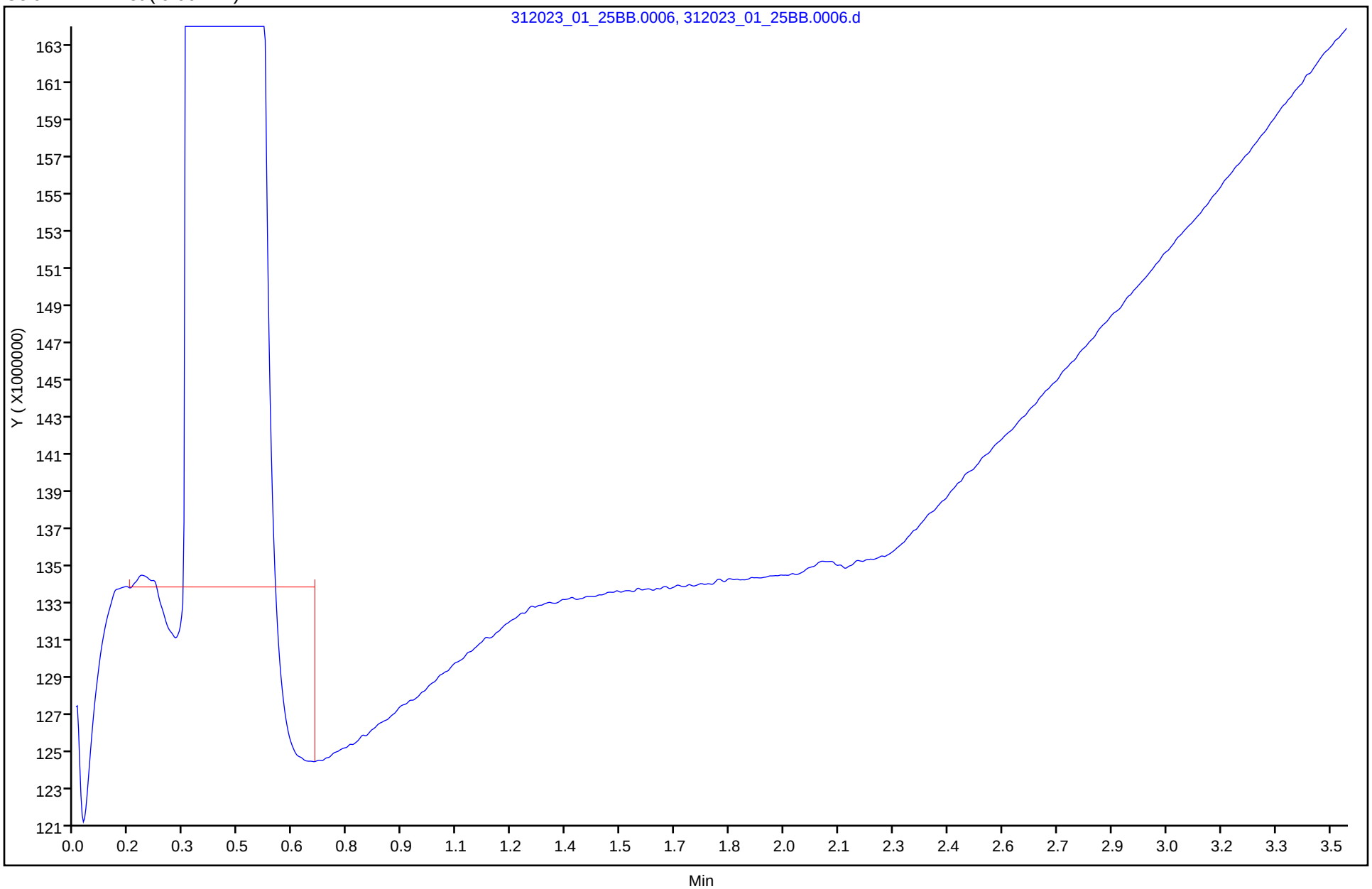
Lims ID: MB 410-338469/1-A Worklist Smp#: 6

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 0

Method: RSK_CO2_19506B Limit Group: GCV - RSK175 CO2

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-338469/2-A

Matrix: Water Lab File ID: 312023_01_25BB.0007.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 08:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	32400		12000	2600

Report Date: 25-Jan-2023 10:15:58

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0007.d				
Lims ID:	LCS 410-338469/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	25-Jan-2023 08:42:00	ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCS				
Misc. Info.:	410-0075742-007				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:15:57	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.048	2.048	0.000	128244943	H 35820	32381	

Chrom Revision: 2.3 17-Jan-2023 20:47:52

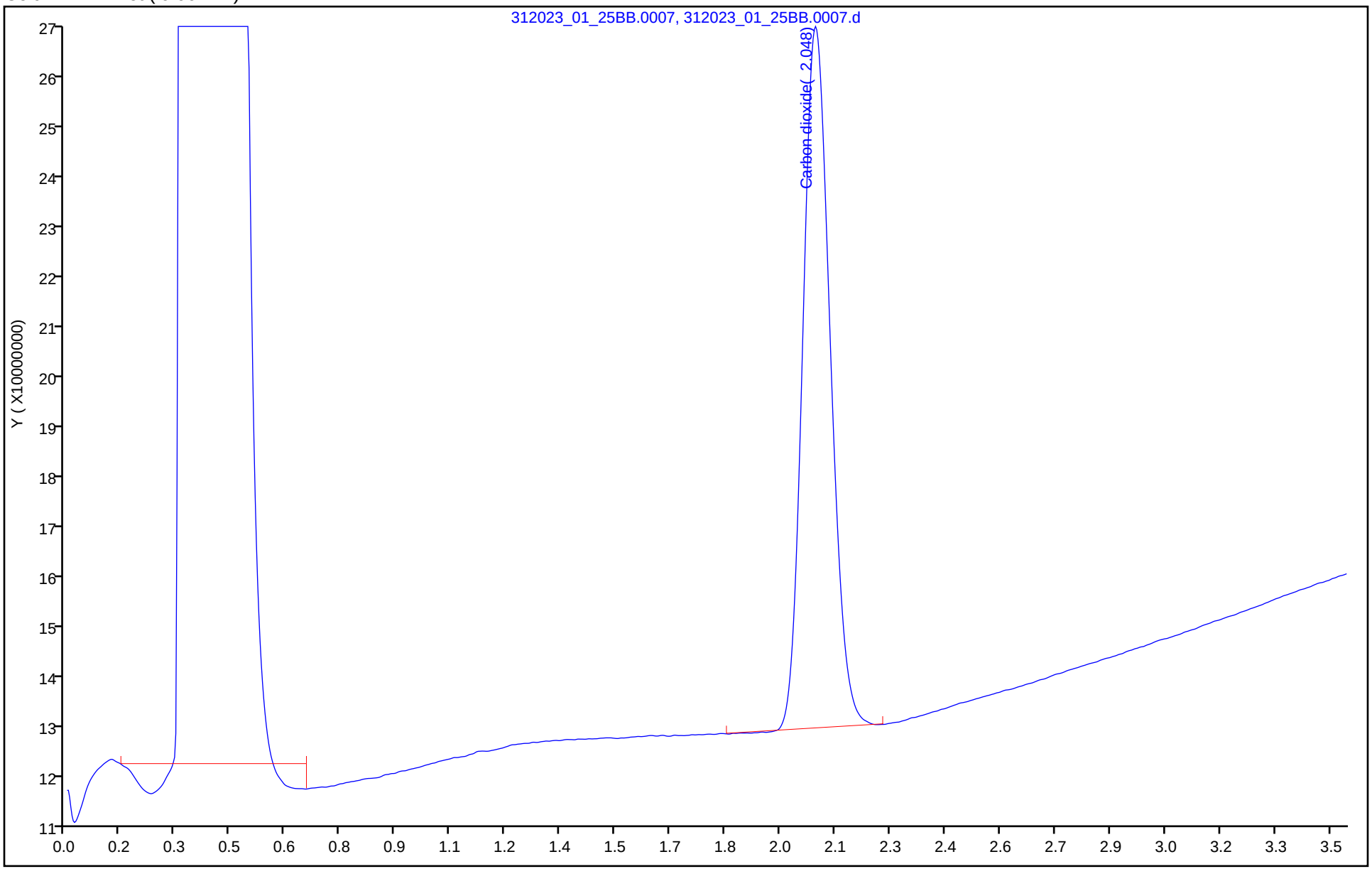
Report Date: 25-Jan-2023 10:15:58 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0007.d

Injection Date:	25-Jan-2023 08:42:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCS 410-338469/2-A			Worklist Smp#:	7
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: HS23010982-05 MS Lab Sample ID: 410-113149-4 MS

Matrix: Water Lab File ID: 312023_01_25BB.0020.d

Analysis Method: RSK-175 Date Collected: 01/19/2023 11:35

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 10:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.5

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	208000	M J1 4	12000	2600

Report Date: 25-Jan-2023 11:08:45

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0020.d				
Lims ID:	410-113149-A-4-B MS				
Client ID:	HS23010982-05				
Sample Type:	MS				
Inject. Date:	25-Jan-2023 10:37:00	ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-020				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:03:51	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				
First Level Reviewer: WN7O		Date:	25-Jan-2023 10:43:55		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.001	2.048	-0.047	822743067H	35820	207737	Ea

QC Flag Legend

Processing Flags
- E - Exceeded Maximum Amount
- H - Response Measured by Height

Review Flags
- a - User Assigned ID

Chrom Revision: 2.3 17-Jan-2023 20:47:52

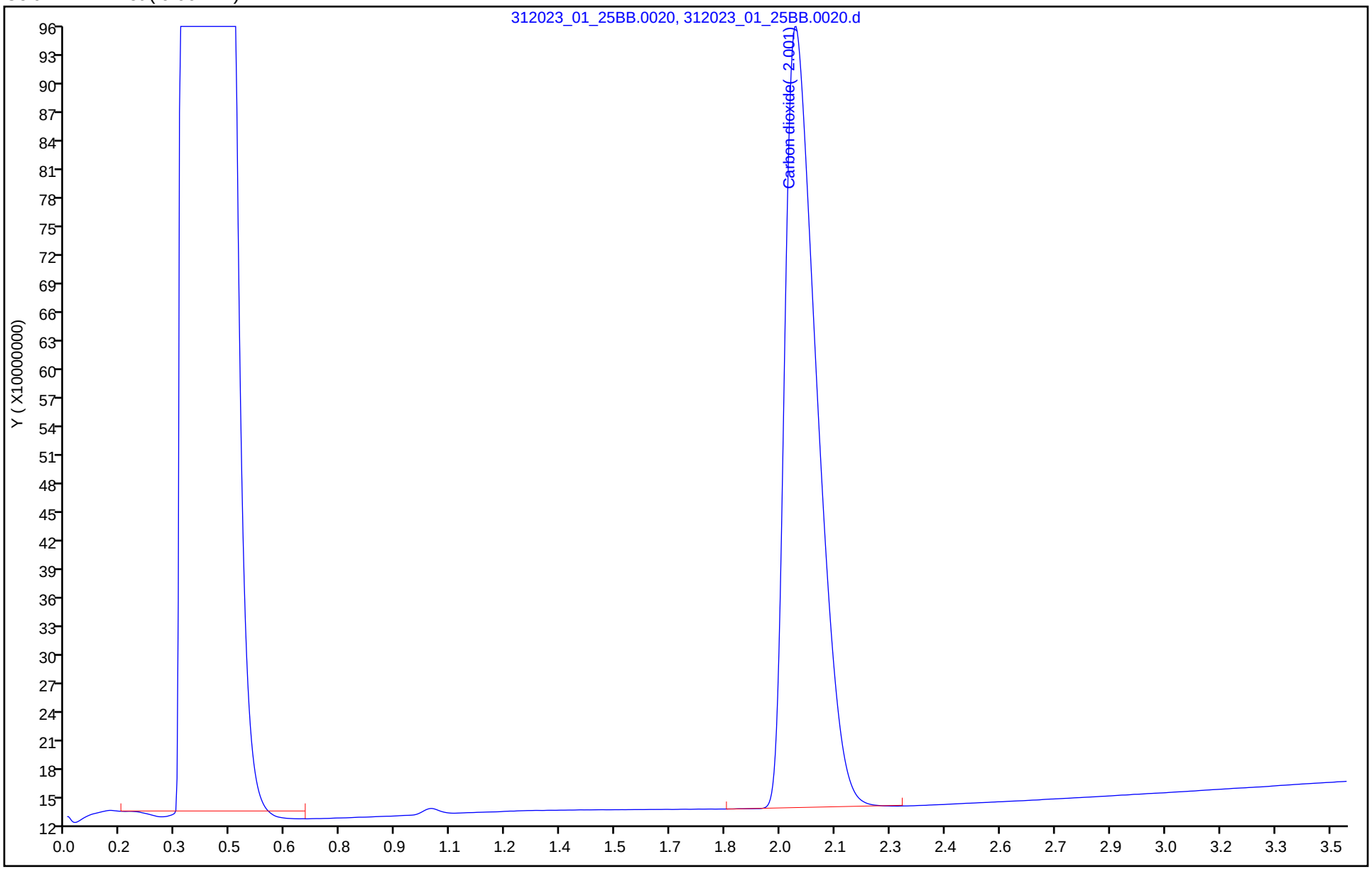
Report Date: 25-Jan-2023 11:08:45 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0020.d

Injection Date:	25-Jan-2023 10:37:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113149-A-4-B MS			Worklist Smp#:	20
Client ID:	HS23010982-05				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 25-Jan-2023 11:08:45 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

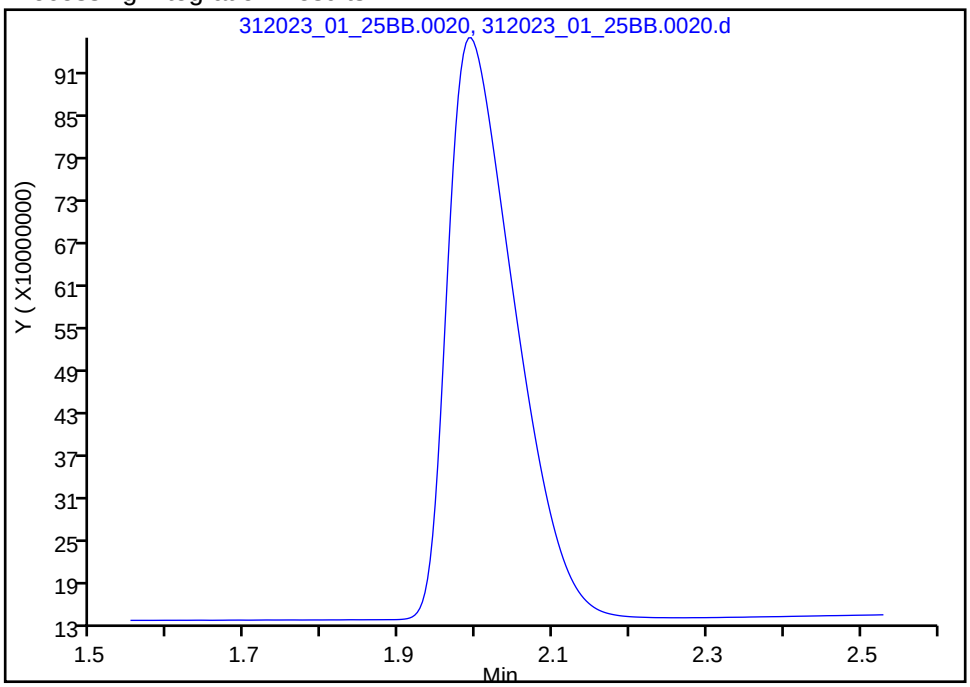
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0020.d				
Injection Date:	25-Jan-2023 10:37:00	Instrument ID:	19506-B		
Lims ID:	410-113149-A-4-B MS				
Client ID:	HS23010982-05				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

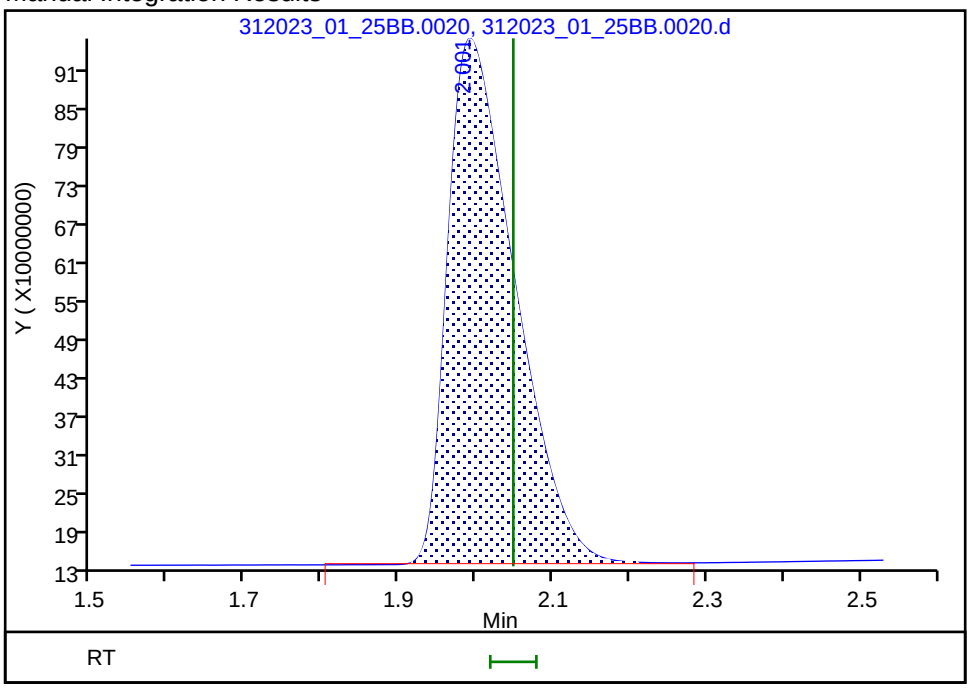
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.00
Height: 822743067
Amount: 207737
Amount Units: ug/l



Reviewer: WN7O, 25-Jan-2023 10:43:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113149-1

SDG No.:

Client Sample ID: HS23010982-05 MSD Lab Sample ID: 410-113149-4 MSD

Matrix: Water Lab File ID: 312023_01_25BB.0021.d

Analysis Method: RSK-175 Date Collected: 01/19/2023 11:35

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2023 10:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.5

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 338435 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	213000	M J1 4	12000	2600

Report Date: 25-Jan-2023 11:08:45

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0021.d				
Lims ID:	410-113149-A-4-C MSD				
Client ID:	HS23010982-05				
Sample Type:	MSD				
Inject. Date:	25-Jan-2023 10:45:00	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-021				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 11:03:51	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				
First Level Reviewer: WN7O		Date:	25-Jan-2023 10:51:18		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.999	2.048	-0.049	843759134H	35820	213043	Ea

QC Flag Legend

Processing Flags
- E - Exceeded Maximum Amount
- H - Response Measured by Height

Review Flags
- a - User Assigned ID

Chrom Revision: 2.3 17-Jan-2023 20:47:52

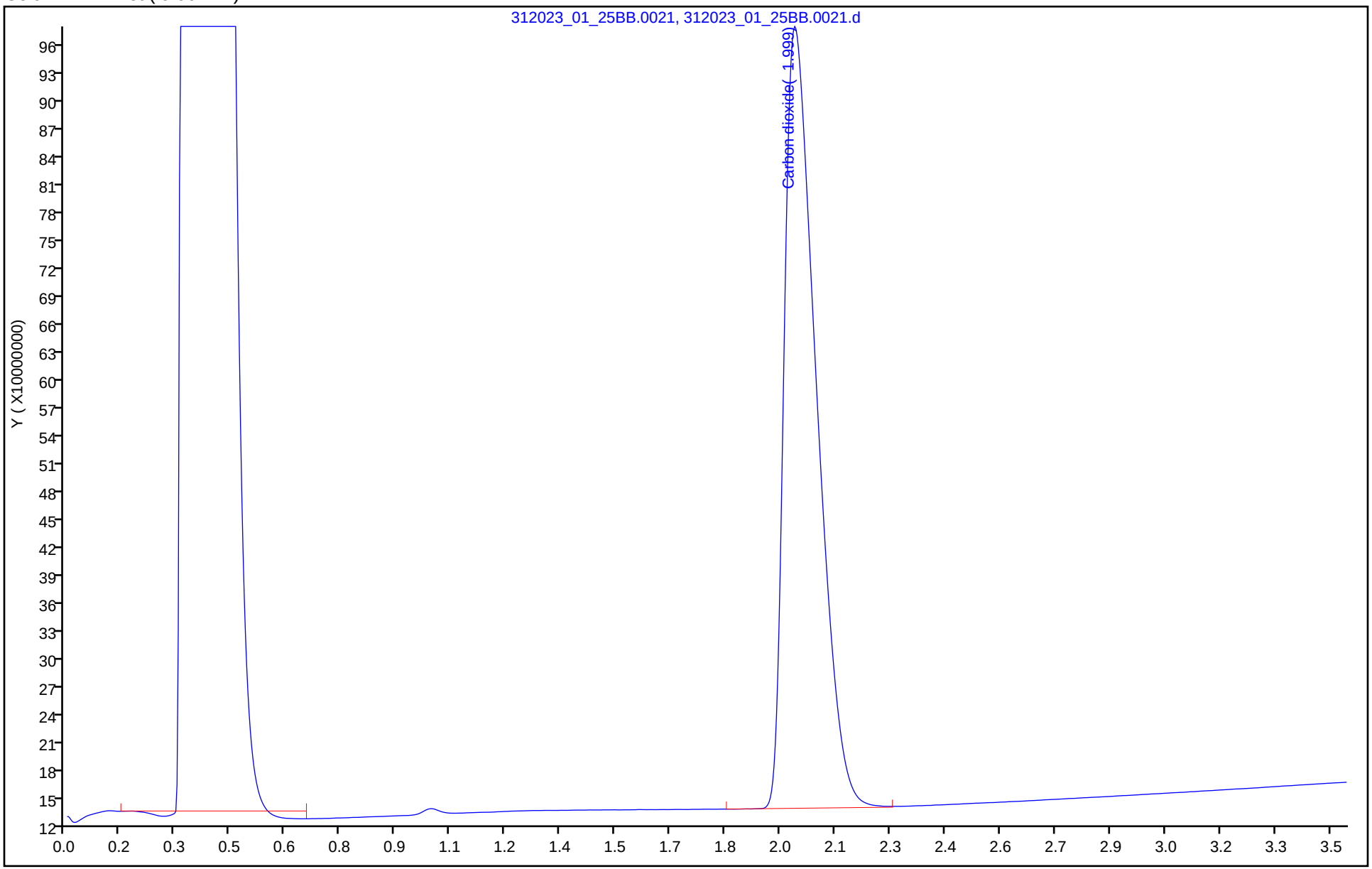
Report Date: 25-Jan-2023 11:08:45 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0021.d

Injection Date:	25-Jan-2023 10:45:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113149-A-4-C MSD			Worklist Smp#:	21
Client ID:	HS23010982-05				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 25-Jan-2023 11:08:45 Chrom Revision: 2.3 17-Jan-2023 20:47:52
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

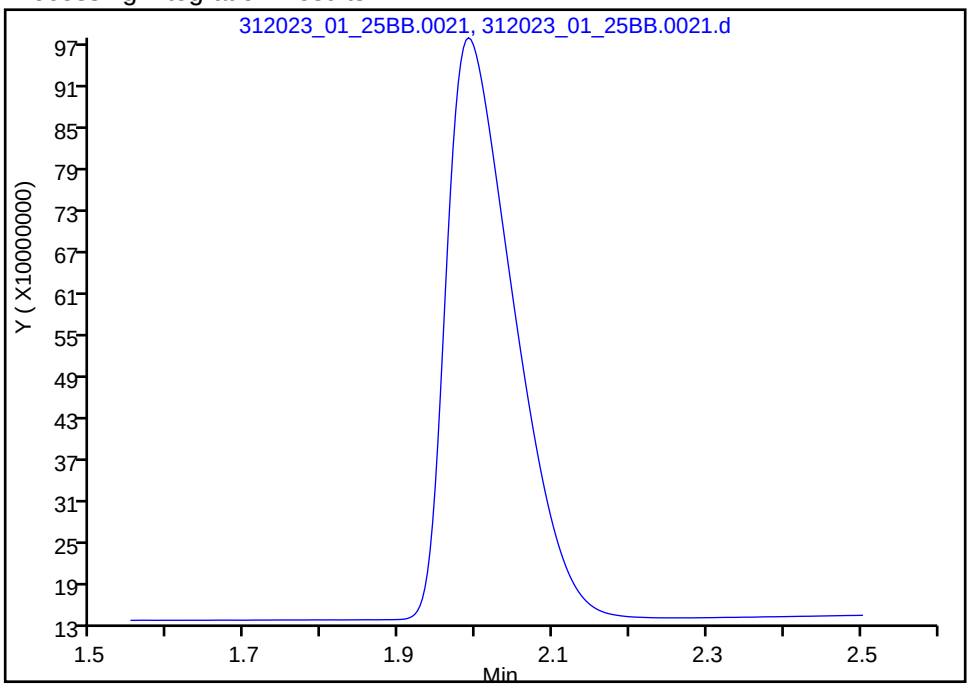
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0021.d				
Injection Date:	25-Jan-2023 10:45:00	Instrument ID:	19506-B		
Lims ID:	410-113149-A-4-C MSD				
Client ID:	HS23010982-05				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

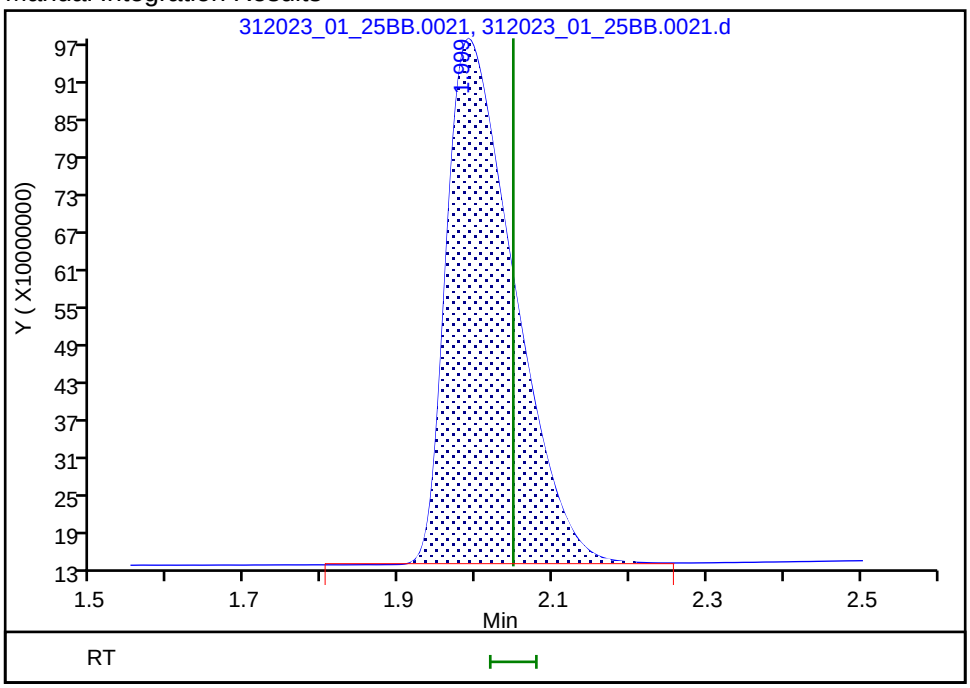
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.00
Height: 843759134
Amount: 213043
Amount Units: ug/l



Reviewer: WN7O, 25-Jan-2023 10:51:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Instrument ID: 19506-B Start Date: 12/30/2022 16:24

Analysis Batch Number: 331616 End Date: 12/30/2022 22:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PIBLK 410-331616/1		12/30/2022 16:24	1		HP Plot 0.53(mm)
IC 410-331616/2		12/30/2022 16:32	1	312022_12_30B.0002.d	HP Plot 0.53(mm)
IC 410-331616/3		12/30/2022 16:40	1	312022_12_30B.0003.d	HP Plot 0.53(mm)
ICRT 410-331616/4		12/30/2022 16:48	1	312022_12_30B.0004.d	HP Plot 0.53(mm)
IC 410-331616/5		12/30/2022 16:56	1	312022_12_30B.0005.d	HP Plot 0.53(mm)
IC 410-331616/6		12/30/2022 17:05	1	312022_12_30B.0006.d	HP Plot 0.53(mm)
IC 410-331616/7		12/30/2022 17:13	1		HP Plot 0.53(mm)
PIBLK 410-331616/8		12/30/2022 17:21	1		HP Plot 0.53(mm)
ICVL 410-331616/9		12/30/2022 17:29	1		HP Plot 0.53(mm)
ICV 410-331616/10		12/30/2022 17:37	1	312022_12_30B.0010.d	HP Plot 0.53(mm)
ZZZZZ		12/30/2022 18:10	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 18:17	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 18:26	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 18:33	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 18:41	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 18:48	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 18:56	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 19:04	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 19:11	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 19:19	1		HP Plot 0.53(mm)
CCV 410-331616/21		12/30/2022 19:27	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 19:34	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 19:42	1		HP Plot 0.53(mm)
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ZZZZZ		12/30/2022 19:57	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 20:05	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 20:13	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 20:20	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 20:28	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 20:35	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 20:43	1		HP Plot 0.53(mm)
CCV 410-331616/32		12/30/2022 20:51	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 21:03	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 21:11	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 21:20	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 21:28	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 21:36	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 21:44	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 21:52	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 22:01	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 22:09	1		HP Plot 0.53(mm)
ZZZZZ		12/30/2022 22:17	5		HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Instrument ID: 19506-B Start Date: 12/30/2022 16:24

Analysis Batch Number: 331616 End Date: 12/30/2022 22:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 410-331616/43		12/30/2022 22:25	1		HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-113149-1

SDG No.:

Instrument ID: 19506-B Start Date: 01/25/2023 08:03

Analysis Batch Number: 338435 End Date: 01/25/2023 11:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-338435/4		01/25/2023 08:03	1	312023_01_25BB.0004.d	HP Plot 0.53(mm)
ICVL 410-338435/5		01/25/2023 08:27	1		HP Plot 0.53(mm)
MB 410-338469/1-A		01/25/2023 08:34	1	312023_01_25BB.0006.d	HP Plot 0.53(mm)
LCS 410-338469/2-A		01/25/2023 08:42	1	312023_01_25BB.0007.d	HP Plot 0.53(mm)
ZZZZZ		01/25/2023 09:00	1		HP Plot 0.53(mm)
ZZZZZ		01/25/2023 09:08	1		HP Plot 0.53(mm)
ZZZZZ		01/25/2023 09:16	1		HP Plot 0.53(mm)
ZZZZZ		01/25/2023 09:23	1		HP Plot 0.53(mm)
ZZZZZ		01/25/2023 09:31	1		HP Plot 0.53(mm)
ZZZZZ		01/25/2023 09:38	1		HP Plot 0.53(mm)
CCV 410-338435/14		01/25/2023 09:46	1	312023_01_25BB.0014.d	HP Plot 0.53(mm)
ZZZZZ		01/25/2023 09:59	1		HP Plot 0.53(mm)
410-113149-1	HS23010982-01	01/25/2023 10:06	1	312023_01_25BB.0016.d	HP Plot 0.53(mm)
410-113149-2	HS23010982-03	01/25/2023 10:14	1	312023_01_25BB.0017.d	HP Plot 0.53(mm)
410-113149-3	HS23010982-04	01/25/2023 10:22	1	312023_01_25BB.0018.d	HP Plot 0.53(mm)
410-113149-4	HS23010982-05	01/25/2023 10:30	1	312023_01_25BB.0019.d	HP Plot 0.53(mm)
410-113149-4 MS	HS23010982-05 MS	01/25/2023 10:37	1	312023_01_25BB.0020.d	HP Plot 0.53(mm)
410-113149-4 MSD	HS23010982-05 MSD	01/25/2023 10:45	1	312023_01_25BB.0021.d	HP Plot 0.53(mm)
410-113149-5	HS23010982-06	01/25/2023 10:53	1	312023_01_25BB.0022.d	HP Plot 0.53(mm)
CCV 410-338435/23		01/25/2023 11:00	1		HP Plot 0.53(mm)
CCV 410-338435/24		01/25/2023 11:29	1	312023_01_25BB.0024.d	HP Plot 0.53(mm)
CCV 410-338435/25		01/25/2023 11:37	1	312023_01_25BB.0025.d	HP Plot 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-113149-1

SDG No.:

Batch Number: 331616 Batch Start Date: 12/30/22 16:24 Batch Analyst: Patrushev, James P

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EPH_CO2ICV 00002	EPH_CO2MS 00004		
IC 410-331616/2		RSK-175		5 mL	5 mL		30 uL		
IC 410-331616/3		RSK-175		5 mL	5 mL		60 uL		
ICRT 410-331616/4		RSK-175		5 mL	5 mL		100 uL		
IC 410-331616/5		RSK-175		5 mL	5 mL		250 uL		
IC 410-331616/6		RSK-175		5 mL	5 mL		500 uL		
ICV 410-331616/10		RSK-175		5 mL	5 mL	0.32 mL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-113149-1

SDG No.:

Batch Number: 338469 Batch Start Date: 01/25/23 08:22 Batch Analyst: Patrushev, James P

Batch Method: RSK-175 Batch End Date: 01/25/23 08:53

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Headspace	EPH_CO2MS 00004	
MB 410-338469/1		RSK-175, RSK-175			5 mL	5 mL			
LCS 410-338469/2		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
410-113149-A-1	HS23010982-01	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-113149-A-2	HS23010982-03	RSK-175, RSK-175	T	6.5 SU	5 mL	5 mL	No		
410-113149-A-3	HS23010982-04	RSK-175, RSK-175	T	6.5 SU	5 mL	5 mL	No		
410-113149-A-4	HS23010982-05	RSK-175, RSK-175	T	6.5 SU	5 mL	5 mL	No		
410-113149-A-4 MS	HS23010982-05	RSK-175, RSK-175	T	6.5 SU	5 mL	5 mL	No	0.1 mL	
410-113149-A-4 MSD	HS23010982-05	RSK-175, RSK-175	T	6.5 SU	5 mL	5 mL	No	0.1 mL	
410-113149-A-5	HS23010982-06	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		

Batch Notes	
Pipette/Syringe/Dispenser ID	7105
pH Indicator ID	10BDH1521

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20789**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	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:	HS23010982
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23010982-01**	**16WW48-230119**	**Groundwater**	**19 Jan 2023 08:25**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
2.	**HS23010982-03**	**16IW09-230119**	**Groundwater**	**19 Jan 2023 09:55**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
3.	**HS23010982-04**	**16IW20-230119**	**Groundwater**	**19 Jan 2023 10:45**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
4.	**HS23010982-05**	**16EW02-230119**	**Groundwater**	**19 Jan 2023 11:35**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
5.	**HS23010982-06**	**16EW03-230119**	**Groundwater**	**19 Jan 2023 12:35**
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS23010982-05 = ms/msd

QC Level: DOD IV (DoD Data Package)

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 20789

Relinquished By: KENETH Date/Time: 1-24-23 1800

Received By: [signature] Date/Time: 1/24/23 10:20

Cooler ID(s): Temperature(s): 2.5

[signature]

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Purchase Order

PO: HS23010982

VENDOR:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

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:	20789
TSR:	Ron Martino

	Item	Catalog No	Unit Price	Quantity	Ext Price
1.	RSK - CO2; Level II & IV, LHAAP EQUIS EDD	NA	$95.00	5	$475.00

Order Total: $475.00

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-113149-1

Login Number: 113149
List Number: 1
Creator: McBeth, Jessica

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

HS23010982-E2300056 Perchlorate Report Level IV

ALS WO# HS23010982

January 27, 2023 Service Request No:E2300056

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23010982

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 23, 2023
For your reference, these analyses have been assigned our service request number **E2300056.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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.:**	E2300056
Project:	HS23010982	**Date Received:**	01/23/23
Sample Matrix:	Ground 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

Six samples were received for analysis at ALS Environmental in Houston on 01/23/23.

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:

EQ2300026: 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 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:**E2300056
Project: HS23010982

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300056-001	16WW48-230119	1/19/2023	0825
E2300056-002	16RW04-230119	1/19/2023	0910
E2300056-003	16IW09-230119	1/19/2023	0955
E2300056-004	16IW20-230119	1/19/2023	1045
E2300056-005	16EW02-230119	1/19/2023	1135
E2300056-006	16EW03-230119	1/19/2023	1235

Service Request Summary

Folder #: **E2300056**
Client Name: ALS Environmental - US
Project Name: HS23010982
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 01/23/23
Internal Due Date: 2/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23010982
EDD: EQUIS
EFWEDD_LHAAP

8 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300056-001	16WW48-230119	Ground Water	01/19/23 0825	**IV**
E2300056-002	16RW04-230119	Ground Water	01/19/23 0910	**IV**
E2300056-003	16IW09-230119	Ground Water	01/19/23 0955	**IV**
E2300056-004	16IW20-230119	Ground Water	01/19/23 1045	**IV**
E2300056-005	16EW02-230119	Ground Water	01/19/23 1135	**IV**
E2300056-006	16EW03-230119	Ground Water	01/19/23 1235	**IV**

Service Request Summary

Folder #: **E2300056**
Client Name: ALS Environmental - US
Project Name: HS23010982
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 01/23/23
Internal Due Date: 2/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23010982
EDD: EQUIS
EFWEDD_LHAAP

8 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	5	IV Due 2/10
Semivoa GCMS	ClO4 DOD/6850	1	MS/MSD

Data Qualifiers

Lab Standard

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

Data Qualifiers

Lab Standard

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

ALS Laboratory Group

Acronyms

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

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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	LA028-2023	12/31/2023
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	2368363	12/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

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www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 20790**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
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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:	HS23010982
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	HS23010982-01	**16WW48-230119**	**Groundwater**	**19 Jan 2023 08:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
2.	HS23010982-02	**16RW04-230119**	**Groundwater**	**19 Jan 2023 09:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
3.	HS23010982-03	**16IW09-230119**	**Groundwater**	**19 Jan 2023 09:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
4.	HS23010982-04	**16IW20-230119**	**Groundwater**	**19 Jan 2023 10:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
5.	HS23010982-05	**16EW02-230119**	**Groundwater**	**19 Jan 2023 11:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
6.	HS23010982-06	**16EW03-230119**	**Groundwater**	**19 Jan 2023 12:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS23010982-05 = ms/msd

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20790**

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 1-25-23 1200

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist JH

Client/Project ALS

Thermometer ID IR31

Date/Time Received: 1-23-23 Initials: CG

Date/Time Logged in: 1-23-23 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		1-23-23	1100	CG	3.7	☑
						☐
						☐
						☐

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:

HS-HRMSCoolerReceipt R1.0

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Houston, TX 77099
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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#: 413582 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/26/23 08:50

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300053-001	16WW41-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300053-002	16RW06-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300053-003	16RW07-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300053-004	16WW55-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300053-005	16WW35-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300053-006	16WW16-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300053-007	16WW16-230119-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300056-001	16WW48-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300056-002	16RW04-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300056-003	16IW09-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300056-004	16IW20-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300056-005	16EW02-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300056-006	16EW03-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300080-001	LH18/24-SP650_012523_AIX	.01	6850/ClO4 DOD			Water	10mL	
15	E2300080-002	LH18/24-SP650_012523_BIX	.01	6850/ClO4 DOD			Water	10mL	
16	EQ2300026-01	MB		6850/ClO4 DOD			Liquid	10mL	
17	EQ2300026-02	LCS		6850/ClO4 DOD			Liquid	10mL	
18	EQ2300026-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
19	EQ2300026-04	16EW02-230119 MS	.01	6850/ClO4 DOD			Liquid	10mL	
20	EQ2300026-05	16EW02-230119 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
21	EQ2300026-06	16WW35-230119 MS	.01	6850/ClO4 DOD			Liquid	10mL	
22	EQ2300026-07	16WW35-230119 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
23	R2300316-004	2301091027A BLM-17-550	.01	6850/ClO4			Water	10mL	
24	R2300316-009	2301091456A BLM-15-305	.01	6850/ClO4			Water	10mL	
25	R2300316-014	2301101352Y PL-6-1195	.01	6850/ClO4			Water	10mL	
26	R2300519-005	2301170958A BLM-18-430	.01	6850/ClO4			Water	10mL	
27	R2300519-010	2301171442A 400-A-151	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 226778 Logbook Ref: Perchlorate Internal Standard Expires On: 05/31/2023

E2300053-001	100.00µL	E2300053-002	100.00µL	E2300053-003	100.00µL	E2300053-004	100.00µL	E2300053-005	100.00µL	E2300053-006	100.00µL
E2300053-007	100.00µL	E2300056-001	100.00µL	E2300056-002	100.00µL	E2300056-003	100.00µL	E2300056-004	100.00µL	E2300056-005	100.00µL
E2300056-006	100.00µL	E2300080-001	100.00µL	E2300080-002	100.00µL	EQ2300026-01	100.00µL	EQ2300026-01	100.00µL	EQ2300026-02	1.00µL
EQ2300026-02	1.00µL	EQ2300026-03	1.00µL	EQ2300026-03	1.00µL	EQ2300026-04	1.00µL	EQ2300026-05	1.00µL	EQ2300026-06	1.00µL

Preparation Information Benchsheet

Prep Run#: 413582 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/26/23 08:50

EQ2300026-07	1.00µL	R2300316-004	100.00µL	R2300316-009	100.00µL	R2300316-014	100.00µL	R2300519-005	100.00µL	R2300519-010	100.00µL

Name: Perchlorate Intermediate Stock1 Inventory ID 227236 Logbook Ref: Perchlorate (1st Source) Expires On: 07/31/2023

EQ2300026-02	100.00µL	EQ2300026-02	100.00µL	EQ2300026-03	100.00µL	EQ2300026-03	100.00µL	EQ2300026-04	100.00µL	EQ2300026-05	100.00µL
EQ2300026-06	100.00µL	EQ2300026-07	100.00µL								

Preparation Materials

Water HPLC Grade	01/04/2023 Water (226857)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (224414)
6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)	6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)		

Preparation Steps

Step: Preparation
Started: 1/26/23 08:50
Finished: 1/26/23 09:50
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 01/26/23

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 0825
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW48-230119	**Units:**	µg/L
Lab Code:	E2300056-001	**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	**2.35**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:18	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 0910
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16RW04-230119	**Units:**	µg/L
Lab Code:	E2300056-002	**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	1/26/23	1/26/23 15:23	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 0955
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16IW09-230119	**Units:**	µg/L
Lab Code:	E2300056-003	**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	ND	U	0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:29	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1045
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16IW20-230119	**Units:**	µg/L
Lab Code:	E2300056-004	**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	ND	U	0.100	0.0500	0.0250	1	1/26/23	1/26/23 16:08	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1135
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	E2300056-005	**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	1/26/23	1/27/23 09:23	413582	792835	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1235
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW03-230119	**Units:**	µg/L
Lab Code:	E2300056-006	**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	**0.0379**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 16:02	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300026-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:44	413582	792728	

Accuracy & Precision

ALS Environmental - Houston HRMS
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www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/26/23
Sample Matrix:	Ground Water		

Lab Control Sample Summary

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

Analytical Method:	6850	**Units:**	µg/L
Prep Method:	Method	**Basis:**	NA
		Extraction Lot:	413582

	Lab Control Sample EQ2300026-02			Duplicate Lab Control Sample EQ2300026-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0868	0.100	87	0.0936	0.100	94	84 - 119	8	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:**	E2300056
Project:	HS23010982	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300026-02	**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	**0.0868**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:50	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300026-03	**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	**0.0936**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:55	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
		Date Analyzed:	1/26/23

Matrix Spike Summary

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

Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	E2300056-005	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16EW02-230119MS			16EW02-230119DMS					
		Matrix Spike			**Duplicate Matrix Spike**					
		EQ2300026-04			EQ2300026-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.102	0.100	102	0.105	0.100	105	84 - 119	3	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:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1135
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	EQ2300026-04	**Basis:**	NA
Run Type:	Matrix Spike		

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:45	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Collected:**	1/19/23 1135
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16EW02-230119	**Units:**	µg/L
Lab Code:	EQ2300026-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.105**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 15:50	413582	792728	

Initial Calibration

ALS Environmental - Houston HRMS
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20221214

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XMI
2nd Review: Kneir

ICAL Date: 12/14/2022
Cal. Std. xp: 01/31/2023
ICAL ID: EC2200016

Mobile Phases : **A:**0.10% Formic Acid/Water 3210301-08 **B:**MeOH 224417

	Sample Name		File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	IB		20221214_001	Perchlorate6850c.lcm	1x	☒		12/14/2022 15:12
2	ICS		20221214_002	Perchlorate6850c.lcm	1x	☒		12/14/2022 15:29
3	LODV		20221214_003	Perchlorate6850c.lcm	1x	☒		12/14/2022 15:35
4	PERCHLORATE1		20221214_004	Perchlorate6850c.lcm	1x	☒	226061	12/14/2022 15:40
5	PERCHLORATE2		20221214_005	Perchlorate6850c.lcm	1x	☒	226062	12/14/2022 15:46
6	PERCHLORATE3		20221214_006	Perchlorate6850c.lcm	1x	☒	226063	12/14/2022 15:51
7	PERCHLORATE4		20221214_007	Perchlorate6850c.lcm	1x	☒	226064	12/14/2022 15:57
8	PERCHLORATE5		20221214_008	Perchlorate6850c.lcm	1x	☒	226065	12/14/2022 16:02
9	PERCHLORATE6		20221214_009	Perchlorate6850c.lcm	1x	☒	226066	12/14/2022 16:09
10	PERCHLORATE7		20221214_010	Perchlorate6850c.lcm	1x	☒	225881	12/14/2022 16:15
11	PERCHLORATE8		20221214_011	Perchlorate6850c.lcm	1x	☒	226068	12/14/2022 16:20
12	PERCHLORATE9		20221214_012	Perchlorate6850c.lcm	1x	☒	226069	12/14/2022 16:25
13	PERCHLORATE10		20221214_013	Perchlorate6850c.lcm	1x	☒	226070	12/14/2022 16:31
14	PERCHLORATEICV		20221214_014	Perchlorate6850c.lcm	1x	☒	226067	12/14/2022 16:37

Initial Calibration - Detailed Report

Calibration ID: EC2200016 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2200016-01	PERCHLORATE1	20221214_004	12/14/2022 15:40
02	EC2200016-02	PERCHLORATE2	20221214_005	12/14/2022 15:46
03	EC2200016-03	PERCHLORATE3	20221214_006	12/14/2022 15:51
04	EC2200016-04	PERCHLORATE4	20221214_007	12/14/2022 15:57
05	EC2200016-05	PERCHLORATE5	20221214_008	12/14/2022 16:02
06	EC2200016-06	PERCHLORATE6	20221214_009	12/14/2022 16:09
07	EC2200016-07	PERCHLORATE7	20221214_010	12/14/2022 16:15
08	EC2200016-08	PERCHLORATE8	20221214_011	12/14/2022 16:20
09	EC2200016-09	PERCHLORATE9	20221214_012	12/14/2022 16:25
10	EC2200016-10	PERCHLORATE10	20221214_013	12/14/2022 16:31

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

Perchlorate **Average RF** **RSD = 2.927** **Average RF = 0.1567**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1615	02	0.5000	0.1479	03	0.7000	0.1579	04	1.0000	0.1573
05	2.0000	0.1505	06	5.0000	0.1573	07	10.0000	0.1541	08	20.0000	0.162
09	30.0000	0.1598	10	50.0000	0.1587						

Analyte

Perchlorate RSE = 2.93

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.1	02	0.5000	0.472	-5.6	03	0.7000	0.705	0.8
04	1.0000	1.00	0.4	05	2.0000	1.92	-3.9	06	5.0000	5.02	0.4
07	10.0000	9.83	-1.7	08	20.0000	20.7	3.4	09	30.0000	30.6	2.0
10	50.0000	50.6	1.3								

Initial Calibration Verification Summary Report

Calibration ID:	EC2200016	**Instrument ID:**	E-LCMS-01
Datafile ID:	20221214_014	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2200016-11	T	Average RF	10	9.359	ng/mL	-6.4	<= 15

Insight Report

Printed at 12/15/2022 10:55:51 AM

Method File: I:\LCMS01\DATA\20221013ICAL\20221013ICAL.lcm
Project File: I:\LCMS01\DATA\20221214\12142022 ICAL.damlp

PERCHLORATE1

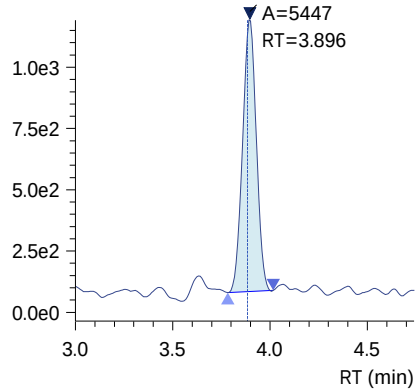
Sample ID: PERCHLORATE1
Date Acquired: 12/14/2022 3:40:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_004.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.896	5447	337240	0.1031	ng/mL	101.00 >85.00	35.31	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.889	337240	337240	1.0000	ng/mL	----	----	

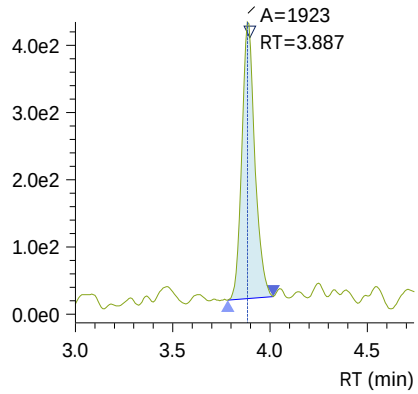
Perchlorate

Conc 0.1031
R#1 35.31 (34.02)

Q 99.00>83.00 (-) 1.19e3



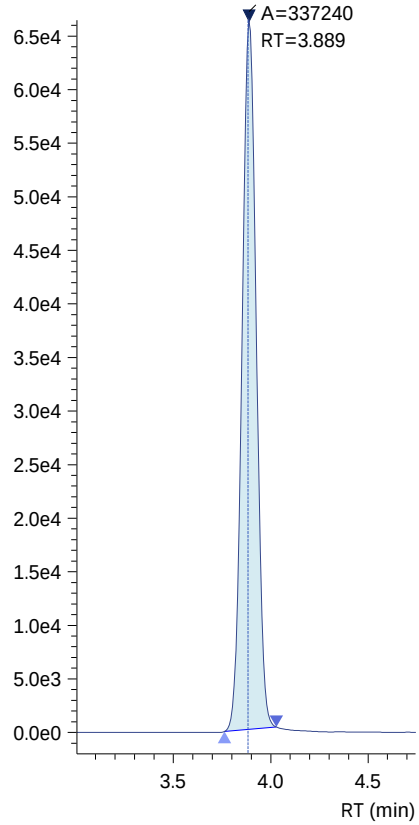
R1 101.00>85.00 (-) 4.35e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.65e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

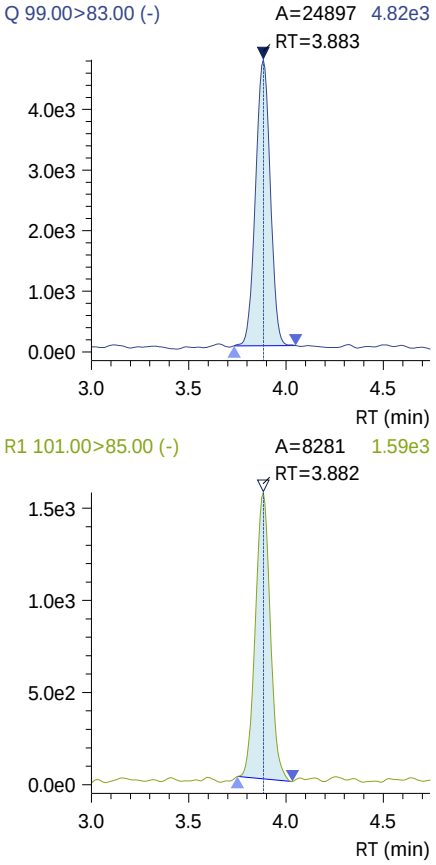
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 12/14/2022 3:46:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_005.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.883	24897	336620	0.4720	ng/mL	101.00 >85.00	33.26	23.94 -44.46
Sodium Perchlorate-18O4 _IS	Auto	3.878	336620	336620	1.0000	ng/mL	----	----	

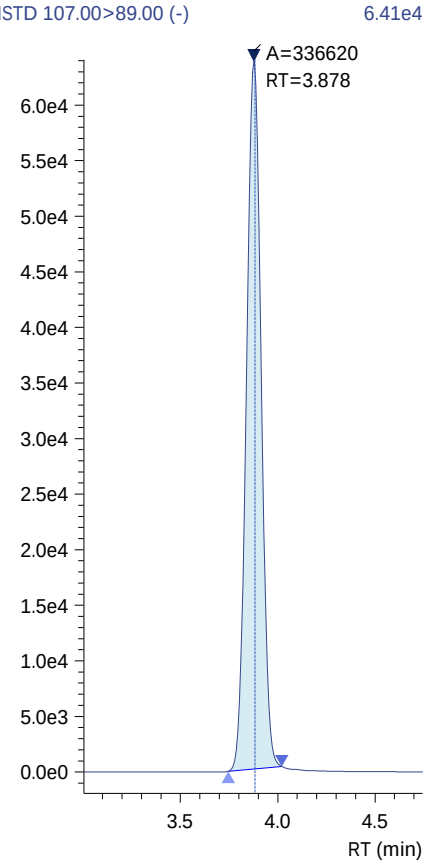
Perchlorate

Conc 0.4720
R#1 33.26 (34.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE3

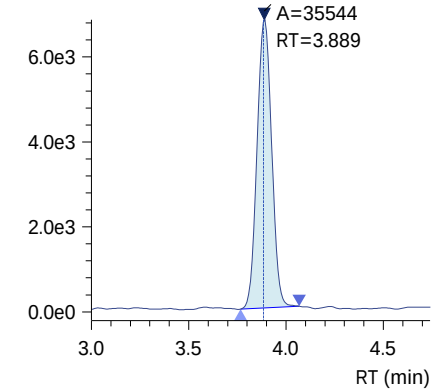
Sample ID: PERCHLORATE3
Date Acquired: 12/14/2022 3:51:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_006.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.889	35544	321596	0.7053	ng/mL	101.00 >85.00	35.09	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.885	321596	321596	1.0000	ng/mL	----	----	

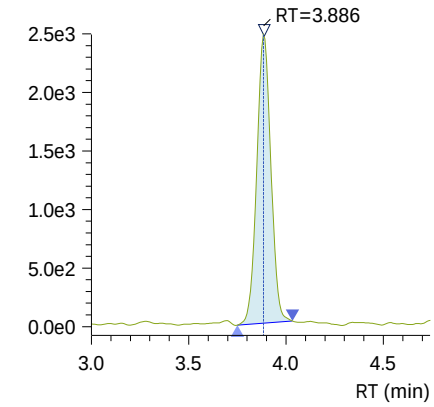
Perchlorate

Conc 0.7053
R#1 35.09 (34.02)

Q 99.00>83.00 (-) 6.88e3



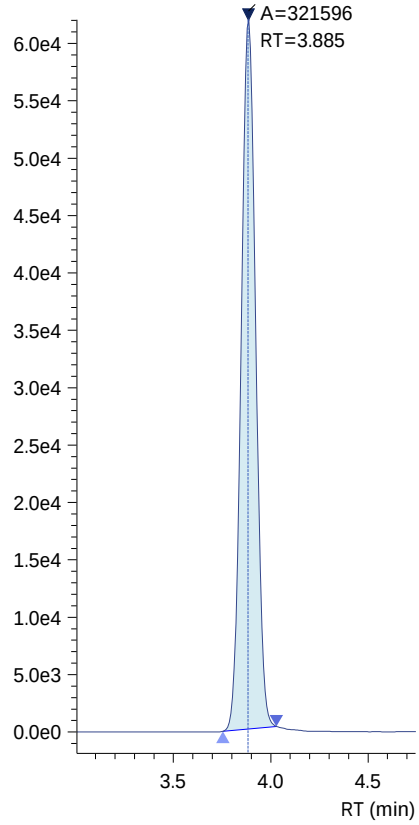
R1 101.00>85.00 (-) A=12471 2.50e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.21e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

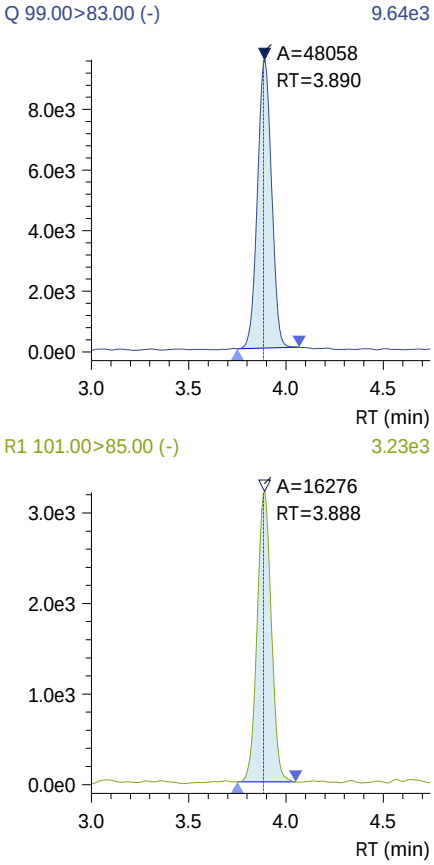
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 12/14/2022 3:57:06 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_007.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.890	48058	305584	1.0036	ng/mL	101.00 >85.00	33.87	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.886	305584	305584	1.0000	ng/mL	----	----	

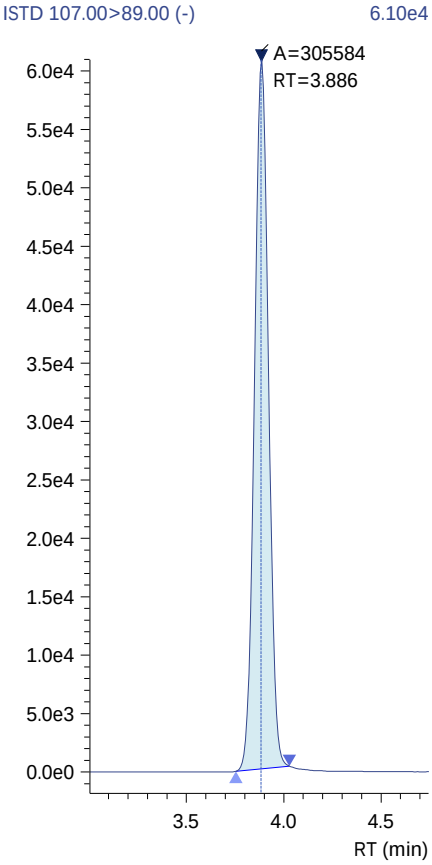
Perchlorate

Conc 1.0036
R#1 33.87 (34.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE5

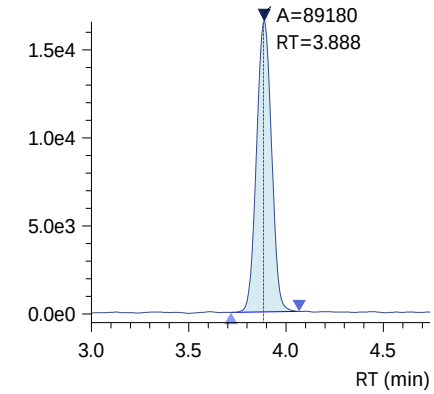
Sample ID: PERCHLORATE5
Date Acquired: 12/14/2022 4:02:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_008.lcd
Vial: 5 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.888	89180	296200	1.9213	ng/mL	101.00 >85.00	32.32	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.885	296200	296200	1.0000	ng/mL	----	----	

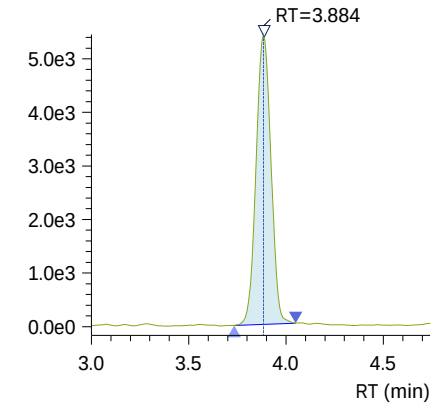
Perchlorate

Conc 1.9213
R#1 32.32 (34.02)

Q 99.00>83.00 (-) 1.66e4



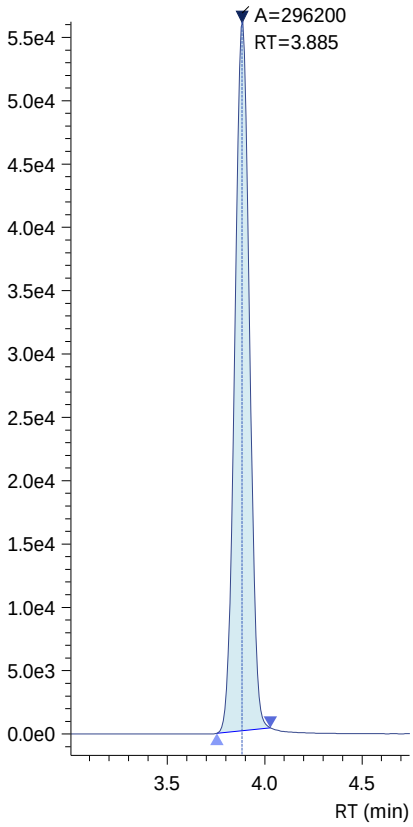
R1 101.00>85.00 (-) A=28822 5.45e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.62e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE6

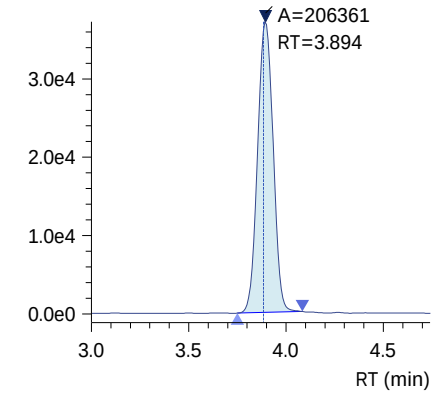
Sample ID: PERCHLORATE6
Date Acquired: 12/14/2022 4:09:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_009.lcd
Vial: 6 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.894	206361	262312	5.0202	ng/mL	101.00 >85.00	33.93	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.889	262312	262312	1.0000	ng/mL	----	----	

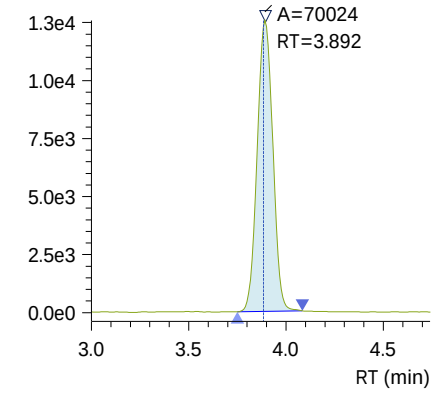
Perchlorate

Conc 5.0202
R#1 33.93 (34.02)

Q 99.00>83.00 (-) 3.73e4



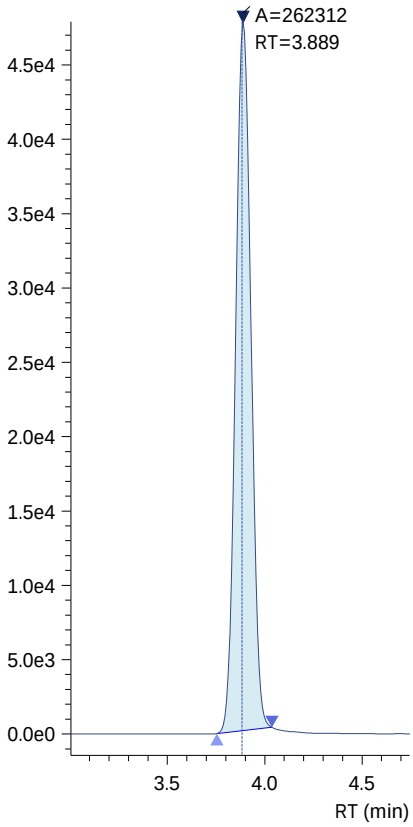
R1 101.00>85.00 (-) 1.26e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.79e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE7

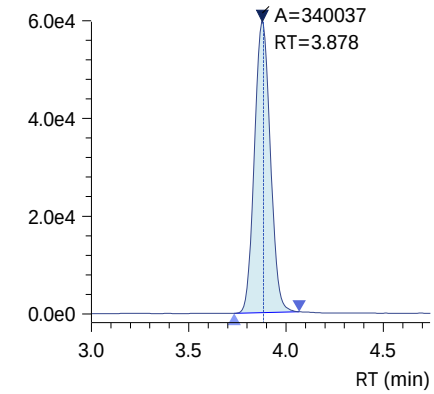
Sample ID: PERCHLORATE7
Date Acquired: 12/14/2022 4:15:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_010.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.878	340037	220702	9.8317	ng/mL	101.00 >85.00	34.05	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.875	220702	220702	1.0000	ng/mL	----	----	

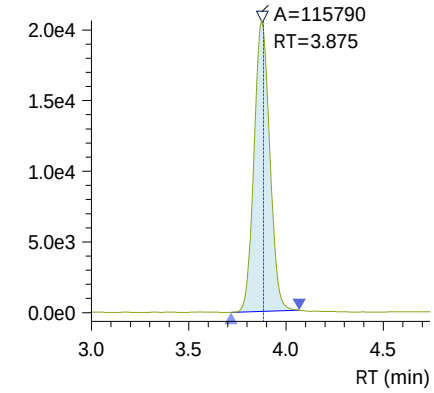
Perchlorate

Conc 9.8317
R#1 34.05 (34.02)

Q 99.00>83.00 (-) 5.98e4



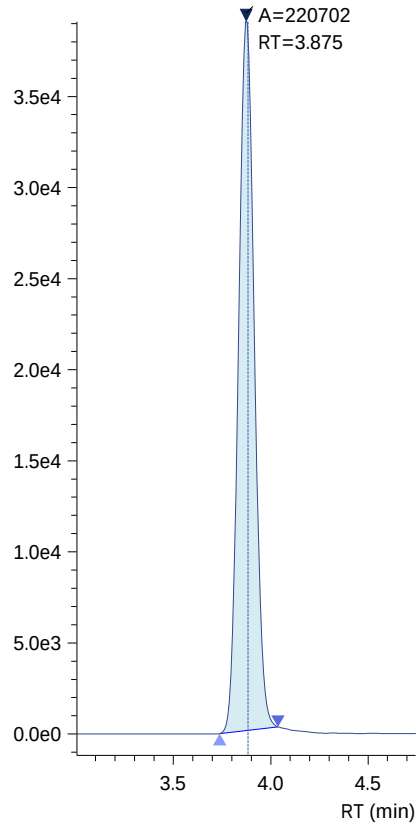
R1 101.00>85.00 (-) 2.07e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.91e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE8

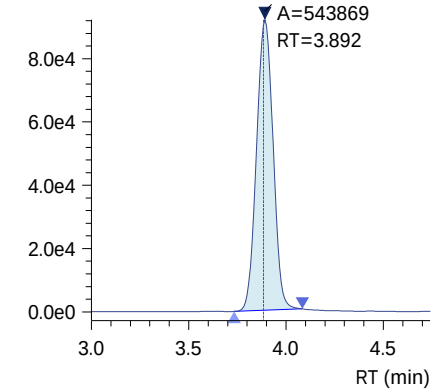
Sample ID: PERCHLORATE8
Date Acquired: 12/14/2022 4:20:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_011.lcd
Vial: 8 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.892	543869	167819	20.6806	ng/mL	101.00 >85.00	33.45	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.888	167819	167819	1.0000	ng/mL	----	----	

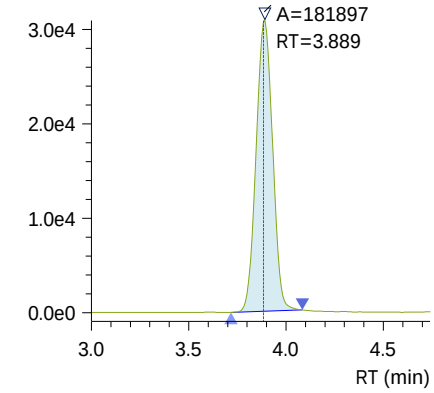
Perchlorate

Conc 20.6806
R#1 33.45 (34.02)

Q 99.00>83.00 (-) 9.23e4



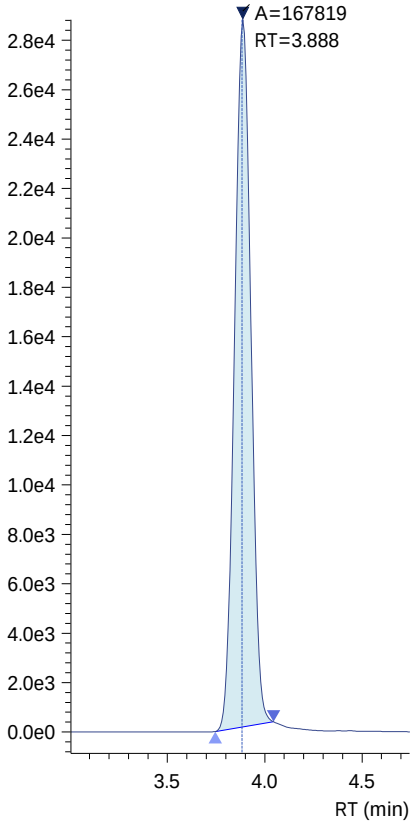
R1 101.00>85.00 (-) 3.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.88e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE9

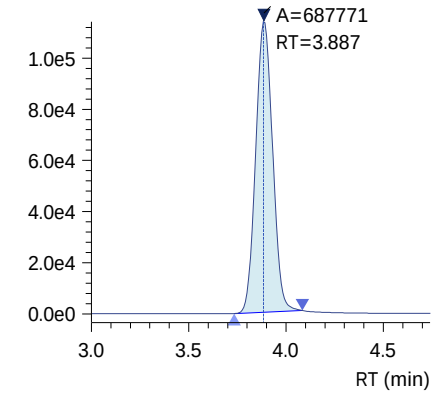
Sample ID: PERCHLORATE9
Date Acquired: 12/14/2022 4:25:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_012.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.887	687771	143493	30.5860	ng/mL	101.00 >85.00	33.79	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.883	143493	143493	1.0000	ng/mL	----	----	

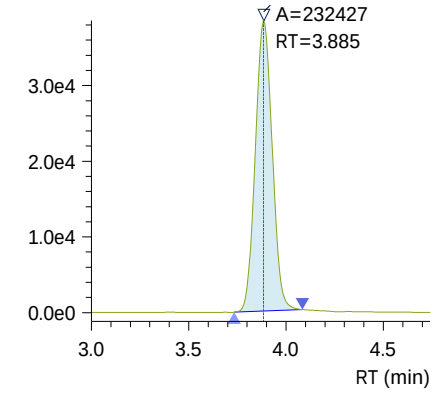
Perchlorate

Conc 30.5860
R#1 33.79 (34.02)

Q 99.00>83.00 (-) 1.14e5



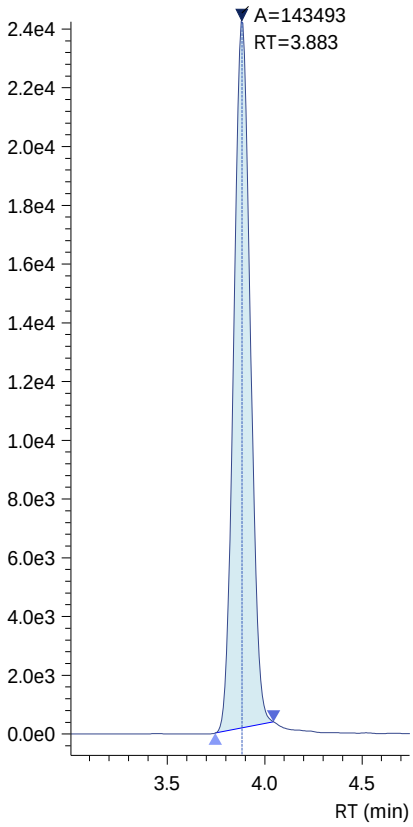
R1 101.00>85.00 (-) 3.86e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.43e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE10

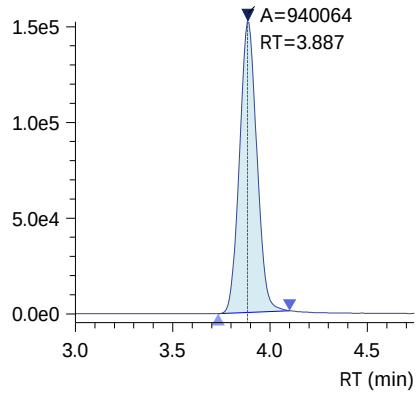
Sample ID: PERCHLORATE10
Date Acquired: 12/14/2022 4:31:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_013.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.887	9400 64	118445	50.6 464	ng/mL	101.00 >85.00	33.39	23.94 -44.46
Sodium Perchlorate-18O4_IS	Auto	3.883	1184 45	118445	1.0000	ng/mL	----	----	

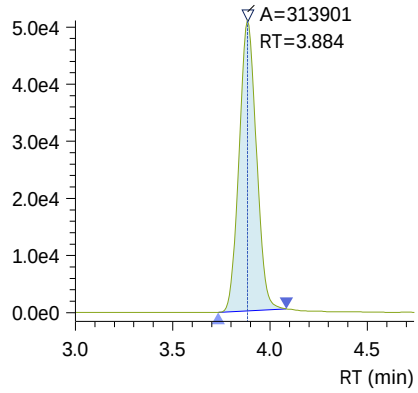
Perchlorate

Conc 50.6464
R#1 33.39 (34.02)

Q 99.00>83.00 (-) 1.53e5



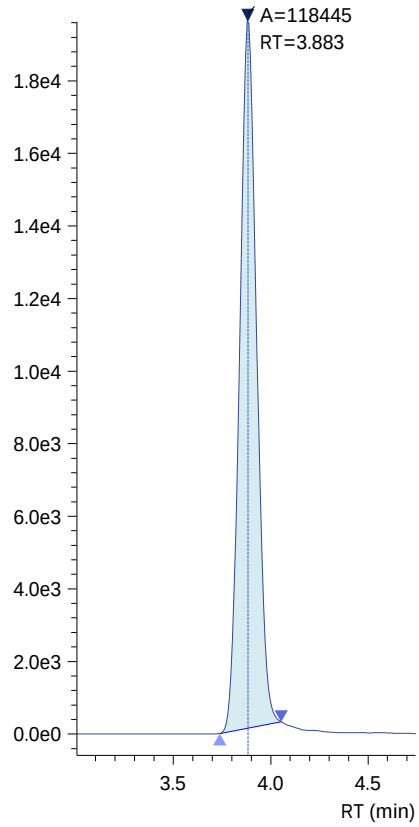
R1 101.00>85.00 (-) 5.12e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.96e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

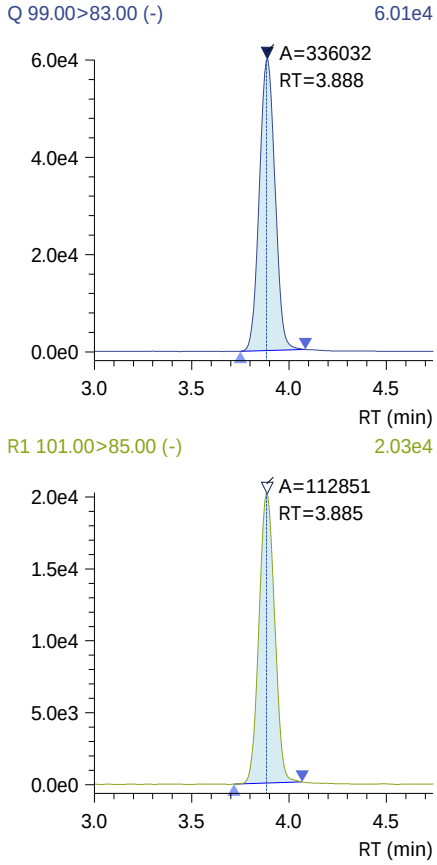
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 12/14/2022 4:37:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_014.lcd
Vial: 11 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.888	3360 32	229124	9.3588	ng/mL	101.00 >85.00	33.58	23.94 -44.46
Sodium Perchlorate-18O4 _IS	Auto	3.884	2291 24	229124	1.0000	ng/mL	----	----	

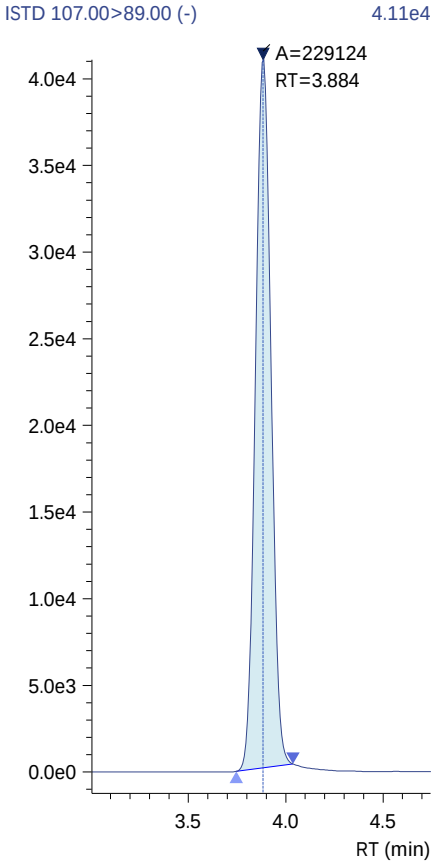
Perchlorate

Conc 9.3588
R#1 33.58 (34.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

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

20230127-792835

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XMI
2nd Review: Kneir

ICAL Date: 12/14/2022
Cal. Std. xp: 01/31/2023
ICAL ID: EC2200016

Mobile Phases : A:0.10% Formic Acid/Water 3210303-02 **B:**MeOH 224417

	Sample Name		File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	IB		20230127-001	Perchlorate6850c.lcm	1x	☒		1/27/2023 8:48
2	ICS		20230127-002	Perchlorate6850c.lcm	1x	☒	32103024	1/27/2023 8:53
3	LODV		20230127-003	Perchlorate6850c.lcm	1x	☒	225199	1/27/2023 9:11
4	PERCHLORATE7		20230127-004	Perchlorate6850c.lcm	1x	☒	226067	1/27/2023 9:17
5	E2300056-005		20230127-005	Perchlorate6850c.lcm	1x	☒		1/27/2023 9:23
6	EQ2300028-01		20230127-006	Perchlorate6850c.lcm	1x	☒		1/27/2023 9:29
7	EQ2300028-02		20230127-007	Perchlorate6850c.lcm	1x	☒		1/27/2023 9:35
8	EQ2300028-03		20230127-008	Perchlorate6850c.lcm	1x	☒		1/27/2023 9:40
9	R2300211-006		20230127-009	Perchlorate6850c.lcm	1x	☒		1/27/2023 9:50
10	E2300064-001		20230127-010	Perchlorate6850c.lcm	1x	☒		1/27/2023 9:56
11	E2300054-003		20230127-011	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:02
12	E2300054-009		20230127-012	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:08
13	E2300054-010		20230127-013	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:14
14	E2300054-011		20230127-014	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:19
15	PERCHLORATE7		20230127-015	Perchlorate6850c.lcm	1x	☒	226067	1/27/2023 10:25
16	E2300054-012		20230127-016	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:31
17	E2300054-015		20230127-017	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:37
18	E2300054-016		20230127-018	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:42
19	E2300054-017		20230127-019	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:48
20	E2300054-018		20230127-020	Perchlorate6850c.lcm	1x	☒		1/27/2023 10:54
21	E2300054-001x10		20230127-021	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:00
22	E2300054-002x10		20230127-022	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:06
23	E2300054-004x10		20230127-023	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:11
24	E2300054-005x10		20230127-024	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:17
25	E2300054-006x10		20230127-025	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:23
26	PERCHLORATE7		20230127-026	Perchlorate6850c.lcm	1x	☒	226067	1/27/2023 11:29
27	E2300054-007x10		20230127-027	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:34
28	E2300054-008		20230127-028	Perchlorate6850c.lcm	1x	☒	DNU-OUT OF ICAL RANGE	1/27/2023 11:40
29	E2300054-013x10		20230127-029	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:46
30	E2300054-008x10		20230127-030	Perchlorate6850c.lcm	10x	☒		1/27/2023 11:52
31	E2300054-014x5		20230127-031	Perchlorate6850c.lcm	5x	☒		1/27/2023 11:58
32	PERCHLORATE7		20230127-032	Perchlorate6850c.lcm	1x	☒	226067	1/27/2023 12:03

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/26/23 11:39

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230125\20230125-004	**Lab Code:**	EQ2300035-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	792728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300035-04	195,847	3.51
Method Blank	EQ2300026-01	330,820	3.51
Lab Control Sample	EQ2300026-02	329,146	3.51
Duplicate Lab Control Sample	EQ2300026-03	325,820	3.51

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/26/23 12:55

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

File ID: I:\LCMS01\DATA\20230125\20230126-014
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300035-01
Analysis Lot: 792728
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300035-01	200,906	3.51

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:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/26/23 14:54

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230125\20230126-025	**Lab Code:**	EQ2300035-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	792728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300035-02	313,798	3.46
16WW48-230119	E2300056-001	329,719	3.45
16RW04-230119	E2300056-002	291,749	3.47
16IW09-230119	E2300056-003	296,552	3.46
16EW02-230119MS	EQ2300026-04	319,976	3.47
16EW02-230119DMS	EQ2300026-05	312,691	3.46
16EW03-230119	E2300056-006	321,591	3.46
16IW20-230119	E2300056-004	303,059	3.45

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:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/26/23 16:29

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230125\20230126-035	**Lab Code:**	EQ2300035-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	792728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300035-03	263,972	3.45

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:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/27/23 09:17

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230127\20230127-004	**Lab Code:**	EQ2300037-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	792835
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300037-01	185,050	3.45
16EW02-230119	E2300056-005	279,193	3.45

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:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/27/23 10:25

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230127\20230127-015	**Lab Code:**	EQ2300037-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	792835
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300037-02	185,247	3.45

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:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/27/23 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\20230127\20230127-026	**Lab Code:**	EQ2300037-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	792835
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300037-03	175,508	3.45

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:**	E2300056
Project:	HS23010982	**Date Analyzed:**	1/27/23 12:03

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230127\20230127-032	**Lab Code:**	EQ2300037-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	792835
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	251,001	3.88
	Upper Limit ==>	376,502	5.88
	Lower Limit ==>	125,501	1.88
Associated Analyses			
Continuing Calibration Verification	EQ2300037-04	176,265	3.45

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/26/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230125\20230126-014

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1567	0.1641	4.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/26/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230125\20230126-025

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1567	0.1606	2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/26/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230125\20230126-035

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.97	0.1567	0.1562	-0.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/26/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230125\20230125-004

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1567	0.1637	4.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/27/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230127\20230127-004

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792835
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1567	0.1640	4.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/27/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230127\20230127-015

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792835
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1567	0.1567	0.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/27/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230127\20230127-026

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792835
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.96	0.1567	0.1561	-0.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23010982

Service Request: E2300056
Date Analyzed: 1/27/23

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

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230127\20230127-032

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 792835
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.99	0.1567	0.1566	-0.1	NA	± 15 %	Average RF

Insight Report

Printed at 1/27/2023 9:34:02 AM

Method File: I:\LCMS01\DATA\20230125\01262023.lcm
Project File: I:\LCMS01\DATA\20230125\01262023.damlp

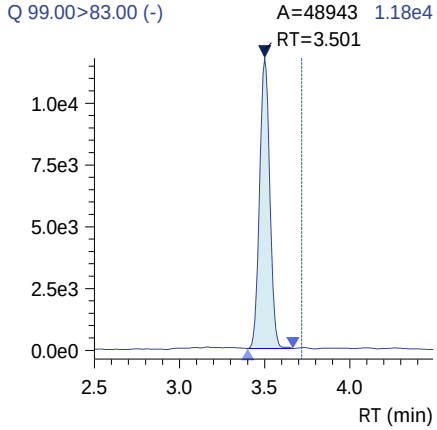
ICS

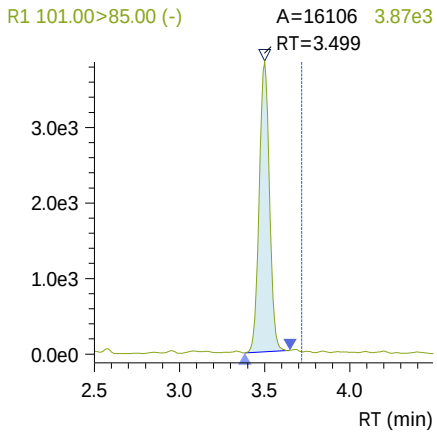
Sample ID: ICS
Date Acquired: 1/26/2023 11:01:40 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230125-002.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.501	48943	292300	1.0685	ng/mL	101.00 >85.00	32.91	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.497	292300	292300	1.0000	ng/mL	----	----	

Perchlorate

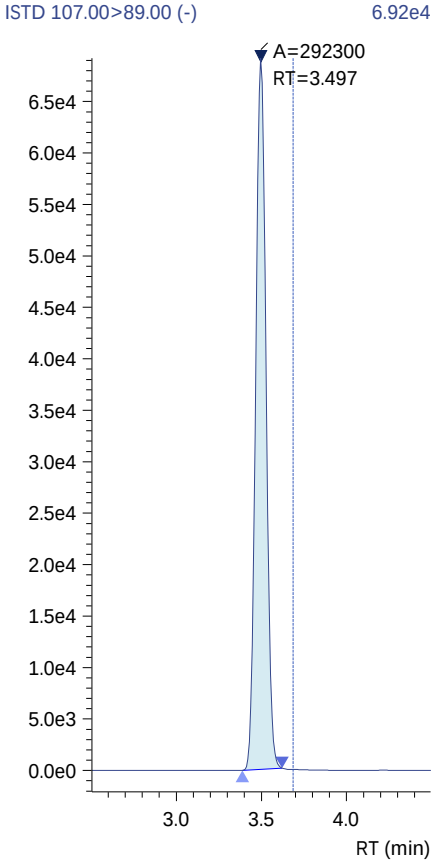
Conc 1.0685
R#1 32.91 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

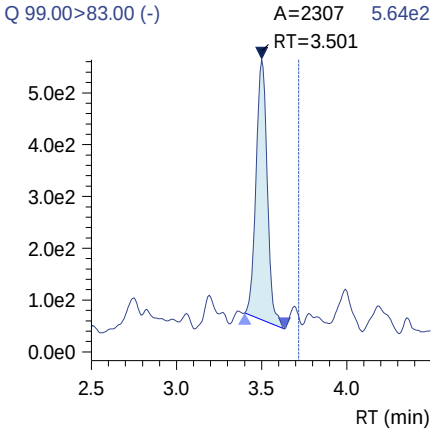
LODV

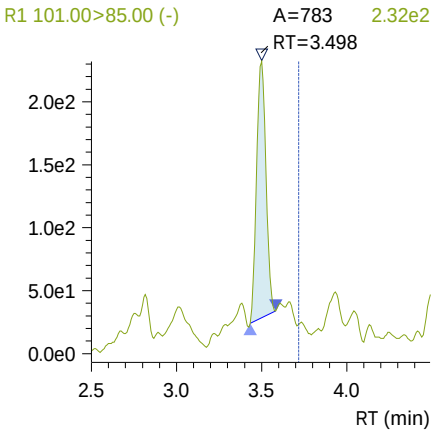
Sample ID: LODV
Date Acquired: 1/26/2023 11:33:59 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230125-003.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.501	2307	248256	0.0593	ng/mL	101.00 >85.00	33.94	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.497	248256	248256	1.0000	ng/mL	----	----	

Perchlorate

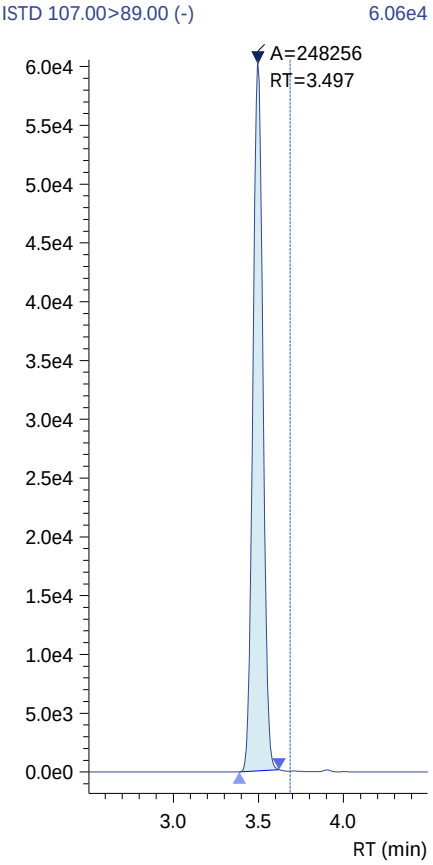
Conc 0.0593
R#1 33.94 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

PERCHLORATE7

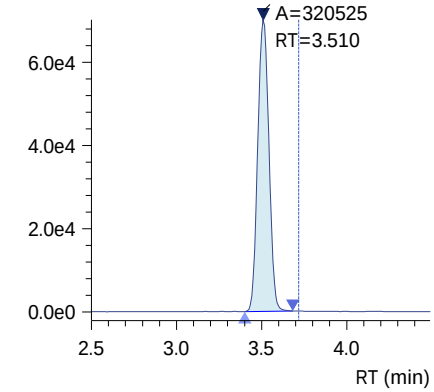
Sample ID: PERCHLORATE7
Date Acquired: 1/26/2023 11:39:23 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230125-004.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.510	320525	195847	10.4437	ng/mL	101.00 >85.00	32.60	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.505	195847	195847	1.0000	ng/mL	----	----	

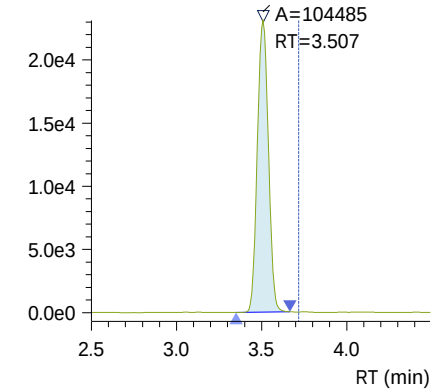
Perchlorate

Conc 10.4437
R#1 32.60 (32.08)

Q 99.00>83.00 (-) 7.03e4



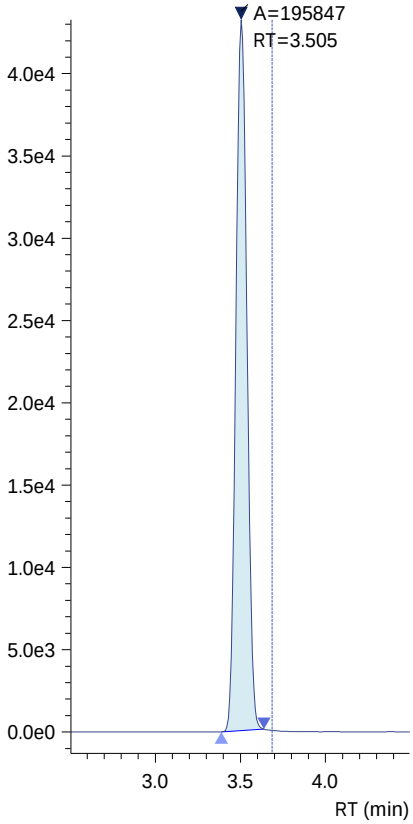
R1 101.00>85.00 (-) 2.31e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.33e4



Insight Report

Printed at 1/27/2023 9:34:02 AM

EQ2300026-01

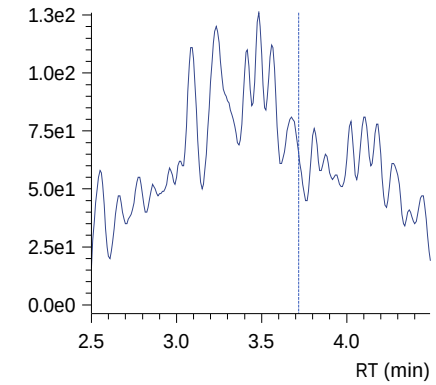
Sample ID: EQ2300026-01
Date Acquired: 1/26/2023 11:44:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230125-005.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	330820	----	ng/mL	101.00 >85.00	0.00	22.45 -41.70
Sodium Perchlorate-18O4_IS	Auto	3.509	330820	330820	1.0000	ng/mL	----	----	

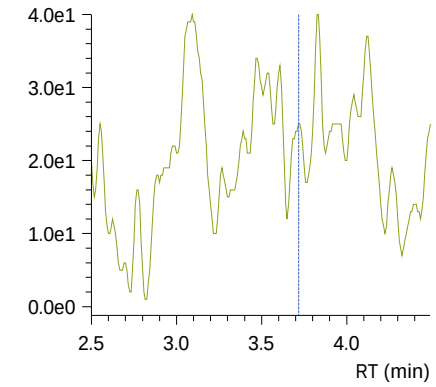
Perchlorate

Conc ----
R#1 0.00 (32.08)

Q 99.00>83.00 (-) 1.26e2



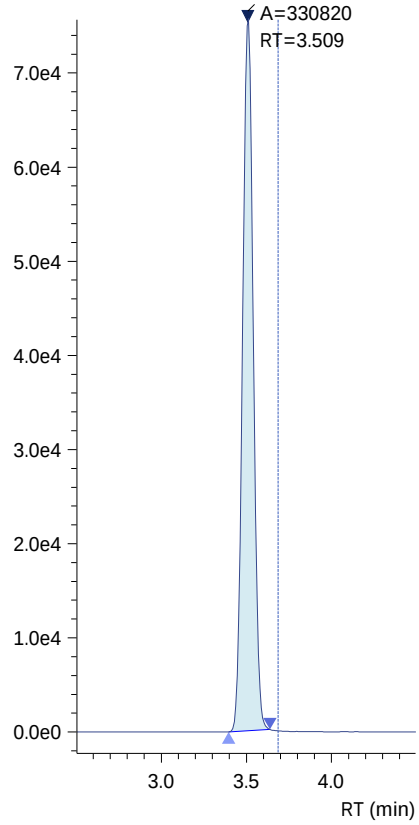
R1 101.00>85.00 (-) 4.00e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.57e4



Insight Report

Printed at 1/27/2023 9:34:02 AM

EQ2300026-02

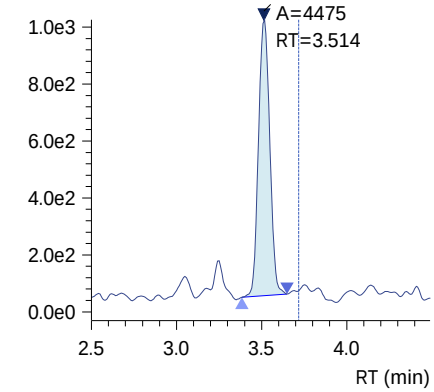
Sample ID: EQ2300026-02
Date Acquired: 1/26/2023 11:50:15 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230125-006.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.514	4475	329146	0.0868	ng/mL	101.00 >85.00	31.79	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.510	329146	329146	1.0000	ng/mL	----	----	

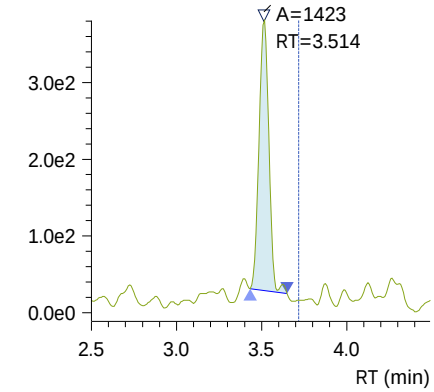
Perchlorate

Conc 0.0868
R#1 31.79 (32.08)

Q 99.00>83.00 (-) 1.03e3



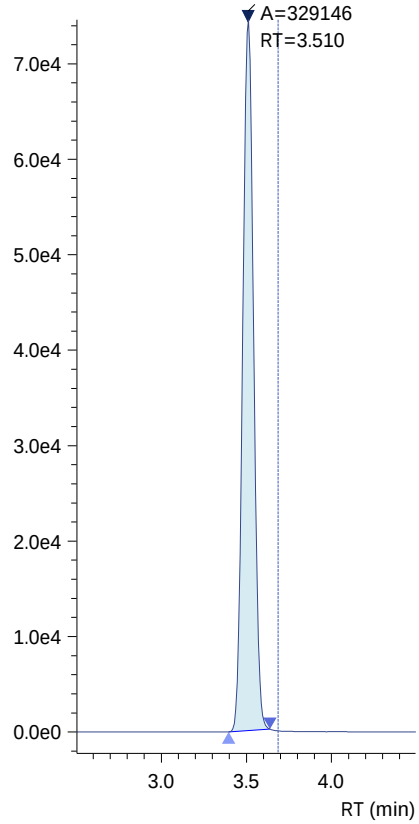
R1 101.00>85.00 (-) 3.81e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.46e4



Insight Report

Printed at 1/27/2023 9:34:02 AM

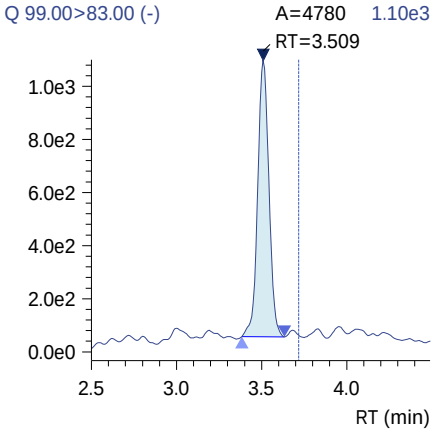
EQ2300026-03

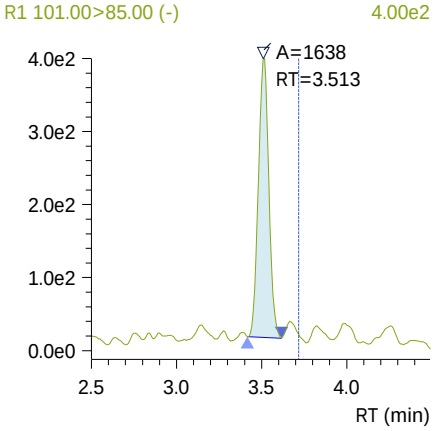
Sample ID: EQ2300026-03
Date Acquired: 1/26/2023 11:55:43 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230125-007.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.509	4780	325820	0.0936	ng/mL	101.00 >85.00	34.26	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.508	325820	325820	1.0000	ng/mL	----	----	

Perchlorate

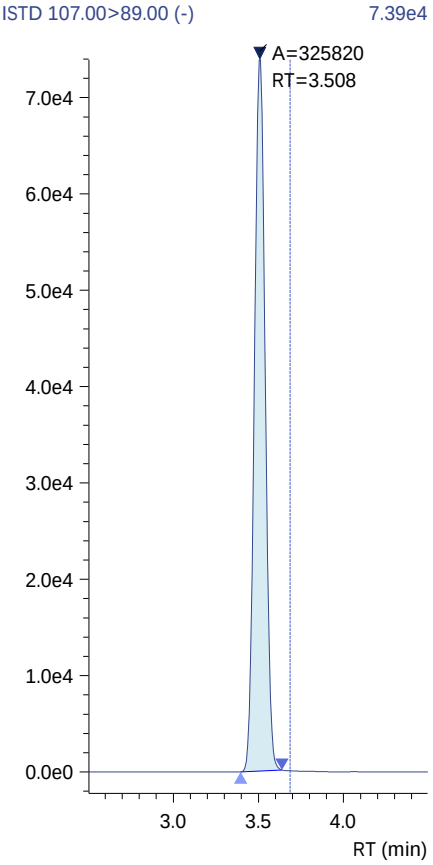
Conc 0.0936
R#1 34.26 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

PERCHLORATE7

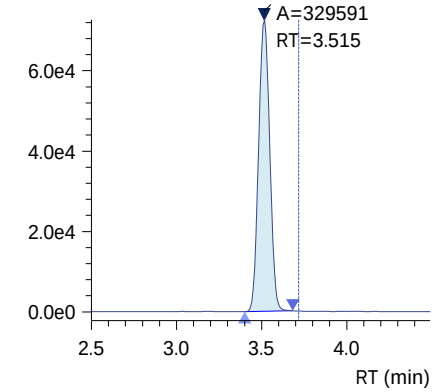
Sample ID: PERCHLORATE7
Date Acquired: 1/26/2023 12:55:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-014.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.515	329591	200906	10.4687	ng/mL	101.00 >85.00	32.18	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.510	200906	200906	1.0000	ng/mL	----	----	

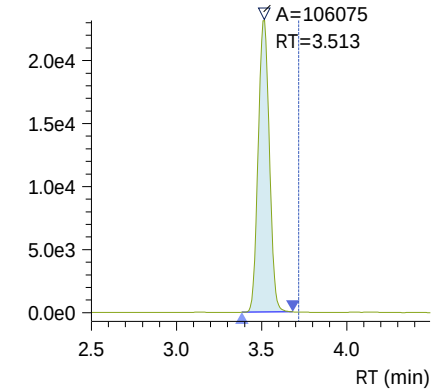
Perchlorate

Conc 10.4687
R#1 32.18 (32.08)

Q 99.00>83.00 (-) 7.27e4



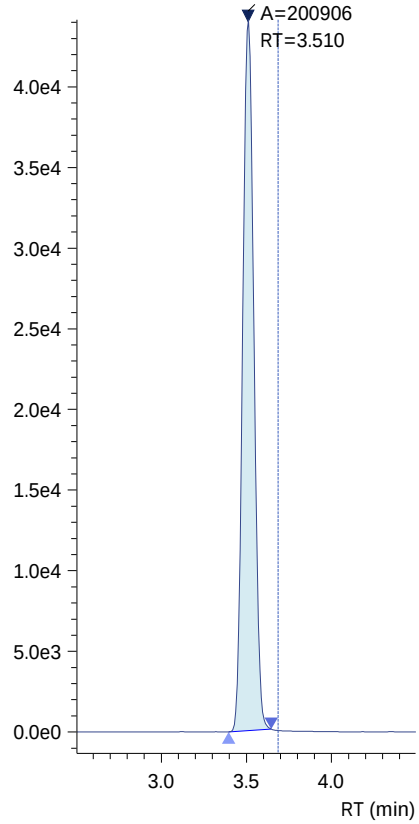
R1 101.00>85.00 (-) 2.32e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.42e4



Insight Report

Printed at 1/27/2023 9:34:02 AM

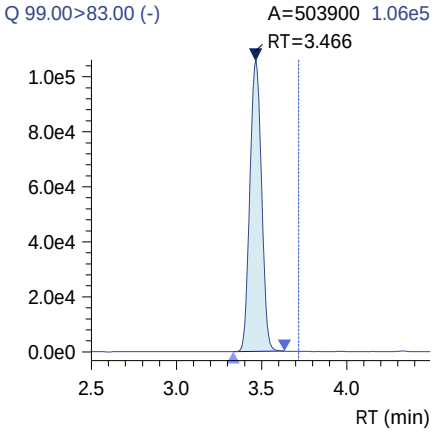
PERCHLORATE7

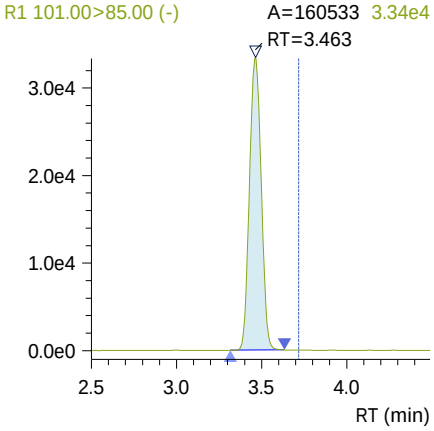
Sample ID: PERCHLORATE7
Date Acquired: 1/26/2023 2:54:41 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-025.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.466	503900	313798	10.2471	ng/mL	101.00 >85.00	31.86	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.461	313798	313798	1.0000	ng/mL	----	----	

Perchlorate

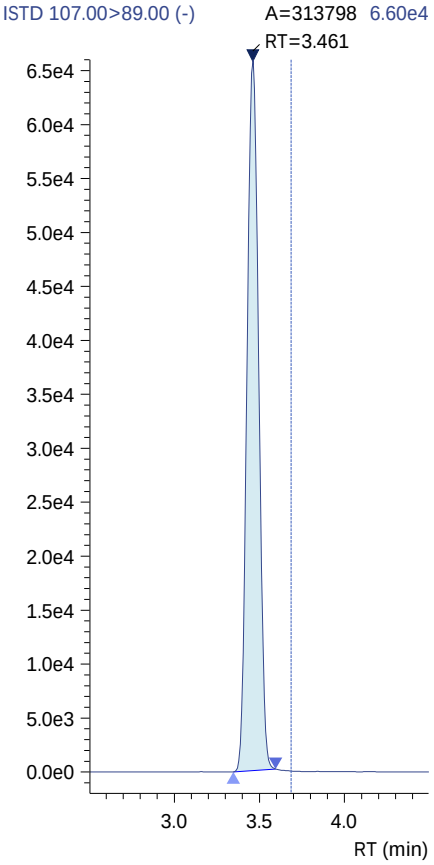
Conc 10.2471
R#1 31.86 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

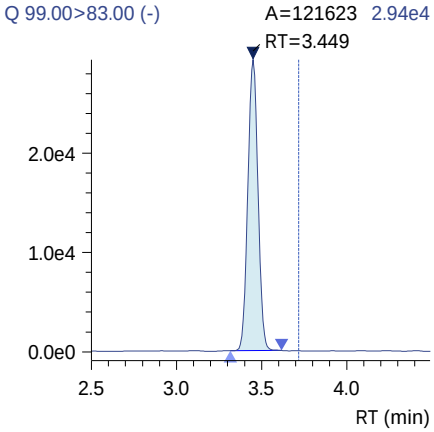
E2300056-001

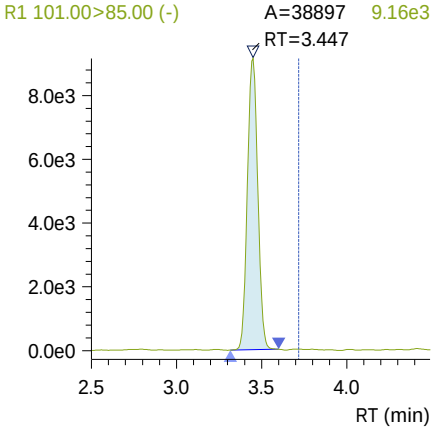
Sample ID: E2300056-001
Date Acquired: 1/26/2023 3:18:31 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-026.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.449	121623	329719	2.3539	ng/mL	101.00 >85.00	31.98	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.445	329719	329719	1.0000	ng/mL	----	----	

Perchlorate

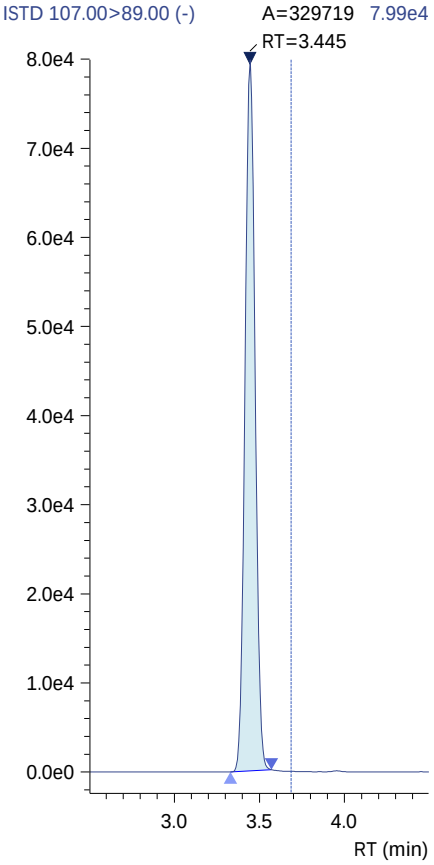
Conc 2.3539
R#1 31.98 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

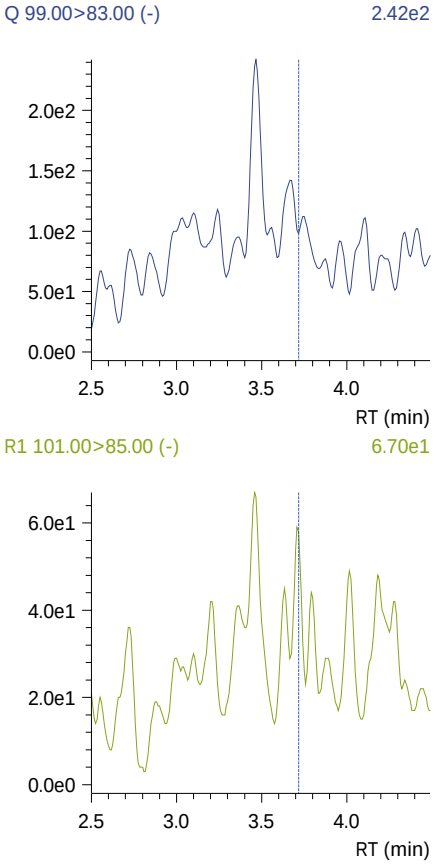
E2300056-002

Sample ID: E2300056-002
Date Acquired: 1/26/2023 3:23:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-027.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	291749	----	ng/mL	101.00 >85.00	0.00	22.45 -41.70
Sodium Perchlorate-18O4_IS	Auto	3.465	291749	291749	1.0000	ng/mL	----	----	

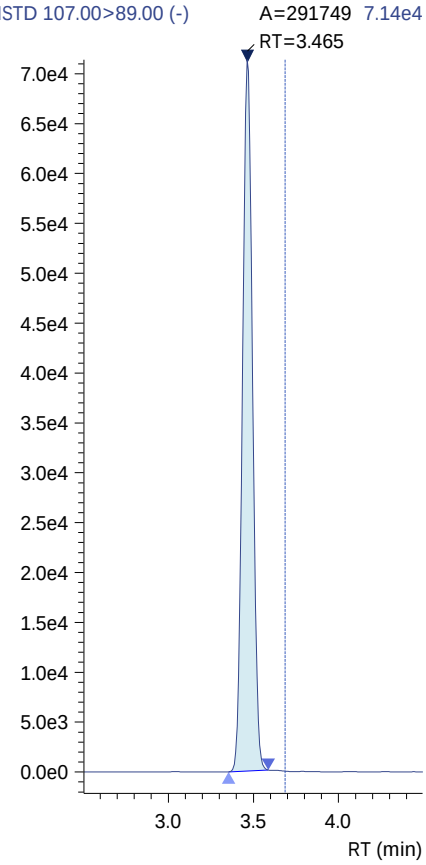
Perchlorate

Conc ----
R#1 0.00 (32.08)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

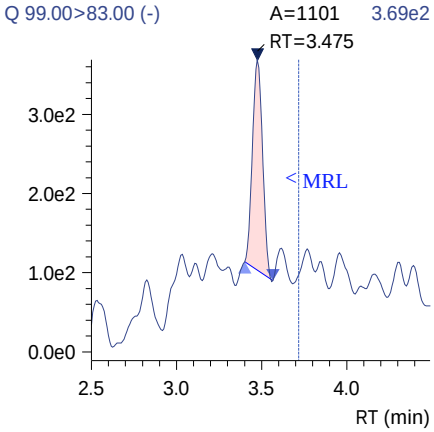
E2300056-003

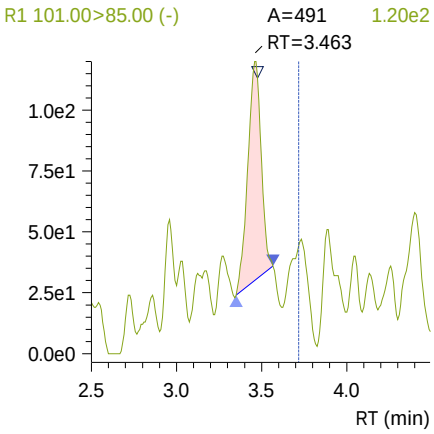
Sample ID: E2300056-003
Date Acquired: 1/26/2023 3:29:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-028.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.475	1101	296552	0.0237	ng/mL	101.00 >85.00	44.60	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.463	296552	296552	1.0000	ng/mL	----	----	

Perchlorate

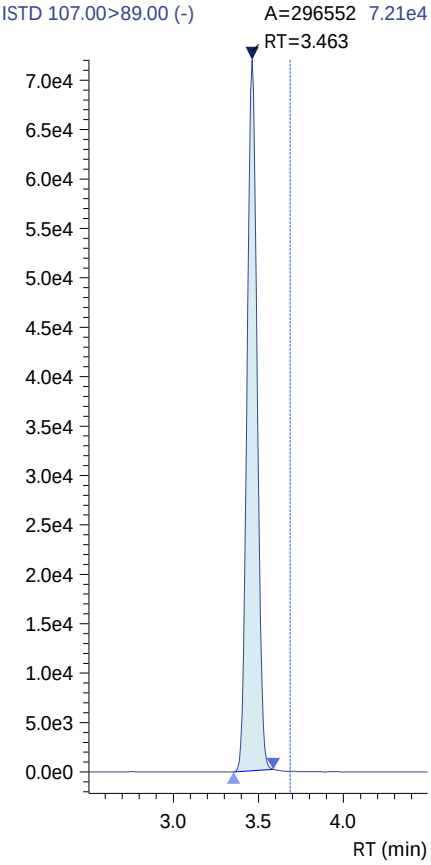
Conc 0.0237
R#1 44.60 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:35:08 AM

Method File: I:\LCMS01\DATA\20230125\01262023.lcm
Project File: I:\LCMS01\DATA\20230125\01262023.damlp

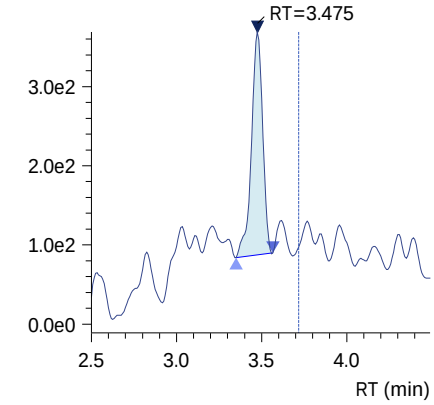
E2300056-003

Sample ID: E2300056-003
Date Acquired: 1/26/2023 3:29:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-028.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 3

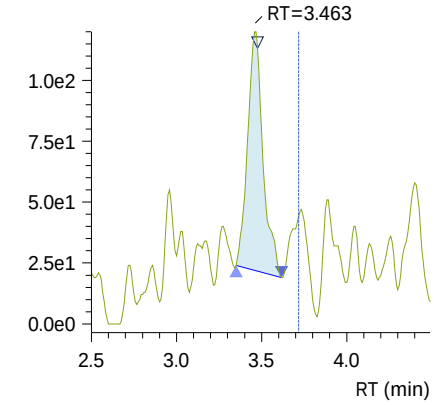
Perchlorate

Conc 0.0278
R#1 47.77 (32.08)

Q 99.00>83.00 (-) A=1291 3.69e2



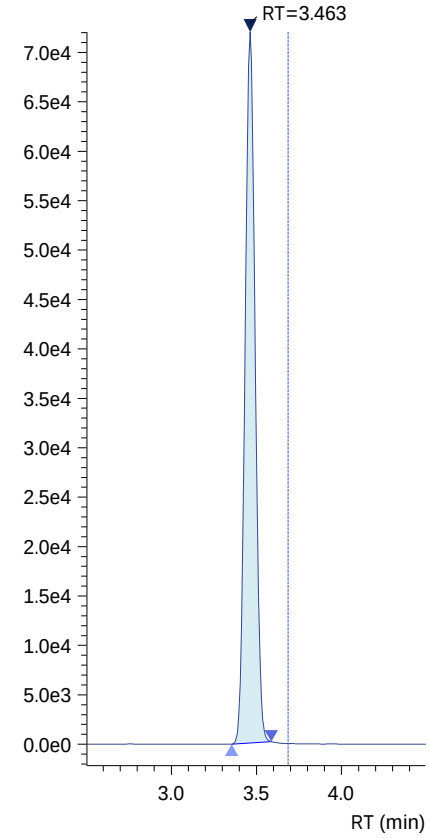
R1 101.00>85.00 (-) A=617 1.20e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=296552 7.21e4



Insight Report

Printed at 1/27/2023 9:34:02 AM

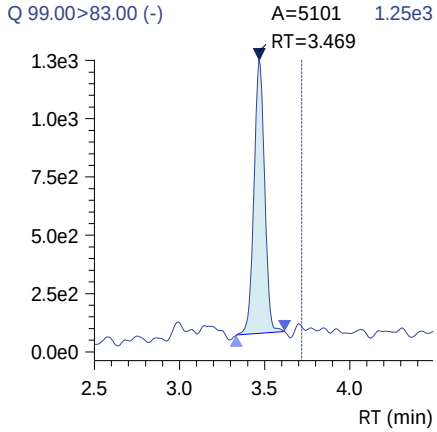
EQ2300026-04

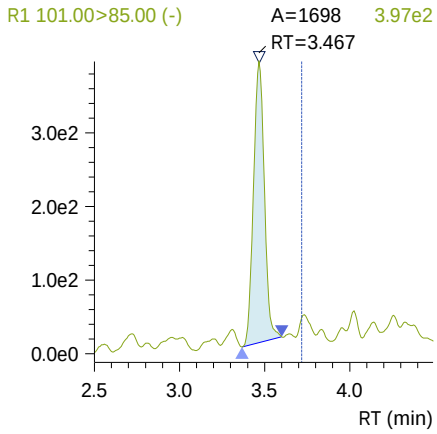
Sample ID: EQ2300026-04
Date Acquired: 1/26/2023 3:45:31 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-030.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.469	5101	319976	0.1017	ng/mL	101.00 >85.00	33.28	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.465	319976	319976	1.0000	ng/mL	----	----	

Perchlorate

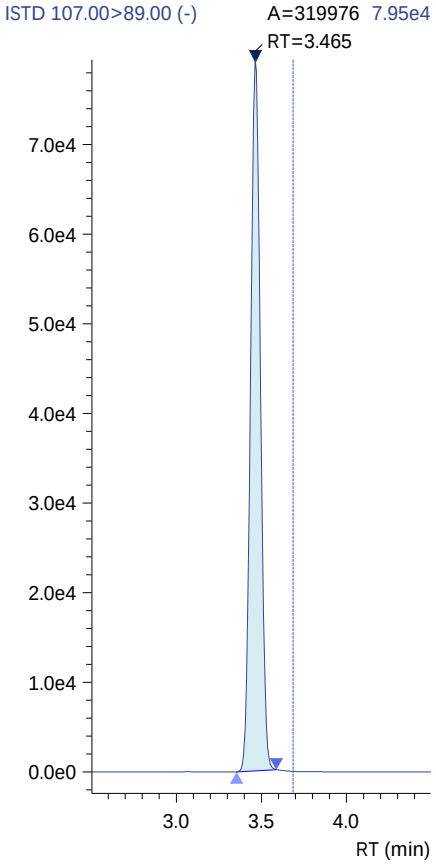
Conc 0.1017
R#1 33.28 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

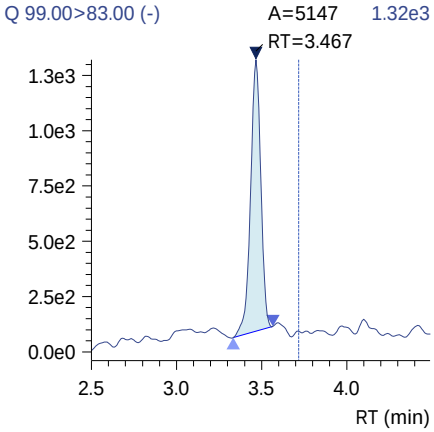
EQ2300026-05

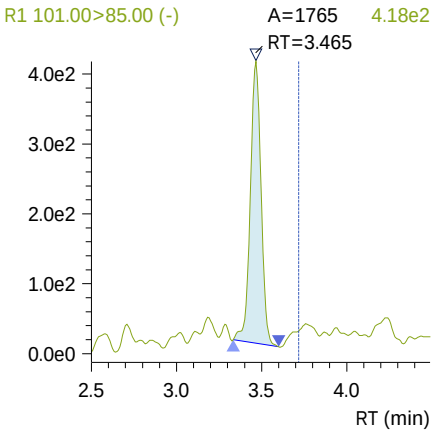
Sample ID: EQ2300026-05
Date Acquired: 1/26/2023 3:50:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-031.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.467	5147	312691	0.1050	ng/mL	101.00 >85.00	34.29	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.464	312691	312691	1.0000	ng/mL	----	----	

Perchlorate

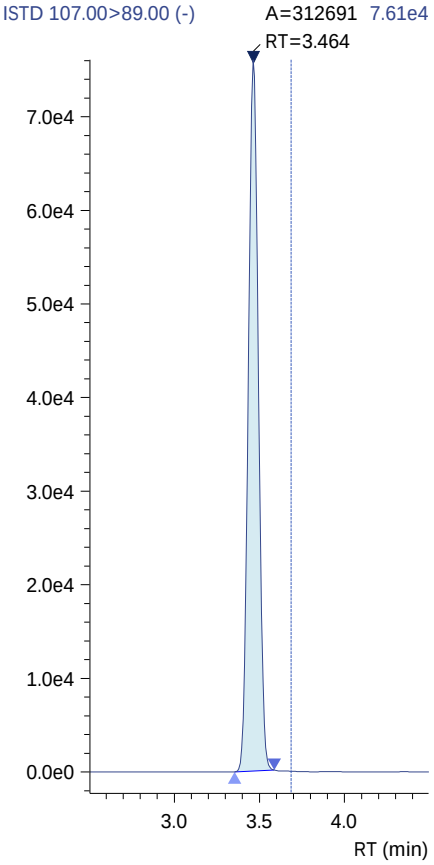
Conc 0.1050
R#1 34.29 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

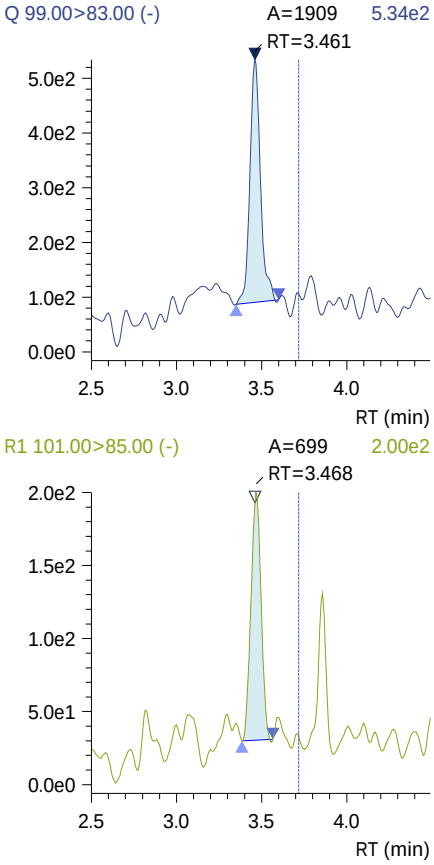
E2300056-006

Sample ID: E2300056-006
Date Acquired: 1/26/2023 4:02:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-033.lcd
Vial: 31 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.461	1909	321591	0.0379	ng/mL	101.00 >85.00	36.63	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.464	321591	321591	1.0000	ng/mL	----	----	

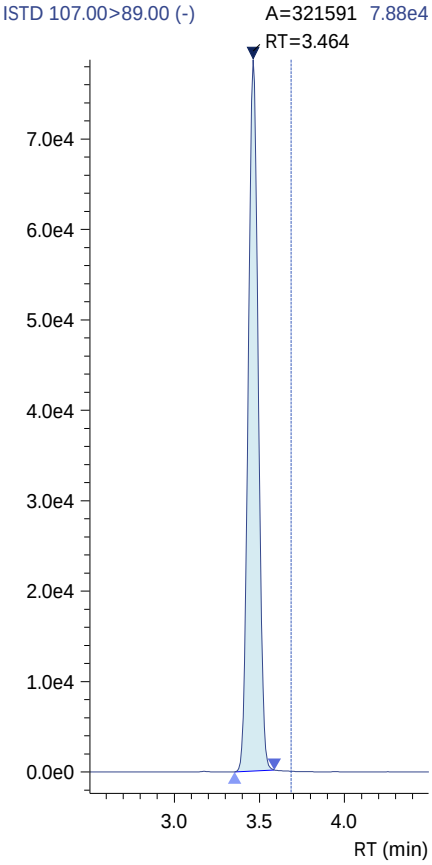
Perchlorate

Conc 0.0379
R#1 36.63 (32.08)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:34:02 AM

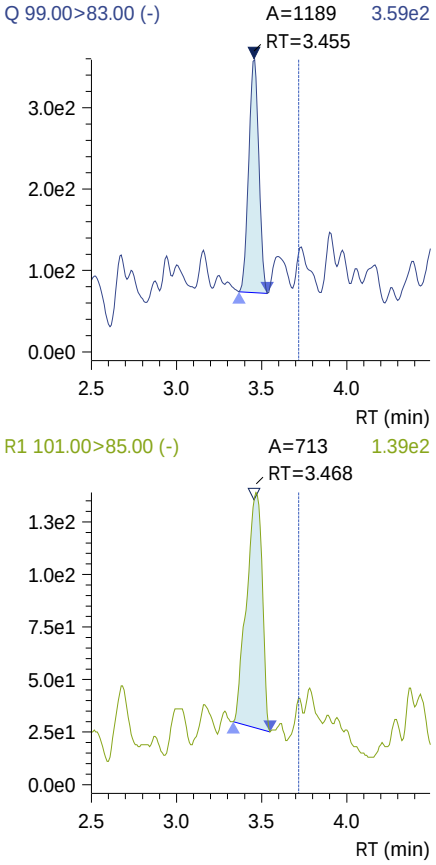
E2300056-004

Sample ID: E2300056-004
Date Acquired: 1/26/2023 4:08:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-034.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.455	1189	304978	0.0249	ng/mL	101.00 >85.00	59.99	22.45 -41.70
Sodium Perchlorate -18O4_IS	M	3.448	304978	304978	1.0000	ng/mL	----	----	

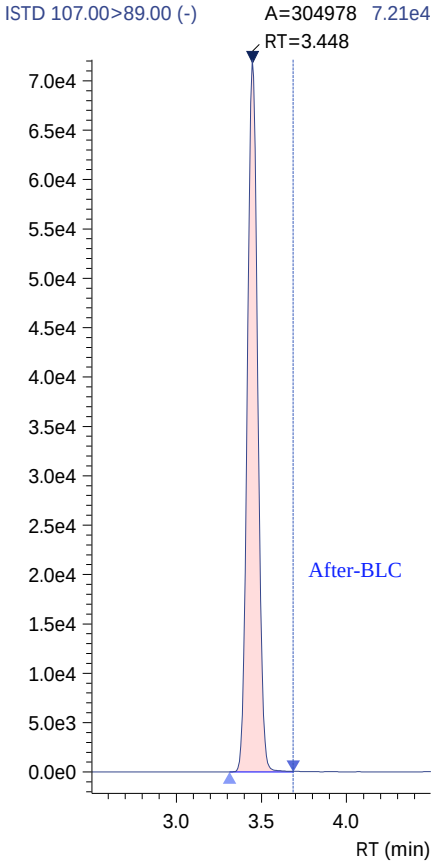
Perchlorate

Conc 0.0249
R#1 59.99 (32.08)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 9:35:08 AM

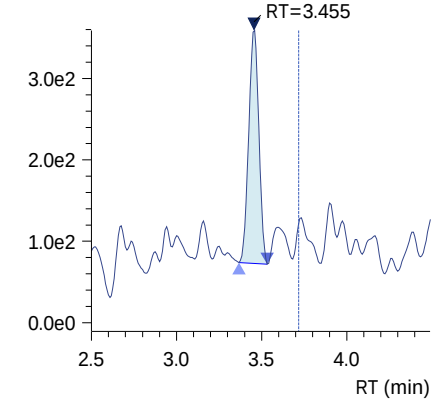
E2300056-004

Sample ID: E2300056-004
Date Acquired: 1/26/2023 4:08:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-034.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 3

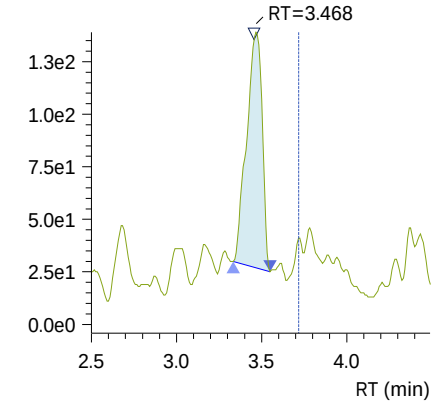
Perchlorate

Conc 0.0250
R#1 59.99 (32.08)

Q 99.00>83.00 (-) A=1189 3.59e2 RT=3.455



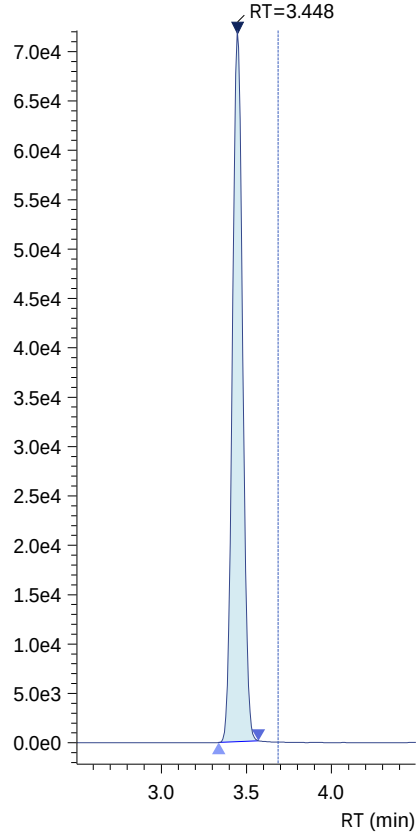
R1 101.00>85.00 (-) A=713 1.39e2 RT=3.468



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=303059 7.21e4 RT=3.448



Insight Report

Printed at 1/27/2023 9:34:02 AM

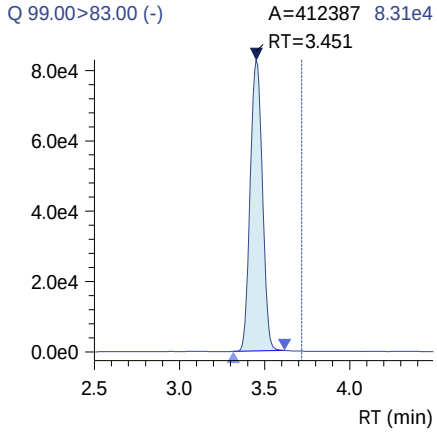
PERCHLORATE7

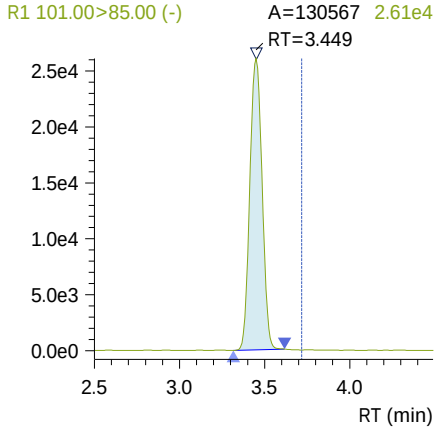
Sample ID: PERCHLORATE7
Date Acquired: 1/26/2023 4:29:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230125\20230126-035.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.451	412387	263972	9.9691	ng/mL	101.00 >85.00	31.66	22.45 -41.70
Sodium Perchlorate -18O4_IS	Auto	3.445	263972	263972	1.0000	ng/mL	----	----	

Perchlorate

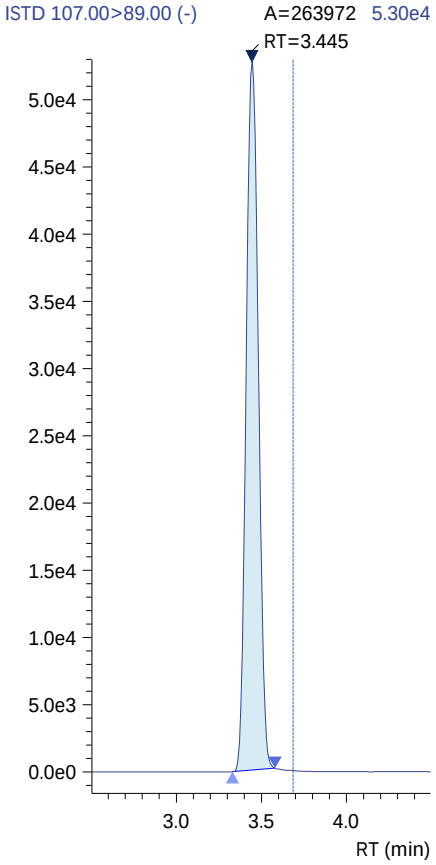
Conc 9.9691
R#1 31.66 (32.08)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 12:19:50 PM

Method File: I:\LCMS01\DATA\20230127\20230127.lcm
Project File: I:\LCMS01\DATA\20230127\20230127.damlp

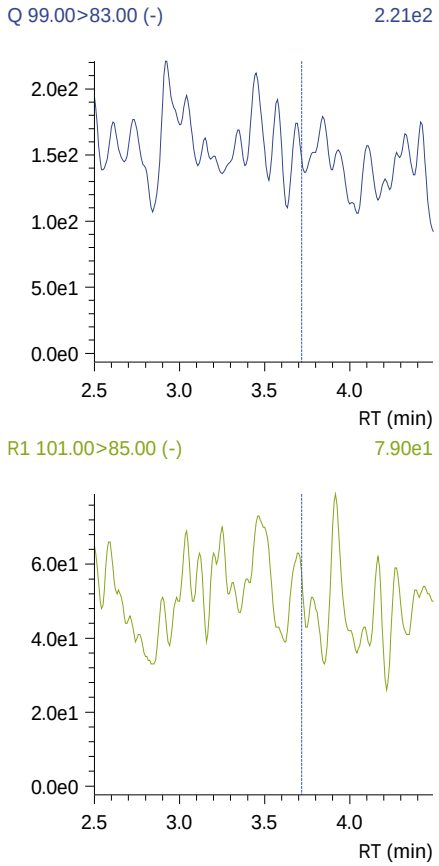
IB

Sample ID: IB
Date Acquired: 1/27/2023 8:48:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230127\20230127-001.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	267207	----	ng/mL	101.00 >85.00	0.00	22.02 -40.89
Sodium Perchlorate-18O4_IS	Auto	3.459	267207	267207	1.0000	ng/mL	----	----	

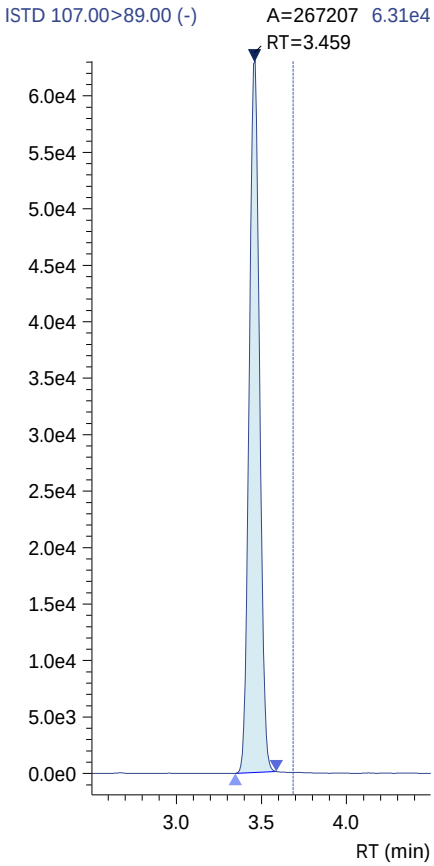
Perchlorate

Conc ----
R#1 0.00 (31.45)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 12:19:50 PM

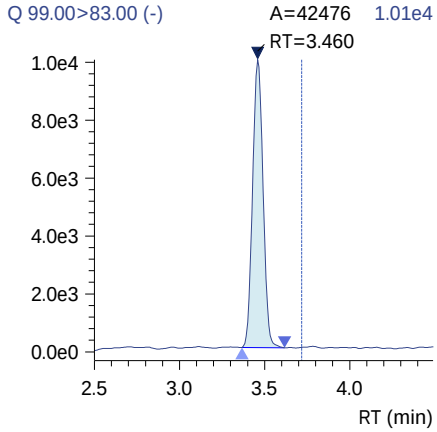
ICS

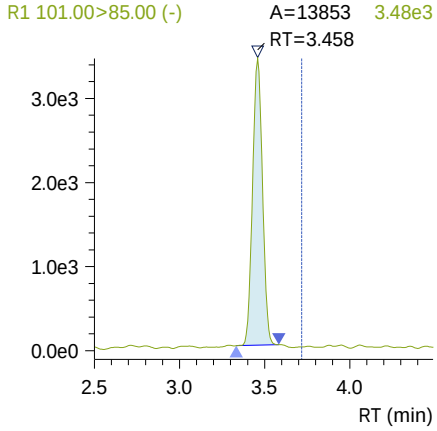
Sample ID: ICS
Date Acquired: 1/27/2023 8:53:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230127\20230127-002.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.460	42476	265742	1.0200	ng/mL	101.00 >85.00	32.61	22.02 -40.89
Sodium Perchlorate-18O4_IS	Auto	3.456	2657 42	265742	1.0000	ng/mL	----	----	

Perchlorate

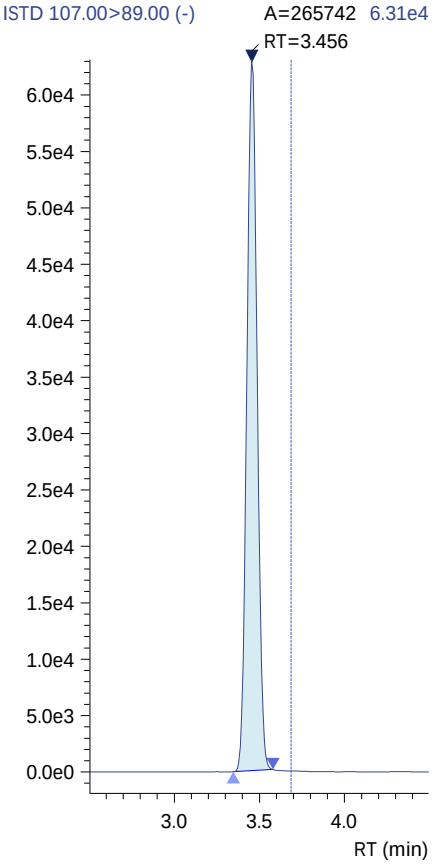
Conc 1.0200
R#1 32.61 (31.45)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 12:19:50 PM

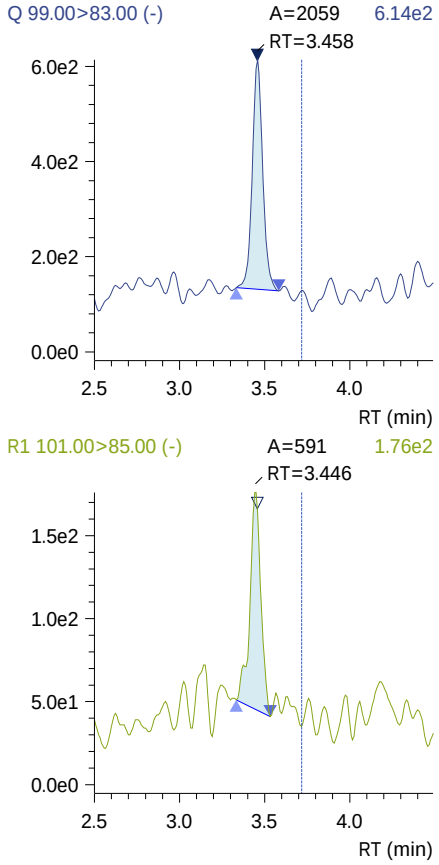
LODV

Sample ID: LODV
Date Acquired: 1/27/2023 9:11:30 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230127\20230127-003.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.458	2059	222974	0.0589	ng/mL	101.00 >85.00	28.68	22.02 -40.89
Sodium Perchlorate-18O4_IS	Auto	3.453	2229 74	222974	1.0000	ng/mL	----	----	

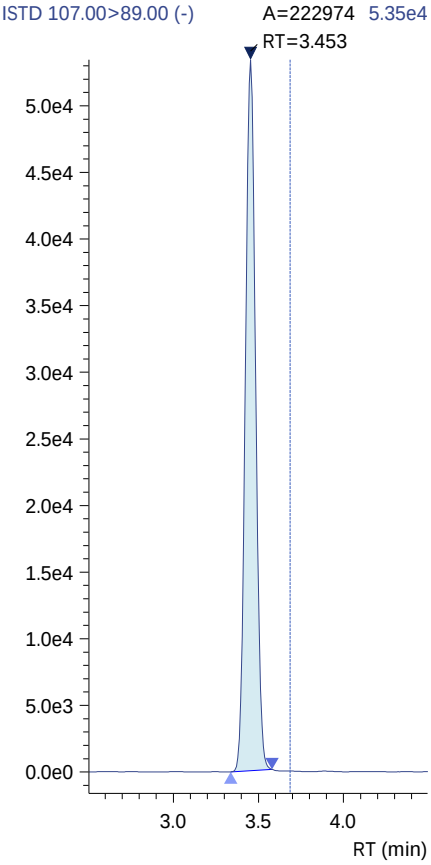
Perchlorate

Conc 0.0589
R#1 28.68 (31.45)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 12:19:50 PM

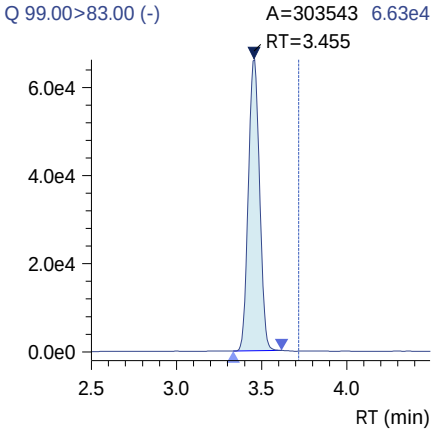
PERCHLORATE7

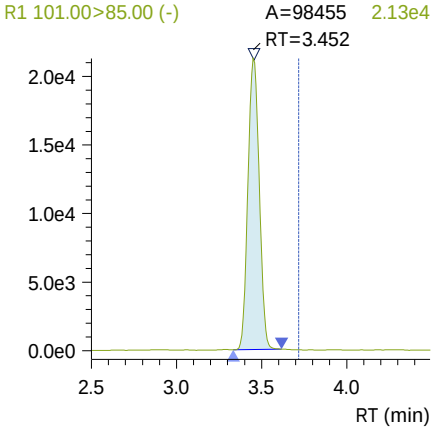
Sample ID: PERCHLORATE7
Date Acquired: 1/27/2023 9:17:43 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230127\20230127-004.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.455	3035 43	185050	10.4 674	ng/mL	101.00 >85.00	32.44	22.02 -40.89
Sodium Perchlorate-18O4_IS	Auto	3.452	1850 50	185050	1.0000	ng/mL	----	----	

Perchlorate

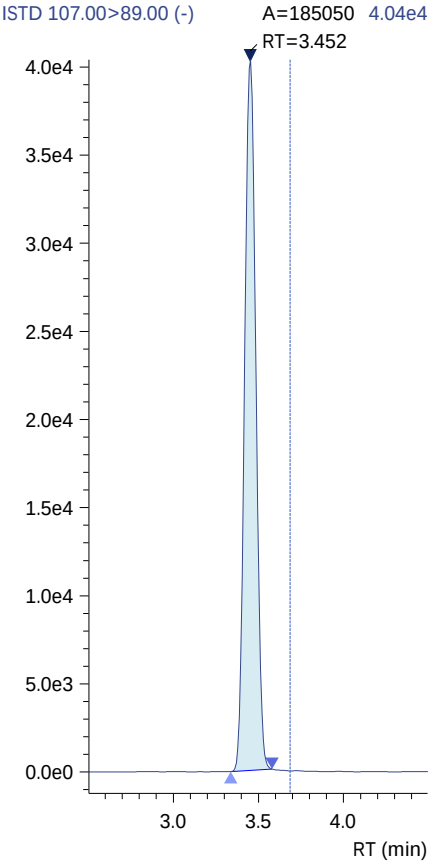
Conc 10.4674
R#1 32.44 (31.45)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 12:19:50 PM

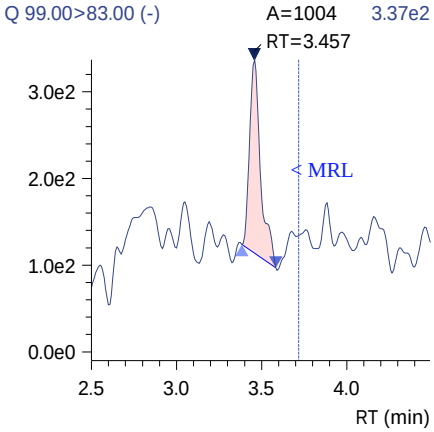
E2300056-005

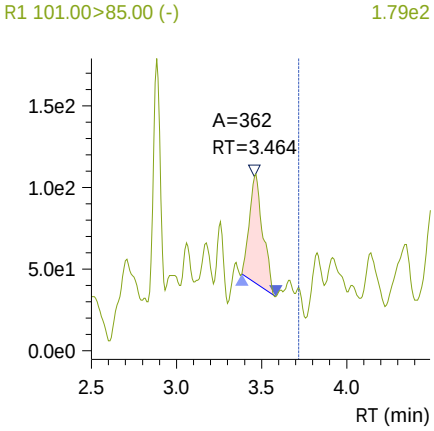
Sample ID: E2300056-005
Date Acquired: 1/27/2023 9:23:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230127\20230127-005.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.457	1004	279193	0.0230	ng/mL	101.00 >85.00	36.00	22.02 -40.89
Sodium Perchlorate-18O4_IS	Auto	3.454	279193	279193	1.0000	ng/mL	----	----	

Perchlorate

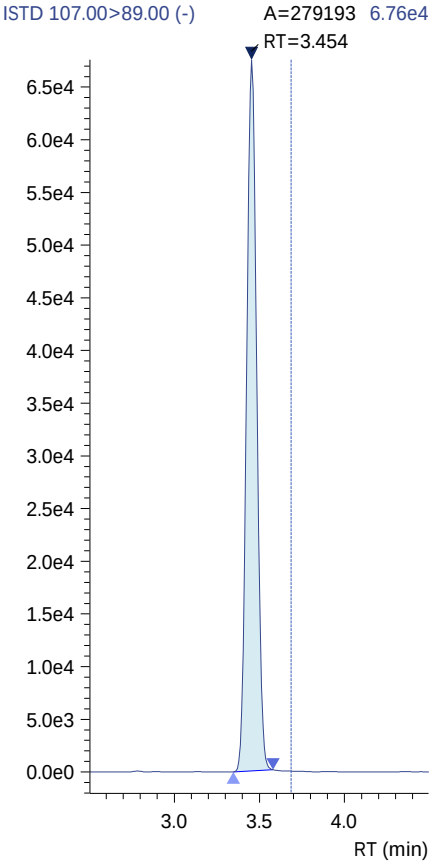
Conc 0.0230
R#1 36.00 (31.45)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/27/2023 12:20:48 PM

Method File: I:\LCMS01\DATA\20230127\20230127.lcm
Project File: I:\LCMS01\DATA\20230127\20230127.damlp

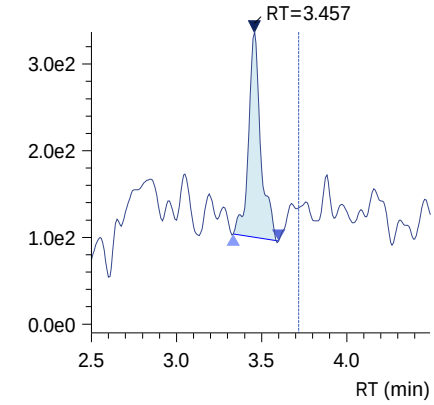
E2300056-005

Sample ID: E2300056-005
Date Acquired: 1/27/2023 9:23:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230127\20230127-005.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 3

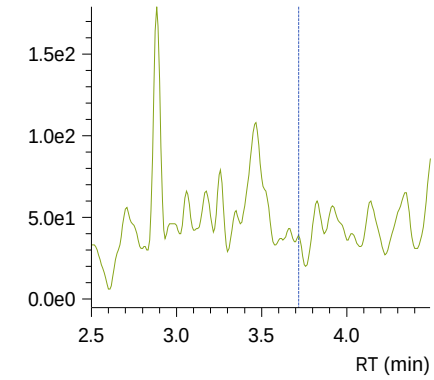
Perchlorate

Conc 0.0270
R#1 0.00 (31.45)

Q 99.00>83.00 (-) A=1183 3.37e2 RT=3.457



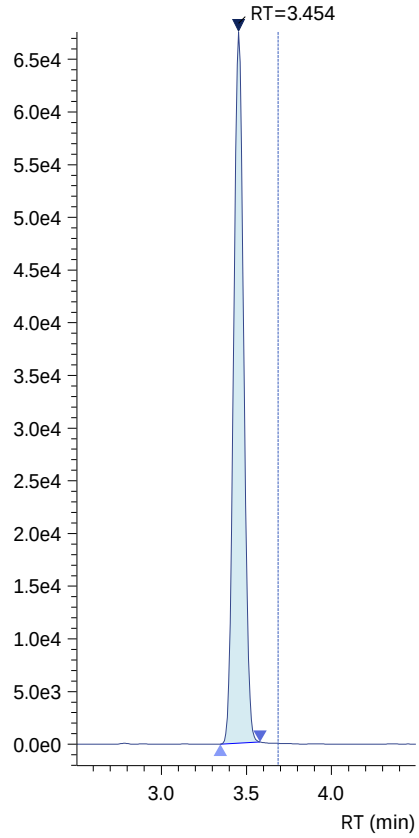
R1 101.00>85.00 (-) 1.79e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=279193 6.76e4 RT=3.454



Insight Report

Printed at 1/27/2023 12:19:50 PM

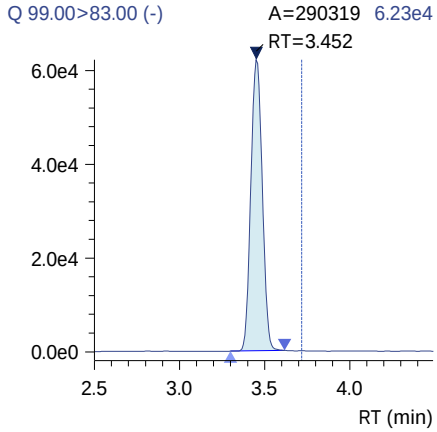
PERCHLORATE7

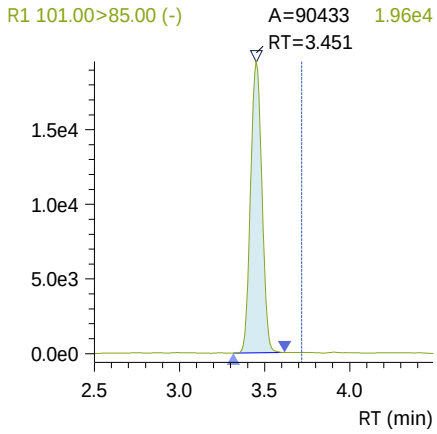
Sample ID: PERCHLORATE7
Date Acquired: 1/27/2023 10:25:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230127\20230127-015.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.452	290319	185247	10.0008	ng/mL	101.00 >85.00	31.15	22.02 -40.89
Sodium Perchlorate-18O4_IS	Auto	3.449	185247	185247	1.0000	ng/mL	----	----	

Perchlorate

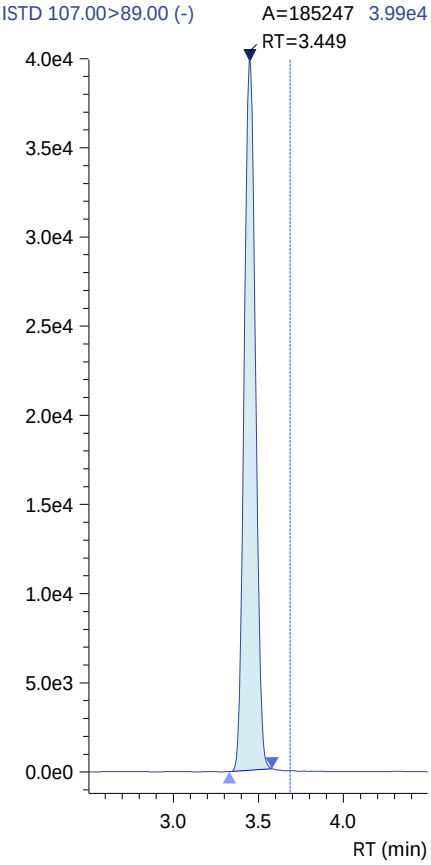
Conc 10.0008
R#1 31.15 (31.45)





Sodium Perchlorate-18O4_IS

Conc 1.0000



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WorkOrder: HS23010986

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

16-Feb-2023

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ALS Group USA, Corp
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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 424237

Raw Data VOA6 426355

Raw Data VOA6 426481

HS23010986-GCSEMI-RSK-175

Form 1 - Sample Results

Form 3A - MS/MSD

Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 6 - ICAL

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Run Log

Raw Data FID-4 322102

Raw Data FID-4 426956

HS23010986 Wet Chemistry

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Cover Page

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Data Summaries

Organic Sample Data

HS23010986 LHAAP 16 January 2023 Final

ALS WO# HS23010986

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February 02, 2023

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS23010986**

Laboratory Results for: **LHAAP 16 January 2023**

Dear Vicki Graves ,

ALS Environmental received 9 sample(s) on Jan 20, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL
Dane J. Wacasey

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23010986

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23010986-01	16WW41-230119	Groundwater		19-Jan-2023 09:00	20-Jan-2023 10:10	☐
HS23010986-02	16RW06-230119	Groundwater		19-Jan-2023 10:10	20-Jan-2023 10:10	☐
HS23010986-03	16RW07-230119	Groundwater		19-Jan-2023 11:15	20-Jan-2023 10:10	☐
HS23010986-04	16WW55-230119	Groundwater		19-Jan-2023 12:05	20-Jan-2023 10:10	☐
HS23010986-05	16WW35-230119	Groundwater		19-Jan-2023 12:55	20-Jan-2023 10:10	☐
HS23010986-06	16WW16-230119	Groundwater		19-Jan-2023 14:30	20-Jan-2023 10:10	☐
HS23010986-07	16WW16-230119-FD	Groundwater		19-Jan-2023 14:30	20-Jan-2023 10:10	☐
HS23010986-08	CG-061422-309	Water	CG-061422-309	19-Jan-2023 08:30	20-Jan-2023 10:10	☐
HS23010986-09	CG-061422-306	Water	CG-061422-306	19-Jan-2023 08:30	20-Jan-2023 10:10	☐

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23010986

Work Order Comments

- The analysis for CO2 by RSK175 was subcontracted to Eurofins in Lancaster, PA. The final report is appended.
- The analysis for Perchlorate was performed by ALS Houston Specialty Lab. The final report is appended.

GC Semivolatiles by Method RSK-175

Batch ID: R426956

Sample ID: HS23010982-05MS

- MS and MSD are for an unrelated sample

Sample ID: 16WW35-230119 (HS23010986-05MS)

- The recovery of the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) associated with the analytes were outside of the established control limits. However, the LCS was within control limits. The recovery of the MS/MSD may be due to sample matrix interference. Methane, Ethane, Ethene

GCMS Volatiles by Method SW8260

Batch ID: R426355

Sample ID: 16WW35-230119 (HS23010986-05)

- Lowest possible dilution due to high concentrations of target analytes.

Sample ID: HS23010982-05MS

- MS and MSD are for an unrelated sample

Batch ID: R426481

Sample ID: HS23010982-02MS

- MS and MSD are for an unrelated sample

WetChemistry by Method SM5310B

Batch ID: R427021

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

WetChemistry by Method SW9056

Batch ID: R426640

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23010986

WetChemistry by Method SW9056

Batch ID: R426893

Sample ID: 16WW16-230119 (HS23010986-06)

- The reporting limit is elevated due to dilution for high concentrations of non-target analytes. (Nitrogen, Nitrate (As N),Nitrogen, Nitrate-Nitrite)

Sample ID: 16WW35-230119 (HS23010986-05MS)

- The recovery of the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) associated with this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS/MSD may be due to sample matrix interference. (Nitrogen, Nitrate-Nitrite)

Sample ID: HS23010982-05MS

- MS and MSD are for an unrelated sample (Nitrogen, Nitrate-Nitrite)

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW41-230119
Collection Date: 19-Jan-2023 09:00

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	24-Jan-2023 15:14
1,1-Dichloroethene	**25**		**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jan-2023 15:14
1,2-Dichloroethane	**4.4**	J	**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jan-2023 15:14
cis-1,2-Dichloroethene	**3,400**		**100**	**500**	**500**	**ug/L**	500	25-Jan-2023 11:51
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	24-Jan-2023 15:14
Trichloroethene	**6,800**		**100**	**500**	**500**	**ug/L**	500	25-Jan-2023 11:51
Vinyl chloride	**720**		**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jan-2023 15:14
Surr: 1,2-Dichloroethane-d4	*95.6*			**0**	*81-118*	*%REC*	*5*	*24-Jan-2023 15:14*
Surr: 1,2-Dichloroethane-d4	*97.3*			**0**	*81-118*	*%REC*	*500*	*25-Jan-2023 11:51*
Surr: 4-Bromofluorobenzene	*100*			**0**	*85-114*	*%REC*	*5*	*24-Jan-2023 15:14*
Surr: 4-Bromofluorobenzene	*99.9*			**0**	*85-114*	*%REC*	*500*	*25-Jan-2023 11:51*
Surr: Dibromofluoromethane	*87.4*			**0**	*80-119*	*%REC*	*5*	*24-Jan-2023 15:14*
Surr: Dibromofluoromethane	*89.7*			**0**	*80-119*	*%REC*	*500*	*25-Jan-2023 11:51*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*5*	*24-Jan-2023 15:14*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*500*	*25-Jan-2023 11:51*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 11:13
Ethene	**0.0320**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 11:13
Methane	**0.0122**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	27-Jan-2023 11:13
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**48.4**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 20:28
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**9,880**		**20.0**	**25.0**	**50.0**	**mg/L**	100	26-Jan-2023 19:47
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	31-Jan-2023 00:27
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jan-2023 15:28
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	26-Jan-2023 08:56

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW06-230119
Collection Date: 19-Jan-2023 10:10

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jan-2023 14:11
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 14:11
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 14:11
cis-1,2-Dichloroethene	**15**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:11
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jan-2023 14:11
Trichloroethene	**160**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:11
Vinyl chloride	**5.1**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:11
Surr: 1,2-Dichloroethane-d4	*99.7*			**0**	*81-118*	*%REC*	*1*	*24-Jan-2023 14:11*
Surr: 4-Bromofluorobenzene	*98.9*			**0**	*85-114*	*%REC*	*1*	*24-Jan-2023 14:11*
Surr: Dibromofluoromethane	*92.2*			**0**	*80-119*	*%REC*	*1*	*24-Jan-2023 14:11*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*24-Jan-2023 14:11*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jan-2023 15:28

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW07-230119
Collection Date: 19-Jan-2023 11:15

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jan-2023 14:32
1,1-Dichloroethene	**14**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:32
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 14:32
cis-1,2-Dichloroethene	**130**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:32
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jan-2023 14:32
Trichloroethene	**2,200**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2023 12:12
Vinyl chloride	**100**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:32
Surr: 1,2-Dichloroethane-d4	*98.1*			**0**	*81-118*	*%REC*	*1*	*24-Jan-2023 14:32*
Surr: 1,2-Dichloroethane-d4	*98.0*			**0**	*81-118*	*%REC*	*50*	*25-Jan-2023 12:12*
Surr: 4-Bromofluorobenzene	*99.8*			**0**	*85-114*	*%REC*	*1*	*24-Jan-2023 14:32*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*50*	*25-Jan-2023 12:12*
Surr: Dibromofluoromethane	*89.8*			**0**	*80-119*	*%REC*	*1*	*24-Jan-2023 14:32*
Surr: Dibromofluoromethane	*90.8*			**0**	*80-119*	*%REC*	*50*	*25-Jan-2023 12:12*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*24-Jan-2023 14:32*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*50*	*25-Jan-2023 12:12*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jan-2023 15:28

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW55-230119
Collection Date: 19-Jan-2023 12:05

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jan-2023 14:53
1,1-Dichloroethene	**8.9**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:53
1,2-Dichloroethane	**2.4**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:53
cis-1,2-Dichloroethene	**500**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2023 12:33
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jan-2023 14:53
Trichloroethene	**2,100**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2023 12:33
Vinyl chloride	**100**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jan-2023 14:53
Surr: 1,2-Dichloroethane-d4	*98.9*			**0**	*81-118*	*%REC*	*1*	*24-Jan-2023 14:53*
Surr: 1,2-Dichloroethane-d4	*98.0*			**0**	*81-118*	*%REC*	*50*	*25-Jan-2023 12:33*
Surr: 4-Bromofluorobenzene	*99.1*			**0**	*85-114*	*%REC*	*1*	*24-Jan-2023 14:53*
Surr: 4-Bromofluorobenzene	*99.8*			**0**	*85-114*	*%REC*	*50*	*25-Jan-2023 12:33*
Surr: Dibromofluoromethane	*90.8*			**0**	*80-119*	*%REC*	*1*	*24-Jan-2023 14:53*
Surr: Dibromofluoromethane	*90.0*			**0**	*80-119*	*%REC*	*50*	*25-Jan-2023 12:33*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*24-Jan-2023 14:53*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*50*	*25-Jan-2023 12:33*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 11:29
Ethene	**0.0206**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 11:29
Methane	**1.10**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	27-Jan-2023 13:37
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**5.56**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 20:42
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**846**		**4.00**	**5.00**	**10.0**	**mg/L**	20	26-Jan-2023 19:53
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	31-Jan-2023 00:32
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jan-2023 15:28
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	26-Jan-2023 08:56

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW35-230119
Collection Date: 19-Jan-2023 12:55

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	24-Jan-2023 18:02
1,1-Dichloroethene	**150**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 18:02
1,2-Dichloroethane	100	U	20	100	100	ug/L	100	24-Jan-2023 18:02
cis-1,2-Dichloroethene	**8,800**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 18:02
Methylene chloride	100	U	40	100	200	ug/L	100	24-Jan-2023 18:02
Trichloroethene	**17,000**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 18:02
Vinyl chloride	**120**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 18:02
Surr: 1,2-Dichloroethane-d4	*99.7*			**0**	*81-118*	*%REC*	*100*	*24-Jan-2023 18:02*
Surr: 4-Bromofluorobenzene	*99.4*			**0**	*85-114*	*%REC*	*100*	*24-Jan-2023 18:02*
Surr: Dibromofluoromethane	*93.0*			**0**	*80-119*	*%REC*	*100*	*24-Jan-2023 18:02*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*100*	*24-Jan-2023 18:02*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	27-Jan-2023 11:37
Ethene	**0.00775**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 11:37
Methane	**0.0696**		**0.000535**	**0.00250**	**0.00250**	**mg/L**	5	27-Jan-2023 13:45
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**42.8**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 20:57
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**9,540**		**20.0**	**25.0**	**50.0**	**mg/L**	100	26-Jan-2023 19:58
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	0.500	U	0.150	0.500	1.00	mg/L	5	31-Jan-2023 00:38
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jan-2023 15:28
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	26-Jan-2023 08:56

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW16-230119
Collection Date: 19-Jan-2023 14:30

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	24-Jan-2023 15:35
1,1-Dichloroethene	**87**	J	**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 15:35
1,2-Dichloroethane	**64**	J	**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 15:35
cis-1,2-Dichloroethene	**24,000**		**200**	**1000**	**1000**	**ug/L**	1000	25-Jan-2023 12:54
Methylene chloride	100	U	40	100	200	ug/L	100	24-Jan-2023 15:35
Trichloroethene	**63,000**		**200**	**1000**	**1000**	**ug/L**	1000	25-Jan-2023 12:54
Vinyl chloride	**520**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 15:35
Surr: 1,2-Dichloroethane-d4	*100*			**0**	*81-118*	*%REC*	*100*	*24-Jan-2023 15:35*
Surr: 1,2-Dichloroethane-d4	*98.8*			**0**	*81-118*	*%REC*	*1000*	*25-Jan-2023 12:54*
Surr: 4-Bromofluorobenzene	*99.7*			**0**	*85-114*	*%REC*	*100*	*24-Jan-2023 15:35*
Surr: 4-Bromofluorobenzene	*98.4*			**0**	*85-114*	*%REC*	*1000*	*25-Jan-2023 12:54*
Surr: Dibromofluoromethane	*92.4*			**0**	*80-119*	*%REC*	*100*	*24-Jan-2023 15:35*
Surr: Dibromofluoromethane	*90.0*			**0**	*80-119*	*%REC*	*1000*	*25-Jan-2023 12:54*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*100*	*24-Jan-2023 15:35*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1000*	*25-Jan-2023 12:54*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.00680**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 12:04
Ethene	**0.0120**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 12:04
Methane	**1.31**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	27-Jan-2023 13:53
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**5.17**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 21:26
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**371**		**2.00**	**2.50**	**5.00**	**mg/L**	10	27-Jan-2023 07:15
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	**0.424**	J	**0.150**	**0.500**	**1.00**	**mg/L**	5	31-Jan-2023 01:31
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jan-2023 15:28
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	26-Jan-2023 08:56

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW16-230119-FD
Collection Date: 19-Jan-2023 14:30

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	24-Jan-2023 15:56
1,1-Dichloroethene	**91**	J	**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 15:56
1,2-Dichloroethane	**63**	J	**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 15:56
cis-1,2-Dichloroethene	**25,000**		**200**	**1000**	**1000**	**ug/L**	1000	25-Jan-2023 13:15
Methylene chloride	100	U	40	100	200	ug/L	100	24-Jan-2023 15:56
Trichloroethene	**63,000**		**200**	**1000**	**1000**	**ug/L**	1000	25-Jan-2023 13:15
Vinyl chloride	**500**		**20**	**100**	**100**	**ug/L**	100	24-Jan-2023 15:56
Surr: 1,2-Dichloroethane-d4	*98.2*			**0**	*81-118*	*%REC*	*100*	*24-Jan-2023 15:56*
Surr: 1,2-Dichloroethane-d4	*97.9*			**0**	*81-118*	*%REC*	*1000*	*25-Jan-2023 13:15*
Surr: 4-Bromofluorobenzene	*99.1*			**0**	*85-114*	*%REC*	*100*	*24-Jan-2023 15:56*
Surr: 4-Bromofluorobenzene	*99.8*			**0**	*85-114*	*%REC*	*1000*	*25-Jan-2023 13:15*
Surr: Dibromofluoromethane	*91.7*			**0**	*80-119*	*%REC*	*100*	*24-Jan-2023 15:56*
Surr: Dibromofluoromethane	*89.8*			**0**	*80-119*	*%REC*	*1000*	*25-Jan-2023 13:15*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*100*	*24-Jan-2023 15:56*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1000*	*25-Jan-2023 13:15*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.00671**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 12:13
Ethene	**0.0112**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	27-Jan-2023 12:13
Methane	**1.33**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	27-Jan-2023 14:03
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**5.05**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 21:39
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Sulfate	**372**		**2.00**	**2.50**	**5.00**	**mg/L**	10	27-Jan-2023 07:21
NITRATE/NITRITE BY IC BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate-Nitrite	**0.450**	J	**0.150**	**0.500**	**1.00**	**mg/L**	5	31-Jan-2023 01:37
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jan-2023 15:28
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	26-Jan-2023 08:56

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: CG-061422-309
Collection Date: 19-Jan-2023 08:30

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jan-2023 13:08
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:08
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:08
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:08
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jan-2023 13:08
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:08
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:08
Surr: 1,2-Dichloroethane-d4	*100*			**0**	*81-118*	*%REC*	*1*	*24-Jan-2023 13:08*
Surr: 4-Bromofluorobenzene	*99.9*			**0**	*85-114*	*%REC*	*1*	*24-Jan-2023 13:08*
Surr: Dibromofluoromethane	*93.3*			**0**	*80-119*	*%REC*	*1*	*24-Jan-2023 13:08*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1*	*24-Jan-2023 13:08*

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: CG-061422-306
Collection Date: 19-Jan-2023 08:30

ANALYTICAL REPORT
WorkOrder:HS23010986
Lab ID:HS23010986-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jan-2023 13:29
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:29
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:29
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:29
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jan-2023 13:29
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:29
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jan-2023 13:29
Surr: 1,2-Dichloroethane-d4	*99.2*			**0**	*81-118*	*%REC*	*1*	*24-Jan-2023 13:29*
Surr: 4-Bromofluorobenzene	*98.1*			**0**	*85-114*	*%REC*	*1*	*24-Jan-2023 13:29*
Surr: Dibromofluoromethane	*92.6*			**0**	*80-119*	*%REC*	*1*	*24-Jan-2023 13:29*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*24-Jan-2023 13:29*

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

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R426355 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23010986-08	CG-061422-309	19 Jan 2023 08:30			24 Jan 2023 13:08	1
HS23010986-09	CG-061422-306	19 Jan 2023 08:30			24 Jan 2023 13:29	1
Batch ID: R426355 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			24 Jan 2023 15:14	5
HS23010986-02	16RW06-230119	19 Jan 2023 10:10			24 Jan 2023 14:11	1
HS23010986-03	16RW07-230119	19 Jan 2023 11:15			24 Jan 2023 14:32	1
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			24 Jan 2023 14:53	1
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			24 Jan 2023 18:02	100
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			24 Jan 2023 15:35	100
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			24 Jan 2023 15:56	100
Batch ID: R426481 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			25 Jan 2023 11:51	500
HS23010986-03	16RW07-230119	19 Jan 2023 11:15			25 Jan 2023 12:12	50
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			25 Jan 2023 12:33	50
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			25 Jan 2023 12:54	1000
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			25 Jan 2023 13:15	1000
Batch ID: R426541 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			26 Jan 2023 08:56	1
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			26 Jan 2023 08:56	1
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			26 Jan 2023 08:56	1
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			26 Jan 2023 08:56	1
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			26 Jan 2023 08:56	1
Batch ID: R426640 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			26 Jan 2023 19:47	100
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			26 Jan 2023 19:53	20
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			26 Jan 2023 19:58	100
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			27 Jan 2023 07:15	10
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			27 Jan 2023 07:21	10
Batch ID: R426709 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			27 Jan 2023 15:28	1
HS23010986-02	16RW06-230119	19 Jan 2023 10:10			27 Jan 2023 15:28	1
HS23010986-03	16RW07-230119	19 Jan 2023 11:15			27 Jan 2023 15:28	1
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			27 Jan 2023 15:28	1
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			27 Jan 2023 15:28	1
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			27 Jan 2023 15:28	1
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			27 Jan 2023 15:28	1

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R426893 (0)	**Test Name :** NITRATE/NITRITE BY IC BY SW9056A				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			31 Jan 2023 00:27	5
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			31 Jan 2023 00:32	5
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			31 Jan 2023 00:38	5
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			31 Jan 2023 01:31	5
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			31 Jan 2023 01:37	5
Batch ID: R426956 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			27 Jan 2023 11:13	1
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			27 Jan 2023 13:37	100
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			27 Jan 2023 11:29	1
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			27 Jan 2023 13:45	5
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			27 Jan 2023 11:37	1
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			27 Jan 2023 13:53	100
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			27 Jan 2023 12:04	1
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			27 Jan 2023 14:03	100
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			27 Jan 2023 12:13	1
Batch ID: R427021 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS23010986-01	16WW41-230119	19 Jan 2023 09:00			30 Jan 2023 20:28	1
HS23010986-04	16WW55-230119	19 Jan 2023 12:05			30 Jan 2023 20:42	1
HS23010986-05	16WW35-230119	19 Jan 2023 12:55			30 Jan 2023 20:57	1
HS23010986-06	16WW16-230119	19 Jan 2023 14:30			30 Jan 2023 21:26	1
HS23010986-07	16WW16-230119-FD	19 Jan 2023 14:30			30 Jan 2023 21:39	1

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426956 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-230127** Units: **mg/L** Analysis Date: **27-Jan-2023 09:29**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098926** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100								U
Ethene	0.000500	0.00100								U
Methane	0.000500	0.000500								U

LCS Sample ID: **LCS-230127** Units: **mg/L** Analysis Date: **27-Jan-2023 09:37**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098927** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0203	0.00100	0.01804	0	112	75 - 125				
Ethene	0.0194	0.00100	0.0168	0	116	75 - 125				
Methane	0.00914	0.000500	0.009647	0	94.8	75 - 125				

MS Sample ID: **HS23010986-05MS** Units: **mg/L** Analysis Date: **27-Jan-2023 11:47**
Client ID: **16WW35-230119** Run ID: **FID-4_426956** SeqNo: **7098940** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0287	0.00100	0.01804	0	159	75 - 125				S
Ethene	0.0282	0.00100	0.0168	0.007751	122	75 - 125				
Methane	0.0610	0.000500	0.009647	0.06470	-38.6	75 - 125				SEO

MS Sample ID: **HS23010982-05MS** Units: **mg/L** Analysis Date: **27-Jan-2023 10:31**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098933** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0458	0.00100	0.01804	0	254	75 - 125				S
Ethene	0.451	0.00100	0.0168	0.4701	-116	75 - 125				SEO
Methane	0.394	0.000500	0.009647	0.4134	-198	75 - 125				SEO

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426956 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MSD Sample ID: **HS23010986-05MSD** Units: **mg/L** Analysis Date: **27-Jan-2023 11:56**
Client ID: **16WW35-230119** Run ID: **FID-4_426956** SeqNo: **7098941** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0274	0.00100	0.01804	0	152	75 - 125	0.02871	4.51	30	S
Ethene	0.0288	0.00100	0.0168	0.007751	125	75 - 125	0.02821	1.92	30	S
Methane	0.0604	0.000500	0.009647	0.06470	-44.3	75 - 125	0.06097	0.904	30	SEO

MSD Sample ID: **HS23010982-05MSD** Units: **mg/L** Analysis Date: **27-Jan-2023 10:40**
Client ID: Run ID: **FID-4_426956** SeqNo: **7098934** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0418	0.00100	0.01804	0	232	75 - 125	0.04578	9.02	30	S
Ethene	0.450	0.00100	0.0168	0.4701	-117	75 - 125	0.4506	0.0421	30	SEO
Methane	0.391	0.000500	0.009647	0.4134	-229	75 - 125	0.3943	0.758	30	SEO

The following samples were analyzed in this batch: HS23010986-01 HS23010986-04 HS23010986-05 HS23010986-06 HS23010986-07

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426355 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230124** Units: **ug/L** Analysis Date: **24-Jan-2023 09:37**
Client ID: Run ID: **VOA6_426355** SeqNo: **7084871** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*49.27*	*1.0*	*50*	*0*	*98.5*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.18*	*1.0*	*50*	*0*	*100*	*85 - 114*				
Surr: Dibromofluoromethane	*46.97*	*1.0*	*50*	*0*	*93.9*	*80 - 119*				
Surr: Toluene-d8	*52.83*	*1.0*	*50*	*0*	*106*	*89 - 112*				

LCS Sample ID: **VLCSW-230124** Units: **ug/L** Analysis Date: **24-Jan-2023 08:55**
Client ID: Run ID: **VOA6_426355** SeqNo: **7084870** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.79	1.0	20	0	98.9	80 - 119				
1,1-Dichloroethene	21.1	1.0	20	0	106	71 - 131				
1,2-Dichloroethane	22.96	1.0	20	0	115	73 - 128				
cis-1,2-Dichloroethene	20.41	1.0	20	0	102	78 - 123				
Methylene chloride	20.26	2.0	20	0	101	74 - 124				
Trichloroethene	21.1	1.0	20	0	106	79 - 123				
Vinyl chloride	20.07	1.0	20	0	100	58 - 137				
Surr: 1,2-Dichloroethane-d4	*55.08*	*1.0*	*50*	*0*	*110*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*49.99*	*1.0*	*50*	*0*	*100.0*	*80 - 119*				
Surr: Toluene-d8	*49.61*	*1.0*	*50*	*0*	*99.2*	*89 - 112*				

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426355 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23010986-05MS** Units: **ug/L** Analysis Date: **24-Jan-2023 18:23**
Client ID: **16WW35-230119** Run ID: **VOA6_426355** SeqNo: **7086553** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1596	100	2000	0	79.8	80 - 119				S
1,1-Dichloroethene	1730	100	2000	149.1	79.1	71 - 131				
1,2-Dichloroethane	1728	100	2000	0	86.4	73 - 128				
cis-1,2-Dichloroethene	9563	100	2000	8811	37.6	78 - 123				SO
Methylene chloride	1374	200	2000	0	68.7	74 - 124				S
Trichloroethene	18120	100	2000	17370	37.4	79 - 123				SO
Vinyl chloride	1622	100	2000	119.2	75.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*4981*	*100*	*5000*	*0*	*99.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*5111*	*100*	*5000*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*4544*	*100*	*5000*	*0*	*90.9*	*80 - 119*				
Surr: Toluene-d8	*5173*	*100*	*5000*	*0*	*103*	*89 - 112*				

MS Sample ID: **HS23010982-05MS** Units: **ug/L** Analysis Date: **24-Jan-2023 11:01**
Client ID: Run ID: **VOA6_426355** SeqNo: **7085373** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1946	100	2000	120.3	91.3	80 - 119				
1,1-Dichloroethene	4826	100	2000	2800	101	71 - 131				
1,2-Dichloroethane	2896	100	2000	945.1	97.6	73 - 128				
cis-1,2-Dichloroethene	480800	100	2000	469000	590	78 - 123				SEO
Methylene chloride	1568	200	2000	0	78.4	74 - 124				
Trichloroethene	401500	100	2000	388000	670	79 - 123				SEO
Vinyl chloride	23960	100	2000	21960	99.9	58 - 137				EO
Surr: 1,2-Dichloroethane-d4	*5000*	*100*	*5000*	*0*	*100.0*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*5184*	*100*	*5000*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*4698*	*100*	*5000*	*0*	*94.0*	*80 - 119*				
Surr: Toluene-d8	*5138*	*100*	*5000*	*0*	*103*	*89 - 112*				

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426355 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23010986-05MSD** Units: **ug/L** Analysis Date: **24-Jan-2023 18:44**
Client ID: **16WW35-230119** Run ID: **VOA6_426355** SeqNo: **7102544** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1488	100	2000	0	74.4	80 - 119	1596	6.98	20	S
1,1-Dichloroethene	1567	100	2000	149.1	70.9	71 - 131	1730	9.91	20	S
1,2-Dichloroethane	1684	100	2000	0	84.2	73 - 128	1728	2.6	20	
cis-1,2-Dichloroethene	9234	100	2000	8811	21.1	78 - 123	9563	3.5	20	SO
Methylene chloride	1318	200	2000	0	65.9	74 - 124	1374	4.19	20	S
Trichloroethene	17230	100	2000	17370	-7.24	79 - 123	18120	5.05	20	SO
Vinyl chloride	1462	100	2000	119.2	67.1	58 - 137	1622	10.4	20	
Surr: 1,2-Dichloroethane-d4	*4925*	*100*	*5000*	*0*	*98.5*	*81 - 118*	*4981*	*1.13*	*20*	
Surr: 4-Bromofluorobenzene	*5115*	*100*	*5000*	*0*	*102*	*85 - 114*	*5111*	*0.0871*	*20*	
Surr: Dibromofluoromethane	*4507*	*100*	*5000*	*0*	*90.1*	*80 - 119*	*4544*	*0.815*	*20*	
Surr: Toluene-d8	*5153*	*100*	*5000*	*0*	*103*	*89 - 112*	*5173*	*0.394*	*20*	

MSD Sample ID: **HS23010982-05MSD** Units: **ug/L** Analysis Date: **24-Jan-2023 11:22**
Client ID: Run ID: **VOA6_426355** SeqNo: **7085374** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1872	100	2000	120.3	87.6	80 - 119	1946	3.83	20	
1,1-Dichloroethene	4530	100	2000	2800	86.5	71 - 131	4826	6.33	20	
1,2-Dichloroethane	2828	100	2000	945.1	94.1	73 - 128	2896	2.38	20	
cis-1,2-Dichloroethene	470700	100	2000	469000	85.0	78 - 123	480800	2.12	20	EO
Methylene chloride	1502	200	2000	0	75.1	74 - 124	1568	4.35	20	
Trichloroethene	391500	100	2000	388000	175	79 - 123	401500	2.5	20	SEO
Vinyl chloride	22580	100	2000	21960	30.6	58 - 137	23960	5.96	20	SEO
Surr: 1,2-Dichloroethane-d4	*5037*	*100*	*5000*	*0*	*101*	*81 - 118*	*5000*	*0.739*	*20*	
Surr: 4-Bromofluorobenzene	*5146*	*100*	*5000*	*0*	*103*	*85 - 114*	*5184*	*0.745*	*20*	
Surr: Dibromofluoromethane	*4688*	*100*	*5000*	*0*	*93.8*	*80 - 119*	*4698*	*0.207*	*20*	
Surr: Toluene-d8	*5132*	*100*	*5000*	*0*	*103*	*89 - 112*	*5138*	*0.11*	*20*	

The following samples were analyzed in this batch:

HS23010986-01	HS23010986-02	HS23010986-03	HS23010986-04
HS23010986-05	HS23010986-06	HS23010986-07	HS23010986-08
HS23010986-09			

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426481 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230125** Units: **ug/L** Analysis Date: **25-Jan-2023 09:24**
Client ID: Run ID: **VOA6_426481** SeqNo: **7087539** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	1.0	1.0								U
Trichloroethene	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*48.66*	*1.0*	*50*	*0*	*97.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.26*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*45.56*	*1.0*	*50*	*0*	*91.1*	*80 - 119*				
Surr: Toluene-d8	*52.59*	*1.0*	*50*	*0*	*105*	*89 - 112*				

LCS Sample ID: **VLCSW-230125** Units: **ug/L** Analysis Date: **25-Jan-2023 08:42**
Client ID: Run ID: **VOA6_426481** SeqNo: **7087538** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	17.55	1.0	20	0	87.8	78 - 123				
Trichloroethene	20.24	1.0	20	0	101	79 - 123				
Surr: 1,2-Dichloroethane-d4	*57.18*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*53.58*	*1.0*	*50*	*0*	*107*	*85 - 114*				
Surr: Dibromofluoromethane	*50.07*	*1.0*	*50*	*0*	*100*	*80 - 119*				
Surr: Toluene-d8	*51.82*	*1.0*	*50*	*0*	*104*	*89 - 112*				

MS Sample ID: **HS23010982-02MS** Units: **ug/L** Analysis Date: **25-Jan-2023 10:27**
Client ID: Run ID: **VOA6_426481** SeqNo: **7087542** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	1610	100	2000	145.3	73.2	78 - 123				S
Trichloroethene	5232	100	2000	3310	96.1	79 - 123				
Surr: 1,2-Dichloroethane-d4	*4875*	*100*	*5000*	*0*	*97.5*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*5159*	*100*	*5000*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*4446*	*100*	*5000*	*0*	*88.9*	*80 - 119*				
Surr: Toluene-d8	*5207*	*100*	*5000*	*0*	*104*	*89 - 112*				

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426481 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23010982-02MSD** Units: **ug/L** Analysis Date: **25-Jan-2023 10:48**
Client ID: Run ID: **VOA6_426481** SeqNo: **7087543** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	1504	100	2000	145.3	67.9	78 - 123	1610	6.8	20	S
Trichloroethene	4875	100	2000	3310	78.3	79 - 123	5232	7.05	20	S
Surr: 1,2-Dichloroethane-d4	*4839*	*100*	*5000*	*0*	*96.8*	*81 - 118*	*4875*	*0.755*	*20*	
Surr: 4-Bromofluorobenzene	*5099*	*100*	*5000*	*0*	*102*	*85 - 114*	*5159*	*1.18*	*20*	
Surr: Dibromofluoromethane	*4465*	*100*	*5000*	*0*	*89.3*	*80 - 119*	*4446*	*0.446*	*20*	
Surr: Toluene-d8	*5214*	*100*	*5000*	*0*	*104*	*89 - 112*	*5207*	*0.12*	*20*	

The following samples were analyzed in this batch: HS23010986-01 HS23010986-03 HS23010986-04 HS23010986-06 HS23010986-07

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426640 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY SW9056A**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **26-Jan-2023 15:43**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091194** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	0.250	0.500								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **26-Jan-2023 15:49**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091195** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	20.35	0.500	20	0	102	80 - 120				

MS Sample ID: **HS23011253-02MS** Units: **mg/L** Analysis Date: **26-Jan-2023 16:01**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091197** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	25.15	0.500	10	15.93	92.2	80 - 120				

MSD Sample ID: **HS23011253-02MSD** Units: **mg/L** Analysis Date: **26-Jan-2023 16:07**
Client ID: Run ID: **ICS-Integrion_426640** SeqNo: **7091198** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	24.38	0.500	10	15.93	84.4	80 - 120	25.15	3.11	20	

The following samples were analyzed in this batch: HS23010986-01 HS23010986-04 HS23010986-05 HS23010986-06 HS23010986-07

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R426893 (0) **Instrument: ICS-Integrion** **Method: NITRATE/NITRITE BY IC BY SW9056A**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **30-Jan-2023 22:25**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097679** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	0.100	0.200								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **30-Jan-2023 22:54**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097680** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	8.356	0.200	8	0	104	90 - 110				

MS Sample ID: **HS23010986-05MS** Units: **mg/L** Analysis Date: **31-Jan-2023 00:44**
Client ID: **16WW35-230119** Run ID: **ICS-Integrion_426893** SeqNo: **7097693** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	7.607	1.00	20	0	38.0	80 - 120				S

MS Sample ID: **HS23010982-05MS** Units: **mg/L** Analysis Date: **31-Jan-2023 00:15**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097688** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	12.21	1.00	20	0	61.0	80 - 120				S

MSD Sample ID: **HS23010986-05MSD** Units: **mg/L** Analysis Date: **31-Jan-2023 00:50**
Client ID: **16WW35-230119** Run ID: **ICS-Integrion_426893** SeqNo: **7097694** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	7.599	1.00	20	0	38.0	80 - 120	7.607	0.105	20	S

MSD Sample ID: **HS23010982-05MSD** Units: **mg/L** Analysis Date: **31-Jan-2023 00:21**
Client ID: Run ID: **ICS-Integrion_426893** SeqNo: **7097689** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	12.44	1.00	20	0	62.2	80 - 120	12.21	1.85	20	S

The following samples were analyzed in this batch: HS23010986-01 HS23010986-04 HS23010986-05 HS23010986-06 HS23010986-07

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23010986

QC BATCH REPORT

Batch ID: R427021 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 19:46**
Client ID: Run ID: **TOC_05_427021** SeqNo: **7100674** PrepDate: DF: **1**

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

LCS Sample ID: **LCS-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 20:00**
Client ID: Run ID: **TOC_05_427021** SeqNo: **7100675** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.43	1.00	10	0	104	85 - 115				

LCSD Sample ID: **LCSD-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 20:13**
Client ID: Run ID: **TOC_05_427021** SeqNo: **7100676** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.36	1.00	10	0	104	85 - 115	10.43	0.673	20	

MS Sample ID: **HS23010986-05MS** Units: **mg/L** Analysis Date: **30-Jan-2023 21:12**
Client ID: **16WW35-230119** Run ID: **TOC_05_427021** SeqNo: **7100680** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	53.03	1.00	10	42.78	102	80 - 120				EO

The following samples were analyzed in this batch: HS23010986-01 HS23010986-04 HS23010986-05 HS23010986-06 HS23010986-07

ALS Houston, US Date: 02-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23010986**

QUALIFIERS, ACRONYMS, UNITS

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

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

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	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	624-2023	31-Dec-2023
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: 02-Feb-23

Sample Receipt Checklist

Work Order ID: HS23010986 **Date/Time Received:** 20-Jan-2023 10:10

Client Name: CBI-Houston **Received by:** Malcolm Burleson

Completed By: /S/ Paresh M. Giga (eSignature) 20-Jan-2023 14:35 (Date/Time) **Reviewed by:** /S/ Dane J. Wacasey (eSignature) 31-Jan-2023 18:36 (Date/Time)

Matrices: GW Carrier name: FedEx Priority Overnight

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:none
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.2C/0.7C U/c	IR31
Cooler(s)/Kit(s):	49116	
Date/Time sample(s) sent to storage:	1/20/23 16:20	

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

Login Notes: NO3 rec'd in neat bottles=pH 5. Due to instrument failure and lack of local subcontract option to meet holding time, a split was preserved for NO3/NO2.
Preserved 1ml H2SO4 (Lot 3100607012) 1/20/23@14:00. Final pH (1).

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX, 77099 (281) 575-2190 ATTN: Dane Wacasey

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

Project No. 501032

Job: **LHAAP 16 January 2023**

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Manganese by SW6020A				Remarks (Preservatives, etc.)	Lab I.D.#
16WW41-230119/0900	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						
16RWD6-230119/1010	GW	1-19-23		4	✓					✓						
16RWD7-230119/1115	GW	1-19-23		4	✓					✓						
16WW55-230119/1205	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						
16WW35-230119/1255	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						
16WW35-230119-MS/1255	GW	1-19-23	MS	13	✓	✓	✓	✓	✓	✓						
16WW35-230119-MSD/1255	GW	1-19-23	MSD	13	✓	✓	✓	✓	✓	✓						
16WW16-230119/1430	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
	1-19-23	1700								01-20-2023	1010

For Lab Use Only

Received At Lab By:

Date	Time	Temp of Container	Seal No.	Condition
		4.6570		IR3 1 3.0kg -0 SC

Remarks:

HS23010986

Aptim Environmental & Infrastucture. Inc.
Longhorn Army Ammunition Plant 16 January 2023

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX, 77099 (281) 575-2190 ATTN: Dane Wacasey

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

Project No. 501032

Job: **LHAAP 16 January 2023**

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Manganese by SW6020A	Remarks (Preservatives, etc.)	Lab I.D.#
16WW16-230119-FD/1430	GW	1-19-23	FD	13	✓	✓	✓	✓	✓	✓			
0830 / Tr. P Blank CG-061423-TB	TB	1-19-23	/	2	✓								
CG-061422-306/0830	TB	1-19-23	/	2	✓								

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
	1-19-23	1700								01/20/2023	10:10

For Lab Use Only

Received At Lab By:	Date	Time	Temp of Container	Seal No.	Condition
			4.6°C		IR31 3.0 0.5C

Remarks:

HS23010986

Aptim Environmental & Infrastucture, Inc.
Longhorn Army Ammunition Plant 16 January 2023

(Word) S:\1-ces\Forms\Chain of Custody - BiWeekly

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Project: APTIM
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KARNACK, TEXAS

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P.O. Number:

Field Sample I.D. / Time	Sample Matrix	Date	MS / MSD	No. OF CONTAINERS	VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Mangemese by SW6020A				Remarks (Preservatives, etc.)	Lab I.D.#
16WW41-230119/0900	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						
16RWD6-230119/1010	GW	1-19-23		4	✓					✓						
16RWD7-230119/1115	GW	1-19-23		4	✓					✓						
16WW55-230119/1205	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						
16WW35-230119/1255	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						
16WW35-230119-MS/1255	GW	1-19-23	MS	13	✓	✓	✓	✓	✓	✓						
16WW35-230119-MSD/1255	GW	1-19-23	MSD	13	✓	✓	✓	✓	✓	✓						
16WW16-230119/1430	GW	1-19-23		13	✓	✓	✓	✓	✓	✓						

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time

For Lab Use Only

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

Remarks:

(Word) S:\1-esh\Forms\Chain of Custody - BiWeekly

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd, Suite 210 Houston, TX, 77099 (281) 575-2190 ATTN: Dane Wacasey

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

Project No. 501032

Job: **LHAAP 16 January 2023**

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Manganese by SW6020A				Remarks (Preservatives, etc.)	Lab I.D.#
					Analyses											
LkWW16-230119-FD/1430	GW	1-19-23	FD	13	✓	✓	✓	✓	✓	✓						
CG-061422-309/0800	TB	1-19-23	✓	3	✓											
CG-061422-306/0830	TB	1-19-23	✓	3	✓											

Additional Remarks: **Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com**

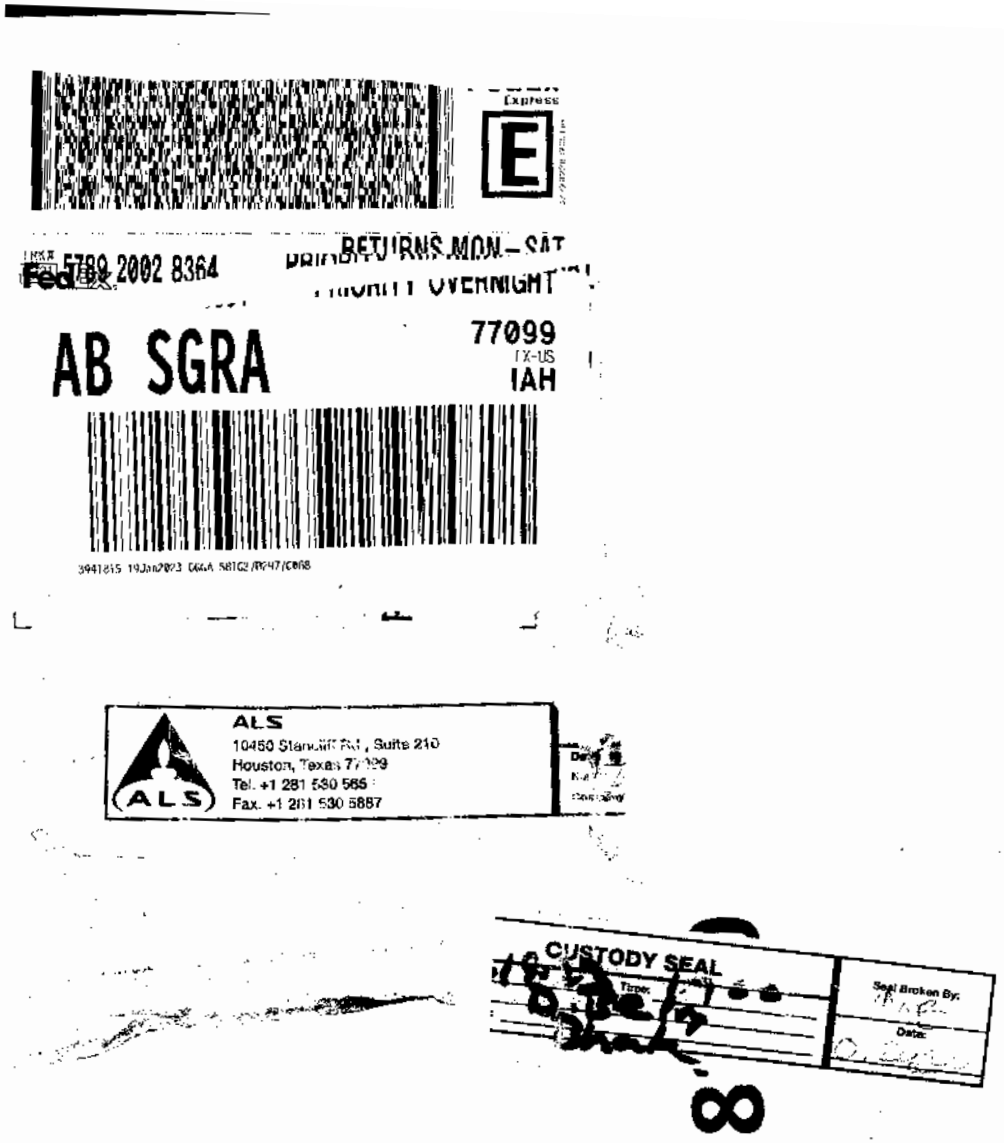
Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
	1-19-23	1700									

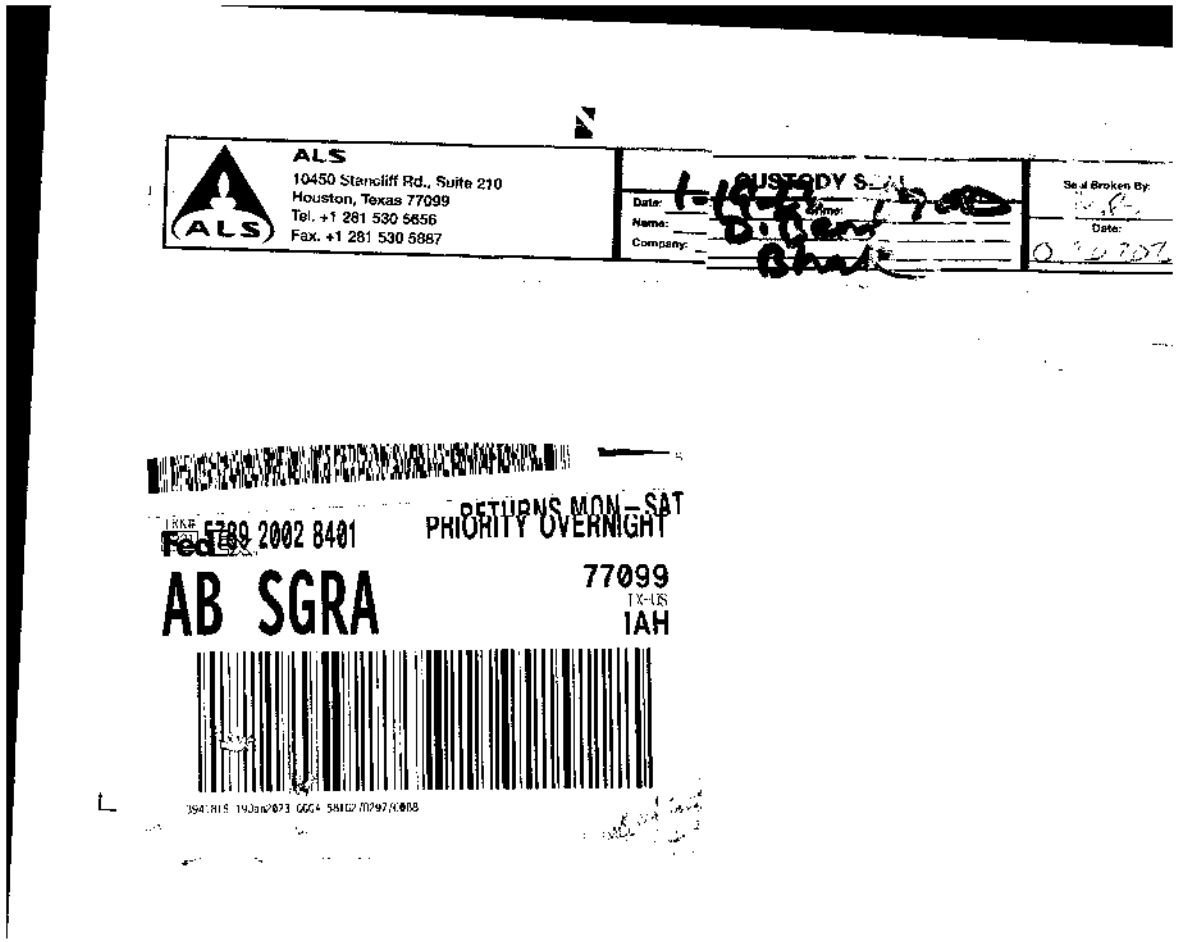
For Lab Use Only

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

Remarks:

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly


Express
E
5788 2002 8364
RETURNS MON – SAT
77099
TX-US
IAH
AB SGRA
ALS
10450 Stanc
Houston, Texas 77
Tel. +1 281 530 56
Fax. +1 281 530 5887
CUSTODY SEAL
Seal Broken By:
Date:
8



ALS
10450 Stanliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY S...
Date:
Name:
Company:
Seal Broken By:
Date:

FedEx 5789 2002 8401
RETURNS MON – SAT
PRIORITY OVERNIGHT
AB SGRA
77099
TX-US
IAH

January 27, 2023 Service Request No:E2300053

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23010986

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 23, 2023
For your reference, these analyses have been assigned our service request number **E2300053.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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.:**	E2200053
Project:	HS23010986	**Date Received:**	01/23/23
Sample Matrix:	Ground 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 01/23/23.

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:

EQ2300026: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. MS/DMS results flagged with a pound (#) indicate the control criteria is not applicable.

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:**E2300053
Project: HS23010986

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300053-001	16WW41-230119	1/19/2023	0900
E2300053-002	16RW06-230119	1/19/2023	1010
E2300053-003	16RW07-230119	1/19/2023	1115
E2300053-004	16WW55-230119	1/19/2023	1205
E2300053-005	16WW35-230119	1/19/2023	1255
E2300053-006	16WW16-230119	1/19/2023	1430
E2300053-007	16WW16-230119-FD	1/19/2023	1430

Service Request Summary

Folder #: **E2300053**
Client Name: ALS Environmental - US
Project Name: HS23010986
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 01/23/23
Internal Due Date: 2/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23010986
EDD: EQUIS
EFWEDD_LHAAP

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300053-001	16WW41-230119	Ground Water	01/19/23 0900	**IV**
E2300053-002	16RW06-230119	Ground Water	01/19/23 1010	**IV**
E2300053-003	16RW07-230119	Ground Water	01/19/23 1115	**IV**
E2300053-004	16WW55-230119	Ground Water	01/19/23 1205	**IV**
E2300053-005	16WW35-230119	Ground Water	01/19/23 1255	**IV**
E2300053-006	16WW16-230119	Ground Water	01/19/23 1430	**IV**
E2300053-007	16WW16-230119-FD	Ground Water	01/19/23 1430	**IV**

Service Request Summary

Folder #: **E2300053**
Client Name: ALS Environmental - US
Project Name: HS23010986
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 01/23/23
Internal Due Date: 2/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23010986
EDD: EQUIS
EFWEDD_LHAAP

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	6	IV Due 2/10
Semivoa GCMS	ClO4 DOD/6850	1	MS/MSD

Data Qualifiers

Lab Standard

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

Data Qualifiers

Lab Standard

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

ALS Laboratory Group

Acronyms

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

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

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	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	LA028-2023	12/31/2023
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	2368363	12/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

ALS Environmental - Houston 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: **Dept of Defense** **COC ID: 20794**

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:	HS23010986
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	HS23010986-01	16WW41-230119	Groundwater	19 Jan 2023 09:00
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
2.	HS23010986-02	16RW06-230119	Groundwater	19 Jan 2023 10:10
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
3.	HS23010986-03	16RW07-230119	Groundwater	19 Jan 2023 11:15
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
4.	HS23010986-04	16WW55-230119	Groundwater	19 Jan 2023 12:05
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
5.	HS23010986-05	16WW35-230119	Groundwater	19 Jan 2023 12:55
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
6.	HS23010986-06	16WW16-230119	Groundwater	19 Jan 2023 14:30
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023
7.	HS23010986-07	16WW16-230119-FD	Groundwater	19 Jan 2023 14:30
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			03 Feb 2023

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20794**

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS23010986-05 = ms/msd

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 1-24-23 1200

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist JG

Client/Project ALS

Thermometer ID IR31

Date/Time Received: 1-23-23 Initials: CG Date/Time Logged in: 1-23-23 Initials CG

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

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

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

Were they intact? ○ Yes ○ No ◉ N/A

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

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

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

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		1-23-23	1100	CG	3.7	☑
						☐
						☐
						☐

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:

HS-HRMSCoolerReceipt R1.0

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#: 413582 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/26/23 08:50

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300053-001	16WW41-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300053-002	16RW06-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300053-003	16RW07-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300053-004	16WW55-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300053-005	16WW35-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300053-006	16WW16-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300053-007	16WW16-230119-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300056-001	16WW48-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300056-002	16RW04-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300056-003	16IW09-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300056-004	16IW20-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300056-005	16EW02-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300056-006	16EW03-230119	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300080-001	LH18/24-SP650_012523_AIX	.01	6850/ClO4 DOD			Water	10mL	
15	E2300080-002	LH18/24-SP650_012523_BIX	.01	6850/ClO4 DOD			Water	10mL	
16	EQ2300026-01	MB		6850/ClO4 DOD			Liquid	10mL	
17	EQ2300026-02	LCS		6850/ClO4 DOD			Liquid	10mL	
18	EQ2300026-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
19	EQ2300026-04	16EW02-230119 MS	.01	6850/ClO4 DOD			Liquid	10mL	
20	EQ2300026-05	16EW02-230119 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
21	EQ2300026-06	16WW35-230119 MS	.01	6850/ClO4 DOD			Liquid	10mL	
22	EQ2300026-07	16WW35-230119 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
23	R2300316-004	2301091027A BLM-17-550	.01	6850/ClO4			Water	10mL	
24	R2300316-009	2301091456A BLM-15-305	.01	6850/ClO4			Water	10mL	
25	R2300316-014	2301101352Y PL-6-1195	.01	6850/ClO4			Water	10mL	
26	R2300519-005	2301170958A BLM-18-430	.01	6850/ClO4			Water	10mL	
27	R2300519-010	2301171442A 400-A-151	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 226778 Logbook Ref: Perchlorate Internal Standard Expires On: 05/31/2023

E2300053-001	100.00µL	E2300053-002	100.00µL	E2300053-003	100.00µL	E2300053-004	100.00µL	E2300053-005	100.00µL	E2300053-006	100.00µL
E2300053-007	100.00µL	E2300056-001	100.00µL	E2300056-002	100.00µL	E2300056-003	100.00µL	E2300056-004	100.00µL	E2300056-005	100.00µL
E2300056-006	100.00µL	E2300080-001	100.00µL	E2300080-002	100.00µL	EQ2300026-01	100.00µL	EQ2300026-01	100.00µL	EQ2300026-02	1.00µL
EQ2300026-02	1.00µL	EQ2300026-03	1.00µL	EQ2300026-03	1.00µL	EQ2300026-04	1.00µL	EQ2300026-05	1.00µL	EQ2300026-06	1.00µL

Preparation Information Benchsheet

Prep Run#: 413582 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/26/23 08:50

EQ2300026-07	1.00µL	R2300316-004	100.00µL	R2300316-009	100.00µL	R2300316-014	100.00µL	R2300519-005	100.00µL	R2300519-010	100.00µL

Name: Perchlorate Intermediate Stock1 Inventory ID 227236 Logbook Ref: Perchlorate (1st Source) Expires On: 07/31/2023

EQ2300026-02	100.00µL	EQ2300026-02	100.00µL	EQ2300026-03	100.00µL	EQ2300026-03	100.00µL	EQ2300026-04	100.00µL	EQ2300026-05	100.00µL
EQ2300026-06	100.00µL	EQ2300026-07	100.00µL								

Preparation Materials

Water HPLC Grade	01/04/2023 Water (226857)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (224414)
6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)	6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)		

Preparation Steps

Step: Preparation
Started: 1/26/23 08:50
Finished: 1/26/23 09:50
By: XMI
Comments

Comments: _____

Reviewed By: TW Date: 01/26/23

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:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 0900
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW41-230119	**Units:**	µg/L
Lab Code:	E2300053-001	**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	**11.0**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 13:06	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1010
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16RW06-230119	**Units:**	µg/L
Lab Code:	E2300053-002	**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	1/26/23	1/26/23 13:12	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1115
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16RW07-230119	**Units:**	µg/L
Lab Code:	E2300053-003	**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	**0.633**		0.100	0.0500	0.0250	1	1/26/23	1/26/23 13:17	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1205
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW55-230119	**Units:**	µg/L
Lab Code:	E2300053-004	**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	**55.5**		1.00	0.500	0.250	10	1/26/23	1/26/23 13:22	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1255
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW35-230119	**Units:**	µg/L
Lab Code:	E2300053-005	**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	**94.9**		1.00	0.500	0.250	10	1/26/23	1/26/23 13:28	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1430
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW16-230119	**Units:**	µg/L
Lab Code:	E2300053-006	**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	**630**		5.00	2.50	1.25	50	1/26/23	1/26/23 14:33	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1430
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW16-230119-FD	**Units:**	µg/L
Lab Code:	E2300053-007	**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	**650**		5.00	2.50	1.25	50	1/26/23	1/26/23 14:38	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300026-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:44	413582	792728	

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: HS23010986
Sample Matrix: Ground Water

Service Request: E2300053
Date Analyzed: 1/26/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 413582

	Lab Control Sample EQ2300026-02			Duplicate Lab Control Sample EQ2300026-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0868	0.100	87	0.0936	0.100	94	84 - 119	8	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:**	E2300053
Project:	HS23010986	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300026-02	**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	**0.0868**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:50	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300026-03	**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	**0.0936**	J	0.100	0.0500	0.0250	1	1/26/23	1/26/23 11:55	413582	792728	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
		Date Analyzed:	1/26/23

Matrix Spike Summary

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

Sample Name:	16WW35-230119	**Units:**	µg/L
Lab Code:	E2300053-005	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW35-230119MS				16WW35-230119DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2300026-06				EQ2300026-07					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	94.9	96.2	0.100	1293	#	102	0.100	6906	#	84 - 119	6	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:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1255
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW35-230119	**Units:**	µg/L
Lab Code:	EQ2300026-06	**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	**96.2**	E	0.100	0.0500	0.0250	1	1/26/23	1/26/23 14:43	413582	792728	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300053
Project:	HS23010986	**Date Collected:**	1/19/23 1255
Sample Matrix:	Ground Water	**Date Received:**	1/23/23
Sample Name:	16WW35-230119	**Units:**	µg/L
Lab Code:	EQ2300026-07	**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	**102**	E	0.100	0.0500	0.0250	1	1/26/23	1/26/23 14:49	413582	792728	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dane Wacasey
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston, Texas 77099

Generated 1/26/2023 6:27:28 AM

JOB DESCRIPTION

HS23010986

JOB NUMBER

410-113148-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

my EOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
1/26/2023 6:27:28 AM

Authorized for release by
Kelly Bauer, Project Manager
Kelly.Bauer@et.eurofinsus.com
(717)556-7262

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Job ID: 410-113148-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-113148-1

Receipt
The samples were received on 1/24/2023 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC VOA
Method RSK_175_CO2_D5: The continuing calibration verification (CCV) associated with batch 410-338435 recovered outside the 15% difference limit for Carbon dioxide. The CCV was confirmed 2 times and were within the control limits ; therefore, the data has been reported. The following items are affected: HS23010986-07 (410-113148-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Client Sample ID: HS23010986-01 — Lab Sample ID: 410-113148-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M	12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-04 — Lab Sample ID: 410-113148-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	89000		12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-05 — Lab Sample ID: 410-113148-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	130000	J1	12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-06 — Lab Sample ID: 410-113148-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	97000		12000	2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-07 — Lab Sample ID: 410-113148-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	92000	Q cn	12000	2600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Client Sample ID: HS23010986-01
Lab Sample ID: 410-113148-1

Date Collected: 01/19/23 09:00
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	170000	M	12000	2600	ug/L		01/25/23 08:22	01/25/23 09:00	1

Client Sample ID: HS23010986-04
Lab Sample ID: 410-113148-2

Date Collected: 01/19/23 12:05
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	89000		12000	2600	ug/L		01/25/23 08:22	01/25/23 09:08	1

Client Sample ID: HS23010986-05
Lab Sample ID: 410-113148-3

Date Collected: 01/19/23 12:55
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	130000	J1	12000	2600	ug/L		01/25/23 08:22	01/25/23 09:16	1

Client Sample ID: HS23010986-06
Lab Sample ID: 410-113148-4

Date Collected: 01/19/23 14:30
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	97000		12000	2600	ug/L		01/25/23 08:22	01/25/23 09:38	1

Client Sample ID: HS23010986-07
Lab Sample ID: 410-113148-5

Date Collected: 01/19/23 14:30
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	92000	Q cn	12000	2600	ug/L		01/25/23 08:22	01/25/23 09:59	1

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-338469/1-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 338469

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	2600	U	12000	2600	ug/L		01/25/23 08:22	01/25/23 08:34	1

Lab Sample ID: LCS 410-338469/2-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 338469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide			35800	32400		ug/L		90	80 - 122		

Lab Sample ID: 410-113148-3 MS
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010986-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide	130000	J1	35800	171000	M J1	ug/L		128	80 - 122		

Lab Sample ID: 410-113148-3 MSD
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010986-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	130000	J1	35800	134000	J1	ug/L		24	80 - 122	24	30

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

GC VOA

Analysis Batch: 338435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113148-1	HS23010986-01	Total/NA	Water	RSK-175	338469
410-113148-2	HS23010986-04	Total/NA	Water	RSK-175	338469
410-113148-3	HS23010986-05	Total/NA	Water	RSK-175	338469
410-113148-4	HS23010986-06	Total/NA	Water	RSK-175	338469
410-113148-5	HS23010986-07	Total/NA	Water	RSK-175	338469
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	338469
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	338469
410-113148-3 MS	HS23010986-05	Total/NA	Water	RSK-175	338469
410-113148-3 MSD	HS23010986-05	Total/NA	Water	RSK-175	338469

Prep Batch: 338469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113148-1	HS23010986-01	Total/NA	Water	RSK-175	
410-113148-2	HS23010986-04	Total/NA	Water	RSK-175	
410-113148-3	HS23010986-05	Total/NA	Water	RSK-175	
410-113148-4	HS23010986-06	Total/NA	Water	RSK-175	
410-113148-5	HS23010986-07	Total/NA	Water	RSK-175	
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-113148-3 MS	HS23010986-05	Total/NA	Water	RSK-175	
410-113148-3 MSD	HS23010986-05	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Job ID: 410-113148-1
Project/Site: HS23010986

Client Sample ID: HS23010986-01
Lab Sample ID: 410-113148-1
Date Collected: 01/19/23 09:00
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:00

Client Sample ID: HS23010986-04
Lab Sample ID: 410-113148-2
Date Collected: 01/19/23 12:05
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:08

Client Sample ID: HS23010986-05
Lab Sample ID: 410-113148-3
Date Collected: 01/19/23 12:55
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:16

Client Sample ID: HS23010986-06
Lab Sample ID: 410-113148-4
Date Collected: 01/19/23 14:30
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:38

Client Sample ID: HS23010986-07
Lab Sample ID: 410-113148-5
Date Collected: 01/19/23 14:30
Matrix: Water
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:59

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	ELLE
RSK-175	Dissolved Gases Prep	RSK	ELLE

Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique , RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-113148-1	HS23010986-01	Water	01/19/23 09:00	01/24/23 10:20
410-113148-2	HS23010986-04	Water	01/19/23 12:05	01/24/23 10:20
410-113148-3	HS23010986-05	Water	01/19/23 12:55	01/24/23 10:20
410-113148-4	HS23010986-06	Water	01/19/23 14:30	01/24/23 10:20
410-113148-5	HS23010986-07	Water	01/19/23 14:30	01/24/23 10:20

410-113148 Chain of Custody

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 20793

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	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:	HS23010986
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	HS23010986-01	16WW41-230119	Groundwater	19 Jan 2023 09:00
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
2.	HS23010986-04	16WW55-230119	Groundwater	19 Jan 2023 12:05
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
3.	HS23010986-05	16WW35-230119	Groundwater	19 Jan 2023 12:55
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
4.	HS23010986-06	16WW16-230119	Groundwater	19 Jan 2023 14:30
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023
5.	HS23010986-07	16WW16-230119-FD	Groundwater	19 Jan 2023 14:30
	RSK - CO2; Level II & IV, LHAAP EQUIS EDD			03 Feb 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS23010986-05 = ms/msd

QC Level: DOD IV (DoD Data Package)

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 20793

Relinquished By: [illegible] Date/Time: 1-24-23 1806

Received By: [illegible] Date/Time: 1/24/23 10:20

Cooler ID(s): Temperature(s): 2.3

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Purchase Order

PO: HS23010986

VENDOR:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

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:	20793
TSR:	Ron Martino

	Item	Catalog No	Unit Price	Quantity	Ext Price
1.	RSK - CO2; Level II & IV, LHAAP EQUIS EDD	NA	$95.00	5	$475.00

Order Total: $475.00

RIGHT SOLUTIONS | RIGHT PARTNER

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-113148-1

Login Number: 113148
List Number: 1
Creator: McBeth, Jessica

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

HS23010986-MSVOA-SW8260

ALS WO# HS23010986

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-01				Collected	Received	Matrix	Basis
16WW41-230119				01/19/23 09:00	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	01/24/23 15:14	VOA6_426355	X012422
1,1-Dichloroethene	ug/L	25		1.0	5.0	5.0	5	01/24/23 15:14	VOA6_426355	X012422
1,2-Dichloroethane	ug/L	4.4	J	1.0	5.0	5.0	5	01/24/23 15:14	VOA6_426355	X012422
cis-1,2-Dichloroethene	ug/L	3,400		100	500	500	500	01/25/23 11:51	VOA6_426481	X012513
Methylene chloride	ug/L	10	U	2.0	10	10	5	01/24/23 15:14	VOA6_426355	X012422
Trichloroethene	ug/L	6,800		100	500	500	500	01/25/23 11:51	VOA6_426481	X012513
Vinyl chloride	ug/L	720		1.0	5.0	5.0	5	01/24/23 15:14	VOA6_426355	X012422

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-02	Collected	Received	Matrix	Basis
16RW06-230119	01/19/23 10:10	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 14:11	VOA6_426355	X012419
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 14:11	VOA6_426355	X012419
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 14:11	VOA6_426355	X012419
cis-1,2-Dichloroethene	ug/L	15		0.20	1.0	1.0	1	01/24/23 14:11	VOA6_426355	X012419
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 14:11	VOA6_426355	X012419
Trichloroethene	ug/L	160		0.20	1.0	1.0	1	01/24/23 14:11	VOA6_426355	X012419
Vinyl chloride	ug/L	5.1		0.20	1.0	1.0	1	01/24/23 14:11	VOA6_426355	X012419

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-03	Collected	Received	Matrix	Basis
16RW07-230119	01/19/23 11:15	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 14:32	VOA6_426355	X012420
1,1-Dichloroethene	ug/L	14		0.20	1.0	1.0	1	01/24/23 14:32	VOA6_426355	X012420
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 14:32	VOA6_426355	X012420
cis-1,2-Dichloroethene	ug/L	130		0.20	1.0	1.0	1	01/24/23 14:32	VOA6_426355	X012420
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 14:32	VOA6_426355	X012420
Trichloroethene	ug/L	2,200		10	50	50	50	01/25/23 12:12	VOA6_426481	X012514
Vinyl chloride	ug/L	100		0.20	1.0	1.0	1	01/24/23 14:32	VOA6_426355	X012420

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-04				Collected	Received	Matrix	Basis
16WW55-230119				01/19/23 12:05	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 14:53	VOA6_426355	X012421
1,1-Dichloroethene	ug/L	8.9		0.20	1.0	1.0	1	01/24/23 14:53	VOA6_426355	X012421
1,2-Dichloroethane	ug/L	2.4		0.20	1.0	1.0	1	01/24/23 14:53	VOA6_426355	X012421
cis-1,2-Dichloroethene	ug/L	500		10	50	50	50	01/25/23 12:33	VOA6_426481	X012515
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 14:53	VOA6_426355	X012421
Trichloroethene	ug/L	2,100		10	50	50	50	01/25/23 12:33	VOA6_426481	X012515
Vinyl chloride	ug/L	100		0.20	1.0	1.0	1	01/24/23 14:53	VOA6_426355	X012421

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-05				Collected	Received	Matrix	Basis
16WW35-230119				01/19/23 12:55	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	100	U	30	100	100	100	01/24/23 18:02	VOA6_426355	X012430
1,1-Dichloroethene	ug/L	150		20	100	100	100	01/24/23 18:02	VOA6_426355	X012430
1,2-Dichloroethane	ug/L	100	U	20	100	100	100	01/24/23 18:02	VOA6_426355	X012430
cis-1,2-Dichloroethene	ug/L	8,800		20	100	100	100	01/24/23 18:02	VOA6_426355	X012430
Methylene chloride	ug/L	200	U	40	200	200	100	01/24/23 18:02	VOA6_426355	X012430
Trichloroethene	ug/L	17,000		20	100	100	100	01/24/23 18:02	VOA6_426355	X012430
Vinyl chloride	ug/L	120		20	100	100	100	01/24/23 18:02	VOA6_426355	X012430

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-06				Collected	Received	Matrix	Basis
16WW16-230119				01/19/23 14:30	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	100	U	30	100	100	100	01/24/23 15:35	VOA6_426355	X012423
1,1-Dichloroethene	ug/L	87	J	20	100	100	100	01/24/23 15:35	VOA6_426355	X012423
1,2-Dichloroethane	ug/L	64	J	20	100	100	100	01/24/23 15:35	VOA6_426355	X012423
cis-1,2-Dichloroethene	ug/L	24,000		200	1000	1000	1000	01/25/23 12:54	VOA6_426481	X012516
Methylene chloride	ug/L	200	U	40	200	200	100	01/24/23 15:35	VOA6_426355	X012423
Trichloroethene	ug/L	63,000		200	1000	1000	1000	01/25/23 12:54	VOA6_426481	X012516
Vinyl chloride	ug/L	520		20	100	100	100	01/24/23 15:35	VOA6_426355	X012423

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-07	Collected	Received	Matrix	Basis
16WW16-230119-FD	01/19/23 14:30	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	100	U	30	100	100	100	01/24/23 15:56	VOA6_426355	X012424
1,1-Dichloroethene	ug/L	91	J	20	100	100	100	01/24/23 15:56	VOA6_426355	X012424
1,2-Dichloroethane	ug/L	63	J	20	100	100	100	01/24/23 15:56	VOA6_426355	X012424
cis-1,2-Dichloroethene	ug/L	25,000		200	1000	1000	1000	01/25/23 13:15	VOA6_426481	X012517
Methylene chloride	ug/L	200	U	40	200	200	100	01/24/23 15:56	VOA6_426355	X012424
Trichloroethene	ug/L	63,000		200	1000	1000	1000	01/25/23 13:15	VOA6_426481	X012517
Vinyl chloride	ug/L	500		20	100	100	100	01/24/23 15:56	VOA6_426355	X012424

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-08				Collected	Received	Matrix	Basis
CG-061422-309				01/19/23 08:30	01/20/23 10:10	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 13:08	VOA6_426355	X012416
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:08	VOA6_426355	X012416
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:08	VOA6_426355	X012416
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:08	VOA6_426355	X012416
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 13:08	VOA6_426355	X012416
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:08	VOA6_426355	X012416
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:08	VOA6_426355	X012416

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

HS23010986-09				Collected	Received	Matrix	Basis
CG-061422-306				01/19/23 08:30	01/20/23 10:10	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 13:29	VOA6_426355	X012417
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:29	VOA6_426355	X012417
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:29	VOA6_426355	X012417
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:29	VOA6_426355	X012417
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 13:29	VOA6_426355	X012417
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:29	VOA6_426355	X012417
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 13:29	VOA6_426355	X012417

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

VBLKW-230124	Collected	Received	Matrix	Basis
VBLKW-230124	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/24/23 09:37	VOA6_426355	X012406
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/24/23 09:37	VOA6_426355	X012406

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

VBLKW-230125	Collected	Received	Matrix	Basis
VBLKW-230125	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/23 09:24	VOA6_426481	X012506
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/23 09:24	VOA6_426481	X012506

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Form 2

System Monitoring Compound Recovery

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426355

Volatiles by EPA 8260

CCV	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	54.93	50	110	80-120	
4-Bromofluorobenzene	53.31	50	107	80-120	
Dibromofluoromethane	50.54	50	101	80-120	
Toluene-d8	50.21	50	100	80-120	

VLCSW-230124	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	55.08	50	110	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	49.99	50	100.0	80-119	
Toluene-d8	49.61	50	99.2	89-112	

VBLKW-230124	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.27	50	98.5	81-118	
4-Bromofluorobenzene	50.18	50	100	85-114	
Dibromofluoromethane	46.97	50	93.9	80-119	
Toluene-d8	52.83	50	106	89-112	

HS23010982-05MS	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	5000	5000	100.0	81-118	
4-Bromofluorobenzene	5184	5000	104	85-114	
Dibromofluoromethane	4698	5000	94.0	80-119	
Toluene-d8	5138	5000	103	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426355

Volatiles by EPA 8260

HS23010982-05MSD	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	5037	5000	101	81-118	
4-Bromofluorobenzene	5146	5000	103	85-114	
Dibromofluoromethane	4688	5000	93.8	80-119	
Toluene-d8	5132	5000	103	89-112	

HS23010986-08	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50	50	100	81-118	
4-Bromofluorobenzene	50	50	99.9	85-114	
Dibromofluoromethane	47	50	93.3	80-119	
Toluene-d8	53	50	107	89-112	

HS23010986-09	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50	50	99.2	81-118	
4-Bromofluorobenzene	49	50	98.1	85-114	
Dibromofluoromethane	46	50	92.6	80-119	
Toluene-d8	53	50	106	89-112	

HS23010986-02	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50	50	99.7	81-118	
4-Bromofluorobenzene	49	50	98.9	85-114	
Dibromofluoromethane	46	50	92.2	80-119	
Toluene-d8	53	50	106	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426355

Volatiles by EPA 8260

HS23010986-03	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	98.1	81-118	
4-Bromofluorobenzene	50	50	99.8	85-114	
Dibromofluoromethane	45	50	89.8	80-119	
Toluene-d8	53	50	105	89-112	

HS23010986-04	Analyzed 01/24/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	98.9	81-118	
4-Bromofluorobenzene	50	50	99.1	85-114	
Dibromofluoromethane	45	50	90.8	80-119	
Toluene-d8	53	50	106	89-112	

HS23010986-01	Analyzed 01/24/23		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	240	250	95.6	81-118	
4-Bromofluorobenzene	250	250	100	85-114	
Dibromofluoromethane	220	250	87.4	80-119	
Toluene-d8	260	250	106	89-112	

HS23010986-06	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	5,000	5000	100	81-118	
4-Bromofluorobenzene	5,000	5000	99.7	85-114	
Dibromofluoromethane	4,600	5000	92.4	80-119	
Toluene-d8	5,400	5000	107	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426355

Volatiles by EPA 8260

HS23010986-07	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4,900	5000	98.2	81-118	
4-Bromofluorobenzene	5,000	5000	99.1	85-114	
Dibromofluoromethane	4,600	5000	91.7	80-119	
Toluene-d8	5,300	5000	106	89-112	

HS23010986-05	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	5,000	5000	99.7	81-118	
4-Bromofluorobenzene	5,000	5000	99.4	85-114	
Dibromofluoromethane	4,600	5000	93.0	80-119	
Toluene-d8	5,300	5000	107	89-112	

HS23010986-05MS	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4981	5000	99.6	81-118	
4-Bromofluorobenzene	5111	5000	102	85-114	
Dibromofluoromethane	4544	5000	90.9	80-119	
Toluene-d8	5173	5000	103	89-112	

HS23010986-05MSD	Analyzed 01/24/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4925	5000	98.5	81-118	
4-Bromofluorobenzene	5115	5000	102	85-114	
Dibromofluoromethane	4507	5000	90.1	80-119	
Toluene-d8	5153	5000	103	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426481

Volatiles by EPA 8260

CCV	Analyzed 01/25/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	52.7	50	105	80-120	
4-Bromofluorobenzene	52.42	50	105	80-120	
Dibromofluoromethane	48.88	50	97.8	80-120	
Toluene-d8	49.61	50	99.2	80-120	

VLCSW-230125	Analyzed 01/25/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	57.18	50	114	81-118	
4-Bromofluorobenzene	53.58	50	107	85-114	
Dibromofluoromethane	50.07	50	100	80-119	
Toluene-d8	51.82	50	104	89-112	

VBLKW-230125	Analyzed 01/25/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.66	50	97.3	81-118	
4-Bromofluorobenzene	50.26	50	101	85-114	
Dibromofluoromethane	45.56	50	91.1	80-119	
Toluene-d8	52.59	50	105	89-112	

HS23010982-02MS	Analyzed 01/25/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4875	5000	97.5	81-118	
4-Bromofluorobenzene	5159	5000	103	85-114	
Dibromofluoromethane	4446	5000	88.9	80-119	
Toluene-d8	5207	5000	104	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426481

Volatiles by EPA 8260

HS23010982-02MSD	Analyzed 01/25/23		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	4839	5000	96.8	81-118	
4-Bromofluorobenzene	5099	5000	102	85-114	
Dibromofluoromethane	4465	5000	89.3	80-119	
Toluene-d8	5214	5000	104	89-112	

HS23010986-01	Analyzed 01/25/23		Conc Units µg/L		DF 500
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	24,000	25000	97.3	81-118	
4-Bromofluorobenzene	25,000	25000	99.9	85-114	
Dibromofluoromethane	22,000	25000	89.7	80-119	
Toluene-d8	26,000	25000	105	89-112	

HS23010986-03	Analyzed 01/25/23		Conc Units µg/L		DF 50
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	2,400	2500	98.0	81-118	
4-Bromofluorobenzene	2,500	2500	101	85-114	
Dibromofluoromethane	2,300	2500	90.8	80-119	
Toluene-d8	2,600	2500	105	89-112	

HS23010986-04	Analyzed 01/25/23		Conc Units µg/L		DF 50
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	2,400	2500	98.0	81-118	
4-Bromofluorobenzene	2,500	2500	99.8	85-114	
Dibromofluoromethane	2,300	2500	90.0	80-119	
Toluene-d8	2,600	2500	106	89-112	

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

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426481

Volatiles by EPA 8260

HS23010986-06	Analyzed 01/25/23		Conc Units µg/L		DF 1000
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49,000	50000	98.8	81-118	
4-Bromofluorobenzene	49,000	50000	98.4	85-114	
Dibromofluoromethane	45,000	50000	90.0	80-119	
Toluene-d8	52,000	50000	105	89-112	

HS23010986-07	Analyzed 01/25/23		Conc Units µg/L		DF 1000
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49,000	50000	97.9	81-118	
4-Bromofluorobenzene	50,000	50000	99.8	85-114	
Dibromofluoromethane	45,000	50000	89.8	80-119	
Toluene-d8	53,000	50000	105	89-112	

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

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23010986**

		HS23010982-05		HS23010982-05MS				HS23010982-05MSD						
Sample Matrix	Aqueous	**Run Date**	01/24/23	01/24/23				01/24/23						
Units	µg/L	**Run Time**	09:58	11:01				11:22						
		Data File	X012407.D	X012410.D				X012411.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	100	120.3	1946	2000	91		1872	2000	88		20	3.80	
1,1-Dichloroethene	71-131	100	2800	4826	2000	101		4530	2000	87		20	6.30	
1,2-Dichloroethane	73-128	100	945.1	2896	2000	98		2828	2000	94		20	2.40	
cis-1,2-Dichloroethene	78-123	100	469000	480800	2000	590	*	470700	2000	85		20	2.10	
Methylene chloride	74-124	100	0	1568	2000	78		1502	2000	75		20	4.30	
Trichloroethene	79-123	100	388000	401500	2000	670	*	391500	2000	175	*	20	2.50	
Vinyl chloride	58-137	100	21960	23960	2000	100		22580	2000	31	*	20	6.00	

16WW35-230119		HS23010986-05		HS23010986-05MS				HS23010986-05MSD						
Sample Matrix	Aqueous	**Run Date**	01/24/23	01/24/23				01/24/23						
Units	µg/L	**Run Time**	18:02	18:23				18:44						
		Data File	X012430.D	X012431.D				X012432.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	100	0	1596	2000	80	*	1488	2000	74	*	20	7.00	
1,1-Dichloroethene	71-131	100	149.1	1730	2000	79		1567	2000	71	*	20	9.90	
1,2-Dichloroethane	73-128	100	0	1728	2000	86		1684	2000	84		20	2.60	
cis-1,2-Dichloroethene	78-123	100	8811	9563	2000	38	*	9234	2000	21	*	20	3.50	
Methylene chloride	74-124	100	0	1374	2000	69	*	1318	2000	66	*	20	4.20	
Trichloroethene	79-123	100	17370	18120	2000	37	*	17230	2000	-7	*	20	5.00	
Vinyl chloride	58-137	100	119.2	1622	2000	75		1462	2000	67		20	10.4	

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

		HS23010982-02		HS23010982-02MS				HS23010982-02MSD						
Sample Matrix	Aqueous	**Run Date**	01/25/23	01/25/23				01/25/23						
Units	µg/L	**Run Time**	10:06	10:27				10:48						
		Data File	X012508.D	X012509.D				X012510.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
cis-1,2-Dichloroethene	78-123	100	145.3	1610	2000	73	*	1504	2000	68	*	20	6.80	
Trichloroethene	79-123	100	3310	5232	2000	96		4875	2000	78	*	20	7.10	

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

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Form 3B

Laboratory Control Sample Recovery

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

VOA6_426355		QC ID	VLCSW-230124			
QC Matrix Aqueous	Units	Run Date	01/24/23			
	ug/L	Run Time	08:55			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	19.79	99		
1,1-Dichloroethene	71-131	20	21.1	106		
1,2-Dichloroethane	73-128	20	22.96	115		
1,2-Dichloroethane-d4	81-118	50	55.08	110		
4-Bromofluorobenzene	85-114	50	51	102		
cis-1,2-Dichloroethene	78-123	20	20.41	102		
Dibromofluoromethane	80-119	50	49.99	100		
Methylene chloride	74-124	20	20.26	101		
Toluene-d8	89-112	50	49.61	99		
Trichloroethene	79-123	20	21.1	106		
Vinyl chloride	58-137	20	20.07	100		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

VOA6_426481		QC ID	VLCSW-230125			
QC Matrix Aqueous	Units %REC	Run Date Run Time	01/25/23 08:42			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,2-Dichloroethane-d4	81-118	50	57.18	114		
4-Bromofluorobenzene	85-114	50	53.58	107		
cis-1,2-Dichloroethene	78-123	20	17.55	88		
Dibromofluoromethane	80-119	50	50.07	100		
Toluene-d8	89-112	50	51.82	104		
Trichloroethene	79-123	20	20.24	101		

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

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Form 4

Method Blank Summary

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230124	X012406.D	01/24/23 09:37	VOA6_426355
VLCSW-230124	LCS	VLCSW-230124	X012404.D	01/24/23 08:55	VOA6_426355
BatchQC	MS	HS23010982-05MS	X012410.D	01/24/23 11:01	VOA6_426355
BatchQC	MSD	HS23010982-05MSD	X012411.D	01/24/23 11:22	VOA6_426355
CG-061422-309	SAMP	HS23010986-08	X012416.D	01/24/23 13:08	VOA6_426355
CG-061422-306	SAMP	HS23010986-09	X012417.D	01/24/23 13:29	VOA6_426355
16RW06-230119	SAMP	HS23010986-02	X012419.D	01/24/23 14:11	VOA6_426355
16RW07-230119	SAMP	HS23010986-03	X012420.D	01/24/23 14:32	VOA6_426355
16WW55-230119	SAMP	HS23010986-04	X012421.D	01/24/23 14:53	VOA6_426355
16WW41-230119	SAMP	HS23010986-01	X012422.D	01/24/23 15:14	VOA6_426355
16WW16-230119	SAMP	HS23010986-06	X012423.D	01/24/23 15:35	VOA6_426355
16WW16-230119-FD	SAMP	HS23010986-07	X012424.D	01/24/23 15:56	VOA6_426355
16WW35-230119	SAMP	HS23010986-05	X012430.D	01/24/23 18:02	VOA6_426355
16WW35-230119	MS	HS23010986-05MS	X012431.D	01/24/23 18:23	VOA6_426355
16WW35-230119	MSD	HS23010986-05MSD	X012432.D	01/24/23 18:44	VOA6_426355

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230125	X012506.D	01/25/23 09:24	VOA6_426481
VLCSW-230125	LCS	VLCSW-230125	X012504.D	01/25/23 08:42	VOA6_426481
BatchQC	MS	HS23010982-02MS	X012509.D	01/25/23 10:27	VOA6_426481
BatchQC	MSD	HS23010982-02MSD	X012510.D	01/25/23 10:48	VOA6_426481
16WW41-230119	SAMP	HS23010986-01	X012513.D	01/25/23 11:51	VOA6_426481
16RW07-230119	SAMP	HS23010986-03	X012514.D	01/25/23 12:12	VOA6_426481
16WW55-230119	SAMP	HS23010986-04	X012515.D	01/25/23 12:33	VOA6_426481
16WW16-230119	SAMP	HS23010986-06	X012516.D	01/25/23 12:54	VOA6_426481
16WW16-230119-FD	SAMP	HS23010986-07	X012517.D	01/25/23 13:15	VOA6_426481

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Form 5

Instrument Performance Check

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_424237

Tune File X121601.D 12/16/22 11:17

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	18.3 (18.4)
75	30.0 - 60.0% of mass 95	46.1 (46.1)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.2 (7.16)
173	Less than 2.0% of mass 174	0.8 (0.897) 1
174	50.0 - 120.0% of mass 95	89 (89)
175	4.0 - 9.0% of mass 174	7 (7.82) 1
176	93.0 - 101.0% of mass 174	87.4 (98.2) 1
177	5.0 - 9.0% of mass 176	5.8 (6.59) 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	12/16/22 11:38	X121602	VSTD000.25
2	ICAL2	12/16/22 12:20	X121603	VSTD000.5
3	ICAL3	12/16/22 12:41	X121604	VSTD001
4	ICAL4	12/16/22 13:02	X121605	VSTD002
5	ICAL5	12/16/22 13:23	X121606	VSTD005
6	ICAL6	12/16/22 13:43	X121607	VSTD020
7	ICAL7	12/16/22 14:04	X121608	VSTD050
8	ICAL8	12/16/22 14:25	X121609	VSTD100
9	ICAL9	12/16/22 14:46	X121610	VSTD150
10	ICAL	12/16/22 15:07	X121611	VSTD200
11	ICV	12/16/22 15:49	X121613	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426355

Tune File X012401.D 01/24/23 07:31

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	19.3 (19.3)
75	30.0 - 60.0% of mass 95	50 (50)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7 (7.04)
173	Less than 2.0% of mass 174	0.7 (0.819) 1
174	50.0 - 120.0% of mass 95	86.8 (86.8)
175	4.0 - 9.0% of mass 174	6.1 (7.05) 1
176	93.0 - 101.0% of mass 174	83.5 (96.2) 1
177	5.0 - 9.0% of mass 176	5.8 (6.91) 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	01/24/23 07:52	X012402	CCV
2	LCS	01/24/23 08:55	X012404	VLCSW-230124
3	MBLK	01/24/23 09:37	X012406	VBLKW-230124
4	MS	01/24/23 11:01	X012410	ZZZZZZMS
5	MSD	01/24/23 11:22	X012411	ZZZZZZMSD
6	SAMP	01/24/23 13:08	X012416	CG-061422-309
7	SAMP	01/24/23 13:29	X012417	CG-061422-306
8	SAMP	01/24/23 14:11	X012419	16RW06-230119
9	SAMP	01/24/23 14:32	X012420	16RW07-230119
10	SAMP	01/24/23 14:53	X012421	16WW55-230119
11	SAMP	01/24/23 15:14	X012422	16WW41-230119
12	SAMP	01/24/23 15:35	X012423	16WW16-230119
13	SAMP	01/24/23 15:56	X012424	16WW16-230119-FD
14	SAMP	01/24/23 18:02	X012430	16WW35-230119
15	MS	01/24/23 18:23	X012431	HS23010986-05MS
16	MSD	01/24/23 18:44	X012432	HS23010986-05MSD
17	CCV_EN	01/24/23 19:05	X012433	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426481

Tune File X012501.D 01/25/23 07:18

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	19.1 (19.1)
75	30.0 - 60.0% of mass 95	50.9 (50.9)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.3 (7.3)
173	Less than 2.0% of mass 174	0.8 (0.922) 1
174	50.0 - 120.0% of mass 95	84.4 (84.4)
175	4.0 - 9.0% of mass 174	6.1 (7.23) 1
176	93.0 - 101.0% of mass 174	82.3 (97.6) 1
177	5.0 - 9.0% of mass 176	5.3 (6.48) 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	CCV	01/25/23 07:39	X012502	CCV
2	LCS	01/25/23 08:42	X012504	VLCSW-230125
3	MBLK	01/25/23 09:24	X012506	VBLKW-230125
4	MS	01/25/23 10:27	X012509	ZZZZZZMS
5	MSD	01/25/23 10:48	X012510	ZZZZZZMSD
6	SAMP	01/25/23 11:51	X012513	16WW41-230119
7	SAMP	01/25/23 12:12	X012514	16RW07-230119
8	SAMP	01/25/23 12:33	X012515	16WW55-230119
9	SAMP	01/25/23 12:54	X012516	16WW16-230119
10	SAMP	01/25/23 13:15	X012517	16WW16-230119-FD
11	CCV_EN	01/25/23 15:00	X012522	CCV-END

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Form 6

Initial Calibration Data

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138
ICAL End Date 16-DEC-2022 1507

Calibration Files

Level 1 ..voa6.i\X221216.b\X121602.D
Level 2 ..voa6.i\X221216.b\X121603.D
Level 3 ..voa6.i\X221216.b\X121604.D
Level 4 ..voa6.i\X221216.b\X121605.D
Level 5 ..voa6.i\X221216.b\X121606.D
Level 6 ..voa6.i\X221216.b\X121607.D
Level 7 ..voa6.i\X221216.b\X121608.D
Level 8 ..voa6.i\X221216.b\X121609.D
Level 9 ..voa6.i\X221216.b\X121610.D
Level 10 ..voa6.i\X221216.b\X121611.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 160392	1990 309019	2911 476130	6239 635808	15008	63382	LINR	0.00786	0.35247		0.99971	
Chloromethane	NE 192710	2466 388163	3670 621048	8057 865151	19623	72324	LINR	0.04423	0.47332		0.99747	
Propionitrile	NE 0.04851	0.06018 0.04917	0.05265 0.05178	0.04739 0.05178	0.05114	0.04656	AVRG		0.05102		7.91502	
Vinyl Chloride	NE 0.44103	0.52268 0.42953	0.40472 0.44923	0.39786 0.45909	0.42164	0.40520	AVRG		0.43678		8.81916	
Bromomethane	NE 139689	1893 284165	3293 470318	5996 NE	15112	52034	LINR	0.03529	0.34244		0.99519	
Chloroethane	NE 0.29447	0.35820 0.28714	0.27936 0.30494	0.31044 0.30410	0.31436	0.28309	AVRG		0.30401		7.80750	
Trichlorofluoromethane	NE 0.60756	0.71207 0.59817	0.54474 0.64605	0.57316 0.65074	0.59068	0.57785	AVRG		0.61122		8.28859	
Acrolein	NE 27445	440 60756	761 96139	1317 125874	2699	12279	LINR	0.05644	0.03519		0.99833	
Acetone	NE 124798	2669 243517	4787 373504	7041 514105	17632	50987	LINR	-0.00069	0.14025		0.99910	
1,1-Dichloroethene	NE 0.36912	0.44142 0.36226	0.35953 0.38517	0.37590 0.39076	0.37389	0.35725	AVRG		0.37948		6.80558	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138 **ICAL End Date** 16-DEC-2022 1507

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 0.05462	0.05610 0.05559	0.05239 0.05946	0.05650 0.05952	0.05728	0.05469	AVRG		0.05624		4.10209	
Acetonitrile	NE 0.04430	0.04776 0.04552	0.04645 0.04791	0.04253 0.04736	0.04357	0.04417	AVRG		0.04551		4.32823	
Allyl Chloride	NE 0.81324	0.99118 0.83169	0.95202 0.86799	0.81682 0.86396	0.84304	0.82034	AVRG		0.86670		7.30464	
Iodomethane	NE 455792	2397 958603	3865 1554547	8702 2193685	26708	143457	QUAD	0.06641	2.01333	-0.08031	0.99956	
Acrylonitrile	NE 0.12970	0.12113 0.12956	0.12536 0.13857	0.12482 0.13997	0.12256	0.12666	AVRG		0.12870		5.15060	
Methylene Chloride	NE 0.49311	0.63666 0.46611	0.59459 0.48892	0.50364 0.47907	0.50885	0.51372	AVRG		0.52052		10.92514	
Methyl tert-butyl ether	NE 1.16844	1.26574 1.18584	1.39027 1.23813	1.27259 1.24075	1.24993	1.16729	AVRG		1.24211		5.52745	
Carbon Disulfide	NE 0.97542	1.07494 0.97088	1.00609 1.02392	0.95722 1.06178	0.94769	0.91773	AVRG		0.99285		5.32584	
trans-1,2-Dichloroethene	NE 0.41851	0.48064 0.41454	0.42427 0.43221	0.38965 0.43554	0.42173	0.40526	AVRG		0.42470		5.92187	
Vinyl Acetate	NE 1.07506	1.09845 1.07519	0.99054 1.16529	1.06368 1.16741	1.12321	1.05445	AVRG		1.09037		5.13969	
1,1-Dichloroethane	NE 0.72125	0.83949 0.70504	0.80145 0.74074	0.69997 0.74459	0.75023	0.70550	AVRG		0.74536		6.34771	
Chloroprene	NE 0.16145	0.19503 0.16116	0.18721 0.16823	0.17124 0.17481	0.15874	0.15219	AVRG		0.17001		8.17551	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138 **ICAL End Date** 16-DEC-2022 1507

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 130179	1292 264221	2498 407629	5418 555896	11771	47830	LINR	0.06050	0.15346		0.99924	
Methacrylonitrile	NE 0.32328	0.44770 0.32565	0.36475 0.34081	0.34993 0.34351	0.34840	0.34235	AVRG		0.35404		10.52608	
2,2-Dichloropropane	NE 0.62063	0.70167 0.61027	0.65466 0.64008	0.60521 0.65162	0.61866	0.59289	AVRG		0.63286		5.25207	
cis-1,2-Dichloroethene	NE 0.49985	0.61803 0.48778	0.49622 0.51710	0.52999 0.51455	0.50446	0.48374	AVRG		0.51686		7.86616	
Chloroform	NE 0.81023	0.87547 0.78725	0.86252 0.84612	0.85352 0.84457	0.84666	0.79238	AVRG		0.83541		3.73708	
Bromochloromethane	NE 0.26364	0.32093 0.26287	0.29857 0.28290	0.28124 0.28282	0.29319	0.26077	AVRG		0.28299		6.91423	
1,1,1-Trichloroethane	NE 0.65703	0.76105 0.64156	0.65666 0.67604	0.60049 0.69720	0.64387	0.63152	AVRG		0.66283		6.90392	
1,1-Dichloropropene	NE 0.37084	0.35889 0.35979	0.34245 0.36734	0.33027 0.37324	0.34789	0.34406	AVRG		0.35497		4.12237	
1,2-Dichloroethane	NE 0.39909	0.45501 0.40154	0.40587 0.41082	0.39492 0.41030	0.41104	0.39842	AVRG		0.40967		4.39762	
Carbon Tetrachloride	NE 0.36348	0.40179 0.35355	0.45347 0.36349	0.40515 0.37429	0.35265	0.34370	AVRG		0.37906		9.25223	
Benzene	NE 1.17241	1.34410 1.15323	1.19304 1.17461	1.18322 1.18197	1.19608	1.14722	AVRG		1.19399		4.90945	
Trichloroethene	NE 0.33750	0.37562 0.33140	0.31723 0.33891	0.33885 0.34649	0.33109	0.33079	AVRG		0.33865		4.73809	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138 **ICAL End Date** 16-DEC-2022 1507

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 0.42913	0.53078 0.42602	0.45893 0.44706	0.43689 0.45009	0.42833	0.42563	AVRG		0.44810		7.41292	
Methyl Methacrylate	NE 0.32238	0.38746 0.32465	0.34921 0.34726	0.33881 0.35704	0.33548	0.30606	AVRG		0.34093		6.87301	
2-Chloroethylvinyl ether	NE 0.13057	0.13531 0.12541	0.11670 0.12799	0.12141 0.12973	0.12912	0.13108	AVRG		0.12748		4.37734	
1,2-Dichloropropane	NE 0.31044	0.35613 0.30521	0.33560 0.31542	0.29692 0.31856	0.31629	0.30391	AVRG		0.31761		5.71516	
2-Nitropropane	NE 0.73644	1.05598 0.73807	0.76159 0.78445	0.80915 0.80253	0.77468	0.75211	AVRG		0.80167		12.32619	
Dibromomethane	NE 0.20672	0.25085 0.20317	0.21183 0.21324	0.22317 0.21357	0.21081	0.20954	AVRG		0.21588		6.58330	
4-Methyl-2-Pentanone	NE 0.25814	0.28987 0.25156	0.26418 0.26114	0.28502 0.26166	0.26684	0.26684	AVRG		0.26725		4.64865	
cis-1,3-Dichloropropene	NE 0.52860	0.53732 0.53368	0.47650 0.55605	0.50179 0.56353	0.51804	0.52075	AVRG		0.52625		5.04185	
Ethyl Methacrylate	NE 0.20804	0.28138 0.22619	0.24077 0.24786	0.23910 0.26163	0.20135	0.21276	AVRG		0.23545		11.14205	
Toluene	NE 1.36202	1.60765 1.32088	1.37997 1.35198	1.37463 1.35870	1.36957	1.31273	AVRG		1.38201		6.34459	
trans-1,3-Dichloropropene	NE 0.44682	0.44236 0.44877	0.39493 0.47075	0.40065 0.48573	0.41433	0.42619	AVRG		0.43673		7.01005	
2-Hexanone	NE 0.17839	0.19991 0.17192	0.17409 0.18312	0.17972 0.18566	0.18386	0.17978	AVRG		0.18183		4.45920	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_424237

Volatiles by by EPA 8260

ICAL Start Date 16-DEC-2022 1138 **ICAL End Date** 16-DEC-2022 1507

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1,1,2-Trichloroethane	NE 0.26479	0.32419 0.25654	0.26954 0.26825	0.29087 0.26649	0.28491	0.26973	AVRG		0.27726		7.37510	
1,3-Dichloropropane	NE 0.53007	0.62065 0.51166	0.55587 0.53587	0.54217 0.53590	0.54663	0.53274	AVRG		0.54573		5.60982	
Dibromochloromethane	NE 0.39906	0.43810 0.39075	0.38701 0.40792	0.39402 0.40793	0.38762	0.38903	AVRG		0.40016		4.08851	
Tetrachloroethene	NE 0.29836	0.33024 0.28012	0.25660 0.28506	0.28292 0.28889	0.26322	0.28810	AVRG		0.28594		7.36821	
1,2-Dibromoethane	NE 0.35151	0.36263 0.33998	0.33509 0.35512	0.32714 0.35096	0.35422	0.34322	AVRG		0.34665		3.22017	
1-Chlorohexane	NE 0.24556	0.26597 0.23682	0.22998 0.25047	0.21386 0.26558	0.22191	0.24457	AVRG		0.24163		7.44215	
Chlorobenzene	NE 0.95622	1.20054 0.92158	0.96715 0.96470	0.94773 0.97511	0.95913	0.93014	AVRG		0.98026		8.61127	
1,1,1,2-Tetrachloroethane	NE 0.36060	0.42477 0.35457	0.34549 0.36940	0.36191 0.37188	0.34596	0.34861	AVRG		0.36480		6.70616	
Ethylbenzene	NE 0.47797	0.47482 0.45902	0.43893 0.46986	0.45503 0.47447	0.45171	0.45394	AVRG		0.46175		2.86128	
m,p-Xylenes	NE 0.60205	0.69860 0.58346	0.55710 0.60071	0.56286 0.61493	0.56012	0.57743	AVRG		0.59525		7.35638	
o-Xylene	NE 0.59049	0.68372 0.57562	0.51381 0.60058	0.56977 0.61516	0.56849	0.56994	AVRG		0.58751		7.79066	
Styrene	NE 1.03116	1.02806 1.01266	0.79991 1.07651	0.88633 1.09594	0.95404	0.97800	AVRG		0.98473		9.52837	

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Bromoform	NE	0.31195	0.25221	0.26817	0.25683	0.26696						
	0.27805	0.27584	0.29222	0.29278			AVRG		0.27722		6.87336	
Isopropylbenzene	NE	1.35706	1.16805	1.25967	1.30607	1.32939						
	1.41077	1.36357	1.42773	1.45784			AVRG		1.34224		6.69875	
1,1,2,2-Tetrachloroethane	NE	0.91828	0.84470	0.83187	0.83648	0.79018						
	0.74007	0.71754	0.75363	0.73962			AVRG		0.79693		8.24435	
1,2,3-Trichloropropane	NE	0.58047	0.56626	0.53238	0.58048	0.54015						
	0.53505	0.52761	0.60583	0.53897			AVRG		0.55636		4.97536	
trans-1,4-Dichloro-2-butene	NE	0.12274	0.09213	0.10381	0.10162	0.10094						
	0.10800	0.10845	0.11623	0.11751			AVRG		0.10794		8.88299	
n-Propylbenzene	NE	3.20938	2.13608	2.47845	2.73904	2.83806						
	2.90611	2.78733	2.90643	2.92515			AVRG		2.76956		11.03336	
Bromobenzene	NE	0.90477	0.79060	0.83045	0.81066	0.82521						
	0.80056	0.78064	0.82147	0.81857			AVRG		0.82033		4.35370	
1,3,5-Trimethylbenzene	NE	2.06484	1.68256	1.97796	2.03460	2.07048						
	2.12398	2.07652	2.18148	2.20122			AVRG		2.04596		7.47801	
2-Chlorotoluene	NE	1.93144	1.77508	1.90257	1.85141	1.80074						
	1.79455	1.71779	1.79669	1.78644			AVRG		1.81741		3.65582	
4-Chlorotoluene	NE	2.19766	1.72811	1.99610	2.10678	2.06499						
	2.09570	2.05624	2.19099	2.20989			AVRG		2.07183		7.13984	
tert-Butylbenzene	NE	1.83685	1.33195	1.56610	1.66625	1.69957						
	1.74647	1.66742	1.77236	1.78580			AVRG		1.67475		9.03914	
1,2,4-Trimethylbenzene	NE	2.44261	1.84882	2.01055	2.12502	2.14371						
	2.18278	2.12445	2.25368	2.24326			AVRG		2.15277		7.66012	

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sec-Butylbenzene	NE 2.38144	2.28219 2.30322	1.76441 2.43114	1.95855 2.46321	2.17705	2.29365	AVRG		2.22832		10.32115	
p-Isopropyltoluene	NE 2.16946	2.11113 2.07989	1.42476 2.19272	1.76888 2.20460	1.95504	2.06459	AVRG		1.99679		12.72950	
1,3-Dichlorobenzene	NE 1.39279	1.34465 1.34586	1.21323 1.42324	1.32549 1.42237	1.40186	1.38449	AVRG		1.36155		4.82043	
1,4-Dichlorobenzene	NE 1.45712	1.63128 1.44362	1.40441 1.52301	1.45614 1.52190	1.47766	1.45673	AVRG		1.48576		4.44368	
Benzyl Chloride	NE 472387	3642 1009234	4632 1650494	12783 2286488	35254	163895	LINR	0.05387	0.82700		0.99832	
n-Butylbenzene	NE 696355	5149 1425779	8459 2293126	19853 3216534	54831	248190	LINR	0.03551	1.99525		0.99890	
1,2-Dichlorobenzene	NE 1.39065	1.58241 1.36532	1.22790 1.44207	1.34058 1.43128	1.42827	1.41177	AVRG		1.40225		6.73504	
1,2-Dibromo-3-Chloropropane	NE 48660	441 94321	778 149691	1619 205063	4911	18635	LINR	0.00184	0.12764		0.99948	
1,2,4-Trichlorobenzene	NE 0.95146	0.91627 0.90293	0.65608 0.94400	0.83350 0.95022	0.89445	0.91558	AVRG		0.88494		10.53488	
Hexachlorobutadiene	NE 155390	1477 299042	1928 466452	3970 654615	13454	55912	QUAD	-0.00107	2.58308	-0.07816	0.99966	
Naphthalene	NE 2.14094	2.01970 2.06230	1.60683 2.15450	1.85985 2.12714	2.04153	2.10842	AVRG		2.01347		8.78393	
1,2,3-Trichlorobenzene	NE 0.85880	1.02696 0.83163	0.68341 0.85478	0.79977 0.84995	0.84958	0.87304	AVRG		0.84755		10.42886	

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Ethyl Acetate	NE 0.37280	0.44748 0.34980	0.34909 0.38488	0.40657 0.39192	0.39985	0.40902	AVRG		0.39016		7.92750	
Methyl Acrylate	NE 0.33014	0.38247 0.33914	0.34243 0.35741	0.29817 0.35867	0.33173	0.31494	AVRG		0.33946		7.36740	
n-Butanol	NE 54418	622 124057	1171 210842	2004 297334	4891	15012	QUAD	0.80435	158	-58.97368	0.99813	*
Ethyl Acrylate	NE 420886	NE 862071	NE 1358300	9825 1836030	26414	172044	LINR	0.05859	1.02468		0.99901	*
Cyclohexanone	NE 0.01934	0.07093 0.01945	0.03374 0.01993	0.02556 0.01966	0.01884	0.01912	AVRG		0.02740		62.21369	*
1,4-Dioxane	0.00463 0.00443	0.00501 0.00442	0.00455 0.00480	0.00386 0.00497	0.00466	0.00438	AVRG		0.00457		7.29408	
n-Hexane	NE 0.39852	0.41368 0.36338	0.26016 0.39788	0.32309 0.40267	0.32437	0.35631	AVRG		0.36001		13.97418	
Freon TF	NE 0.37622	0.40111 0.36030	0.37263 0.38547	0.33005 0.39624	0.32940	0.35185	AVRG		0.36703		7.16337	
Methyl Acetate	NE 0.21071	0.27499 0.21615	0.23617 0.22455	0.22728 0.22667	0.19900	0.20937	AVRG		0.22499		9.73149	
Methylcyclohexane	NE 0.60749	0.69525 0.62521	0.49917 0.65111	0.58500 0.65095	0.56389	0.63030	AVRG		0.61204		9.36456	
Isopropyl alcohol	NE 0.01716	0.02240 0.01767	0.01652 0.01919	0.01536 0.01934	0.01833	0.01677	AVRG		0.01808		11.41496	
Amyl alcohol	NE 0.00433	NE 0.00498	NE 0.00582	NE 0.00605	0.00196	0.00315	AVRG		0.00438		36.19033	*

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Allyl alcohol	NE 0.01993	0.03347 0.01817	0.01301 0.01989	0.01615 0.02013	0.01622	0.01782	AVRG		0.01942		29.60962	*
4-Methyl-2-pentanol	NE 0.04191	0.13977 0.04448	0.06768 0.05120	0.05740 0.05444	0.04467	0.04137	AVRG		0.06032		51.38639	*
Tert-butyl alcohol	NE 0.03307	0.04145 0.03257	0.03359 0.03586	0.03291 0.03628	0.03387	0.03199	AVRG		0.03462		8.48705	
Diethyl ether	NE 0.30968	0.40393 0.31674	0.33122 0.33062	0.34807 0.33029	0.33548	0.30080	AVRG		0.33409		8.92652	
1,3-Butadiene	NE 0.33288	0.38854 0.32994	0.38107 0.34951	0.31405 0.35836	0.31693	0.31715	AVRG		0.34316		8.15203	
Cyclohexane	NE 237699	2803 432198	4003 682728	7375 943314	19859	84355	LINR	0.02522	0.51703		0.99847	
Tetrahydrofuran	NE 58181	900 109518	1361 162133	2867 219995	7598	28221	LINR	-0.06333	0.06025		0.99942	
alpha-Methylstyrene	NE 1.13399	1.35155 1.10993	0.85865 1.16502	1.02359 1.17184	1.06165	1.09458	AVRG		1.10787		11.89593	
Diisopropyl ether	NE 1.21127	1.41201 1.25239	1.35074 1.32366	1.30436 1.33324	1.25459	1.23114	AVRG		1.29704		5.00179	
Dichlorofluoromethane	NE 0.05734	NE 0.05842	NE 0.06234	NE 0.06214	0.06484	0.06089	AVRG		0.06099		4.51209	*
Propylene oxide	NE 0.03071	NE 0.03174	0.05613 0.03407	0.03062 0.03228	0.03687	0.02961	AVRG		0.03525		24.79698	*
3-Methyl-1-butanol	NE 0.00489	NE 0.00483	NE 0.00601	NE 0.00612	0.00211	0.00438	AVRG		0.00472		30.80128	*

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Butyl acrylate	NE 0.63698	0.73114 0.67566	0.58907 0.72950	0.57945 0.74630	0.58578	0.60437	AVRG		0.65314		10.52624	
1,2,3-Trimethylbenzene	NE 2.21302	2.76749 2.29498	2.61167 2.36627	2.52848 2.30685	2.25428	2.32678	AVRG		2.40776		7.74526	
Ethanol	NE 29714	458 56794	787 87890	1703 117751	3072	12594	LINR	-0.06594	0.00325		0.99956	
1-Propanol	NE 0.00727	0.00862 0.00784	0.00964 0.00802	0.00852 0.00816	0.00825	0.00721	AVRG		0.00817		9.04495	
tert-Butyl formate	NE 0.24908	NE 0.25521	NE 0.29218	0.25634 0.29283	0.33766	0.24706	AVRG		0.27577		12.14219	*
3,3-Dimethyl-1-butanol	NE 0.02235	NE 0.02388	NE 0.02628	NE 0.02679	0.01912	0.02169	AVRG		0.02335		12.46791	*
tert-Amyl methyl ether	NE 1.32775	2.53777 1.35994	1.82297 1.44272	1.67155 1.43312	1.55575	1.35887	AVRG		1.61227		23.79383	*
tert-Butyl ethyl ether	NE 1.27589	1.81984 1.30743	1.44501 1.37993	1.35004 1.39745	1.35223	1.28319	AVRG		1.40122		11.86386	
tert-Amyl alcohol	NE 0.02491	0.03129 0.02552	0.02457 0.02922	0.02972 0.02928	0.03377	0.02471	AVRG		0.02811		11.82574	
Epichlorohydrin	NE 58515	926 126478	1242 183469	2483 257397	5941	23842	LINR	0.04999	0.02268		0.99921	
Isoprene	NE 0.13550	0.20890 0.13652	0.10782 0.14294	0.12769 0.14612	0.14811	0.13210	AVRG		0.14286		19.27805	*
n-Amyl acetate	NE 0.52035	NE 0.54240	NE 0.59479	NE 0.61078	NE	0.53118	AVRG		0.55990		7.20069	*

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Isopropyl acetate	NE 0.72227	1.34716 0.73275	0.78367 0.76494	0.79130 0.76466	0.77391	0.74796	AVRG		0.82540		23.86221	*
n-Butyl acetate	NE 0.19856	0.47947 0.20815	0.28533 0.21762	0.15799 0.22438	0.22627	0.22783	AVRG		0.24729		37.68114	*
Acetaldehyde	NE 67188	NE 107798	3384 161053	5661 205547	6161	32393	LINR	-0.46573	0.02837		0.99553	
Methyl Amyl Ketone	NE 0.62641	1.24254 0.65992	0.68451 0.69377	0.63815 0.71197	0.57607	0.60726	AVRG		0.71562		28.26825	*
Dimethyl Disulfide	NE 0.67210	0.79855 0.68414	0.63899 0.70500	0.61608 0.69777	0.61366	0.66406	AVRG		0.67671		8.32695	
1,2-Dichloroethylene (total)	NE 0.45918	0.54933 0.45116	0.46024 0.47466	0.45982 0.47504	0.46309	0.44450	AVRG		0.47078		6.59168	
Xylenes (total)	NE 0.56357	0.65089 0.56191	0.51351 0.58028	0.53491 0.60523	0.53725	0.54549	AVRG		0.56589		7.37687	
Dibromofluoromethane	NE 211939	2321 438954	4769 652724	9050 856027	24255	90108	LINR	-0.00333	0.47851		0.99972	
1,2-Dichloroethane-d4	NE 222293	2849 455890	5559 686218	9783 919752	24938	92990	LINR	0.00543	0.50950		0.99982	
Toluene-d8	NE 1.18347	1.47608 1.20166	1.31472 1.16429	1.20749 1.10711	1.24798	1.21701	AVRG		1.23554		8.62469	
4-Bromofluorobenzene	NE 292753	3870 615584	7790 936681	13631 1277239	32501	116878	LINR	0.00128	0.46242		0.99992	

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

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02/16/2023

ALS Environmental–Houston Laboratory
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RunID VOA6_424237

Volatiles by by EPA 8260

Instrument ID voa6.i ICAL Date 16-DEC-2022
Lab File ID X121613.D ICAL Time 2249
?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	48.61	97.24	80-120	
1,1,1-Trichloroeth	50.00	50.16	100.33	80-120	
1,1,2,2-Tetrachlor	50.00	46.75	93.50	80-120	
Freon TF	50.00	52.90	105.81	80-120	
Methyl Acetate	50.00	48.17	96.35	80-120	
Cyclohexane	50.00	51.73	103.47	80-120	
Methylcyclohexane	50.00	50.89	101.79	80-120	
Carbon Disulfide	100.00	98.50	98.50	80-120	
2-Hexanone	100.00	96.73	96.74	80-120	
1,1,2-Trichloroeth	50.00	47.91	95.83	80-120	
1,1-Dichloroethane	50.00	48.19	96.39	80-120	
1,1-Dichloroethene	50.00	49.34	98.68	80-120	
1,1-Dichloropropen	50.00	52.11	104.24	80-120	
1,2,3-Trichloroben	50.00	52.79	105.58	80-120	
1,2,3-Trichloropro	50.00	48.07	96.16	80-120	
1,2,4-Trichloroben	50.00	54.66	109.32	80-120	
1,2,4-Trimethylben	50.00	51.32	102.65	80-120	
1,2-Dibromo-3-Chlo	50.00	50.53	101.07	80-120	
1,2-Dibromoethane	50.00	50.24	100.49	80-120	
Acrolein	100.00	95.06	95.07	80-120	
Acrylonitrile	100.00	101.42	101.43	80-120	
1,2-Dichlorobenzen	50.00	49.52	99.05	80-120	
1,2-Dichloroethane	50.00	49.52	99.05	80-120	
1,2-Dichloropropan	50.00	49.60	99.22	80-120	
1,3,5-Trimethylben	50.00	52.30	104.61	80-120	
1,3-Dichlorobenzen	50.00	51.21	102.43	80-120	
1,3-Dichloropropan	50.00	47.82	95.66	80-120	
1,4-Dichlorobenzen	50.00	49.71	99.44	80-120	
1-Chlorohexane	50.00	51.98	103.97	80-120	
2,2-Dichloropropan	50.00	50.98	101.98	80-120	
2-Butanone	100.00	97.74	97.74	80-120	
2-Chloroethylvinyl	100.00	104.19	104.19	80-120	
2-Chlorotoluene	50.00	49.94	99.89	80-120	
4-Chlorotoluene	50.00	51.25	102.51	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_424237

Volatiles by by EPA 8260

Instrument ID voa6.i ICAL Date 16-DEC-2022
Lab File ID X121613.D ICAL Time 2249
?VAL? ?VAL? Conc Units ug/L
Analysis Type VOA Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	54.75	109.51	80-120	
4-Methyl-2-Pentano	100.00	94.03	94.03	80-120	
Acetone	100.00	101.89	101.90	80-120	
Acetonitrile	500.00	475.59	95.12	80-120	
Allyl Chloride	50.00	47.31	94.63	80-120	
Benzene	50.00	50.29	100.58	80-120	
Bromobenzene	50.00	49.62	99.25	80-120	
Bromochloromethane	50.00	47.25	94.51	80-120	
Bromodichlorometha	50.00	49.22	98.45	80-120	
Bromoform	50.00	49.33	98.66	80-120	
Bromomethane	50.00	50.78	101.58	80-120	
Carbon Tetrachlori	50.00	49.06	98.12	80-120	
Chlorobenzene	50.00	48.34	96.68	80-120	
Chloroethane	50.00	48.32	96.64	80-120	
Chloroform	50.00	48.45	96.91	80-120	
Chloromethane	50.00	50.17	100.35	80-120	
Chloroprene	50.00	47.74	95.50	80-120	
cis-1,2-Dichloroet	50.00	48.25	96.51	80-120	
cis-1,3-Dichloropr	50.00	52.11	104.22	80-120	
Dibromochlorometha	50.00	49.50	99.02	80-120	
Dibromomethane	50.00	49.19	98.38	80-120	
Dichlorodifluorome	50.00	52.19	104.38	80-120	
Ethylbenzene	50.00	51.31	102.63	80-120	
Ethyl Methacrylate	50.00	44.07	88.15	80-120	
Iodomethane	100.00	96.48	96.49	80-120	
Isobutyl Alcohol	1000.00	982.15	98.22	70-130	
Propionitrile	500.00	486.89	97.38	70-130	
Hexachlorobutadien	50.00	57.73	115.48	80-120	
Isopropylbenzene	50.00	52.09	104.19	80-120	
m,p-Xylenes	100.00	100.17	100.17	80-120	
Methyl tert-butyl	50.00	48.12	96.25	80-120	
Methylene Chloride	50.00	47.56	95.14	80-120	
Methacrylonitrile	50.00	46.73	93.48	80-120	
Methyl Methacrylat	50.00	47.71	95.43	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_424237

Volatiles by by EPA 8260

Instrument ID voa6.i ICAL Date 16-DEC-2022
Lab File ID X121613.D ICAL Time 2249
?VAL? ?VAL? Conc Units ug/L
Analysis Type VOA Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	50.66	101.33	80-120	
n-Propylbenzene	50.00	52.67	105.35	80-120	
Naphthalene	50.00	52.67	105.35	80-120	
o-Xylene	50.00	49.75	99.51	80-120	
sec-Butylbenzene	50.00	54.16	108.34	80-120	
Styrene	50.00	52.09	104.20	80-120	
tert-Butylbenzene	50.00	52.83	105.67	80-120	
Tetrachloroethene	50.00	50.99	101.99	80-120	
Toluene	50.00	49.20	98.42	80-120	
trans-1,2-Dichloro	50.00	49.99	99.98	80-120	
trans-1,3-Dichloro	50.00	52.50	105.01	80-120	
trans-1,4-Dichloro	50.00	49.73	99.47	80-120	
Trichloroethene	50.00	51.28	102.56	80-120	
Trichlorofluoromet	50.00	51.00	102.02	80-120	
Vinyl Acetate	100.00	104.75	104.76	80-120	
Vinyl Chloride	50.00	50.57	101.15	80-120	
1,2-Dichloroethyle	100.00	98.24	98.25	80-120	
Xylenes (total)	150.00	149.92	99.95	80-120	
1,4-Dioxane	1000.00	1021.76	102.18	80-120	
Dibromofluorometha	50.00	50.91	101.84	71-125	
1,2-Dichloroethane	50.00	50.36	100.73	70-125	
Toluene-d8	50.00	49.50	99.00	75-125	
4-Bromofluorobenze	50.00	49.98	99.97	72-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	50.0	43.46372	0.30363	0.100	13.07255	20.0	Linear	
Chloromethane	50.0	47.04171	0.42438	0.100	5.91658	20.0	Linear	
Propionitrile	0.05102	0.05658	0.05658	0.010	-10.89928	20.0	Averaged	
Vinyl Chloride	0.43678	0.42536	0.42536	0.100	2.61473	20.0	Averaged	
Bromomethane	50.0	46.37703	0.30555	0.100	7.24594	20.0	Linear	
Chloroethane	0.30401	0.28704	0.28704	0.100	5.58124	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.66678	0.66678	0.100	-9.08910	20.0	Averaged	
Acrolein	100	103	0.03516	0.010	-2.74295	20.0	Linear	
Acetone	100	110	0.15370	0.100	-9.55416	20.0	Linear	
1,1-Dichloroethene	0.37948	0.38027	0.38027	0.100	-0.20880	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06598	0.06598	0.005	-17.31786	20.0	Averaged	
Acetonitrile	0.04551	0.05401	0.05401	0.005	-18.67808	20.0	Averaged	
Allyl Chloride	0.86670	0.96166	0.96166	0.100	-10.95676	20.0	Averaged	
Iodomethane	100	102	0.51250	0.100	-2.28565	20.0	Quadratic	
Acrylonitrile	0.12870	0.14847	0.14847	0.050	-15.35984	20.0	Averaged	
Methylene Chloride	0.52052	0.48596	0.48596	0.100	6.64028	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.33368	1.33368	0.100	-7.37258	20.0	Averaged	
Carbon Disulfide	0.99285	1.05102	1.05102	0.100	-5.85845	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.43863	0.43863	0.100	-3.27902	20.0	Averaged	
Vinyl Acetate	1.09037	1.27201	1.27201	0.010	-16.65922	20.0	Averaged	
1,1-Dichloroethane	0.74536	0.76741	0.76741	0.200	-2.95779	20.0	Averaged	
Chloroprene	0.17001	0.16396	0.16396	0.100	3.55956	20.0	Averaged	
2-Butanone	100	111	0.16565	0.100	-10.97028	20.0	Linear	
Methacrylonitrile	0.35404	0.39326	0.39326	0.100	-11.07804	20.0	Averaged	
2,2-Dichloropropane	0.63286	0.73773	0.73773	0.100	-16.57210	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.50541	0.50541	0.100	2.21463	20.0	Averaged	
Chloroform	0.83541	0.85884	0.85884	0.200	-2.80386	20.0	Averaged	
Bromochloromethane	0.28299	0.26476	0.26476	0.100	6.44309	20.0	Averaged	
Dibromofluoromethane	50.0	50.54201	0.48529	0.100	-1.08402	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.75141	0.75141	0.100	-13.36404	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.42083	0.42083	0.100	-18.55297	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.45623	0.45623	0.100	-11.36502	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.41971	0.41971	0.100	-10.72407	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	54.92946	0.55697	0.100	-9.85893	20.0	Linear	

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Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Benzene	1.19399	1.23242	1.23242	0.500	-3.21892	20.0	Averaged	
Trichloroethene	0.33865	0.35892	0.35892	0.200	-5.98441	20.0	Averaged	
Bromodichloromethane	0.44810	0.45546	0.45546	0.200	-1.64355	20.0	Averaged	
Methyl Methacrylate	0.34093	0.39915	0.39915	0.100	-17.07916	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.14872	0.14872	0.001	-16.66371	20.0	Averaged	
1,2-Dichloropropane	0.31761	0.32073	0.32073	0.100	-0.98342	20.0	Averaged	
2-Nitropropane	0.12626	0.15726	0.15726	0.000	-24.54847	20.0	Averaged	<-
Dibromomethane	0.21588	0.21656	0.21656	0.100	-0.31458	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.29611	0.29611	0.100	-10.79742	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.56177	0.56177	0.200	-6.74973	20.0	Averaged	
Toluene-d8	1.23554	1.24078	1.24078	0.100	-0.42453	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.26783	0.26783	0.100	-13.75030	20.0	Averaged	
Toluene	1.38201	1.43737	1.43737	0.400	-4.00528	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.49161	0.49161	0.100	-12.56715	20.0	Averaged	
2-Hexanone	0.18183	0.20842	0.20842	0.100	-14.62209	20.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.27255	0.27255	0.100	1.69756	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.55948	0.55948	0.100	-2.51948	20.0	Averaged	
Dibromochloromethane	0.40016	0.40703	0.40703	0.100	-1.71720	20.0	Averaged	
Tetrachloroethene	0.28594	0.32100	0.32100	0.200	-12.26115	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.36165	0.36165	0.100	-4.32772	20.0	Averaged	
1-Chlorohexane	0.24163	0.29701	0.29701	0.100	-22.91612	20.0	Averaged	<-
Chlorobenzene	0.98026	0.98352	0.98352	0.500	-0.33302	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37500	0.37500	0.100	-2.79473	20.0	Averaged	
Ethylbenzene	0.46175	0.50775	0.50775	0.100	-9.96066	20.0	Averaged	
m,p-Xylenes	0.59525	0.64741	0.64741	0.100	-8.76315	20.0	Averaged	
o-Xylene	0.58751	0.61524	0.61524	0.300	-4.71985	20.0	Averaged	
Styrene	0.98473	1.07182	1.07182	0.300	-8.84350	20.0	Averaged	
Bromoform	0.27722	0.28569	0.28569	0.100	-3.05500	20.0	Averaged	
Isopropylbenzene	1.34224	1.59205	1.59205	0.100	-18.61159	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.77429	0.77429	0.300	2.84050	20.0	Averaged	
4-Bromofluorobenzene	50.0	53.31448	0.49248	0.100	-6.62895	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.59000	0.59000	0.100	-6.04687	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12369	0.12369	0.050	-14.59072	20.0	Averaged	
n-Propylbenzene	2.76956	3.29232	3.29232	0.100	-18.87513	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.82033	0.81343	0.81343	0.100	0.84012	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.38751	2.38751	0.100	-16.69398	20.0	Averaged	
2-Chlorotoluene	1.81741	1.99202	1.99202	0.100	-9.60752	20.0	Averaged	
4-Chlorotoluene	2.07183	2.33540	2.33540	0.100	-12.72184	20.0	Averaged	
tert-Butylbenzene	1.67475	1.99053	1.99053	0.100	-18.85498	20.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.42500	2.42500	0.100	-12.64559	20.0	Averaged	
sec-Butylbenzene	2.22832	2.82484	2.82484	0.100	-26.77019	20.0	Averaged	<-
p-Isopropyltoluene	1.99679	2.52320	2.52320	0.100	-26.36316	20.0	Averaged	<-
1,3-Dichlorobenzene	1.36155	1.46731	1.46731	0.600	-7.76740	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.54667	1.54667	0.400	-4.09957	20.0	Averaged	
Benzyl Chloride	50.0	54.78916	0.86167	0.010	-9.57833	20.0	Linear	
n-Butylbenzene	50.0	59.29315	2.29524	0.500	-18.58631	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.45055	1.45055	0.400	-3.44437	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	52.85755	0.13470	0.040	-5.71510	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.05472	1.05472	0.100	-19.18461	20.0	Averaged	
Hexachlorobutadiene	50.0	59.03119	0.46399	0.100	-18.06237	20.0	Quadratic	
Naphthalene	2.01347	2.25857	2.25857	0.200	-12.17325	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.95851	0.95851	0.010	-13.09219	20.0	Averaged	
Methyl Acetate	0.22499	0.25699	0.25699	0.100	-14.22206	20.0	Averaged	
Freon TF	0.36703	0.39383	0.39383	0.100	-7.30111	20.0	Averaged	
Cyclohexane	50.0	59.83489	0.60569	0.100	-19.66977	20.0	Linear	
Tetrahydrofuran	100	106	0.06566	0.001	-5.80765	20.0	Linear	
Methylcyclohexane	0.61204	0.78046	0.78046	0.100	-27.51713	20.0	Averaged	<-
1,4-Dioxane	0.00457	0.00510	0.00510	0.001	-11.52102	20.0	Averaged	
n-Butanol	1000	1170	0.00760	0.005	-17.02338	20.0	Quadratic	
Methyl Acrylate	0.33946	0.43700	0.43700	0.100	-28.73507	20.0	Averaged	<-
Ethyl Acrylate	50.0	59.78295	1.17864	0.100	-19.56589	20.0	Linear	
n-Hexane	0.36001	0.46688	0.46688	0.100	-29.68804	20.0	Averaged	<-
Diethyl ether	0.33409	0.31783	0.31783	0.100	4.86841	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.04084	0.04084	0.005	-17.96123	20.0	Averaged	
Isopropyl alcohol	0.01808	0.02197	0.02197	0.005	-21.48986	20.0	Averaged	<-
Diisopropyl ether	1.29704	1.41121	1.41121	0.100	-8.80228	20.0	Averaged	
2-Methylnaphthalene	0.97007	1.07108	1.07108	0.100	-10.41266	20.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.64258	2.64258	0.100	-9.75280	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 0752
Lab File ID X012402.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Ethanol	1000	1107	0.00361	0.001	-10.72715	20.0	Linear	
tert-Butyl formate	0.26532	0.32117	0.32117	0.100	-21.05122	20.0	Averaged	<-
3,3-Dimethyl-1-butanol	0.02366	0.02865	0.02865	0.005	-21.12182	20.0	Averaged	<-
tert-Amyl methyl ether	1.44127	1.51435	1.51435	0.005	-5.07027	20.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.47876	1.47876	0.100	-7.29422	20.0	Averaged	
tert-Amyl alcohol	0.02685	0.03212	0.03212	0.005	-19.59981	20.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.05704	0.05704	0.005	-20.52985	20.0	Averaged	<-
1-Methylnaphthalene	++++	1.07108	1.07108	0.100	++++	20.0	Averaged	<-
1,3-Butadiene	0.34316	0.33346	0.33346	0.100	2.82619	20.0	Averaged	
Amyl alcohol	0.00494	0.00589	0.00589	0.005	-19.14178	20.0	Averaged	<-
Dichlorofluoromethane	0.06474	0.06267	0.06267	0.100	3.20266	20.0	Averaged	<-
Propylene oxide	0.03144	0.03211	0.03211	0.005	-2.12099	20.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00631	0.00631	0.005	-27.71454	20.0	Averaged	<-
Butyl acrylate	0.65314	0.75966	0.75966	0.100	-16.30897	20.0	Averaged	
Epichlorohydrin	200	229	0.02563	0.001	-14.25972	20.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.47202	0.47202	0.200	-0.26335	20.0	Averaged	
Xylenes (total)	0.56589	0.61191	0.61191	0.100	-8.13163	20.0	Averaged	
alpha-Methylstyrene	1.10787	1.15502	1.15502	0.100	-4.25589	20.0	Averaged	
Ethyl Acetate	0.39016	0.44813	0.44813	0.100	-14.85875	20.0	Averaged	
Cyclohexanone	0.02086	0.02700	0.02700	0.005	-29.44332	20.0	Averaged	<-
Isoprene	0.13320	0.15062	0.15062	0.100	-13.07944	20.0	Averaged	
Isopentane	++++	0.28776	0.28776	0.100	++++	20.0	Averaged	<-
Isopropyl acetate	0.77682	0.87677	0.87677	0.100	-12.86716	20.0	Averaged	
n-Amyl acetate	0.58303	0.61633	0.61633	0.100	-5.71021	20.0	Averaged	
n-Butyl acetate	0.42951	0.50880	0.50880	0.100	-18.46056	20.0	Averaged	
Allyl alcohol	0.01838	0.02334	0.02334	0.004	-27.02397	20.0	Averaged	<-
Acetaldehyde	200	200	0.03174	0.001	-0.24429	20.0	Linear	
Methyl Amyl Ketone	0.66478	0.75219	0.75219	0.100	-13.14967	20.0	Averaged	
Dimethyl Disulfide	0.67671	0.72740	0.72740	0.100	-7.49196	20.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00043	0.00043	0.001	++++	20.0	Averaged	<-
Isobutylene	0.05199	++++	3.846e+67	0.100	++++	20.0	Averaged	<-
1-Propanol	0.00817	0.00814	0.00814	0.005	0.33380	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Dichlorodifluoromethane	50.0	44.20299	0.30884	0.100	11.59403	50.0	Linear	
Chloromethane	50.0	46.23524	0.41674	0.100	7.52953	50.0	Linear	
Propionitrile	0.05102	0.05441	0.05441	0.010	-6.64296	50.0	Averaged	
Vinyl Chloride	0.43678	0.42390	0.42390	0.100	2.94848	50.0	Averaged	
Bromomethane	50.0	46.13258	0.30387	0.100	7.73485	50.0	Linear	
Chloroethane	0.30401	0.27943	0.27943	0.100	8.08480	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.67463	0.67463	0.100	-10.37300	50.0	Averaged	
Acrolein	100	97.99542	0.03349	0.010	2.00458	50.0	Linear	
Acetone	100	98.66267	0.13842	0.100	1.33733	50.0	Linear	
1,1-Dichloroethene	0.37948	0.37843	0.37843	0.100	0.27518	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06380	0.06380	0.005	-13.44571	50.0	Averaged	
Acetonitrile	0.04551	0.05249	0.05249	0.005	-15.34840	50.0	Averaged	
Allyl Chloride	0.86670	0.93269	0.93269	0.100	-7.61392	50.0	Averaged	
Iodomethane	100	97.51495	0.48676	0.100	2.48505	50.0	Quadratic	
Acrylonitrile	0.12870	0.14471	0.14471	0.050	-12.43992	50.0	Averaged	
Methylene Chloride	0.52052	0.47850	0.47850	0.100	8.07330	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.29397	1.29397	0.100	-4.17520	50.0	Averaged	
Carbon Disulfide	0.99285	1.00873	1.00873	0.100	-1.59948	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.43227	0.43227	0.100	-1.78107	50.0	Averaged	
Vinyl Acetate	1.09037	1.08738	1.08738	0.010	0.27416	50.0	Averaged	
1,1-Dichloroethane	0.74536	0.74037	0.74037	0.200	0.66988	50.0	Averaged	
Chloroprene	0.17001	0.16600	0.16600	0.100	2.35763	50.0	Averaged	
2-Butanone	100	105	0.15695	0.100	-5.30296	50.0	Linear	
Methacrylonitrile	0.35404	0.38024	0.38024	0.100	-7.39903	50.0	Averaged	
2,2-Dichloropropane	0.63286	0.61886	0.61886	0.100	2.21067	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.50503	0.50503	0.100	2.28889	50.0	Averaged	
Chloroform	0.83541	0.85432	0.85432	0.200	-2.26317	50.0	Averaged	
Bromochloromethane	0.28299	0.26408	0.26408	0.100	6.68179	50.0	Averaged	
Dibromofluoromethane	50.0	49.86951	0.47885	0.100	0.26097	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.74089	0.74089	0.100	-11.77757	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.40205	0.40205	0.100	-13.26124	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.43433	0.43433	0.100	-6.02098	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.40734	0.40734	0.100	-7.45914	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	54.20416	0.54958	0.100	-8.40832	50.0	Linear	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Benzene	1.19399	1.18956	1.18956	0.500	0.37087	50.0	Averaged	
Trichloroethene	0.33865	0.36140	0.36140	0.200	-6.71707	50.0	Averaged	
Bromodichloromethane	0.44810	0.43377	0.43377	0.200	3.19673	50.0	Averaged	
Methyl Methacrylate	0.34093	0.39866	0.39866	0.100	-16.93538	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.13925	0.13925	0.001	-9.22960	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.30487	0.30487	0.100	4.00990	50.0	Averaged	
2-Nitropropane	0.12626	0.14417	0.14417	0.000	-14.18583	50.0	Averaged	
Dibromomethane	0.21588	0.20762	0.20762	0.100	3.82665	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.27449	0.27449	0.100	-2.70870	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.51722	0.51722	0.200	1.71626	50.0	Averaged	
Toluene-d8	1.23554	1.19404	1.19404	0.100	3.35833	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.25638	0.25638	0.100	-8.88994	50.0	Averaged	
Toluene	1.38201	1.38367	1.38367	0.400	-0.11953	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.44637	0.44637	0.100	-2.20819	50.0	Averaged	
2-Hexanone	0.18183	0.19178	0.19178	0.100	-5.47393	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.26245	0.26245	0.100	5.34071	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.52759	0.52759	0.100	3.32336	50.0	Averaged	
Dibromochloromethane	0.40016	0.38615	0.38615	0.100	3.50141	50.0	Averaged	
Tetrachloroethene	0.28594	0.30755	0.30755	0.200	-7.55720	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.34155	0.34155	0.100	1.47091	50.0	Averaged	
1-Chlorohexane	0.24163	0.28221	0.28221	0.100	-16.79346	50.0	Averaged	
Chlorobenzene	0.98026	0.94171	0.94171	0.500	3.93259	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.36005	0.36005	0.100	1.30184	50.0	Averaged	
Ethylbenzene	0.46175	0.49252	0.49252	0.100	-6.66381	50.0	Averaged	
m,p-Xylenes	0.59525	0.62084	0.62084	0.100	-4.29909	50.0	Averaged	
o-Xylene	0.58751	0.59325	0.59325	0.300	-0.97727	50.0	Averaged	
Styrene	0.98473	1.02837	1.02837	0.300	-4.43166	50.0	Averaged	
Bromoform	0.27722	0.26961	0.26961	0.100	2.74681	50.0	Averaged	
Isopropylbenzene	1.34224	1.55110	1.55110	0.100	-15.56075	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.71408	0.71408	0.300	10.39606	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.80001	0.46922	0.100	-1.60002	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.78918	0.78918	0.100	-41.84810	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11160	0.11160	0.050	-3.39650	50.0	Averaged	
n-Propylbenzene	2.76956	3.12247	3.12247	0.100	-12.74261	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Bromobenzene	0.82033	0.78323	0.78323	0.100	4.52243	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.29698	2.29698	0.100	-12.26916	50.0	Averaged	
2-Chlorotoluene	1.81741	1.89793	1.89793	0.100	-4.43056	50.0	Averaged	
4-Chlorotoluene	2.07183	2.22504	2.22504	0.100	-7.39496	50.0	Averaged	
tert-Butylbenzene	1.67475	1.92910	1.92910	0.100	-15.18700	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.31173	2.31173	0.100	-7.38425	50.0	Averaged	
sec-Butylbenzene	2.22832	2.70982	2.70982	0.100	-21.60857	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.39627	2.39627	0.100	-20.00646	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.38856	1.38856	0.600	-1.98339	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.46983	1.46983	0.400	1.07223	50.0	Averaged	
Benzyl Chloride	50.0	38.96922	0.60000	0.010	22.06156	50.0	Linear	
n-Butylbenzene	50.0	54.53251	2.10527	0.500	-9.06503	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.39341	1.39341	0.400	0.63050	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	48.73652	0.12418	0.040	2.52697	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	0.97030	0.97030	0.100	-9.64490	50.0	Averaged	
Hexachlorobutadiene	50.0	54.33295	0.42660	0.100	-8.66589	50.0	Quadratic	
Naphthalene	2.01347	2.11971	2.11971	0.200	-5.27688	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.90268	0.90268	0.010	-6.50485	50.0	Averaged	
Methyl Acetate	0.22499	0.24138	0.24138	0.100	-7.28376	50.0	Averaged	
Freon TF	0.36703	0.39662	0.39662	0.100	-8.06055	50.0	Averaged	
Cyclohexane	50.0	60.20402	0.60951	0.100	-20.40805	50.0	Linear	
Tetrahydrofuran	100	107	0.06666	0.001	-7.46791	50.0	Linear	
Methylcyclohexane	0.61204	0.73485	0.73485	0.100	-20.06496	50.0	Averaged	
1,4-Dioxane	0.00457	0.00541	0.00541	0.001	-18.41020	50.0	Averaged	
n-Butanol	1000	1056	0.00679	0.005	-5.58483	50.0	Quadratic	
Methyl Acrylate	0.33946	0.46148	0.46148	0.100	-35.94624	50.0	Averaged	
Ethyl Acrylate	50.0	57.83779	1.13908	0.100	-15.67558	50.0	Linear	
n-Hexane	0.36001	0.40991	0.40991	0.100	-13.86200	50.0	Averaged	
Diethyl ether	0.33409	0.31236	0.31236	0.100	6.50394	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.03851	0.03851	0.005	-11.22766	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02083	0.02083	0.005	-15.18430	50.0	Averaged	
Diisopropyl ether	1.29704	1.37638	1.37638	0.100	-6.11674	50.0	Averaged	
2-Methylnaphthalene	0.97007	0.99426	0.99426	0.100	-2.49348	50.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.55834	2.55834	0.100	-6.25425	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426355

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 24-JAN-2023 1905
Lab File ID X012433.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Ethanol	1000	1080	0.00352	0.001	-8.01081	50.0	Linear	
tert-Butyl formate	0.26532	0.29963	0.29963	0.100	-12.93457	50.0	Averaged	
3,3-Dimethyl-1-butanol	0.02366	0.02575	0.02575	0.005	-8.83588	50.0	Averaged	
tert-Amyl methyl ether	1.44127	1.50899	1.50899	0.005	-4.69854	50.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.44124	1.44124	0.100	-4.57222	50.0	Averaged	
tert-Amyl alcohol	0.02685	0.02996	0.02996	0.005	-11.58048	50.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.04725	0.04725	0.005	0.16450	50.0	Averaged	
1-Methylnaphthalene	++++	0.99426	0.99426	0.100	++++	50.0	Averaged	<-
1,3-Butadiene	0.34316	0.32793	0.32793	0.100	4.43746	50.0	Averaged	
Amyl alcohol	0.00494	0.00536	0.00536	0.005	-8.32029	50.0	Averaged	
Dichlorofluoromethane	0.06474	0.06574	0.06574	0.100	-1.53841	50.0	Averaged	
Propylene oxide	0.03144	0.03068	0.03068	0.005	2.42736	50.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00546	0.00546	0.005	-10.44766	50.0	Averaged	
Butyl acrylate	0.65314	0.70970	0.70970	0.100	-8.66014	50.0	Averaged	
Epichlorohydrin	200	211	0.02364	0.001	-5.50350	50.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.46865	0.46865	0.200	0.45308	50.0	Averaged	
Xylenes (total)	0.56589	0.58878	0.58878	0.100	-4.04357	50.0	Averaged	
alpha-Methylstyrene	1.10787	1.08841	1.08841	0.100	1.75630	50.0	Averaged	
Ethyl Acetate	0.39016	0.41815	0.41815	0.100	-7.17357	50.0	Averaged	
Cyclohexanone	0.02086	0.02491	0.02491	0.005	-19.43320	50.0	Averaged	
Isoprene	0.13320	0.14475	0.14475	0.100	-8.66806	50.0	Averaged	
Isopentane	++++	0.25846	0.25846	0.100	++++	50.0	Averaged	<-
Isopropyl acetate	0.77682	0.82319	0.82319	0.100	-5.96915	50.0	Averaged	
n-Amyl acetate	0.58303	0.57571	0.57571	0.100	1.25623	50.0	Averaged	
n-Butyl acetate	0.42951	0.48161	0.48161	0.100	-12.12905	50.0	Averaged	
Allyl alcohol	0.01838	0.02050	0.02050	0.004	-11.52303	50.0	Averaged	
Acetaldehyde	200	255	0.03953	0.001	-27.68724	50.0	Linear	
Methyl Amyl Ketone	0.66478	0.69860	0.69860	0.100	-5.08739	50.0	Averaged	
Dimethyl Disulfide	0.67671	0.69265	0.69265	0.100	-2.35634	50.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00041	0.00041	0.001	++++	50.0	Averaged	<-
Isobutylene	0.05199	++++	3.846e+67	0.100	++++	50.0	Averaged	<-
1-Propanol	0.00817	0.00795	0.00795	0.005	2.74312	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	50.0	42.94017	0.29994	0.100	14.11967	20.0	Linear	
Chloromethane	50.0	43.94037	0.39502	0.100	12.11927	20.0	Linear	
Propionitrile	0.05102	0.05054	0.05054	0.010	0.94574	20.0	Averaged	
Vinyl Chloride	0.43678	0.40969	0.40969	0.100	6.20259	20.0	Averaged	
Bromomethane	50.0	42.55394	0.27936	0.100	14.89212	20.0	Linear	
Chloroethane	0.30401	0.26660	0.26660	0.100	12.30500	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.66633	0.66633	0.100	-9.01551	20.0	Averaged	
Acrolein	100	96.94529	0.03312	0.010	3.05471	20.0	Linear	
Acetone	100	93.98292	0.13186	0.100	6.01708	20.0	Linear	
1,1-Dichloroethene	0.37948	0.37087	0.37087	0.100	2.26928	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06049	0.06049	0.005	-7.56610	20.0	Averaged	
Acetonitrile	0.04551	0.05056	0.05056	0.005	-11.10759	20.0	Averaged	
Allyl Chloride	0.86670	0.87296	0.87296	0.100	-0.72299	20.0	Averaged	
Iodomethane	100	97.52577	0.48681	0.100	2.47423	20.0	Quadratic	
Acrylonitrile	0.12870	0.13624	0.13624	0.050	-5.85506	20.0	Averaged	
Methylene Chloride	0.52052	0.46108	0.46108	0.100	11.41993	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.20628	1.20628	0.100	2.88453	20.0	Averaged	
Carbon Disulfide	0.99285	1.00276	1.00276	0.100	-0.99816	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.42585	0.42585	0.100	-0.27020	20.0	Averaged	
Vinyl Acetate	1.09037	1.16994	1.16994	0.010	-7.29743	20.0	Averaged	
1,1-Dichloroethane	0.74536	0.72542	0.72542	0.200	2.67573	20.0	Averaged	
Chloroprene	0.17001	0.16191	0.16191	0.100	4.76104	20.0	Averaged	
2-Butanone	100	102	0.15201	0.100	-2.08341	20.0	Linear	
Methacrylonitrile	0.35404	0.35218	0.35218	0.100	0.52474	20.0	Averaged	
2,2-Dichloropropane	0.63286	0.69770	0.69770	0.100	-10.24635	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.49013	0.49013	0.100	5.17118	20.0	Averaged	
Chloroform	0.83541	0.83191	0.83191	0.200	0.41905	20.0	Averaged	
Bromochloromethane	0.28299	0.25354	0.25354	0.100	10.40840	20.0	Averaged	
Dibromofluoromethane	50.0	48.88030	0.46938	0.100	2.23939	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.72976	0.72976	0.100	-10.09786	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.41724	0.41724	0.100	-17.54060	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.44375	0.44375	0.100	-8.32039	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.42419	0.42419	0.100	-11.90565	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	52.69913	0.53424	0.100	-5.39826	20.0	Linear	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Benzene	1.19399	1.22740	1.22740	0.500	-2.79810	20.0	Averaged	
Trichloroethene	0.33865	0.36324	0.36324	0.200	-7.25914	20.0	Averaged	
Bromodichloromethane	0.44810	0.44597	0.44597	0.200	0.47499	20.0	Averaged	
Methyl Methacrylate	0.34093	0.36494	0.36494	0.100	-7.04448	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.14192	0.14192	0.001	-11.32375	20.0	Averaged	
1,2-Dichloropropane	0.31761	0.31157	0.31157	0.100	1.90004	20.0	Averaged	
2-Nitropropane	0.12626	0.13514	0.13514	0.000	-7.02835	20.0	Averaged	
Dibromomethane	0.21588	0.21030	0.21030	0.100	2.58559	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.27848	0.27848	0.100	-4.20204	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.54533	0.54533	0.200	-3.62519	20.0	Averaged	
Toluene-d8	1.23554	1.22580	1.22580	0.100	0.78807	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.24336	0.24336	0.100	-3.35899	20.0	Averaged	
Toluene	1.38201	1.41845	1.41845	0.400	-2.63662	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.47263	0.47263	0.100	-8.22138	20.0	Averaged	
2-Hexanone	0.18183	0.19301	0.19301	0.100	-6.14741	20.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.26668	0.26668	0.100	3.81508	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.54056	0.54056	0.100	0.94722	20.0	Averaged	
Dibromochloromethane	0.40016	0.39502	0.39502	0.100	1.28443	20.0	Averaged	
Tetrachloroethene	0.28594	0.32583	0.32583	0.200	-13.94737	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.35049	0.35049	0.100	-1.10808	20.0	Averaged	
1-Chlorohexane	0.24163	0.28460	0.28460	0.100	-17.78186	20.0	Averaged	
Chlorobenzene	0.98026	0.97639	0.97639	0.500	0.39464	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37055	0.37055	0.100	-1.57739	20.0	Averaged	
Ethylbenzene	0.46175	0.51103	0.51103	0.100	-10.67167	20.0	Averaged	
m,p-Xylenes	0.59525	0.64386	0.64386	0.100	-8.16552	20.0	Averaged	
o-Xylene	0.58751	0.61350	0.61350	0.300	-4.42356	20.0	Averaged	
Styrene	0.98473	1.06380	1.06380	0.300	-8.02907	20.0	Averaged	
Bromoform	0.27722	0.27421	0.27421	0.100	1.08603	20.0	Averaged	
Isopropylbenzene	1.34224	1.60202	1.60202	0.100	-19.35461	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.75416	0.75416	0.300	5.36642	20.0	Averaged	
4-Bromofluorobenzene	50.0	52.41920	0.48420	0.100	-4.83841	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.57029	0.57029	0.100	-2.50508	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11796	0.11796	0.050	-9.28110	20.0	Averaged	
n-Propylbenzene	2.76956	3.31463	3.31463	0.100	-19.68095	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.82033	0.81789	0.81789	0.100	0.29660	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.40823	2.40823	0.100	-17.70682	20.0	Averaged	
2-Chlorotoluene	1.81741	1.99939	1.99939	0.100	-10.01276	20.0	Averaged	
4-Chlorotoluene	2.07183	2.33071	2.33071	0.100	-12.49548	20.0	Averaged	
tert-Butylbenzene	1.67475	2.02737	2.02737	0.100	-21.05485	20.0	Averaged	<-
1,2,4-Trimethylbenzene	2.15277	2.43774	2.43774	0.100	-13.23748	20.0	Averaged	
sec-Butylbenzene	2.22832	2.88310	2.88310	0.100	-29.38453	20.0	Averaged	<-
p-Isopropyltoluene	1.99679	2.55236	2.55236	0.100	-27.82324	20.0	Averaged	<-
1,3-Dichlorobenzene	1.36155	1.45687	1.45687	0.600	-7.00077	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.54570	1.54570	0.400	-4.03430	20.0	Averaged	
Benzyl Chloride	50.0	50.28936	0.78724	0.010	-0.57872	20.0	Linear	
n-Butylbenzene	50.0	59.35307	2.29763	0.500	-18.70615	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.43850	1.43850	0.400	-2.58491	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	50.62783	0.12901	0.040	-1.25566	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.04369	1.04369	0.100	-17.93847	20.0	Averaged	
Hexachlorobutadiene	50.0	62.29313	0.48999	0.100	-24.58626	20.0	Quadratic	<-
Naphthalene	2.01347	2.20027	2.20027	0.200	-9.27753	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.93294	0.93294	0.010	-10.07569	20.0	Averaged	
Methyl Acetate	0.22499	0.22497	0.22497	0.100	0.00627	20.0	Averaged	
Freon TF	0.36703	0.40197	0.40197	0.100	-9.51882	20.0	Averaged	
Cyclohexane	50.0	59.69943	0.60429	0.100	-19.39886	20.0	Linear	
Tetrahydrofuran	100	93.40801	0.05819	0.001	6.59199	20.0	Linear	
Methylcyclohexane	0.61204	0.72726	0.72726	0.100	-18.82572	20.0	Averaged	
1,4-Dioxane	0.00457	0.00494	0.00494	0.001	-8.18125	20.0	Averaged	
n-Butanol	1000	1006	0.00644	0.005	-0.60632	20.0	Quadratic	
Methyl Acrylate	0.33946	0.42900	0.42900	0.100	-26.37960	20.0	Averaged	<-
Ethyl Acrylate	50.0	55.77932	1.09721	0.100	-11.55865	20.0	Linear	
n-Hexane	0.36001	0.47714	0.47714	0.100	-32.53734	20.0	Averaged	<-
Diethyl ether	0.33409	0.28575	0.28575	0.100	14.46830	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.03645	0.03645	0.005	-5.27078	20.0	Averaged	
Isopropyl alcohol	0.01808	0.01973	0.01973	0.005	-9.11564	20.0	Averaged	
Diisopropyl ether	1.29704	1.29126	1.29126	0.100	0.44617	20.0	Averaged	
2-Methylnaphthalene	0.97007	1.02001	1.02001	0.100	-5.14844	20.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.56385	2.56385	0.100	-6.48314	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 0739
Lab File ID X012502.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Ethanol	1000	1007	0.00328	0.001	-0.72838	20.0	Linear	
tert-Butyl formate	0.26532	0.28579	0.28579	0.100	-7.71853	20.0	Averaged	
3,3-Dimethyl-1-butanol	0.02366	0.02494	0.02494	0.005	-5.41990	20.0	Averaged	
tert-Amyl methyl ether	1.44127	1.39324	1.39324	0.005	3.33273	20.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.35600	1.35600	0.100	1.61264	20.0	Averaged	
tert-Amyl alcohol	0.02685	0.02858	0.02858	0.005	-6.42698	20.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.05008	0.05008	0.005	-5.83268	20.0	Averaged	
1-Methylnaphthalene	++++	1.02001	1.02001	0.100	++++	20.0	Averaged	<-
1,3-Butadiene	0.34316	0.33019	0.33019	0.100	3.78013	20.0	Averaged	
Amyl alcohol	0.00494	0.00510	0.00510	0.005	-3.05976	20.0	Averaged	<-
Dichlorofluoromethane	0.06474	0.05600	0.05600	0.100	13.49876	20.0	Averaged	<-
Propylene oxide	0.03144	0.02922	0.02922	0.005	7.06551	20.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00556	0.00556	0.005	-12.51591	20.0	Averaged	<-
Butyl acrylate	0.65314	0.70132	0.70132	0.100	-7.37756	20.0	Averaged	
Epichlorohydrin	200	211	0.02364	0.001	-5.50467	20.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.45799	0.45799	0.200	2.71678	20.0	Averaged	
Xylenes (total)	0.56589	0.61132	0.61132	0.100	-8.02675	20.0	Averaged	
alpha-Methylstyrene	1.10787	1.14713	1.14713	0.100	-3.54415	20.0	Averaged	
Ethyl Acetate	0.39016	0.39139	0.39139	0.100	-0.31559	20.0	Averaged	
Cyclohexanone	0.02086	0.02473	0.02473	0.005	-18.55217	20.0	Averaged	
Isoprene	0.13320	0.13989	0.13989	0.100	-5.02463	20.0	Averaged	
Isopentane	++++	0.26266	0.26266	0.100	++++	20.0	Averaged	<-
Isopropyl acetate	0.77682	0.82473	0.82473	0.100	-6.16825	20.0	Averaged	
n-Amyl acetate	0.58303	0.59270	0.59270	0.100	-1.65717	20.0	Averaged	
n-Butyl acetate	0.42951	0.47919	0.47919	0.100	-11.56593	20.0	Averaged	
Allyl alcohol	0.01838	0.02386	0.02386	0.004	-29.81474	20.0	Averaged	<-
Acetaldehyde	200	178	0.02854	0.001	11.04492	20.0	Linear	
Methyl Amyl Ketone	0.66478	0.68236	0.68236	0.100	-2.64571	20.0	Averaged	
Dimethyl Disulfide	0.67671	0.67380	0.67380	0.100	0.42870	20.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00048	0.00048	0.001	++++	20.0	Averaged	<-
Isobutylene	0.05199	++++	5.923e+59	0.100	++++	20.0	Averaged	<-
1-Propanol	0.00817	0.00751	0.00751	0.005	8.09206	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Dichlorodifluoromethane	50.0	42.55407	0.29721	0.100	14.89187	50.0	Linear	
Chloromethane	50.0	43.51269	0.39097	0.100	12.97461	50.0	Linear	
Propionitrile	0.05102	0.05154	0.05154	0.010	-1.01486	50.0	Averaged	
Vinyl Chloride	0.43678	0.41405	0.41405	0.100	5.20455	50.0	Averaged	
Bromomethane	50.0	45.74369	0.30121	0.100	8.51262	50.0	Linear	
Chloroethane	0.30401	0.26717	0.26717	0.100	12.11669	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.64252	0.64252	0.100	-5.11971	50.0	Averaged	
Acrolein	100	88.92443	0.03030	0.010	11.07557	50.0	Linear	
Acetone	100	88.00826	0.12348	0.100	11.99174	50.0	Linear	
1,1-Dichloroethene	0.37948	0.35954	0.35954	0.100	5.25320	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06200	0.06200	0.005	-10.24009	50.0	Averaged	
Acetonitrile	0.04551	0.04867	0.04867	0.005	-6.95600	50.0	Averaged	
Allyl Chloride	0.86670	0.86616	0.86616	0.100	0.06154	50.0	Averaged	
Iodomethane	100	91.44282	0.45415	0.100	8.55718	50.0	Quadratic	
Acrylonitrile	0.12870	0.13711	0.13711	0.050	-6.53054	50.0	Averaged	
Methylene Chloride	0.52052	0.46701	0.46701	0.100	10.27922	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.20402	1.20402	0.100	3.06655	50.0	Averaged	
Carbon Disulfide	0.99285	0.97715	0.97715	0.100	1.58154	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.41492	0.41492	0.100	2.30352	50.0	Averaged	
Vinyl Acetate	1.09037	1.11169	1.11169	0.010	-1.95572	50.0	Averaged	
1,1-Dichloroethane	0.74536	0.70676	0.70676	0.200	5.17866	50.0	Averaged	
Chloroprene	0.17001	0.15715	0.15715	0.100	7.56348	50.0	Averaged	
2-Butanone	100	100	0.14873	0.100	0.05435	50.0	Linear	
Methacrylonitrile	0.35404	0.36464	0.36464	0.100	-2.99202	50.0	Averaged	
2,2-Dichloropropane	0.63286	0.63147	0.63147	0.100	0.21835	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.47542	0.47542	0.100	8.01745	50.0	Averaged	
Chloroform	0.83541	0.81347	0.81347	0.200	2.62691	50.0	Averaged	
Bromochloromethane	0.28299	0.25373	0.25373	0.100	10.33897	50.0	Averaged	
Dibromofluoromethane	50.0	47.28488	0.45411	0.100	5.43024	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.72268	0.72268	0.100	-9.02950	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.41299	0.41299	0.100	-16.34412	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.43354	0.43354	0.100	-5.82775	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.40990	0.40990	0.100	-8.13415	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	52.07942	0.52793	0.100	-4.15885	50.0	Linear	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Benzene	1.19399	1.21073	1.21073	0.500	-1.40210	50.0	Averaged	
Trichloroethene	0.33865	0.35917	0.35917	0.200	-6.05906	50.0	Averaged	
Bromodichloromethane	0.44810	0.44150	0.44150	0.200	1.47104	50.0	Averaged	
Methyl Methacrylate	0.34093	0.37488	0.37488	0.100	-9.95795	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.14171	0.14171	0.001	-11.16356	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.30613	0.30613	0.100	3.61324	50.0	Averaged	
2-Nitropropane	0.12626	0.13481	0.13481	0.000	-6.76700	50.0	Averaged	
Dibromomethane	0.21588	0.20618	0.20618	0.100	4.49382	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.28037	0.28037	0.100	-4.90854	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.52717	0.52717	0.200	-0.17453	50.0	Averaged	
Toluene-d8	1.23554	1.19389	1.19389	0.100	3.37052	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.25534	0.25534	0.100	-8.44544	50.0	Averaged	
Toluene	1.38201	1.40751	1.40751	0.400	-1.84490	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.45573	0.45573	0.100	-4.35116	50.0	Averaged	
2-Hexanone	0.18183	0.19478	0.19478	0.100	-7.12446	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.26499	0.26499	0.100	4.42505	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.53112	0.53112	0.100	2.67686	50.0	Averaged	
Dibromochloromethane	0.40016	0.39207	0.39207	0.100	2.02053	50.0	Averaged	
Tetrachloroethene	0.28594	0.31766	0.31766	0.200	-11.09334	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.34891	0.34891	0.100	-0.65024	50.0	Averaged	
1-Chlorohexane	0.24163	0.30084	0.30084	0.100	-24.50223	50.0	Averaged	
Chlorobenzene	0.98026	0.96409	0.96409	0.500	1.64941	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.36867	0.36867	0.100	-1.06044	50.0	Averaged	
Ethylbenzene	0.46175	0.49914	0.49914	0.100	-8.09753	50.0	Averaged	
m,p-Xylenes	0.59525	0.63668	0.63668	0.100	-6.96059	50.0	Averaged	
o-Xylene	0.58751	0.60433	0.60433	0.300	-2.86410	50.0	Averaged	
Styrene	0.98473	1.04640	1.04640	0.300	-6.26203	50.0	Averaged	
Bromoform	0.27722	0.27482	0.27482	0.100	0.86545	50.0	Averaged	
Isopropylbenzene	1.34224	1.58513	1.58513	0.100	-18.09591	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.73487	0.73487	0.300	7.78753	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.99162	0.47100	0.100	-1.98325	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.81153	0.81153	0.100	-45.86546	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11652	0.11652	0.050	-7.95382	50.0	Averaged	
n-Propylbenzene	2.76956	3.19533	3.19533	0.100	-15.37322	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Bromobenzene	0.82033	0.79943	0.79943	0.100	2.54710	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.33869	2.33869	0.100	-14.30786	50.0	Averaged	
2-Chlorotoluene	1.81741	1.92649	1.92649	0.100	-6.00190	50.0	Averaged	
4-Chlorotoluene	2.07183	2.26708	2.26708	0.100	-9.42434	50.0	Averaged	
tert-Butylbenzene	1.67475	1.97537	1.97537	0.100	-17.95030	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.35788	2.35788	0.100	-9.52788	50.0	Averaged	
sec-Butylbenzene	2.22832	2.78791	2.78791	0.100	-25.11301	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.46875	2.46875	0.100	-23.63640	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.42075	1.42075	0.600	-4.34804	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.48497	1.48497	0.400	0.05340	50.0	Averaged	
Benzyl Chloride	50.0	44.33656	0.68878	0.010	11.32689	50.0	Linear	
n-Butylbenzene	50.0	56.35085	2.17783	0.500	-12.70169	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.40978	1.40978	0.400	-0.53664	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	50.63512	0.12903	0.040	-1.27024	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	0.99778	0.99778	0.100	-12.75082	50.0	Averaged	
Hexachlorobutadiene	50.0	57.37873	0.45083	0.100	-14.75745	50.0	Quadratic	
Naphthalene	2.01347	2.18456	2.18456	0.200	-8.49754	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.90862	0.90862	0.010	-7.20535	50.0	Averaged	
Methyl Acetate	0.22499	0.23243	0.23243	0.100	-3.30837	50.0	Averaged	
Freon TF	0.36703	0.38104	0.38104	0.100	-3.81573	50.0	Averaged	
Cyclohexane	50.0	58.82577	0.59526	0.100	-17.65155	50.0	Linear	
Tetrahydrofuran	100	95.64069	0.05953	0.001	4.35931	50.0	Linear	
Methylcyclohexane	0.61204	0.73804	0.73804	0.100	-20.58657	50.0	Averaged	
1,4-Dioxane	0.00457	0.00495	0.00495	0.001	-8.31484	50.0	Averaged	
n-Butanol	1000	1013	0.00649	0.005	-1.31806	50.0	Quadratic	
Methyl Acrylate	0.33946	0.43501	0.43501	0.100	-28.15027	50.0	Averaged	
Ethyl Acrylate	50.0	55.93940	1.10047	0.100	-11.87880	50.0	Linear	
n-Hexane	0.36001	0.43980	0.43980	0.100	-22.16460	50.0	Averaged	
Diethyl ether	0.33409	0.28594	0.28594	0.100	14.41256	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.03810	0.03810	0.005	-10.04850	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02053	0.02053	0.005	-13.56394	50.0	Averaged	
Diisopropyl ether	1.29704	1.29060	1.29060	0.100	0.49717	50.0	Averaged	
2-Methylnaphthalene	0.97007	0.99379	0.99379	0.100	-2.44523	50.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.49497	2.49497	0.100	-3.62205	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID VOA6_426481

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 25-JAN-2023 1500
Lab File ID X012522.D ICAL Date(s) 16-DEC-2022 16-DEC-2022
Analysis Type WATER ICAL Times 1138 1507
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
Ethanol	1000	1067	0.00347	0.001	-6.69503	50.0	Linear	
tert-Butyl formate	0.26532	0.29803	0.29803	0.100	-12.32887	50.0	Averaged	
3,3-Dimethyl-1-butanol	0.02366	0.02457	0.02457	0.005	-3.87142	50.0	Averaged	
tert-Amyl methyl ether	1.44127	1.41184	1.41184	0.005	2.04190	50.0	Averaged	
tert-Butyl ethyl ether	1.37823	1.35617	1.35617	0.100	1.60071	50.0	Averaged	
tert-Amyl alcohol	0.02685	0.02980	0.02980	0.005	-10.98204	50.0	Averaged	
4-Methyl-2-pentanol	0.04732	0.05125	0.05125	0.005	-8.30006	50.0	Averaged	
1-Methylnaphthalene	++++	0.99379	0.99379	0.100	++++	50.0	Averaged	<-
1,3-Butadiene	0.34316	0.31601	0.31601	0.100	7.91020	50.0	Averaged	
Amyl alcohol	0.00494	0.00534	0.00534	0.005	-7.90640	50.0	Averaged	
Dichlorofluoromethane	0.06474	0.05780	0.05780	0.100	10.71467	50.0	Averaged	
Propylene oxide	0.03144	0.02982	0.02982	0.005	5.14355	50.0	Averaged	
3-Methyl-1-butanol	0.00494	0.00558	0.00558	0.005	-12.88255	50.0	Averaged	
Butyl acrylate	0.65314	0.69339	0.69339	0.100	-6.16285	50.0	Averaged	
Epichlorohydrin	200	216	0.02425	0.001	-8.18238	50.0	Linear	
1,2-Dichloroethylene (total	0.47078	0.44517	0.44517	0.200	5.44010	50.0	Averaged	
Xylenes (total)	0.56589	0.60790	0.60790	0.100	-7.42221	50.0	Averaged	
alpha-Methylstyrene	1.10787	1.11388	1.11388	0.100	-0.54279	50.0	Averaged	
Ethyl Acetate	0.39016	0.42840	0.42840	0.100	-9.80120	50.0	Averaged	
Cyclohexanone	0.02086	0.02306	0.02306	0.005	-10.57111	50.0	Averaged	
Isoprene	0.13320	0.13818	0.13818	0.100	-3.73648	50.0	Averaged	
Isopentane	++++	0.24298	0.24298	0.100	++++	50.0	Averaged	<-
Isopropyl acetate	0.77682	0.83340	0.83340	0.100	-7.28345	50.0	Averaged	
n-Amyl acetate	0.58303	0.58946	0.58946	0.100	-1.10206	50.0	Averaged	
n-Butyl acetate	0.42951	0.48167	0.48167	0.100	-12.14347	50.0	Averaged	
Allyl alcohol	0.01838	0.02199	0.02199	0.004	-19.65508	50.0	Averaged	
Acetaldehyde	200	210	0.03307	0.001	-4.93122	50.0	Linear	
Methyl Amyl Ketone	0.66478	0.67365	0.67365	0.100	-1.33472	50.0	Averaged	
Dimethyl Disulfide	0.67671	0.66883	0.66883	0.100	1.16367	50.0	Averaged	
2-Ethyl-1-hexanol	++++	0.00038	0.00038	0.001	++++	50.0	Averaged	<-
Isobutylene	0.05199	++++	5.923e+59	0.100	++++	50.0	Averaged	<-
1-Propanol	0.00817	0.00742	0.00742	0.005	9.14792	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426355

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X012402	507505	#	4.18	#	766430	#	4.96	#	736604	#	7.67	#	425473	#	9.66	#
VLCSW-230124	X012404	506288		4.18		768279		4.97		730061		7.67		416844		9.66	
VBLKW-230124	X012406	599102		4.17		853587		4.97		761276		7.67		394519		9.66	
ZZZZZZMS	X012410	607736		4.17		875321		4.97		808850		7.67		449514		9.66	
ZZZZZZMSD	X012411	616157		4.18		883093		4.96		815509		7.67		448260		9.66	
HS23010986-08	X012416	600218		4.18		862177		4.96		762846		7.67		383976		9.66	
HS23010986-09	X012417	594568		4.18		838318		4.97		747106		7.67		374004		9.66	
HS23010986-02	X012419	592528		4.18		840842		4.96		744883		7.67		383661		9.66	
HS23010986-03	X012420	593177		4.18		848534		4.96		735271		7.67		381708		9.66	
HS23010986-04	X012421	597184		4.18		859732		4.96		750625		7.67		392042		9.66	
HS23010986-01	X012422	579488		4.17		827258		4.96		728430		7.67		379166		9.66	
HS23010986-06	X012423	583489		4.18		828588		4.97		724720		7.67		370804		9.66	
HS23010986-07	X012424	586217		4.18		829896		4.96		732269		7.67		374919		9.66	
HS23010986-05	X012430	590309		4.18		839375		4.96		734612		7.67		382646		9.66	
HS23010986-05MS	X012431	609595		4.18		862181		4.96		792242		7.67		441556		9.66	
HS23010986-05MSD	X012432	615830		4.17		871402		4.97		797088		7.67		441078		9.66	
CCV-END	X012433	503782		4.18		780908		4.96		751713		7.67		437932		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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

RunID
VOA6_426481

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X012502	518521	#	4.18	#	760669	#	4.96	#	733760	#	7.67	#	423046	#	9.66	#
VLCSW-230125	X012504	500560		4.17		748036		4.96		704985		7.67		403871		9.66	
VBLKW-230125	X012506	637607		4.17		893865		4.96		802467		7.67		420093		9.66	
ZZZZZZMS	X012509	626410		4.17		872602		4.96		797697		7.67		445771		9.66	
ZZZZZZMSD	X012510	632455		4.18		884706		4.96		806161		7.67		440623		9.66	
HS23010986-01	X012513	641117		4.18		897403		4.96		809507		7.67		419975		9.66	
HS23010986-03	X012514	625495		4.18		882569		4.96		787053		7.67		419868		9.66	
HS23010986-04	X012515	628398		4.17		887809		4.97		784877		7.67		407890		9.66	
HS23010986-06	X012516	627372		4.17		876111		4.96		791904		7.67		408361		9.66	
HS23010986-07	X012517	632766		4.18		882783		4.96		787567		7.67		410844		9.66	
CCV-END	X012522	525517		4.17		783584		4.96		761044		7.67		443732		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

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Analysis Run Log

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

MSVOA06 -Logbook

Batch: 52417 **Analyst:** Presenta Cabascango

Date: 12-16-2022 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	12-16-2022 11:17 am	1.00	50 mL	50 mL	X121601.D	Liquid	Y	NA
2	VSTD000.25	ICAL1	12-16-2022 11:38 am	1.00	50 mL	50 mL	X121602.D	Liquid	Y	NA
3	VSTD000.5	ICAL2	12-16-2022 12:20 pm	1.00	50 mL	50 mL	X121603.D	Liquid	Y	NA
4	VSTD001	ICAL3	12-16-2022 12:41 pm	1.00	50 mL	50 mL	X121604.D	Liquid	Y	NA
5	VSTD002	ICAL4	12-16-2022 01:02 pm	1.00	50 mL	50 mL	X121605.D	Liquid	Y	NA
6	VSTD005	ICAL5	12-16-2022 01:23 pm	1.00	50 mL	50 mL	X121606.D	Liquid	Y	NA
7	VSTD020	ICAL6	12-16-2022 01:43 pm	1.00	50 mL	50 mL	X121607.D	Liquid	Y	NA
8	VSTD050	ICAL7	12-16-2022 02:04 pm	1.00	50 mL	50 mL	X121608.D	Liquid	Y	NA
9	VSTD100	ICAL8	12-16-2022 02:25 pm	1.00	50 mL	50 mL	X121609.D	Liquid	Y	NA
10	VSTD150	ICAL9	12-16-2022 02:46 pm	1.00	50 mL	50 mL	X121610.D	Liquid	Y	NA
11	VSTD200	ICAL	12-16-2022 03:07 pm	1.00	50 mL	50 mL	X121611.D	Liquid	Y	NA
12	BLANK	SAMP	12-16-2022 03:28 pm	1.00	50 mL	50 mL	X121612.D	Liquid	Y	NA
13	CCV	CCV	12-16-2022 03:49 pm	1.00	50 mL	50 mL	X121613.D	Liquid	Y	NA
14	BLANK	SAMP	12-16-2022 04:10 pm	1.00	50 mL	50 mL	X121614.D	Liquid	Y	NA
15	CCB	SAMP	12-16-2022 04:31 pm	1.00	50 mL	50 mL	X121615.D	Liquid	Y	NA
16	VLCSW-221216	LCS	12-16-2022 04:52 pm	1.00	50 mL	50 mL	X121616.D	Liquid	Y	NA
17	BLANK	SAMP	12-16-2022 05:13 pm	1.00	50 mL	50 mL	X121617.D	Liquid	Y	NA
18	VBLKW-221216	MBLK	12-16-2022 05:34 pm	1.00	50 mL	50 mL	X121618.D	Liquid	Y	NA
19	HS22120648-05	SAMP	12-16-2022 05:55 pm	1.00	50 mL	50 mL	X121619.D	Liquid	Y	NA
20	HS22120648-09	SAMP	12-16-2022 06:16 pm	1.00	50 mL	50 mL	X121620.D	Liquid	Y	NA
21	HS22120648-01	SAMP	12-16-2022 06:37 pm	1.00	50 mL	50 mL	X121621.D	Liquid	Y	NA
22	HS22120648-02	SAMP	12-16-2022 06:58 pm	1.00	50 mL	50 mL	X121622.D	Liquid	Y	NA
23	HS22120648-03	SAMP	12-16-2022 07:19 pm	1.00	50 mL	50 mL	X121623.D	Liquid	Y	NA
24	HS22120648-04	SAMP	12-16-2022 07:40 pm	1.00	50 mL	50 mL	X121624.D	Liquid	Y	NA
25	HS22120648-06	SAMP	12-16-2022 08:01 pm	1.00	50 mL	50 mL	X121625.D	Liquid	Y	NA
26	HS22120648-07	SAMP	12-16-2022 08:22 pm	1.00	50 mL	50 mL	X121626.D	Liquid	Y	NA
27	HS22120648-08	SAMP	12-16-2022 08:43 pm	1.00	50 mL	50 mL	X121627.D	Liquid	Y	NA
28	HS22120648-06MS	MS	12-16-2022 09:04 pm	1.00	50 mL	50 mL	X121628.D	Liquid	Y	NA
29	HS22120648-06MSD	MSD	12-16-2022 09:25 pm	1.00	50 mL	50 mL	X121629.D	Liquid	Y	NA
30	CCV-END	CCV	12-16-2022 09:46 pm	1.00	50 mL	50 mL	X121630.D	Liquid	Y	NA
31	BFB	TUNE	12-16-2022 10:07 pm	1.00	50 mL	50 mL	Y121601.D	Liquid	Y	NA
32	CCV	CCV	12-16-2022 10:28 pm	1.00	50 mL	50 mL	Y121602a.D	Liquid	Y	NA
33	CCV	CCV	12-16-2022 10:49 pm	1.00	50 mL	50 mL	Y121603.D	Liquid	Y	NA
34	CCB	SAMP	12-16-2022 11:10 pm	1.00	50 mL	50 mL	Y121604.D	Liquid	Y	NA
35	VLCSW-221215	LCS	12-16-2022 11:31 pm	1.00	50 mL	50 mL	Y121605.D	Liquid	Y	NA
36	BLANK	SAMP	12-16-2022 11:52 pm	1.00	50 mL	50 mL	Y121606.D	Liquid	Y	NA
37	VBLKW-221215	MBLK	12-17-2022 12:13 am	1.00	50 mL	50 mL	Y121607.D	Liquid	Y	NA
38	HS22120974-13	SAMP	12-17-2022 12:34 am	1.00	50 mL	50 mL	Y121608.D	Liquid	Y	NA
39	HS22120974-01	SAMP	12-17-2022 12:55 am	1.00	50 mL	50 mL	Y121609.D	Liquid	Y	NA
40	HS22120974-01MS	MS	12-17-2022 01:16 am	1.00	50 mL	50 mL	Y121610.D	Liquid	Y	NA
41	HS22120974-01MSD	MSD	12-17-2022 01:38 am	1.00	50 mL	50 mL	Y121611.D	Liquid	Y	NA

MSVOA06 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	BLANK	SAMP	12-17-2022 01:59 am	1.00	50 mL	50 mL	Y121612.D	Liquid	Y	NA
43	HS22120974-02	SAMP	12-17-2022 02:20 am	1.00	50 mL	50 mL	Y121613.D	Liquid	Y	NA
44	HS22120974-03	SAMP	12-17-2022 02:41 am	1.00	50 mL	50 mL	Y121614.D	Liquid	Y	NA
45	HS22120974-04	SAMP	12-17-2022 03:02 am	1.00	50 mL	50 mL	Y121615.D	Liquid	Y	NA
46	HS22120974-05	SAMP	12-17-2022 03:23 am	1.00	50 mL	50 mL	Y121616.D	Liquid	Y	NA
47	HS22120974-06	SAMP	12-17-2022 03:44 am	1.00	50 mL	50 mL	Y121617.D	Liquid	Y	NA
48	HS22120974-07	SAMP	12-17-2022 04:05 am	1.00	50 mL	50 mL	Y121618.D	Liquid	Y	NA
49	HS22120974-08	SAMP	12-17-2022 04:26 am	1.00	50 mL	50 mL	Y121619.D	Liquid	Y	NA
50	HS22120974-09	SAMP	12-17-2022 04:47 am	1.00	50 mL	50 mL	Y121620.D	Liquid	Y	NA
51	HS22120974-10	SAMP	12-17-2022 05:08 am	1.00	50 mL	50 mL	Y121621.D	Liquid	Y	NA
52	HS22120974-11	SAMP	12-17-2022 05:29 am	1.00	50 mL	50 mL	Y121622.D	Liquid	Y	NA
53	HS22120974-12	SAMP	12-17-2022 05:50 am	1.00	50 mL	50 mL	Y121623.D	Liquid	Y	NA
54	HS22120974-14	SAMP	12-17-2022 06:11 am	1.00	50 mL	50 mL	Y121624.D	Liquid	Y	NA
55	HS22120974-15	SAMP	12-17-2022 06:32 am	1.00	50 mL	50 mL	Y121625.D	Liquid	Y	NA
56	HS22120574-15	SAMP	12-17-2022 06:53 am	5.00	10 mL	50 mL	Y121626.D	Liquid	Y	NA
57	HS22120574-17	SAMP	12-17-2022 07:14 am	5.00	10 mL	50 mL	Y121627.D	Liquid	Y	NA
58	HS22120770-07	SAMP	12-17-2022 07:36 am	10.00	5 mL	50 mL	Y121628.D	Liquid	Y	NA
59	HS22120770-07	SAMP	12-17-2022 07:57 am	100.0(	500 µL	50 mL	Y121629.D	Liquid	Y	NA
60	HS22120770-10	SAMP	12-17-2022 08:18 am	5.00	10 mL	50 mL	Y121630.D	Liquid	Y	NA
61	BLANK	SAMP	12-17-2022 08:39 am	1.00	50 mL	50 mL	Y121631.D	Liquid	Y	NA

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

RUNID
VOA6_426355

Run ID VOA6_426355 **Start Date** 01/24/23 **EndDate** 01/24/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X012402.D	01/24/23 07:52	1
VLCSW-230124	LCS	VLCSW-230124	X012404.D	01/24/23 08:55	1
VBLKW-230124	MBLK	VBLKW-230124	X012406.D	01/24/23 09:37	1
BatchQC	MS	HS23010982-05MS	X012410.D	01/24/23 11:01	100
BatchQC	MSD	HS23010982-05MSD	X012411.D	01/24/23 11:22	100
CG-061422-309	SAMP	HS23010986-08	X012416.D	01/24/23 13:08	1
CG-061422-306	SAMP	HS23010986-09	X012417.D	01/24/23 13:29	1
16RW06-230119	SAMP	HS23010986-02	X012419.D	01/24/23 14:11	1
16RW07-230119	SAMP	HS23010986-03	X012420.D	01/24/23 14:32	1
16WW55-230119	SAMP	HS23010986-04	X012421.D	01/24/23 14:53	1
16WW41-230119	SAMP	HS23010986-01	X012422.D	01/24/23 15:14	5
16WW16-230119	SAMP	HS23010986-06	X012423.D	01/24/23 15:35	100
16WW16-230119-FD	SAMP	HS23010986-07	X012424.D	01/24/23 15:56	100
16WW35-230119	SAMP	HS23010986-05	X012430.D	01/24/23 18:02	100
16WW35-230119	MS	HS23010986-05MS	X012431.D	01/24/23 18:23	100
16WW35-230119	MSD	HS23010986-05MSD	X012432.D	01/24/23 18:44	100

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Volatiles by EPA 8260

RUNID
VOA6_426481

Run ID VOA6_426481 **Start Date** 01/25/23 **EndDate** 01/25/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X012502.D	01/25/23 07:39	1
VLCSW-230125	LCS	VLCSW-230125	X012504.D	01/25/23 08:42	1
VBLKW-230125	MBLK	VBLKW-230125	X012506.D	01/25/23 09:24	1
BatchQC	MS	HS23010982-02MS	X012509.D	01/25/23 10:27	100
BatchQC	MSD	HS23010982-02MSD	X012510.D	01/25/23 10:48	100
16WW41-230119	SAMP	HS23010986-01	X012513.D	01/25/23 11:51	500
16RW07-230119	SAMP	HS23010986-03	X012514.D	01/25/23 12:12	50
16WW55-230119	SAMP	HS23010986-04	X012515.D	01/25/23 12:33	50
16WW16-230119	SAMP	HS23010986-06	X012516.D	01/25/23 12:54	1000
16WW16-230119-FD	SAMP	HS23010986-07	X012517.D	01/25/23 13:15	1000

right solutions.
right partner.

Raw Data VOA6 424237

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\x221216.b\X121601.D Page 1
Report Date: 16-Dec-2022 12:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\x221216.b\X121601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 16-DEC-2022 11:17
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\x221216.b\bfb.m
Meth Date : 01-Dec-2022 12:59 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	72328			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	13272			15.00- 40.00	18.35
8.691	8.889	(0.000)	75	33368			30.00- 60.00	46.13
8.691	8.889	(0.000)	96	5178			5.00- 9.00	7.16
8.691	8.889	(0.000)	173	577			0.00- 2.00	0.90
8.691	8.889	(0.000)	174	64360			50.00- 0.00	88.98
8.691	8.889	(0.000)	175	5033			5.00- 9.00	7.82
8.691	8.889	(0.000)	176	63184			95.00- 101.00	98.17
8.691	8.889	(0.000)	177	4164			5.00- 9.00	6.59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.35
75	30.00 - 60.00% of mass 95	46.13
96	5.00 - 9.00% of mass 95	7.16
173	Less than 2.00% of mass 174	0.80 (0.90)
174	Greater than 50.00% of mass 95	88.98
175	5.00 - 9.00% of mass 174	6.96 (7.82)
176	95.00 - 101.00% of mass 174	87.36 (98.17)
177	5.00 - 9.00% of mass 176	5.76 (6.59)

Data File: X121601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	686	63.00	2521	93.00	2705	136.90	215
37.00	3051	64.10	316	94.00	9587	140.90	735
38.00	2957	66.90	155	95.00	72328	141.70	91
39.00	1321	67.90	6274	96.00	5178	142.80	683
39.90	1146	69.00	6990	96.90	213	145.60	119
42.00	114	69.90	604	103.00	58	148.00	107
42.90	301	71.80	385	104.00	313	149.80	105
44.00	1509	72.90	2986	104.70	125	153.80	54
45.00	716	74.00	11163	105.10	132	154.80	169
46.80	723	75.00	33368	105.90	451	156.80	155
48.00	503	76.00	3228	110.60	54	160.80	71
49.00	3278	76.90	395	113.00	74	171.60	83
50.00	13272	77.80	187	114.80	159	172.80	577
51.00	3648	78.90	2224	115.80	342	173.90	64360
52.10	365	79.80	718	116.90	386	174.90	5033
54.00	52	80.90	2158	117.90	425	175.90	63184
54.90	278	81.80	420	118.80	260	176.90	4164
56.00	1513	83.00	51	127.90	191	178.00	133
57.00	1763	86.90	2878	128.90	172		
59.90	665	87.80	2342	129.80	237		
61.00	3173	91.00	516	130.80	156		
62.00	3572	92.00	2006	134.70	222		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121601.D

Date : 16-DEC-2022 11:17

Client ID: BFB

Instrument: voa6.i

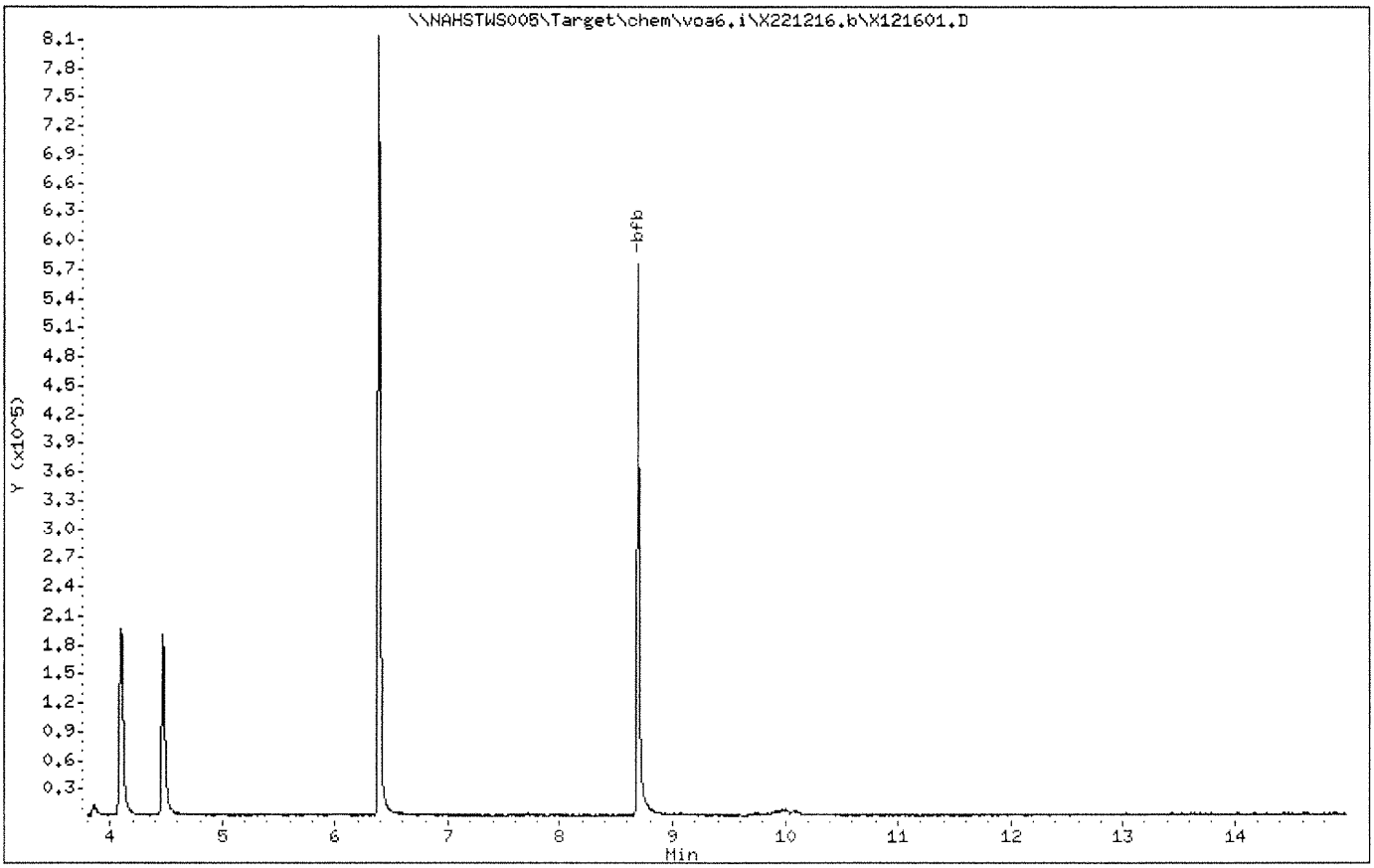
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121601.D Page 2

Date : 16-DEC-2022 11:17

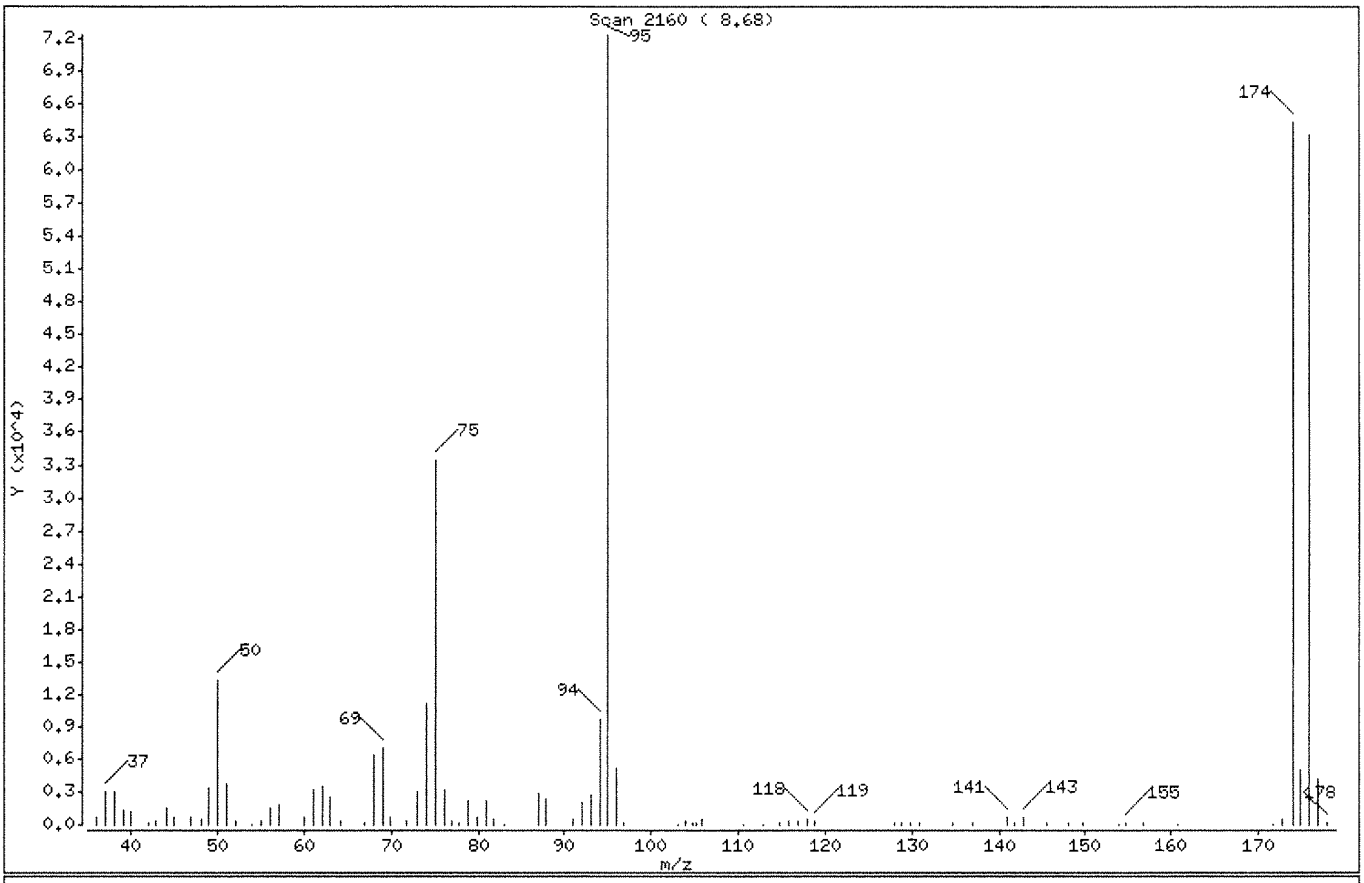
Client ID: BFB Instrument: voa6.i

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	18.35
75	30.00 - 60.00% of mass 95	46.13
96	5.00 - 9.00% of mass 95	7.16
173	Less than 2.00% of mass 174	0.80 (0.90)
174	Greater than 50.00% of mass 95	88.98
175	5.00 - 9.00% of mass 174	6.96 (7.82)
176	95.00 - 101.00% of mass 174	87.36 (98.17)
177	5.00 - 9.00% of mass 176	5.76 (6.59)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121601.D Page 3

Date : 16-DEC-2022 11:17

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: X121601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	686	63.00	2521	93.00	2705	136.90	215
37.00	3051	64.10	316	94.00	9587	140.90	735
38.00	2957	66.90	155	95.00	72328	141.70	91
39.00	1321	67.90	6274	96.00	5178	142.80	683
39.90	1146	69.00	6990	96.90	213	145.60	119
42.00	114	69.90	604	103.00	58	148.00	107
42.90	301	71.80	385	104.00	313	149.80	105
44.00	1509	72.90	2986	104.70	125	153.80	54
45.00	716	74.00	11163	105.10	132	154.80	169
46.80	723	75.00	33368	105.90	451	156.80	155
48.00	503	76.00	3228	110.60	54	160.80	71
49.00	3278	76.90	395	113.00	74	171.60	83
50.00	13272	77.80	187	114.80	159	172.80	577
51.00	3648	78.90	2224	115.80	342	173.90	64360
52.10	365	79.80	718	116.90	386	174.90	5033
54.00	52	80.90	2158	117.90	425	175.90	63184
54.90	278	81.80	420	118.80	260	176.90	4164
56.00	1513	83.00	51	127.90	191	178.00	133
57.00	1763	86.90	2878	128.90	172		
59.90	665	87.80	2342	129.80	237		
61.00	3173	91.00	516	130.80	156		
62.00	3572	92.00	2006	134.70	222		

Data File : \\NAHSTWS005\Target\chem\voa6.i\x221216.b\X121601.D
Inj Date : 16-DEC-2022 11:17
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 16-DEC-2022 11:38
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	461807	50.0000	
135	1,4-Dioxane	88	5.625	5.625	(1.346)	214	5.00000	5.06(M)
140	1,3-Butadiene	54	1.164	1.164	(0.279)	1172	0.25000	0.36
25	Methacrylonitrile	41	3.855	3.855	(0.923)	5876	0.25000	1.79
12	Isobutyl Alcohol	43	4.687	4.687	(1.122)	2537	5.00000	4.88(TM)
13	Acetonitrile	39	2.202	2.202	(0.527)	730	2.50000	1.73
14	Allyl Chloride	41	2.206	2.206	(0.528)	1591	0.25000	0.19
4	Propionitrile	54	3.702	3.702	(0.886)	1165	2.50000	2.47(M)
72	trans-1,4-Dichloro-2-butene	53	8.931	8.931	(1.164)	280	0.25000	0.19(M)
145	alpha-Methylstyrene	118	9.268	9.268	(0.959)	2322	0.25000	0.30
200	Dimethyl Disulfide	94	6.213	6.213	(0.810)	1870	0.25000	0.21
139	Diethyl ether	59	1.760	1.760	(0.421)	687	0.25000	0.22
49	Ethyl Methacrylate	69	6.738	6.738	(1.357)	625	0.25000	0.19
142	Tetrahydrofuran	42	3.836	3.836	(0.918)	358	0.50000	(M)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	4360	0.25000	0.25
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	801	0.25000	0.63(M)
3	Chloromethane	50	1.077	1.077	(0.258)	1420	0.25000	2.53
5	Vinyl Chloride	62	1.141	1.141	(0.273)	1134	0.25000	0.28(M)
6	Bromomethane	94	1.340	1.340	(0.321)	1009	0.25000	2.08(M)
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	1468	0.25000	0.26

10 Acetone	43	1.977	1.977 (0.473)	2727	0.50000	2.07
11 1,1-Dichloroethene	96	1.910	1.910 (0.457)	1010	0.25000	0.28(M)

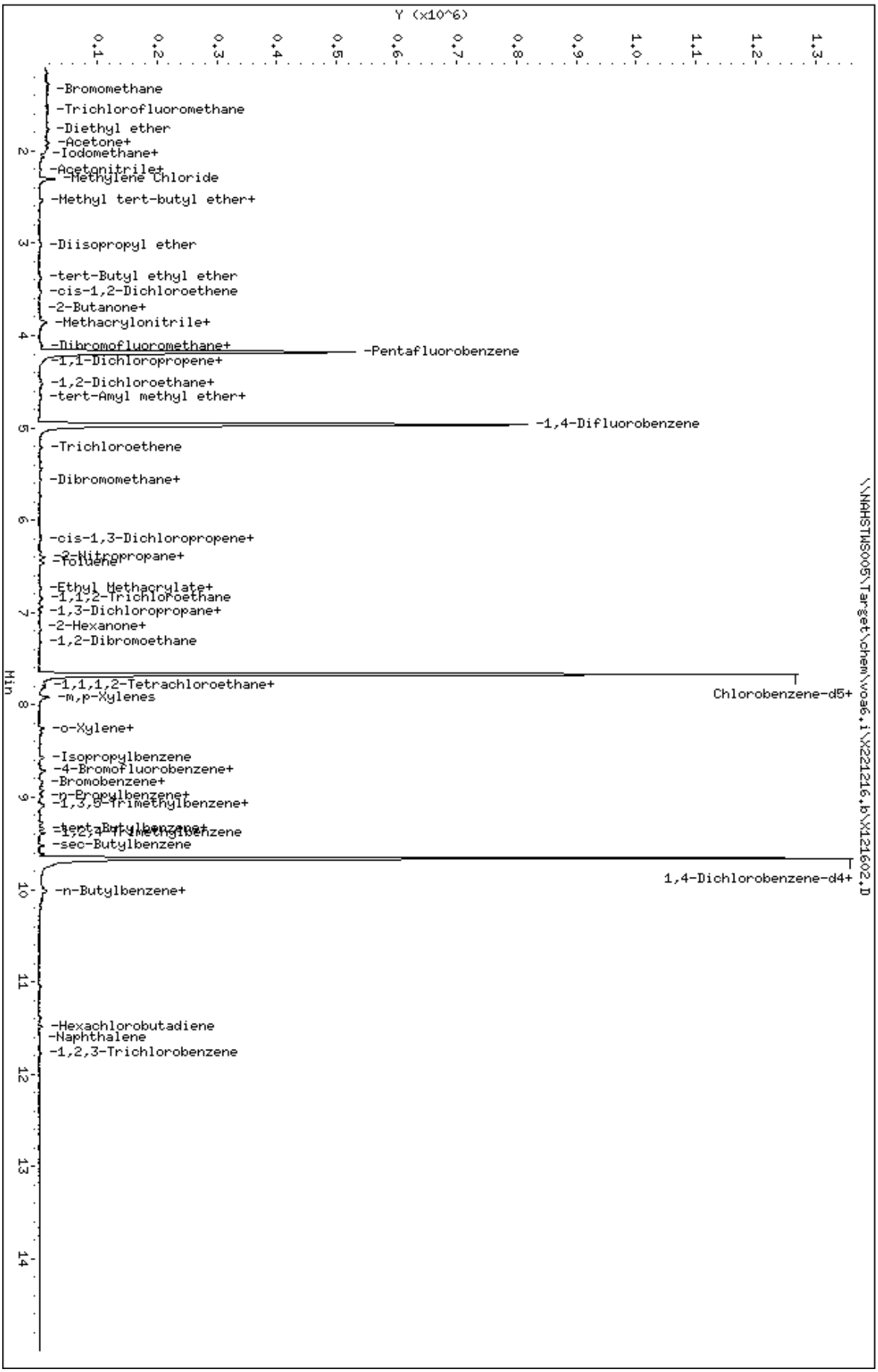
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	15 Iodomethane	142	2.026	2.026	(0.485)	1106	0.50000	3.56(T)
	17 Methylene Chloride	84	2.292	2.292	(0.549)	1436	0.25000	0.29(M)
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	2787	0.25000	0.24
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	5999	0.50000	0.65
	20 trans-1,2-Dichloroethene	96	2.539	2.539	(0.608)	1302	0.25000	0.33
	24 2-Butanone	43	3.698	3.698	(0.885)	1014	0.50000	3.74
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.846)	1402	0.25000	0.29
	28 Chloroform	83	3.908	3.908	(0.935)	2553	0.25000	0.33
	29 Bromochloromethane	128	3.799	3.799	(0.909)	802	0.25000	0.30(M)
$	30 Dibromofluoromethane	113	4.103	4.103	(0.982)	1706	0.25000	0.21
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	1648	0.25000	0.26
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	2114	0.25000	0.43
	33 1,2-Dichloroethane	62	4.571	4.571	(0.921)	2167	0.25000	0.38
	34 Carbon Tetrachloride	117	4.256	4.256	(0.857)	1685	0.25000	0.32(M)
$	35 1,2-Dichloroethane-d4	65	4.481	4.481	(1.073)	2260	0.25000	0.75(T)
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	690224	50.0000	
	37 Benzene	78	4.522	4.522	(0.911)	5768	0.25000	0.34
	38 Trichloroethene	130	5.212	5.212	(1.050)	1544	0.25000	0.33
	44 Dibromomethane	93	5.565	5.565	(1.121)	1046	0.25000	0.35
	45 4-Methyl-2-Pentanone	43	6.352	6.352	(0.828)	2297	0.50000	0.65
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	1839	0.25000	0.25
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	653787	50.0000	
$	48 Toluene-d8	98	6.401	6.401	(0.834)	6828	0.25000	0.42(T)
	50 Toluene	91	6.457	6.457	(0.842)	6778	0.25000	0.37
	52 2-Hexanone	43	7.150	7.150	(0.932)	974	0.50000	0.40(T)
	53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	1098	0.25000	0.30
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	2278	0.25000	0.31
	55 Dibromochloromethane	129	7.184	7.184	(0.936)	1732	0.25000	0.33
	56 Tetrachloroethene	164	6.933	6.933	(0.904)	1051	0.25000	0.28
	57 1,2-Dibromoethane	107	7.278	7.278	(0.949)	1100	0.25000	0.24
	58 1-Chlorohexane	55	7.668	7.668	(1.544)	6570	0.25000	1.96
	59 Chlorobenzene	112	7.694	7.694	(1.003)	3981	0.25000	0.31
	60 1,1,1,2-Tetrachloroethane	131	7.780	7.780	(1.014)	1245	0.25000	0.26
	61 Ethylbenzene	106	7.810	7.810	(1.018)	1854	0.25000	0.30
	62 m,p-Xylenes	106	7.915	7.915	(1.032)	5083	0.50000	0.65
	63 o-Xylene	106	8.252	8.252	(1.076)	2471	0.25000	0.32
	64 Styrene	104	8.297	8.297	(1.082)	3214	0.25000	0.24
	67 Isopropylbenzene	105	8.575	8.575	(1.118)	5495	0.25000	0.31
$	69 4-Bromofluorobenzene	95	8.706	8.706	(1.135)	4271	0.25000	0.77
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	348702	50.0000	
	71 1,2,3-Trichloropropane	75	8.875	8.875	(0.919)	766	0.25000	0.19(M)
	73 n-Propylbenzene	91	8.931	8.931	(0.924)	5570	0.25000	0.28
	74 Bromobenzene	156	8.826	8.826	(0.913)	1517	0.25000	0.26
	75 1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	4893	0.25000	0.34
	76 2-Chlorotoluene	91	8.991	8.991	(0.931)	4890	0.25000	0.38
	77 4-Chlorotoluene	91	9.107	9.107	(0.943)	3881	0.25000	0.26
	78 tert-Butylbenzene	119	9.343	9.343	(0.967)	4059	0.25000	0.34
	79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	5202	0.25000	0.34
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	4818	0.25000	0.31
	82 p-Isopropyltoluene	119	9.662	9.662	(1.000)	4406	0.25000	0.31
	83 1,3-Dichlorobenzene	146	9.621	9.621	(0.996)	3005	0.25000	0.31
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	3674	0.25000	0.35

87	n-Butylbenzene	91	10.033	10.033 (1.038)	1595	0.25000	1.89
88	1,2-Dichlorobenzene	146	10.010	10.010 (1.036)	2937	0.25000	0.30

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	91 Hexachlorobutadiene	225	11.484	11.484	(1.189)	726	0.25000	0.21(M)
	92 Naphthalene	128	11.607	11.607	(1.201)	1969	0.25000	0.14
	93 1,2,3-Trichlorobenzene	180	11.769	11.769	(1.218)	1816	0.25000	0.30(M)
M	94 1,2-Dichloroethylene (total)	96				2704	0.50000	
M	95 Xylenes (total)	106				7554	0.75000	
	141 Cyclohexane	56	4.125	4.125	(0.987)	1235	0.25000	1.51(M)
	138 Freon TF	101	1.917	1.917	(0.459)	765	0.25000	0.22(M)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Date : 16-DEC-2022 11:38
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;
Purge Volume: 5.0
Column phase: DB624

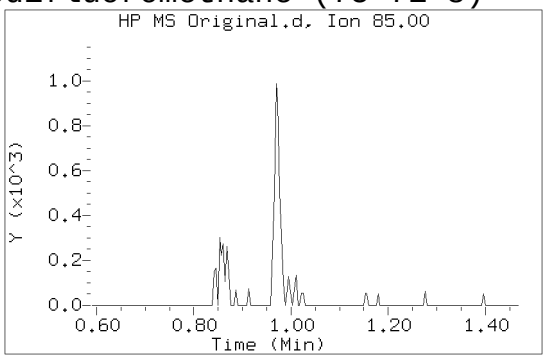
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Dichlorodifluoromethane (75-71-8)

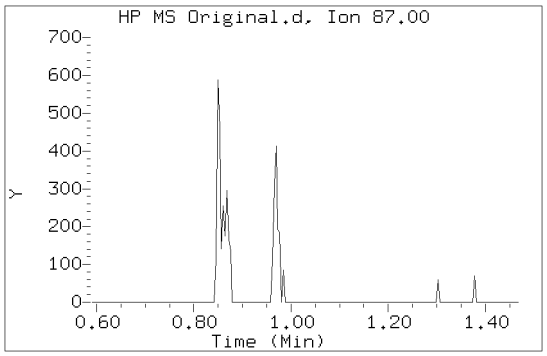
BEFORE

MASS
50
AREA
1420
HEIGHT
1809
16-Dec-2022
11:54
ALSHS
Server



BEFORE

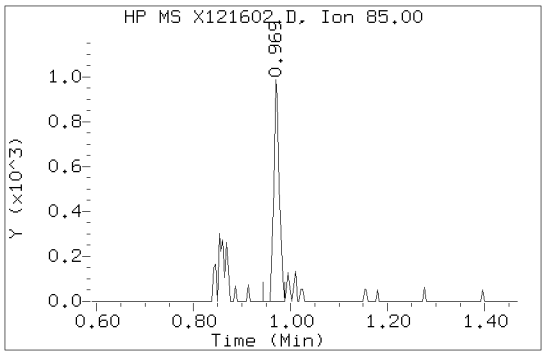
MASS
52
AREA
731
HEIGHT
740
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

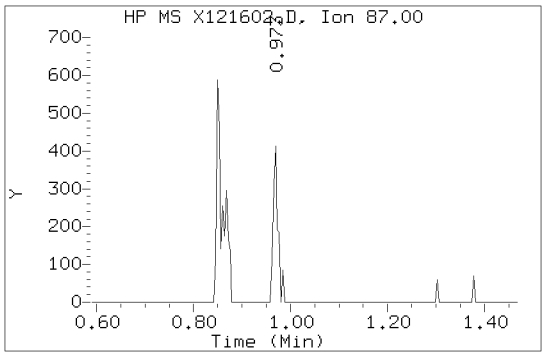
AFTER

MASS
85
AREA
801
HEIGHT
987
27-Dec-2022
16:07
ALSHS
Ser



AFTER

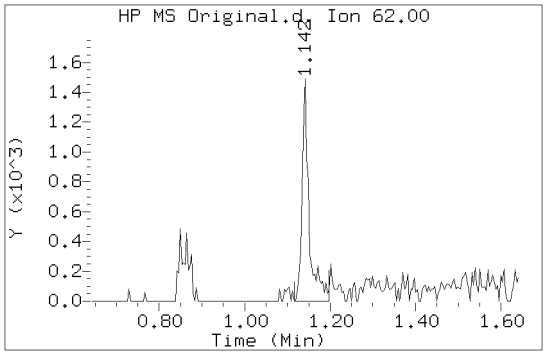
MASS
87
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Vinyl Chloride (75-01-4)

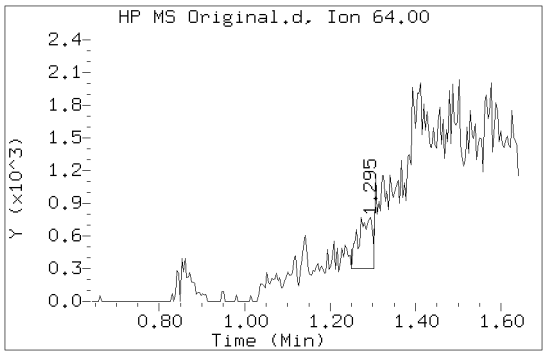
BEFORE

MASS
94
AREA
1572
HEIGHT
983
16-Dec-2022
11:54
ALSHS
Server



BEFORE

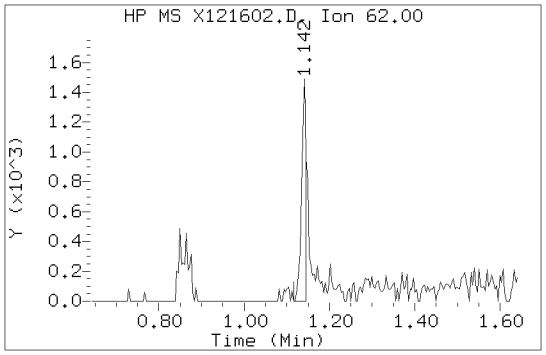
MASS
96
AREA
1330
HEIGHT
961
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

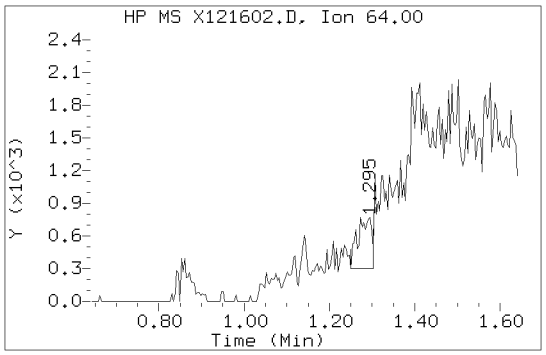
AFTER

MASS
62
AREA
1134
HEIGHT
1490
27-Dec-2022
16:07
ALSHS
Ser



AFTER

MASS
64
AREA
1053
HEIGHT
470
27-Dec-2022
16:07
ALSHS
Ser



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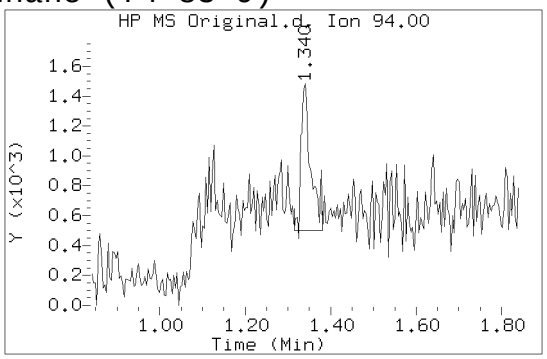
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

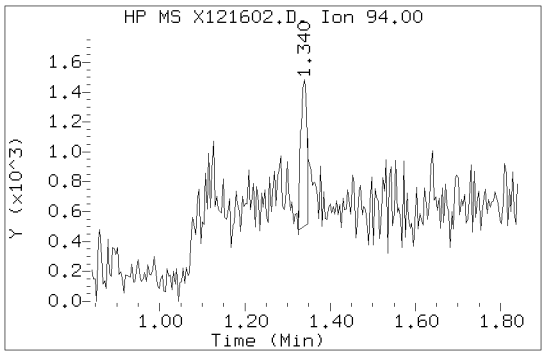
Bromomethane (74-83-9)

Reason Code:

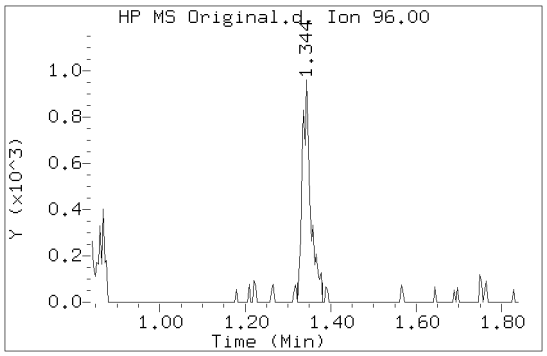
BEFORE
MASS
64
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



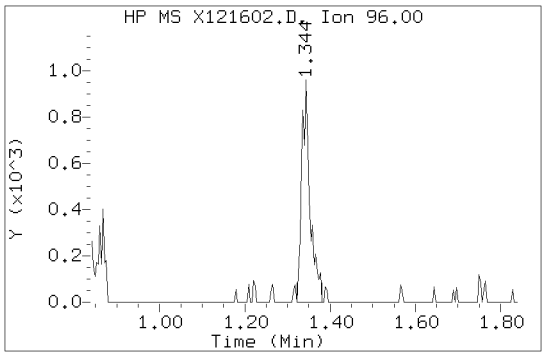
AFTER
MASS
94
AREA
1009
HEIGHT
977
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
66
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



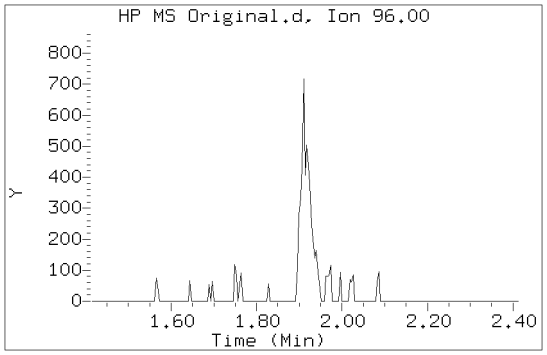
AFTER
MASS
96
AREA
1330
HEIGHT
961
27-Dec-2022
16:07
ALSHS
Ser



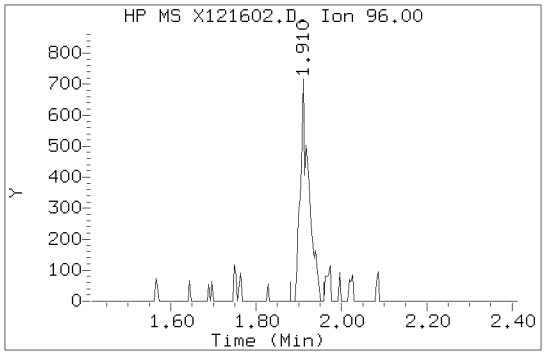
1,1-Dichloroethene (75-35-4)

Reason Code:

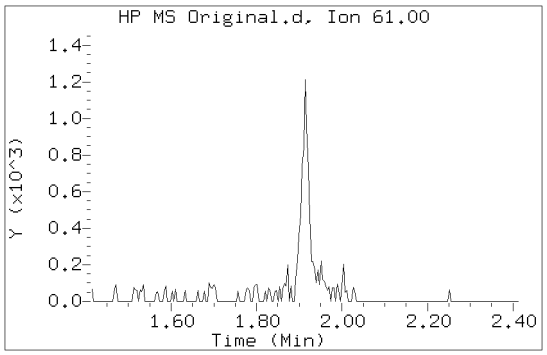
BEFORE
MASS
142
AREA
1106
HEIGHT
699
16-Dec-2022
11:54
ALSHS
Server



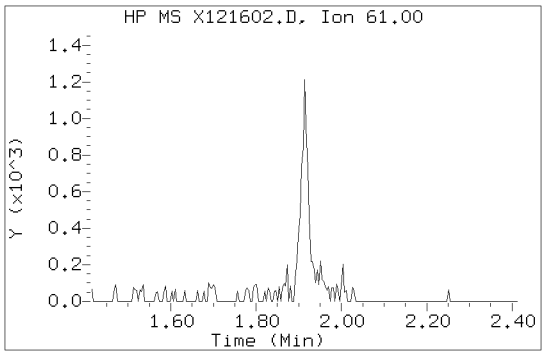
AFTER
MASS
96
AREA
1010
HEIGHT
717
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
127
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



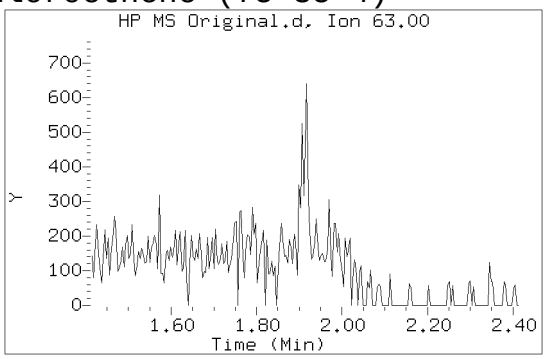
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

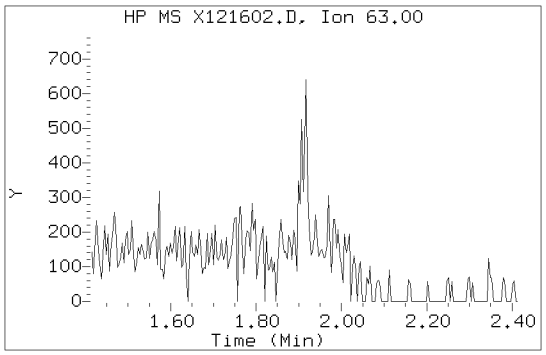
BEFORE

MASS
141
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

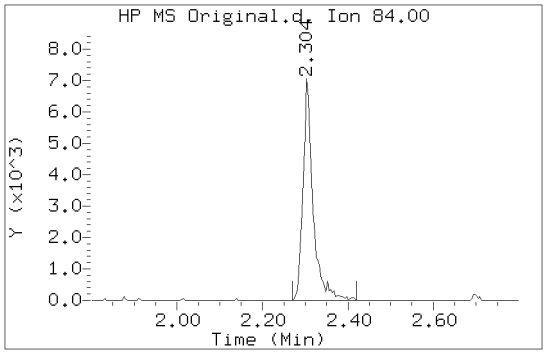


Methylene Chloride (75-09-2)

Reason Code:

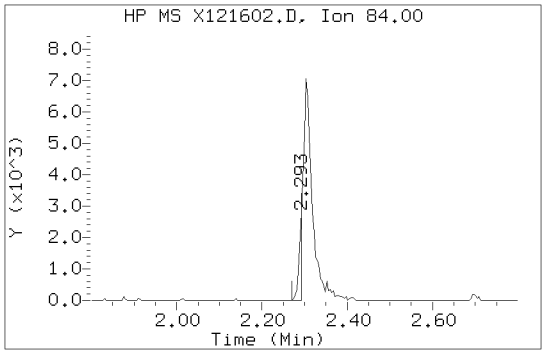
BEFORE

MASS
84
AREA
11777
HEIGHT
7057
16-Dec-2022
11:54
ALSHS
Server



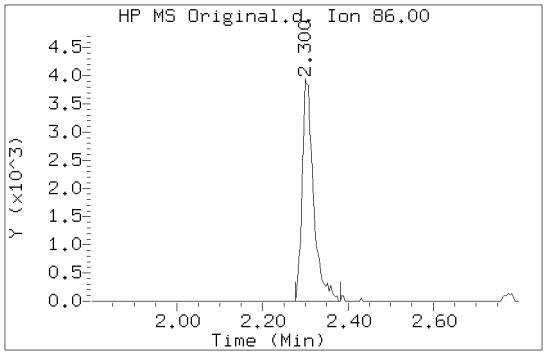
AFTER

MASS
84
AREA
1436
HEIGHT
2786
27-Dec-2022
16:07
ALSHS
Ser



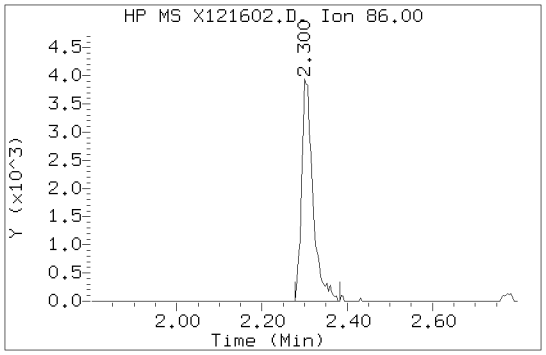
BEFORE

MASS
86
AREA
7453
HEIGHT
3944
16-Dec-2022
11:54
ALSHS
Server



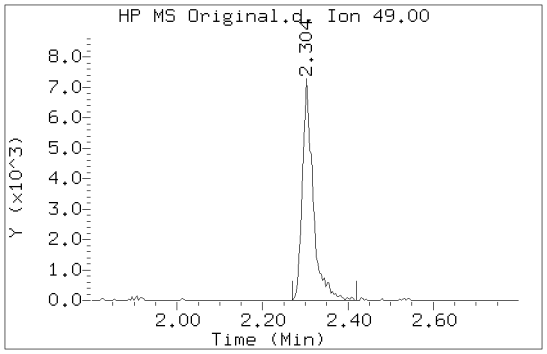
AFTER

MASS
86
AREA
7453
HEIGHT
3944
27-Dec-2022
16:07
ALSHS
Ser



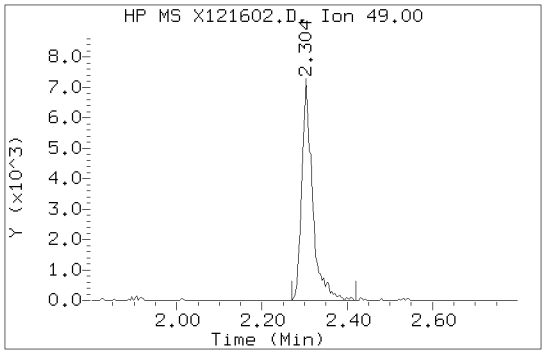
BEFORE

MASS
49
AREA
12974
HEIGHT
7289
16-Dec-2022
11:54
ALSHS
Server



AFTER

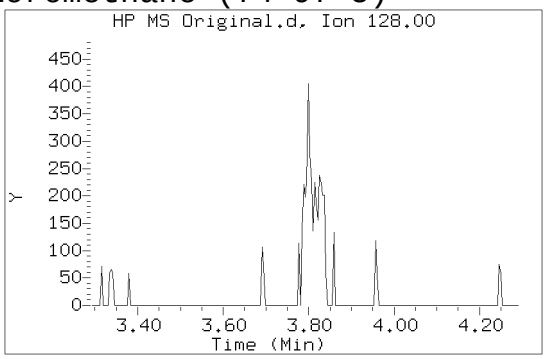
MASS
49
AREA
12974
HEIGHT
7289
27-Dec-2022
16:07
ALSHS
Ser



Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

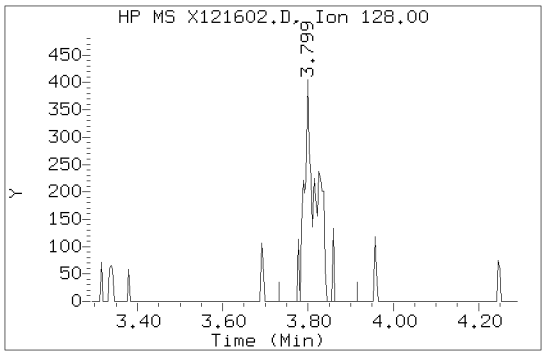
Bromochloromethane (74-97-5)

BEFORE
MASS
96
AREA
1402
HEIGHT
854
16-Dec-2022
11:54
ALSHS
Server

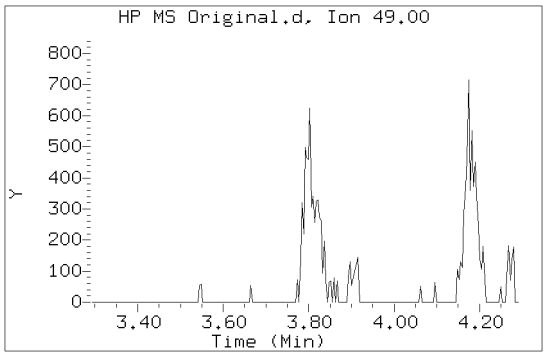


Reason Code:

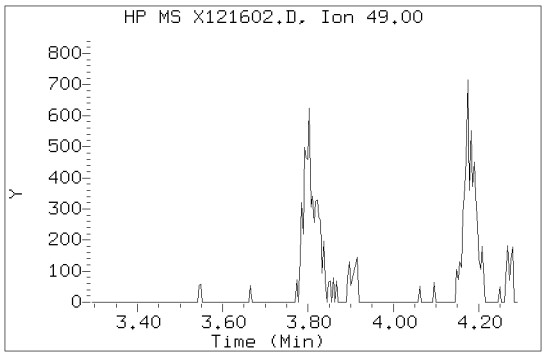
AFTER
MASS
128
AREA
802
HEIGHT
405
27-Dec-2022
16:07
ALSHS
Ser



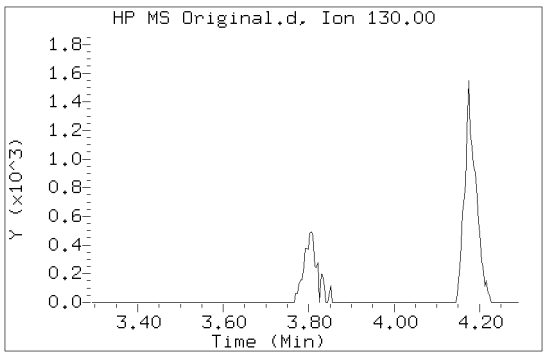
BEFORE
MASS
61
AREA
1975
HEIGHT
828
16-Dec-2022
11:54
ALSHS
Server



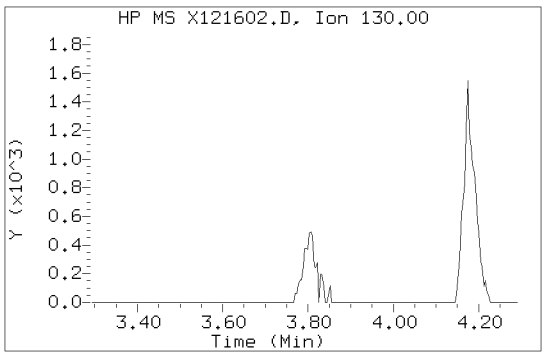
AFTER
MASS
49
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
98
AREA
1027
HEIGHT
608
16-Dec-2022
11:54
ALSHS
Server



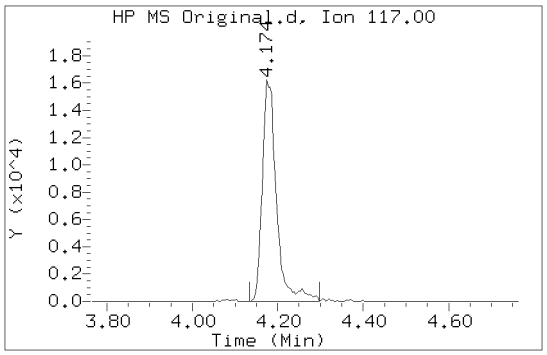
AFTER
MASS
130
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



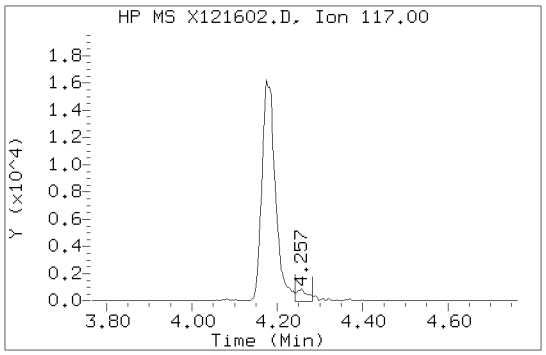
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
97
AREA
1700
HEIGHT
1016
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
117
AREA
1685
HEIGHT
944
27-Dec-2022
16:07
ALSHS
Ser



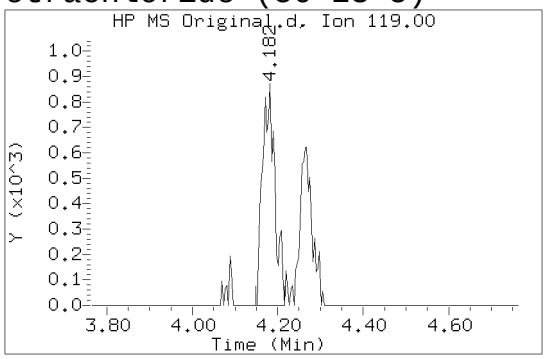
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Carbon Tetrachloride (56-23-5)

Reason Code:

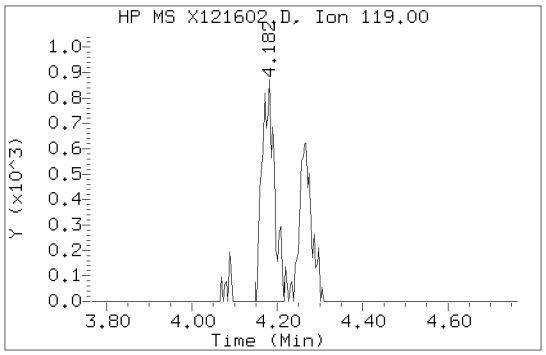
BEFORE

MASS
99
AREA
207130
HEIGHT
91368
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
119
AREA
1748
HEIGHT
872
27-Dec-2022
16:07
ALSHS
Ser

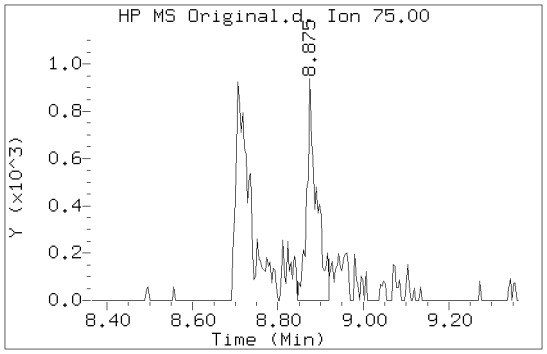


1,2,3-Trichloropropane (96-18-4)

Reason Code:

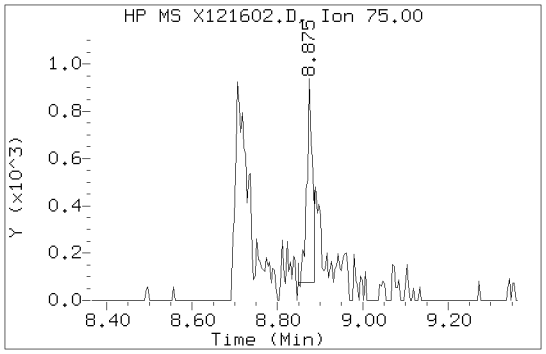
BEFORE

MASS
152
AREA
348702
HEIGHT
242350
16-Dec-2022
11:54
ALSHS
Server



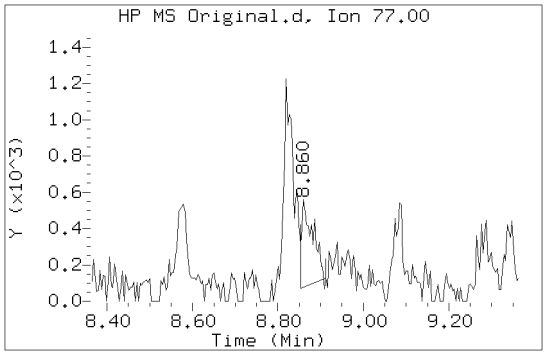
AFTER

MASS
75
AREA
766
HEIGHT
862
27-Dec-2022
16:07
ALSHS
Ser



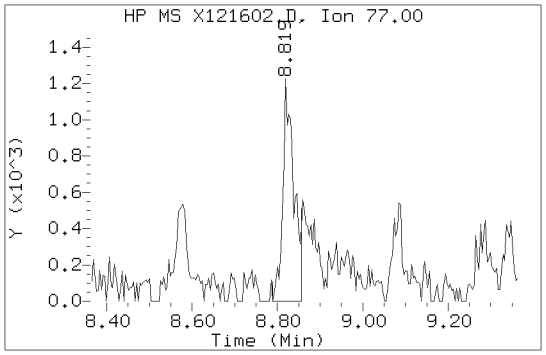
BEFORE

MASS
115
AREA
184413
HEIGHT
133835
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
77
AREA
2223
HEIGHT
1225
27-Dec-2022
16:07
ALSHS
Ser

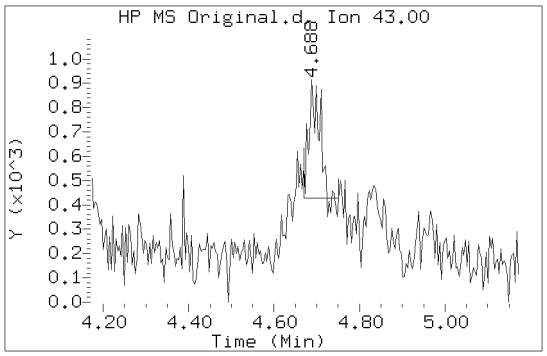


Isobutyl Alcohol (78-83-1)

Reason Code:

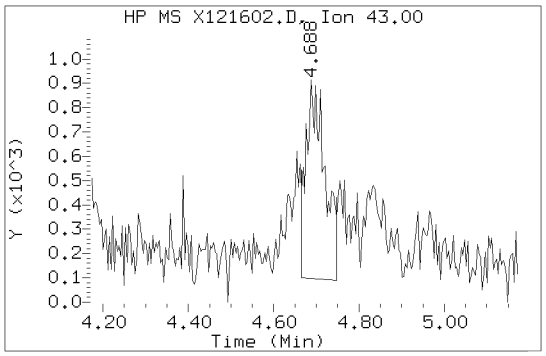
BEFORE

MASS
75
AREA
1475
HEIGHT
938
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
43
AREA
2537
HEIGHT
816
27-Dec-2022
16:07
ALSHS
Ser

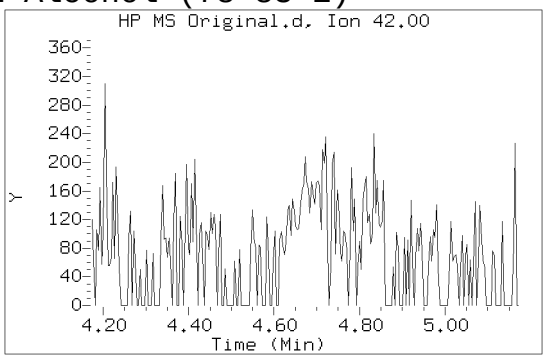


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Isobutyl Alcohol (78-83-1)

BEFORE

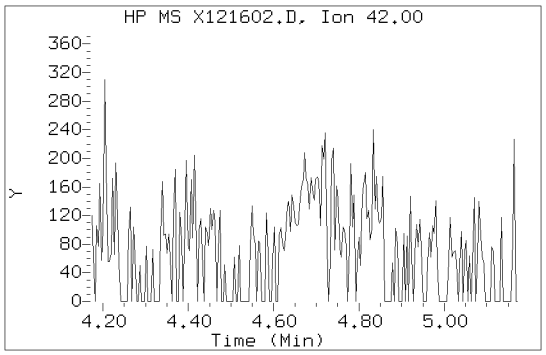
MASS
77
AREA
888
HEIGHT
483
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

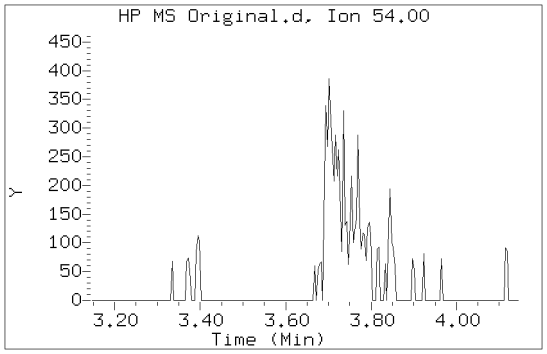
MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Propionitrile (107-12-0)

BEFORE

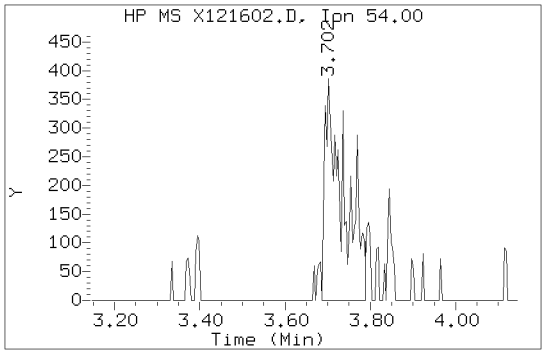
MASS
91
AREA
3881
HEIGHT
1822
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

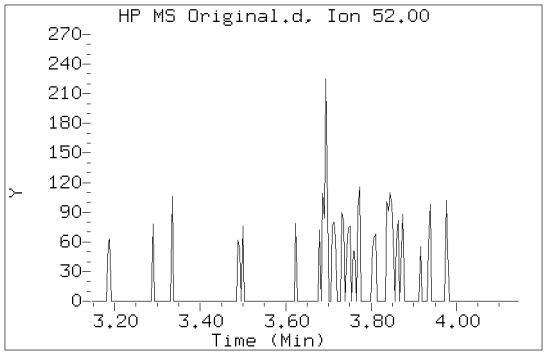
AFTER

MASS
54
AREA
1165
HEIGHT
386
27-Dec-2022
16:07
ALSHS
Ser



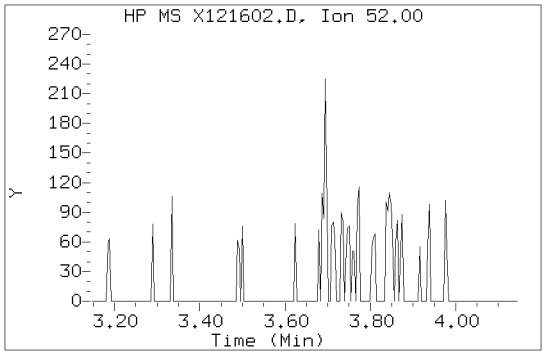
BEFORE

MASS
126
AREA
1511
HEIGHT
914
16-Dec-2022
11:54
ALSHS
Server



AFTER

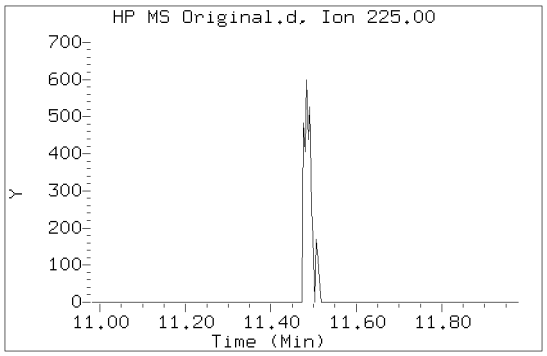
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Hexachlorobutadiene (87-68-3)

BEFORE

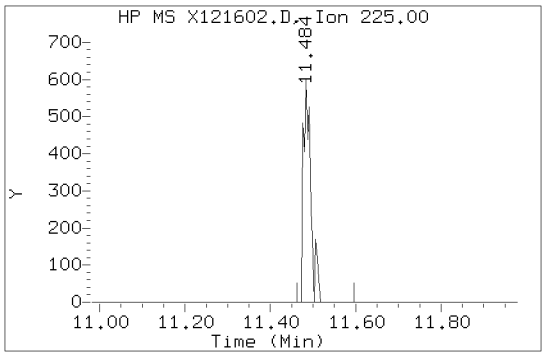
MASS
155
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

MASS
225
AREA
726
HEIGHT
599
27-Dec-2022
16:07
ALSHS
Ser

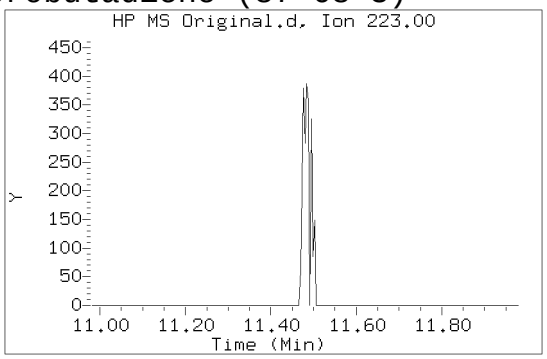


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

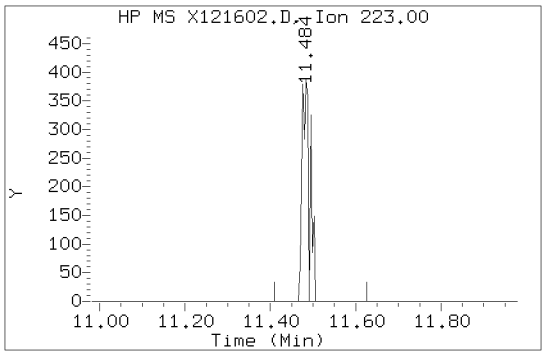
Hexachlorobutadiene (87-68-3)

Reason Code:

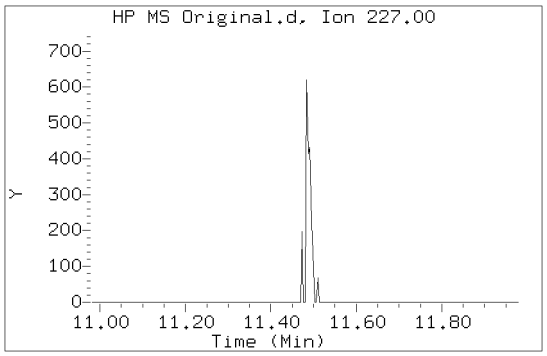
BEFORE
MASS
157
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



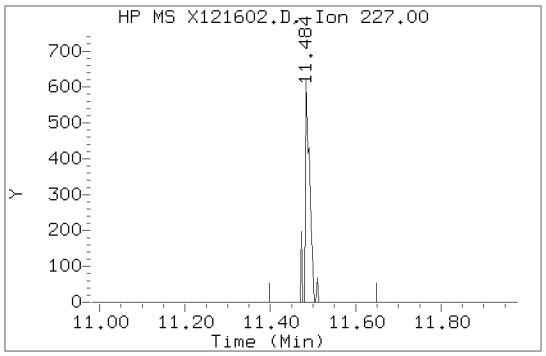
AFTER
MASS
223
AREA
502
HEIGHT
387
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
75
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



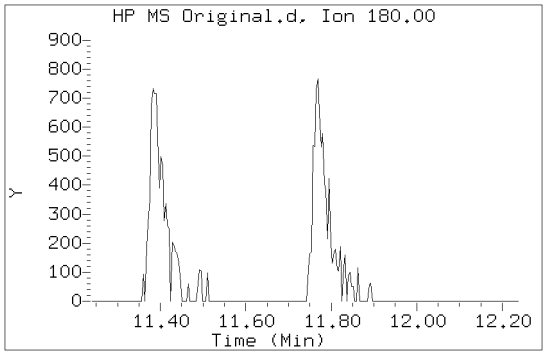
AFTER
MASS
227
AREA
469
HEIGHT
620
27-Dec-2022
16:07
ALSHS
Ser



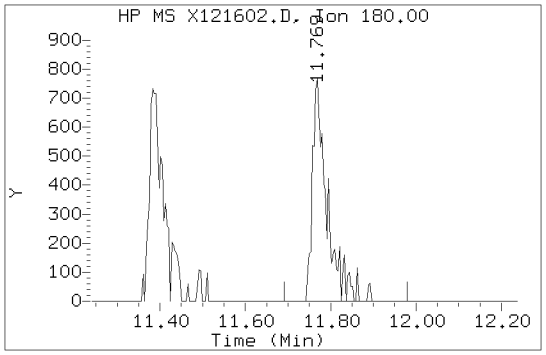
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

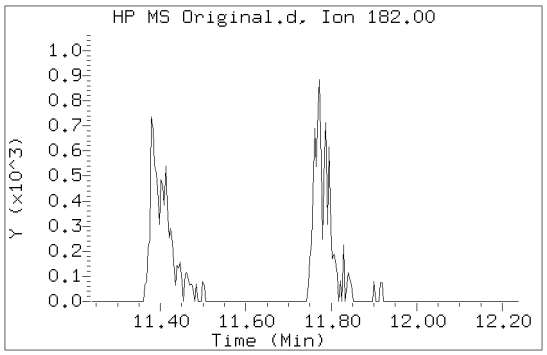
BEFORE
MASS
225
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



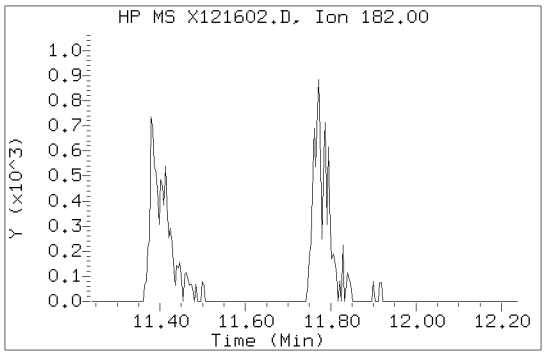
AFTER
MASS
180
AREA
1816
HEIGHT
766
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
223
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
182
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



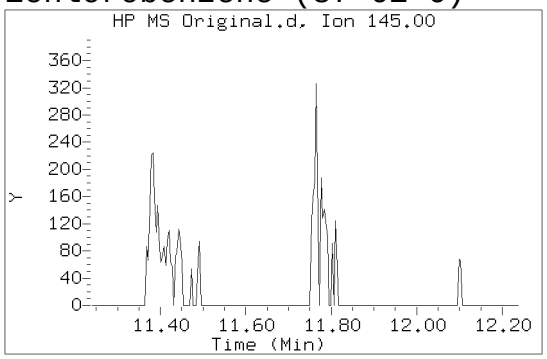
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

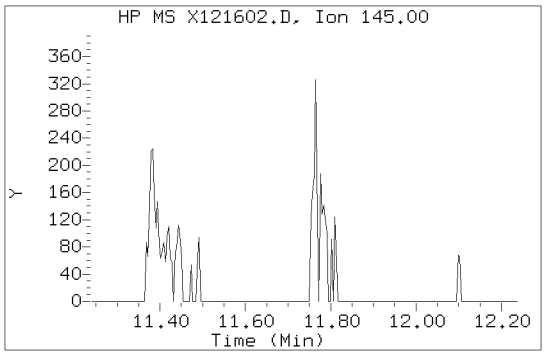
BEFORE

MASS
227
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
145
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

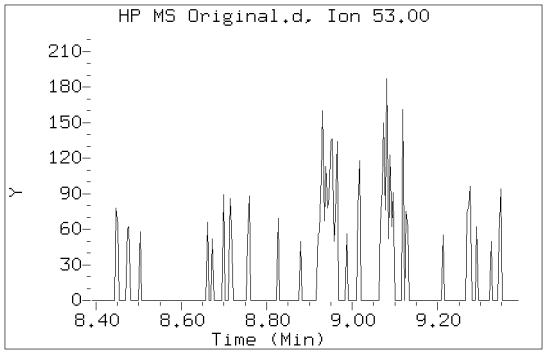


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

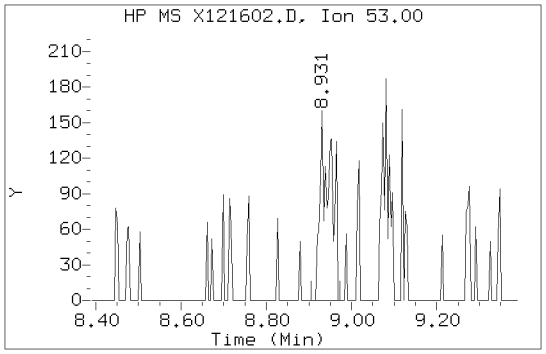
BEFORE

MASS
53
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



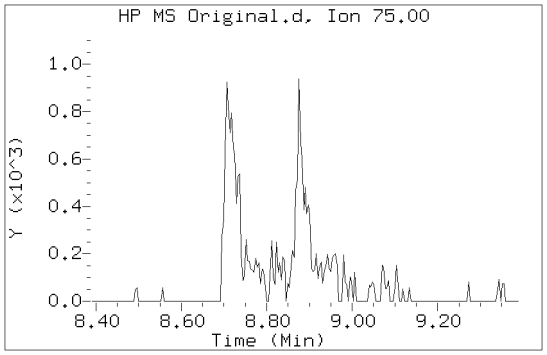
AFTER

MASS
53
AREA
280
HEIGHT
160
27-Dec-2022
16:07
ALSHS
Ser



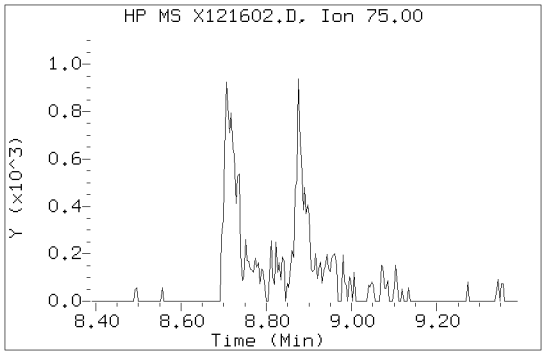
BEFORE

MASS
88
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

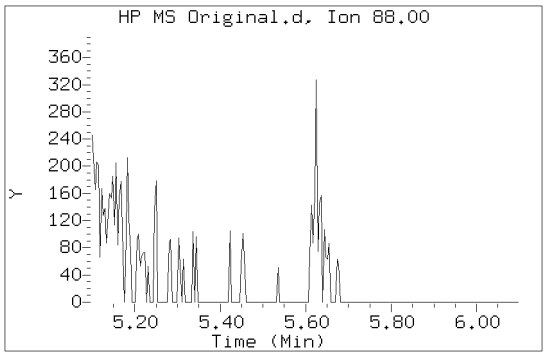


1,4-Dioxane ()

Reason Code:

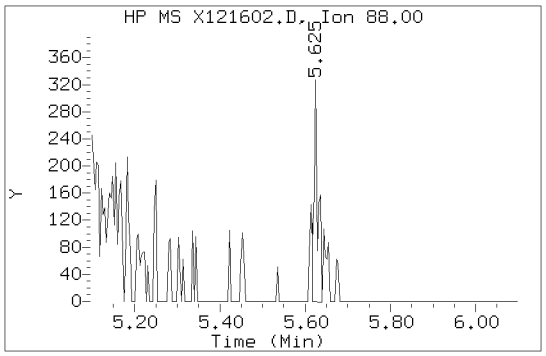
BEFORE

MASS
57
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
88
AREA
214
HEIGHT
327
27-Dec-2022
16:07
ALSHS
Ser

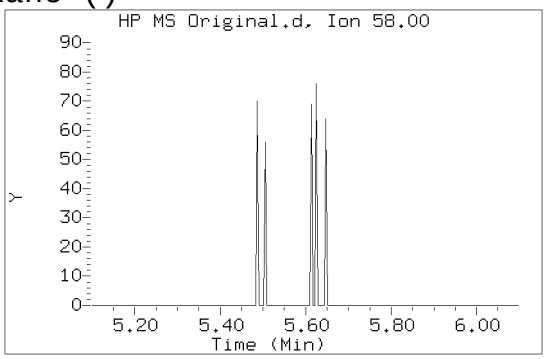


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

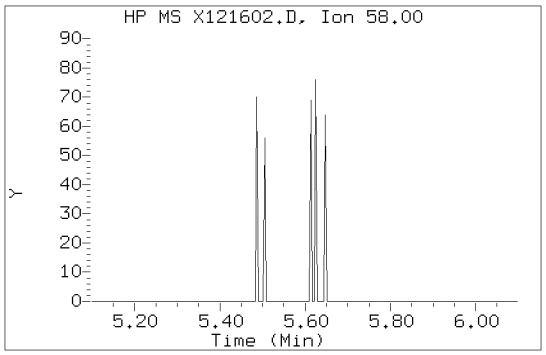
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
41
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



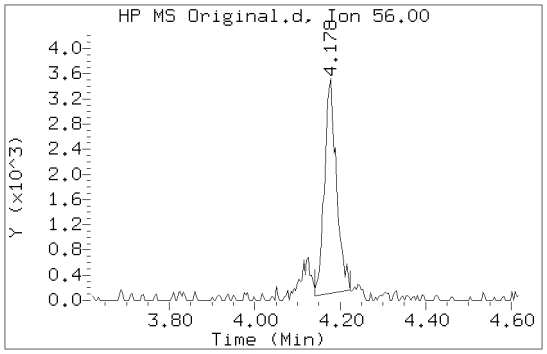
AFTER
MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



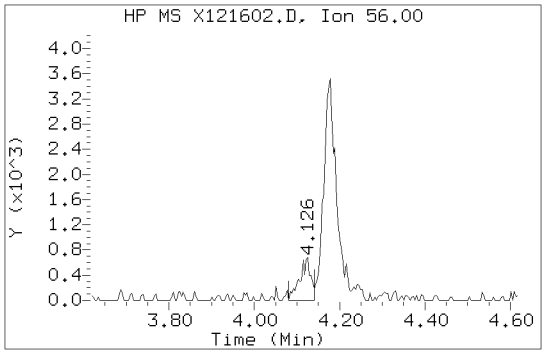
Cyclohexane (110-82-7)

Reason Code:

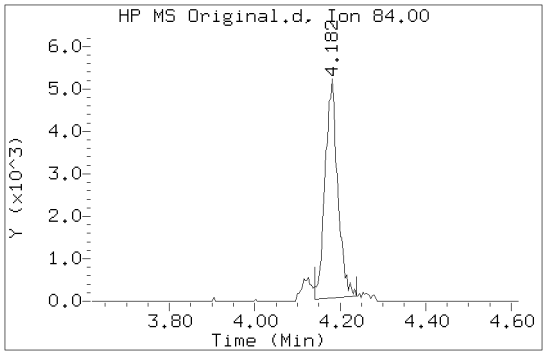
BEFORE
MASS
42
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



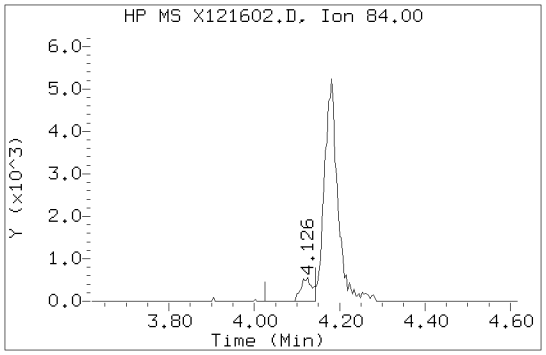
AFTER
MASS
56
AREA
1235
HEIGHT
682
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
71
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



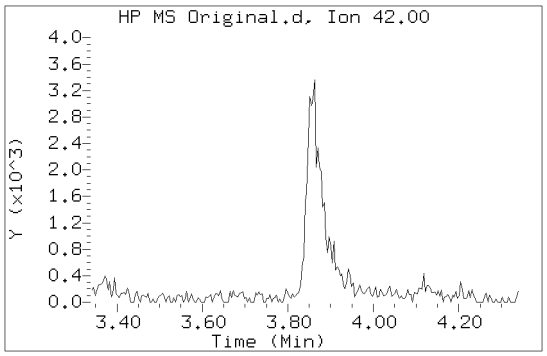
AFTER
MASS
84
AREA
1062
HEIGHT
557
27-Dec-2022
16:07
ALSHS
Ser



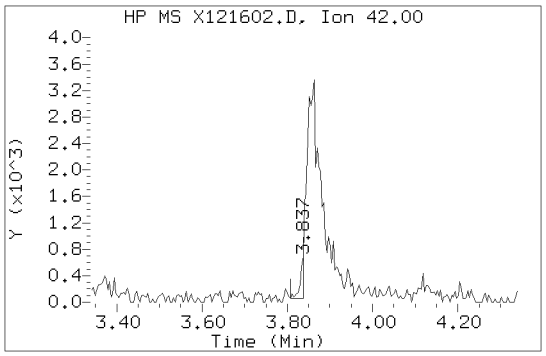
Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE
MASS
101
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
42
AREA
358
HEIGHT
628
27-Dec-2022
16:07
ALSHS
Ser



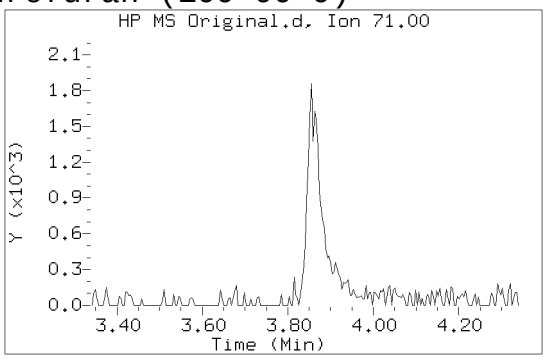
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE

MASS
151
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



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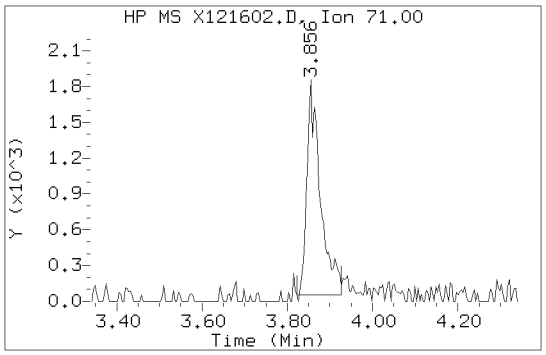

Freon TF (76-13-1)

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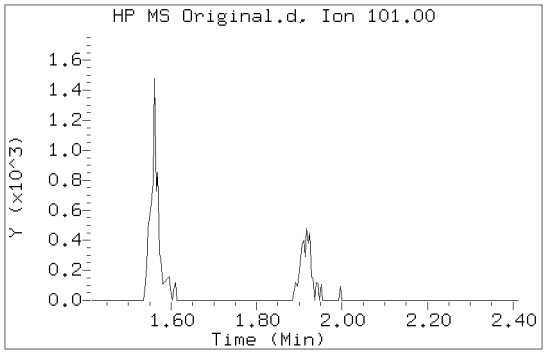

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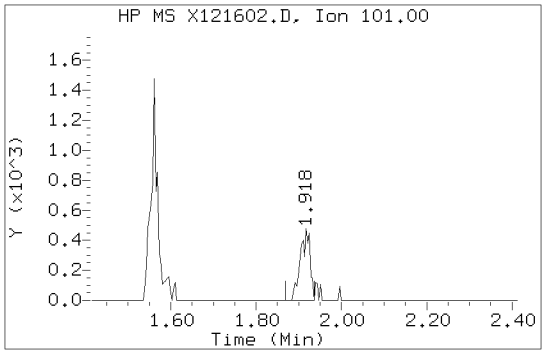

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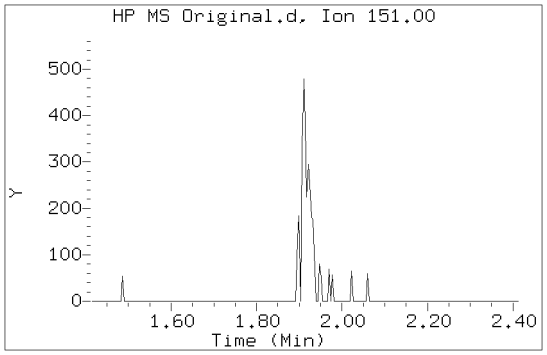

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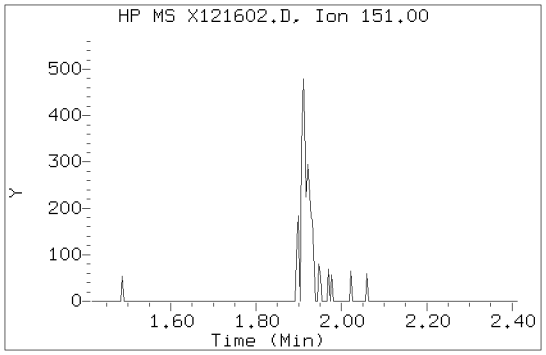

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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
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Inj Date : 16-DEC-2022 12:20
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 11:38 Cal File: X121602.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	461469	50.0000	
135 1,4-Dioxane	88	5.625	5.625	(1.346)	462	10.0000	10.95(M)
140 1,3-Butadiene	54	1.164	1.164	(0.279)	1793	0.50000	0.56(M)
25 Methacrylonitrile	41	3.848	3.848	(0.921)	2066	0.50000	0.63(M)
12 Isobutyl Alcohol	43	4.695	4.695	(1.124)	5178	10.0000	9.97(M)
13 Acetonitrile	39	2.210	2.210	(0.529)	2204	5.00000	5.24(M)
14 Allyl Chloride	41	2.206	2.206	(0.528)	4574	0.50000	0.57(M)
4 Propionitrile	54	3.686	3.686	(0.882)	2777	5.00000	5.89(M)
136 n-Hexane	57	2.772	2.772	(0.664)	1909	0.50000	0.57(M)
72 trans-1,4-Dichloro-2-butene	53	8.931	8.931	(1.165)	792	0.50000	0.56(M)
23 Chloroprene	53	1.771	1.771	(0.424)	900	0.50000	0.57(M)
145 alpha-Methylstyrene	118	9.272	9.272	(0.960)	4701	0.50000	0.60
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	5153	0.50000	0.59(M)
139 Diethyl ether	59	1.760	1.760	(0.421)	1864	0.50000	0.60
130 Ethyl Acetate	43	3.679	3.679	(0.881)	2065	0.50000	0.57(M)
40 Methyl Methacrylate	41	5.628	5.628	(1.347)	1788	0.50000	0.56(M)
49 Ethyl Methacrylate	69	6.727	6.727	(1.355)	1935	0.50000	0.59(M)
132 n-Butanol	56	5.291	5.291	(1.266)	622	10.0000	50.83(M)
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	900	1.00000	(M)
150 Allyl alcohol	57	2.772	2.772	(0.664)	3089	10.0000	17.23

166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	9626	0.50000	0.57(M)
131	Methyl Acrylate	55	3.743	3.743 (0.896)	1765	0.50000	0.56(M)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D Page 2
Report Date: 27-Dec-2022 16:07

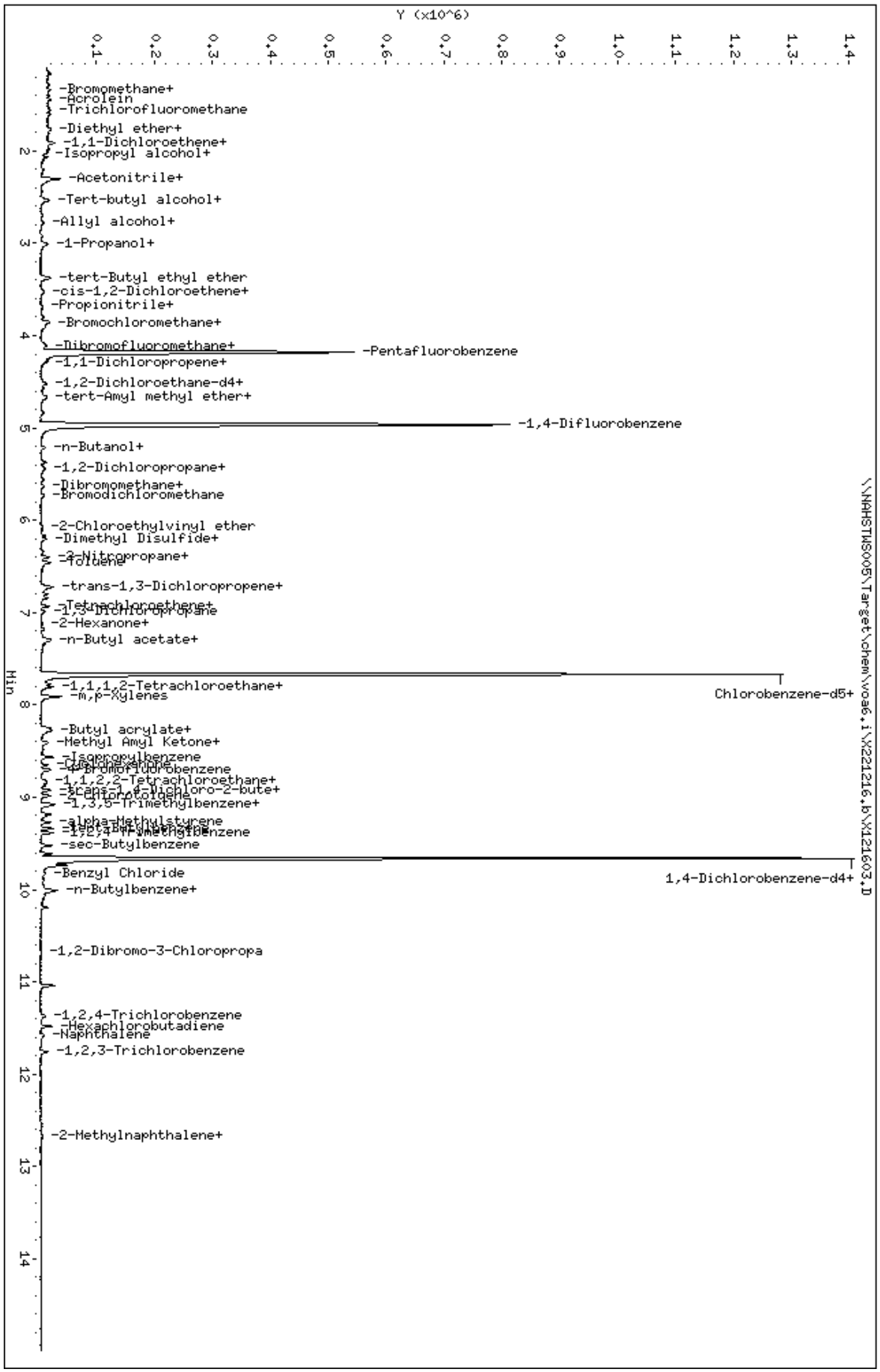
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	162	Butyl acrylate	55	8.271	8.271	(1.079)	4718	0.50000	0.55(M)
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1990	0.50000	1.00(M)
	3	Chloromethane	50	1.077	1.077	(0.258)	2466	0.50000	2.77(M)
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	2412	0.50000	0.59(M)
	6	Bromomethane	94	1.336	1.336	(0.320)	1893	0.50000	2.36(M)
	7	Chloroethane	64	1.407	1.407	(0.337)	1653	0.50000	0.58(M)
	8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	3286	0.50000	0.58(M)
	9	Acrolein	56	1.441	1.441	(0.345)	440	1.00000	4.17(M)
	10	Acetone	43	1.977	1.977	(0.473)	2669	1.00000	2.02(M)
	11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	2037	0.50000	0.58(M)
	15	Iodomethane	142	2.026	2.026	(0.485)	2397	1.00000	3.84(TM)
	16	Acrylonitrile	53	2.566	2.566	(0.614)	1118	1.00000	0.94(M)
	17	Methylene Chloride	84	2.296	2.296	(0.550)	2938	0.50000	0.61(M)
	18	Methyl tert-butyl ether	73	2.536	2.536	(0.607)	5841	0.50000	0.50(M)
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	9921	1.00000	1.08(M)
	20	trans-1,2-Dichloroethene	96	2.543	2.543	(0.609)	2218	0.50000	0.56(M)
	21	Vinyl Acetate	43	3.023	3.023	(0.724)	10138	1.00000	1.00(M)
	22	1,1-Dichloroethane	63	2.926	2.926	(0.700)	3874	0.50000	0.56(M)
	24	2-Butanone	43	3.649	3.649	(0.873)	1292	1.00000	3.93(M)
	26	2,2-Dichloropropane	77	3.514	3.514	(0.841)	3238	0.50000	0.55(M)
	27	cis-1,2-Dichloroethene	96	3.544	3.544	(0.848)	2852	0.50000	0.59
	28	Chloroform	83	3.908	3.908	(0.935)	4040	0.50000	0.52(M)
	29	Bromochloromethane	128	3.799	3.799	(0.909)	1481	0.50000	0.56
$	30	Dibromofluoromethane	113	4.110	4.110	(0.984)	2321	0.50000	0.35
	31	1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	3512	0.50000	0.57(M)
	32	1,1-Dichloropropene	75	4.290	4.290	(0.864)	2468	0.50000	0.50(M)
	33	1,2-Dichloroethane	62	4.567	4.567	(0.920)	3129	0.50000	0.55(M)
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	2763	0.50000	0.52(MH)
$	35	1,2-Dichloroethane-d4	65	4.481	4.481	(1.073)	2849	0.50000	0.87(T)
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	687671	50.0000	
	37	Benzene	78	4.519	4.519	(0.910)	9243	0.50000	0.56
	38	Trichloroethene	130	5.216	5.216	(1.051)	2583	0.50000	0.55(M)
	39	Bromodichloromethane	83	5.730	5.730	(1.154)	3650	0.50000	0.59(M)
	41	2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	1861	1.00000	1.06(M)
	42	1,2-Dichloropropane	63	5.441	5.441	(1.096)	2449	0.50000	0.56(M)
	44	Dibromomethane	93	5.557	5.557	(1.119)	1725	0.50000	0.58
	45	4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	3741	1.00000	1.08(M)
	46	cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	3695	0.50000	0.51(M)
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	645291	50.0000	
$	48	Toluene-d8	98	6.401	6.401	(0.835)	9525	0.50000	0.59
	50	Toluene	91	6.460	6.460	(0.843)	10374	0.50000	0.58(M)
	51	trans-1,3-Dichloropropene	75	6.697	6.697	(1.349)	3042	0.50000	0.50
	52	2-Hexanone	43	7.117	7.117	(0.928)	2580	1.00000	1.09
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	2092	0.50000	0.58(M)
	54	1,3-Dichloropropane	76	6.993	6.993	(0.912)	4005	0.50000	0.56(M)
	55	Dibromochloromethane	129	7.180	7.180	(0.936)	2827	0.50000	0.54
	56	Tetrachloroethene	164	6.933	6.933	(0.904)	2131	0.50000	0.57(M)
	57	1,2-Dibromoethane	107	7.270	7.270	(0.948)	2340	0.50000	0.52(M)
	58	1-Chlorohexane	55	7.705	7.705	(1.552)	1829	0.50000	0.55(MH)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	7747	0.50000	0.61
	60	1,1,1,2-Tetrachloroethane	131	7.784	7.784	(1.015)	2741	0.50000	0.58(M)
	61	Ethylbenzene	106	7.806	7.806	(1.018)	3064	0.50000	0.51(M)

62 m,p-Xylenes	106	7.911	7.911 (1.032)	9016	1.00000	1.17(M)
63 o-Xylene	106	8.252	8.252 (1.076)	4412	0.50000	0.58(M)

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	64	Styrene	104	8.286	8.286	(1.081)	6634	0.50000	0.52(M)
	66	Bromoform	173	8.421	8.421	(1.098)	2013	0.50000	0.56(TM)
	67	Isopropylbenzene	105	8.567	8.567	(1.117)	8757	0.50000	0.50(M)
	68	1,1,2,2-Tetrachloroethane	83	8.845	8.845	(0.915)	3194	0.50000	0.57(M)
$	69	4-Bromofluorobenzene	95	8.706	8.706	(1.135)	3870	0.50000	0.71(M)
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	347824	50.0000	
	71	1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2019	0.50000	0.52(M)
	73	n-Propylbenzene	91	8.923	8.923	(0.924)	11163	0.50000	0.57(M)
	74	Bromobenzene	156	8.818	8.818	(0.913)	3147	0.50000	0.55(M)
	75	1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	7182	0.50000	0.50(M)
	76	2-Chlorotoluene	91	8.983	8.983	(0.930)	6718	0.50000	0.53(M)
	77	4-Chlorotoluene	91	9.088	9.088	(0.941)	7644	0.50000	0.53(M)
	78	tert-Butylbenzene	119	9.339	9.339	(0.967)	6389	0.50000	0.54(M)
	79	1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	8496	0.50000	0.56(M)
	81	sec-Butylbenzene	105	9.523	9.523	(0.986)	7938	0.50000	0.51(M)
	82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	7343	0.50000	0.52(M)
	83	1,3-Dichlorobenzene	146	9.613	9.613	(0.995)	4677	0.50000	0.49(M)
	84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	5674	0.50000	0.54(M)
	86	Benzyl Chloride	91	9.831	9.831	(1.282)	3642	0.50000	3.03
	87	n-Butylbenzene	91	10.014	10.014	(1.036)	5149	0.50000	2.14(M)
	88	1,2-Dichlorobenzene	146	10.010	10.010	(1.036)	5504	0.50000	0.56(M)
	89	1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	441	0.50000	0.58(M)
	90	1,2,4-Trichlorobenzene	180	11.364	11.364	(1.176)	3187	0.50000	0.51(M)
	91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	1477	0.50000	0.49(M)
	92	Naphthalene	128	11.581	11.581	(1.199)	7025	0.50000	0.50
	93	1,2,3-Trichlorobenzene	180	11.765	11.765	(1.218)	3572	0.50000	0.60(M)
M	94	1,2-Dichloroethylene (total)	96				5070	1.00000	
M	95	Xylenes (total)	106				13428	1.50000	
	141	Cyclohexane	56	4.114	4.114	(0.985)	2803	0.50000	1.84(M)
	138	Freon TF	101	1.917	1.917	(0.459)	1851	0.50000	0.54(M)
	147	Methylcyclohexane	55	5.415	5.415	(1.091)	4781	0.50000	0.56(M)
	146	Methyl Acetate	43	2.240	2.240	(0.536)	1269	0.50000	0.61(M)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Purge Volume: 5.0
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Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 16-DEC-2022 12:20
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LabSampID : VSTD000.5

m,p-Xylenes ()

Reason Code:

BEFORE

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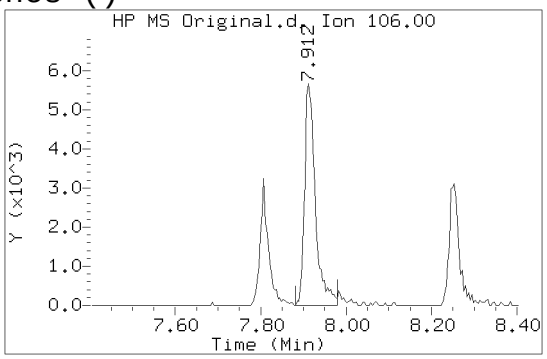
27-Dec-2022
16:03
linh
pham



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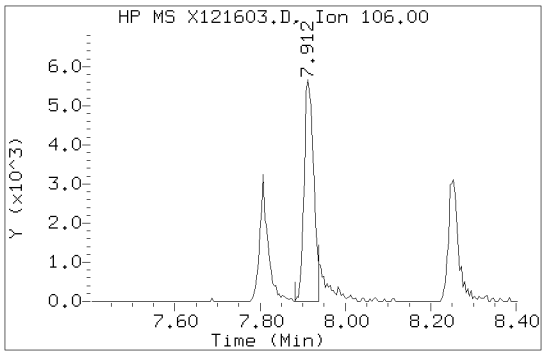

BEFORE

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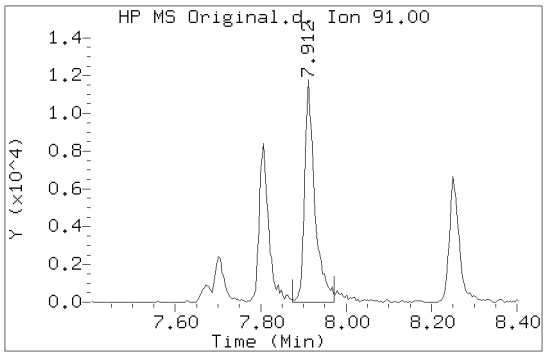

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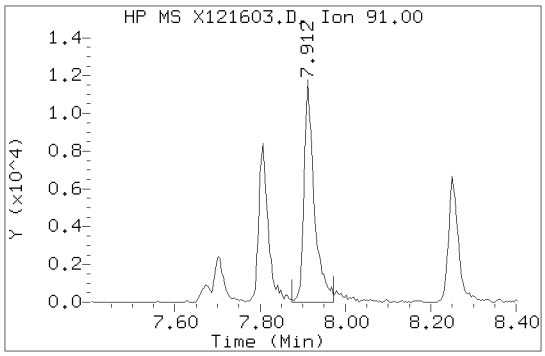

Dichlorodifluoromethane (75-71-8)

Reason Code:

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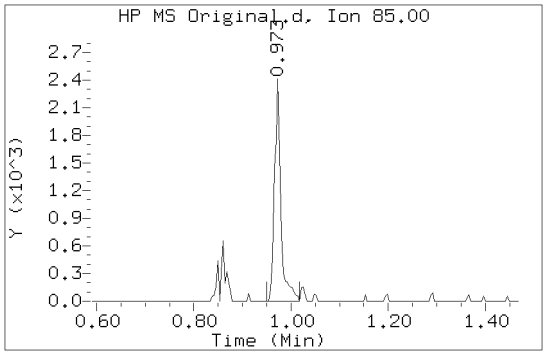

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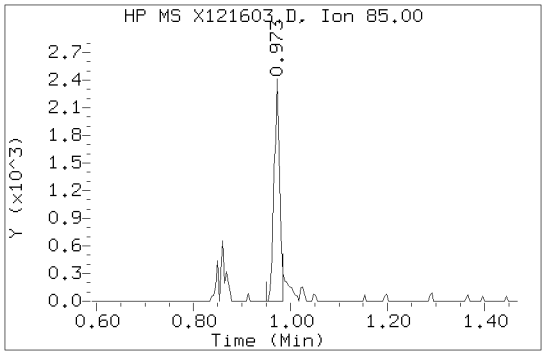

BEFORE

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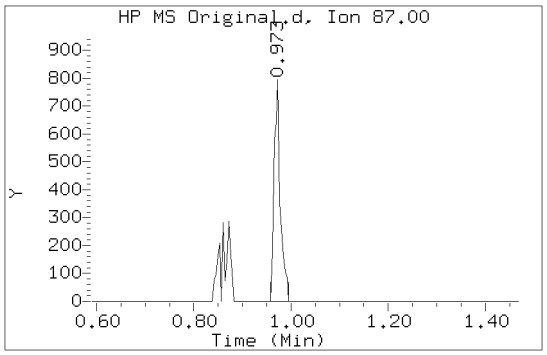

AFTER

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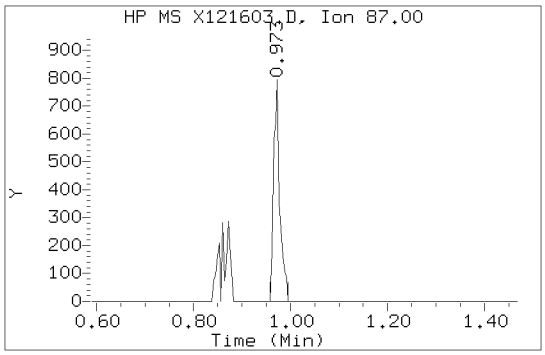

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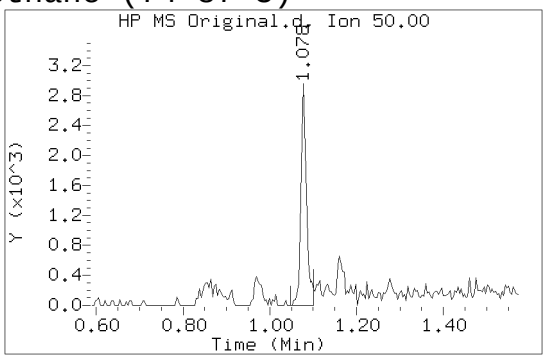
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

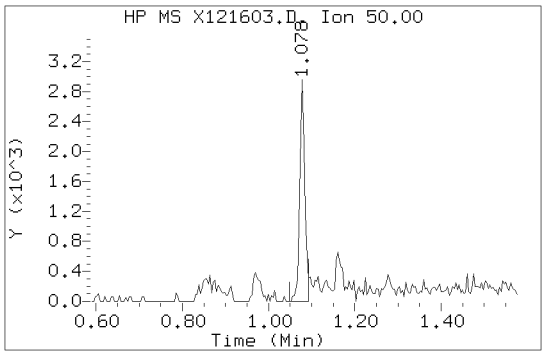
Chloromethane (74-87-3)

Reason Code:

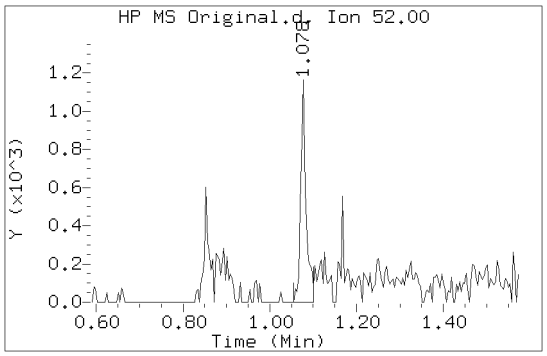
BEFORE
MASS
50
AREA
2589
HEIGHT
2959
27-Dec-2022
16:03
linh
pham



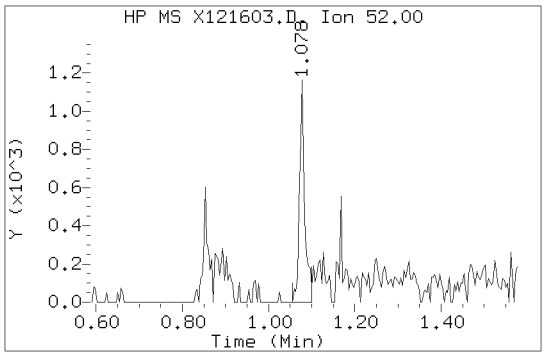
AFTER
MASS
50
AREA
2466
HEIGHT
2959
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
52
AREA
985
HEIGHT
1164
27-Dec-2022
16:03
linh
pham



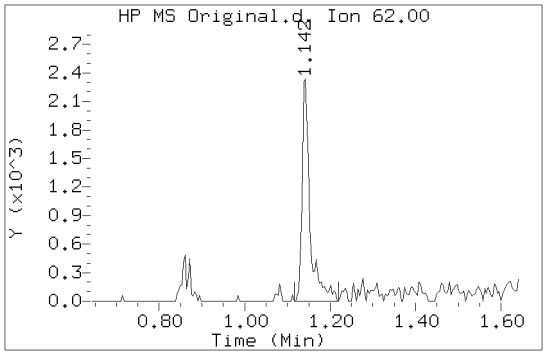
AFTER
MASS
52
AREA
985
HEIGHT
1164
27-Dec-2022
16:07
linh
pham



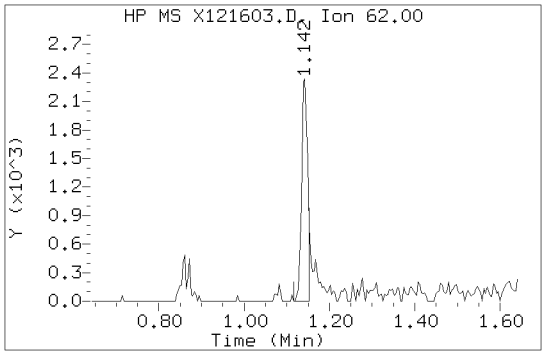
Vinyl Chloride (75-01-4)

Reason Code:

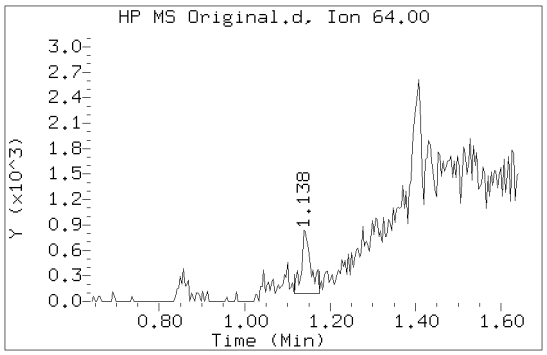
BEFORE
MASS
62
AREA
3132
HEIGHT
2337
27-Dec-2022
16:03
linh
pham



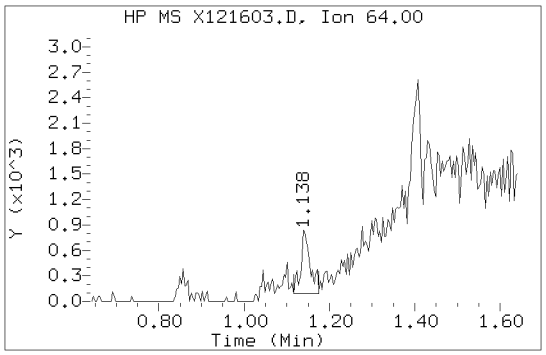
AFTER
MASS
62
AREA
2412
HEIGHT
2337
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
64
AREA
1174
HEIGHT
750
27-Dec-2022
16:03
linh
pham



AFTER
MASS
64
AREA
1174
HEIGHT
750
27-Dec-2022
16:07
linh
pham

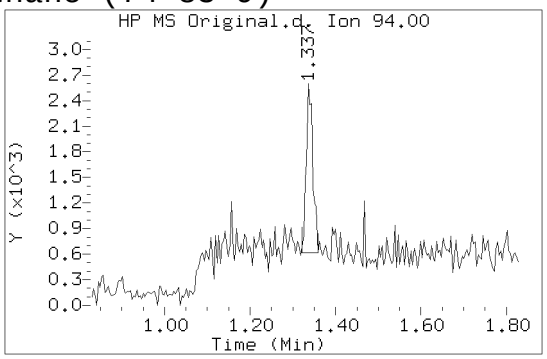


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

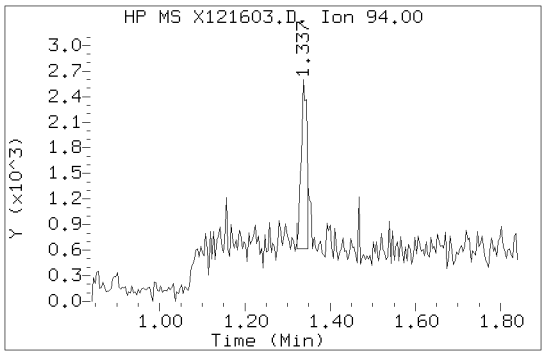
Bromomethane (74-83-9)

Reason Code:

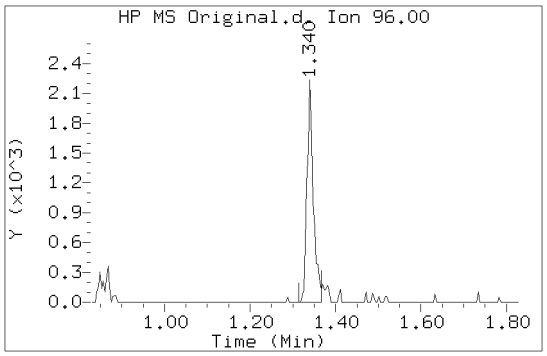
BEFORE
MASS
94
AREA
2146
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



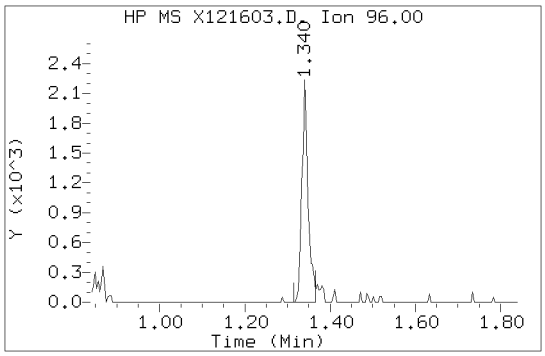
AFTER
MASS
94
AREA
1893
HEIGHT
1983
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
96
AREA
2304
HEIGHT
2236
27-Dec-2022
16:03
linh
pham



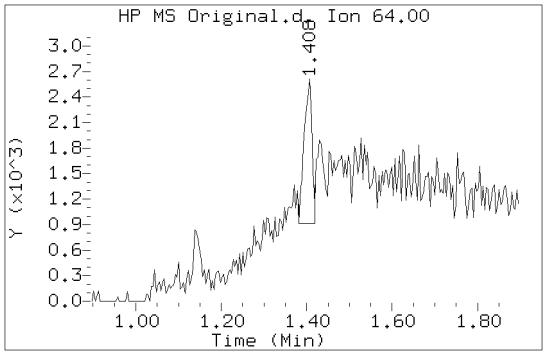
AFTER
MASS
96
AREA
2304
HEIGHT
2236
27-Dec-2022
16:07
linh
pham



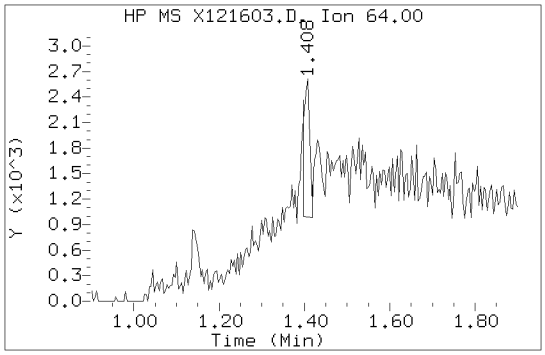
Chloroethane (75-00-3)

Reason Code:

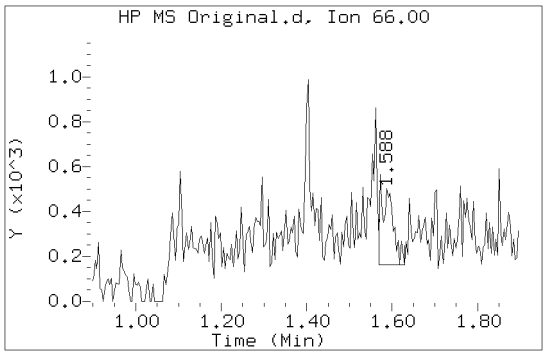
BEFORE
MASS
64
AREA
2196
HEIGHT
1702
27-Dec-2022
16:03
linh
pham



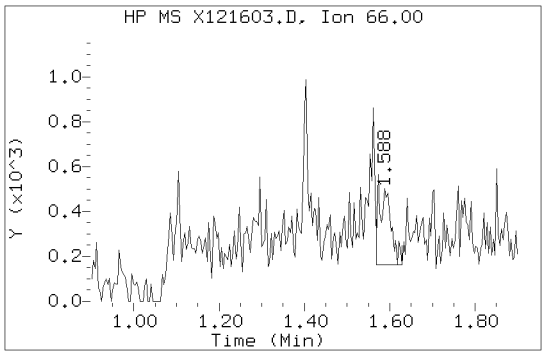
AFTER
MASS
64
AREA
1653
HEIGHT
1624
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
66
AREA
677
HEIGHT
340
27-Dec-2022
16:03
linh
pham



AFTER
MASS
66
AREA
677
HEIGHT
340
27-Dec-2022
16:07
linh
pham



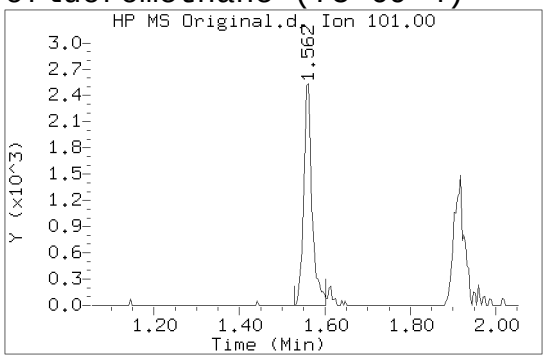
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Trichlorofluoromethane (75-69-4)

Reason Code:

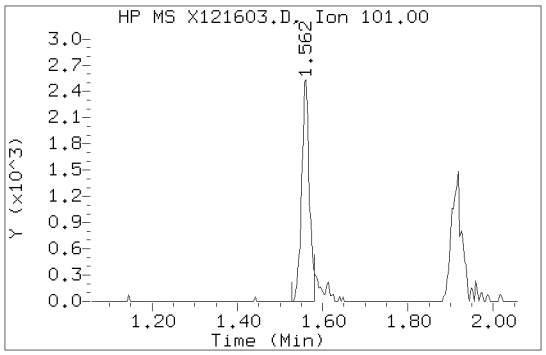
BEFORE

MASS
101
AREA
3530
HEIGHT
2534
27-Dec-2022
16:03
linh
pham



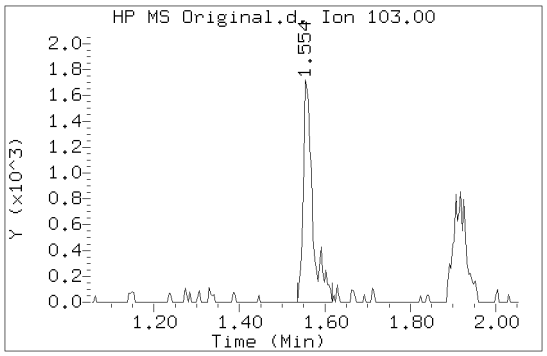
AFTER

MASS
101
AREA
3286
HEIGHT
2534
27-Dec-2022
16:07
linh
pham



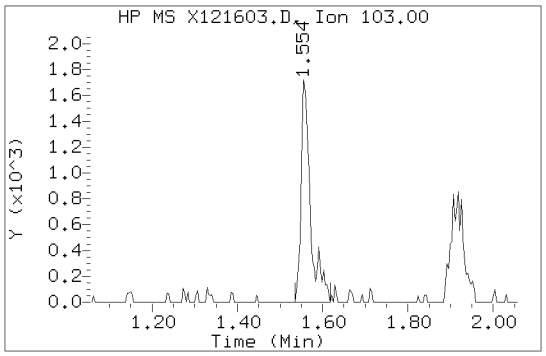
BEFORE

MASS
103
AREA
2708
HEIGHT
1720
27-Dec-2022
16:03
linh
pham



AFTER

MASS
103
AREA
2708
HEIGHT
1720
27-Dec-2022
16:07
linh
pham

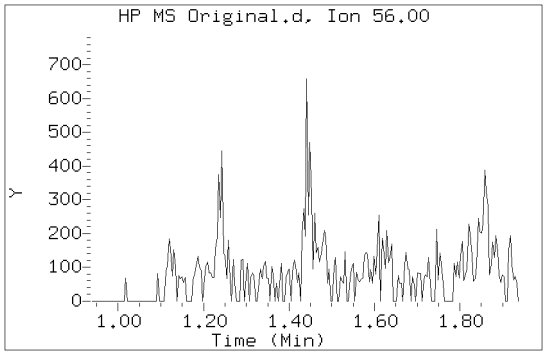


Acrolein (107-02-8)

Reason Code:

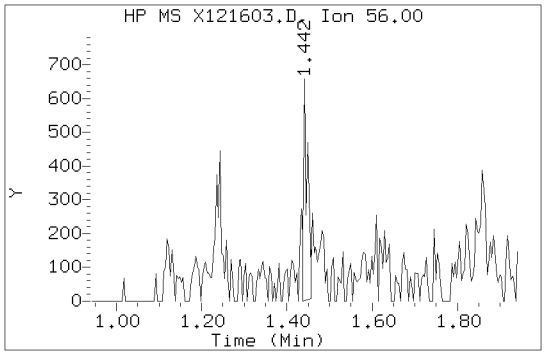
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



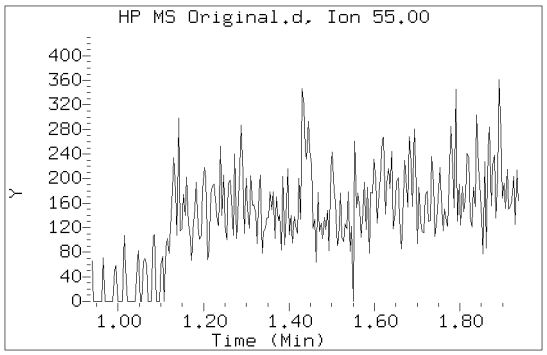
AFTER

MASS
56
AREA
440
HEIGHT
656
27-Dec-2022
16:07
linh
pham



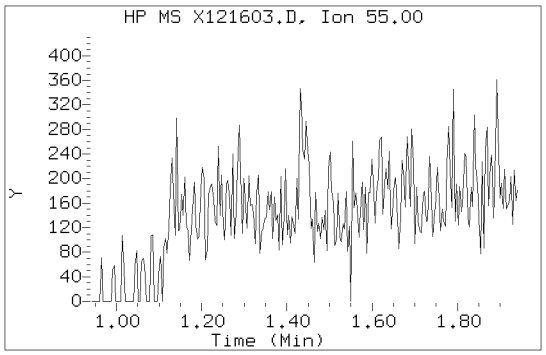
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



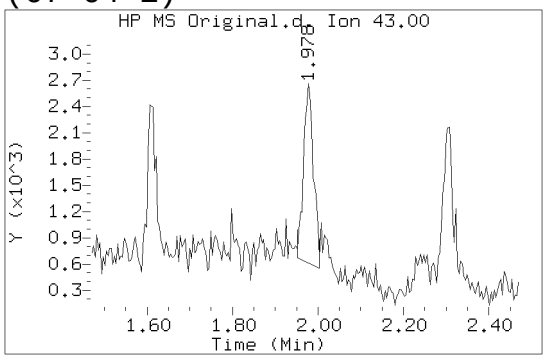
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acetone (67-64-1)

Reason Code:

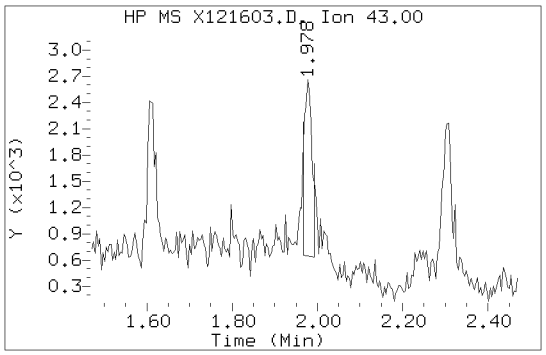
BEFORE

MASS
43
AREA
3388
HEIGHT
2046
27-Dec-2022
16:03
linh
pham



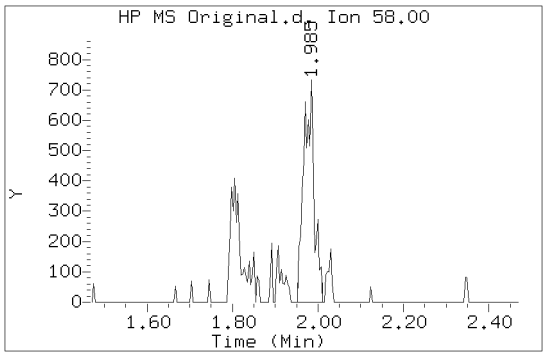
AFTER

MASS
43
AREA
2669
HEIGHT
2015
27-Dec-2022
16:07
linh
pham



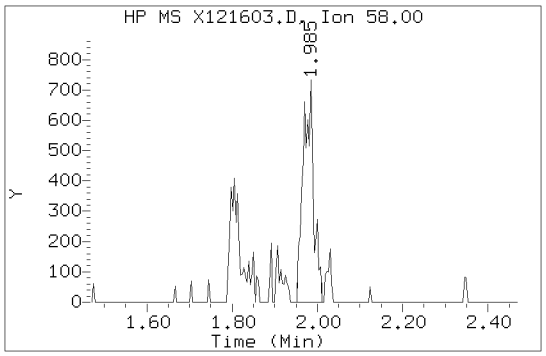
BEFORE

MASS
58
AREA
1264
HEIGHT
733
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
1264
HEIGHT
733
27-Dec-2022
16:07
linh
pham

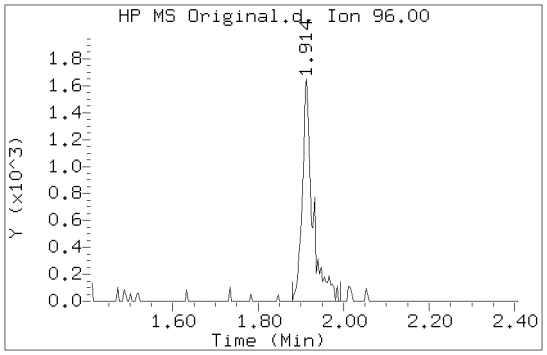


1,1-Dichloroethene (75-35-4)

Reason Code:

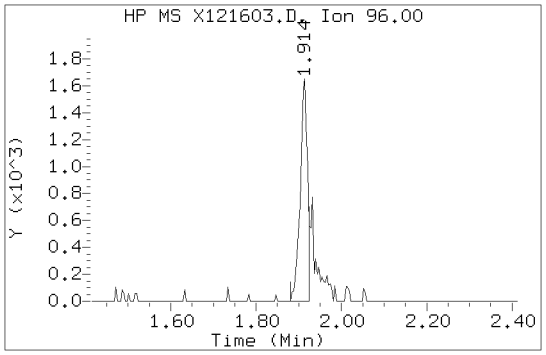
BEFORE

MASS
96
AREA
2836
HEIGHT
1651
27-Dec-2022
16:03
linh
pham



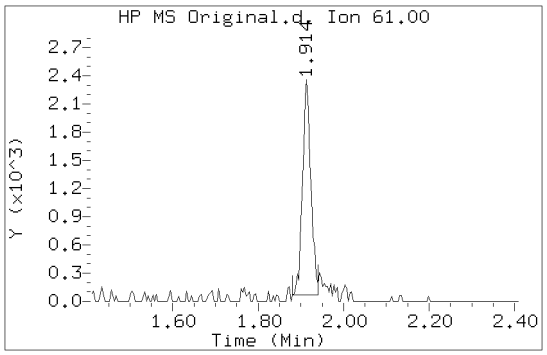
AFTER

MASS
96
AREA
2037
HEIGHT
1651
27-Dec-2022
16:07
linh
pham



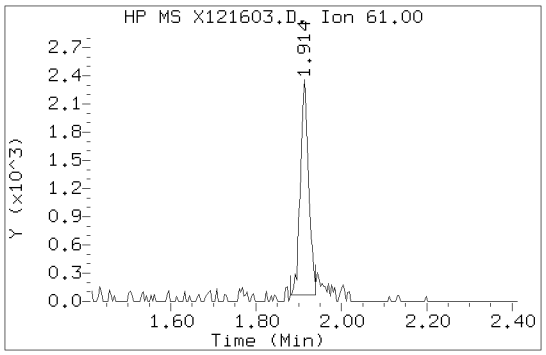
BEFORE

MASS
61
AREA
3197
HEIGHT
2293
27-Dec-2022
16:03
linh
pham



AFTER

MASS
61
AREA
3197
HEIGHT
2293
27-Dec-2022
16:07
linh
pham

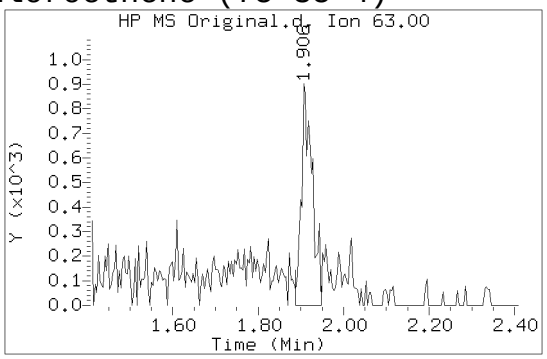


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

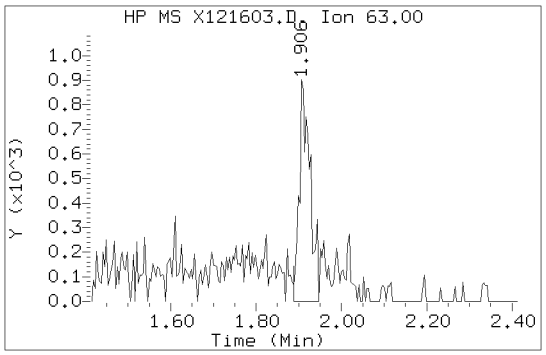
1,1-Dichloroethene (75-35-4)

Reason Code:

BEFORE
MASS
63
AREA
1607
HEIGHT
902
27-Dec-2022
16:03
linh
pham



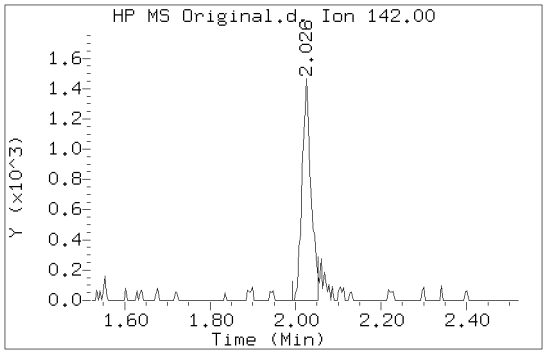
AFTER
MASS
63
AREA
1607
HEIGHT
902
27-Dec-2022
16:07
linh
pham



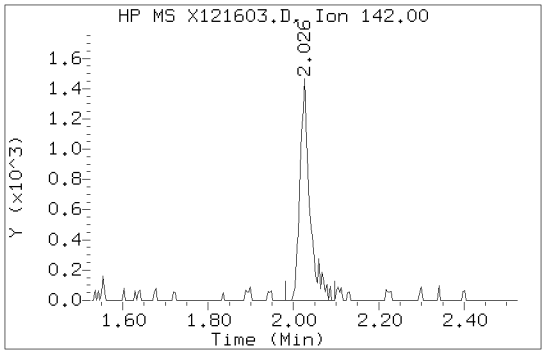
Iodomethane (74-88-4)

Reason Code:

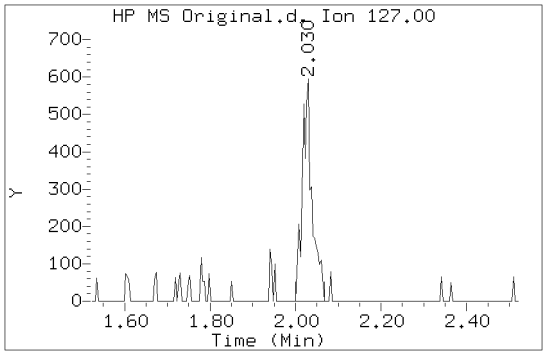
BEFORE
MASS
142
AREA
2166
HEIGHT
1466
27-Dec-2022
16:03
linh
pham



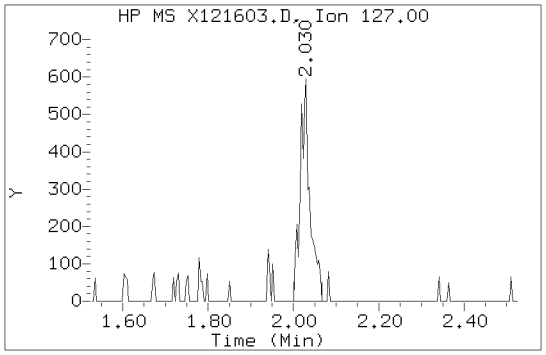
AFTER
MASS
142
AREA
2397
HEIGHT
1466
27-Dec-2022
16:07
linh
pham



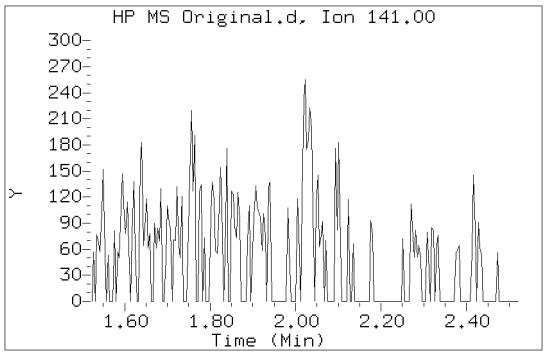
BEFORE
MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:03
linh
pham



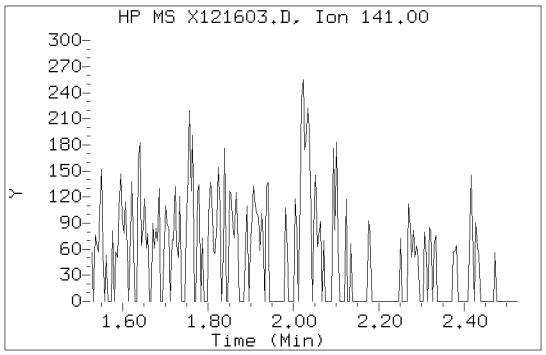
AFTER
MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



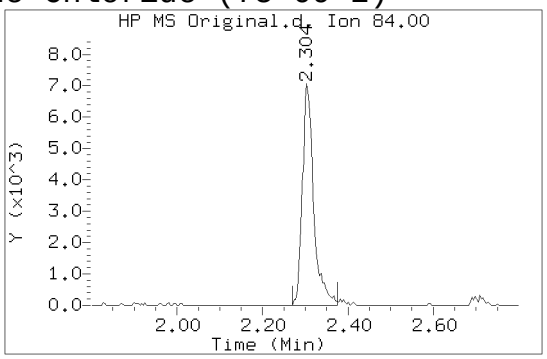
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

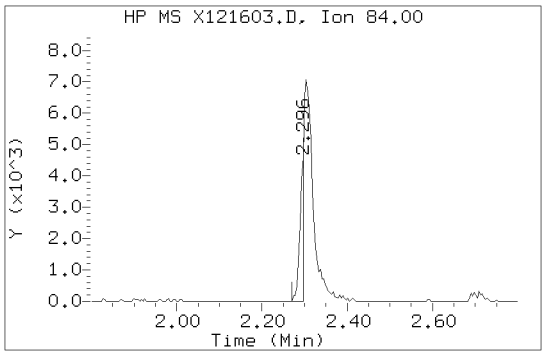
BEFORE

MASS
84
AREA
13307
HEIGHT
7067
27-Dec-2022
16:03
linh
pham



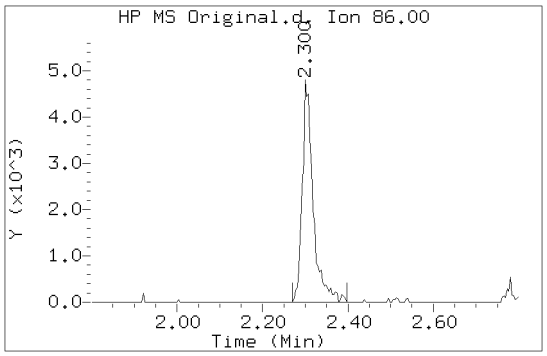
AFTER

MASS
84
AREA
2938
HEIGHT
4595
27-Dec-2022
16:07
linh
pham



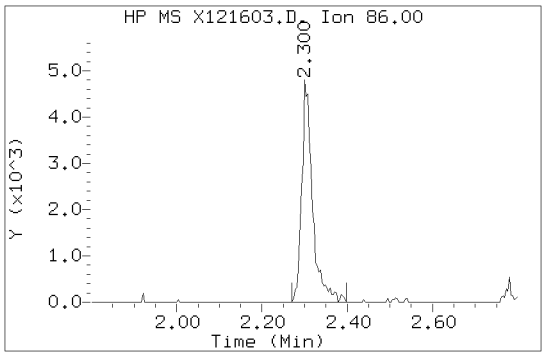
BEFORE

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:03
linh
pham



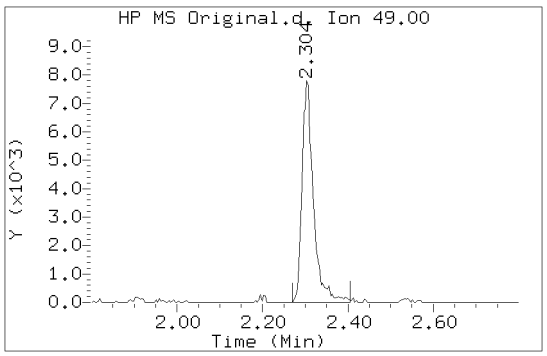
AFTER

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:07
linh
pham



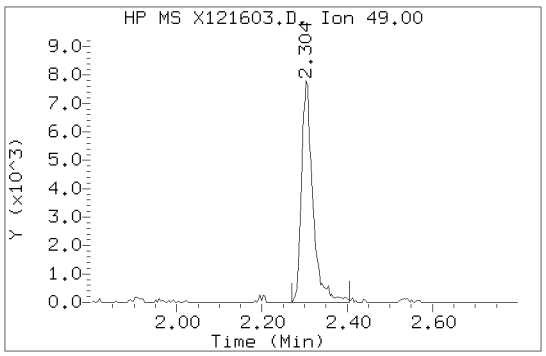
BEFORE

MASS
49
AREA
14733
HEIGHT
7803
27-Dec-2022
16:03
linh
pham



AFTER

MASS
49
AREA
14733
HEIGHT
7803
27-Dec-2022
16:07
linh
pham

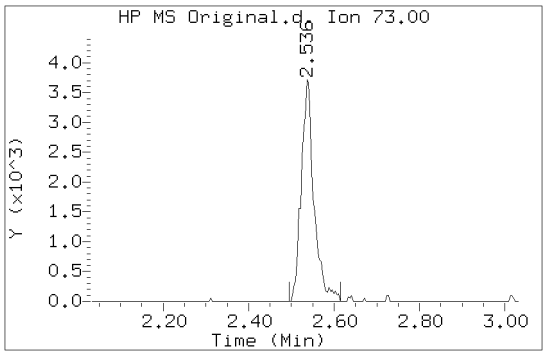


Methyl tert-butyl ether (1634-04-4)

Reason Code:

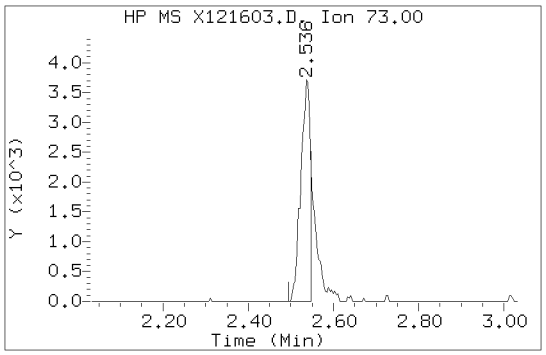
BEFORE

MASS
73
AREA
7826
HEIGHT
3716
27-Dec-2022
16:03
linh
pham



AFTER

MASS
73
AREA
5841
HEIGHT
3716
27-Dec-2022
16:07
linh
pham

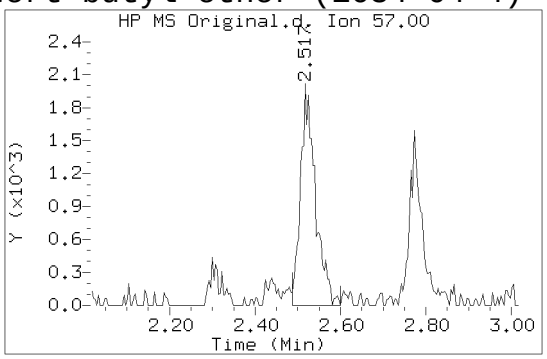


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl tert-butyl ether (1634-04-4)

BEFORE

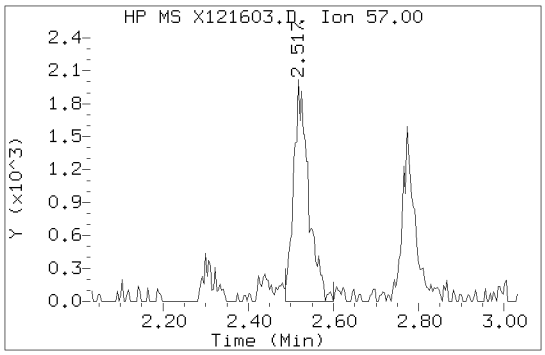
MASS
57
AREA
4915
HEIGHT
2019
27-Dec-2022
16:03
linh
pham



AFTER

MASS
57
AREA
4915
HEIGHT
2019
27-Dec-2022
16:07
linh
pham

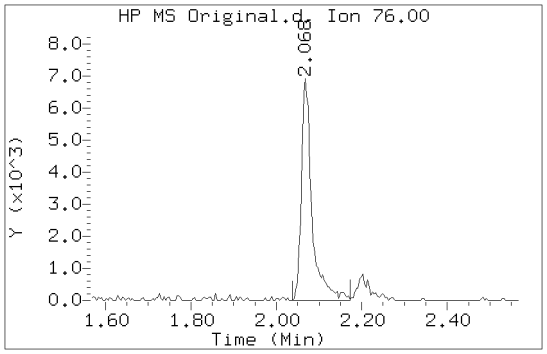
Reason Code:



Carbon Disulfide (75-15-0)

BEFORE

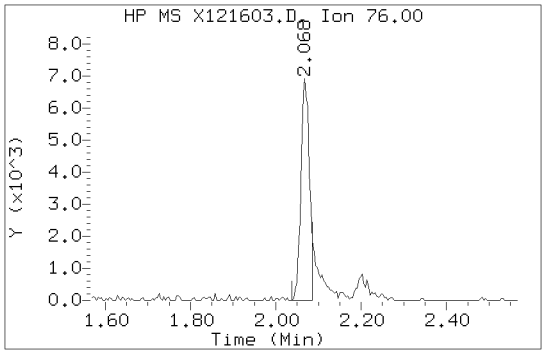
MASS
76
AREA
12313
HEIGHT
6923
27-Dec-2022
16:03
linh
pham



AFTER

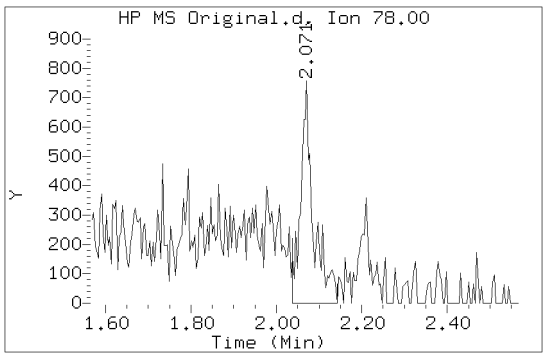
MASS
76
AREA
9921
HEIGHT
6923
27-Dec-2022
16:07
linh
pham

Reason Code:



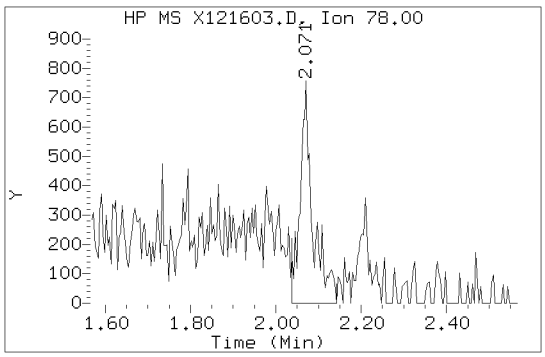
BEFORE

MASS
78
AREA
1586
HEIGHT
757
27-Dec-2022
16:03
linh
pham



AFTER

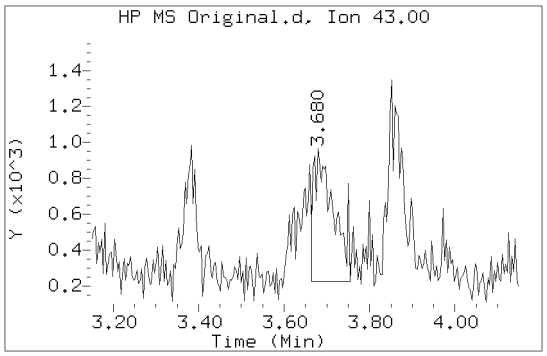
MASS
78
AREA
1586
HEIGHT
757
27-Dec-2022
16:07
linh
pham



2-Butanone (78-93-3)

BEFORE

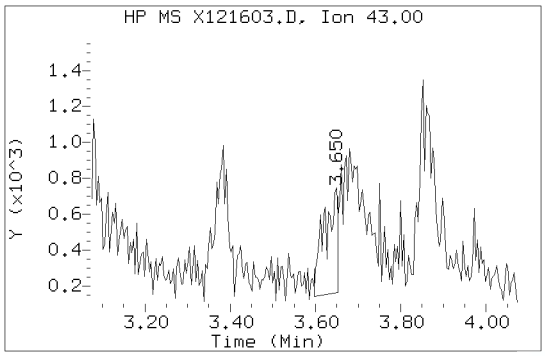
MASS
43
AREA
2415
HEIGHT
742
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
1292
HEIGHT
587
27-Dec-2022
16:07
linh
pham

Reason Code:



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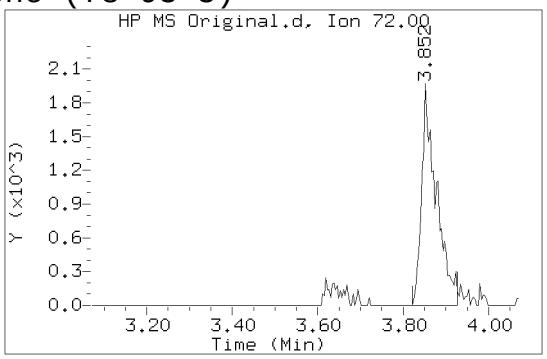
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

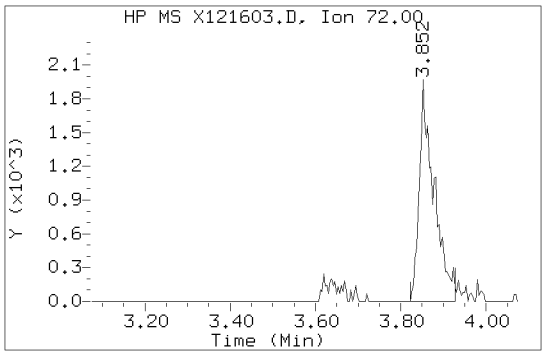
BEFORE

MASS
72
AREA
4698
HEIGHT
1970
27-Dec-2022
16:03
linh
pham



AFTER

MASS
72
AREA
4698
HEIGHT
1970
27-Dec-2022
16:07
linh
pham

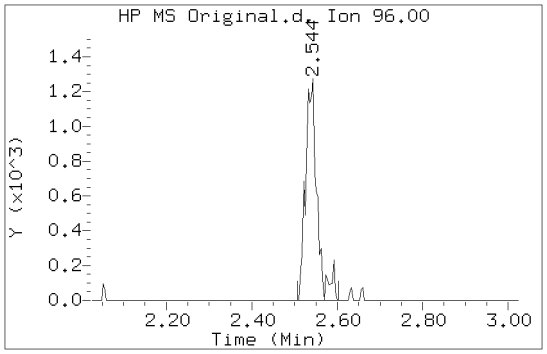


trans-1,2-Dichloroethene (156-60-5)

Reason Code:

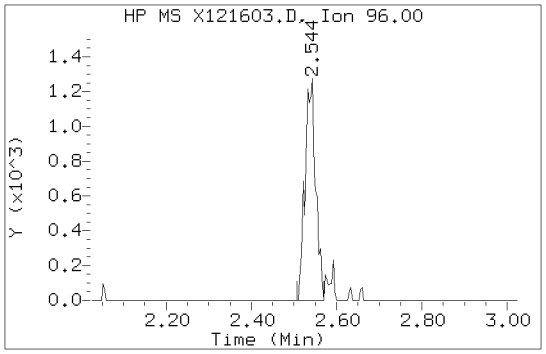
BEFORE

MASS
96
AREA
2404
HEIGHT
1274
27-Dec-2022
16:03
linh
pham



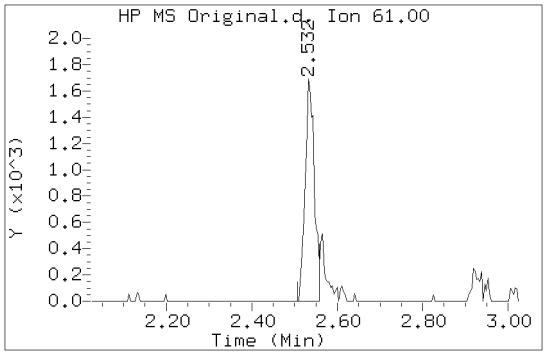
AFTER

MASS
96
AREA
2218
HEIGHT
1274
27-Dec-2022
16:07
linh
pham



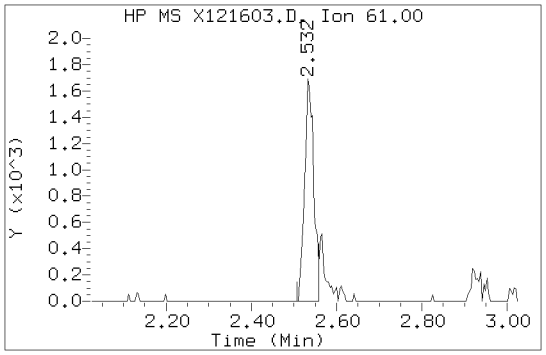
BEFORE

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:03
linh
pham



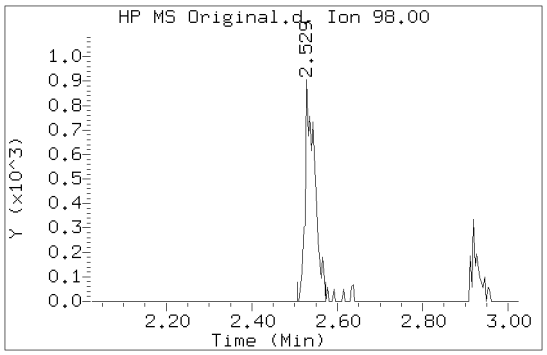
AFTER

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:07
linh
pham



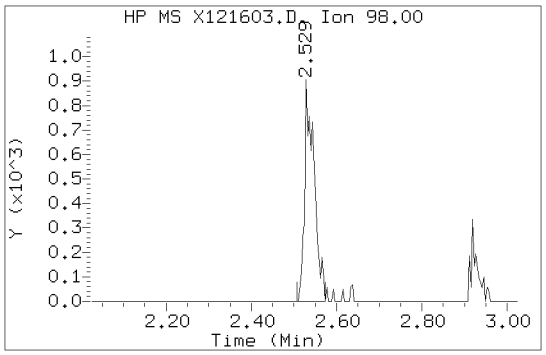
BEFORE

MASS
98
AREA
1412
HEIGHT
906
27-Dec-2022
16:03
linh
pham



AFTER

MASS
98
AREA
1412
HEIGHT
906
27-Dec-2022
16:07
linh
pham



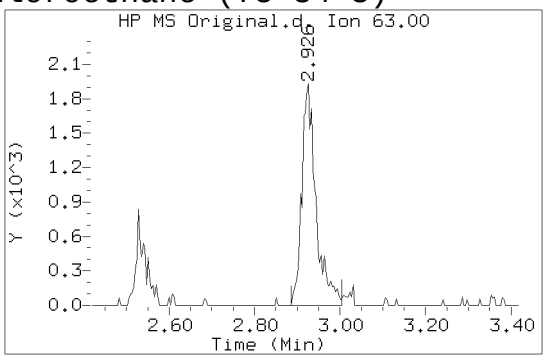
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

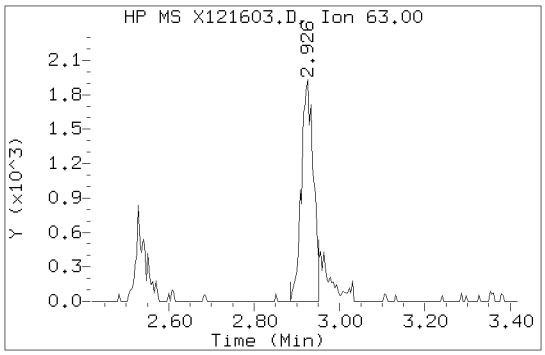
BEFORE

MASS
63
AREA
4504
HEIGHT
1931
27-Dec-2022
16:03
linh
pham



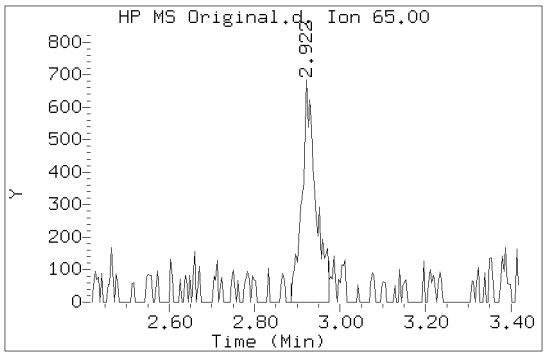
AFTER

MASS
63
AREA
3874
HEIGHT
1931
27-Dec-2022
16:07
linh
pham



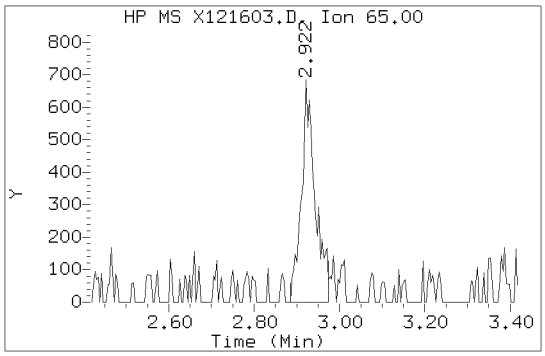
BEFORE

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:03
linh
pham



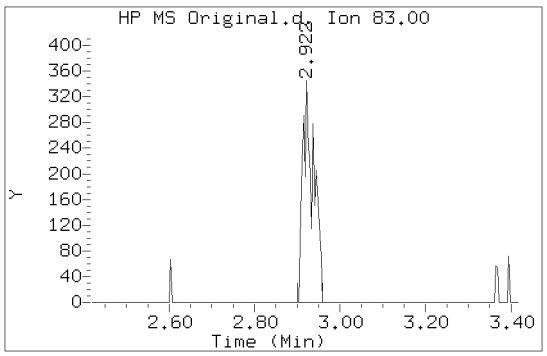
AFTER

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:07
linh
pham



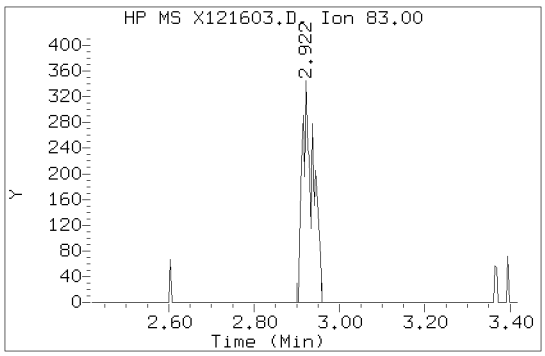
BEFORE

MASS
83
AREA
618
HEIGHT
345
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
618
HEIGHT
345
27-Dec-2022
16:07
linh
pham

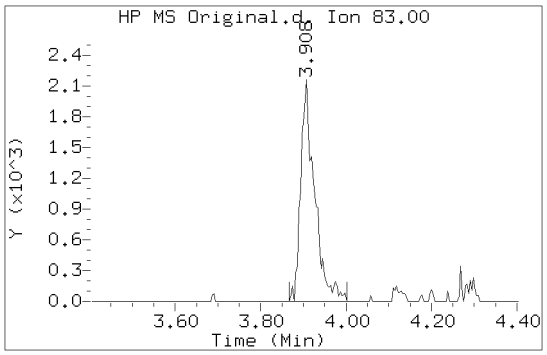


Chloroform (67-66-3)

Reason Code:

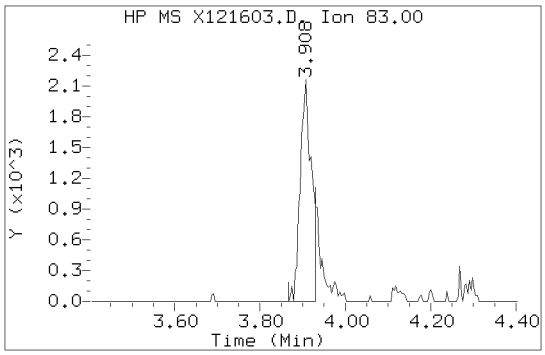
BEFORE

MASS
83
AREA
4949
HEIGHT
2160
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
4040
HEIGHT
2160
27-Dec-2022
16:07
linh
pham



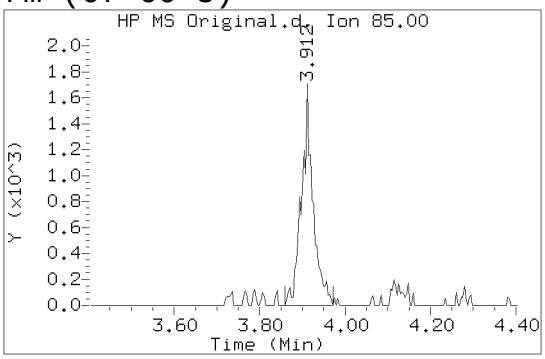
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroform (67-66-3)

Reason Code:

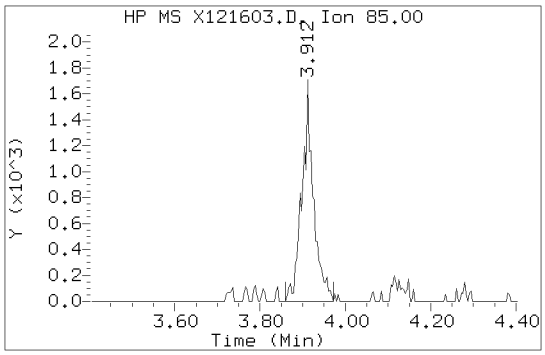
BEFORE

MASS
85
AREA
3222
HEIGHT
1709
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
3222
HEIGHT
1709
27-Dec-2022
16:07
linh
pham

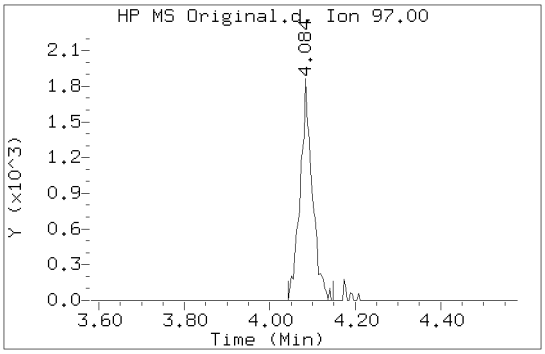


1,1,1-Trichloroethane (71-55-6)

Reason Code:

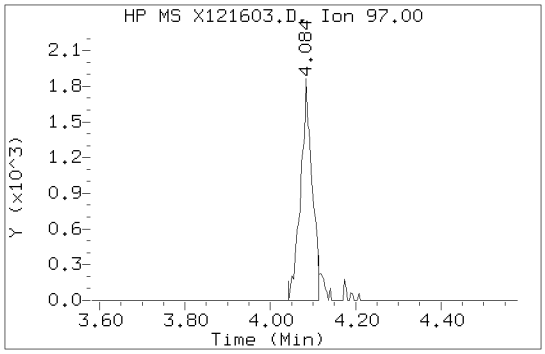
BEFORE

MASS
97
AREA
3710
HEIGHT
1863
27-Dec-2022
16:03
linh
pham



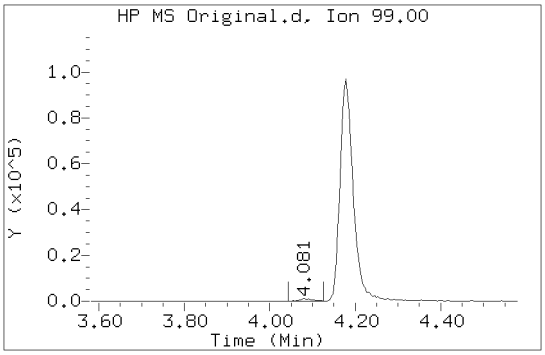
AFTER

MASS
97
AREA
3512
HEIGHT
1863
27-Dec-2022
16:07
linh
pham



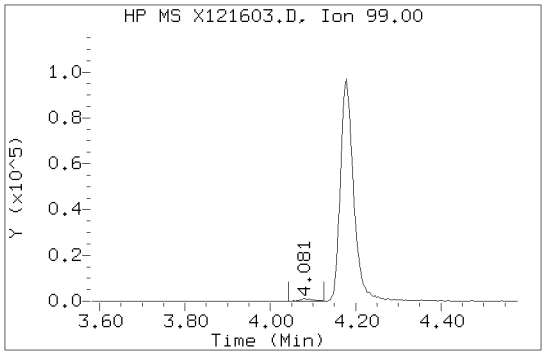
BEFORE

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:03
linh
pham



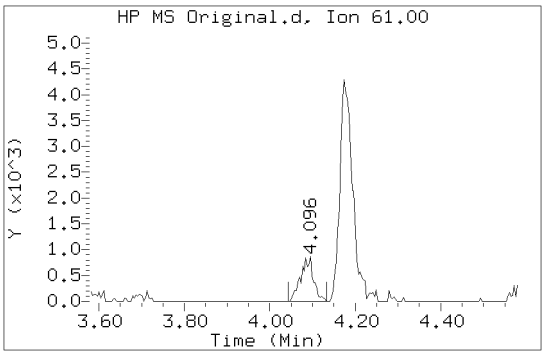
AFTER

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:07
linh
pham



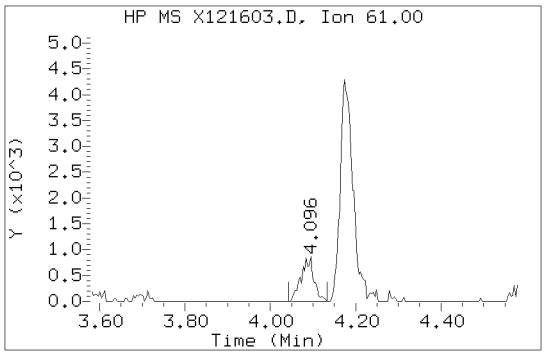
BEFORE

MASS
61
AREA
1801
HEIGHT
872
27-Dec-2022
16:03
linh
pham



AFTER

MASS
61
AREA
1801
HEIGHT
872
27-Dec-2022
16:07
linh
pham



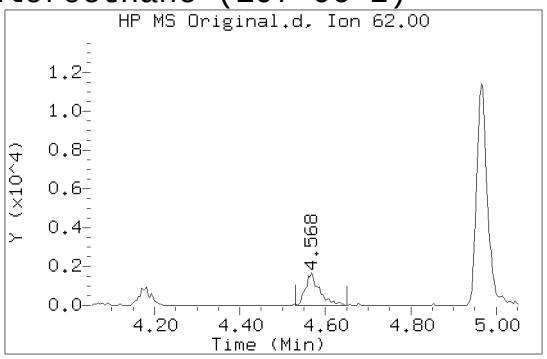
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

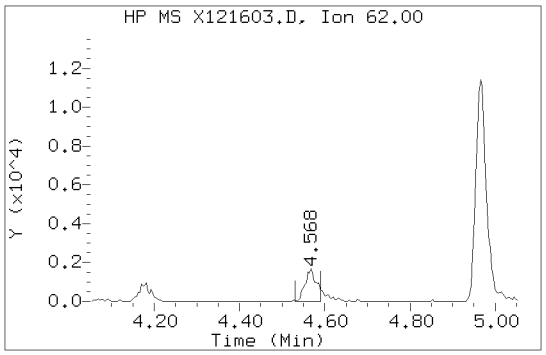
BEFORE

MASS
62
AREA
3822
HEIGHT
1678
27-Dec-2022
16:03
linh
pham



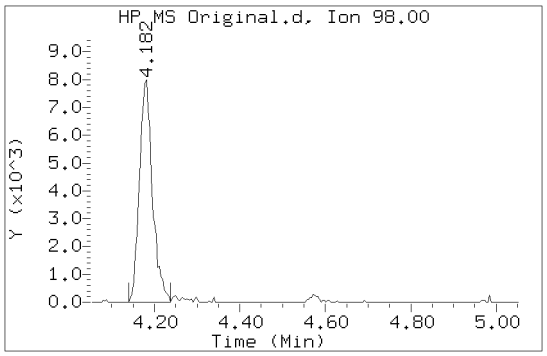
AFTER

MASS
62
AREA
3129
HEIGHT
1678
27-Dec-2022
16:07
linh
pham



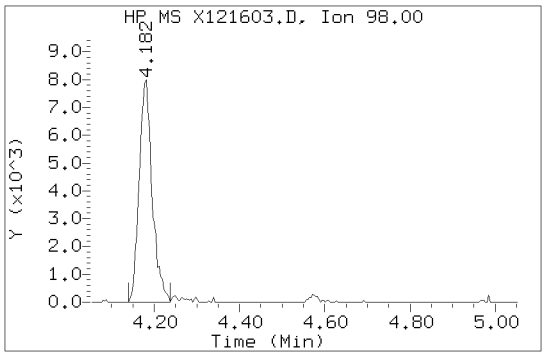
BEFORE

MASS
98
AREA
16918
HEIGHT
7987
27-Dec-2022
16:03
linh
pham



AFTER

MASS
98
AREA
16918
HEIGHT
7987
27-Dec-2022
16:07
linh
pham

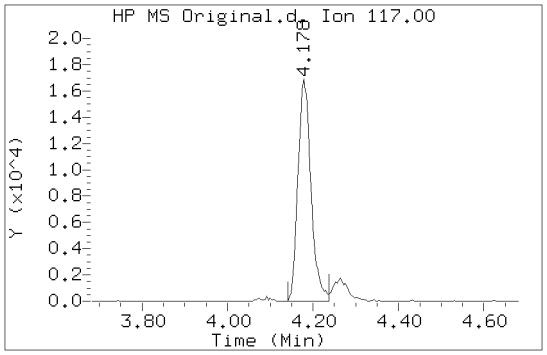


Carbon Tetrachloride (56-23-5)

Reason Code:

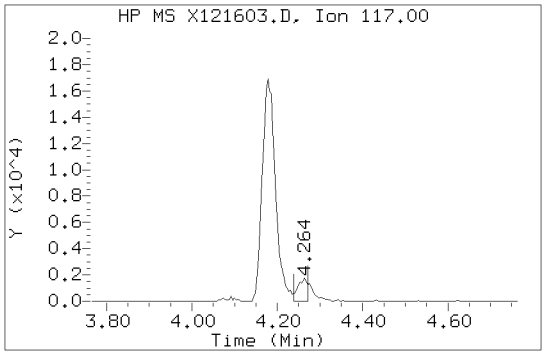
BEFORE

MASS
117
AREA
36559
HEIGHT
16920
27-Dec-2022
16:03
linh
pham



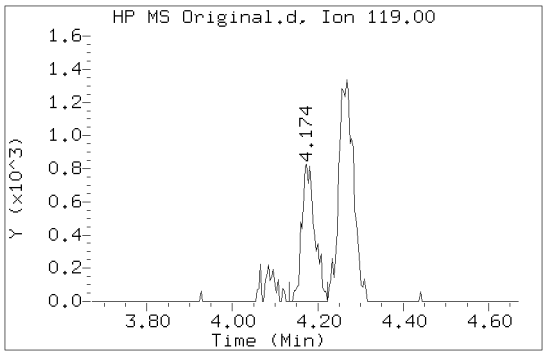
AFTER

MASS
117
AREA
2763
HEIGHT
1744
27-Dec-2022
16:07
linh
pham



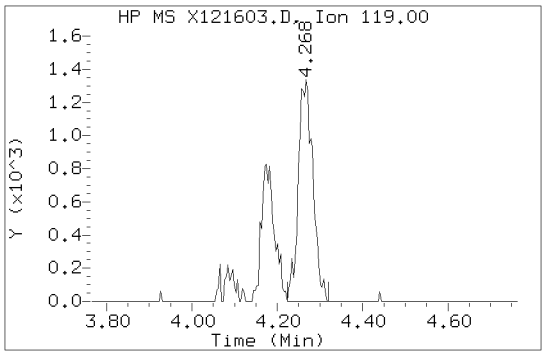
BEFORE

MASS
119
AREA
1780
HEIGHT
826
27-Dec-2022
16:03
linh
pham



AFTER

MASS
119
AREA
3227
HEIGHT
1337
27-Dec-2022
16:07
linh
pham



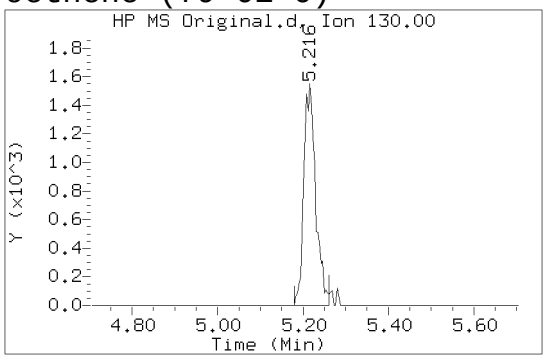
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Trichloroethene (79-01-6)

Reason Code:

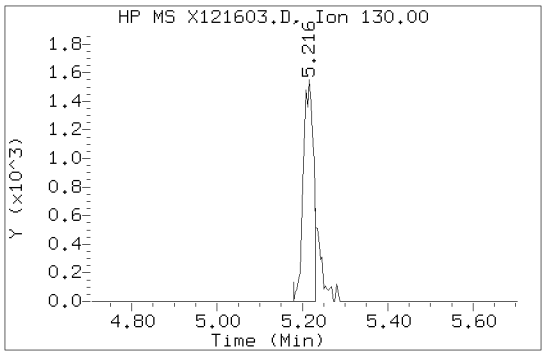
BEFORE

MASS
130
AREA
3011
HEIGHT
1551
27-Dec-2022
16:03
linh
pham



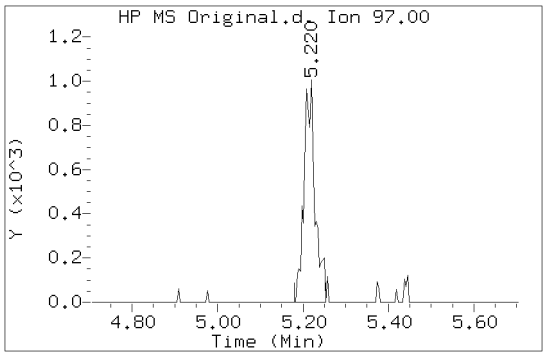
AFTER

MASS
130
AREA
2583
HEIGHT
1551
27-Dec-2022
16:07
linh
pham



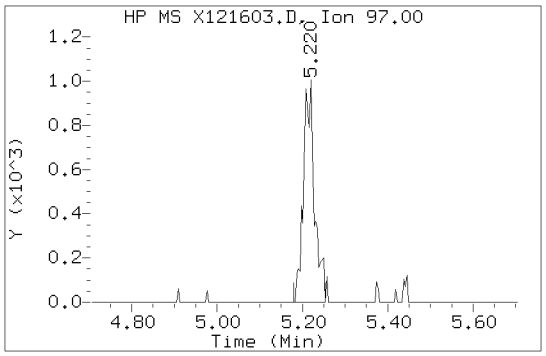
BEFORE

MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:03
linh
pham



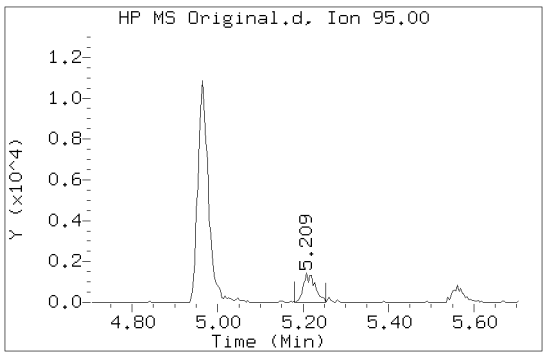
AFTER

MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:07
linh
pham



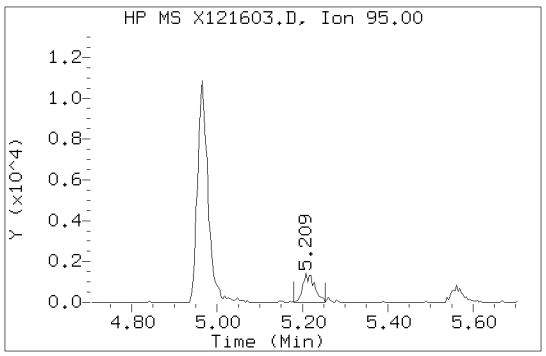
BEFORE

MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:03
linh
pham



AFTER

MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:07
linh
pham

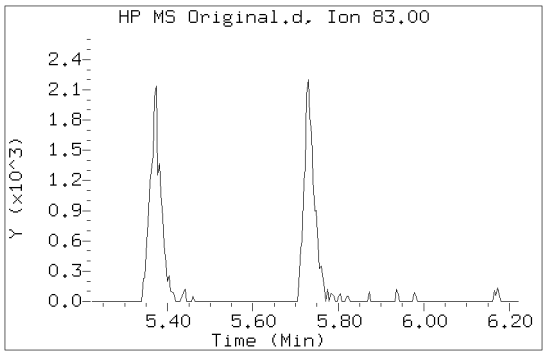


Bromodichloromethane (75-27-4)

Reason Code:

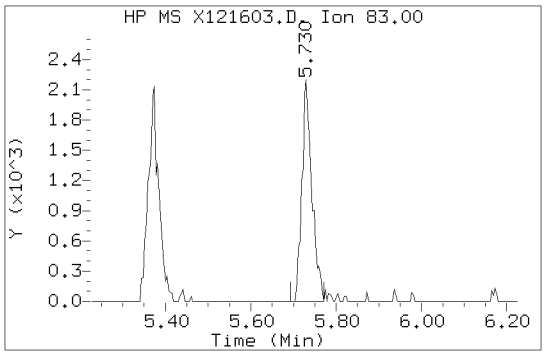
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
3650
HEIGHT
2201
27-Dec-2022
16:07
linh
pham

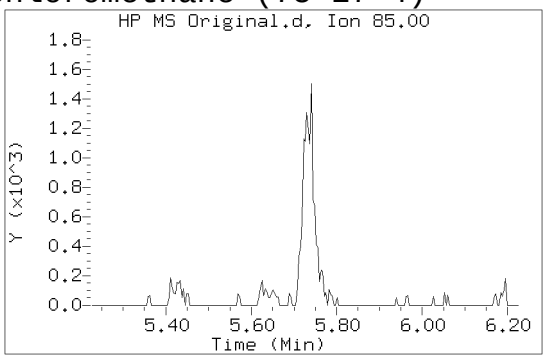


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

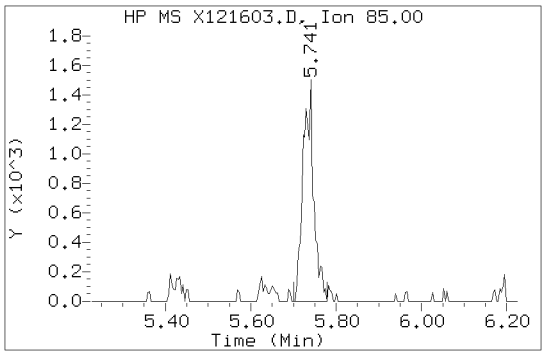
Bromodichloromethane (75-27-4)

Reason Code:

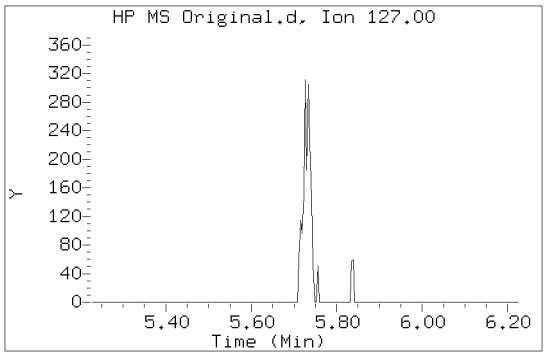
BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



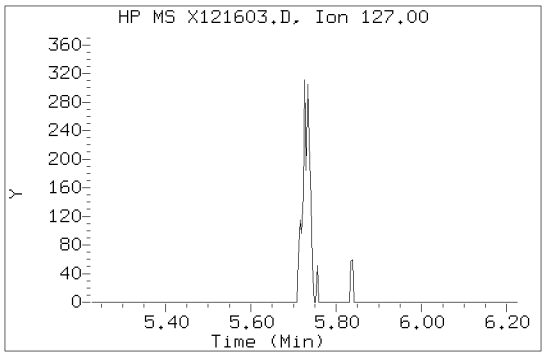
AFTER
MASS
85
AREA
2639
HEIGHT
1503
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



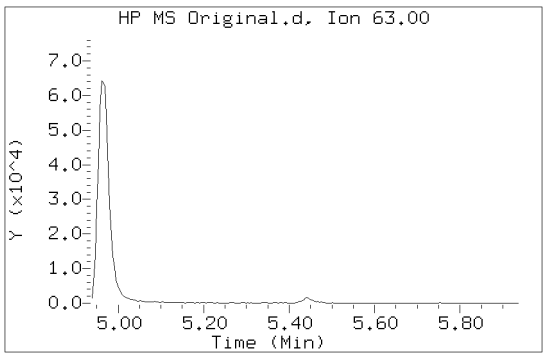
AFTER
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



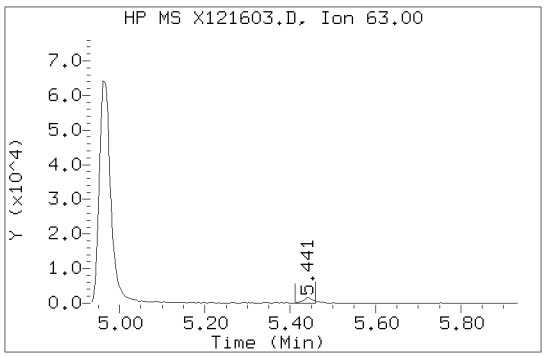
1,2-Dichloropropane (78-87-5)

Reason Code:

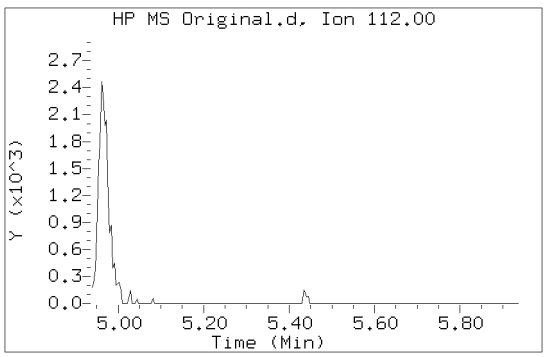
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



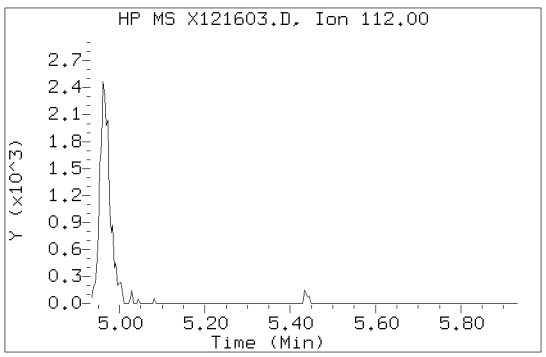
AFTER
MASS
63
AREA
2449
HEIGHT
1587
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



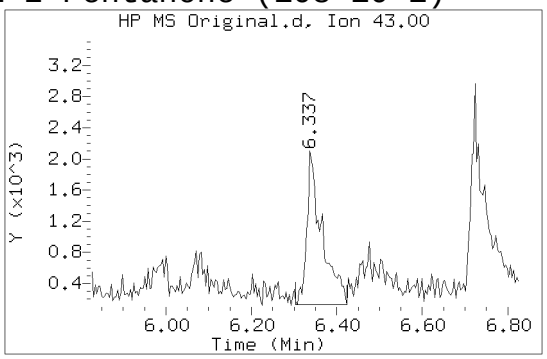
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

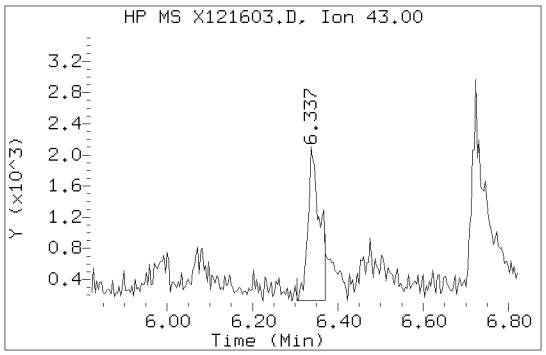
BEFORE

MASS
43
AREA
4873
HEIGHT
1970
27-Dec-2022
16:03
linh
pham



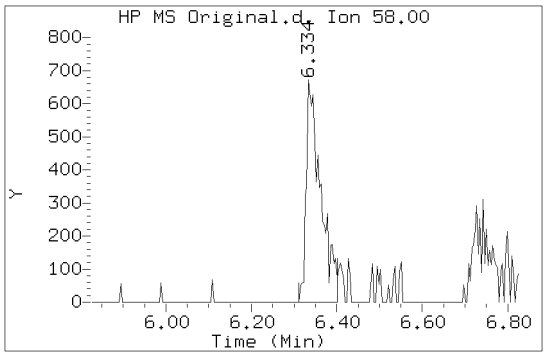
AFTER

MASS
43
AREA
3741
HEIGHT
1970
27-Dec-2022
16:07
linh
pham



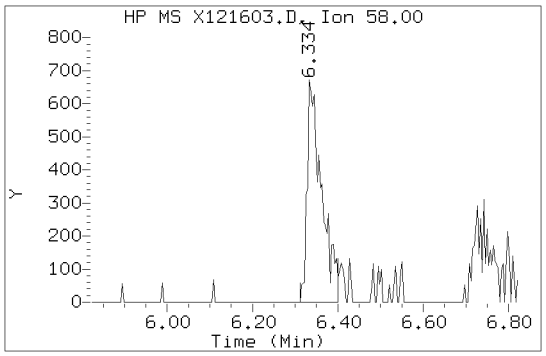
BEFORE

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:03
linh
pham



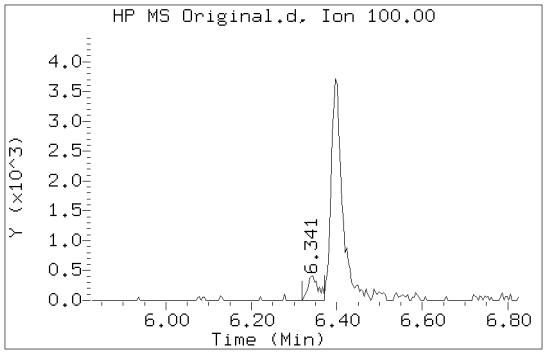
AFTER

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:07
linh
pham



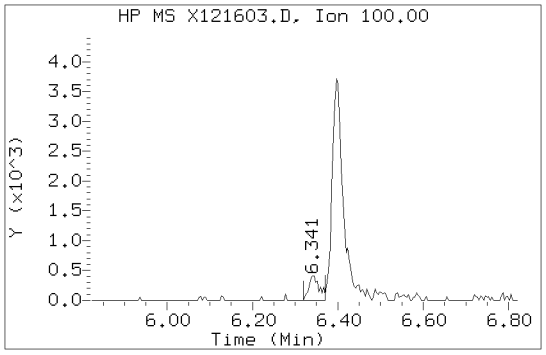
BEFORE

MASS
100
AREA
714
HEIGHT
412
27-Dec-2022
16:03
linh
pham



AFTER

MASS
100
AREA
714
HEIGHT
412
27-Dec-2022
16:07
linh
pham

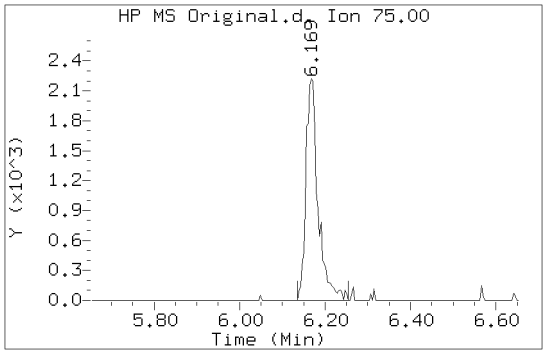


cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

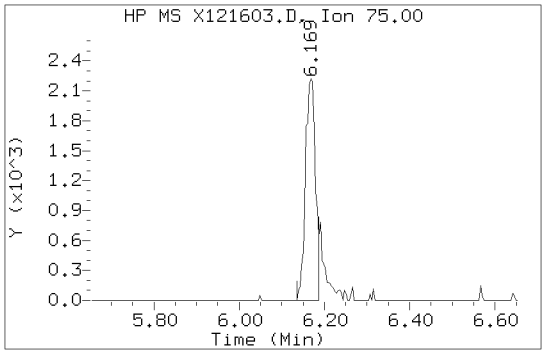
BEFORE

MASS
75
AREA
4432
HEIGHT
2222
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
3695
HEIGHT
2222
27-Dec-2022
16:07
linh
pham

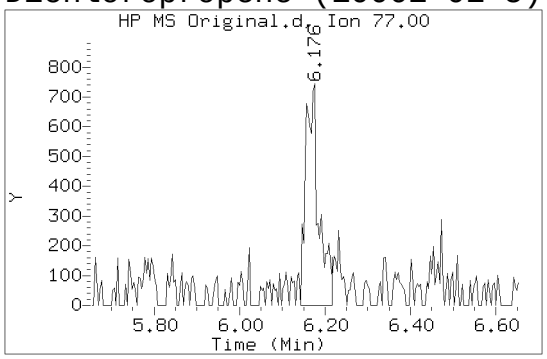


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

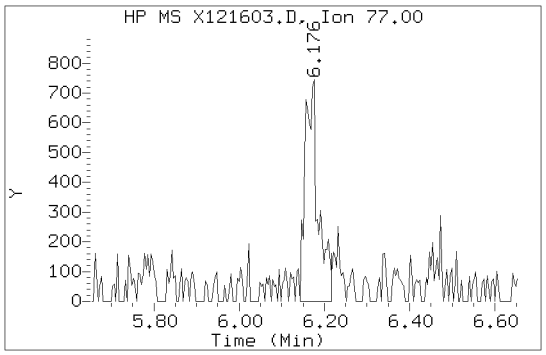
cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

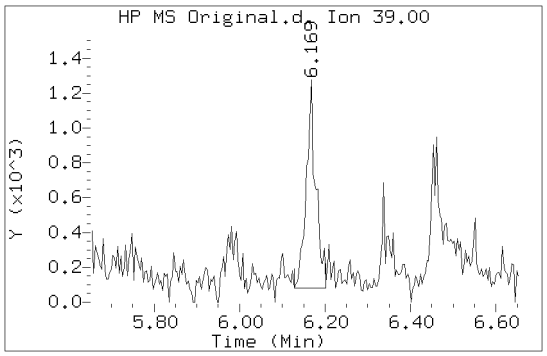
BEFORE
MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:03
linh
pham



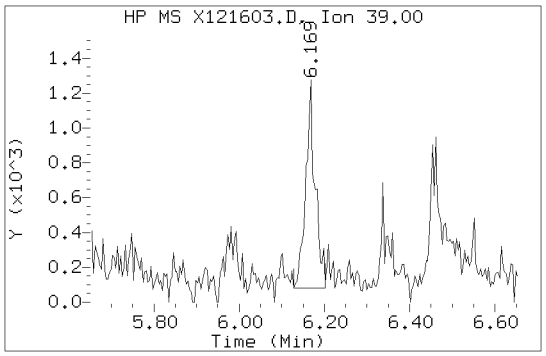
AFTER
MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
1836
HEIGHT
1193
27-Dec-2022
16:03
linh
pham



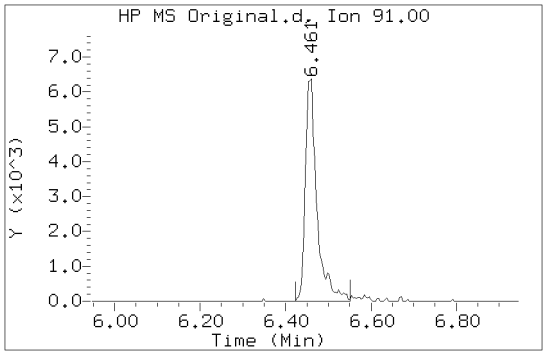
AFTER
MASS
39
AREA
1836
HEIGHT
1193
27-Dec-2022
16:07
linh
pham



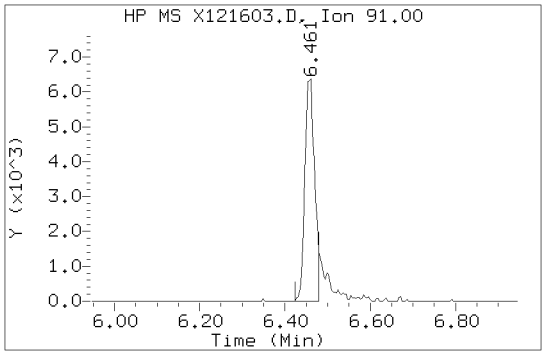
Toluene (108-88-3)

Reason Code:

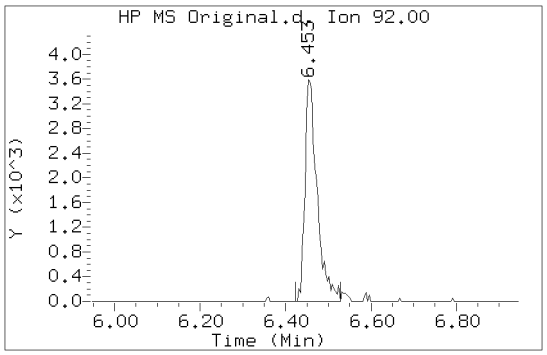
BEFORE
MASS
91
AREA
12225
HEIGHT
6374
27-Dec-2022
16:03
linh
pham



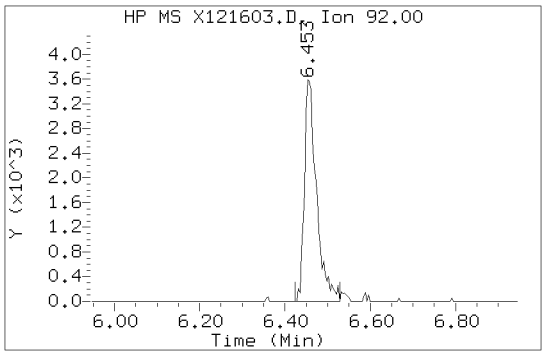
AFTER
MASS
91
AREA
10374
HEIGHT
6374
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
92
AREA
7180
HEIGHT
3591
27-Dec-2022
16:03
linh
pham



AFTER
MASS
92
AREA
7180
HEIGHT
3591
27-Dec-2022
16:07
linh
pham

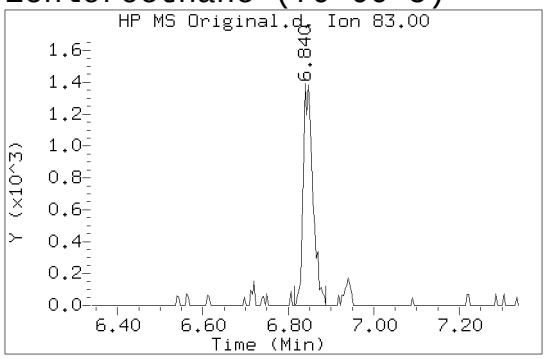


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

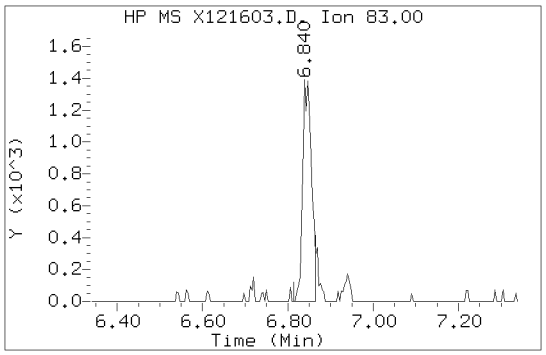
1,1,2-Trichloroethane (79-00-5)

Reason Code:

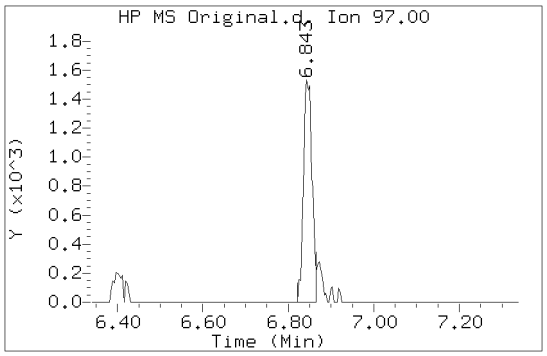
BEFORE
MASS
83
AREA
2247
HEIGHT
1391
27-Dec-2022
16:03
linh
pham



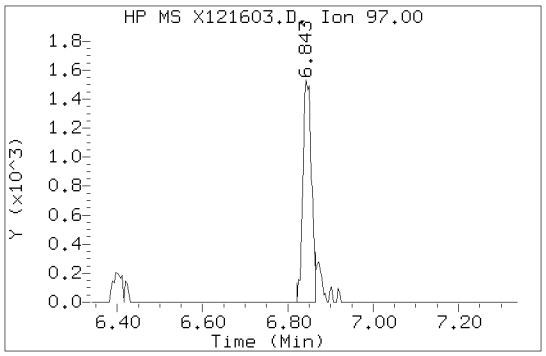
AFTER
MASS
83
AREA
2092
HEIGHT
1391
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
97
AREA
2224
HEIGHT
1532
27-Dec-2022
16:03
linh
pham



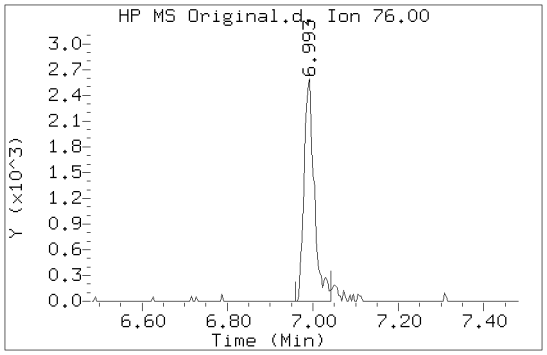
AFTER
MASS
97
AREA
2224
HEIGHT
1532
27-Dec-2022
16:07
linh
pham



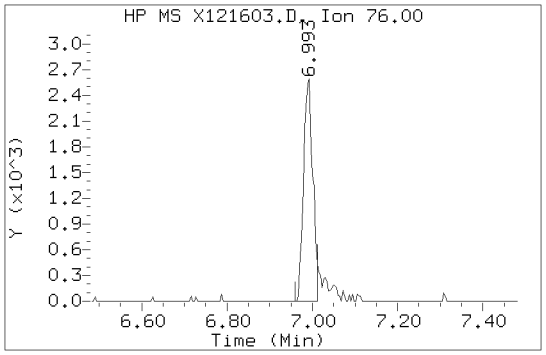
1,3-Dichloropropane (142-28-9)

Reason Code:

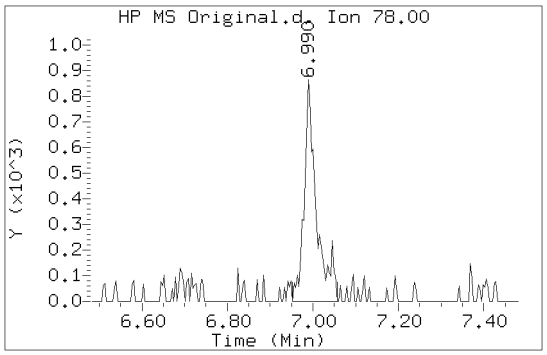
BEFORE
MASS
76
AREA
4415
HEIGHT
2592
27-Dec-2022
16:03
linh
pham



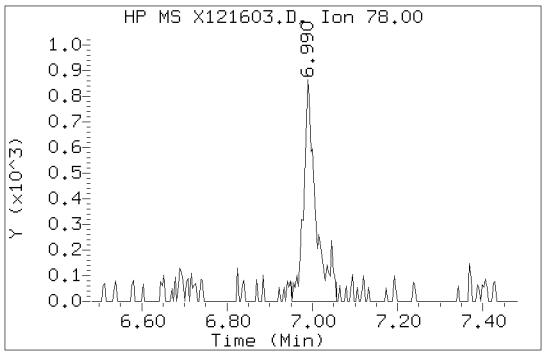
AFTER
MASS
76
AREA
4005
HEIGHT
2592
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
78
AREA
1727
HEIGHT
864
27-Dec-2022
16:03
linh
pham



AFTER
MASS
78
AREA
1727
HEIGHT
864
27-Dec-2022
16:07
linh
pham



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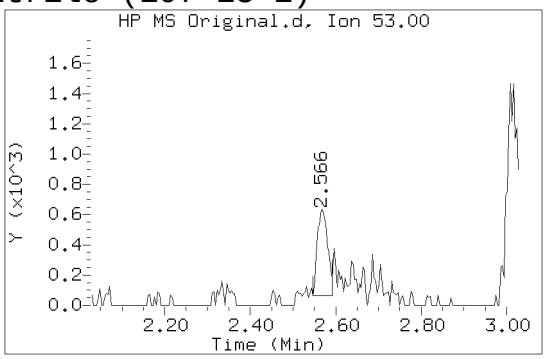
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

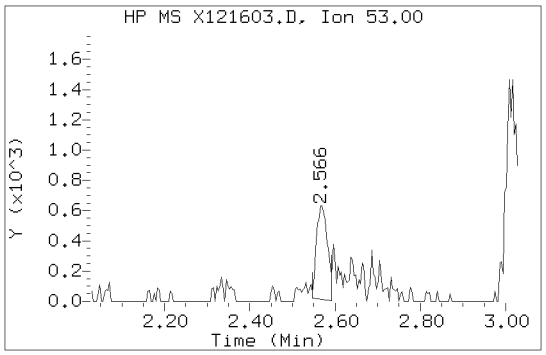
Acrylonitrile (107-13-1)

Reason Code:

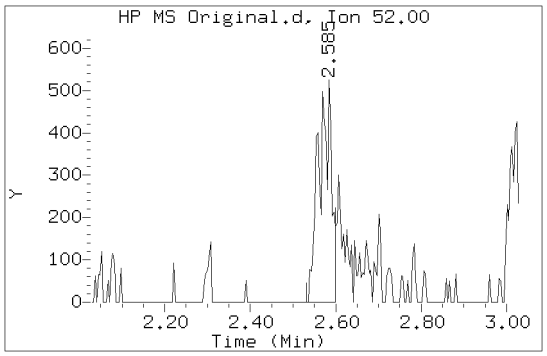
BEFORE
MASS
53
AREA
975
HEIGHT
571
27-Dec-2022
16:03
linh
pham



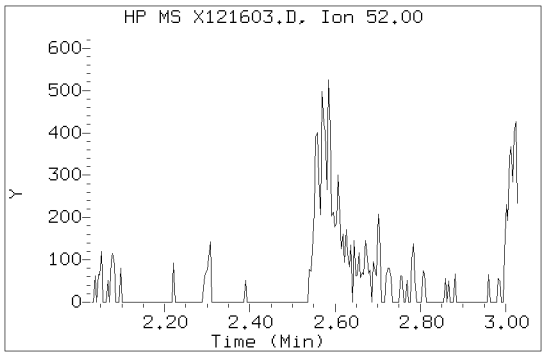
AFTER
MASS
53
AREA
1118
HEIGHT
618
27-Dec-2022
16:07
linh
pham



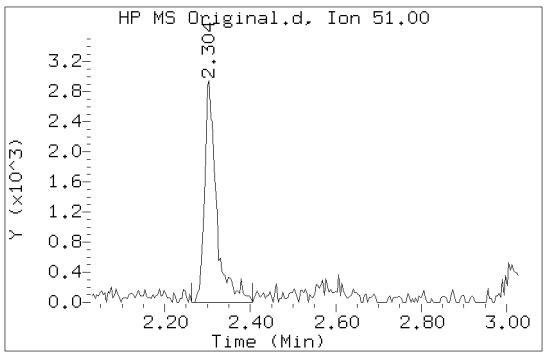
BEFORE
MASS
52
AREA
1100
HEIGHT
525
27-Dec-2022
16:03
linh
pham



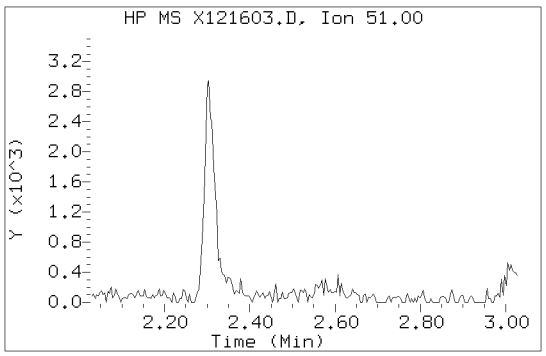
AFTER
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
51
AREA
5708
HEIGHT
2946
27-Dec-2022
16:03
linh
pham



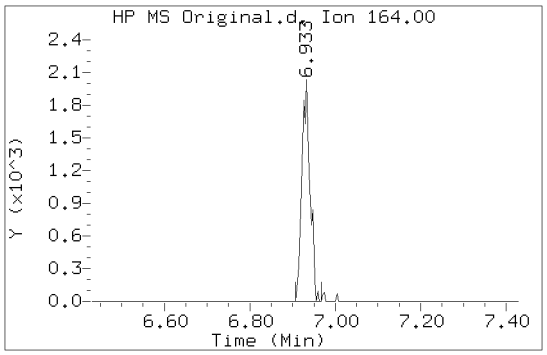
AFTER
MASS
51
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



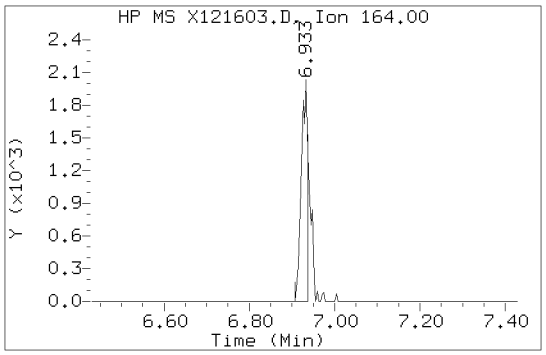
Tetrachloroethene (127-18-4)

Reason Code:

BEFORE
MASS
164
AREA
2777
HEIGHT
2036
27-Dec-2022
16:03
linh
pham



AFTER
MASS
164
AREA
2131
HEIGHT
2036
27-Dec-2022
16:07
linh
pham



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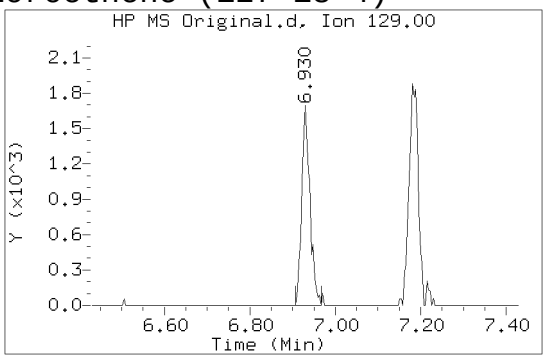
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrachloroethene (127-18-4)

Reason Code:

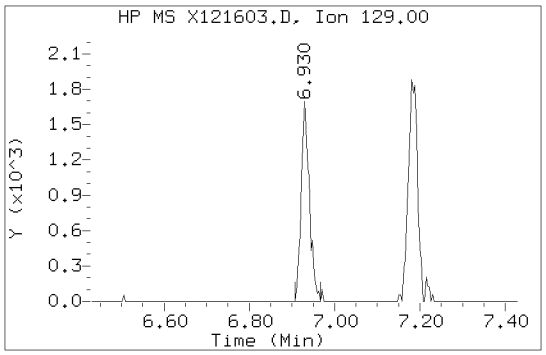
BEFORE

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:03
linh
pham



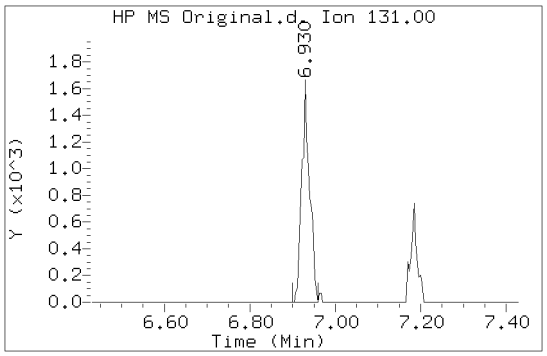
AFTER

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:07
linh
pham



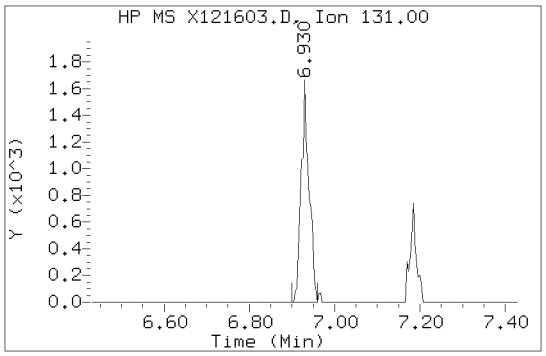
BEFORE

MASS
131
AREA
2193
HEIGHT
1665
27-Dec-2022
16:03
linh
pham



AFTER

MASS
131
AREA
2193
HEIGHT
1665
27-Dec-2022
16:07
linh
pham

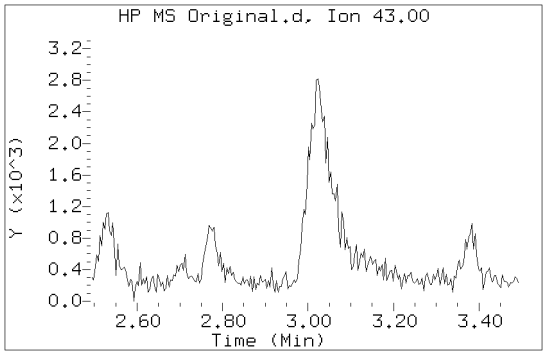


Vinyl Acetate (108-05-4)

Reason Code:

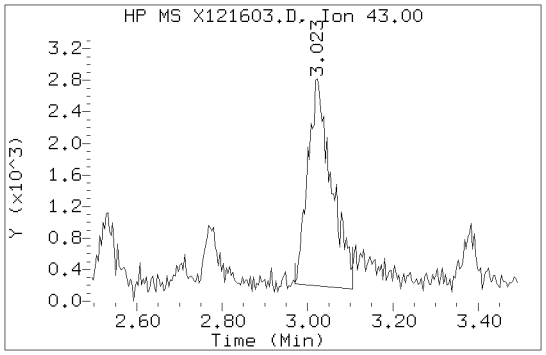
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



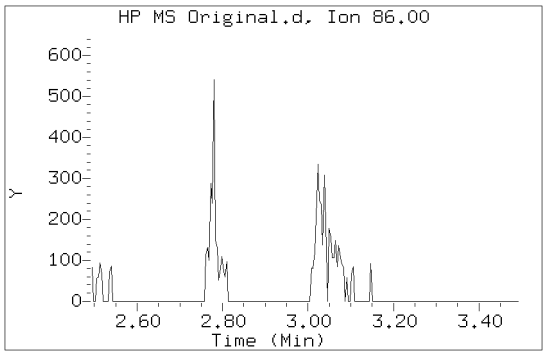
AFTER

MASS
43
AREA
10138
HEIGHT
2622
27-Dec-2022
16:07
linh
pham



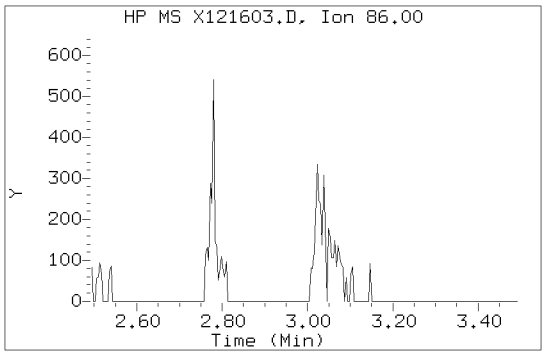
BEFORE

MASS
86
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
86
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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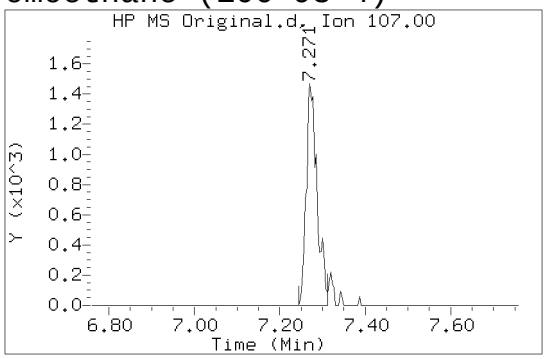
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

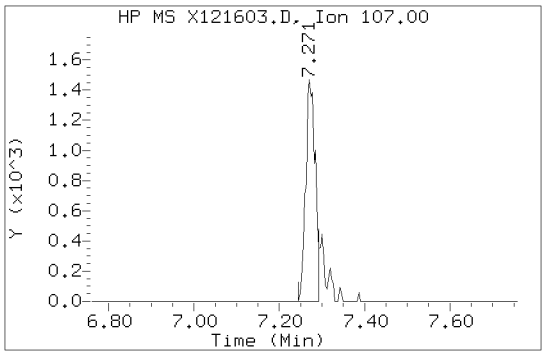
1,2-Dibromoethane (106-93-4)

Reason Code:

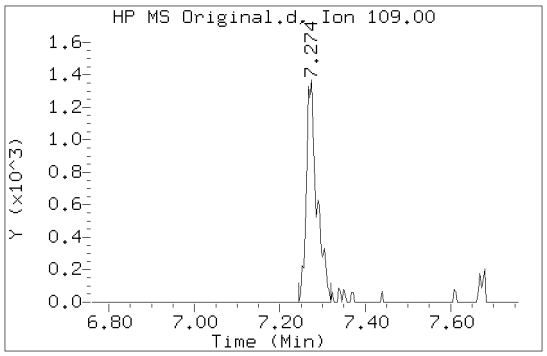
BEFORE
MASS
107
AREA
2627
HEIGHT
1469
27-Dec-2022
16:03
linh
pham



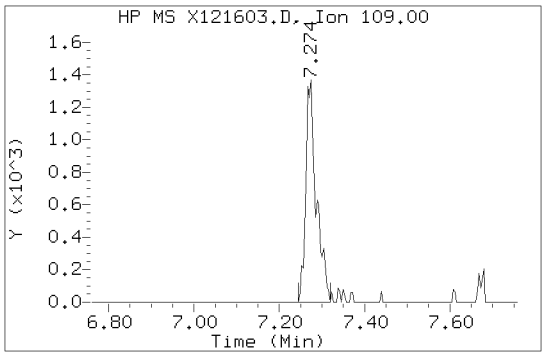
AFTER
MASS
107
AREA
2340
HEIGHT
1469
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:03
linh
pham



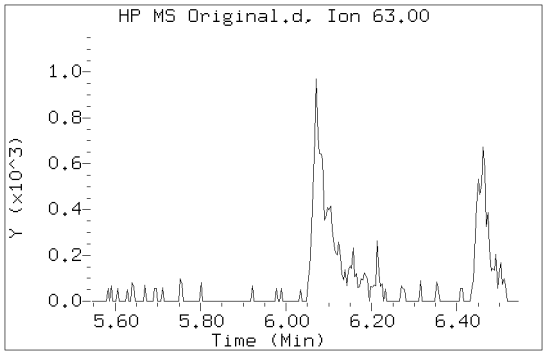
AFTER
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:07
linh
pham



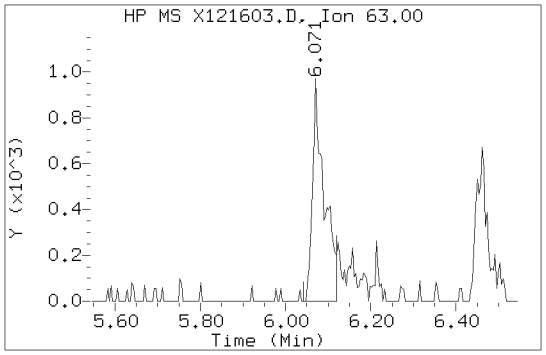
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

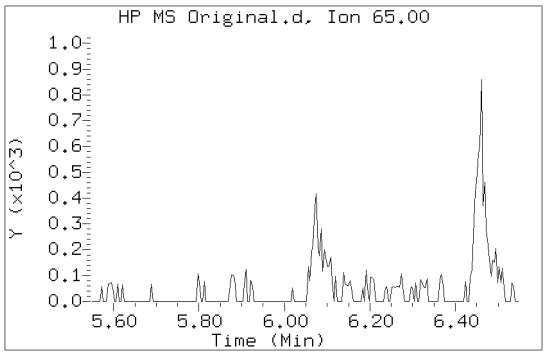
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



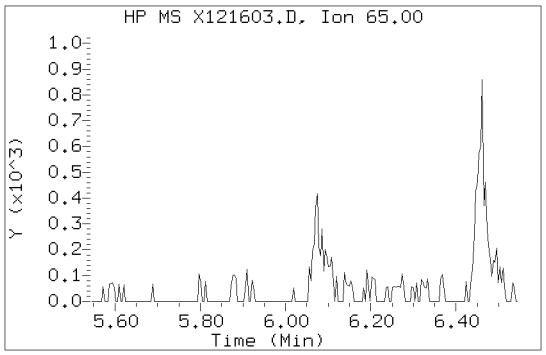
AFTER
MASS
63
AREA
1861
HEIGHT
970
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
65
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
65
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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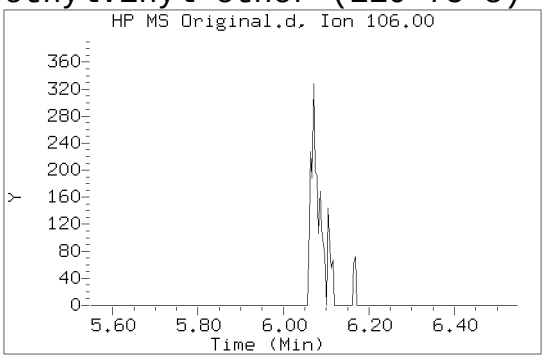
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

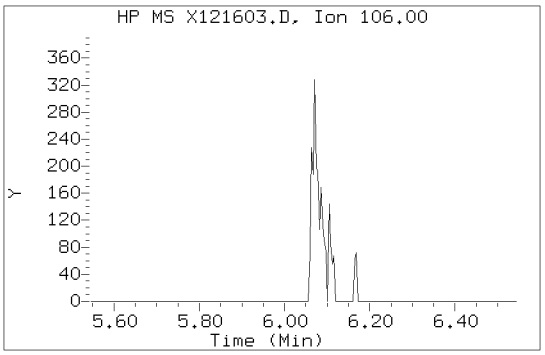
BEFORE

MASS
106
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
106
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

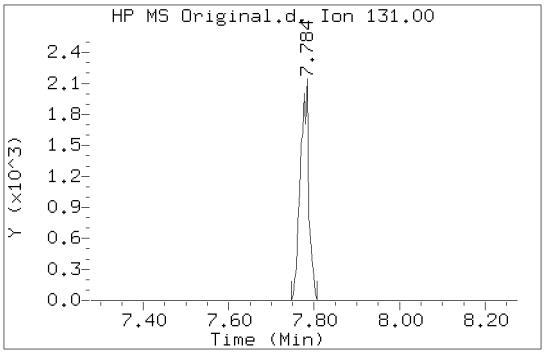


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

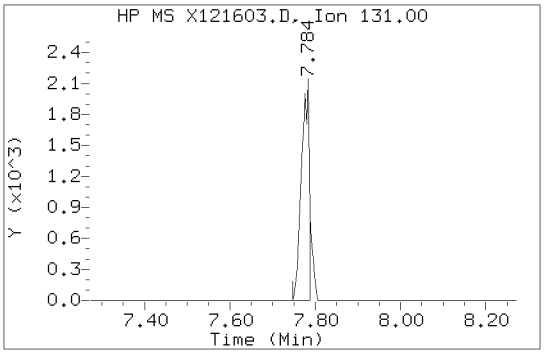
BEFORE

MASS
131
AREA
3036
HEIGHT
2146
27-Dec-2022
16:03
linh
pham



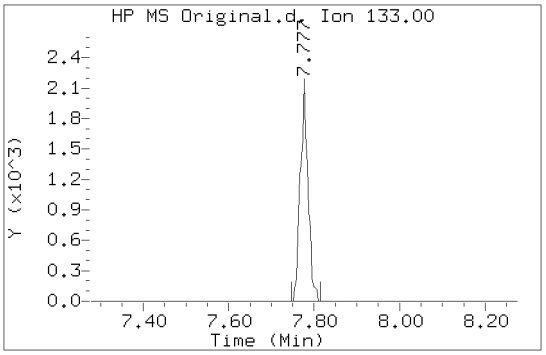
AFTER

MASS
131
AREA
2741
HEIGHT
2146
27-Dec-2022
16:07
linh
pham



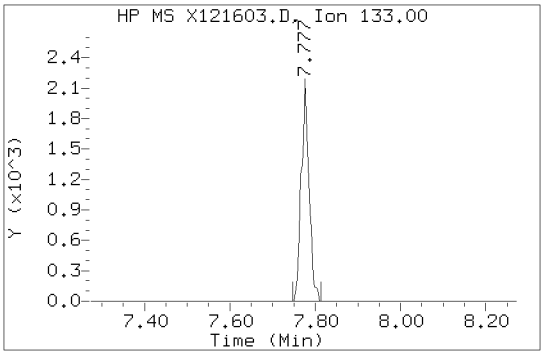
BEFORE

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:03
linh
pham



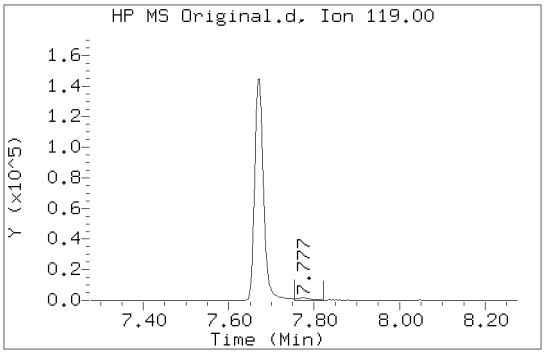
AFTER

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:07
linh
pham



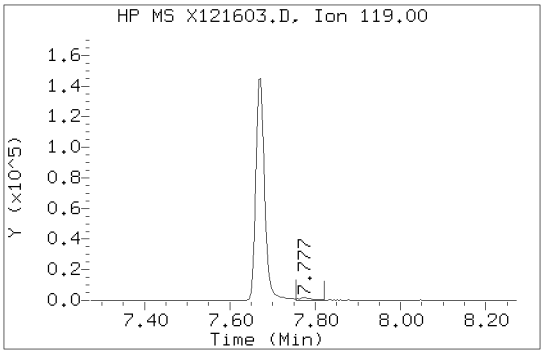
BEFORE

MASS
119
AREA
2971
HEIGHT
1971
27-Dec-2022
16:03
linh
pham



AFTER

MASS
119
AREA
2971
HEIGHT
1971
27-Dec-2022
16:07
linh
pham



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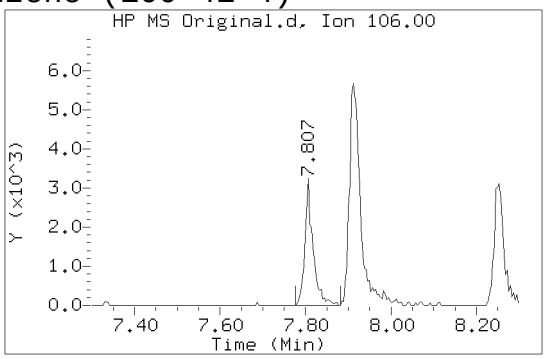
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

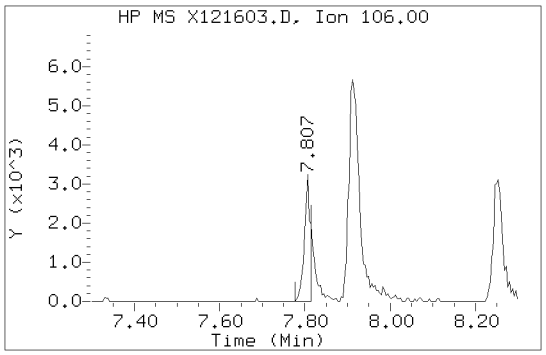
BEFORE

MASS
106
AREA
4331
HEIGHT
3242
27-Dec-2022
16:03
linh
pham



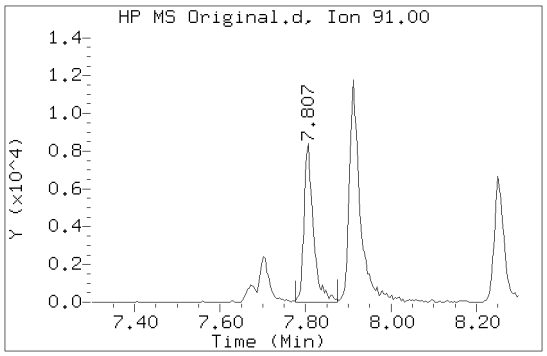
AFTER

MASS
106
AREA
3064
HEIGHT
3242
27-Dec-2022
16:07
linh
pham



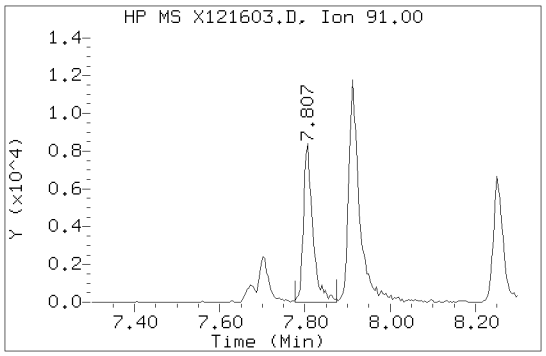
BEFORE

MASS
91
AREA
13136
HEIGHT
8410
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
13136
HEIGHT
8410
27-Dec-2022
16:07
linh
pham

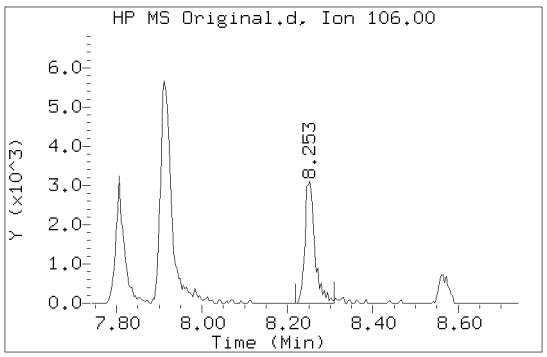


o-Xylene (95-47-6)

Reason Code:

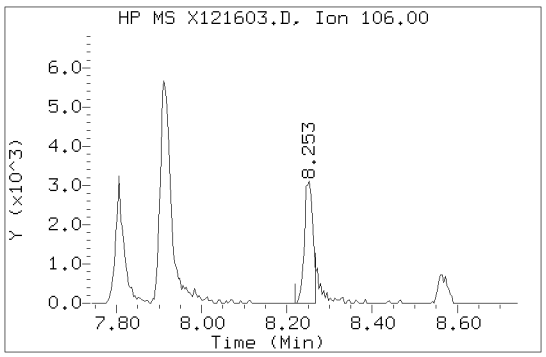
BEFORE

MASS
106
AREA
5100
HEIGHT
3111
27-Dec-2022
16:03
linh
pham



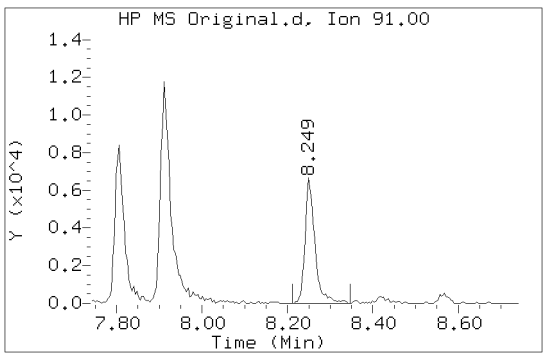
AFTER

MASS
106
AREA
4412
HEIGHT
3111
27-Dec-2022
16:07
linh
pham



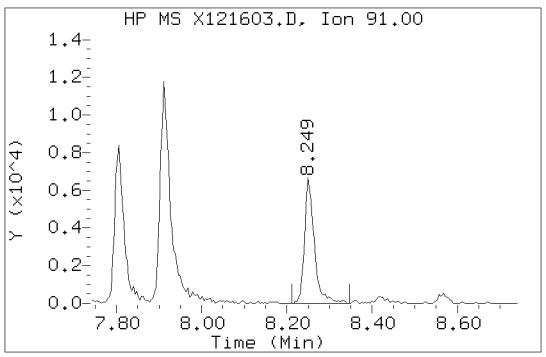
BEFORE

MASS
91
AREA
10808
HEIGHT
6665
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
10808
HEIGHT
6665
27-Dec-2022
16:07
linh
pham

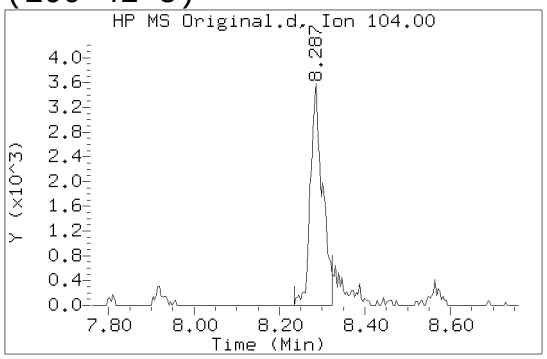


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Styrene (100-42-5)

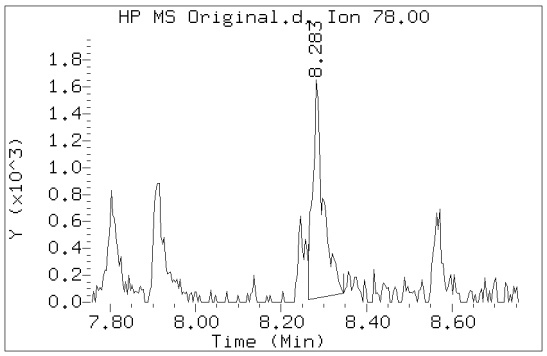
BEFORE

MASS
104
AREA
7074
HEIGHT
3581
27-Dec-2022
16:03
linh
pham



BEFORE

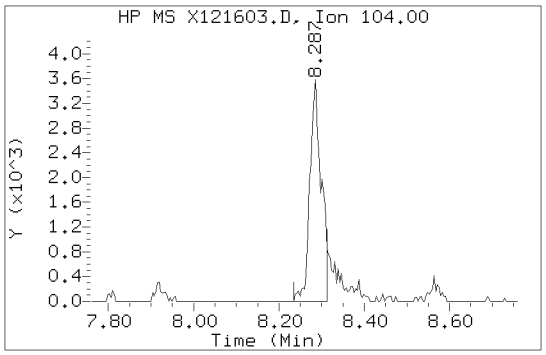
MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:03
linh
pham



Reason Code:

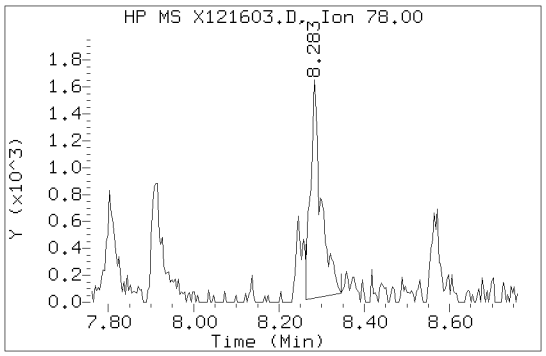
AFTER

MASS
104
AREA
6634
HEIGHT
3581
27-Dec-2022
16:07
linh
pham



AFTER

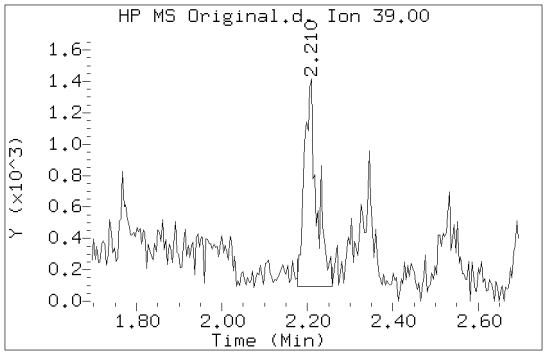
MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:07
linh
pham



Acetonitrile (75-05-8)

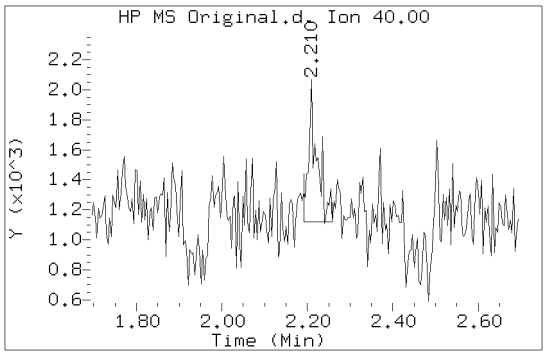
BEFORE

MASS
39
AREA
2674
HEIGHT
1321
27-Dec-2022
16:03
linh
pham



BEFORE

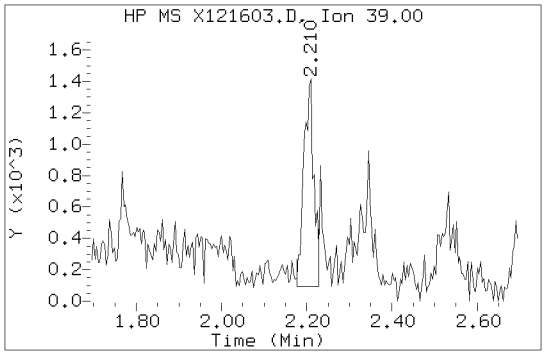
MASS
40
AREA
1296
HEIGHT
946
27-Dec-2022
16:03
linh
pham



Reason Code:

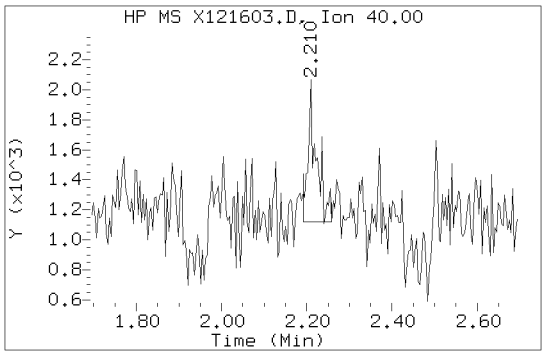
AFTER

MASS
39
AREA
2204
HEIGHT
1321
27-Dec-2022
16:07
linh
pham



AFTER

MASS
40
AREA
1296
HEIGHT
946
27-Dec-2022
16:07
linh
pham



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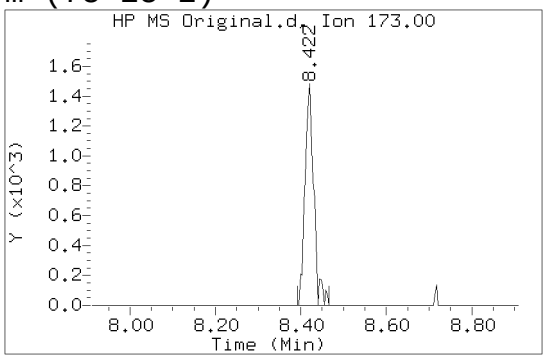
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromoform (75-25-2)

Reason Code:

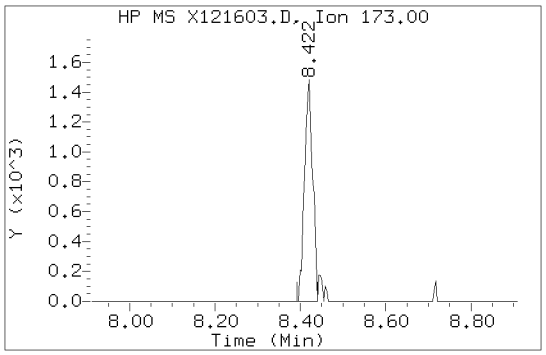
BEFORE

MASS
173
AREA
2158
HEIGHT
1483
27-Dec-2022
16:03
linh
pham



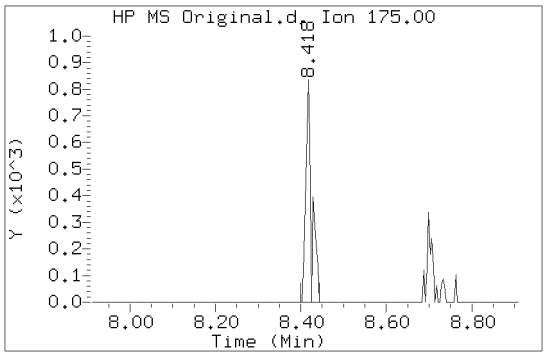
AFTER

MASS
173
AREA
2013
HEIGHT
1483
27-Dec-2022
16:07
linh
pham



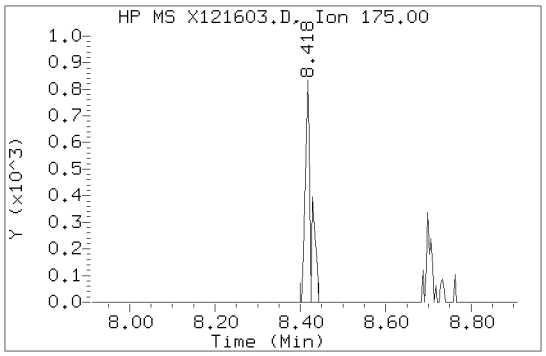
BEFORE

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:03
linh
pham



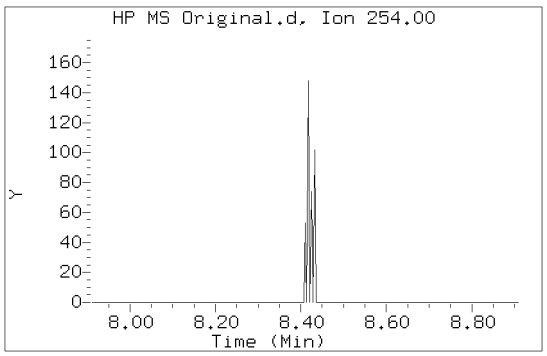
AFTER

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:07
linh
pham



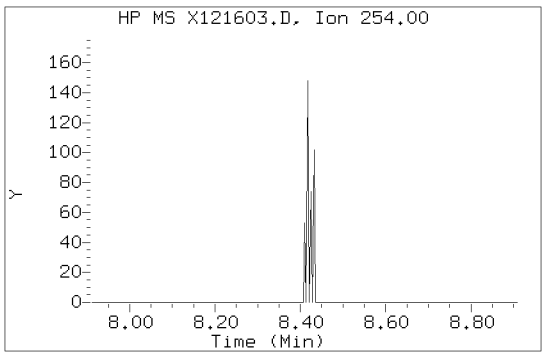
BEFORE

MASS
254
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
254
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

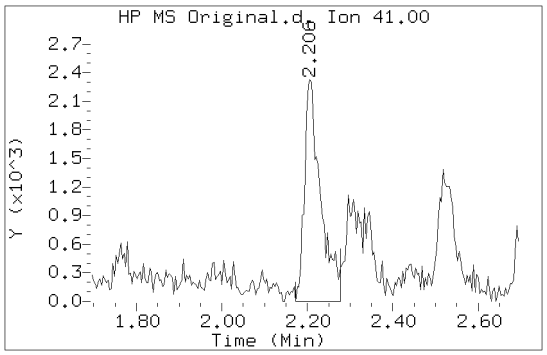


Allyl Chloride (107-05-1)

Reason Code:

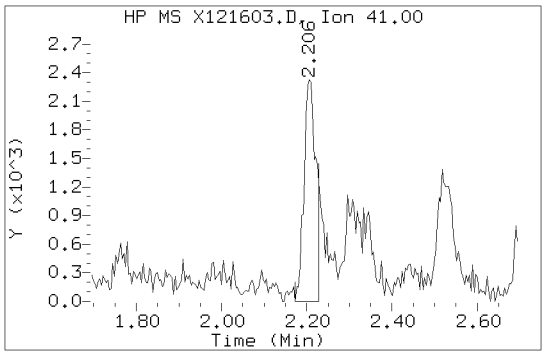
BEFORE

MASS
41
AREA
6169
HEIGHT
2326
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
4574
HEIGHT
2326
27-Dec-2022
16:07
linh
pham



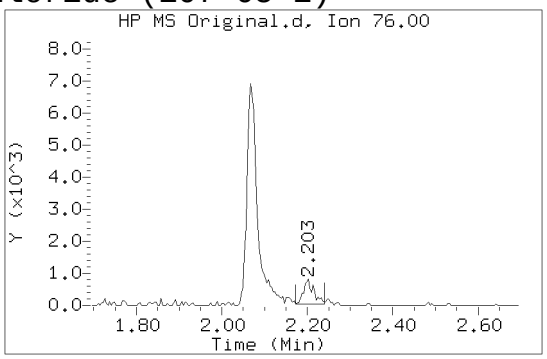
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Allyl Chloride (107-05-1)

Reason Code:

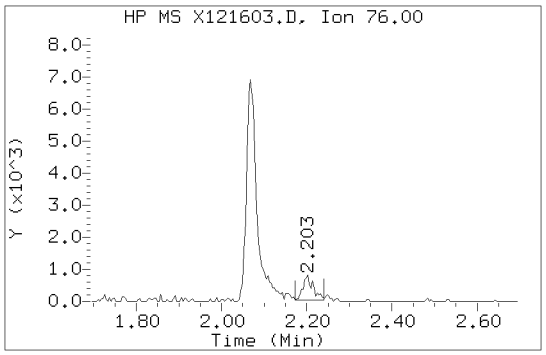
BEFORE

MASS
76
AREA
1254
HEIGHT
763
27-Dec-2022
16:03
linh
pham



AFTER

MASS
76
AREA
1254
HEIGHT
763
27-Dec-2022
16:07
linh
pham

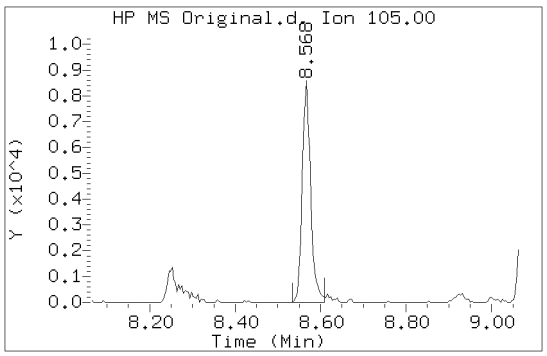


Isopropylbenzene (98-82-8)

Reason Code:

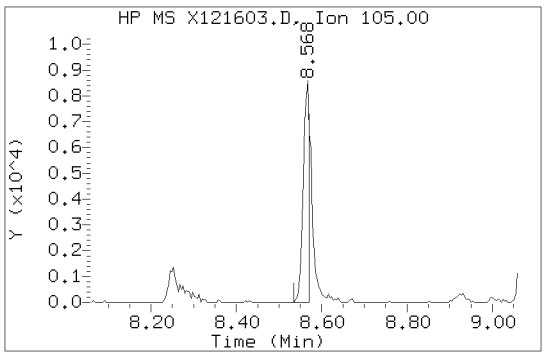
BEFORE

MASS
105
AREA
12091
HEIGHT
8588
27-Dec-2022
16:03
linh
pham



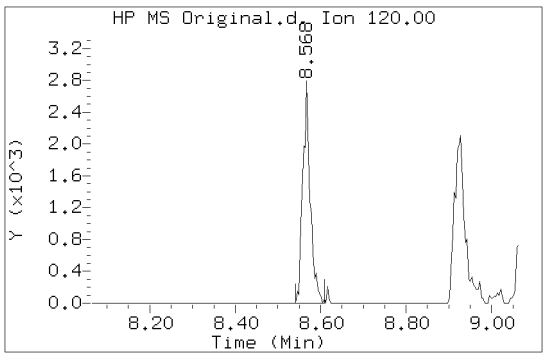
AFTER

MASS
105
AREA
8757
HEIGHT
8588
27-Dec-2022
16:07
linh
pham



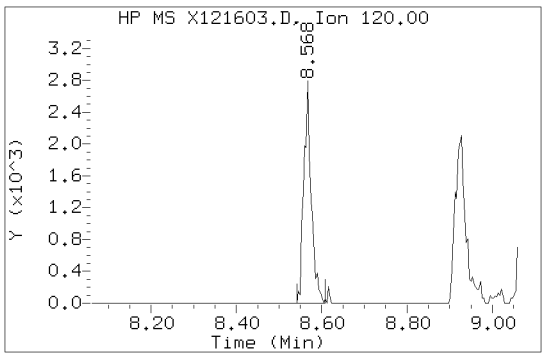
BEFORE

MASS
120
AREA
3462
HEIGHT
2793
27-Dec-2022
16:03
linh
pham



AFTER

MASS
120
AREA
3462
HEIGHT
2793
27-Dec-2022
16:07
linh
pham

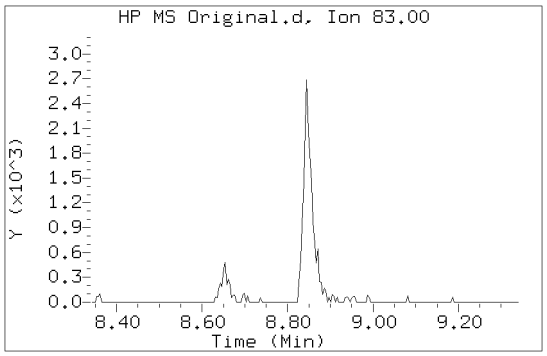


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

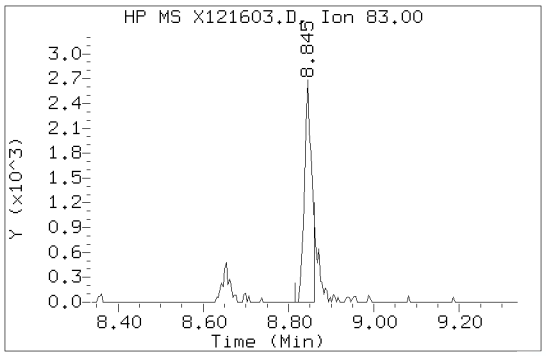
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
3194
HEIGHT
2685
27-Dec-2022
16:07
linh
pham

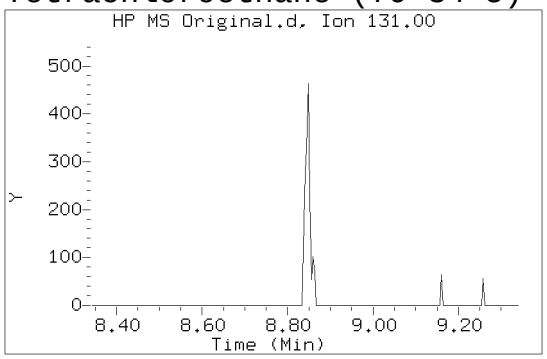


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

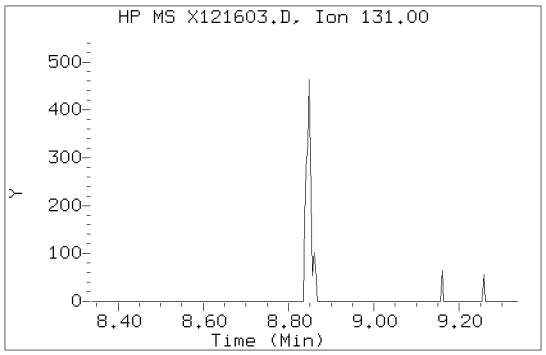
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

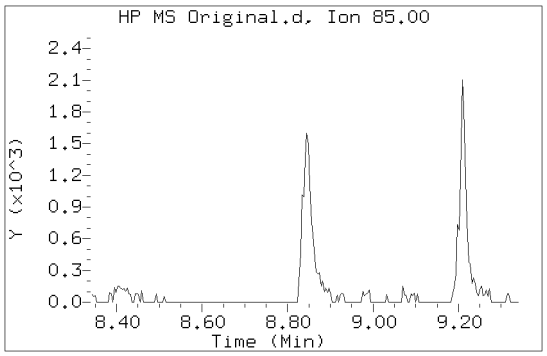
BEFORE
MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



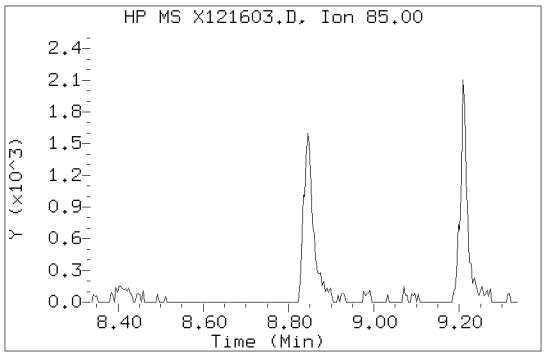
AFTER
MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



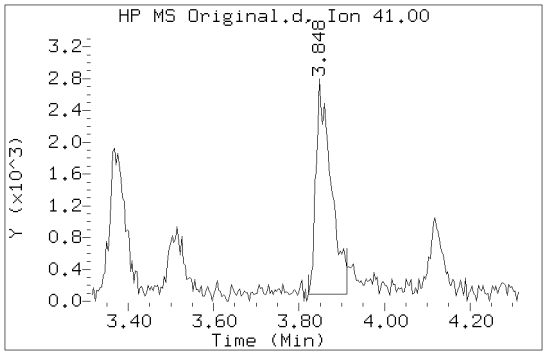
AFTER
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



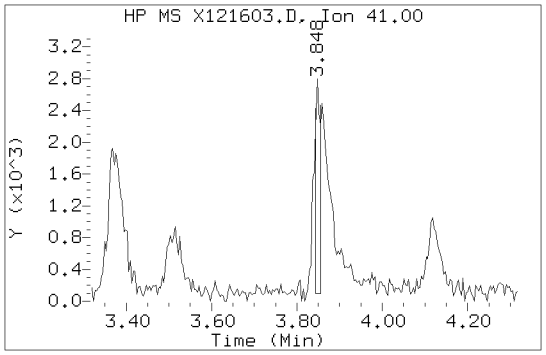
Methacrylonitrile (126-98-7)

Reason Code:

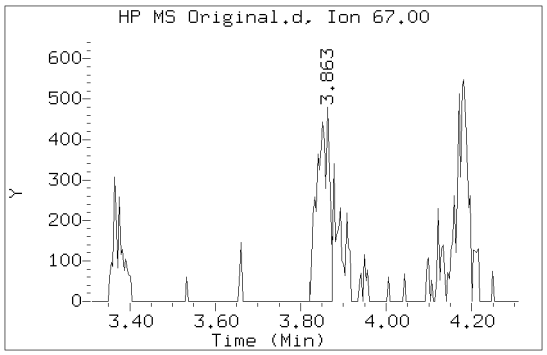
BEFORE
MASS
41
AREA
6587
HEIGHT
2708
27-Dec-2022
16:03
linh
pham



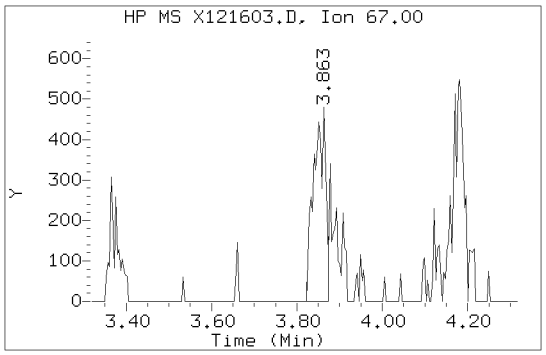
AFTER
MASS
41
AREA
2066
HEIGHT
2701
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
67
AREA
937
HEIGHT
480
27-Dec-2022
16:03
linh
pham



AFTER
MASS
67
AREA
937
HEIGHT
480
27-Dec-2022
16:07
linh
pham



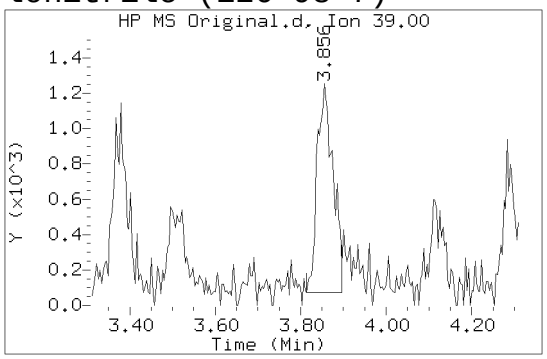
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methacrylonitrile (126-98-7)

Reason Code:

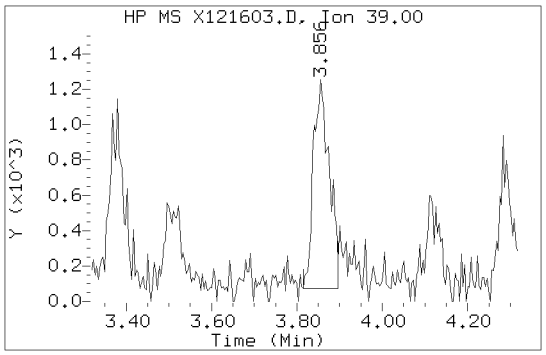
BEFORE

MASS
39
AREA
3048
HEIGHT
1181
27-Dec-2022
16:03
linh
pham



AFTER

MASS
39
AREA
3048
HEIGHT
1181
27-Dec-2022
16:07
linh
pham

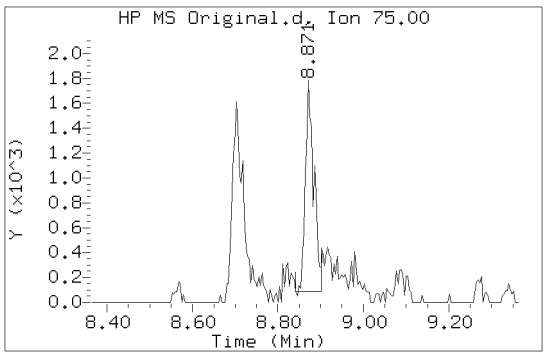


1,2,3-Trichloropropane (96-18-4)

Reason Code:

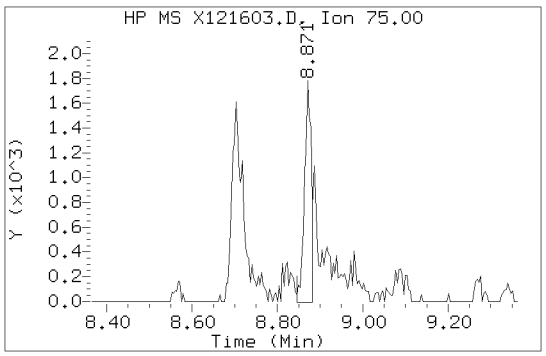
BEFORE

MASS
75
AREA
2351
HEIGHT
1693
27-Dec-2022
16:03
linh
pham



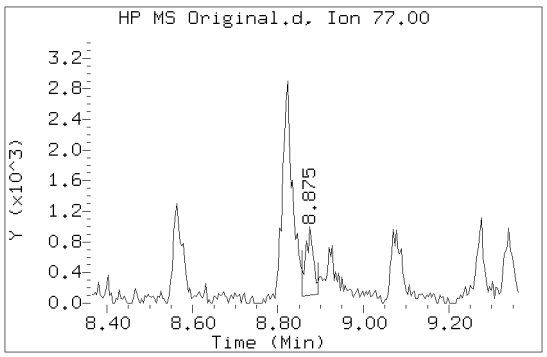
AFTER

MASS
75
AREA
2019
HEIGHT
1788
27-Dec-2022
16:07
linh
pham



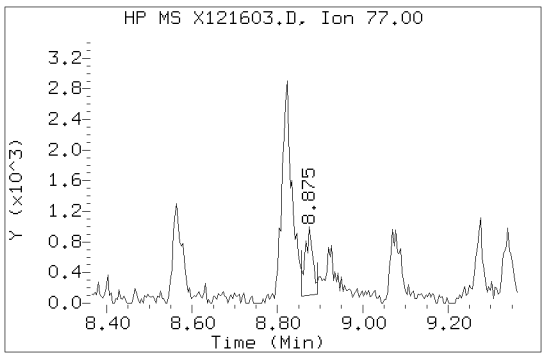
BEFORE

MASS
77
AREA
1161
HEIGHT
895
27-Dec-2022
16:03
linh
pham



AFTER

MASS
77
AREA
1161
HEIGHT
895
27-Dec-2022
16:07
linh
pham

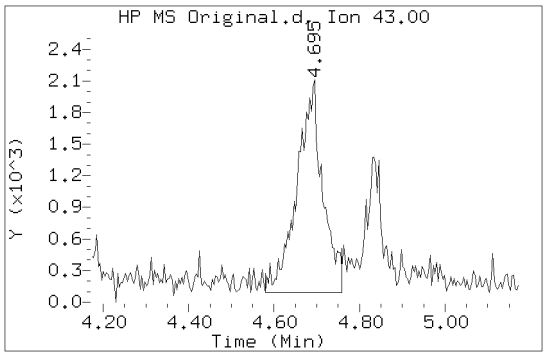


Isobutyl Alcohol (78-83-1)

Reason Code:

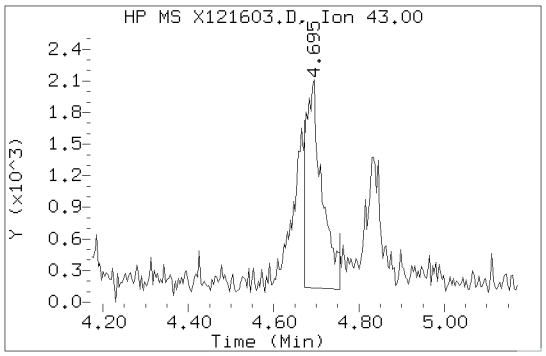
BEFORE

MASS
43
AREA
8478
HEIGHT
2018
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
5178
HEIGHT
1973
27-Dec-2022
16:07
linh
pham

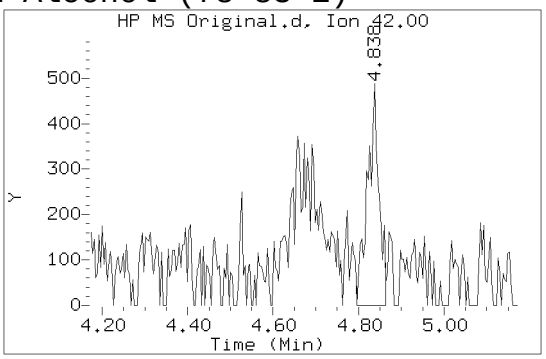


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutyl Alcohol (78-83-1)

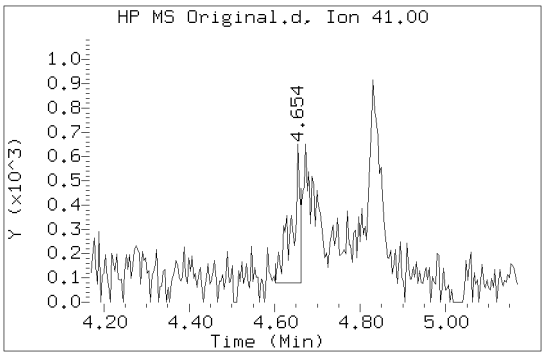
BEFORE

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:03
linh
pham



BEFORE

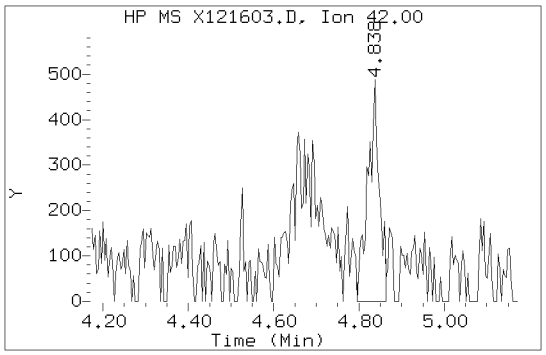
MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:03
linh
pham



Reason Code:

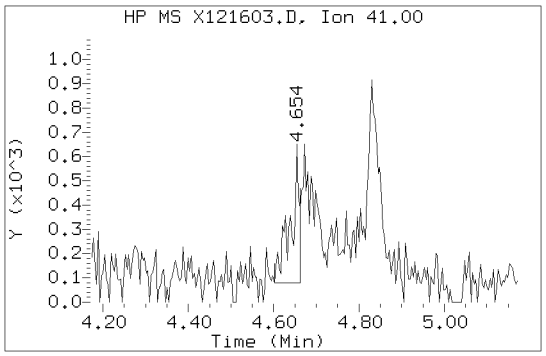
AFTER

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:07
linh
pham



AFTER

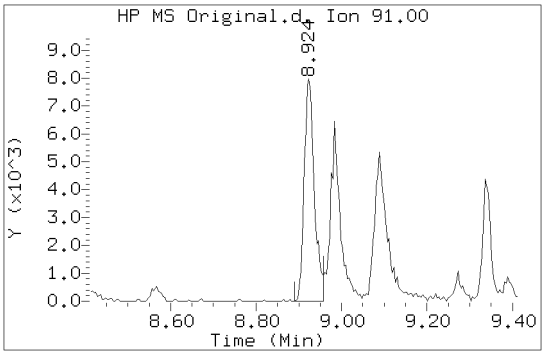
MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:07
linh
pham



n-Propylbenzene (106-65-1)

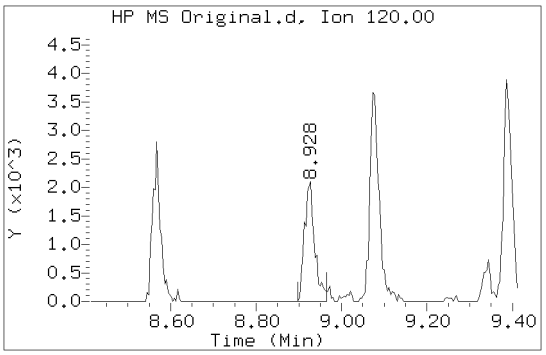
BEFORE

MASS
91
AREA
13496
HEIGHT
7972
27-Dec-2022
16:03
linh
pham



BEFORE

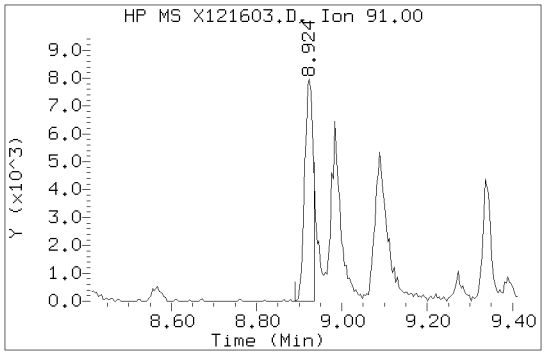
MASS
120
AREA
3559
HEIGHT
2104
27-Dec-2022
16:03
linh
pham



Reason Code:

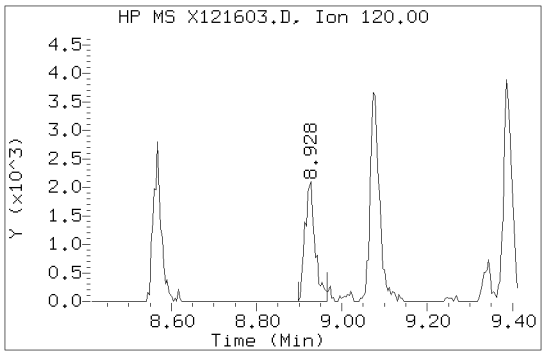
AFTER

MASS
91
AREA
11163
HEIGHT
7972
27-Dec-2022
16:07
linh
pham



AFTER

MASS
120
AREA
3559
HEIGHT
2104
27-Dec-2022
16:07
linh
pham

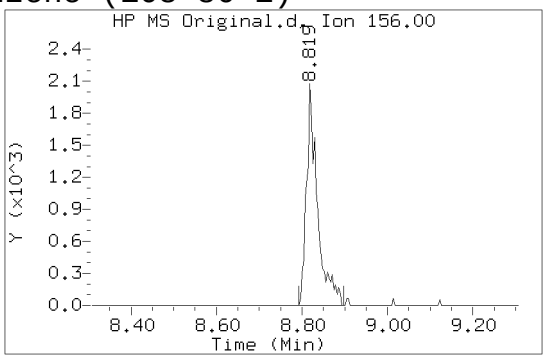


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

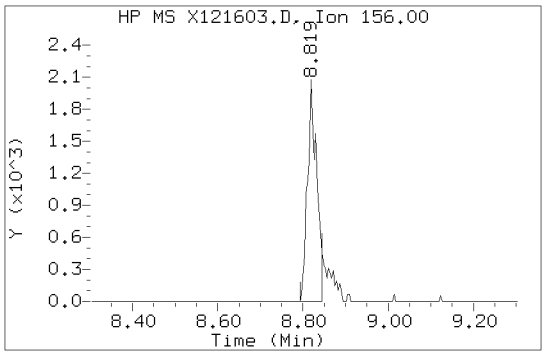
Bromobenzene (108-86-1)

Reason Code:

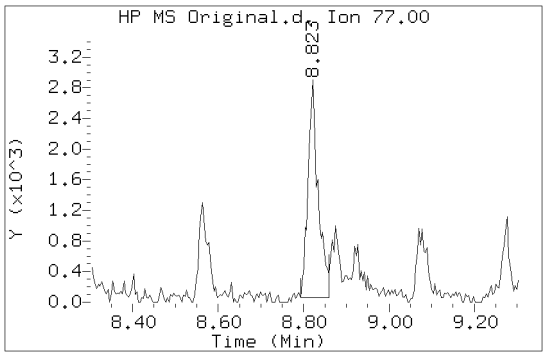
BEFORE
MASS
156
AREA
3747
HEIGHT
2077
27-Dec-2022
16:03
linh
pham



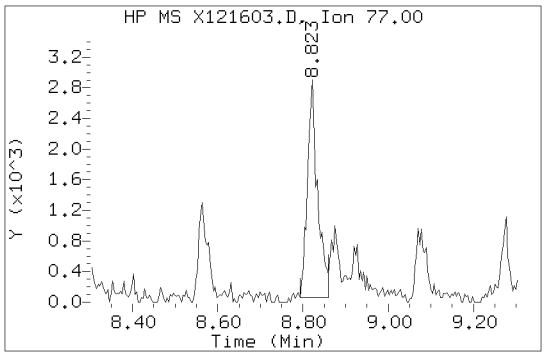
AFTER
MASS
156
AREA
3147
HEIGHT
2077
27-Dec-2022
16:07
linh
pham



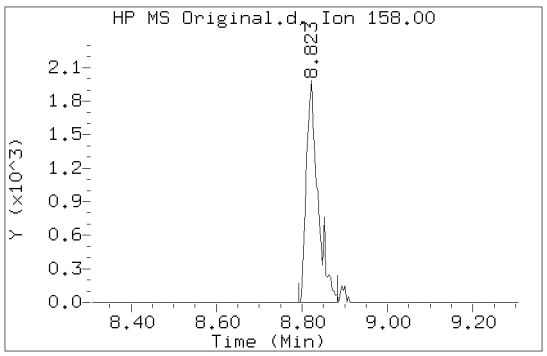
BEFORE
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:03
linh
pham



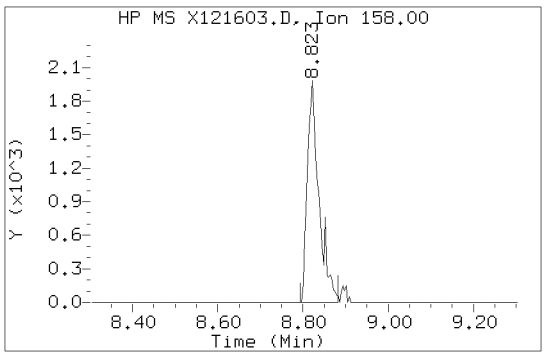
AFTER
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



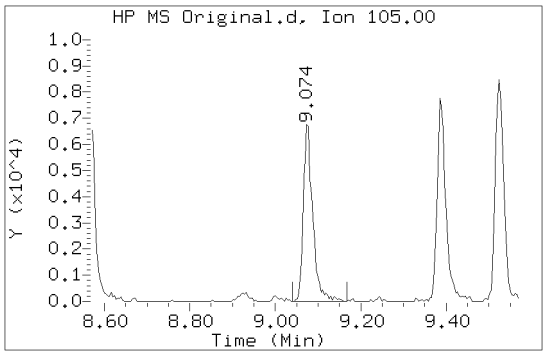
AFTER
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:07
linh
pham



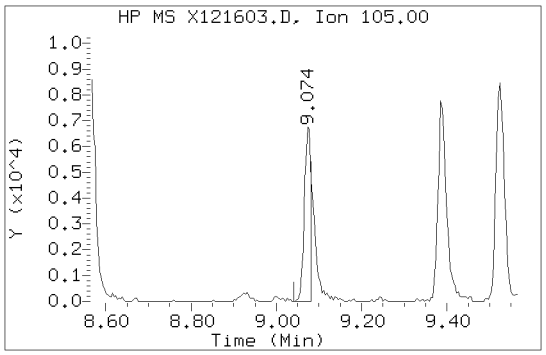
1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

BEFORE
MASS
105
AREA
10555
HEIGHT
6758
27-Dec-2022
16:03
linh
pham



AFTER
MASS
105
AREA
7182
HEIGHT
6758
27-Dec-2022
16:07
linh
pham



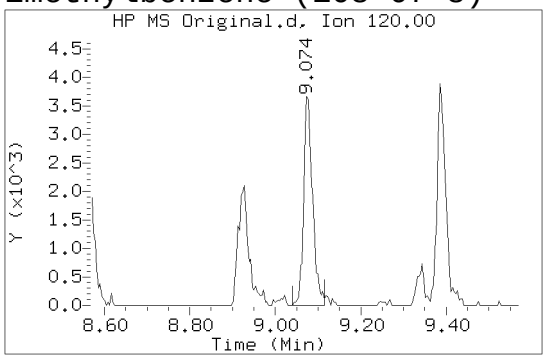
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

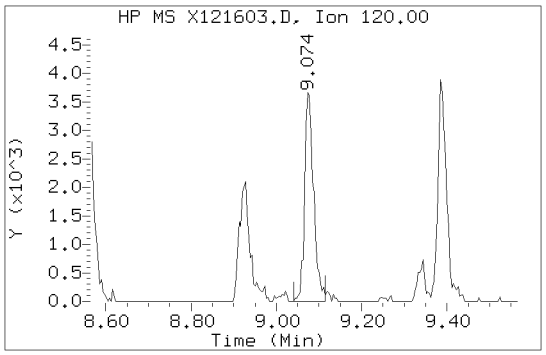
BEFORE

MASS
120
AREA
5450
HEIGHT
3663
27-Dec-2022
16:03
linh
pham



AFTER

MASS
120
AREA
5450
HEIGHT
3663
27-Dec-2022
16:07
linh
pham

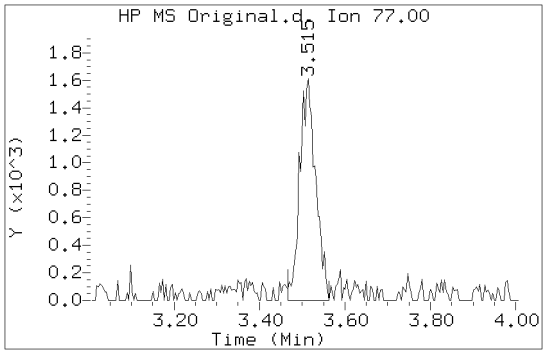


2,2-Dichloropropane (594-20-7)

Reason Code:

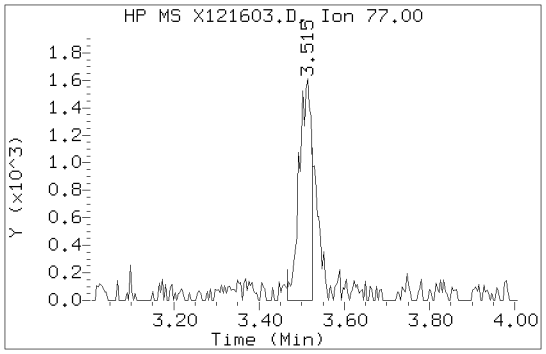
BEFORE

MASS
77
AREA
4217
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



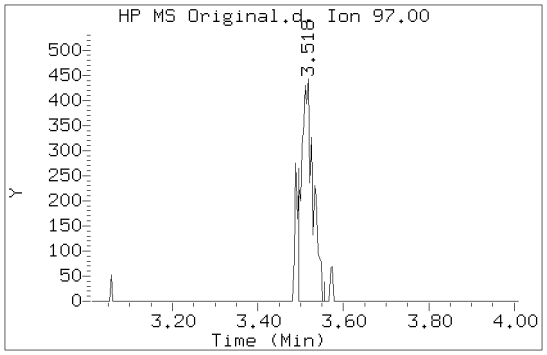
AFTER

MASS
77
AREA
3238
HEIGHT
1612
27-Dec-2022
16:07
linh
pham



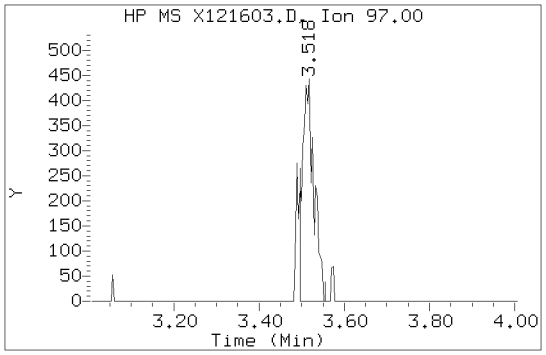
BEFORE

MASS
97
AREA
843
HEIGHT
443
27-Dec-2022
16:03
linh
pham



AFTER

MASS
97
AREA
843
HEIGHT
443
27-Dec-2022
16:07
linh
pham

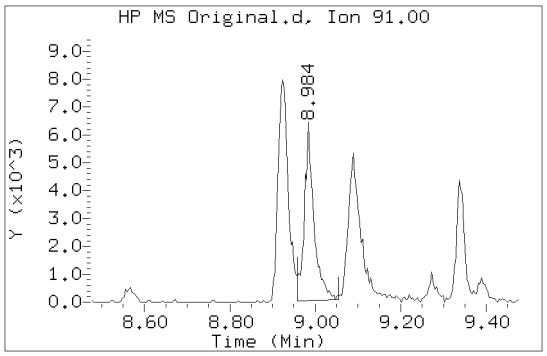


2-Chlorotoluene (95-49-8)

Reason Code:

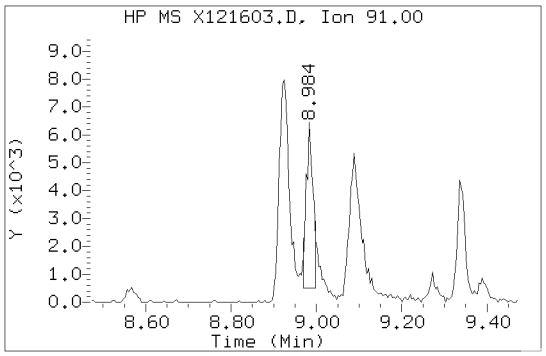
BEFORE

MASS
91
AREA
10128
HEIGHT
6401
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
6718
HEIGHT
5942
27-Dec-2022
16:07
linh
pham



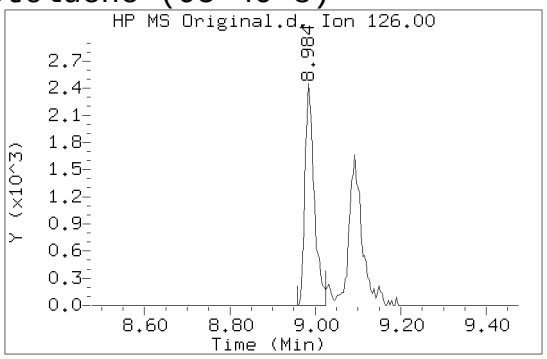
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

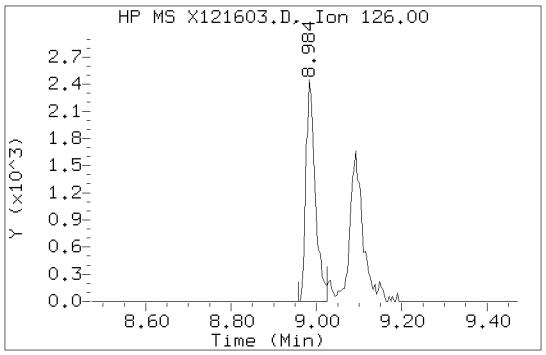
BEFORE

MASS
126
AREA
3761
HEIGHT
2450
27-Dec-2022
16:03
linh
pham



AFTER

MASS
126
AREA
3761
HEIGHT
2450
27-Dec-2022
16:07
linh
pham

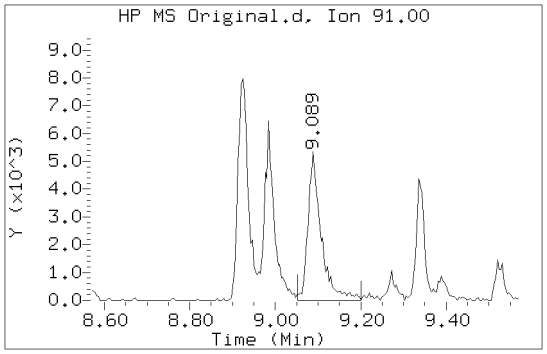


4-Chlorotoluene (106-43-4)

Reason Code:

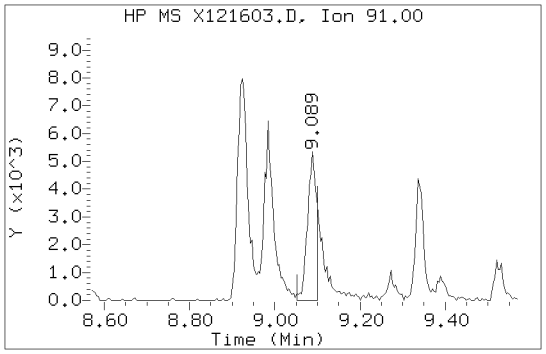
BEFORE

MASS
91
AREA
11481
HEIGHT
5337
27-Dec-2022
16:03
linh
pham



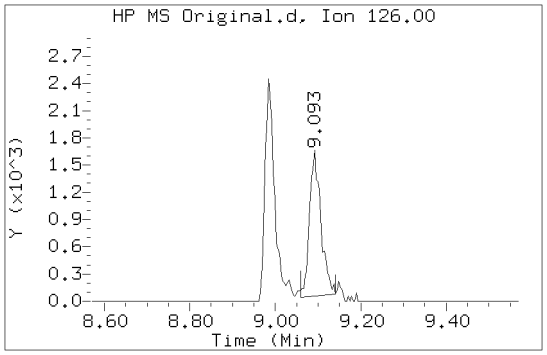
AFTER

MASS
91
AREA
7644
HEIGHT
5337
27-Dec-2022
16:07
linh
pham



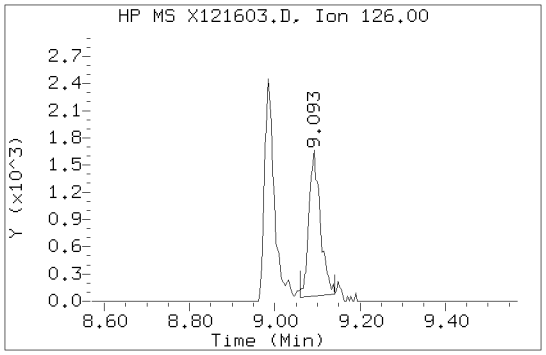
BEFORE

MASS
126
AREA
3008
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



AFTER

MASS
126
AREA
3008
HEIGHT
1612
27-Dec-2022
16:07
linh
pham

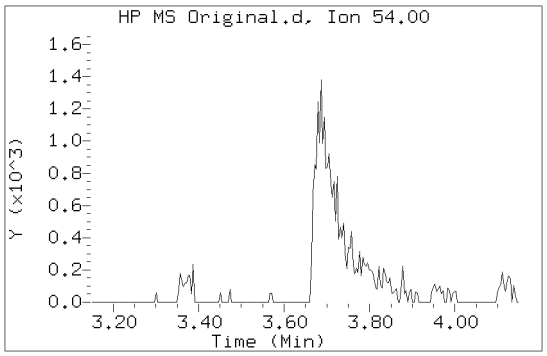


Propionitrile (107-12-0)

Reason Code:

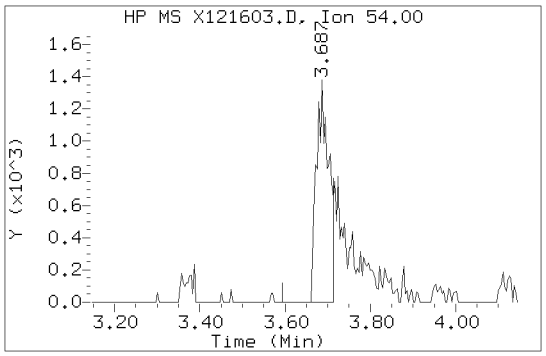
BEFORE

MASS
54
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
54
AREA
2777
HEIGHT
1380
27-Dec-2022
16:07
linh
pham



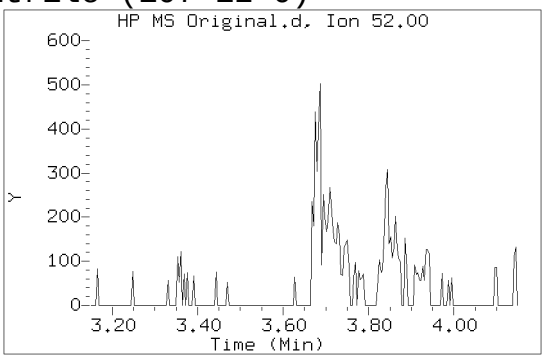
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Propionitrile (107-12-0)

Reason Code:

BEFORE

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
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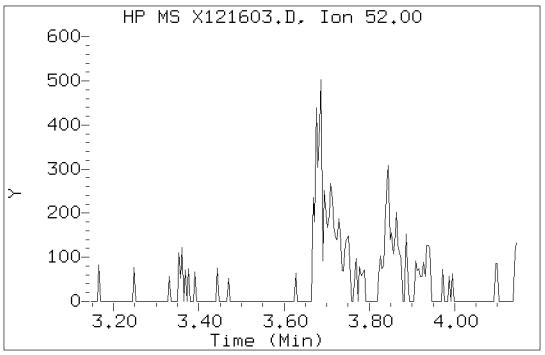

BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
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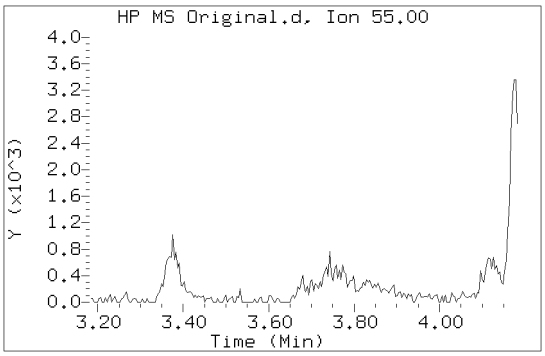
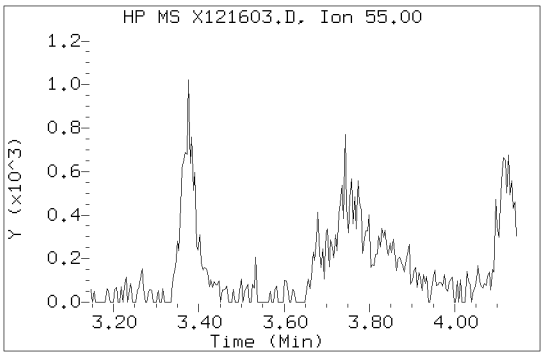


AFTER

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

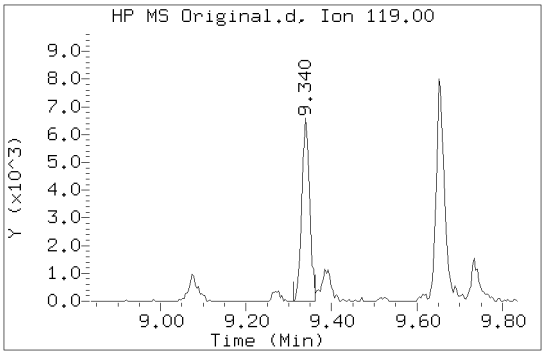


tert-Butylbenzene (98-06-6)

Reason Code:

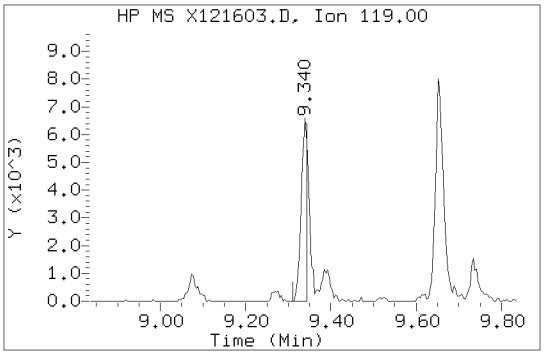
BEFORE

MASS
119
AREA
8660
HEIGHT
6598
27-Dec-2022
16:03
linh
pham



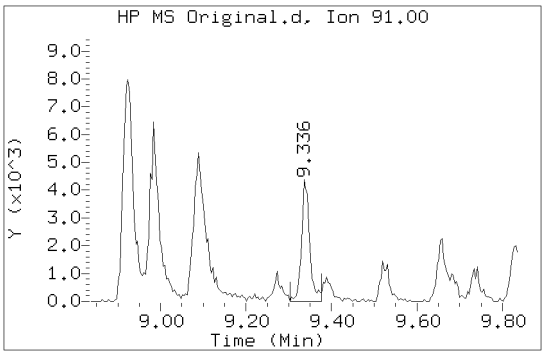
AFTER

MASS
119
AREA
6389
HEIGHT
6598
27-Dec-2022
16:07
linh
pham



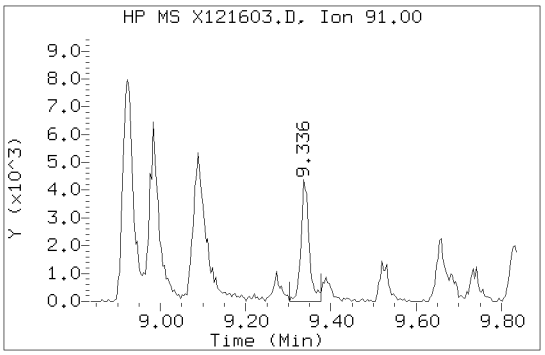
BEFORE

MASS
91
AREA
6013
HEIGHT
4378
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
6013
HEIGHT
4378
27-Dec-2022
16:07
linh
pham



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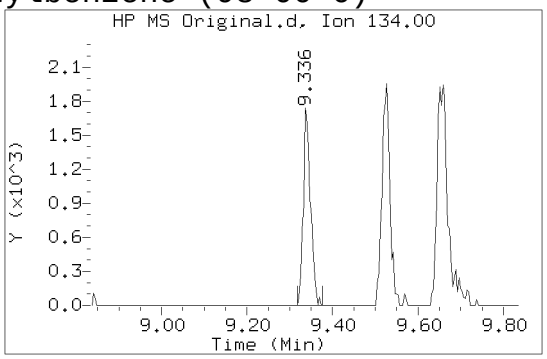
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butylbenzene (98-06-6)

Reason Code:

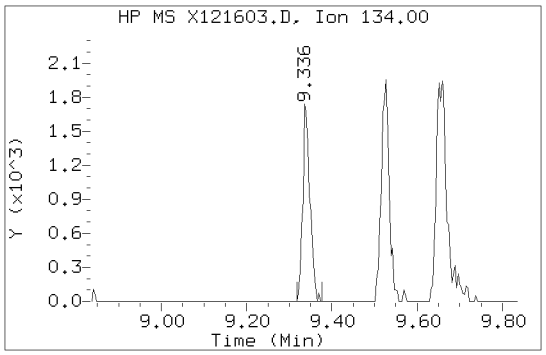
BEFORE

MASS
134
AREA
2112
HEIGHT
1740
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
2112
HEIGHT
1740
27-Dec-2022
16:07
linh
pham

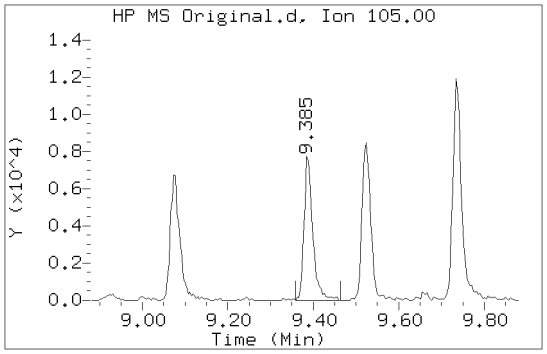


1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

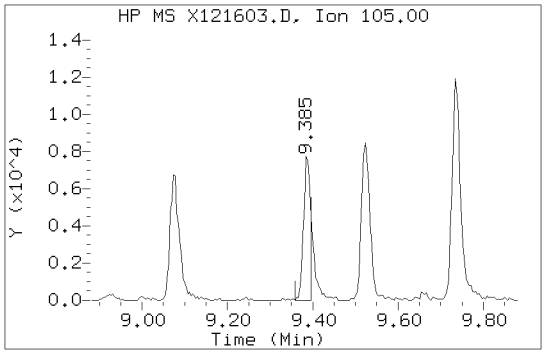
BEFORE

MASS
105
AREA
11065
HEIGHT
7775
27-Dec-2022
16:03
linh
pham



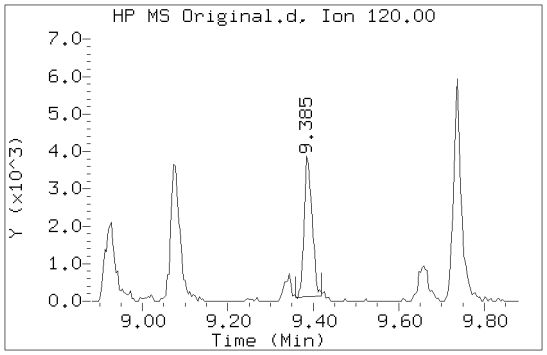
AFTER

MASS
105
AREA
8496
HEIGHT
7775
27-Dec-2022
16:07
linh
pham



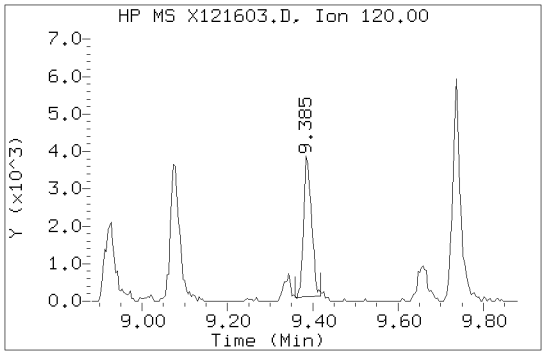
BEFORE

MASS
120
AREA
4898
HEIGHT
3773
27-Dec-2022
16:03
linh
pham



AFTER

MASS
120
AREA
4898
HEIGHT
3773
27-Dec-2022
16:07
linh
pham

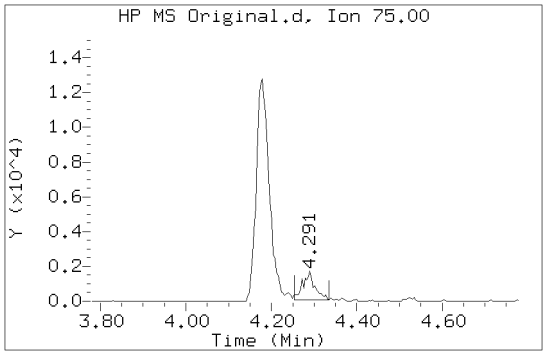


1,1-Dichloropropene (563-58-6)

Reason Code:

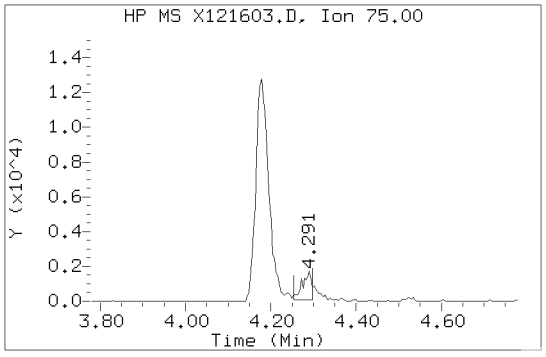
BEFORE

MASS
75
AREA
3235
HEIGHT
1674
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
2468
HEIGHT
1674
27-Dec-2022
16:07
linh
pham



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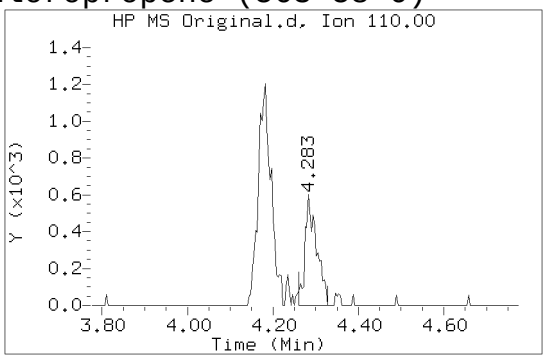
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

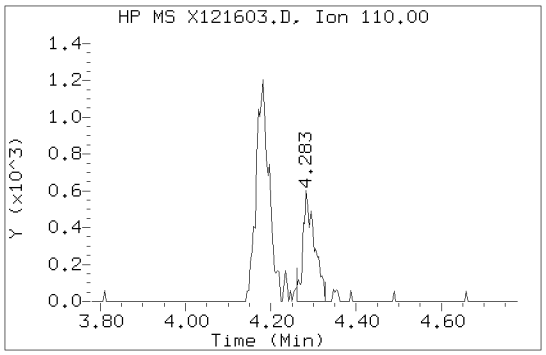
BEFORE

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:03
linh
pham



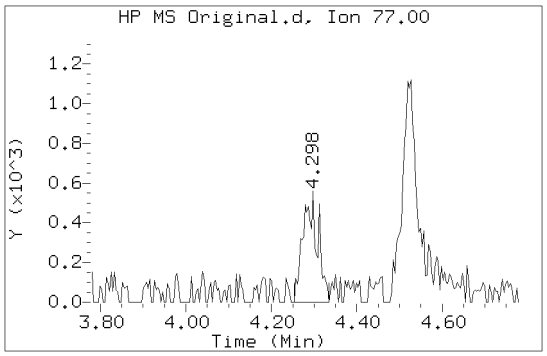
AFTER

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:07
linh
pham



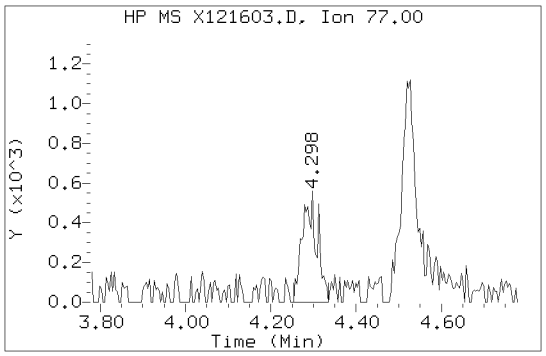
BEFORE

MASS
77
AREA
1342
HEIGHT
559
27-Dec-2022
16:03
linh
pham



AFTER

MASS
77
AREA
1342
HEIGHT
559
27-Dec-2022
16:07
linh
pham

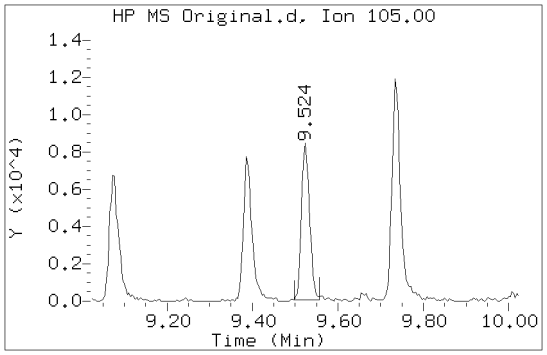


sec-Butylbenzene (135-98-8)

Reason Code:

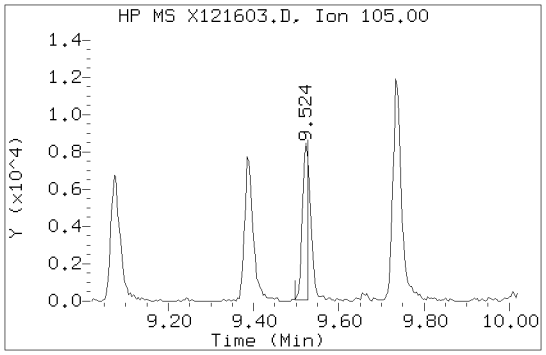
BEFORE

MASS
105
AREA
11512
HEIGHT
8394
27-Dec-2022
16:03
linh
pham



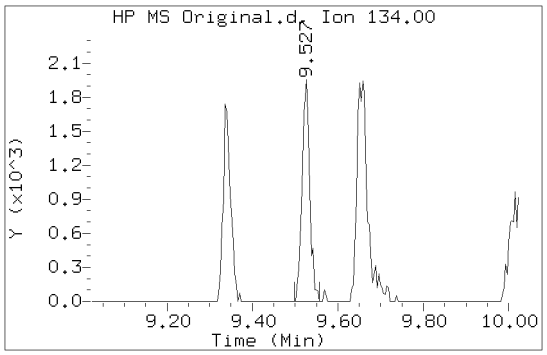
AFTER

MASS
105
AREA
7938
HEIGHT
8394
27-Dec-2022
16:07
linh
pham



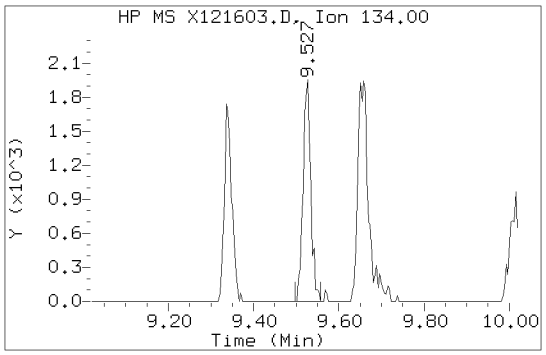
BEFORE

MASS
134
AREA
2519
HEIGHT
1955
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
2519
HEIGHT
1955
27-Dec-2022
16:07
linh
pham



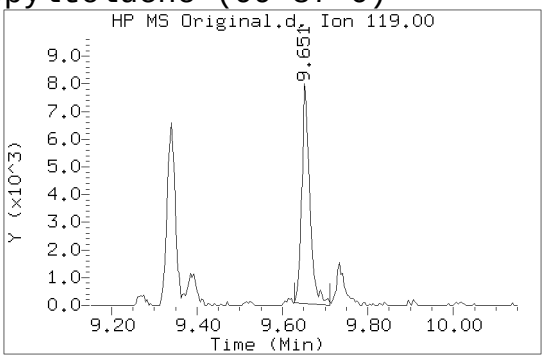
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

Reason Code:

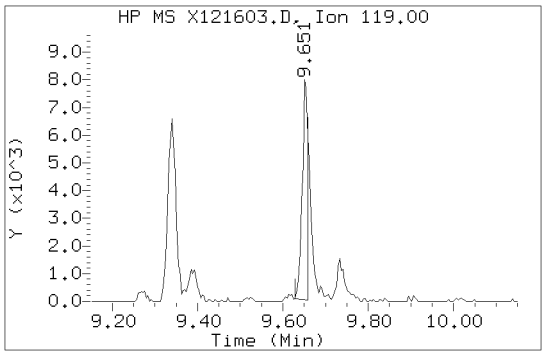
BEFORE

MASS
119
AREA
10660
HEIGHT
7944
27-Dec-2022
16:03
linh
pham



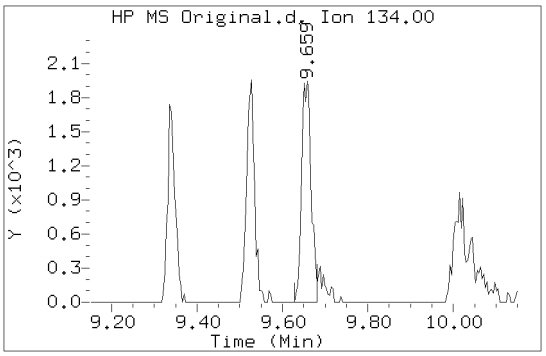
AFTER

MASS
119
AREA
7343
HEIGHT
7944
27-Dec-2022
16:07
linh
pham



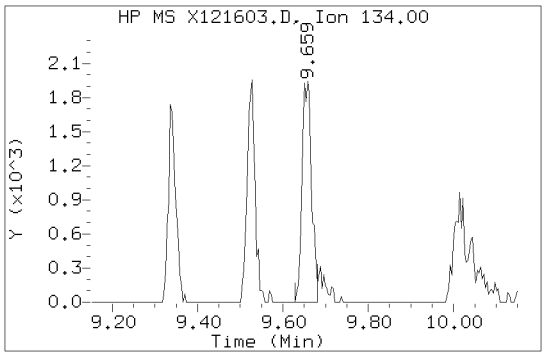
BEFORE

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:03
linh
pham



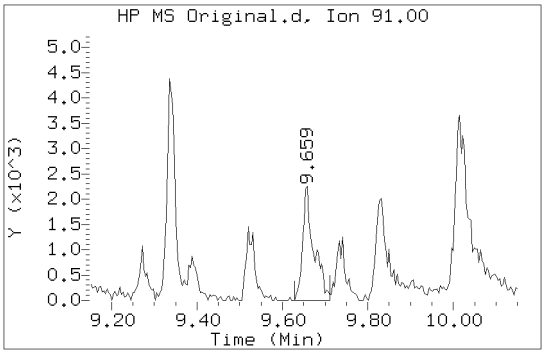
AFTER

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:07
linh
pham



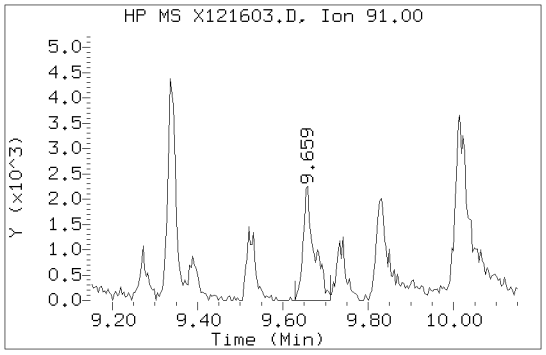
BEFORE

MASS
91
AREA
4191
HEIGHT
2256
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
4191
HEIGHT
2256
27-Dec-2022
16:07
linh
pham

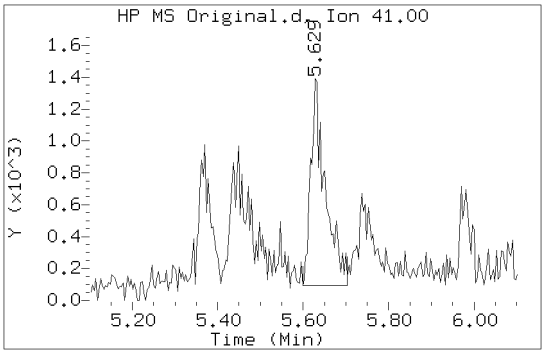


Methyl Methacrylate (80-62-6)

Reason Code:

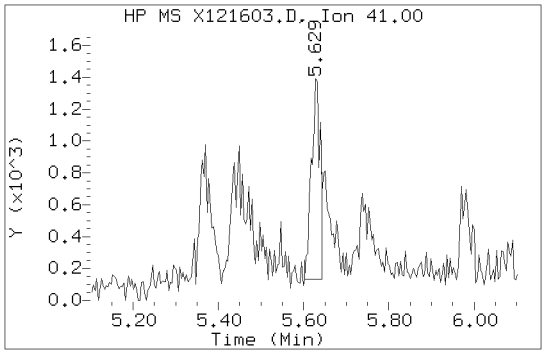
BEFORE

MASS
41
AREA
3067
HEIGHT
1299
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
1788
HEIGHT
1257
27-Dec-2022
16:07
linh
pham

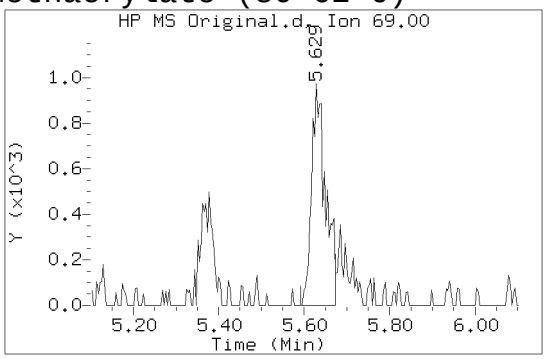


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

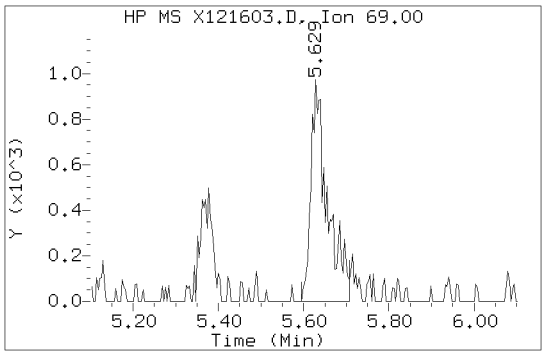
Methyl Methacrylate (80-62-6)

Reason Code:

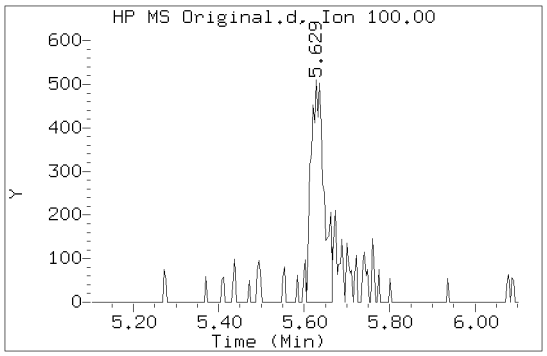
BEFORE
MASS
69
AREA
2216
HEIGHT
973
27-Dec-2022
16:03
linh
pham



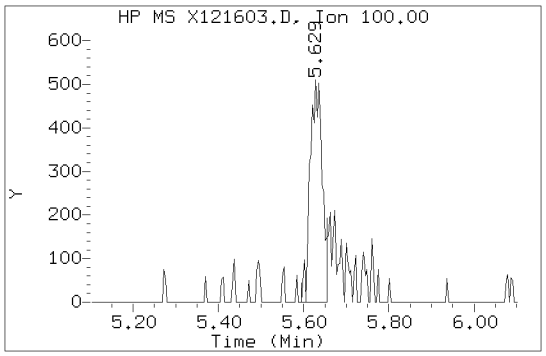
AFTER
MASS
69
AREA
2595
HEIGHT
973
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
100
AREA
1074
HEIGHT
510
27-Dec-2022
16:03
linh
pham



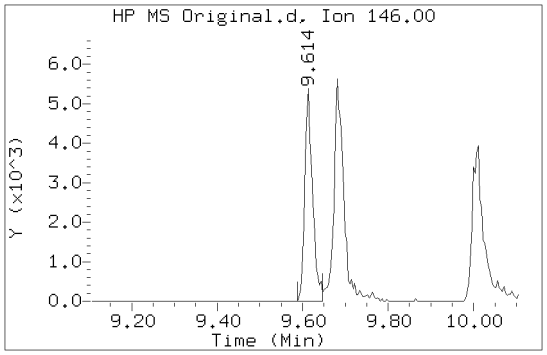
AFTER
MASS
100
AREA
1011
HEIGHT
510
27-Dec-2022
16:07
linh
pham



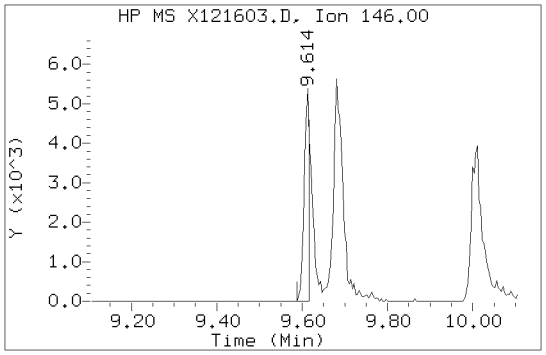
1,3-Dichlorobenzene (541-73-1)

Reason Code:

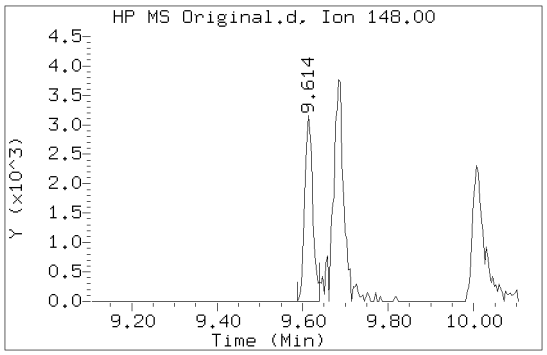
BEFORE
MASS
146
AREA
6964
HEIGHT
5387
27-Dec-2022
16:03
linh
pham



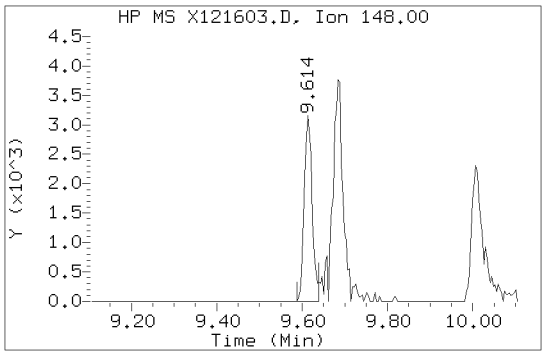
AFTER
MASS
146
AREA
4677
HEIGHT
5387
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
148
AREA
4216
HEIGHT
3157
27-Dec-2022
16:03
linh
pham



AFTER
MASS
148
AREA
4216
HEIGHT
3157
27-Dec-2022
16:07
linh
pham



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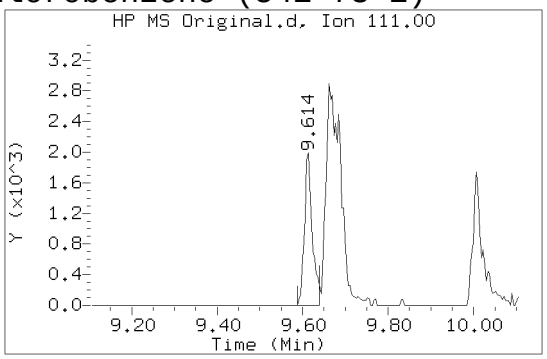
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,3-Dichlorobenzene (541-73-1)

Reason Code:

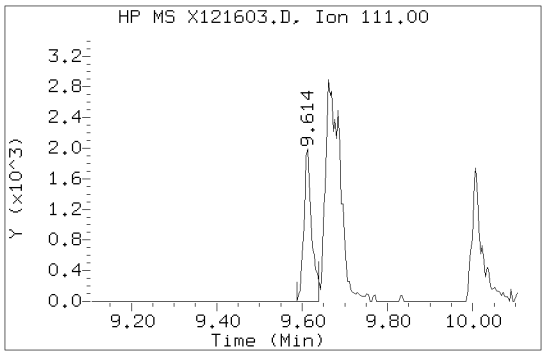
BEFORE

MASS
111
AREA
2596
HEIGHT
1995
27-Dec-2022
16:03
linh
pham



AFTER

MASS
111
AREA
2596
HEIGHT
1995
27-Dec-2022
16:07
linh
pham

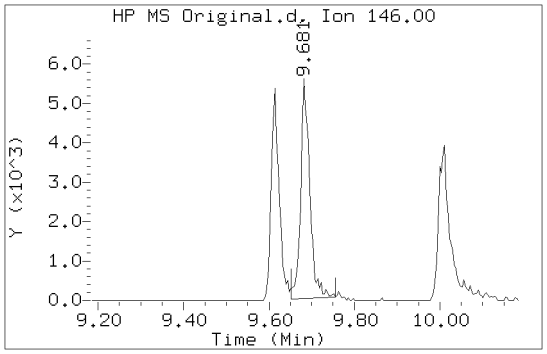


1,4-Dichlorobenzene (106-46-7)

Reason Code:

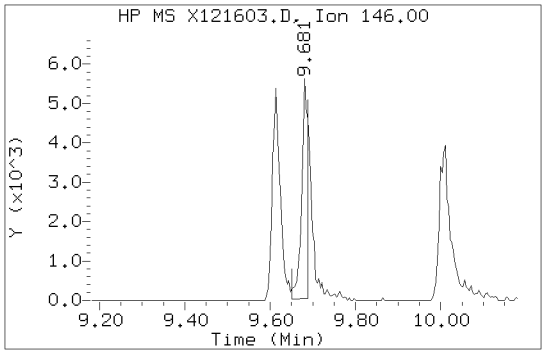
BEFORE

MASS
146
AREA
8510
HEIGHT
5586
27-Dec-2022
16:03
linh
pham



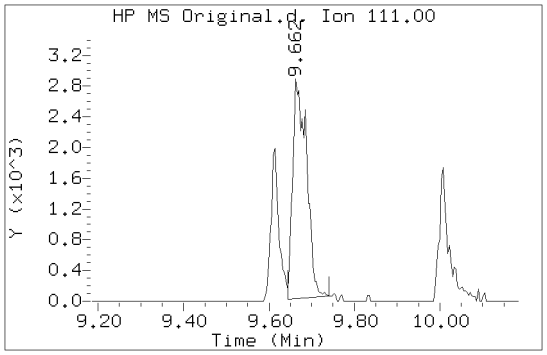
AFTER

MASS
146
AREA
5674
HEIGHT
5587
27-Dec-2022
16:07
linh
pham



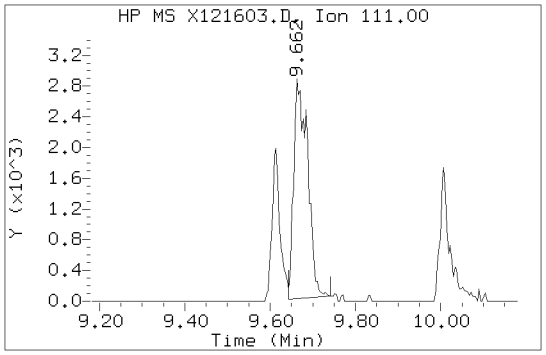
BEFORE

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:03
linh
pham



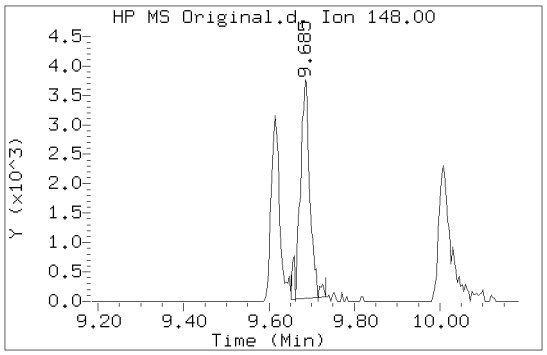
AFTER

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:07
linh
pham



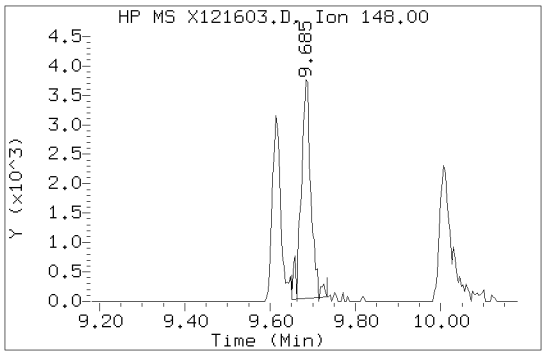
BEFORE

MASS
148
AREA
6083
HEIGHT
3714
27-Dec-2022
16:03
linh
pham



AFTER

MASS
148
AREA
6083
HEIGHT
3714
27-Dec-2022
16:07
linh
pham



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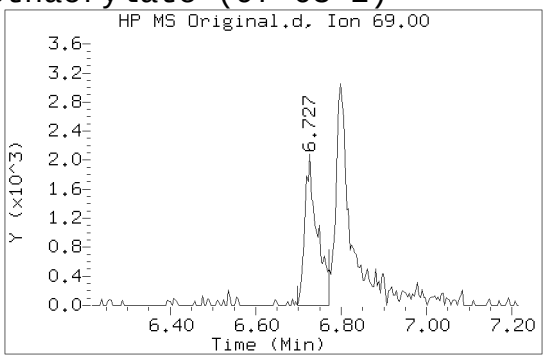
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

Reason Code:

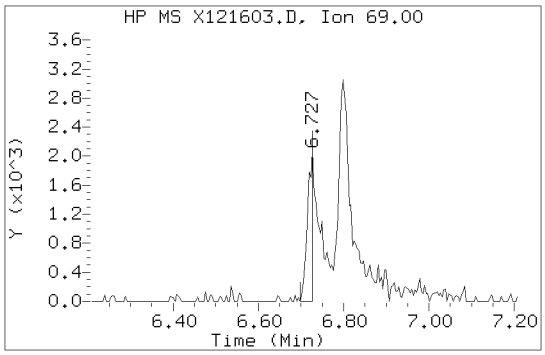
BEFORE

MASS
69
AREA
4283
HEIGHT
2083
27-Dec-2022
16:03
linh
pham



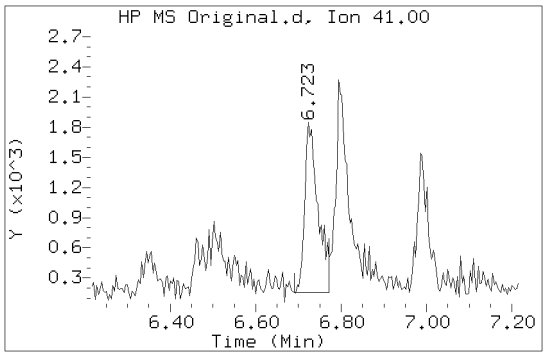
AFTER

MASS
69
AREA
1935
HEIGHT
2083
27-Dec-2022
16:07
linh
pham



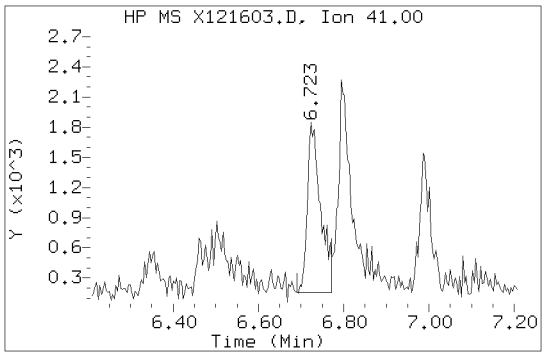
BEFORE

MASS
41
AREA
3701
HEIGHT
1688
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
3701
HEIGHT
1688
27-Dec-2022
16:07
linh
pham

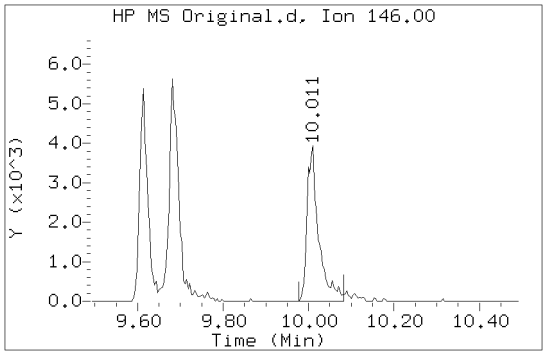


1,2-Dichlorobenzene (95-50-1)

Reason Code:

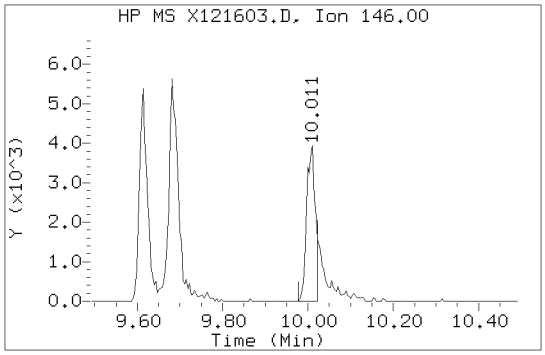
BEFORE

MASS
146
AREA
7400
HEIGHT
3934
27-Dec-2022
16:03
linh
pham



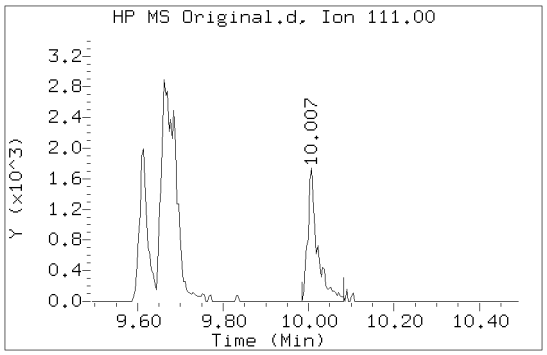
AFTER

MASS
146
AREA
5504
HEIGHT
3934
27-Dec-2022
16:07
linh
pham



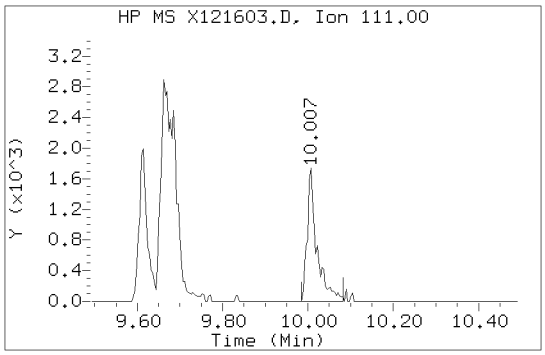
BEFORE

MASS
111
AREA
2768
HEIGHT
1741
27-Dec-2022
16:03
linh
pham



AFTER

MASS
111
AREA
2768
HEIGHT
1741
27-Dec-2022
16:07
linh
pham



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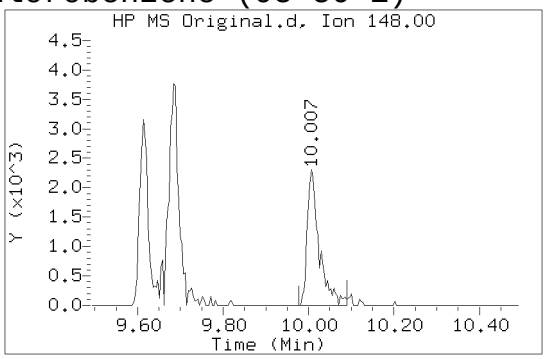
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

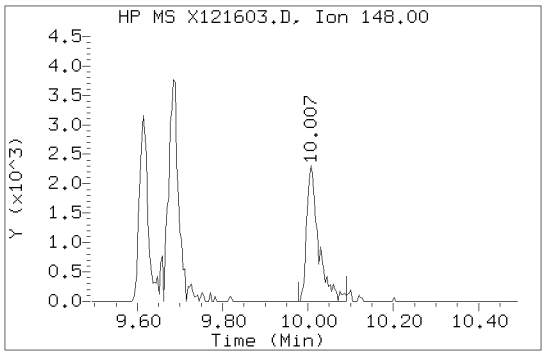
BEFORE

MASS
148
AREA
4515
HEIGHT
2306
27-Dec-2022
16:03
linh
pham



AFTER

MASS
148
AREA
4515
HEIGHT
2306
27-Dec-2022
16:07
linh
pham

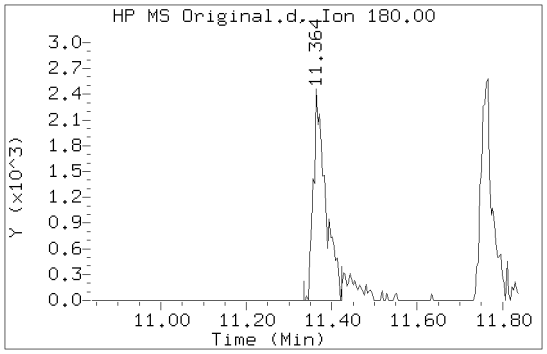


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

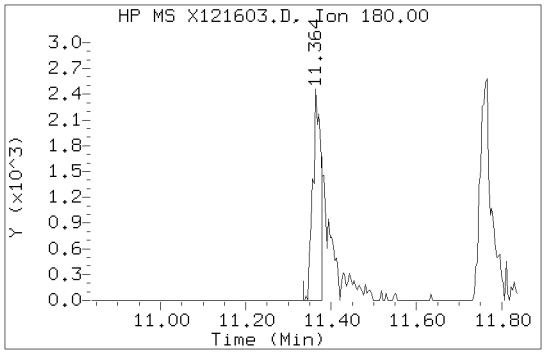
BEFORE

MASS
180
AREA
4912
HEIGHT
2459
27-Dec-2022
16:03
linh
pham



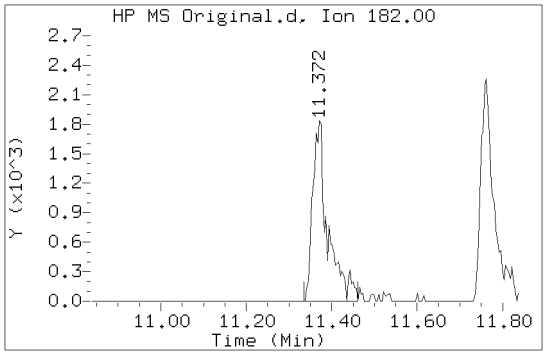
AFTER

MASS
180
AREA
3187
HEIGHT
2459
27-Dec-2022
16:07
linh
pham



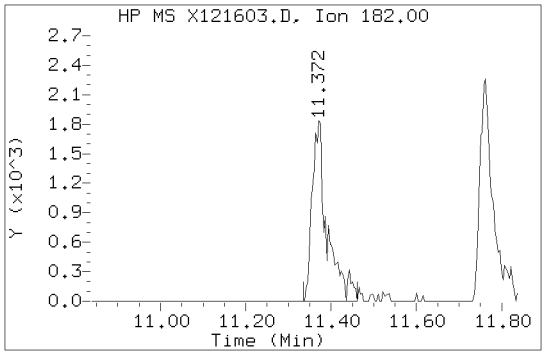
BEFORE

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:03
linh
pham



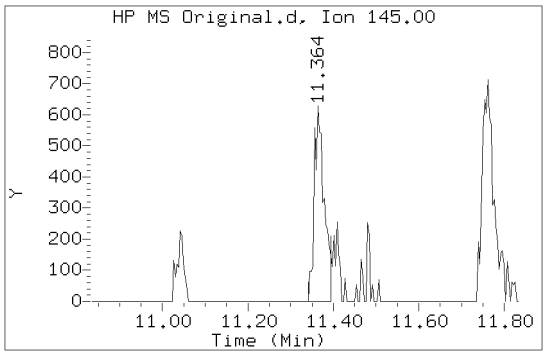
AFTER

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:07
linh
pham



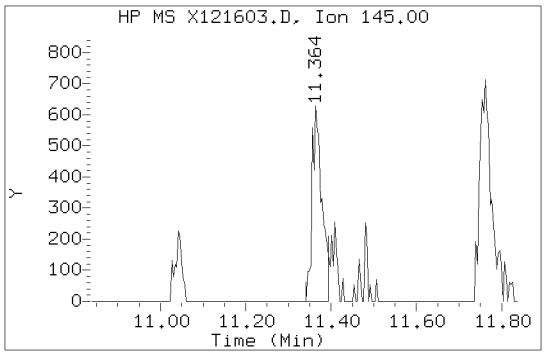
BEFORE

MASS
145
AREA
1003
HEIGHT
629
27-Dec-2022
16:03
linh
pham



AFTER

MASS
145
AREA
1003
HEIGHT
629
27-Dec-2022
16:07
linh
pham

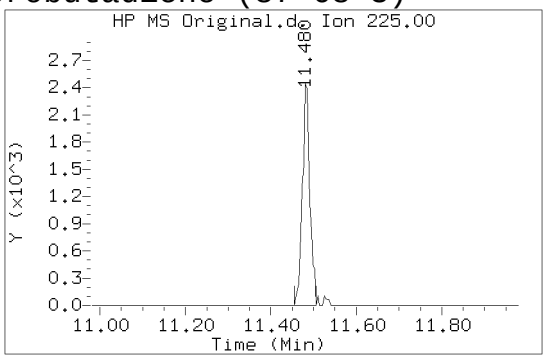


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

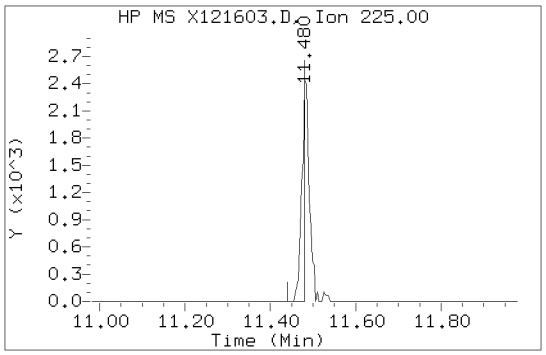
Hexachlorobutadiene (87-68-3)

Reason Code:

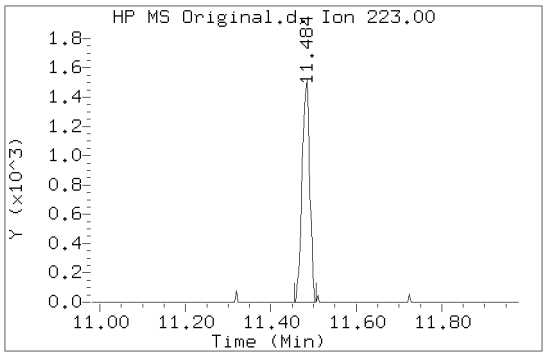
BEFORE
MASS
225
AREA
3038
HEIGHT
2444
27-Dec-2022
16:03
linh
pham



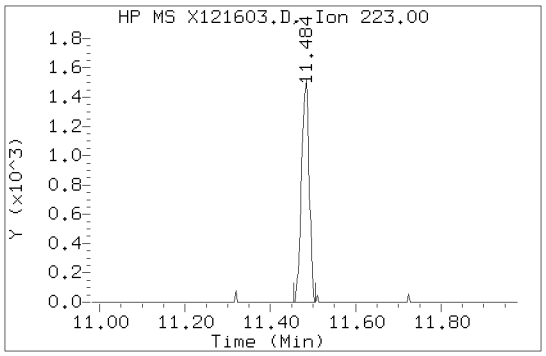
AFTER
MASS
225
AREA
1477
HEIGHT
2444
27-Dec-2022
16:07
linh
pham



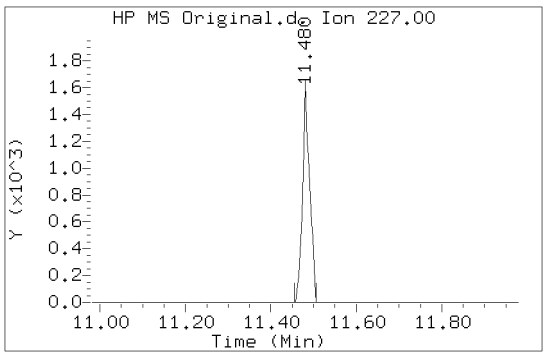
BEFORE
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:03
linh
pham



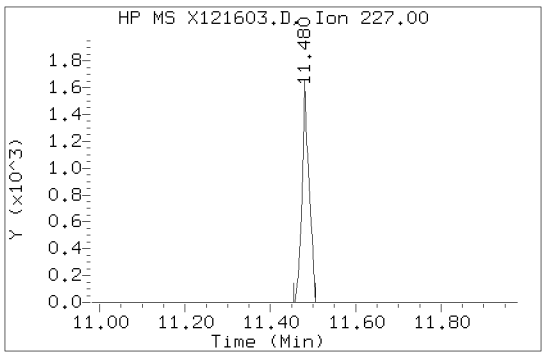
AFTER
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:03
linh
pham



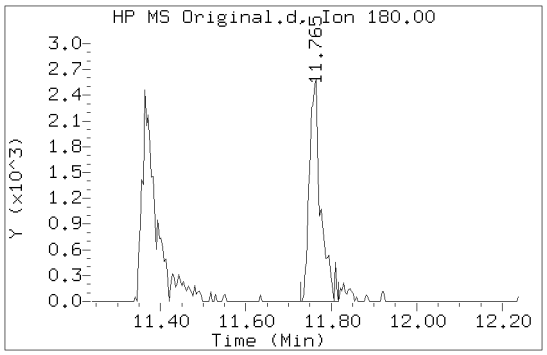
AFTER
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:07
linh
pham



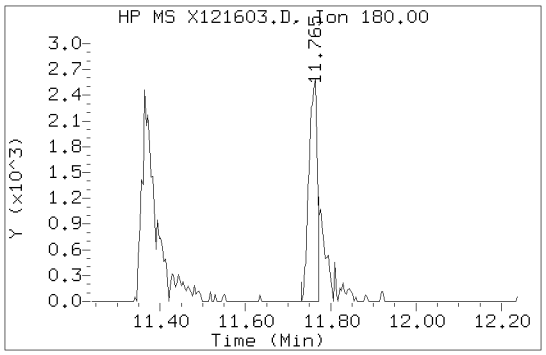
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
180
AREA
4741
HEIGHT
2580
27-Dec-2022
16:03
linh
pham



AFTER
MASS
180
AREA
3572
HEIGHT
2580
27-Dec-2022
16:07
linh
pham



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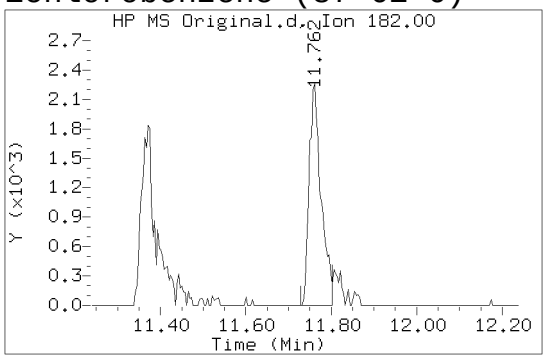
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

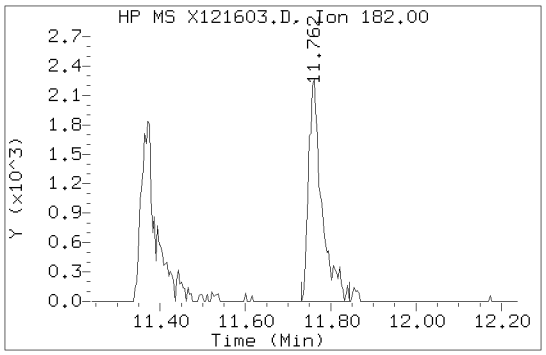
BEFORE

MASS
182
AREA
4404
HEIGHT
2261
27-Dec-2022
16:03
linh
pham



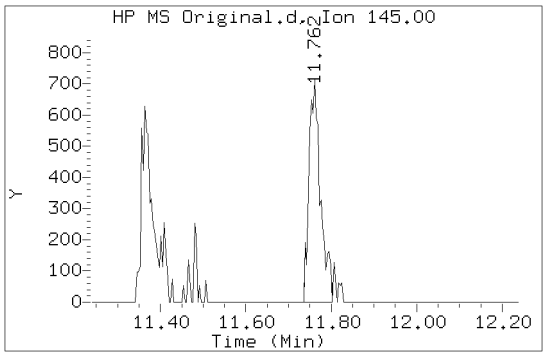
AFTER

MASS
182
AREA
4881
HEIGHT
2261
27-Dec-2022
16:07
linh
pham



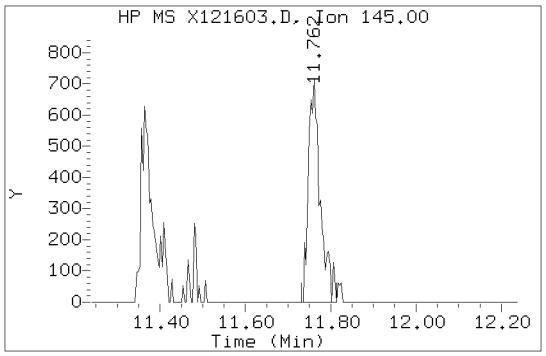
BEFORE

MASS
145
AREA
1338
HEIGHT
713
27-Dec-2022
16:03
linh
pham



AFTER

MASS
145
AREA
1384
HEIGHT
713
27-Dec-2022
16:07
linh
pham

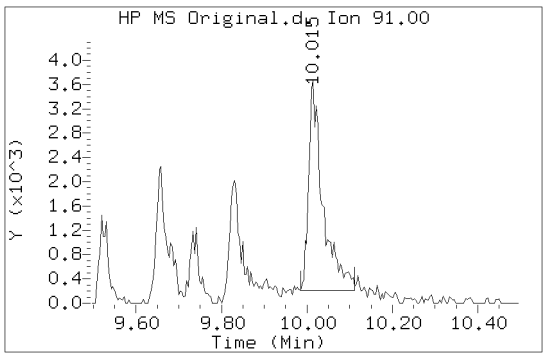


n-Butylbenzene (104-51-8)

Reason Code:

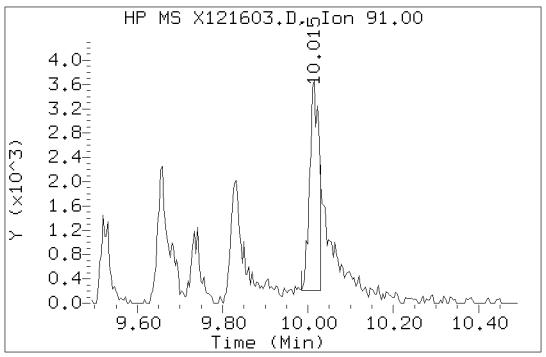
BEFORE

MASS
91
AREA
8005
HEIGHT
3451
27-Dec-2022
16:03
linh
pham



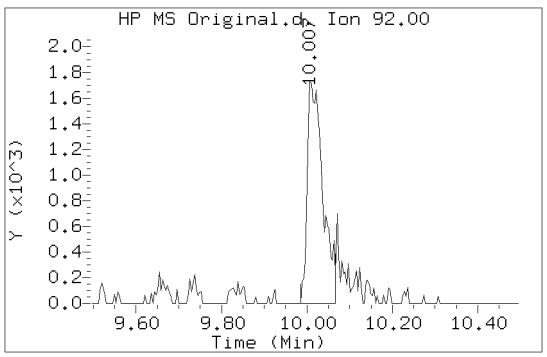
AFTER

MASS
91
AREA
5149
HEIGHT
3451
27-Dec-2022
16:07
linh
pham



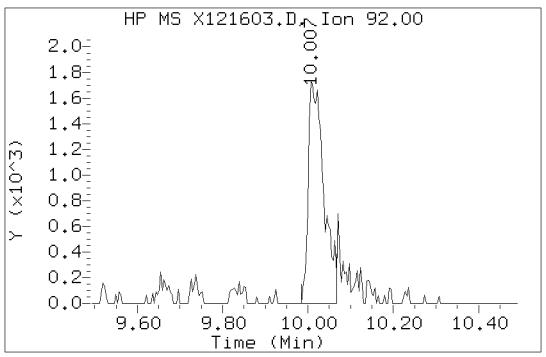
BEFORE

MASS
92
AREA
4404
HEIGHT
1727
27-Dec-2022
16:03
linh
pham



AFTER

MASS
92
AREA
4404
HEIGHT
1727
27-Dec-2022
16:07
linh
pham



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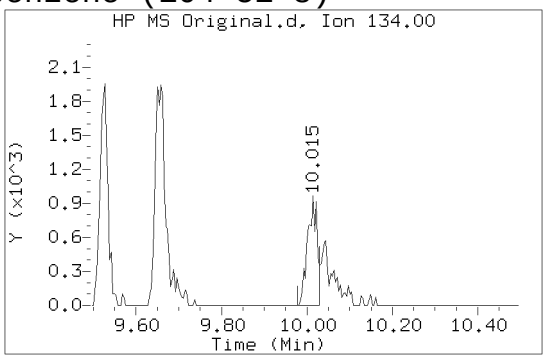
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

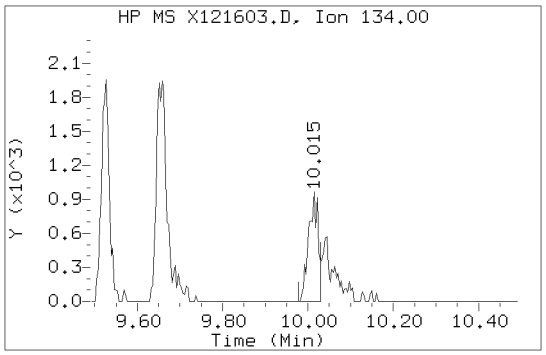
BEFORE

MASS
134
AREA
1502
HEIGHT
969
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
1502
HEIGHT
969
27-Dec-2022
16:07
linh
pham

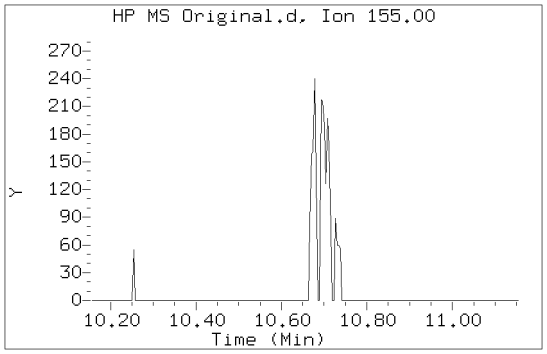


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

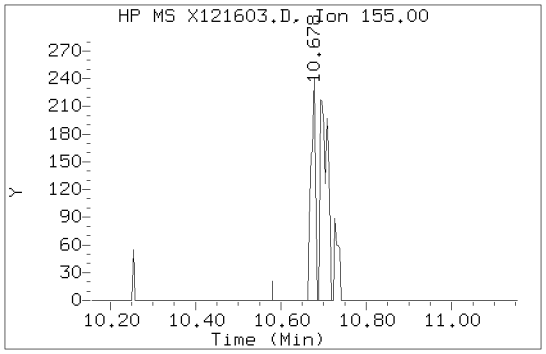
BEFORE

MASS
155
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



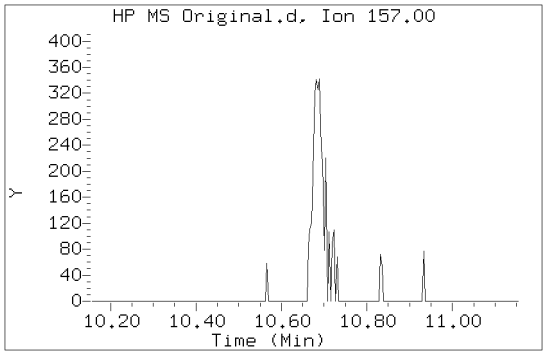
AFTER

MASS
155
AREA
441
HEIGHT
240
27-Dec-2022
16:07
linh
pham



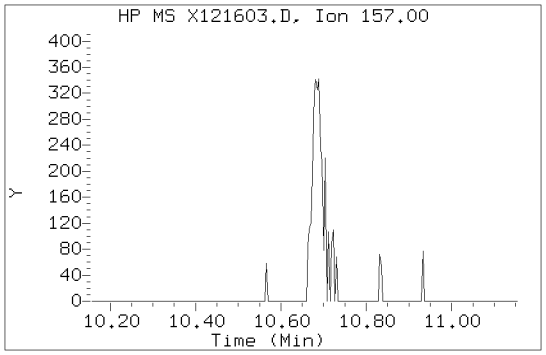
BEFORE

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



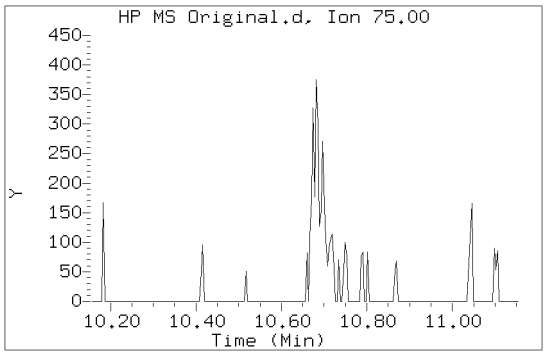
AFTER

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



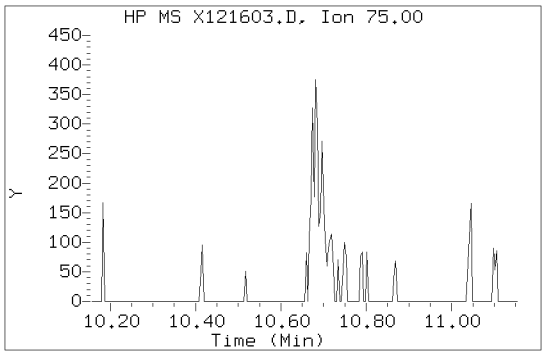
BEFORE

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



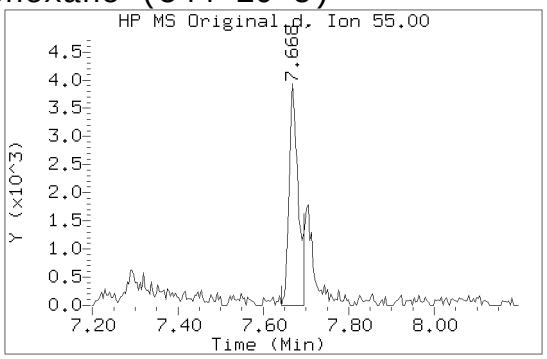
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1-Chlorohexane (544-10-5)

Reason Code:

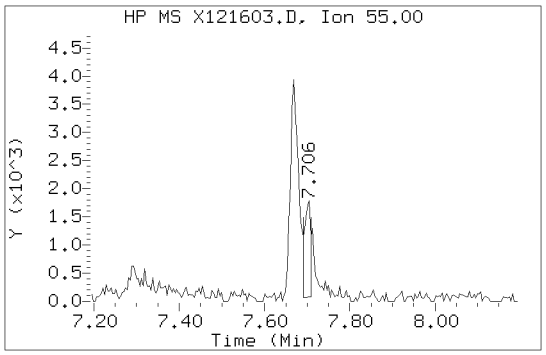
BEFORE

MASS
55
AREA
5785
HEIGHT
3936
27-Dec-2022
16:03
linh
pham



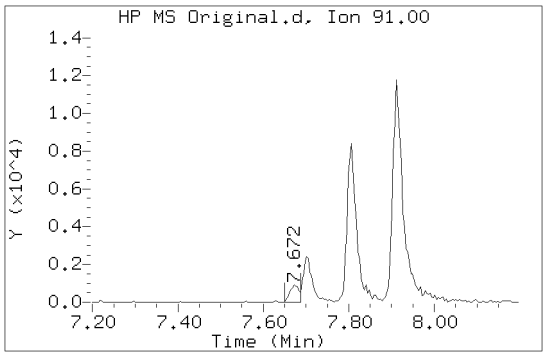
AFTER

MASS
55
AREA
1829
HEIGHT
1707
27-Dec-2022
16:07
linh
pham



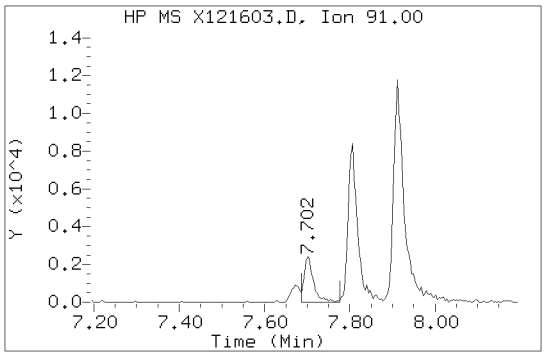
BEFORE

MASS
91
AREA
1355
HEIGHT
933
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
3802
HEIGHT
2430
27-Dec-2022
16:07
linh
pham

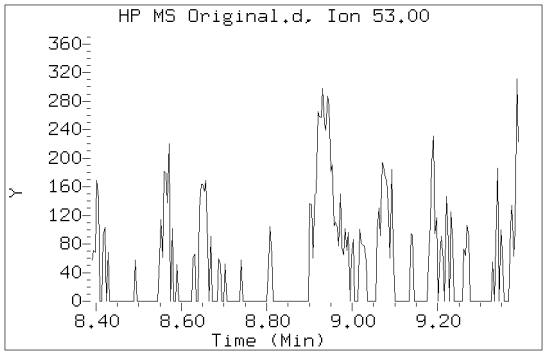


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

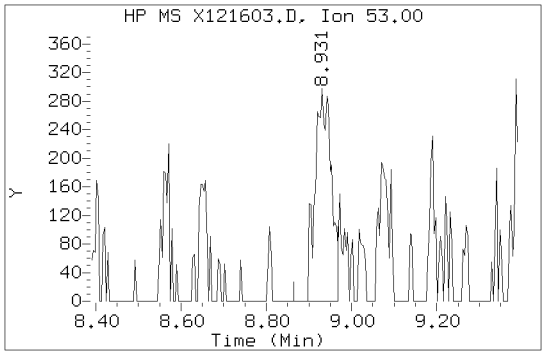
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



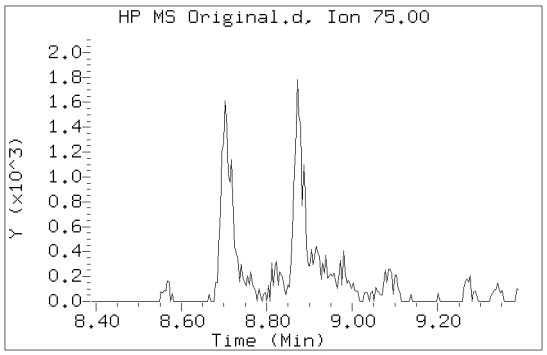
AFTER

MASS
53
AREA
792
HEIGHT
298
27-Dec-2022
16:07
linh
pham



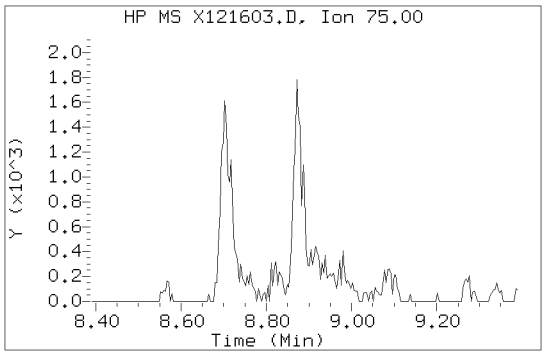
BEFORE

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

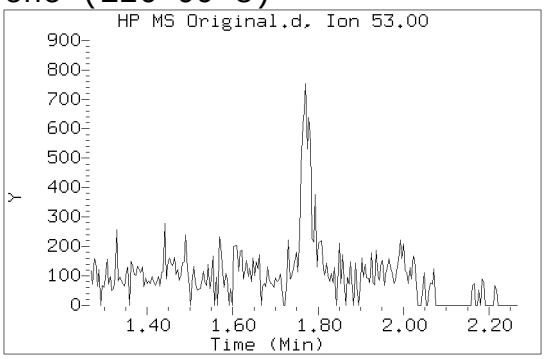


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

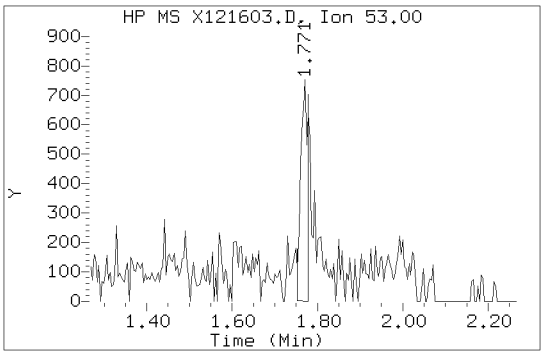
Chloroprene (126-99-8)

Reason Code:

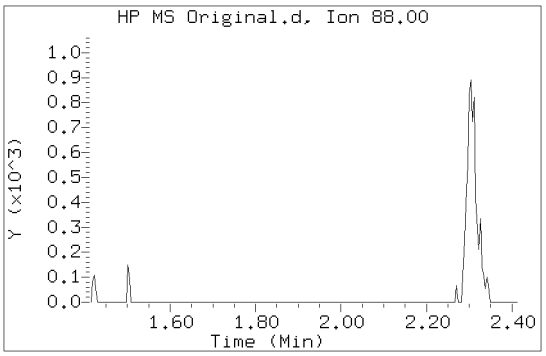
BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



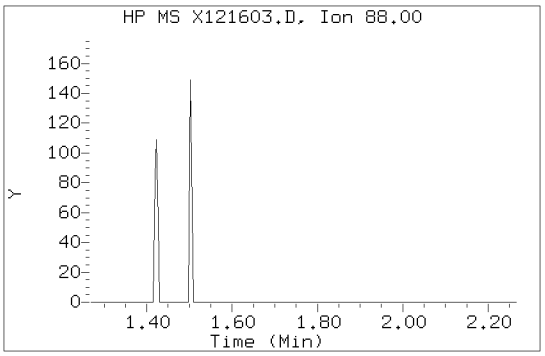
AFTER
MASS
53
AREA
900
HEIGHT
751
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



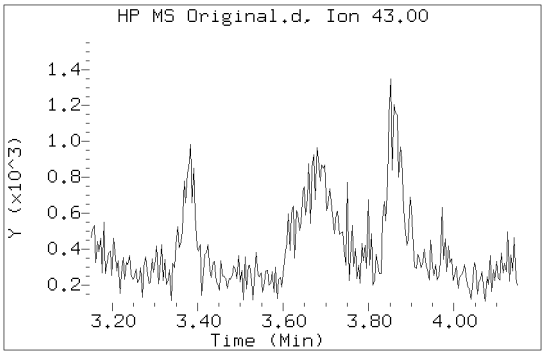
AFTER
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



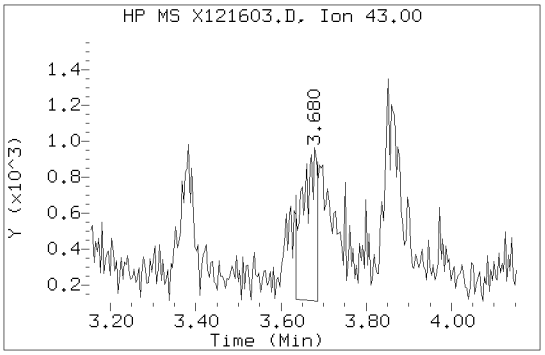
Ethyl Acetate (141-78-6)

Reason Code:

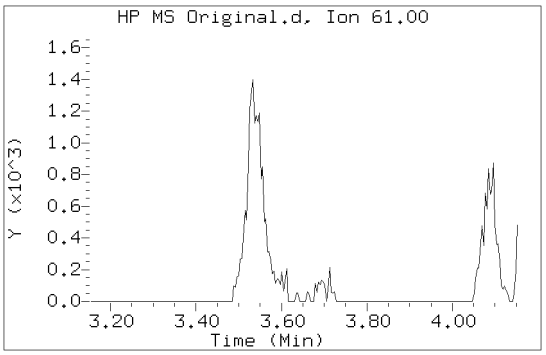
BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



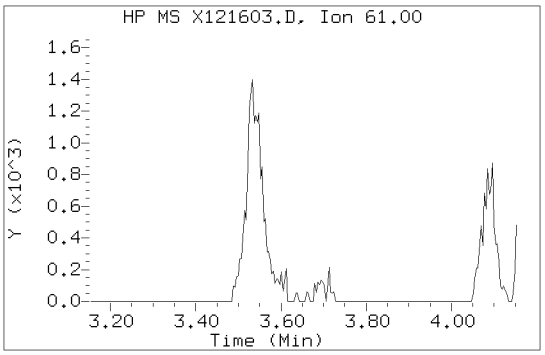
AFTER
MASS
43
AREA
2065
HEIGHT
853
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

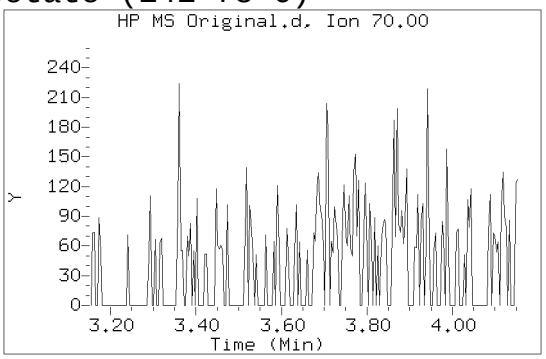


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Acetate (141-78-6)

BEFORE

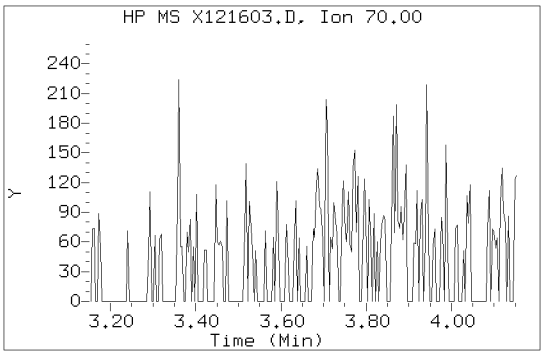
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

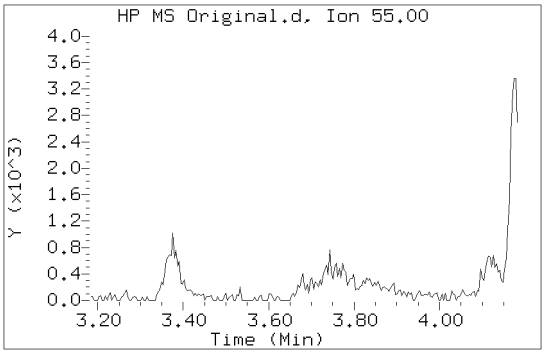
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Methyl Acrylate (96-33-3)

BEFORE

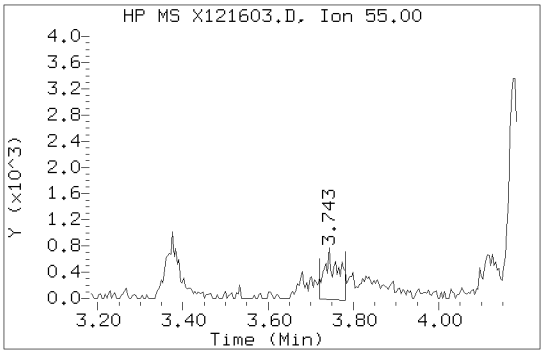
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

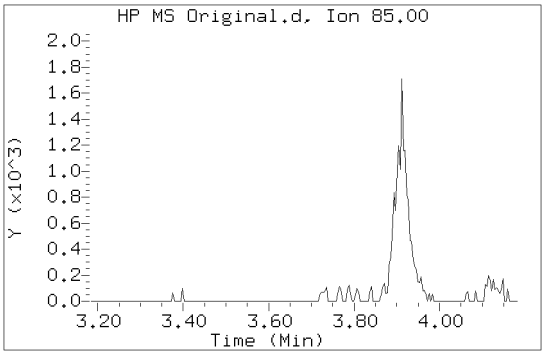
AFTER

MASS
55
AREA
1765
HEIGHT
787
27-Dec-2022
16:07
linh
pham



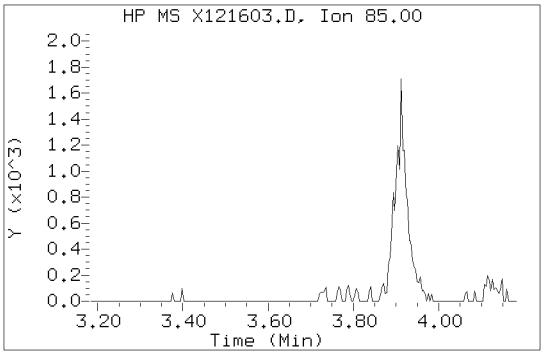
BEFORE

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

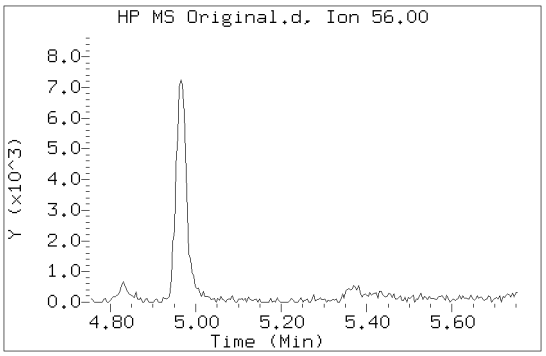
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



n-Butanol (71-36-3)

BEFORE

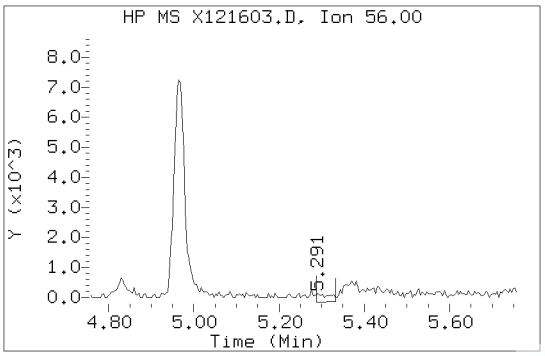
MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
56
AREA
622
HEIGHT
300
27-Dec-2022
16:07
linh
pham



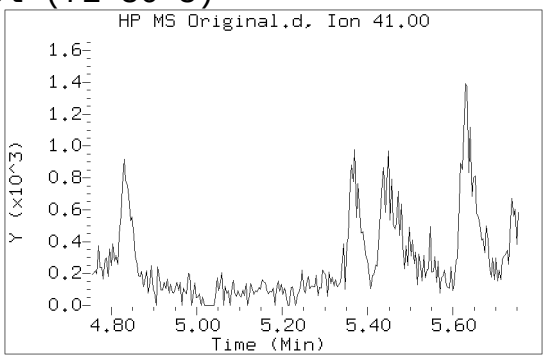
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butanol (71-36-3)

Reason Code:

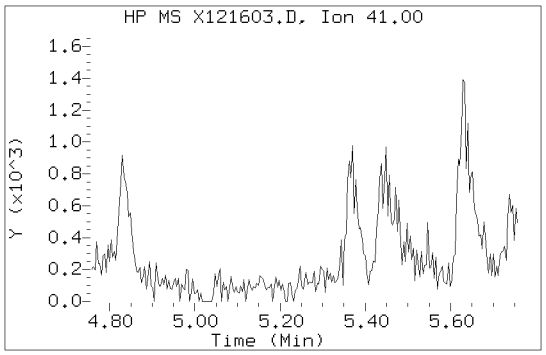
BEFORE

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

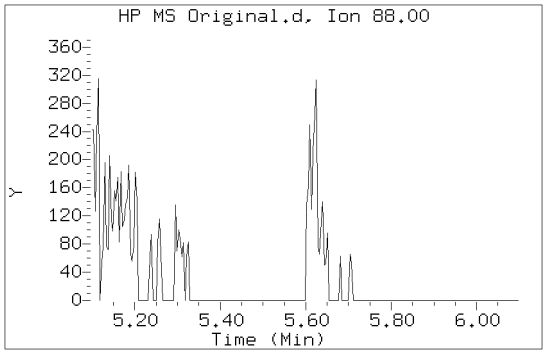


1,4-Dioxane ()

Reason Code:

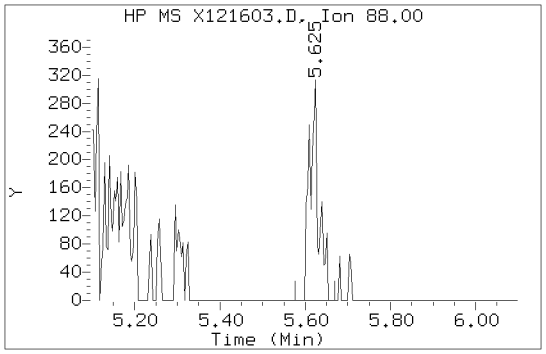
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



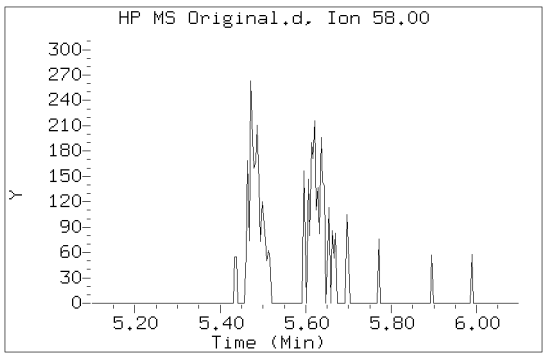
AFTER

MASS
88
AREA
462
HEIGHT
313
27-Dec-2022
16:07
linh
pham



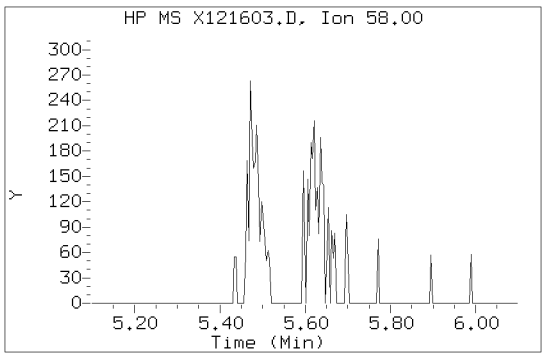
BEFORE

MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

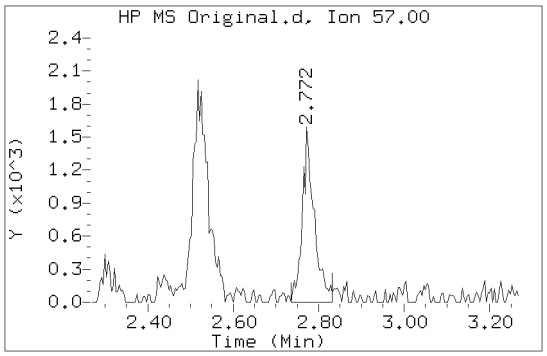


n-Hexane (110-54-3)

Reason Code:

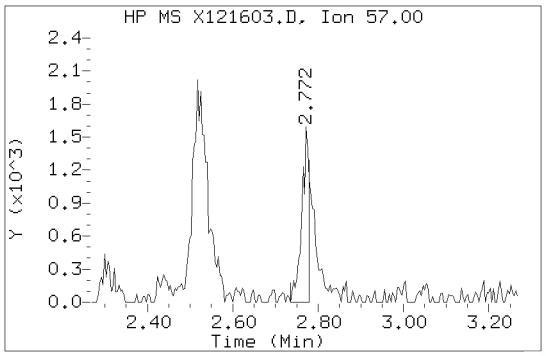
BEFORE

MASS
57
AREA
3089
HEIGHT
1591
27-Dec-2022
16:03
linh
pham



AFTER

MASS
57
AREA
1909
HEIGHT
1591
27-Dec-2022
16:07
linh
pham

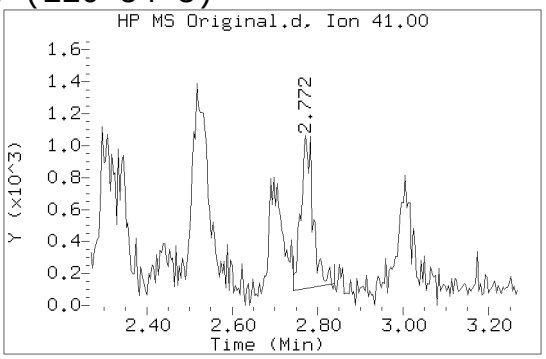


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

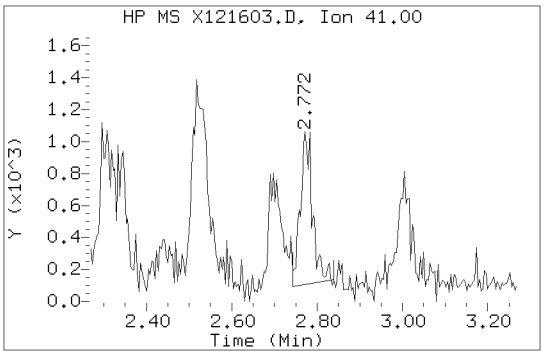
n-Hexane (110-54-3)

Reason Code:

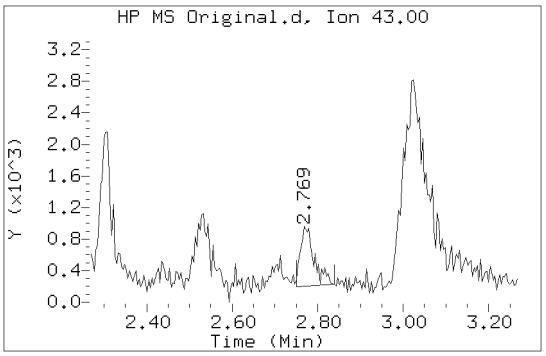
BEFORE
MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:03
linh
pham



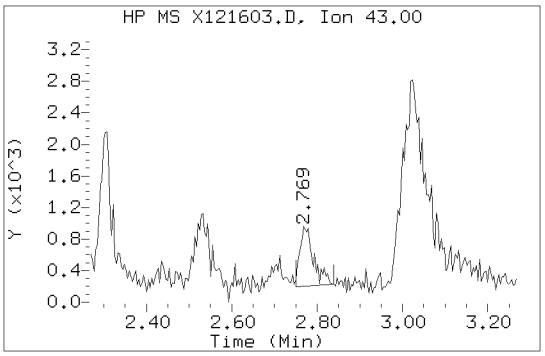
AFTER
MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:03
linh
pham



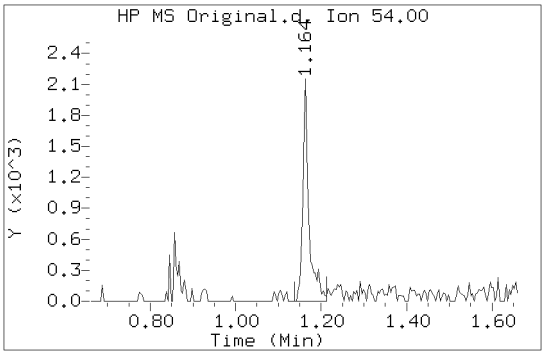
AFTER
MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:07
linh
pham



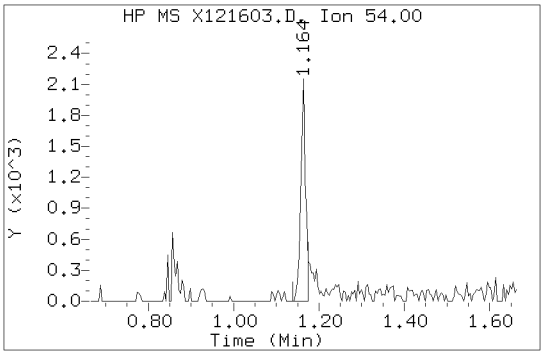
1,3-Butadiene (106-99-0)

Reason Code:

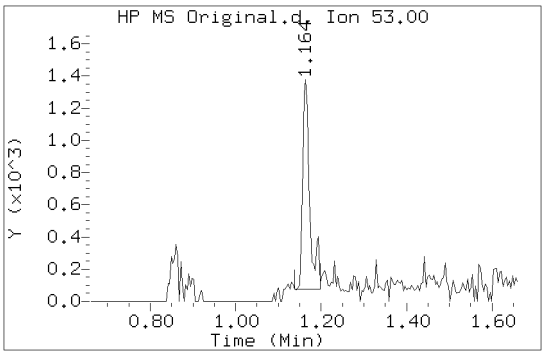
BEFORE
MASS
54
AREA
2206
HEIGHT
2153
27-Dec-2022
16:03
linh
pham



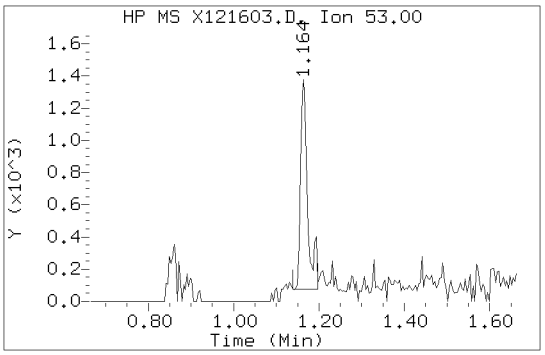
AFTER
MASS
54
AREA
1793
HEIGHT
2153
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
53
AREA
1535
HEIGHT
1301
27-Dec-2022
16:03
linh
pham



AFTER
MASS
53
AREA
1535
HEIGHT
1301
27-Dec-2022
16:07
linh
pham

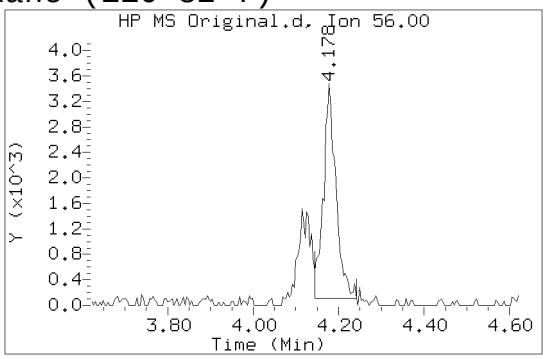


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

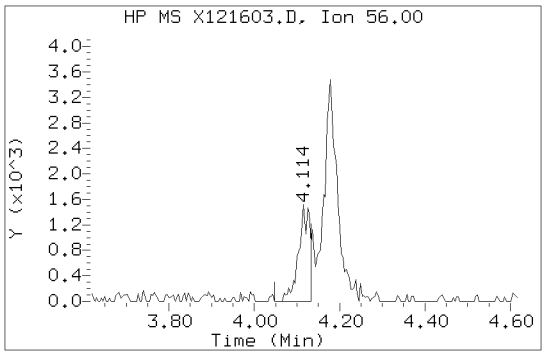
Cyclohexane (110-82-7)

Reason Code:

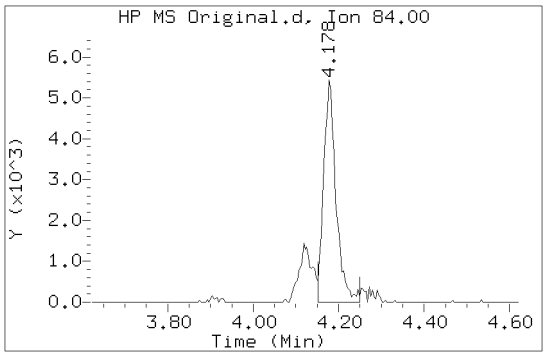
BEFORE
MASS
56
AREA
6884
HEIGHT
3363
27-Dec-2022
16:03
linh
pham



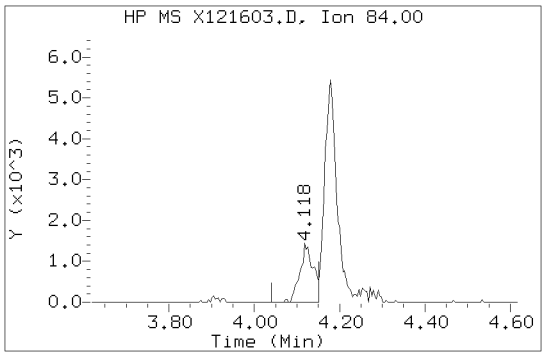
AFTER
MASS
56
AREA
2803
HEIGHT
1514
27-Dec-2022
16:07
linh
pham



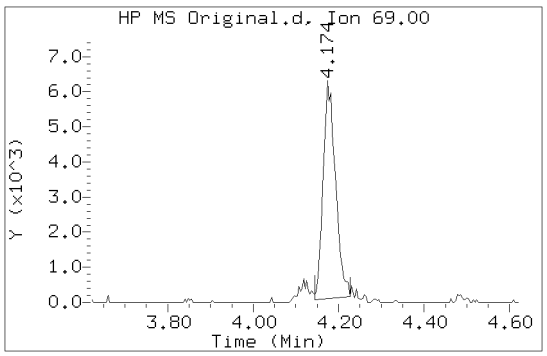
BEFORE
MASS
84
AREA
10951
HEIGHT
5440
27-Dec-2022
16:03
linh
pham



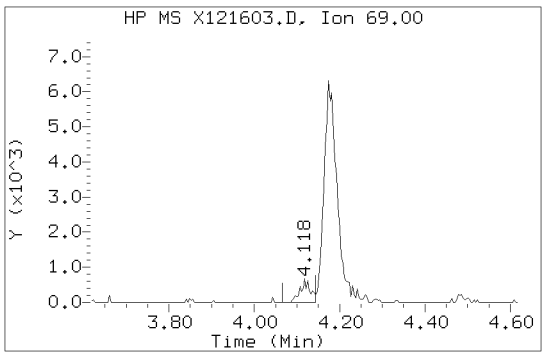
AFTER
MASS
84
AREA
3197
HEIGHT
1443
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
69
AREA
12449
HEIGHT
6206
27-Dec-2022
16:03
linh
pham



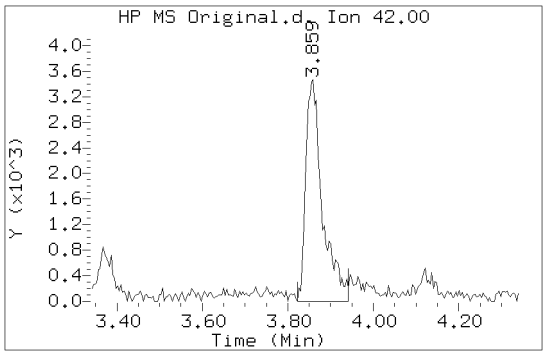
AFTER
MASS
69
AREA
1108
HEIGHT
681
27-Dec-2022
16:07
linh
pham



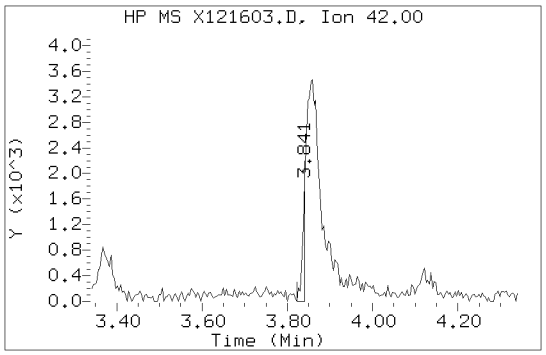
Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE
MASS
42
AREA
9468
HEIGHT
3467
27-Dec-2022
16:03
linh
pham



AFTER
MASS
42
AREA
900
HEIGHT
1891
27-Dec-2022
16:07
linh
pham



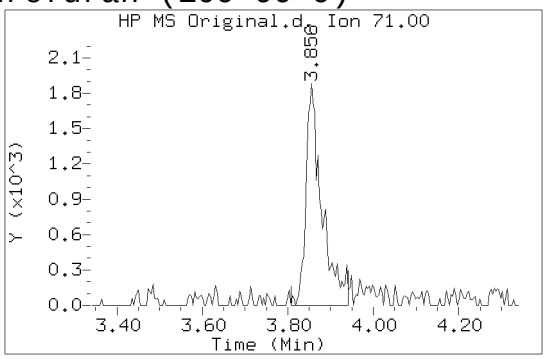
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrahydrofuran (109-99-9)

Reason Code:

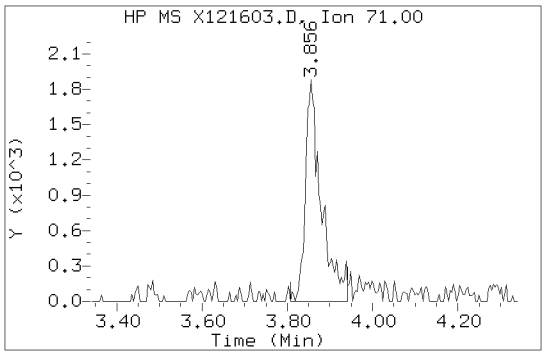
BEFORE

MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:03
linh
pham



AFTER

MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:07
linh
pham

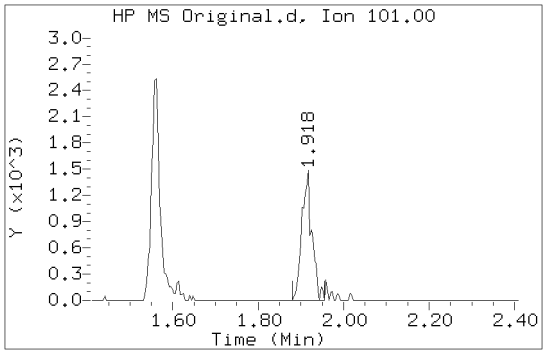


Freon TF (76-13-1)

Reason Code:

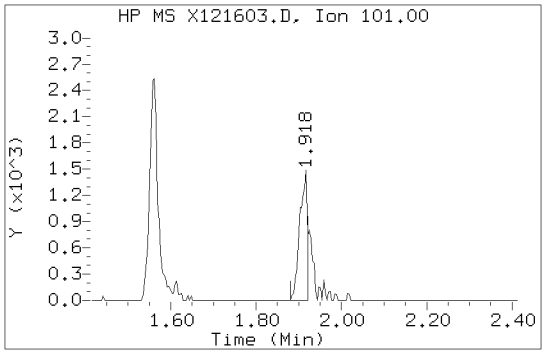
BEFORE

MASS
101
AREA
2478
HEIGHT
1484
27-Dec-2022
16:03
linh
pham



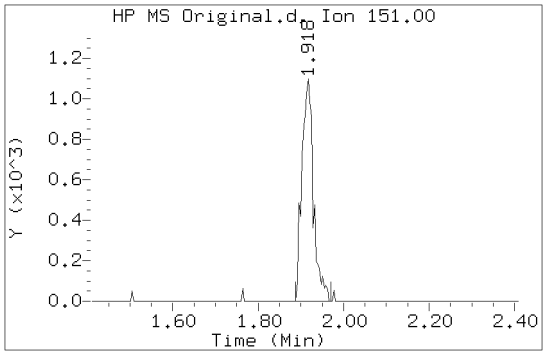
AFTER

MASS
101
AREA
1851
HEIGHT
1484
27-Dec-2022
16:07
linh
pham



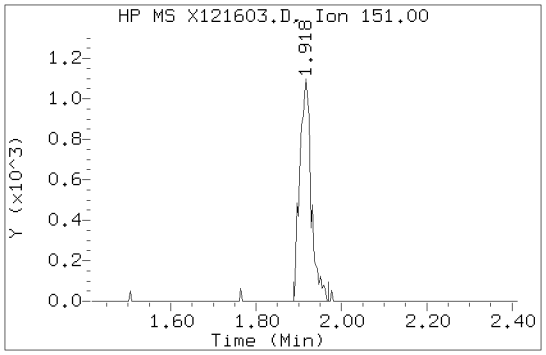
BEFORE

MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:03
linh
pham



AFTER

MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:07
linh
pham

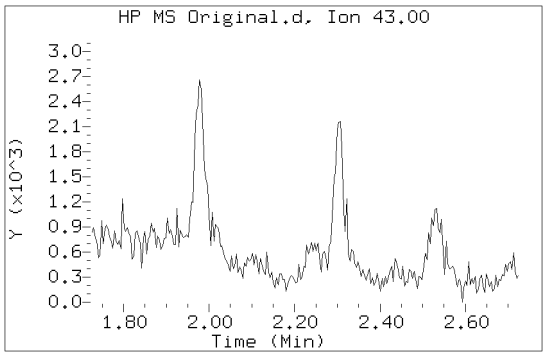


Methyl Acetate (79-20-9)

Reason Code:

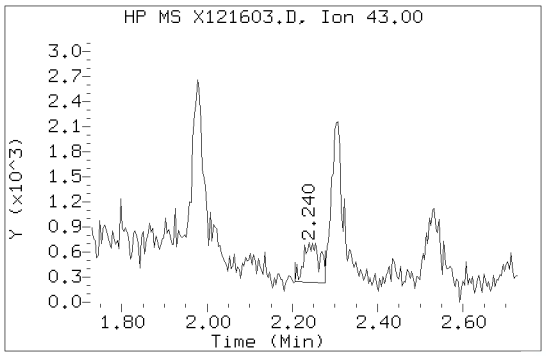
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
1269
HEIGHT
477
27-Dec-2022
16:07
linh
pham

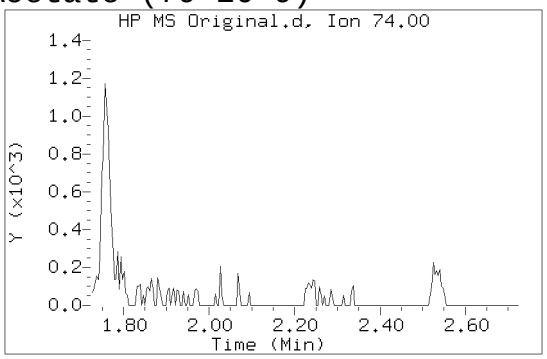


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Acetate (79-20-9)

BEFORE

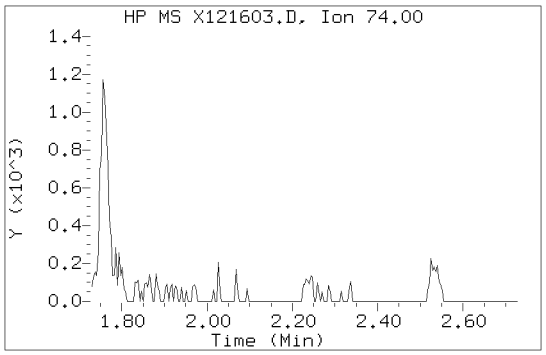
MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

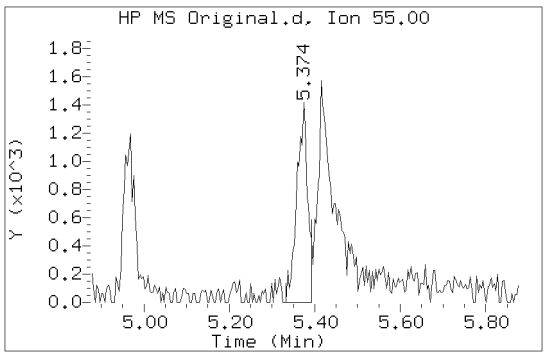
MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Methylcyclohexane (108-87-2)

BEFORE

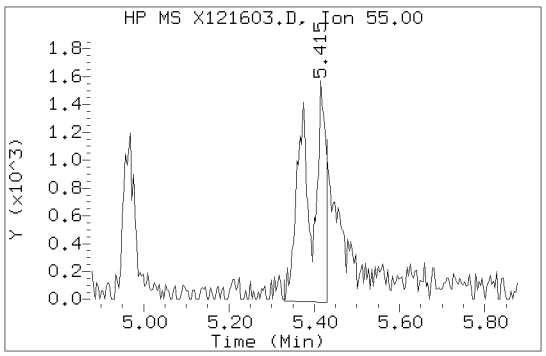
MASS
55
AREA
2505
HEIGHT
1416
27-Dec-2022
16:03
linh
pham



Reason Code:

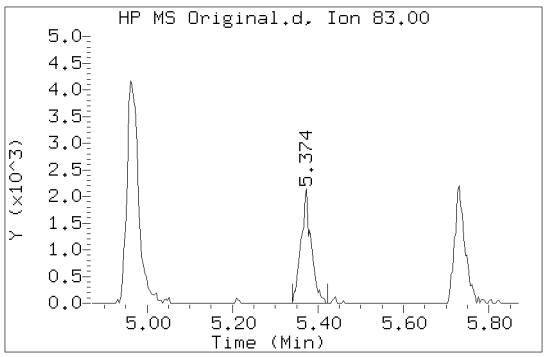
AFTER

MASS
55
AREA
4781
HEIGHT
1590
27-Dec-2022
16:07
linh
pham



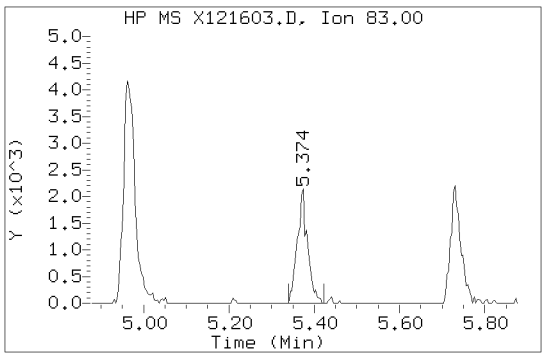
BEFORE

MASS
83
AREA
3627
HEIGHT
2141
27-Dec-2022
16:03
linh
pham



AFTER

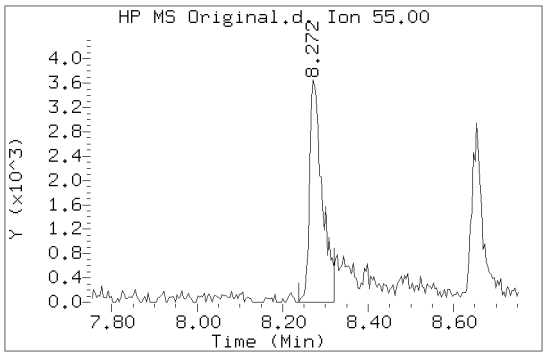
MASS
83
AREA
3627
HEIGHT
2141
27-Dec-2022
16:07
linh
pham



Butyl acrylate (141-32-2)

BEFORE

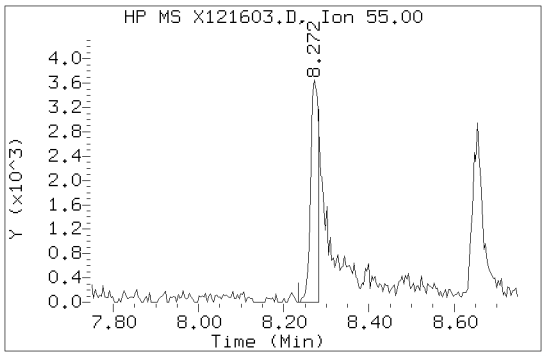
MASS
55
AREA
7480
HEIGHT
3653
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
55
AREA
4718
HEIGHT
3653
27-Dec-2022
16:07
linh
pham



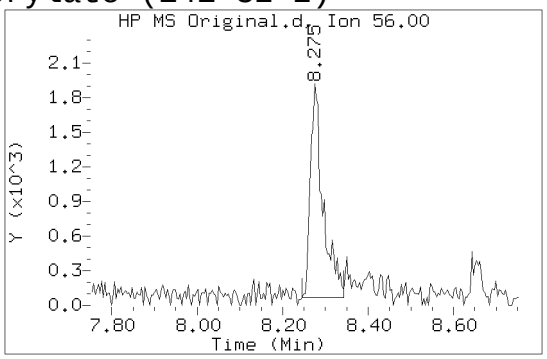
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl acrylate (141-32-2)

Reason Code:

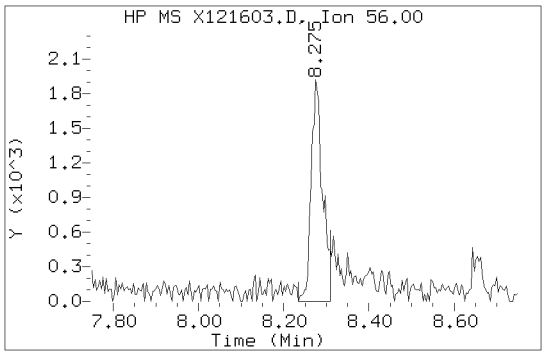
BEFORE

MASS
56
AREA
3795
HEIGHT
1858
27-Dec-2022
16:03
linh
pham



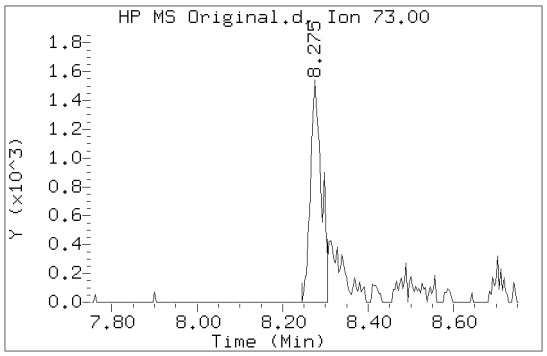
AFTER

MASS
56
AREA
3566
HEIGHT
1923
27-Dec-2022
16:07
linh
pham



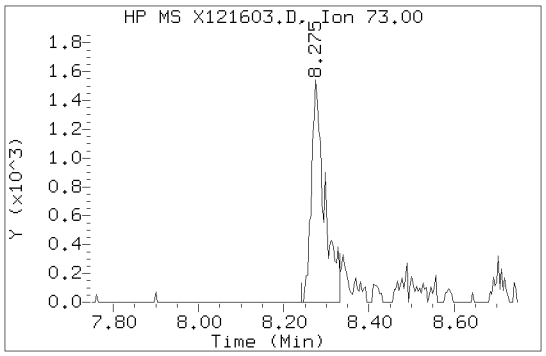
BEFORE

MASS
73
AREA
2742
HEIGHT
1542
27-Dec-2022
16:03
linh
pham



AFTER

MASS
73
AREA
3276
HEIGHT
1542
27-Dec-2022
16:07
linh
pham

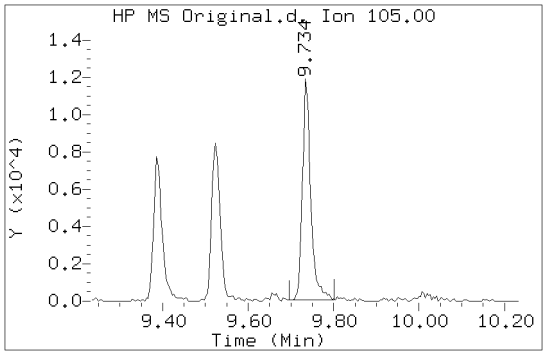


1,2,3-Trimethylbenzene (526-73-8)

Reason Code:

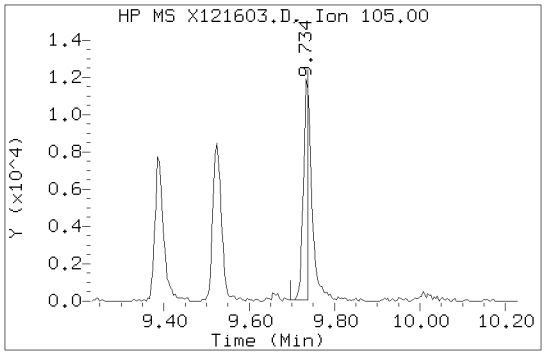
BEFORE

MASS
105
AREA
16642
HEIGHT
11860
27-Dec-2022
16:03
linh
pham



AFTER

MASS
105
AREA
9626
HEIGHT
11860
27-Dec-2022
16:07
linh
pham

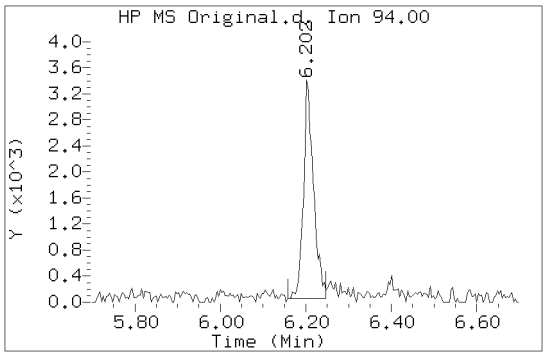


Dimethyl Disulfide (624-92-0)

Reason Code:

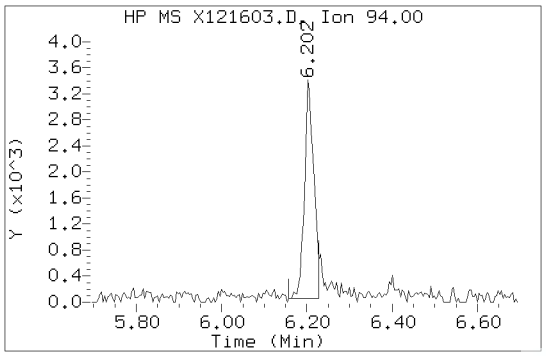
BEFORE

MASS
94
AREA
5523
HEIGHT
3352
27-Dec-2022
16:03
linh
pham



AFTER

MASS
94
AREA
5153
HEIGHT
3352
27-Dec-2022
16:07
linh
pham



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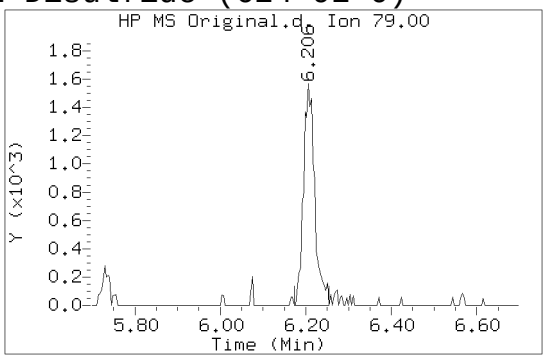
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Dimethyl Disulfide (624-92-0)

BEFORE
MASS
79
AREA
2905
HEIGHT
1568
27-Dec-2022
16:03
linh
pham



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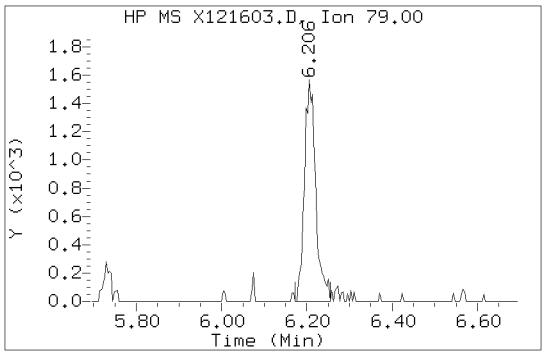

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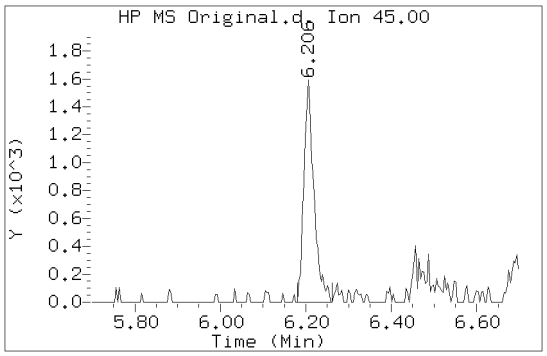

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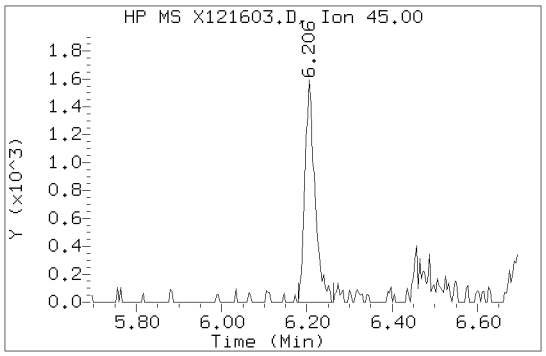

4-Bromofluorobenzene (460-00-4)

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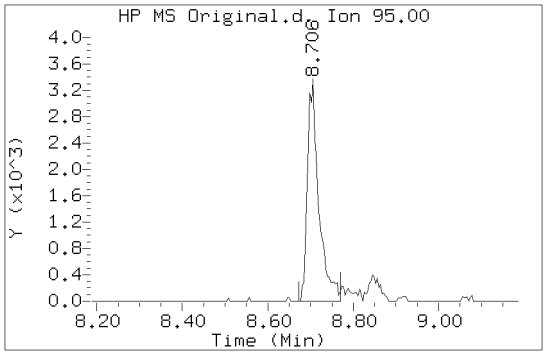

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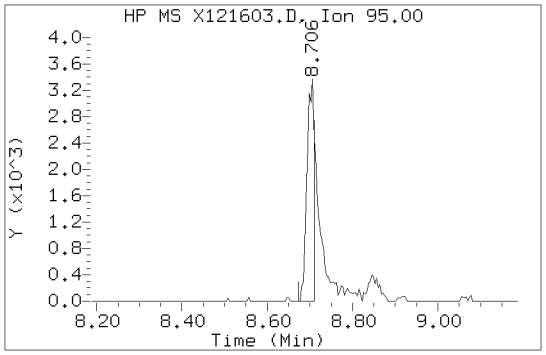

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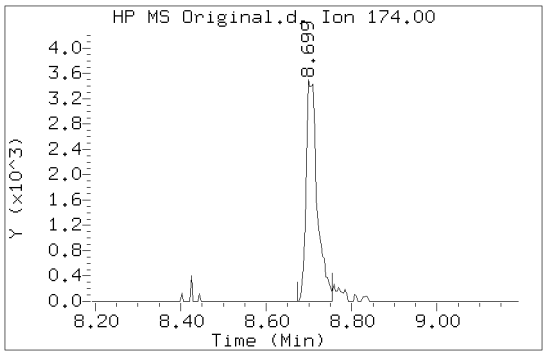

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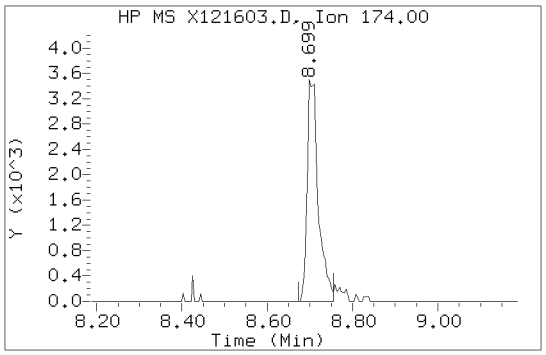

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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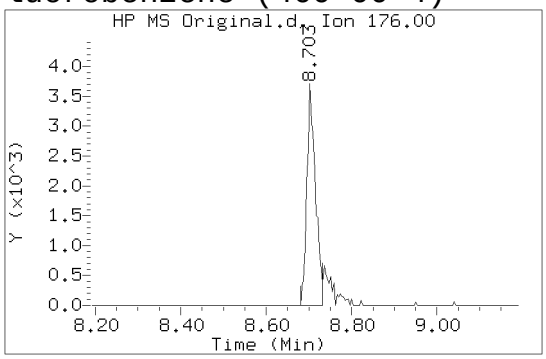

AFTER

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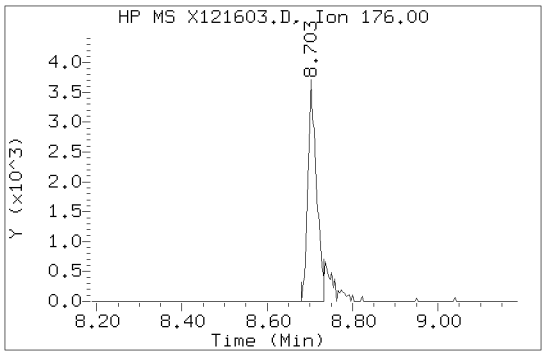

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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
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Inj Date : 16-DEC-2022 12:41
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 12:20 Cal File: X121603.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	450308	50.0000	
135 1,4-Dioxane	88	5.610	5.610	(1.343)	820	20.0000	19.92(M)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	3432	1.00000	1.11
25 Methacrylonitrile	41	3.852	3.852	(0.922)	3285	1.00000	1.03(M)
12 Isobutyl Alcohol	43	4.695	4.695	(1.124)	9436	20.0000	18.62(M)
13 Acetonitrile	39	2.198	2.198	(0.526)	4183	10.0000	10.20
14 Allyl Chloride	41	2.202	2.202	(0.527)	8574	1.00000	1.09
4 Propionitrile	54	3.687	3.687	(0.882)	4742	10.0000	10.32(M)
136 n-Hexane	57	2.776	2.776	(0.664)	2343	1.00000	0.72
72 trans-1,4-Dichloro-2-butene	53	8.920	8.920	(1.163)	1196	1.00000	0.85(M)
194 Acetaldehyde	44	1.212	1.212	(0.290)	3384	4.00000	(M)
23 Chloroprene	53	1.767	1.767	(0.423)	1686	1.00000	1.10(M)
145 alpha-Methylstyrene	118	9.272	9.272	(0.960)	6032	1.00000	0.77
200 Dimethyl Disulfide	94	6.206	6.206	(0.809)	8295	1.00000	0.94
139 Diethyl ether	59	1.760	1.760	(0.421)	2983	1.00000	0.99
130 Ethyl Acetate	43	3.675	3.675	(0.880)	3144	1.00000	0.89(M)
40 Methyl Methacrylate	41	5.628	5.628	(1.347)	3145	1.00000	1.02
49 Ethyl Methacrylate	69	6.727	6.727	(1.355)	3303	1.00000	1.02(M)
132 n-Butanol	56	5.239	5.239	(1.254)	1171	20.0000	60.69(M)
142 Tetrahydrofuran	42	3.844	3.844	(0.920)	1361	2.00000	(M)

150	Allyl alcohol	57	2.776	2.776 (0.664)	2343	20.0000	13.39
166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	18347	1.00000	1.08

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D Page 2
Report Date: 27-Dec-2022 16:07

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.743	3.743	(0.896)	3084	1.00000	1.00(M)
	162	Butyl acrylate	55	8.271	8.271	(1.078)	7647	1.00000	0.90
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	2911	1.00000	1.30
	3	Chloromethane	50	1.078	1.078	(0.258)	3670	1.00000	3.07
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	3645	1.00000	0.92
	6	Bromomethane	94	1.340	1.340	(0.321)	3293	1.00000	2.83
	7	Chloroethane	64	1.400	1.400	(0.335)	2516	1.00000	0.91(M)
	8	Trichlorofluoromethane	101	1.554	1.554	(0.372)	4906	1.00000	0.89
	9	Acrolein	56	1.452	1.452	(0.348)	761	2.00000	5.22(M)
	10	Acetone	43	1.977	1.977	(0.473)	4787	2.00000	3.75(M)
	11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	3238	1.00000	0.94
	15	Iodomethane	142	2.026	2.026	(0.485)	3865	2.00000	4.18(TM)
	16	Acrylonitrile	53	2.554	2.554	(0.612)	2258	2.00000	1.94(M)
	17	Methylene Chloride	84	2.300	2.300	(0.550)	5355	1.00000	1.14(M)
	18	Methyl tert-butyl ether	73	2.536	2.536	(0.607)	12521	1.00000	1.11
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	18122	2.00000	2.02
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	3821	1.00000	0.99
	21	Vinyl Acetate	43	3.012	3.012	(0.721)	17842	2.00000	1.81
	22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	7218	1.00000	1.07
	24	2-Butanone	43	3.619	3.619	(0.866)	2498	2.00000	4.83(M)
	26	2,2-Dichloropropane	77	3.514	3.514	(0.841)	5896	1.00000	1.03
	27	cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	4469	1.00000	0.96
	28	Chloroform	83	3.908	3.908	(0.935)	7768	1.00000	1.03
	29	Bromochloromethane	128	3.803	3.803	(0.910)	2689	1.00000	1.05
$	30	Dibromofluoromethane	113	4.103	4.103	(0.982)	4769	1.00000	0.94
	31	1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	5914	1.00000	0.99
	32	1,1-Dichloropropene	75	4.286	4.286	(0.863)	4698	1.00000	0.96
	33	1,2-Dichloroethane	62	4.564	4.564	(0.919)	5568	1.00000	0.99
	34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	6221	1.00000	1.19
$	35	1,2-Dichloroethane-d4	65	4.485	4.485	(1.074)	5559	1.00000	1.48
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	685937	50.0000	
	37	Benzene	78	4.515	4.515	(0.909)	16367	1.00000	0.99
	38	Trichloroethene	130	5.216	5.216	(1.051)	4352	1.00000	0.93
	39	Bromodichloromethane	83	5.730	5.730	(1.154)	6296	1.00000	1.02(M)
	41	2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	3202	2.00000	1.83(M)
	42	1,2-Dichloropropane	63	5.445	5.445	(1.097)	4604	1.00000	1.05(M)
	44	Dibromomethane	93	5.557	5.557	(1.119)	2906	1.00000	0.98
	45	4-Methyl-2-Pentanone	43	6.341	6.341	(0.827)	6859	2.00000	1.97
	46	cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	6537	1.00000	0.90
*	47	Chlorobenzene-d5	117	7.671	7.671	(1.000)	649074	50.0000	
$	48	Toluene-d8	98	6.401	6.401	(0.834)	17067	1.00000	1.06
	50	Toluene	91	6.457	6.457	(0.842)	17914	1.00000	0.99
	51	trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	5418	1.00000	0.90
	52	2-Hexanone	43	7.109	7.109	(0.927)	4520	2.00000	1.91
	53	1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	3499	1.00000	0.97
	54	1,3-Dichloropropane	76	6.989	6.989	(0.911)	7216	1.00000	1.01
	55	Dibromochloromethane	129	7.177	7.177	(0.936)	5024	1.00000	0.96
	56	Tetrachloroethene	164	6.933	6.933	(0.904)	3331	1.00000	0.89
	57	1,2-Dibromoethane	107	7.270	7.270	(0.948)	4350	1.00000	0.96
	58	1-Chlorohexane	55	7.705	7.705	(1.552)	3155	1.00000	0.95(MH)
	59	Chlorobenzene	112	7.698	7.698	(1.003)	12555	1.00000	0.98
	60	1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	4485	1.00000	0.94

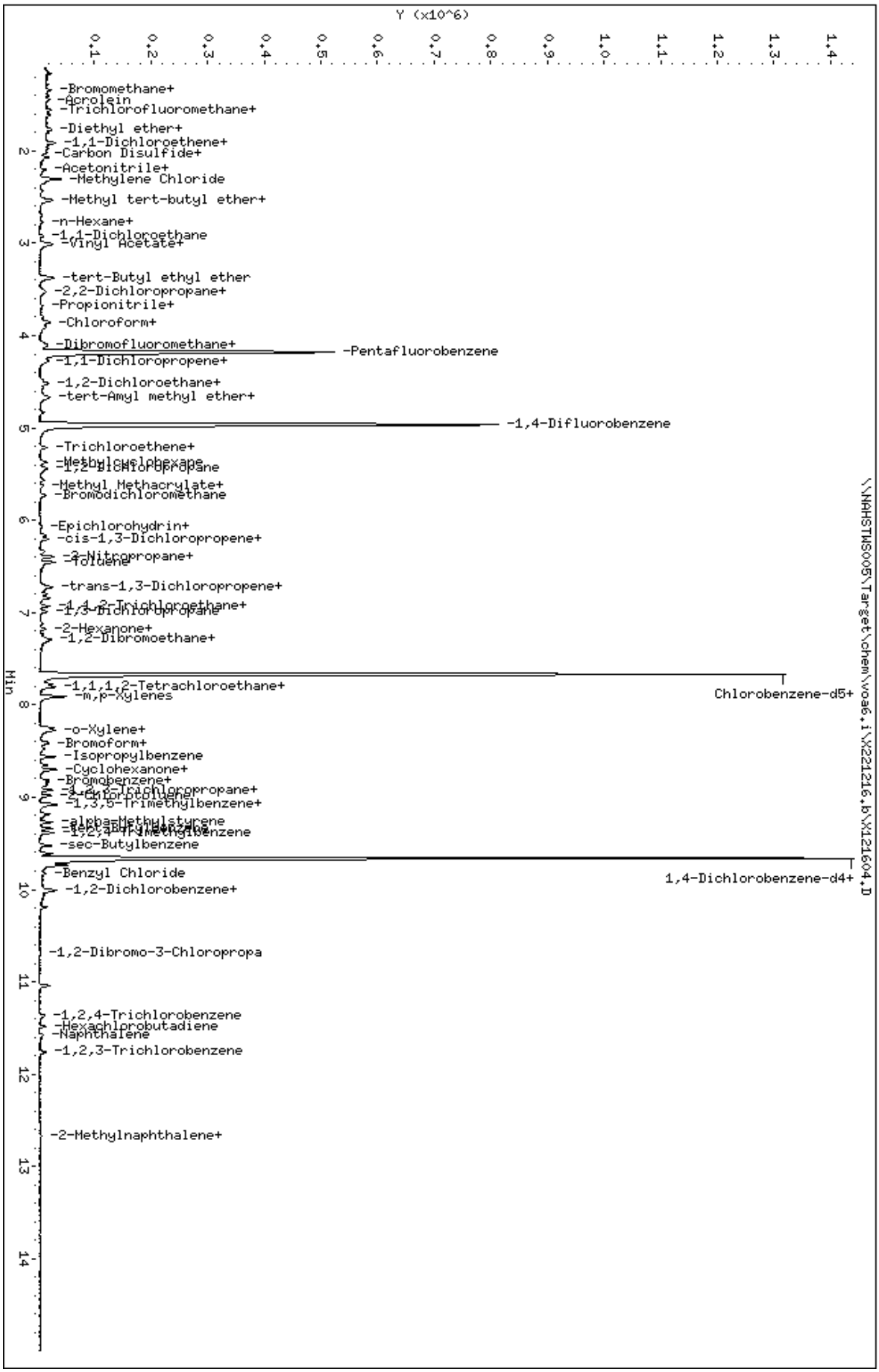
61 Ethylbenzene	106	7.806	7.806 (1.018)	5698	1.00000	0.95
62 m,p-Xylenes	106	7.911	7.911 (1.031)	14464	2.00000	1.87

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D Page 3
Report Date: 27-Dec-2022 16:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.249	8.249	(1.075)	6670	1.00000	0.87
	64 Styrene	104	8.282	8.282	(1.080)	10384	1.00000	0.81
	66 Bromoform	173	8.417	8.417	(1.097)	3274	1.00000	0.90(T)
	67 Isopropylbenzene	105	8.564	8.564	(1.116)	15163	1.00000	0.87
	68 1,1,2,2-Tetrachloroethane	83	8.845	8.845	(0.915)	5934	1.00000	1.05(M)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	7790	1.00000	1.36(M)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	351251	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	3978	1.00000	1.01
	73 n-Propylbenzene	91	8.923	8.923	(0.924)	15006	1.00000	0.77
	74 Bromobenzene	156	8.818	8.818	(0.913)	5554	1.00000	0.96
	75 1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	11820	1.00000	0.82
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	12470	1.00000	0.97
	77 4-Chlorotoluene	91	9.085	9.085	(0.940)	12140	1.00000	0.83
	78 tert-Butylbenzene	119	9.340	9.340	(0.967)	9357	1.00000	0.79
	79 1,2,4-Trimethylbenzene	105	9.385	9.385	(0.971)	12988	1.00000	0.85
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	12395	1.00000	0.79
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	10009	1.00000	0.71
	83 1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	8523	1.00000	0.89
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	9866	1.00000	0.94
	86 Benzyl Chloride	91	9.823	9.823	(1.280)	4632	1.00000	3.12
	87 n-Butylbenzene	91	10.014	10.014	(1.036)	8459	1.00000	2.37(M)
	88 1,2-Dichlorobenzene	146	10.007	10.007	(1.036)	8626	1.00000	0.87
	89 1,2-Dibromo-3-Chloropropane	155	10.689	10.689	(1.106)	778	1.00000	0.95(M)
	90 1,2,4-Trichlorobenzene	180	11.371	11.371	(1.177)	4609	1.00000	0.74
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	1928	1.00000	0.65
	92 Naphthalene	128	11.574	11.574	(1.198)	11288	1.00000	0.79(M)
	93 1,2,3-Trichlorobenzene	180	11.754	11.754	(1.216)	4801	1.00000	0.80
M	94 1,2-Dichloroethylene (total)	96				8290	2.00000	
M	95 Xylenes (total)	106				21134	3.00000	
	141 Cyclohexane	56	4.125	4.125	(0.987)	4003	1.00000	2.12(H)
	138 Freon TF	101	1.906	1.906	(0.456)	3356	1.00000	1.01
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	6848	1.00000	0.81(M)
	146 Methyl Acetate	43	2.236	2.236	(0.535)	2127	1.00000	1.04(M)
	148 Tert-Butyl alcohol	59	2.438	2.438	(0.584)	6051	20.0000	19.40(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
-Bromomethane+
-Acrolein
-Trichlorofluoromethane+
-Diethyl ether+
-1,1-Dichloroethene+
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Methyl tert-butyl ether+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-Propionitrile+
-Chloroform+
-Dibromofluoromethane+
-Pentafluorobenzene
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-tert-Amyl methyl ether+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-Epichlorohydrin+
-cis-1,3-Dichloropropene+
-2-Nitropropane+
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane
-2-Hexanone+
-1,2-Dibromoethane+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
Chlorobenzene-d5+
-o-Xylene+
-Bromoform+
-Isopropylbenzene
-Cyclohexanone+
-Bromobenzene+
-1,1,2,2-Tetrachloropropane+
-1,2,4-Trichlorobenzene
-1,3,5-Trimethylbenzene+
-alpha-Methylstyrene
-tert-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
-2-Methylnaphthalene+
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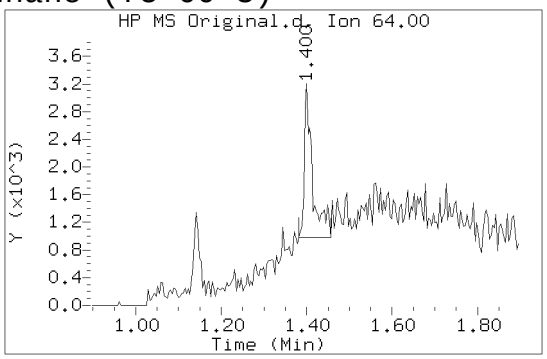
Date : 16-DEC-2022 12:41
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

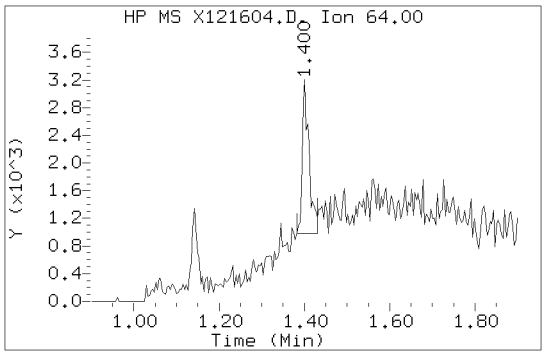
Chloroethane (75-00-3)

Reason Code:

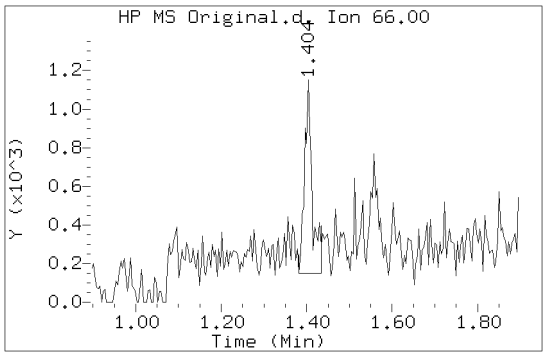
BEFORE
MASS
64
AREA
2984
HEIGHT
2221
27-Dec-2022
16:03
linh
pham



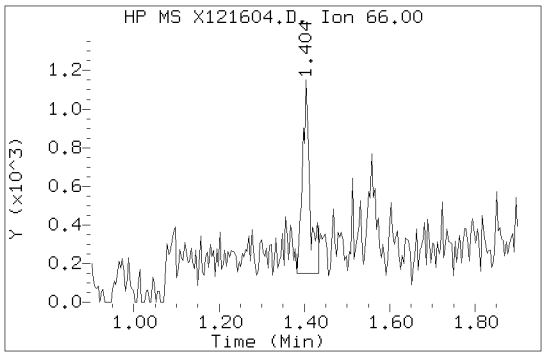
AFTER
MASS
64
AREA
2516
HEIGHT
2221
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
66
AREA
1262
HEIGHT
1002
27-Dec-2022
16:03
linh
pham



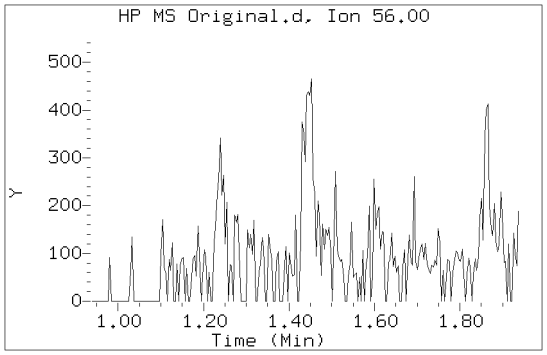
AFTER
MASS
66
AREA
1262
HEIGHT
1002
27-Dec-2022
16:07
linh
pham



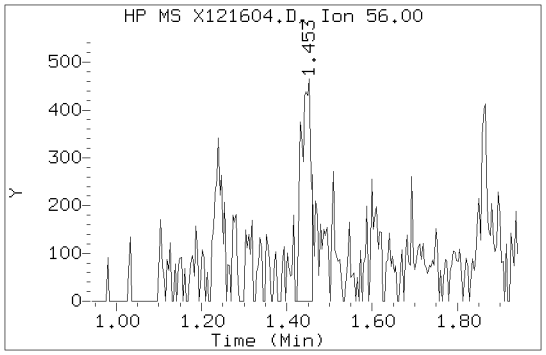
Acrolein (107-02-8)

Reason Code:

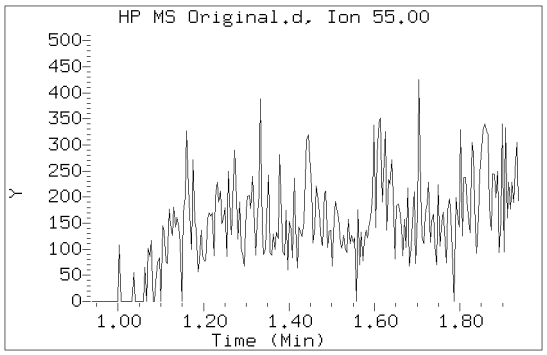
BEFORE
MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



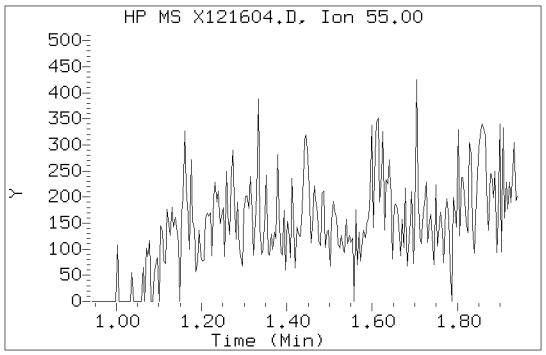
AFTER
MASS
56
AREA
761
HEIGHT
465
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

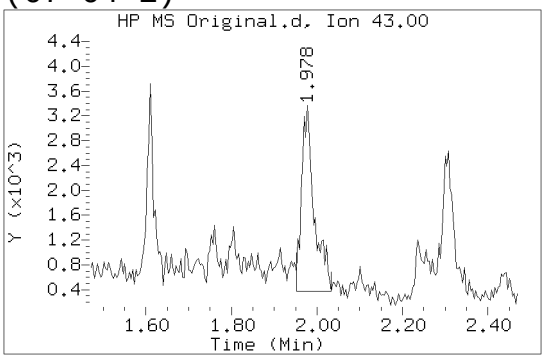


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

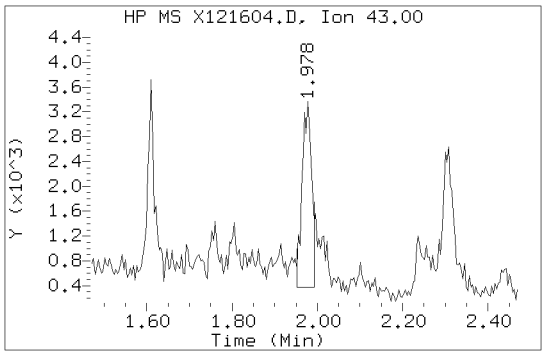
Acetone (67-64-1)

Reason Code:

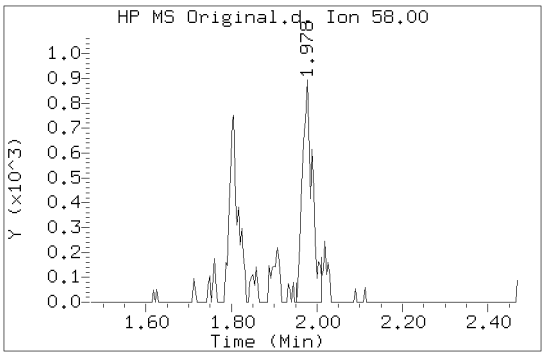
BEFORE
MASS
43
AREA
6265
HEIGHT
2993
27-Dec-2022
16:03
linh
pham



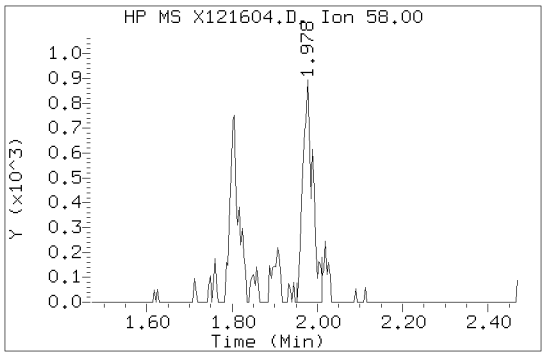
AFTER
MASS
43
AREA
4787
HEIGHT
2993
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
58
AREA
1474
HEIGHT
894
27-Dec-2022
16:03
linh
pham



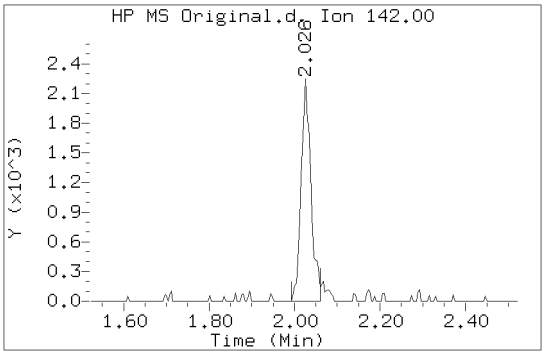
AFTER
MASS
58
AREA
1474
HEIGHT
894
27-Dec-2022
16:07
linh
pham



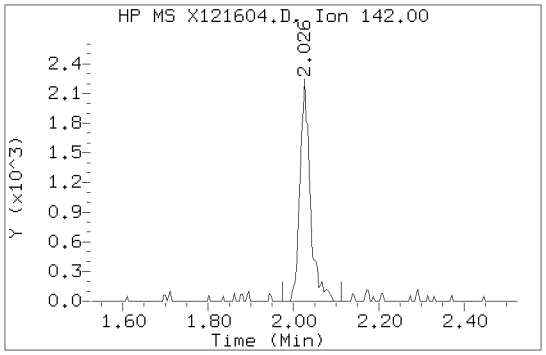
Iodomethane (74-88-4)

Reason Code:

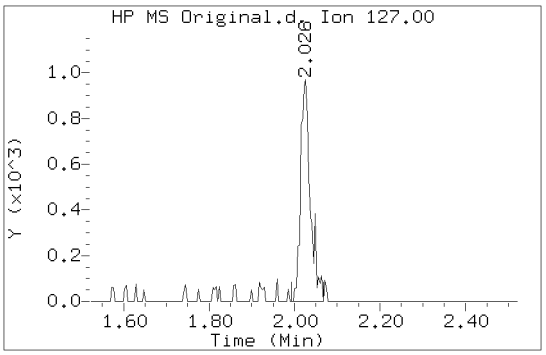
BEFORE
MASS
142
AREA
3661
HEIGHT
2248
27-Dec-2022
16:03
linh
pham



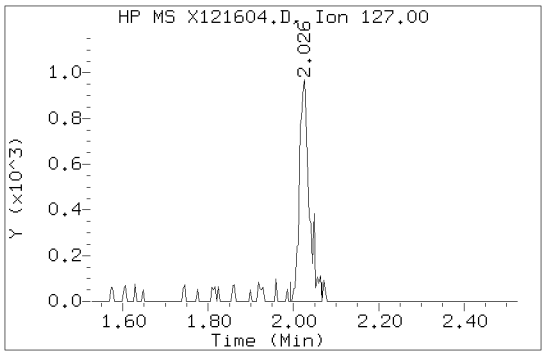
AFTER
MASS
142
AREA
3865
HEIGHT
2248
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
127
AREA
1585
HEIGHT
970
27-Dec-2022
16:03
linh
pham



AFTER
MASS
127
AREA
1585
HEIGHT
970
27-Dec-2022
16:07
linh
pham



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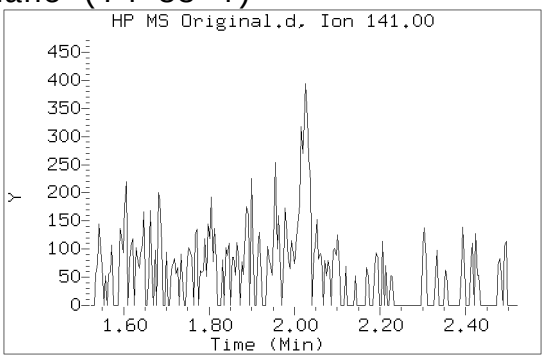
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Iodomethane (74-88-4)

Reason Code:

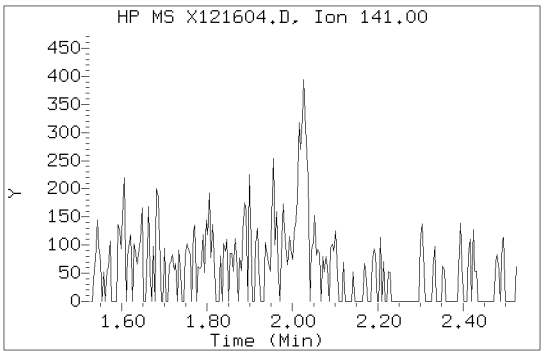
BEFORE

MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
141
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

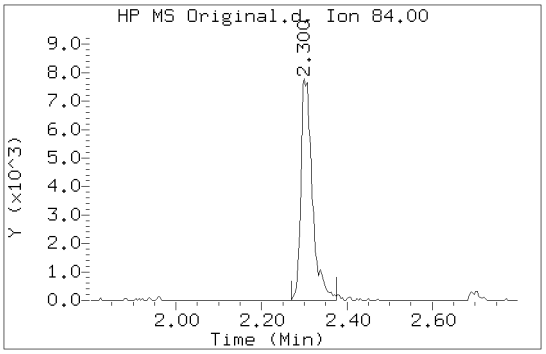


Methylene Chloride (75-09-2)

Reason Code:

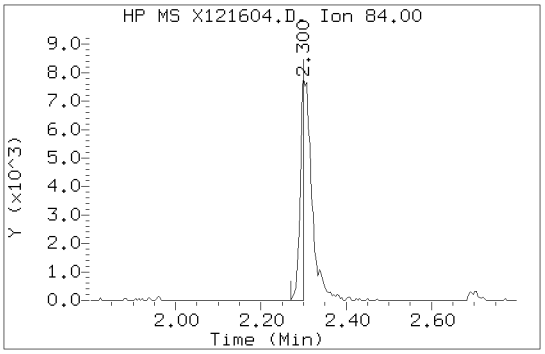
BEFORE

MASS
84
AREA
14864
HEIGHT
7788
27-Dec-2022
16:03
linh
pham



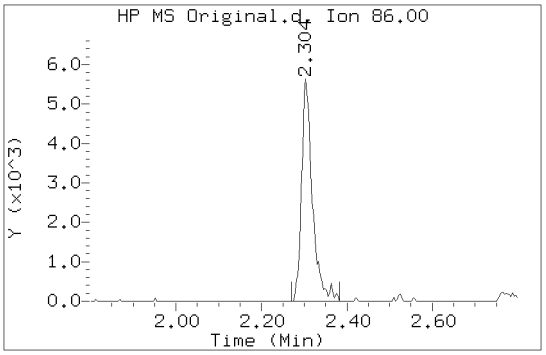
AFTER

MASS
84
AREA
5355
HEIGHT
7788
27-Dec-2022
16:07
linh
pham



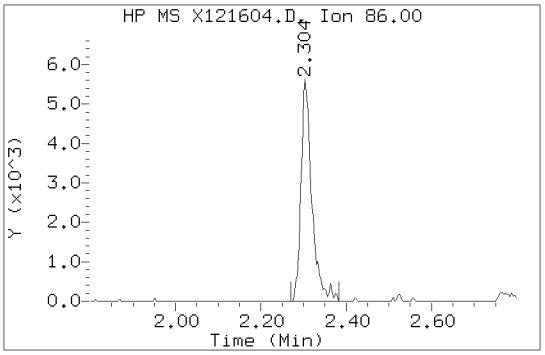
BEFORE

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:03
linh
pham



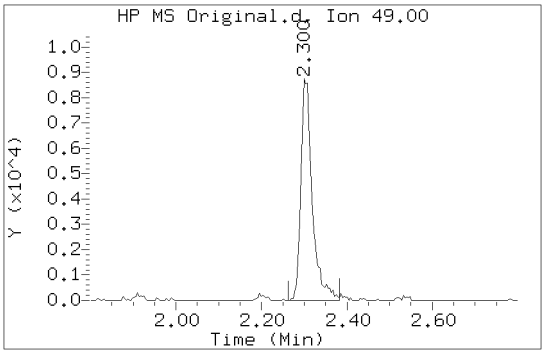
AFTER

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:07
linh
pham



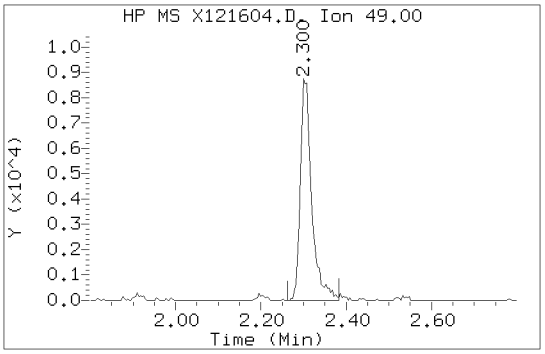
BEFORE

MASS
49
AREA
16641
HEIGHT
8752
27-Dec-2022
16:03
linh
pham



AFTER

MASS
49
AREA
16641
HEIGHT
8752
27-Dec-2022
16:07
linh
pham

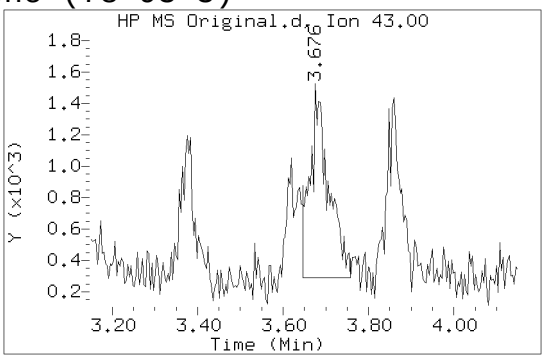


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Butanone (78-93-3)

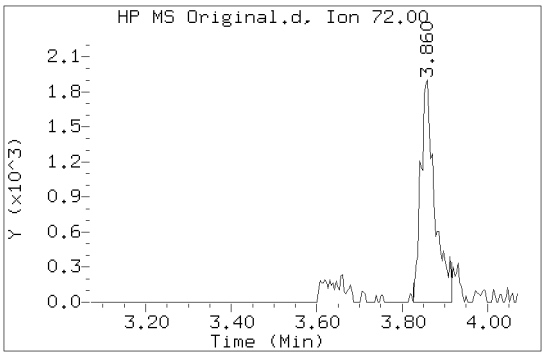
BEFORE

MASS
43
AREA
3758
HEIGHT
1236
27-Dec-2022
16:03
linh
pham



BEFORE

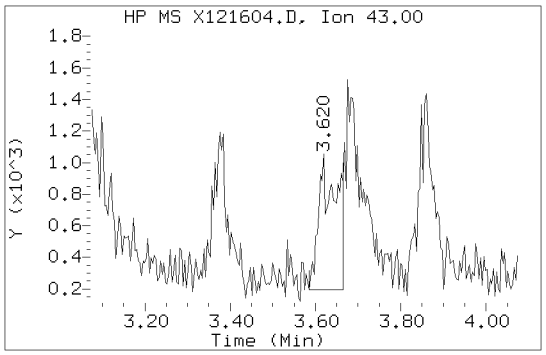
MASS
72
AREA
4320
HEIGHT
1902
27-Dec-2022
16:03
linh
pham



Reason Code:

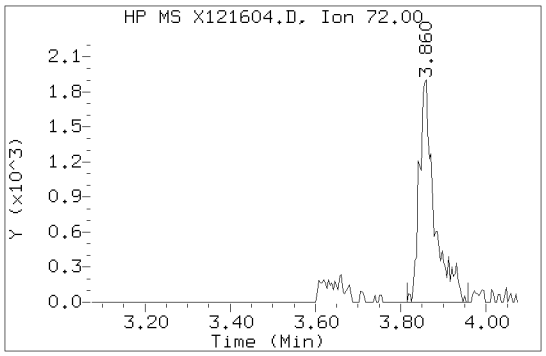
AFTER

MASS
43
AREA
2498
HEIGHT
859
27-Dec-2022
16:07
linh
pham



AFTER

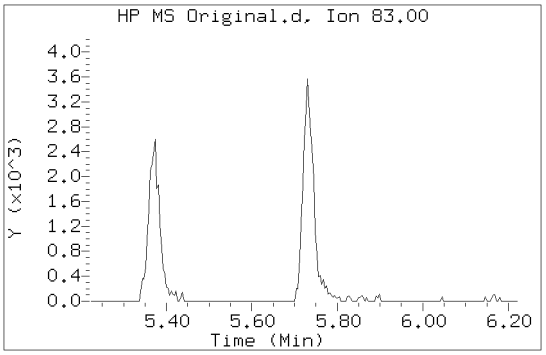
MASS
72
AREA
4690
HEIGHT
1902
27-Dec-2022
16:07
linh
pham



Bromodichloromethane (75-27-4)

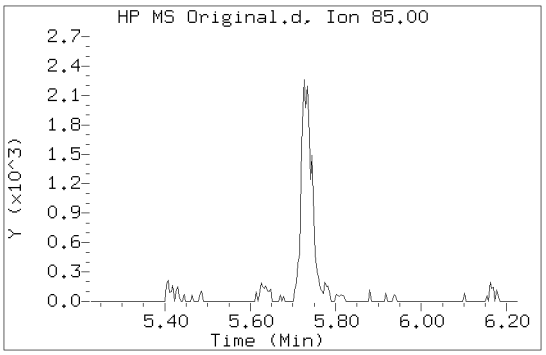
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

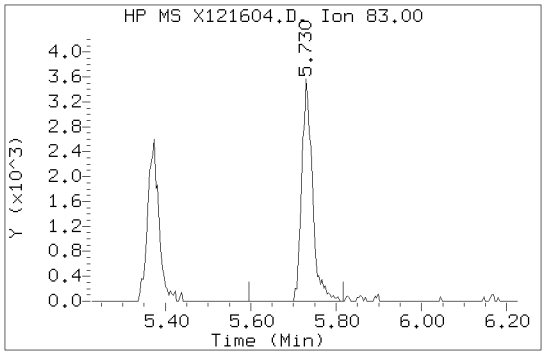
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

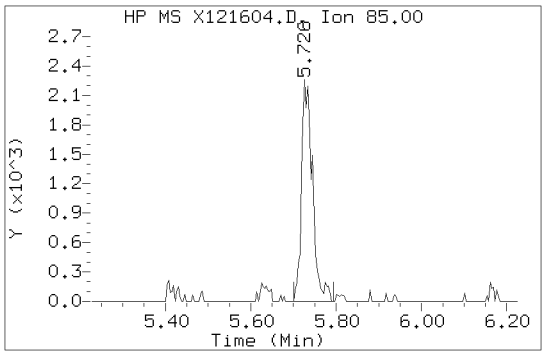
AFTER

MASS
83
AREA
6296
HEIGHT
3568
27-Dec-2022
16:07
linh
pham



AFTER

MASS
85
AREA
4084
HEIGHT
2261
27-Dec-2022
16:07
linh
pham

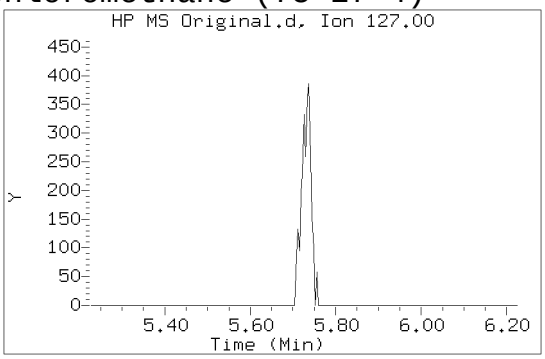


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Bromodichloromethane (75-27-4)

BEFORE

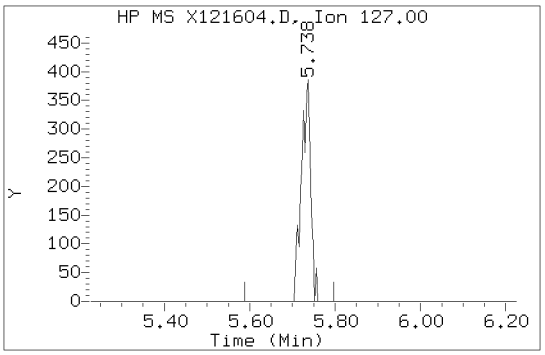
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

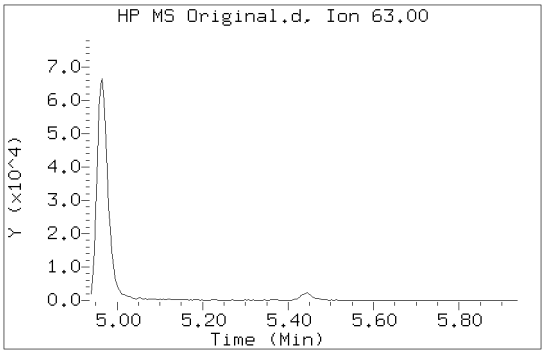
MASS
127
AREA
595
HEIGHT
386
27-Dec-2022
16:07
linh
pham



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

BEFORE

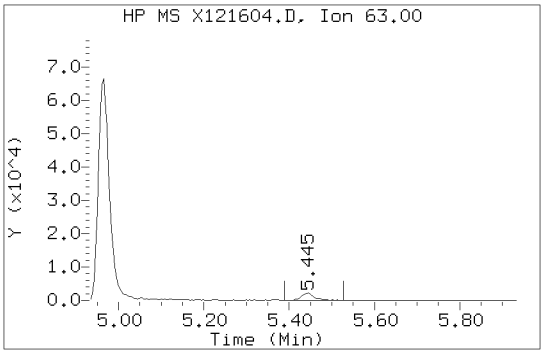
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

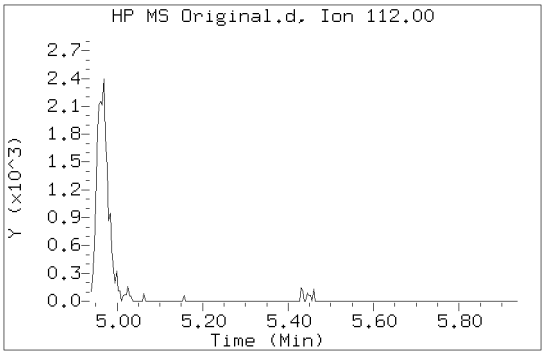
AFTER

MASS
63
AREA
4604
HEIGHT
2381
27-Dec-2022
16:07
linh
pham



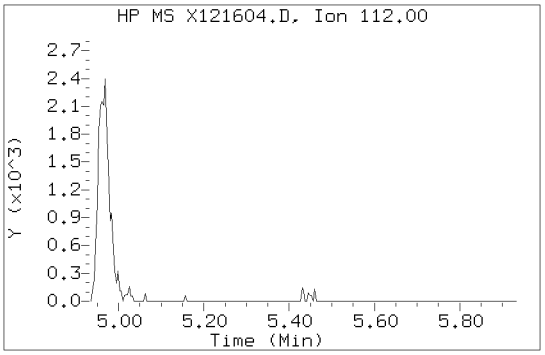
BEFORE

MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

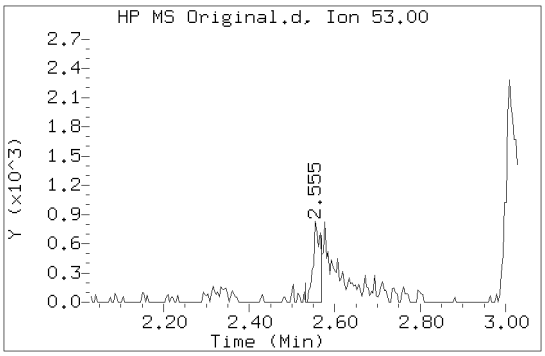
MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Acrylonitrile (107-13-1)

BEFORE

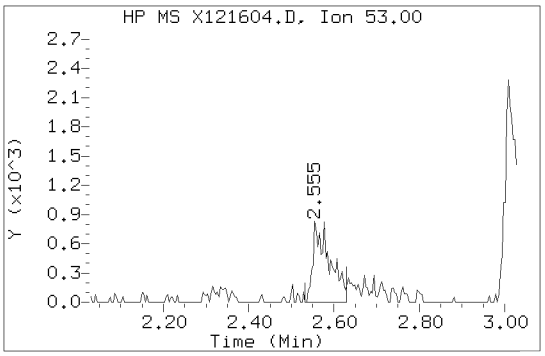
MASS
53
AREA
967
HEIGHT
834
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
53
AREA
2258
HEIGHT
834
27-Dec-2022
16:07
linh
pham

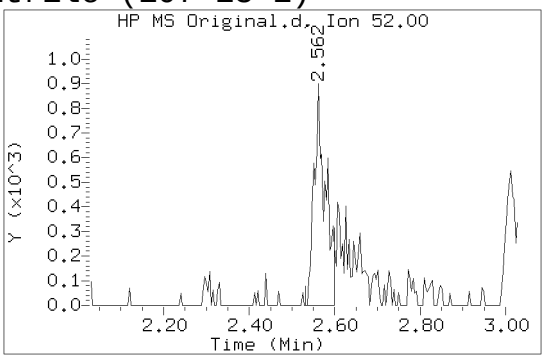


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

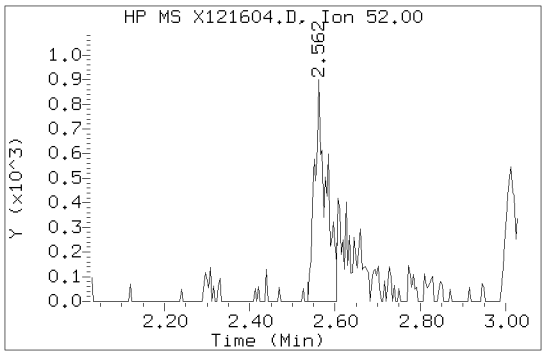
Acrylonitrile (107-13-1)

Reason Code:

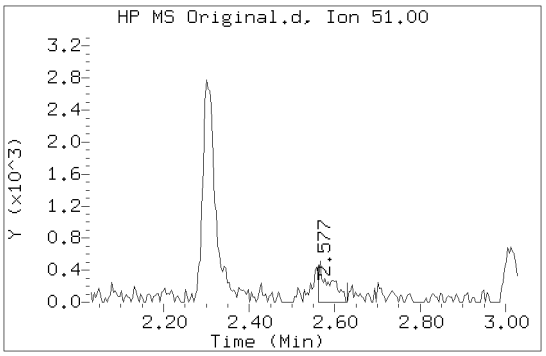
BEFORE
MASS
52
AREA
1657
HEIGHT
900
27-Dec-2022
16:03
linh
pham



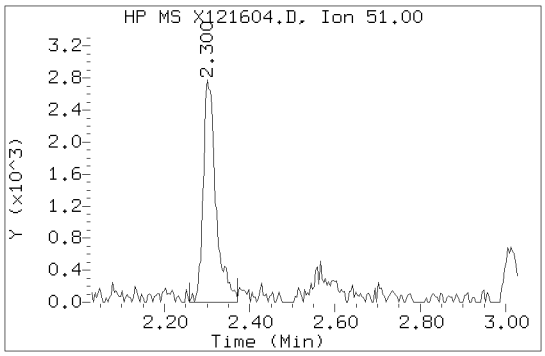
AFTER
MASS
52
AREA
1692
HEIGHT
900
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
51
AREA
901
HEIGHT
301
27-Dec-2022
16:03
linh
pham



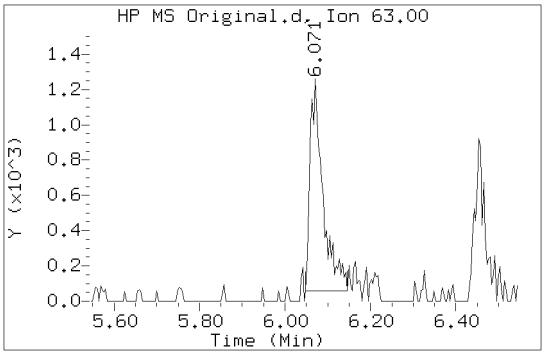
AFTER
MASS
51
AREA
5757
HEIGHT
2777
27-Dec-2022
16:07
linh
pham



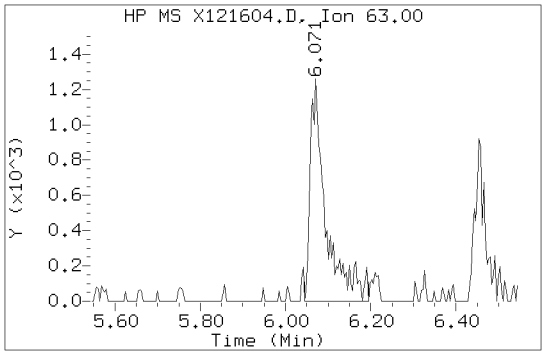
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

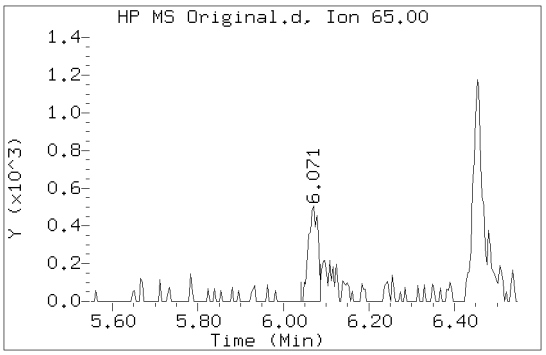
BEFORE
MASS
63
AREA
2513
HEIGHT
1202
27-Dec-2022
16:03
linh
pham



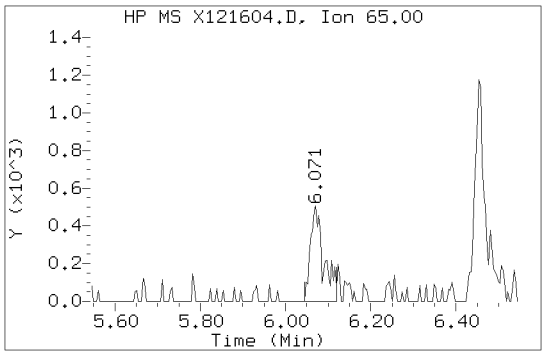
AFTER
MASS
63
AREA
3202
HEIGHT
1260
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
65
AREA
775
HEIGHT
507
27-Dec-2022
16:03
linh
pham



AFTER
MASS
65
AREA
1093
HEIGHT
507
27-Dec-2022
16:07
linh
pham



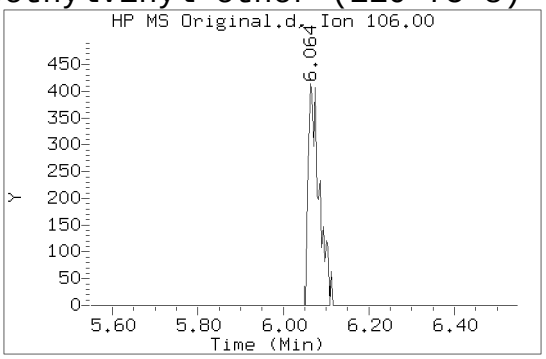
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

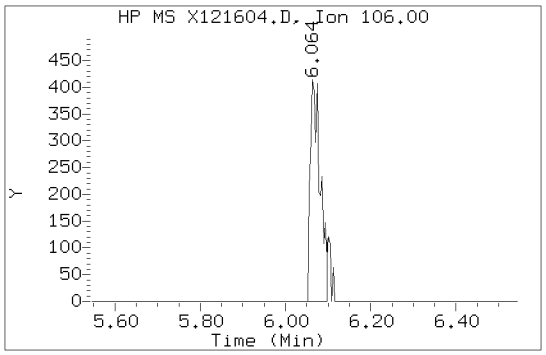
BEFORE

MASS
106
AREA
725
HEIGHT
414
27-Dec-2022
16:03
linh
pham



AFTER

MASS
106
AREA
673
HEIGHT
414
27-Dec-2022
16:07
linh
pham

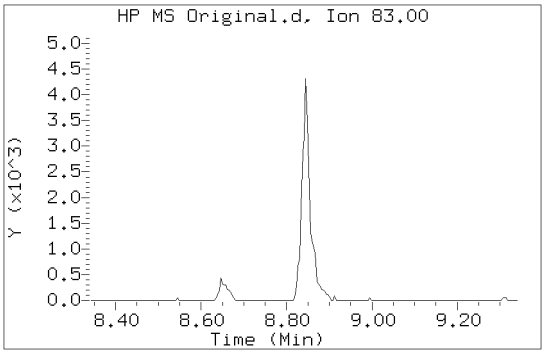


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

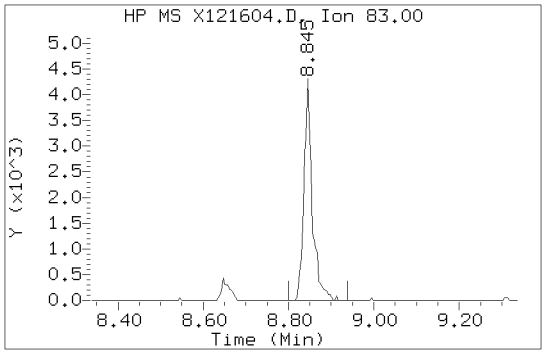
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



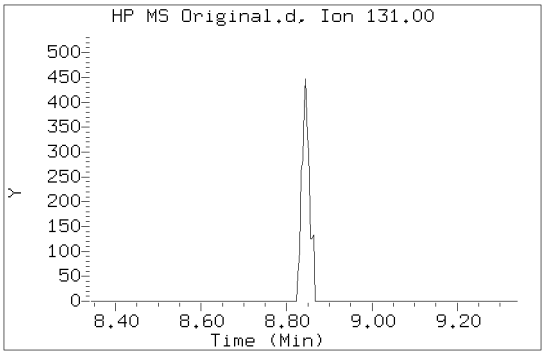
AFTER

MASS
83
AREA
5934
HEIGHT
4312
27-Dec-2022
16:07
linh
pham



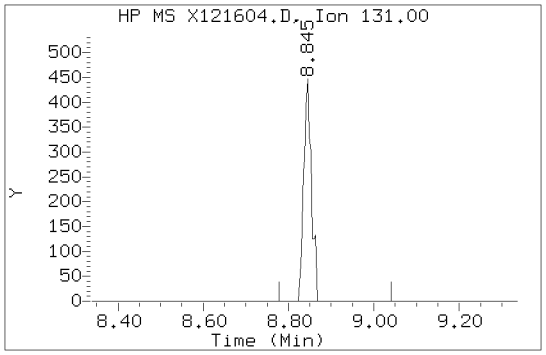
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



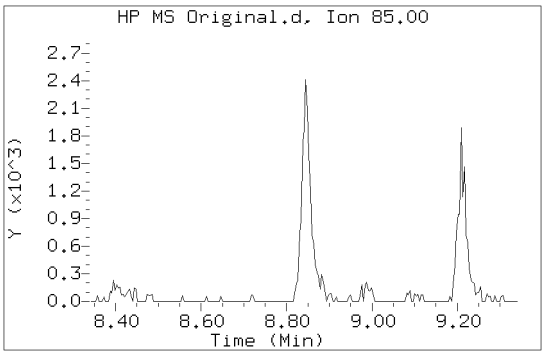
AFTER

MASS
131
AREA
574
HEIGHT
447
27-Dec-2022
16:07
linh
pham



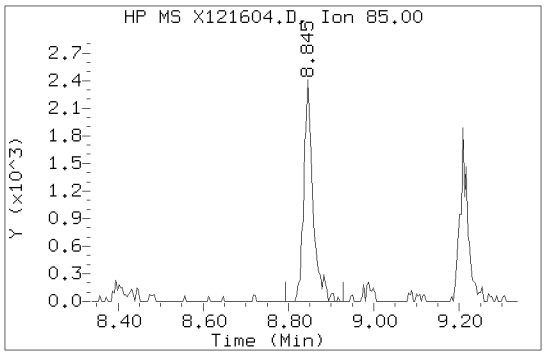
BEFORE

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
3682
HEIGHT
2411
27-Dec-2022
16:07
linh
pham

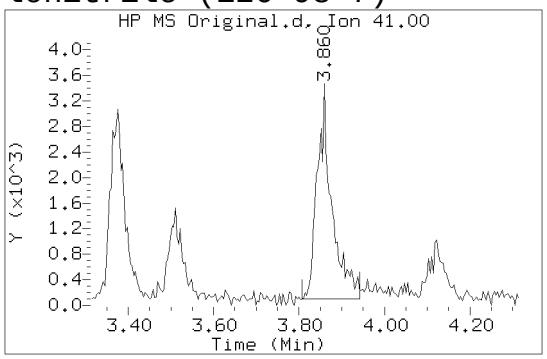


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

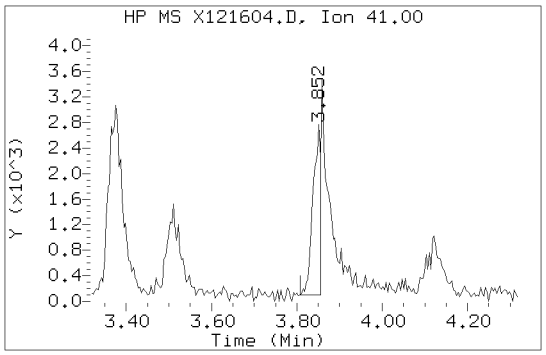
Methacrylonitrile (126-98-7)

Reason Code:

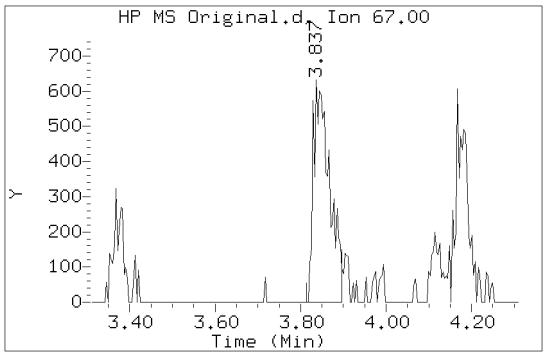
BEFORE
MASS
41
AREA
7966
HEIGHT
3370
27-Dec-2022
16:03
linh
pham



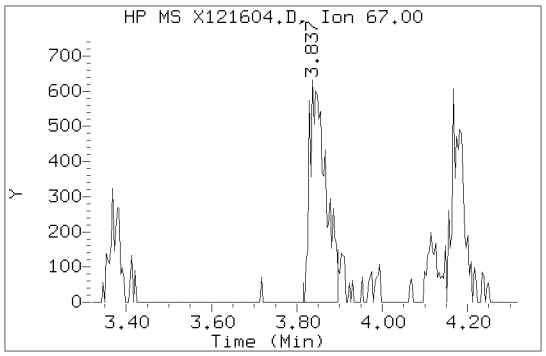
AFTER
MASS
41
AREA
3285
HEIGHT
2668
27-Dec-2022
16:07
linh
pham



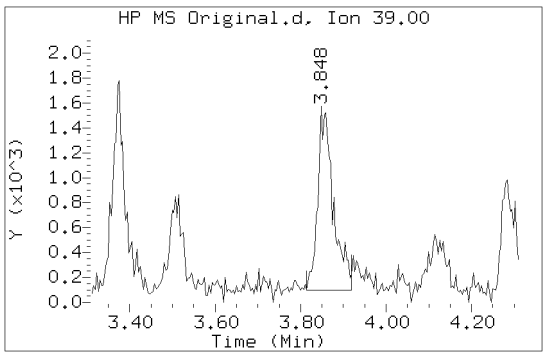
BEFORE
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:03
linh
pham



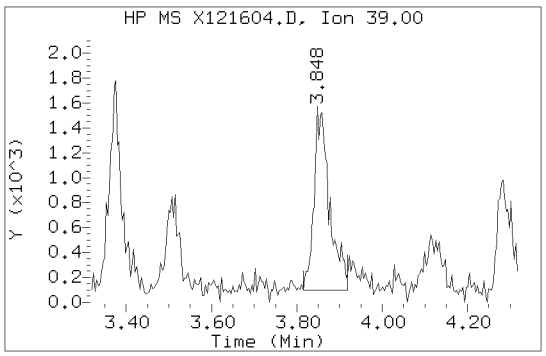
AFTER
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:03
linh
pham



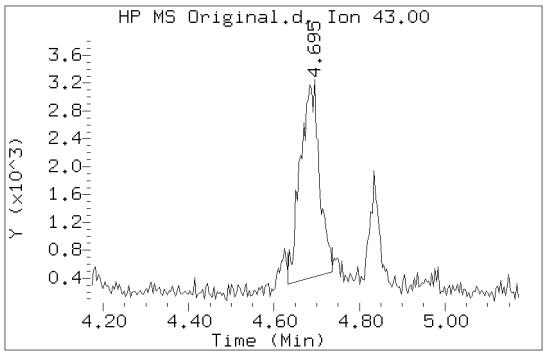
AFTER
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:07
linh
pham



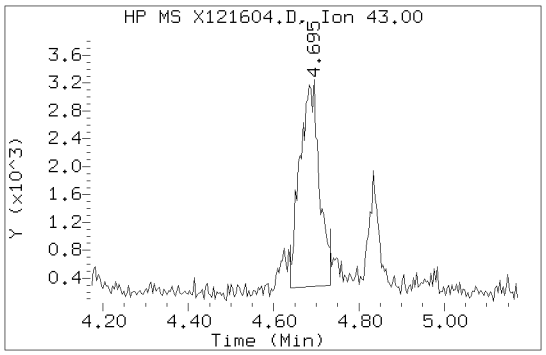
Isobutyl Alcohol (78-83-1)

Reason Code:

BEFORE
MASS
43
AREA
8847
HEIGHT
2826
27-Dec-2022
16:03
linh
pham



AFTER
MASS
43
AREA
9436
HEIGHT
2966
27-Dec-2022
16:07
linh
pham

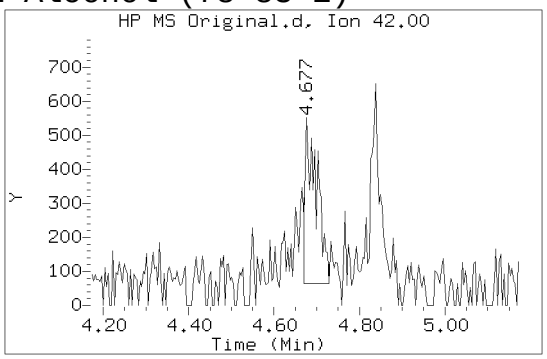


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

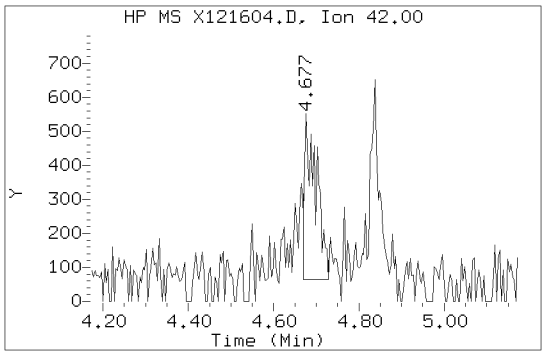
Isobutyl Alcohol (78-83-1)

Reason Code:

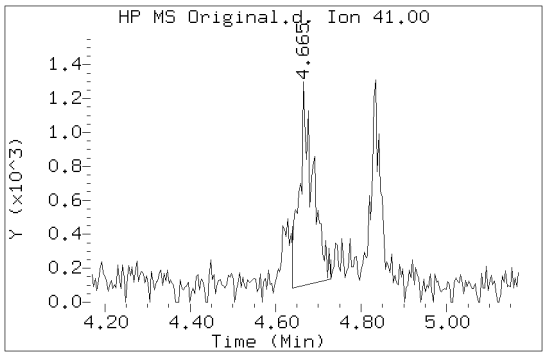
BEFORE
MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:03
linh
pham



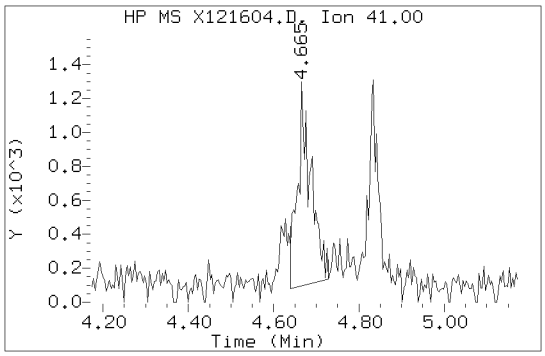
AFTER
MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
41
AREA
2650
HEIGHT
1200
27-Dec-2022
16:03
linh
pham



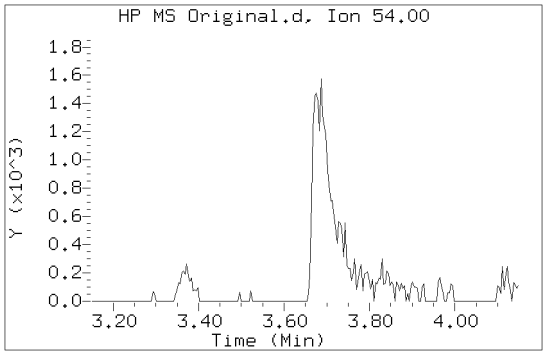
AFTER
MASS
41
AREA
2656
HEIGHT
1201
27-Dec-2022
16:07
linh
pham



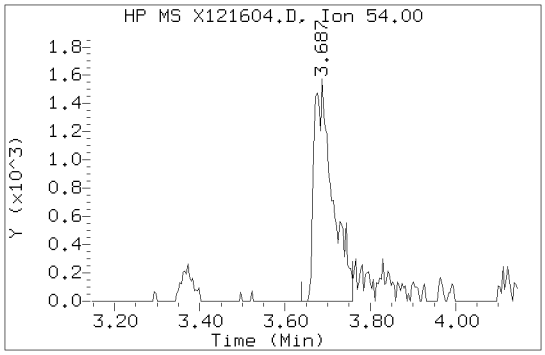
Propionitrile (107-12-0)

Reason Code:

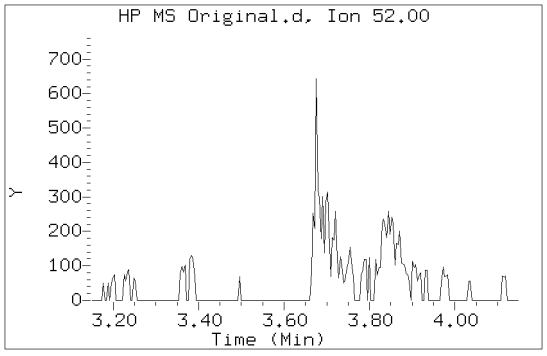
BEFORE
MASS
54
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



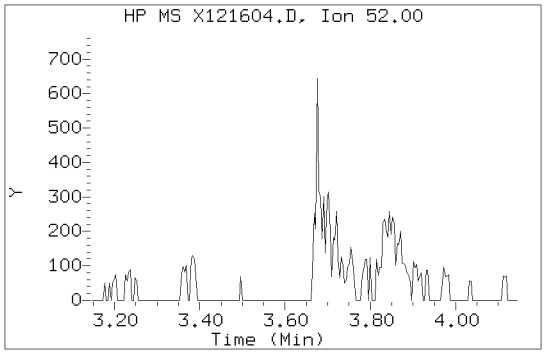
AFTER
MASS
54
AREA
4742
HEIGHT
1574
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



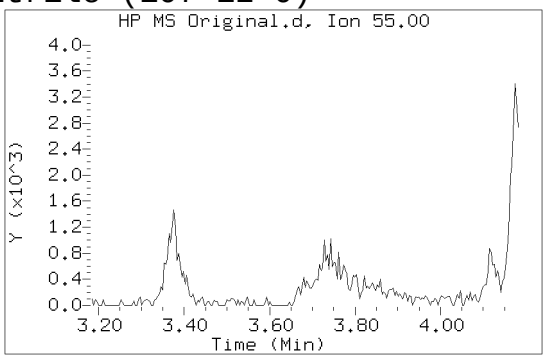
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Propionitrile (107-12-0)

Reason Code:

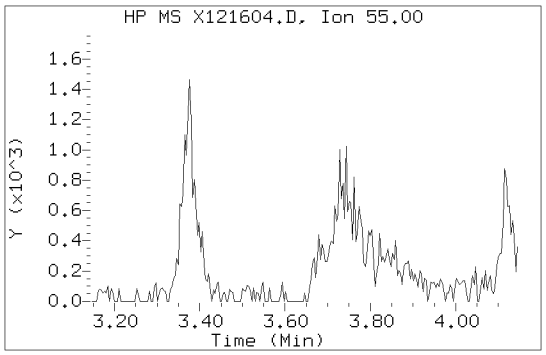
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

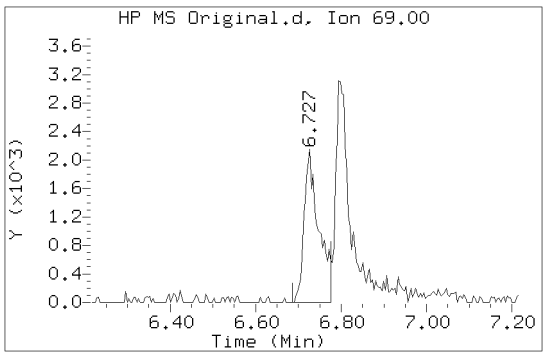


Ethyl Methacrylate (97-63-2)

Reason Code:

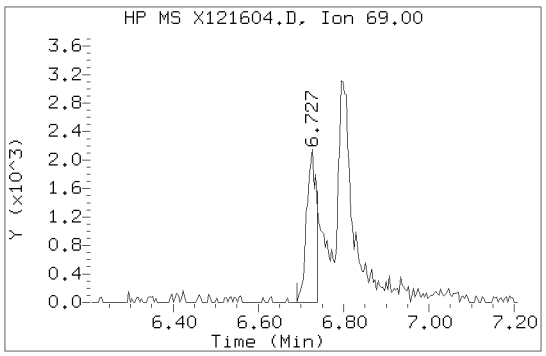
BEFORE

MASS
69
AREA
5177
HEIGHT
2156
27-Dec-2022
16:03
linh
pham



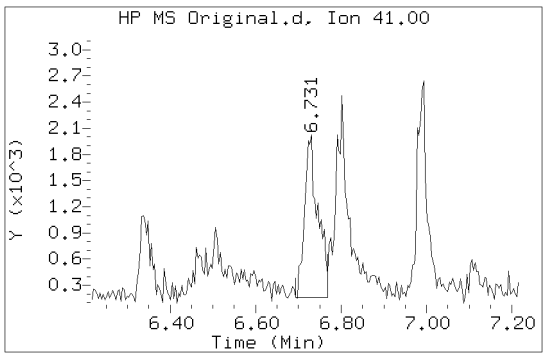
AFTER

MASS
69
AREA
3303
HEIGHT
2156
27-Dec-2022
16:07
linh
pham



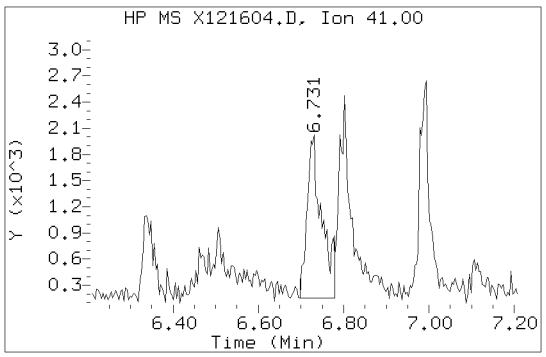
BEFORE

MASS
41
AREA
4059
HEIGHT
1867
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
4485
HEIGHT
1872
27-Dec-2022
16:07
linh
pham

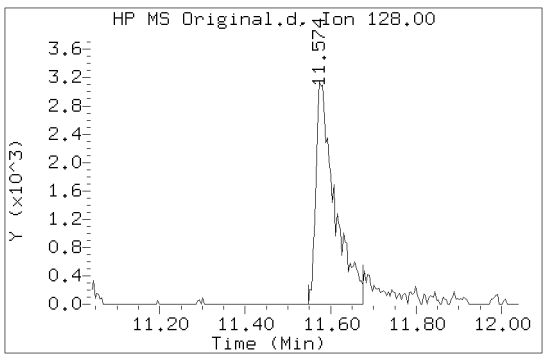


Naphthalene (91-20-3)

Reason Code:

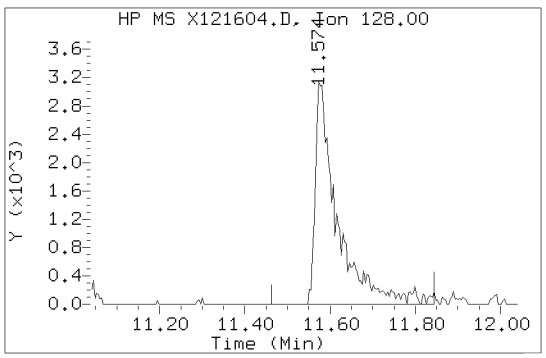
BEFORE

MASS
128
AREA
9627
HEIGHT
3139
27-Dec-2022
16:03
linh
pham



AFTER

MASS
128
AREA
11288
HEIGHT
3139
27-Dec-2022
16:07
linh
pham

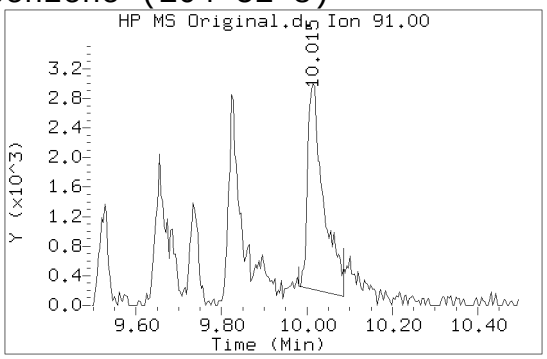


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

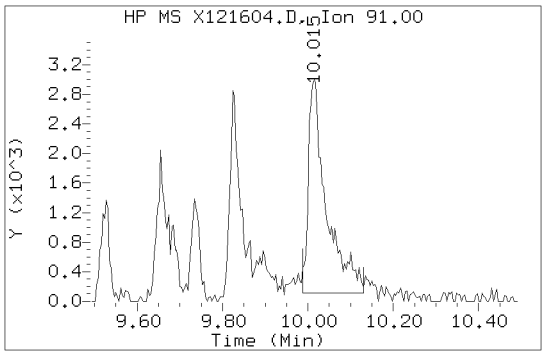
n-Butylbenzene (104-51-8)

Reason Code:

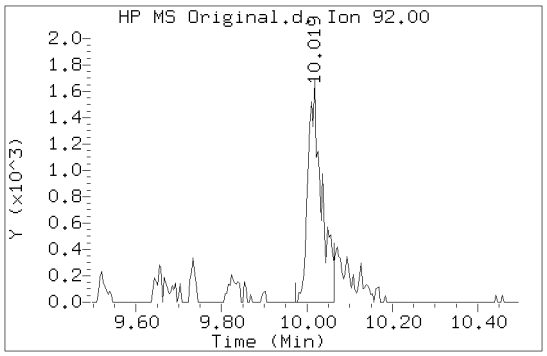
BEFORE
MASS
91
AREA
7194
HEIGHT
2783
27-Dec-2022
16:03
linh
pham



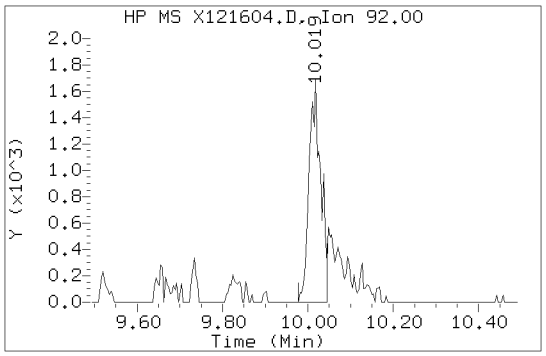
AFTER
MASS
91
AREA
8459
HEIGHT
2887
27-Dec-2022
16:07
linh
pham



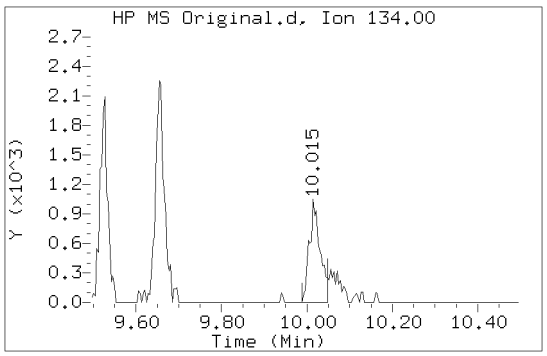
BEFORE
MASS
92
AREA
3696
HEIGHT
1686
27-Dec-2022
16:03
linh
pham



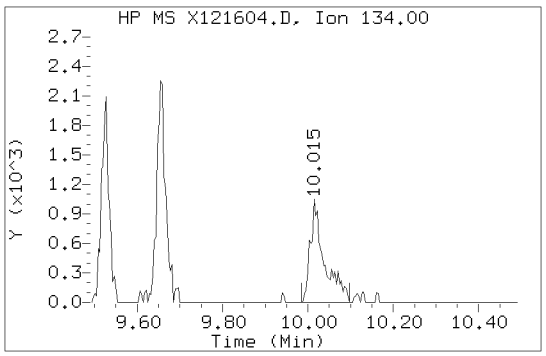
AFTER
MASS
92
AREA
3188
HEIGHT
1686
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
134
AREA
1829
HEIGHT
1051
27-Dec-2022
16:03
linh
pham



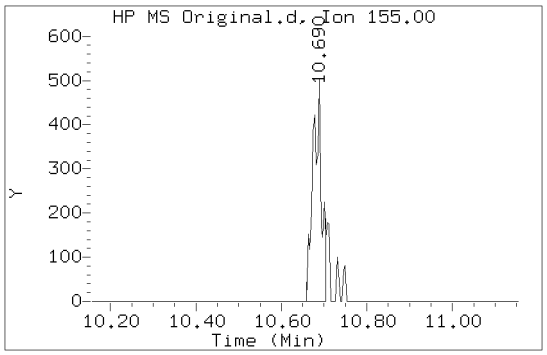
AFTER
MASS
134
AREA
2397
HEIGHT
1051
27-Dec-2022
16:07
linh
pham



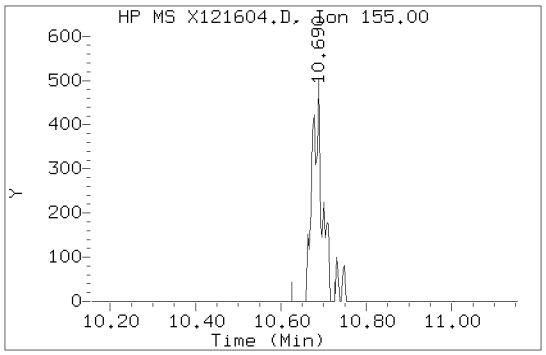
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE
MASS
155
AREA
699
HEIGHT
502
27-Dec-2022
16:03
linh
pham



AFTER
MASS
155
AREA
778
HEIGHT
502
27-Dec-2022
16:07
linh
pham



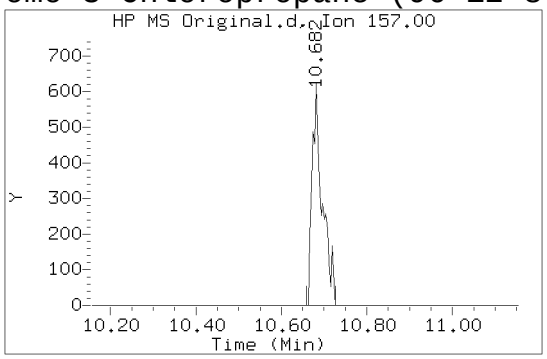
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

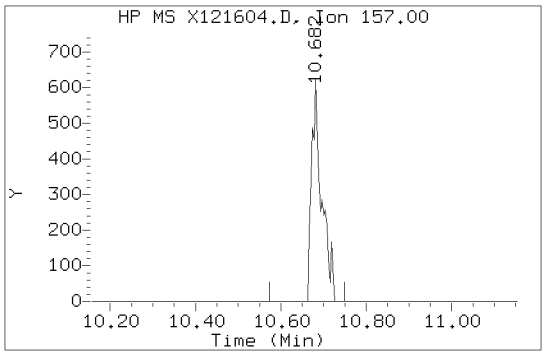
BEFORE

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:03
linh
pham



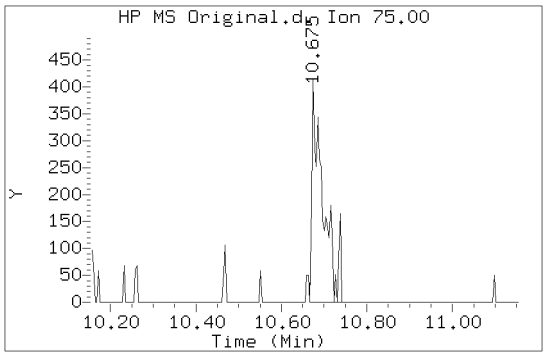
AFTER

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:07
linh
pham



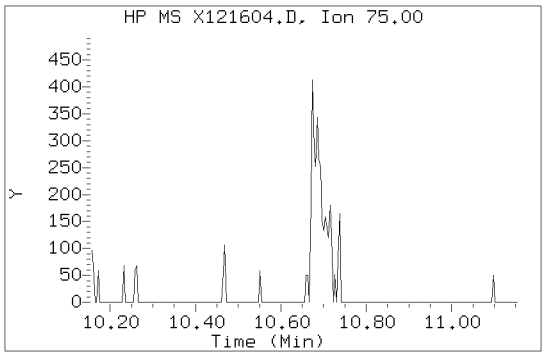
BEFORE

MASS
75
AREA
742
HEIGHT
413
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

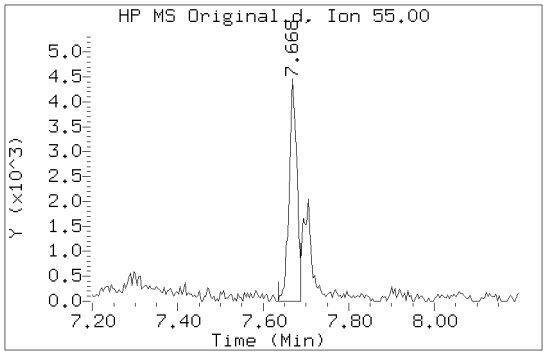


1-Chlorohexane (544-10-5)

Reason Code:

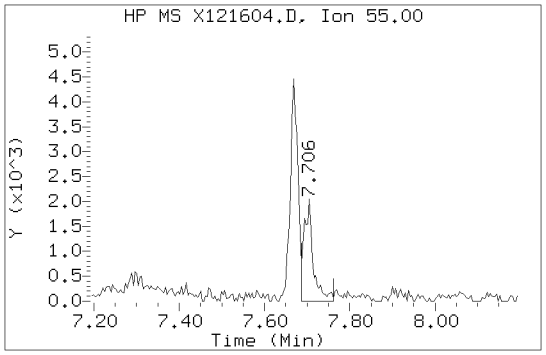
BEFORE

MASS
55
AREA
5660
HEIGHT
4460
27-Dec-2022
16:03
linh
pham



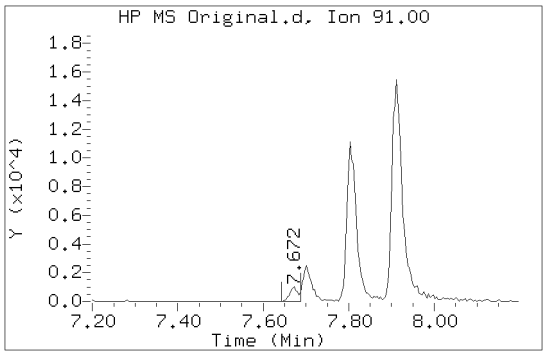
AFTER

MASS
55
AREA
3155
HEIGHT
2048
27-Dec-2022
16:07
linh
pham



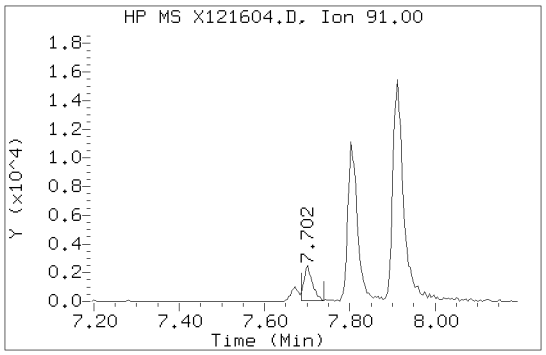
BEFORE

MASS
91
AREA
1392
HEIGHT
1029
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
3448
HEIGHT
2478
27-Dec-2022
16:07
linh
pham

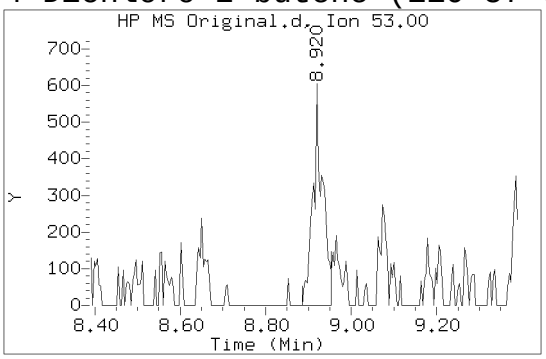


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

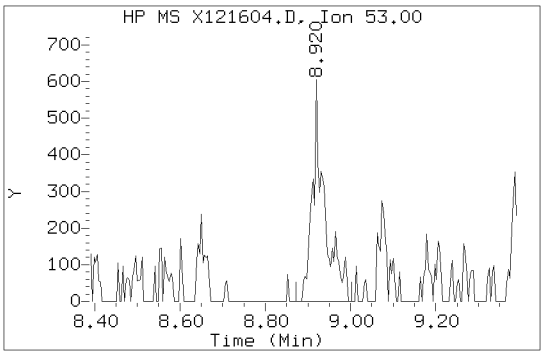
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

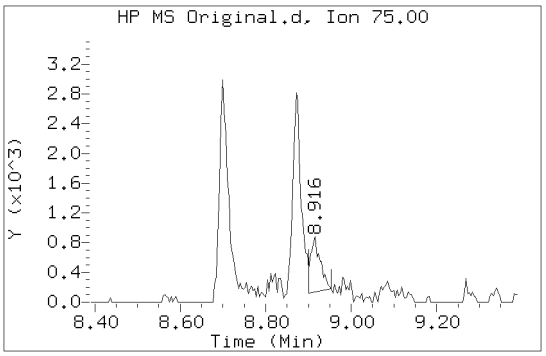
BEFORE
MASS
53
AREA
956
HEIGHT
605
27-Dec-2022
16:03
linh
pham



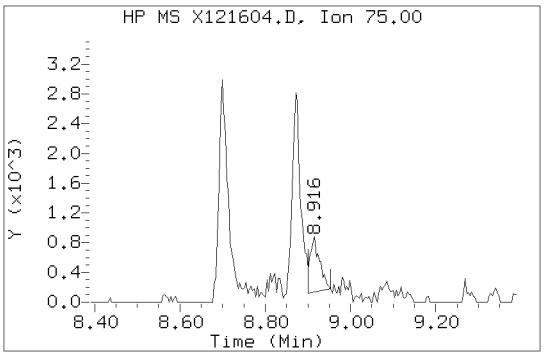
AFTER
MASS
53
AREA
1196
HEIGHT
605
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:03
linh
pham



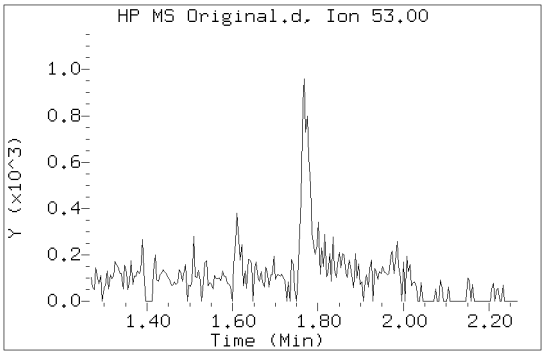
AFTER
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:07
linh
pham



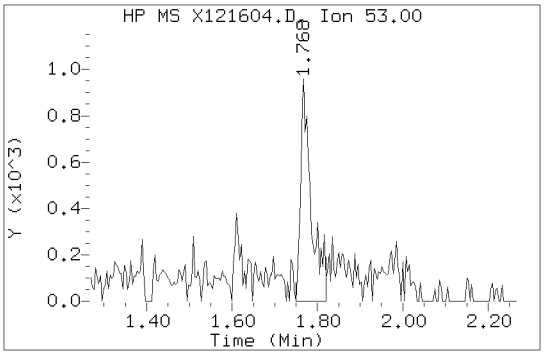
Chloroprene (126-99-8)

Reason Code:

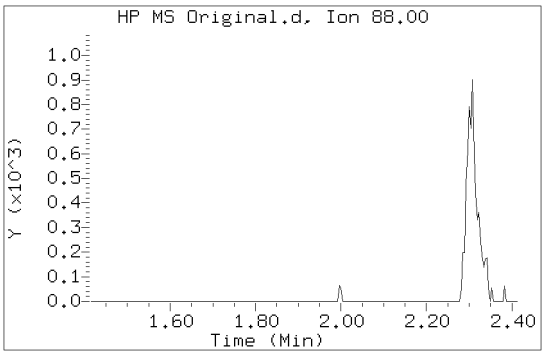
BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



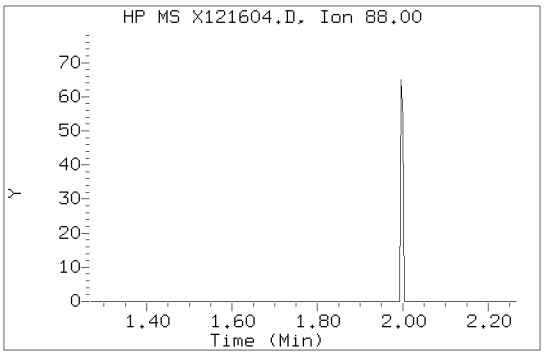
AFTER
MASS
53
AREA
1686
HEIGHT
959
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

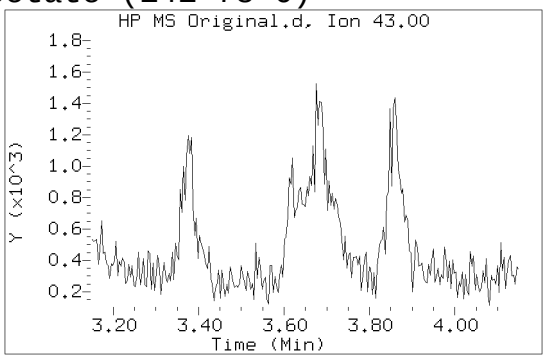


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

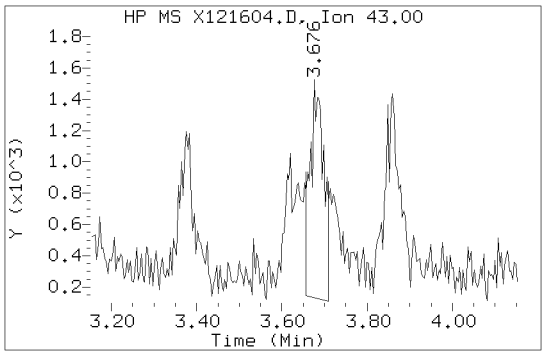
Ethyl Acetate (141-78-6)

Reason Code:

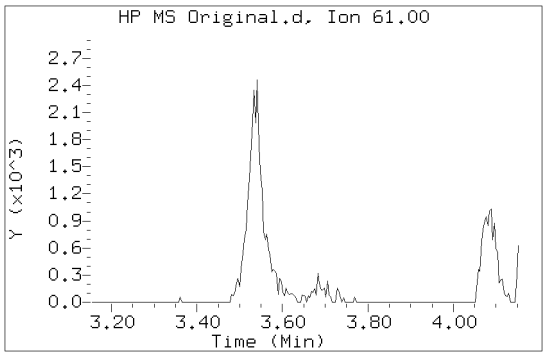
BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



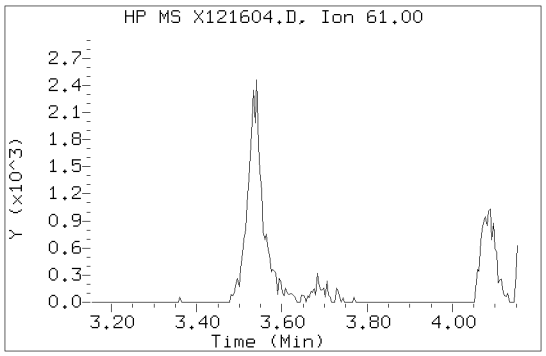
AFTER
MASS
43
AREA
3144
HEIGHT
1392
27-Dec-2022
16:07
linh
pham



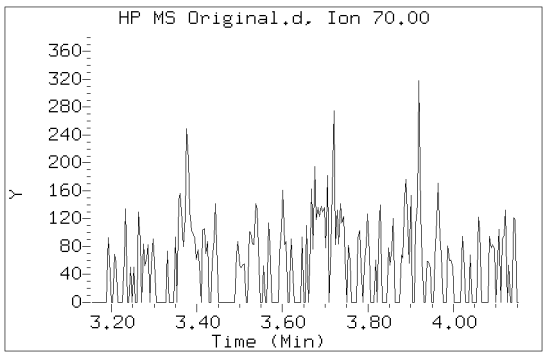
BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



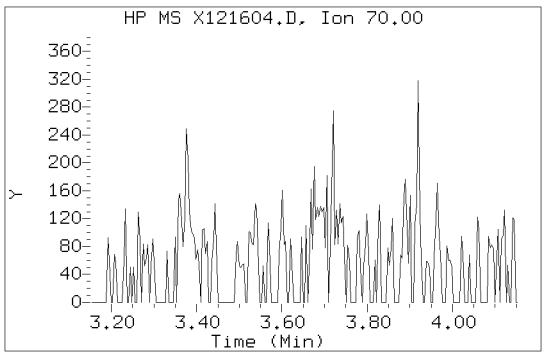
AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



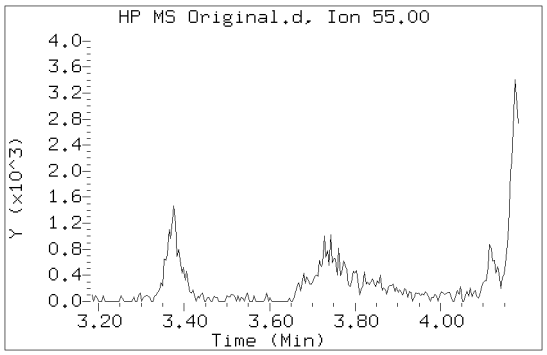
AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



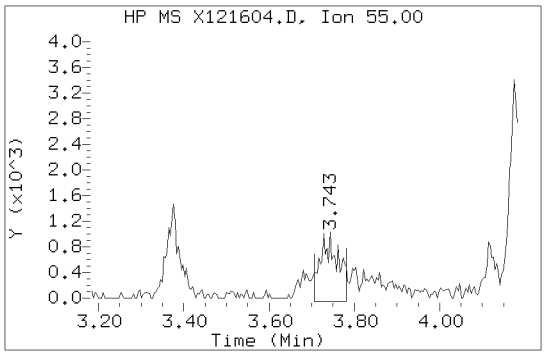
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
55
AREA
3084
HEIGHT
1078
27-Dec-2022
16:07
linh
pham

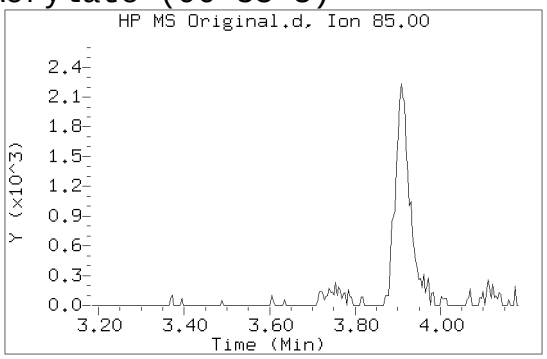


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

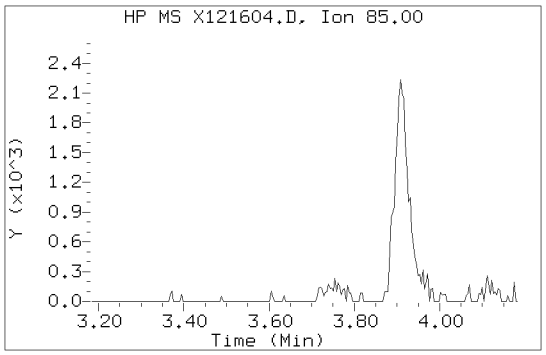
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



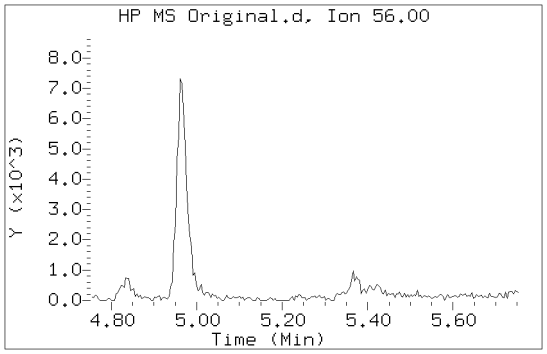
AFTER
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



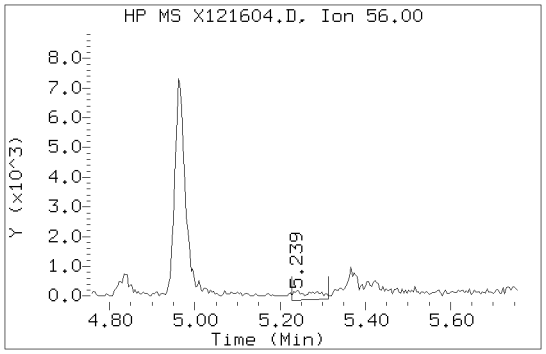
n-Butanol (71-36-3)

Reason Code:

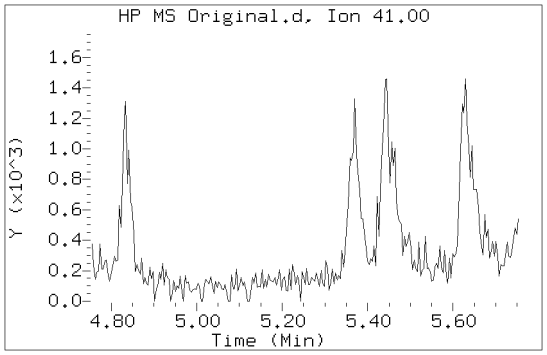
BEFORE
MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



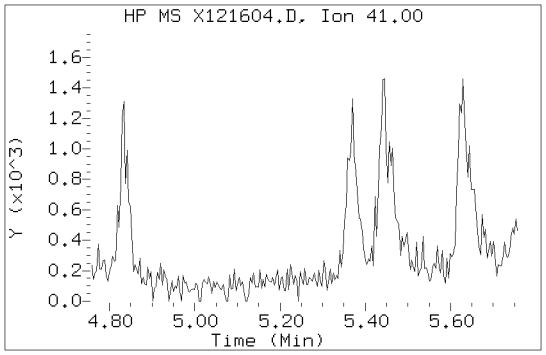
AFTER
MASS
56
AREA
1171
HEIGHT
317
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



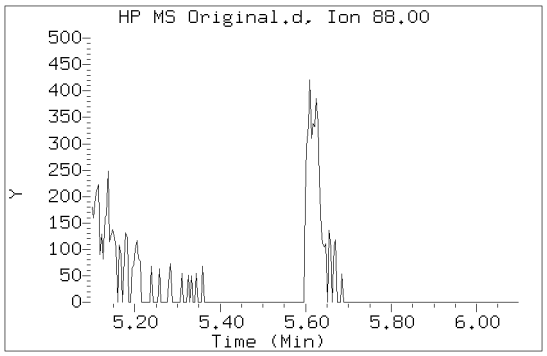
AFTER
MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



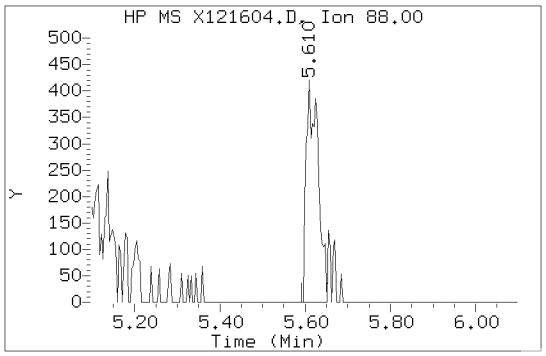
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
88
AREA
820
HEIGHT
421
27-Dec-2022
16:07
linh
pham



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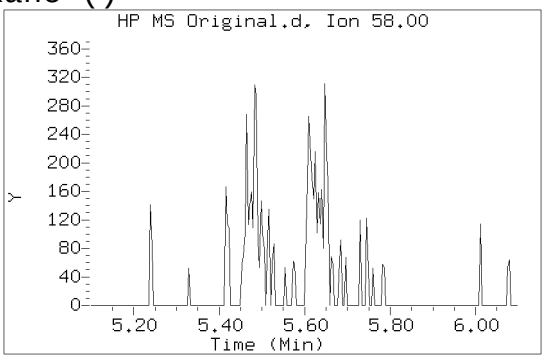
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

1,4-Dioxane ()

Reason Code:

BEFORE
MASS
58
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
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58
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HEIGHT
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27-Dec-2022
16:07
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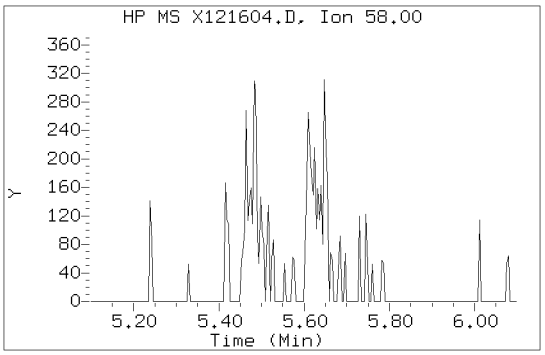

Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE
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3939
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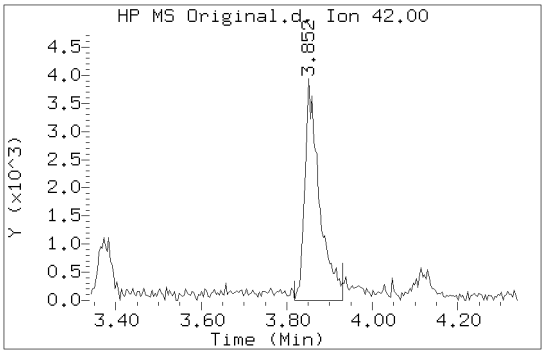

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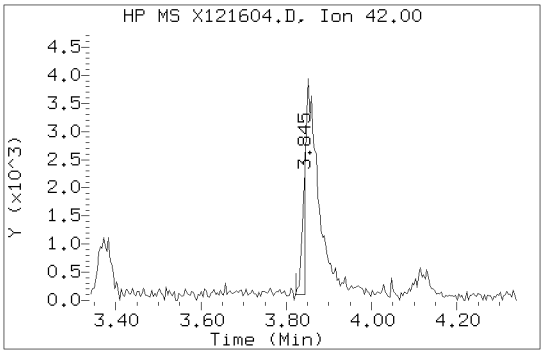

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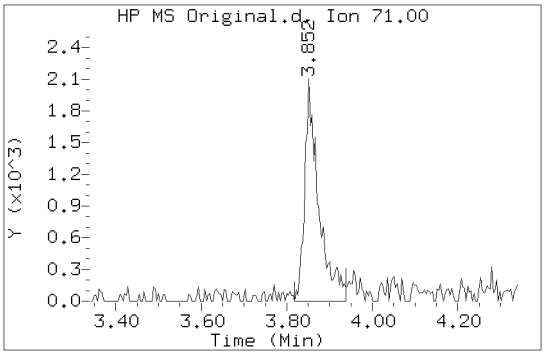

AFTER
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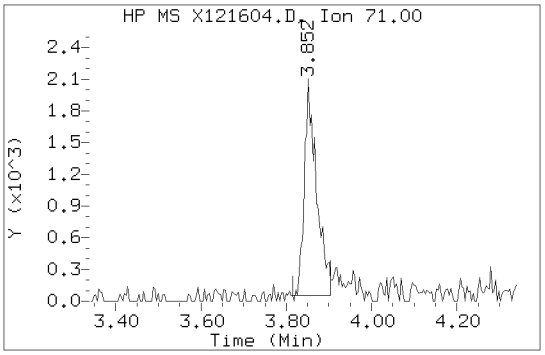

Methyl Acetate (79-20-9)

Reason Code:

BEFORE
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43
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HEIGHT
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27-Dec-2022
16:03
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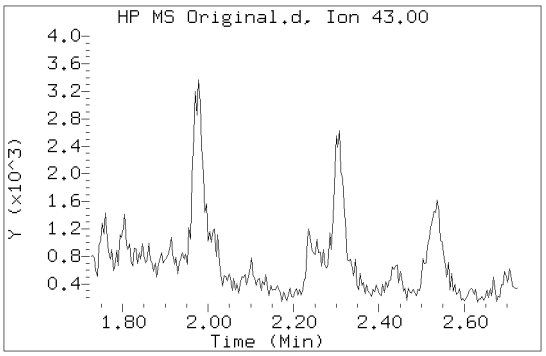

AFTER
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HEIGHT
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16:07
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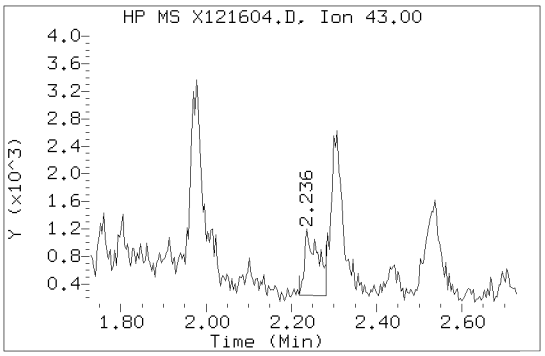

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acetate (79-20-9)

BEFORE

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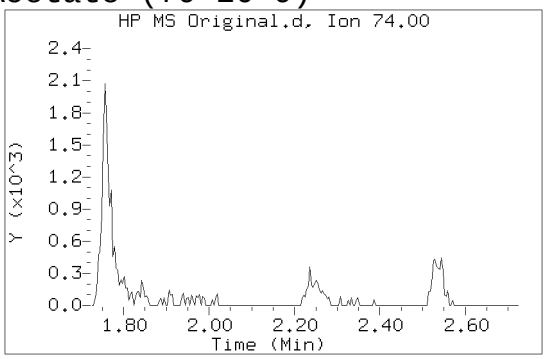
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

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16:07
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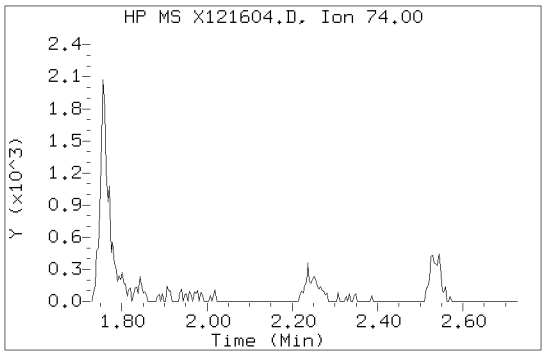

Methylcyclohexane (108-87-2)

BEFORE

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16:03
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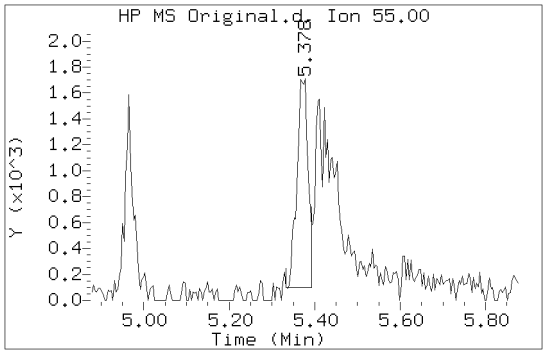

Reason Code:

AFTER

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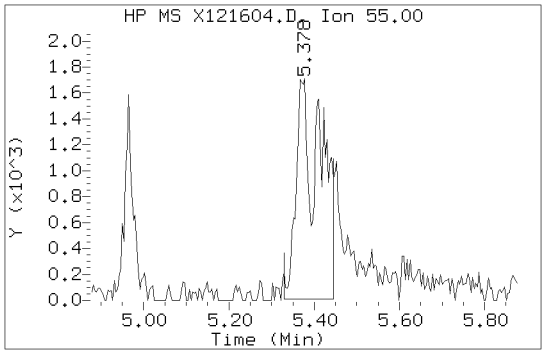

BEFORE

MASS
83
AREA
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HEIGHT
2601
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16:03
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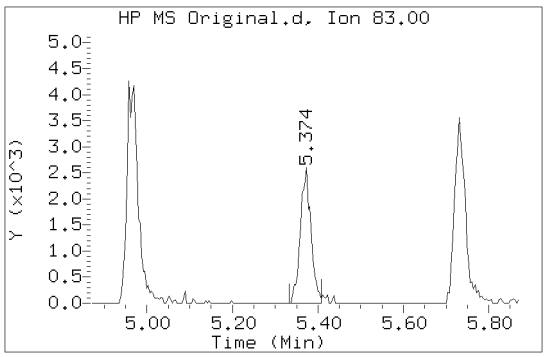

AFTER

MASS
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HEIGHT
2601
27-Dec-2022
16:07
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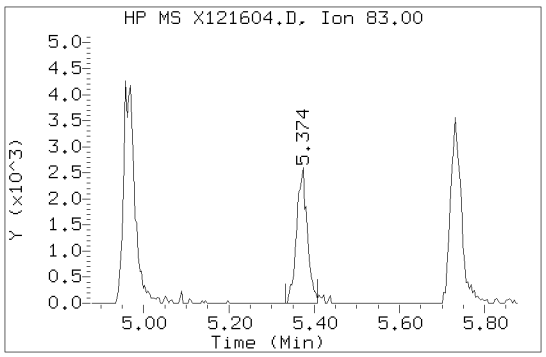

Acetaldehyde (75-07-0)

BEFORE

MASS
44
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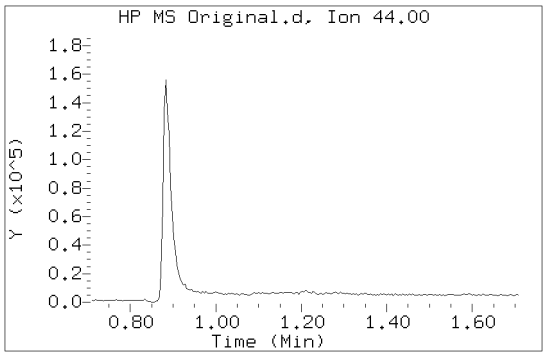
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

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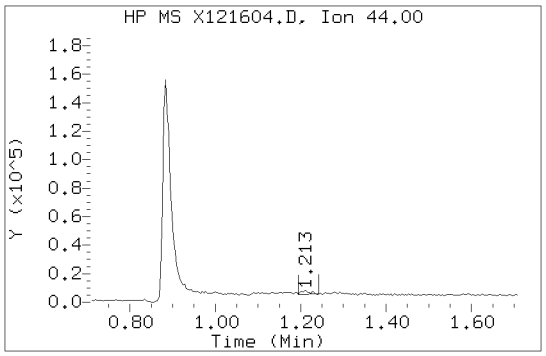

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

BEFORE
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HEIGHT
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27-Dec-2022
16:03
linh
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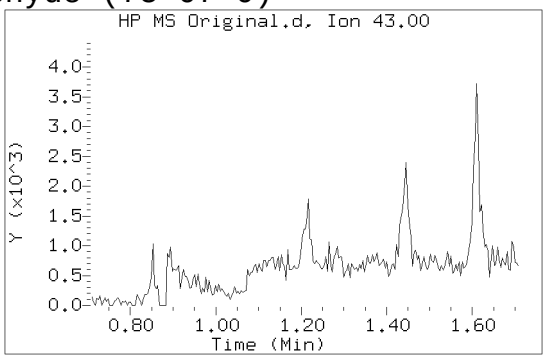

BEFORE
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HEIGHT
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16:03
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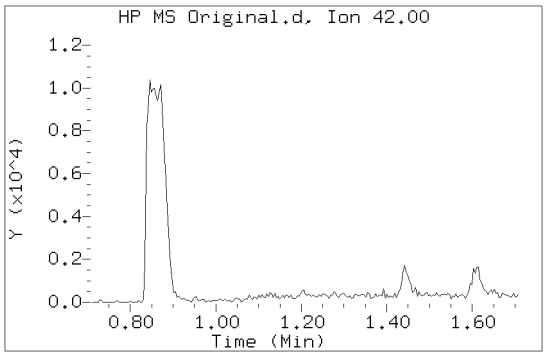

Reason Code:

AFTER
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16:07
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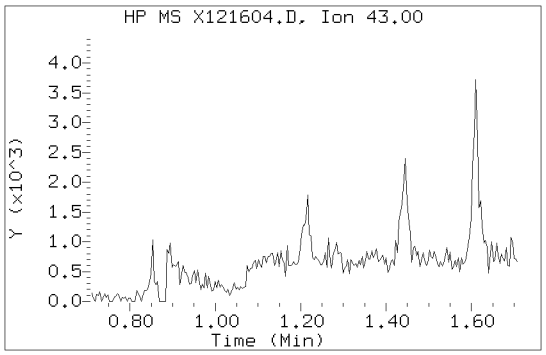

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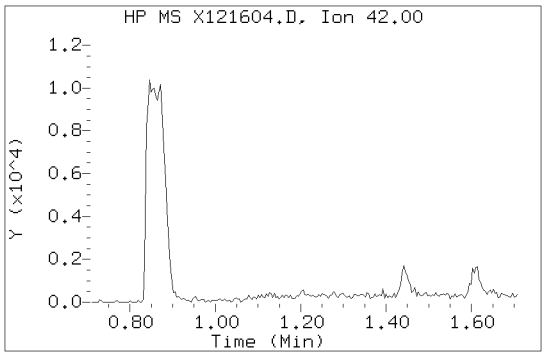

4-Bromofluorobenzene (460-00-4)

BEFORE
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HEIGHT
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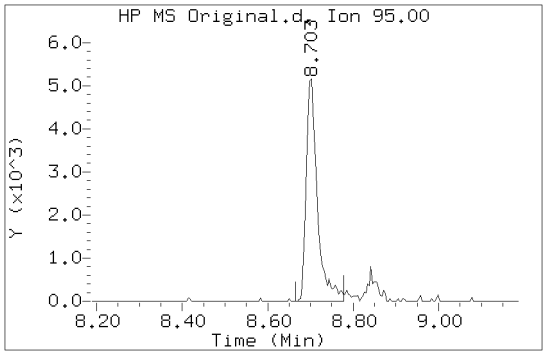
27-Dec-2022
16:03
linh
pham



BEFORE
MASS
174
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HEIGHT
5802
27-Dec-2022
16:03
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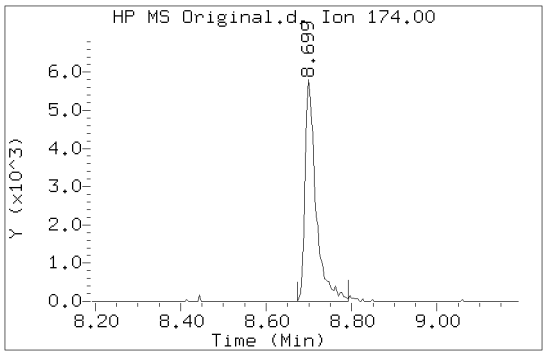
pham



Reason Code:

AFTER
MASS
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HEIGHT
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16:07
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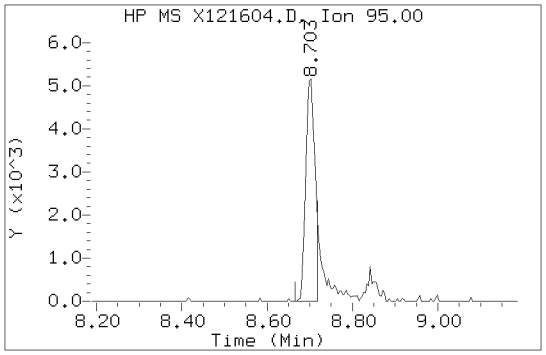

AFTER
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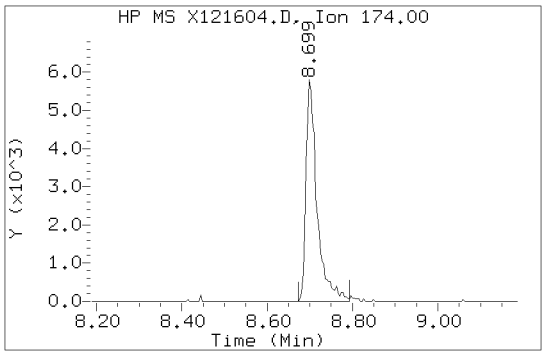

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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AREA
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HEIGHT
5603
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16:03
linh
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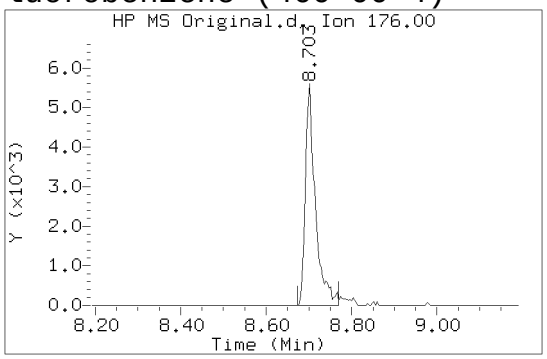

AFTER

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27-Dec-2022
16:07
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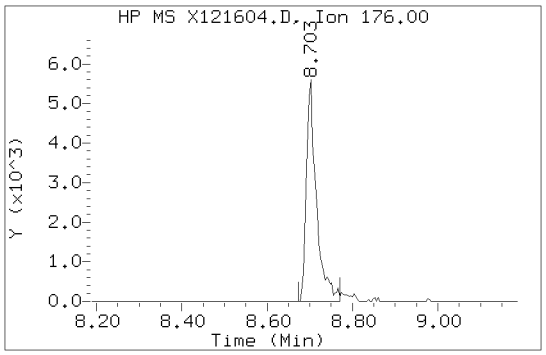

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
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Inj Date : 16-DEC-2022 13:02
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 12:41 Cal File: X121604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	456374	50.0000	
135 1,4-Dioxane	88	5.610	5.610	(1.343)	1409	40.0000	33.77(M)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	5733	2.00000	1.83
25 Methacrylonitrile	41	3.859	3.859	(0.924)	6388	2.00000	1.97(M)
12 Isobutyl Alcohol	43	4.684	4.684	(1.121)	20629	40.0000	40.18(M)
13 Acetonitrile	39	2.198	2.198	(0.526)	7764	20.0000	18.69
14 Allyl Chloride	41	2.206	2.206	(0.528)	14911	2.00000	1.88
4 Propionitrile	54	3.675	3.675	(0.880)	8651	20.0000	18.57
136 n-Hexane	57	2.768	2.768	(0.663)	5898	2.00000	1.79
72 trans-1,4-Dichloro-2-butene	53	8.920	8.920	(1.163)	2690	2.00000	1.92(M)
194 Acetaldehyde	44	1.212	1.212	(0.290)	5661	8.00000	(M)
23 Chloroprene	53	1.771	1.771	(0.424)	3126	2.00000	2.01(M)
145 alpha-Methylstyrene	118	9.268	9.268	(0.959)	14447	2.00000	1.84
200 Dimethyl Disulfide	94	6.202	6.202	(0.808)	15964	2.00000	1.82
139 Diethyl ether	59	1.756	1.756	(0.420)	6354	2.00000	2.08
130 Ethyl Acetate	43	3.675	3.675	(0.880)	7422	2.00000	2.08(M)
40 Methyl Methacrylate	41	5.617	5.617	(1.345)	6185	2.00000	1.98
49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	6546	2.00000	2.03
132 n-Butanol	56	5.343	5.343	(1.279)	2004	40.0000	74.77(TM)
142 Tetrahydrofuran	42	3.848	3.848	(0.921)	2867	4.00000	2.04(M)

150	Allyl alcohol	57	2.768	2.768 (0.663)	5898	40.0000	33.27
166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	35687	2.00000	2.10

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D Page 2
Report Date: 27-Dec-2022 16:07

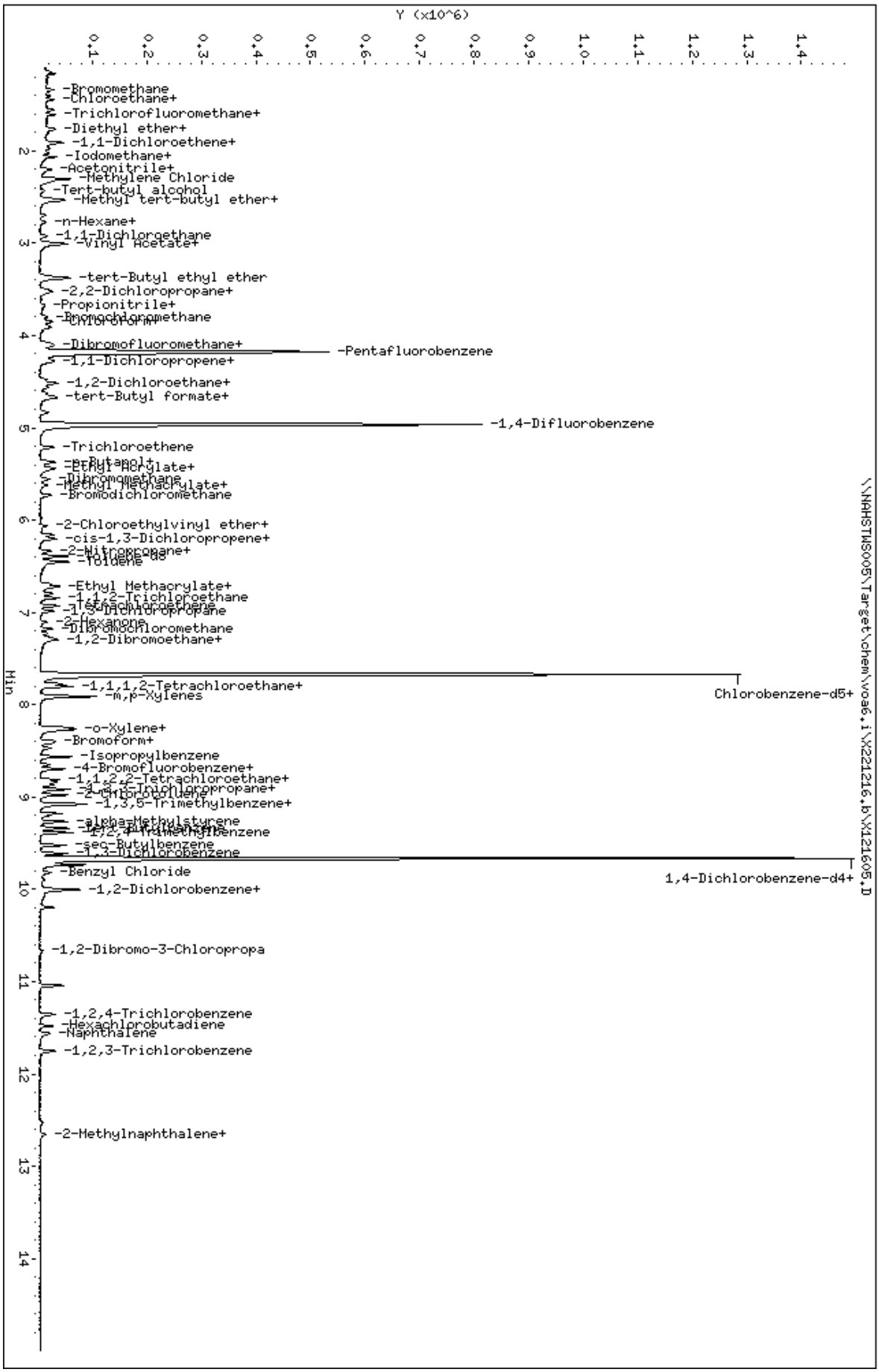
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.720	3.720	(0.891)	5443	2.00000	1.75(M)
	162	Butyl acrylate	55	8.267	8.267	(1.078)	15015	2.00000	1.77
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	6239	2.00000	2.33
	3	Chloromethane	50	1.077	1.077	(0.258)	8057	2.00000	4.07
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	7263	2.00000	1.82
	6	Bromomethane	94	1.340	1.340	(0.321)	5996	2.00000	3.68(M)
	7	Chloroethane	64	1.400	1.400	(0.335)	5667	2.00000	2.04(M)
	8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	10463	2.00000	1.87
	9	Acrolein	56	1.441	1.441	(0.345)	1317	4.00000	6.92(M)
	10	Acetone	43	1.973	1.973	(0.472)	7041	4.00000	5.46(M)
	11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	6862	2.00000	1.98
	15	Iodomethane	142	2.022	2.022	(0.484)	8702	4.00000	5.23
	16	Acrylonitrile	53	2.554	2.554	(0.611)	4557	4.00000	3.87(M)
	17	Methylene Chloride	84	2.303	2.303	(0.551)	9194	2.00000	1.93(M)
	18	Methyl tert-butyl ether	73	2.536	2.536	(0.607)	23231	2.00000	2.04
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	34948	4.00000	3.85
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	7113	2.00000	1.83
	21	Vinyl Acetate	43	3.008	3.008	(0.720)	38835	4.00000	3.90
	22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	12778	2.00000	1.87
	24	2-Butanone	43	3.604	3.604	(0.863)	5418	4.00000	6.89(M)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	11048	2.00000	1.91
	27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.845)	9675	2.00000	2.05
	28	Chloroform	83	3.908	3.908	(0.935)	15581	2.00000	2.04
	29	Bromochloromethane	128	3.803	3.803	(0.910)	5134	2.00000	1.98
$	30	Dibromofluoromethane	113	4.106	4.106	(0.983)	9050	2.00000	1.90
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	10962	2.00000	1.81
	32	1,1-Dichloropropene	75	4.286	4.286	(0.863)	9042	2.00000	1.86
	33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	10812	2.00000	1.92
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	11092	2.00000	2.13(M)
$	35	1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	9783	2.00000	2.37
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	684444	50.0000	
	37	Benzene	78	4.515	4.515	(0.909)	32394	2.00000	1.98
	38	Trichloroethene	130	5.216	5.216	(1.051)	9277	2.00000	2.00
	39	Bromodichloromethane	83	5.733	5.733	(1.155)	11961	2.00000	1.94
	41	2-Chloroethylvinyl ether	63	6.059	6.059	(1.220)	6648	4.00000	3.80
	42	1,2-Dichloropropane	63	5.441	5.441	(1.096)	8129	2.00000	1.86(M)
	44	Dibromomethane	93	5.553	5.553	(1.119)	6110	2.00000	2.06
	45	4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	14771	4.00000	4.26
	46	cis-1,3-Dichloropropene	75	6.161	6.161	(1.241)	13738	2.00000	1.90
*	47	Chlorobenzene-d5	117	7.671	7.671	(1.000)	647809	50.0000	
$	48	Toluene-d8	98	6.393	6.393	(0.833)	31289	2.00000	1.95
	50	Toluene	91	6.453	6.453	(0.841)	35620	2.00000	1.98
	51	trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	10969	2.00000	1.83
	52	2-Hexanone	43	7.105	7.105	(0.926)	9314	4.00000	3.95
	53	1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	7537	2.00000	2.09
	54	1,3-Dichloropropane	76	6.989	6.989	(0.911)	14049	2.00000	1.98
	55	Dibromochloromethane	129	7.180	7.180	(0.936)	10210	2.00000	1.96
	56	Tetrachloroethene	164	6.929	6.929	(0.903)	7331	2.00000	1.97
	57	1,2-Dibromoethane	107	7.263	7.263	(0.947)	8477	2.00000	1.88
	58	1-Chlorohexane	55	7.697	7.697	(1.550)	5855	2.00000	1.77(MH)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	24558	2.00000	1.93
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.013)	9378	2.00000	1.98

61 Ethylbenzene	106	7.802	7.802 (1.017)	11791	2.00000	1.97
62 m,p-Xylenes	106	7.911	7.911 (1.031)	29170	4.00000	3.78

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.249	8.249	(1.075)	14764	2.00000	1.93
	64 Styrene	104	8.271	8.271	(1.078)	22967	2.00000	1.80
	66 Bromoform	173	8.417	8.417	(1.097)	6949	2.00000	1.93(T)
	67 Isopropylbenzene	105	8.563	8.563	(1.116)	32641	2.00000	1.87
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	11741	2.00000	2.08
$	69 4-Bromofluorobenzene	95	8.698	8.698	(1.134)	13631	2.00000	2.33
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	352851	50.0000	
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	7514	2.00000	1.91
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	34981	2.00000	1.78
	74 Bromobenzene	156	8.815	8.815	(0.912)	11721	2.00000	2.02
	75 1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	27917	2.00000	1.93
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	26853	2.00000	2.09
	77 4-Chlorotoluene	91	9.077	9.077	(0.939)	28173	2.00000	1.92
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	22104	2.00000	1.87
	79 1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	28377	2.00000	1.86
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	27643	2.00000	1.75
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	24966	2.00000	1.77
	83 1,3-Dichlorobenzene	146	9.613	9.613	(0.995)	18708	2.00000	1.94
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	20552	2.00000	1.96
	86 Benzyl Chloride	91	9.819	9.819	(1.280)	12783	2.00000	3.88
	87 n-Butylbenzene	91	10.003	10.003	(1.035)	19853	2.00000	3.18(M)
	88 1,2-Dichlorobenzene	146	9.999	9.999	(1.035)	18921	2.00000	1.91
	89 1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	1619	2.00000	1.88(M)
	90 1,2,4-Trichlorobenzene	180	11.352	11.352	(1.175)	11764	2.00000	1.88(M)
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	3970	2.00000	1.39
	92 Naphthalene	128	11.559	11.559	(1.196)	26250	2.00000	1.84(M)
	93 1,2,3-Trichlorobenzene	180	11.750	11.750	(1.216)	11288	2.00000	1.88
M	94 1,2-Dichloroethylene (total)	96				16788	4.00000	
M	95 Xylenes (total)	106				43934	6.00000	
	141 Cyclohexane	56	4.125	4.125	(0.987)	7375	2.00000	2.82(H)
	138 Freon TF	101	1.917	1.917	(0.459)	6025	2.00000	1.79
	147 Methylcyclohexane	55	5.373	5.373	(1.082)	16016	2.00000	1.91(M)
	146 Methyl Acetate	43	2.247	2.247	(0.538)	4149	2.00000	2.02
	148 Tert-Butyl alcohol	59	2.434	2.434	(0.583)	12015	40.0000	38.02(a)
	149 Isopropyl Alcohol	45	2.101	2.101	(0.503)	5607	40.0000	33.97

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.



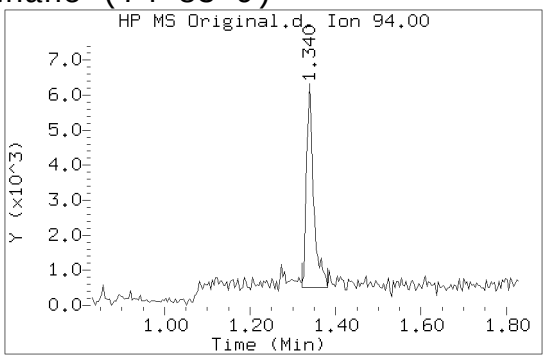
Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Date : 16-DEC-2022 13:02
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

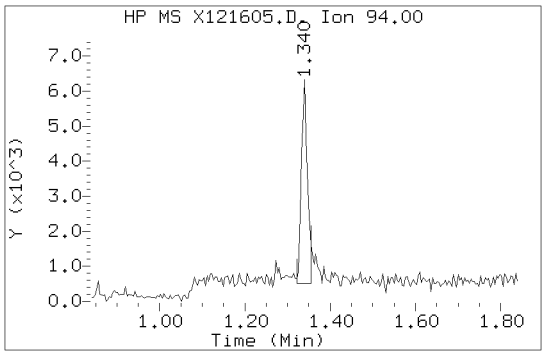
Bromomethane (74-83-9)

BEFORE
MASS
94
AREA
6762
HEIGHT
5808
27-Dec-2022
16:03
linh
pham

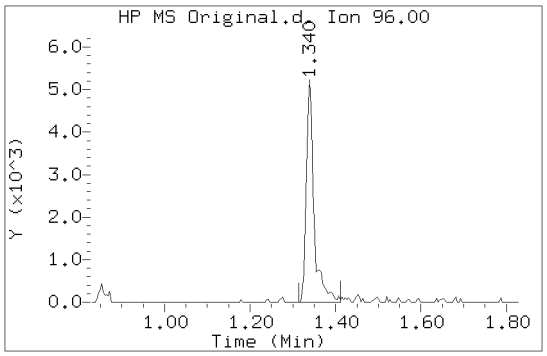


Reason Code:

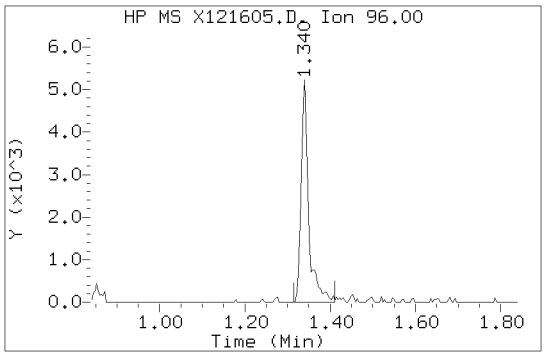
AFTER
MASS
94
AREA
5996
HEIGHT
5808
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
96
AREA
6661
HEIGHT
5227
27-Dec-2022
16:03
linh
pham

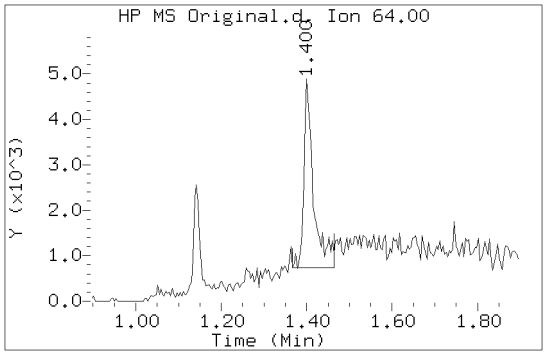


AFTER
MASS
96
AREA
6661
HEIGHT
5227
27-Dec-2022
16:07
linh
pham



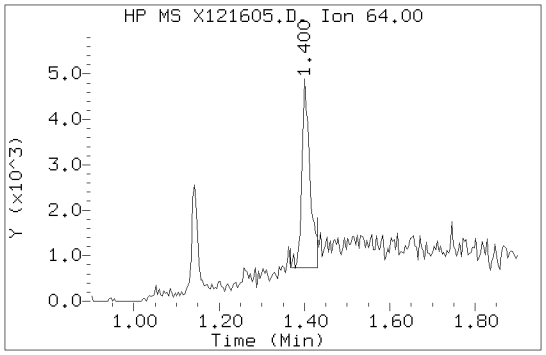
Chloroethane (75-00-3)

BEFORE
MASS
64
AREA
6641
HEIGHT
4162
27-Dec-2022
16:03
linh
pham

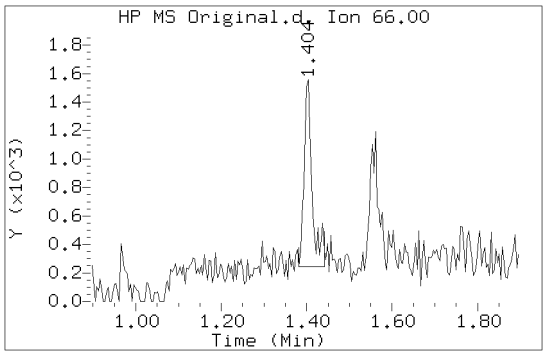


Reason Code:

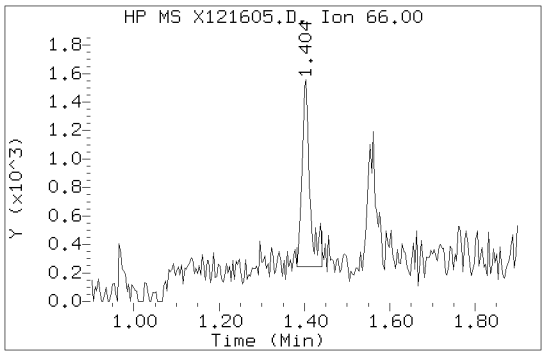
AFTER
MASS
64
AREA
5667
HEIGHT
4162
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
66
AREA
1745
HEIGHT
1315
27-Dec-2022
16:03
linh
pham



AFTER
MASS
66
AREA
1745
HEIGHT
1315
27-Dec-2022
16:07
linh
pham



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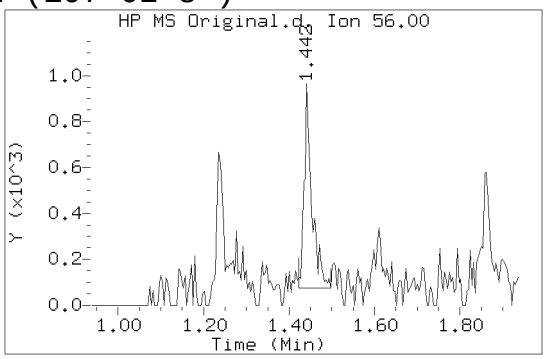
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Acrolein (107-02-8)

Reason Code:

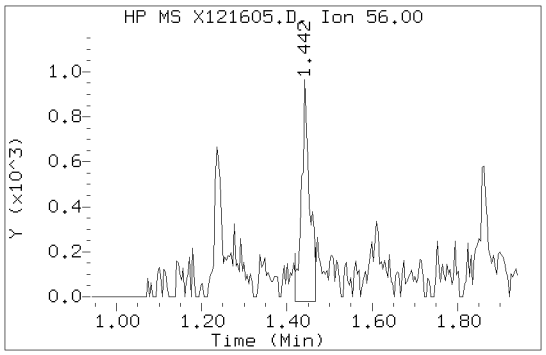
BEFORE

MASS
56
AREA
1122
HEIGHT
890
27-Dec-2022
16:03
linh
pham



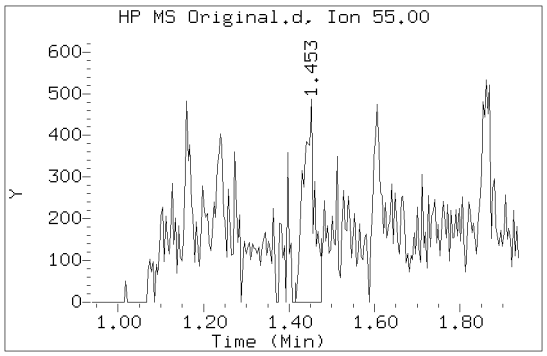
AFTER

MASS
56
AREA
1317
HEIGHT
985
27-Dec-2022
16:07
linh
pham



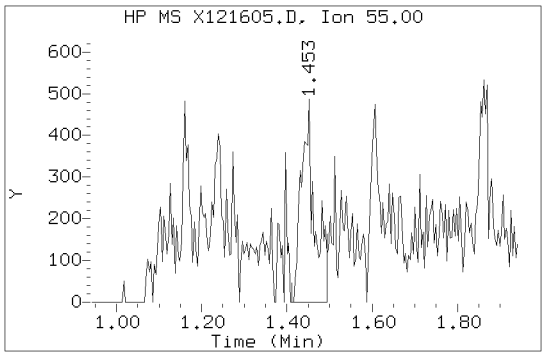
BEFORE

MASS
55
AREA
885
HEIGHT
487
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
1067
HEIGHT
487
27-Dec-2022
16:07
linh
pham

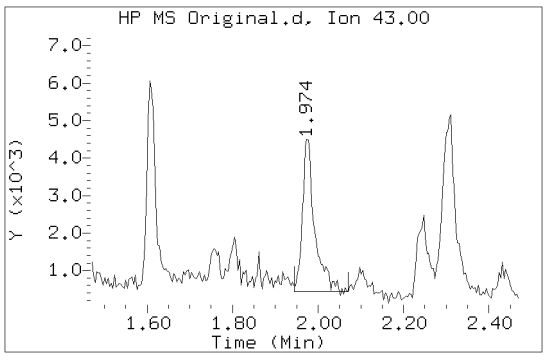


Acetone (67-64-1)

Reason Code:

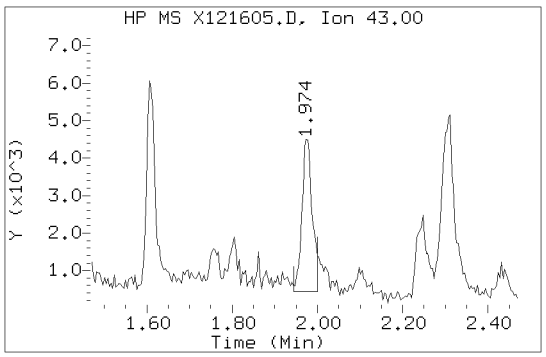
BEFORE

MASS
43
AREA
8369
HEIGHT
4066
27-Dec-2022
16:03
linh
pham



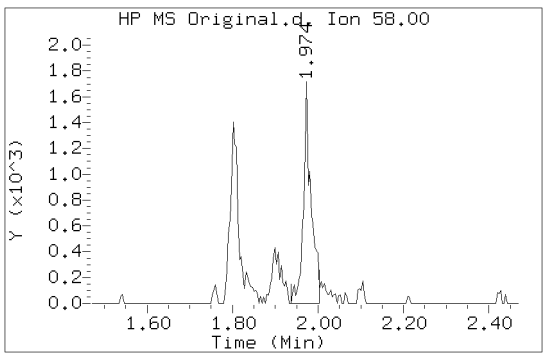
AFTER

MASS
43
AREA
7041
HEIGHT
4066
27-Dec-2022
16:07
linh
pham



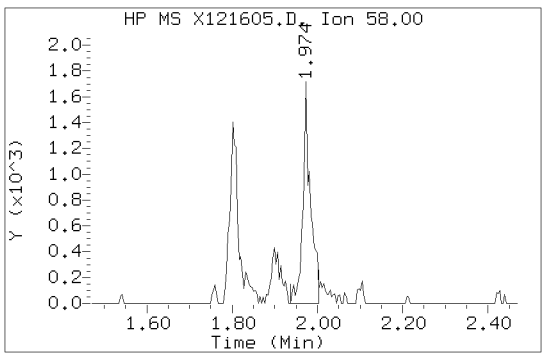
BEFORE

MASS
58
AREA
2165
HEIGHT
1717
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
2165
HEIGHT
1717
27-Dec-2022
16:07
linh
pham



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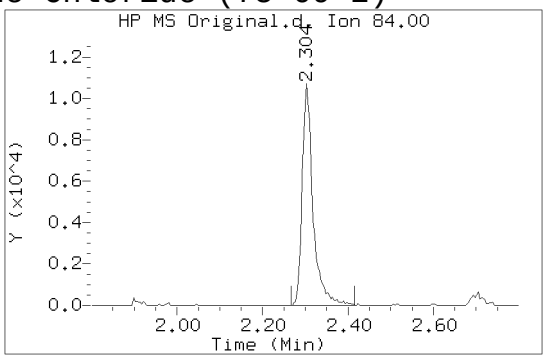
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

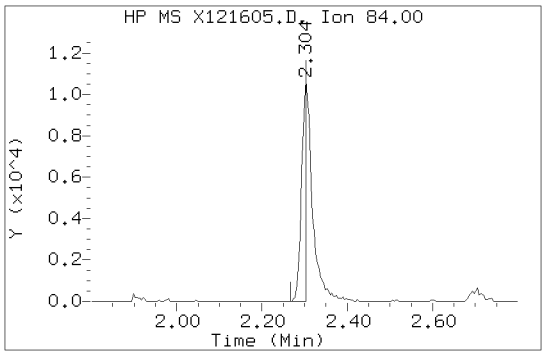
Methylene Chloride (75-09-2)

Reason Code:

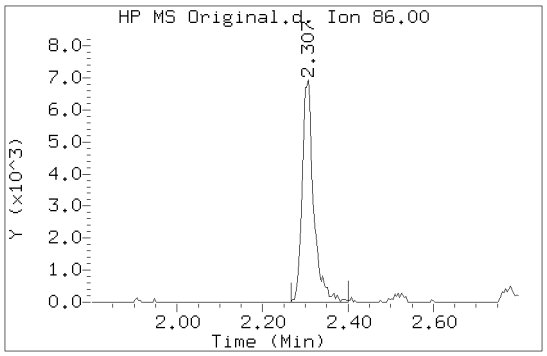
BEFORE
MASS
84
AREA
19299
HEIGHT
10710
27-Dec-2022
16:03
linh
pham



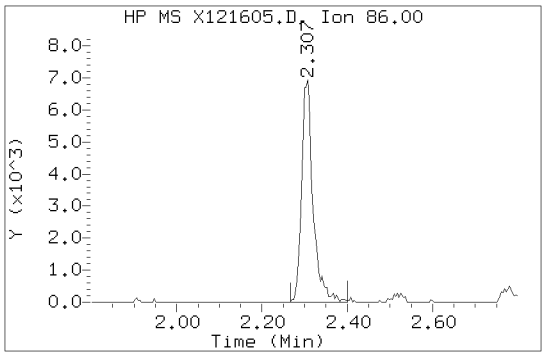
AFTER
MASS
84
AREA
9194
HEIGHT
10710
27-Dec-2022
16:07
linh
pham



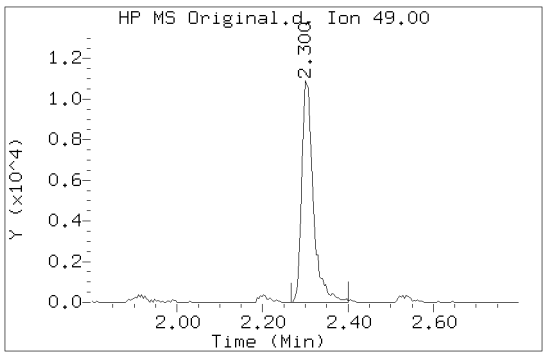
BEFORE
MASS
86
AREA
13231
HEIGHT
6936
27-Dec-2022
16:03
linh
pham



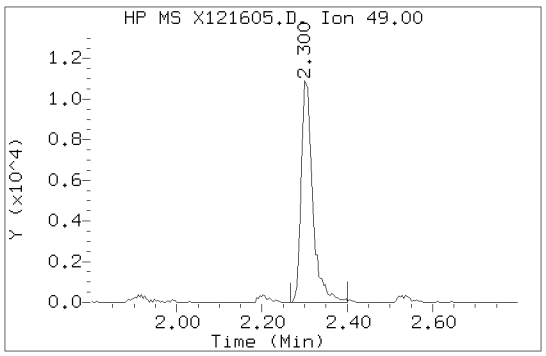
AFTER
MASS
86
AREA
13231
HEIGHT
6936
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
49
AREA
21067
HEIGHT
10905
27-Dec-2022
16:03
linh
pham



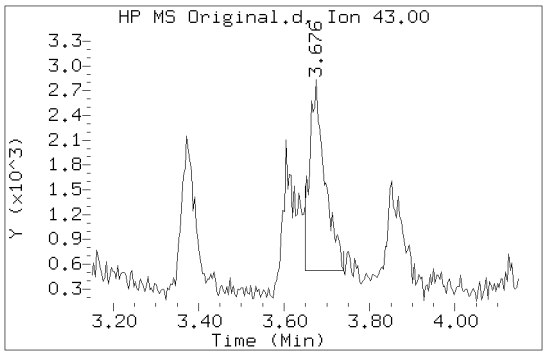
AFTER
MASS
49
AREA
21067
HEIGHT
10905
27-Dec-2022
16:07
linh
pham



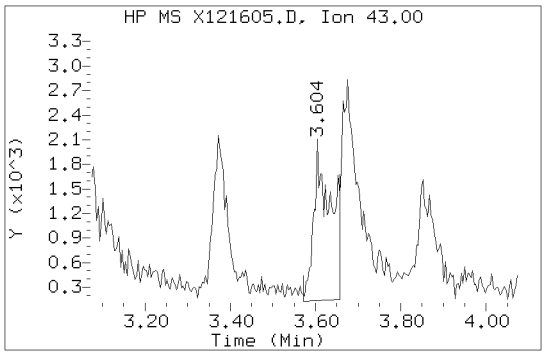
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
43
AREA
5778
HEIGHT
2307
27-Dec-2022
16:03
linh
pham



AFTER
MASS
43
AREA
5418
HEIGHT
1969
27-Dec-2022
16:07
linh
pham



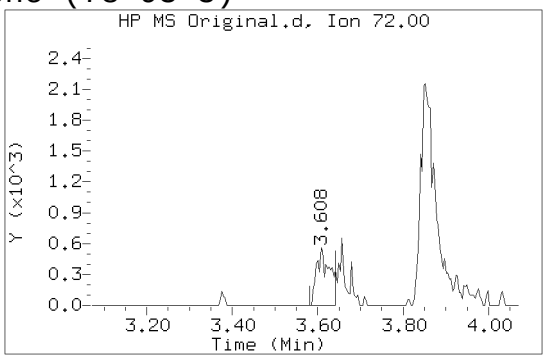
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

BEFORE

MASS
72
AREA
1209
HEIGHT
563
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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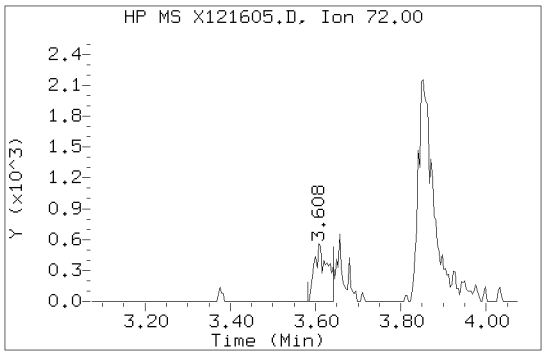
1209
HEIGHT
563
27-Dec-2022
16:07
linh
pham

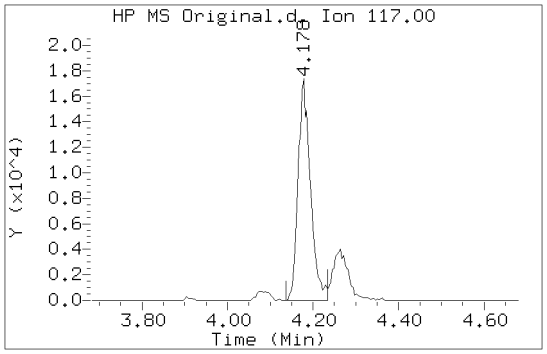


Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE

MASS
117
AREA
35555
HEIGHT
17376
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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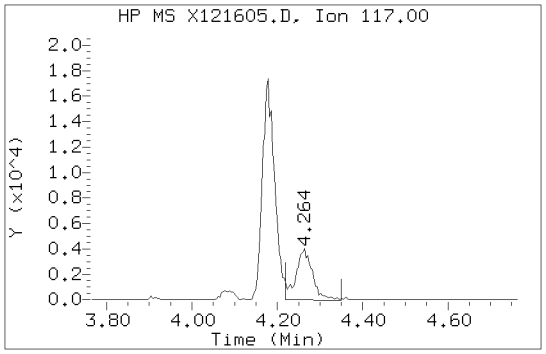
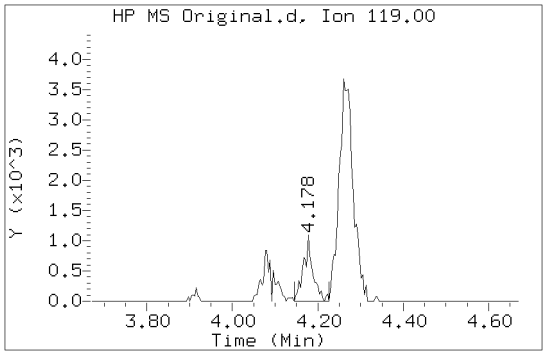
HEIGHT
4036
27-Dec-2022
16:07
linh
pham



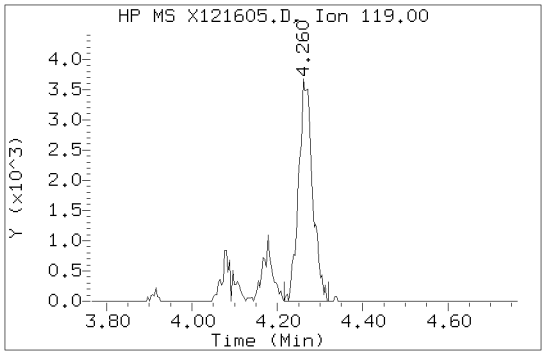
BEFORE

MASS
119
AREA
1692
HEIGHT
1100
27-Dec-2022
16:03
linh
pham



AFTER

MASS
119
AREA
8494
HEIGHT
3676
27-Dec-2022
16:07
linh
pham

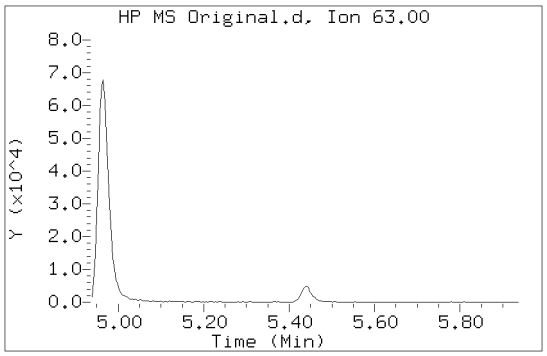


1,2-Dichloropropane (78-87-5)

Reason Code:

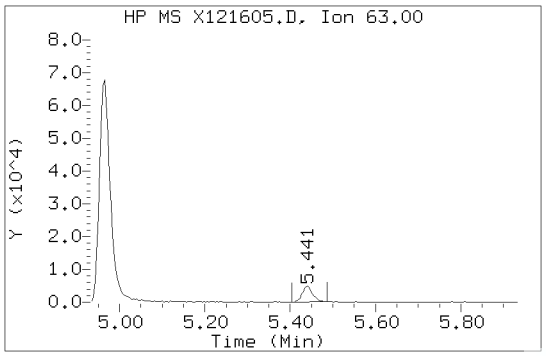
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
63
AREA
8129
HEIGHT
4705
27-Dec-2022
16:07
linh
pham



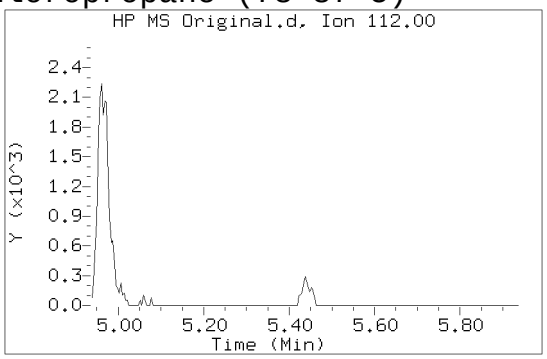
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

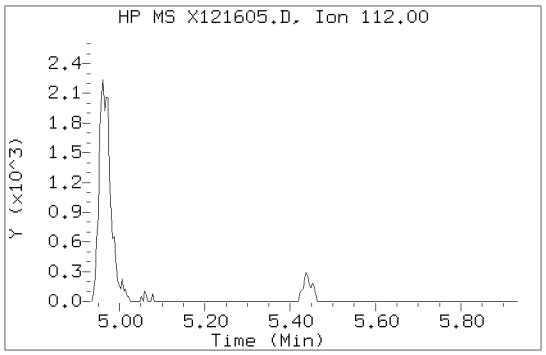
BEFORE

MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

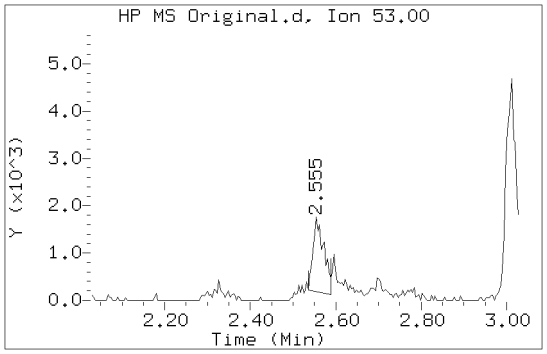


Acrylonitrile (107-13-1)

Reason Code:

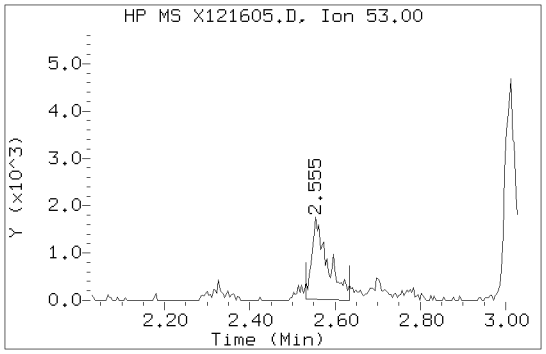
BEFORE

MASS
53
AREA
2810
HEIGHT
1577
27-Dec-2022
16:03
linh
pham



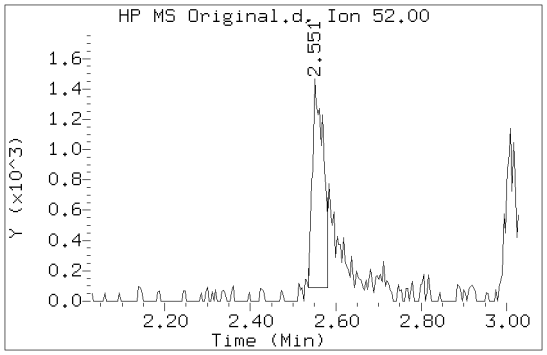
AFTER

MASS
53
AREA
4557
HEIGHT
1735
27-Dec-2022
16:07
linh
pham



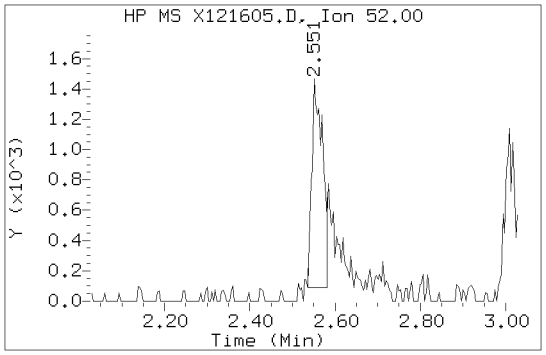
BEFORE

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:03
linh
pham



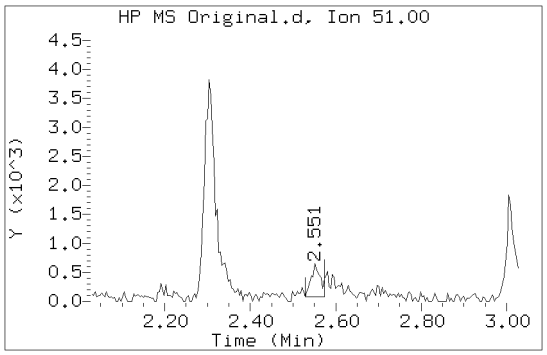
AFTER

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:07
linh
pham



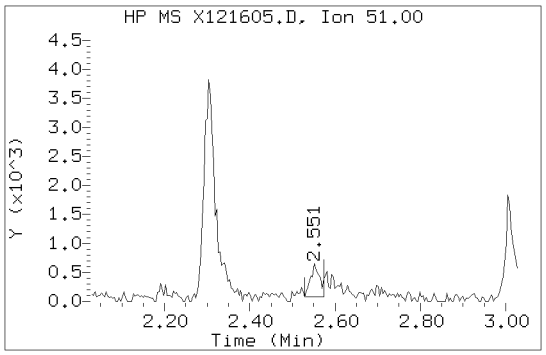
BEFORE

MASS
51
AREA
876
HEIGHT
575
27-Dec-2022
16:03
linh
pham



AFTER

MASS
51
AREA
876
HEIGHT
575
27-Dec-2022
16:07
linh
pham

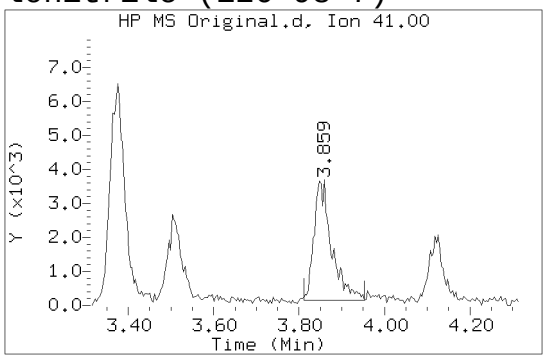


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

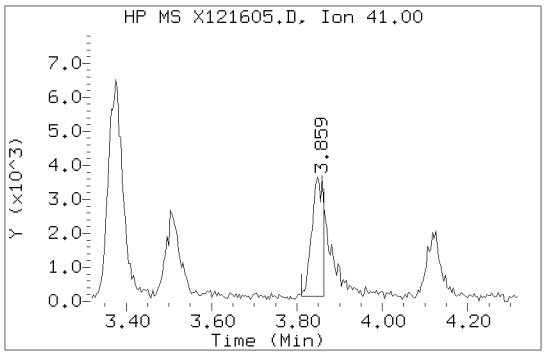
Methacrylonitrile (126-98-7)

Reason Code:

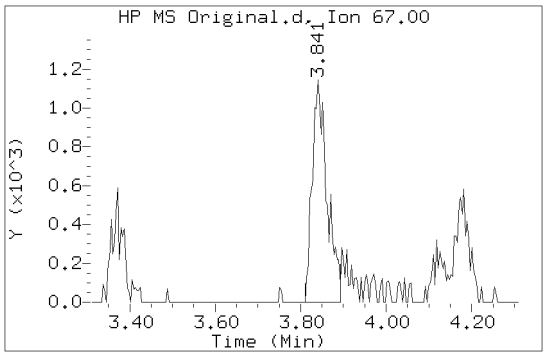
BEFORE
MASS
41
AREA
10013
HEIGHT
3544
27-Dec-2022
16:03
linh
pham



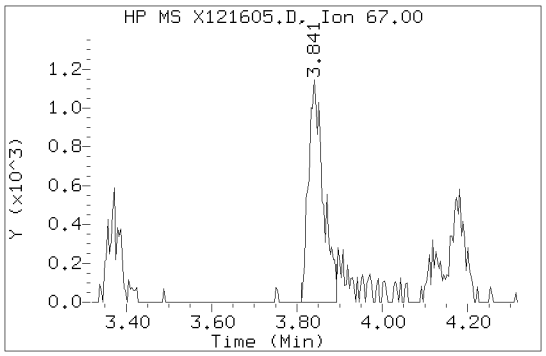
AFTER
MASS
41
AREA
6388
HEIGHT
3544
27-Dec-2022
16:07
linh
pham



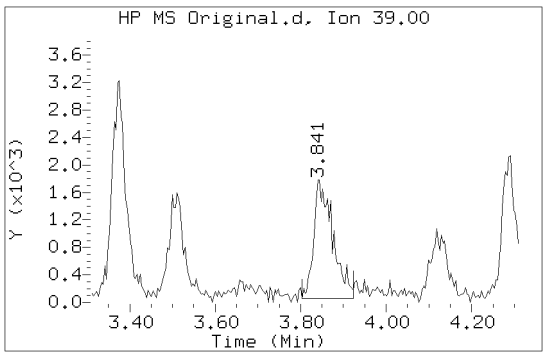
BEFORE
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:03
linh
pham



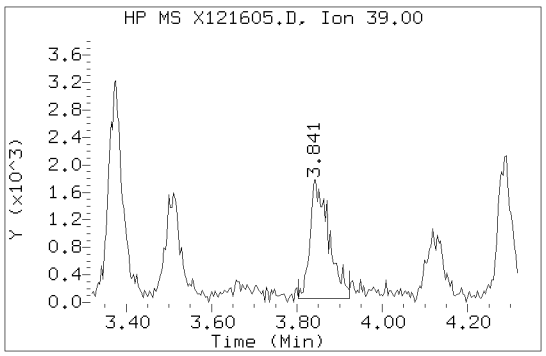
AFTER
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:03
linh
pham



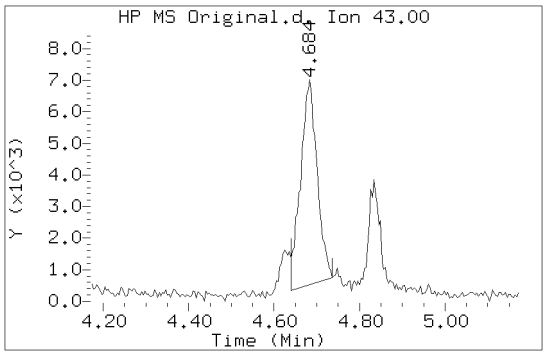
AFTER
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:07
linh
pham



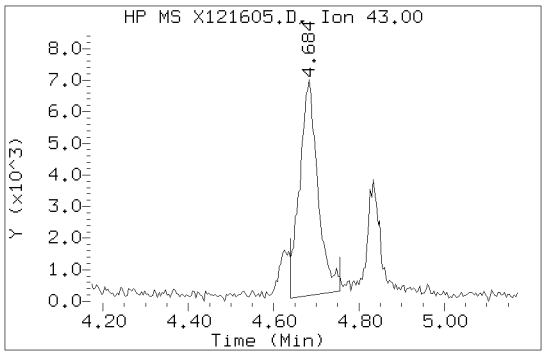
Isobutyl Alcohol (78-83-1)

Reason Code:

BEFORE
MASS
43
AREA
17811
HEIGHT
6479
27-Dec-2022
16:03
linh
pham



AFTER
MASS
43
AREA
20629
HEIGHT
6832
27-Dec-2022
16:07
linh
pham



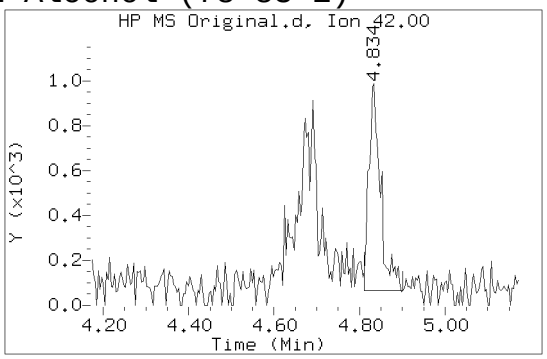
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Isobutyl Alcohol (78-83-1)

Reason Code:

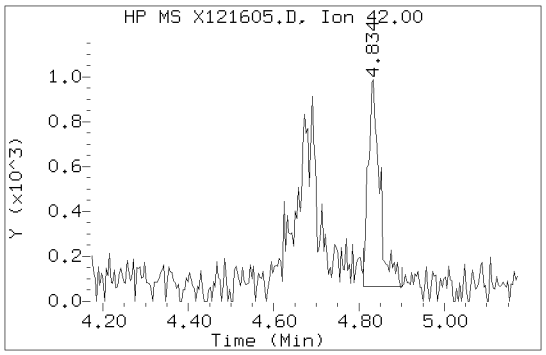
BEFORE

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:03
linh
pham



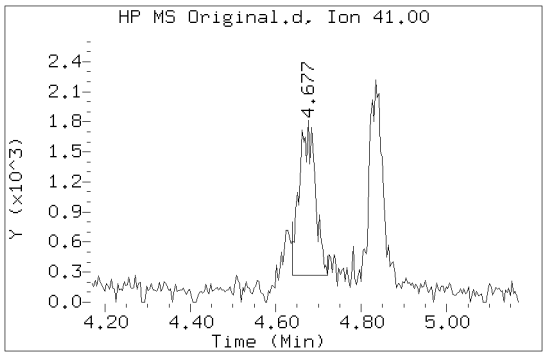
AFTER

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:07
linh
pham



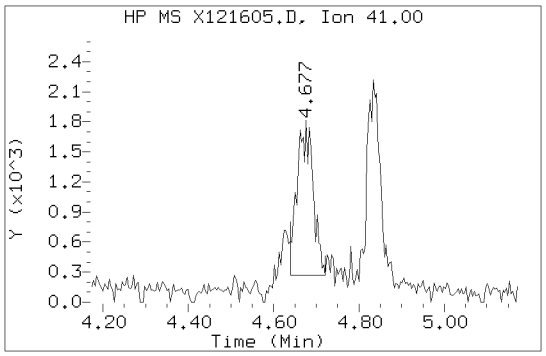
BEFORE

MASS
41
AREA
4067
HEIGHT
1547
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
4067
HEIGHT
1547
27-Dec-2022
16:07
linh
pham

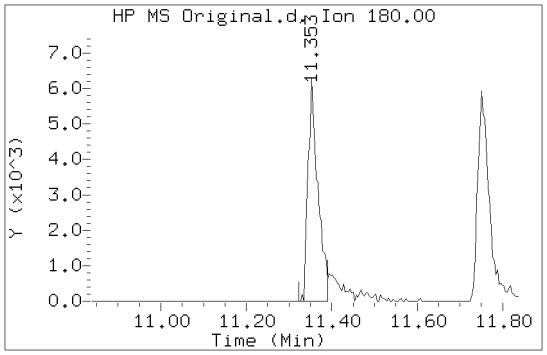


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

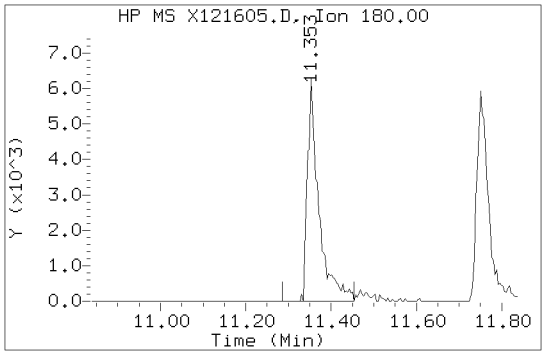
BEFORE

MASS
180
AREA
10131
HEIGHT
6269
27-Dec-2022
16:03
linh
pham



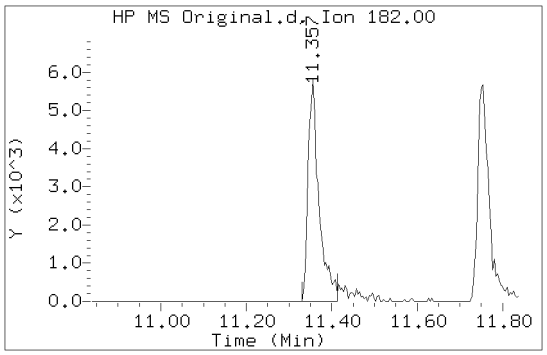
AFTER

MASS
180
AREA
11764
HEIGHT
6269
27-Dec-2022
16:07
linh
pham



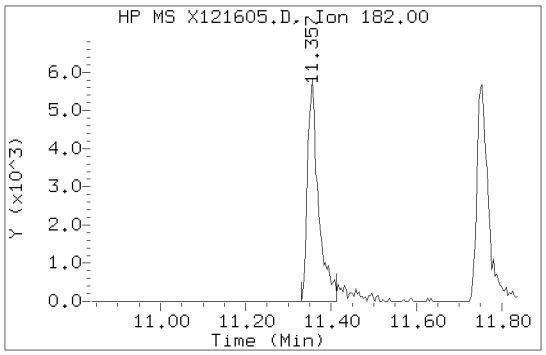
BEFORE

MASS
182
AREA
10317
HEIGHT
5807
27-Dec-2022
16:03
linh
pham



AFTER

MASS
182
AREA
10317
HEIGHT
5807
27-Dec-2022
16:07
linh
pham



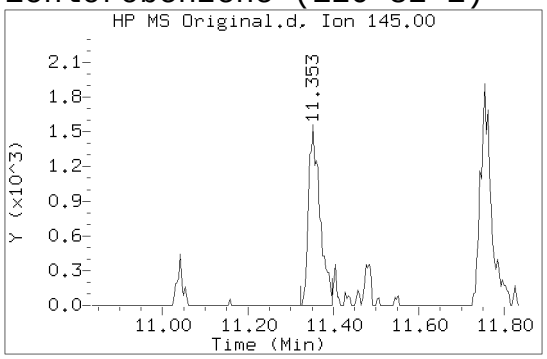
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

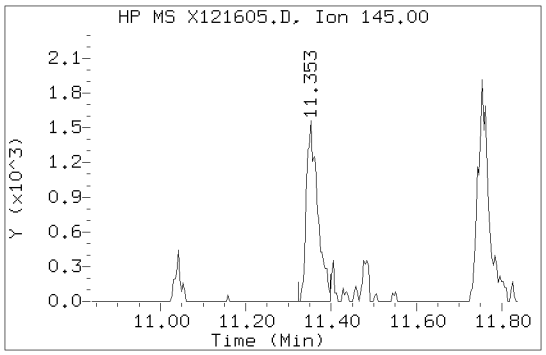
BEFORE

MASS
145
AREA
2887
HEIGHT
1565
27-Dec-2022
16:03
linh
pham



AFTER

MASS
145
AREA
2887
HEIGHT
1565
27-Dec-2022
16:07
linh
pham

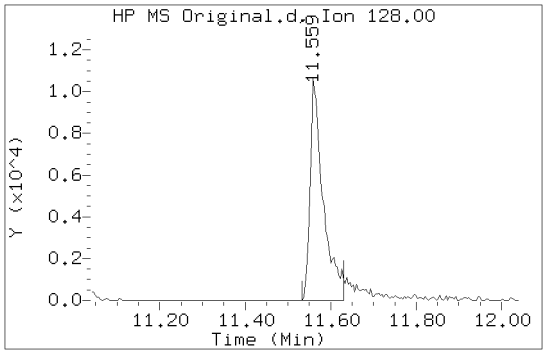


Naphthalene (91-20-3)

Reason Code:

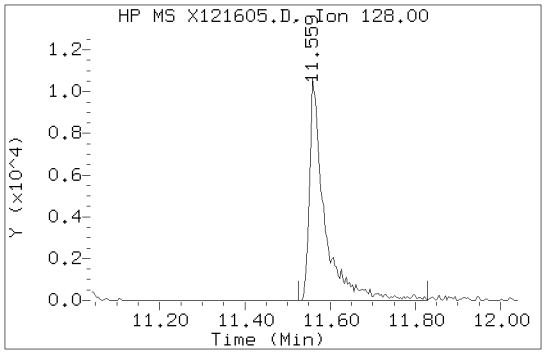
BEFORE

MASS
128
AREA
22581
HEIGHT
10616
27-Dec-2022
16:03
linh
pham



AFTER

MASS
128
AREA
26250
HEIGHT
10616
27-Dec-2022
16:07
linh
pham

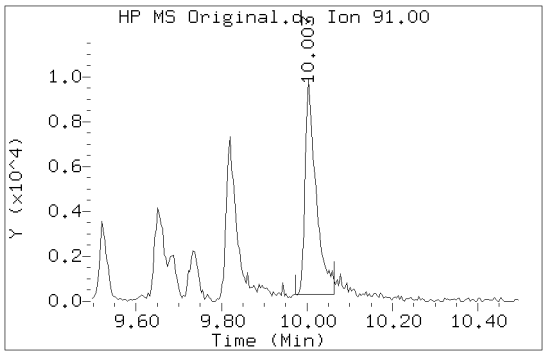


n-Butylbenzene (104-51-8)

Reason Code:

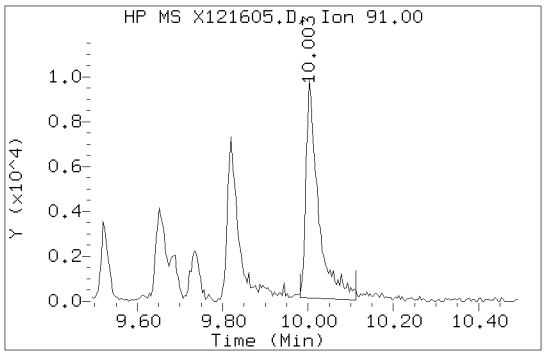
BEFORE

MASS
91
AREA
17181
HEIGHT
9558
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
19853
HEIGHT
9720
27-Dec-2022
16:07
linh
pham



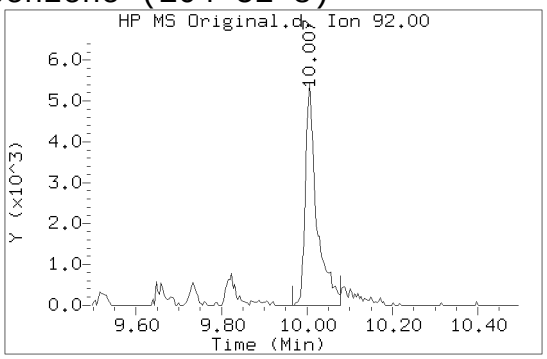
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butylbenzene (104-51-8)

Reason Code:

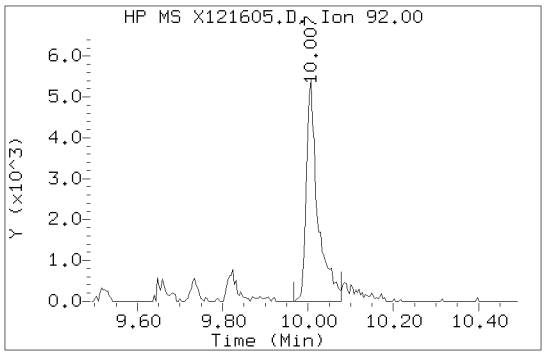
BEFORE

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:03
linh
pham



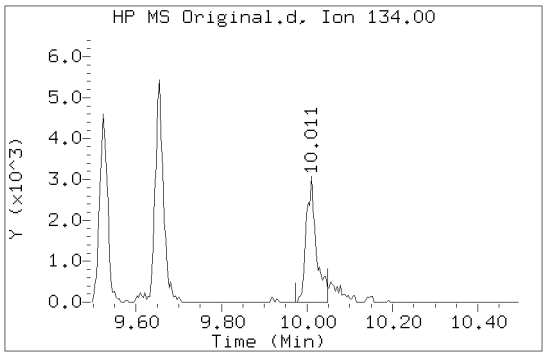
AFTER

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:07
linh
pham



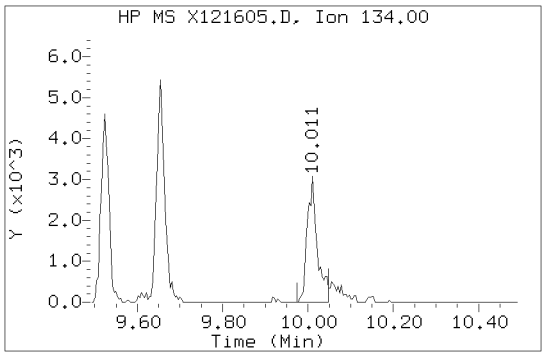
BEFORE

MASS
134
AREA
5059
HEIGHT
3076
27-Dec-2022
16:03
linh
pham



AFTER

MASS
134
AREA
5059
HEIGHT
3076
27-Dec-2022
16:07
linh
pham

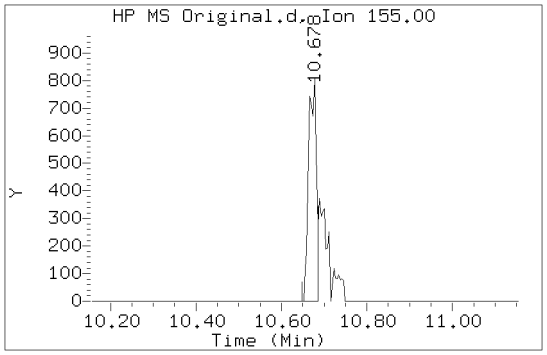


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

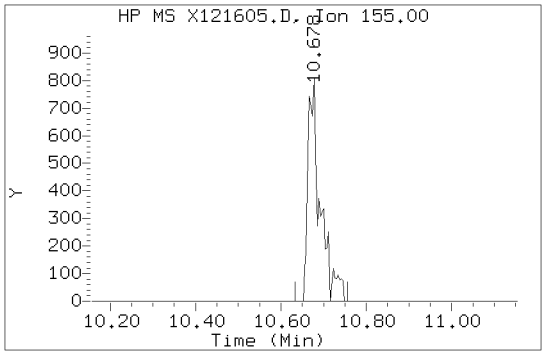
BEFORE

MASS
155
AREA
1026
HEIGHT
806
27-Dec-2022
16:03
linh
pham



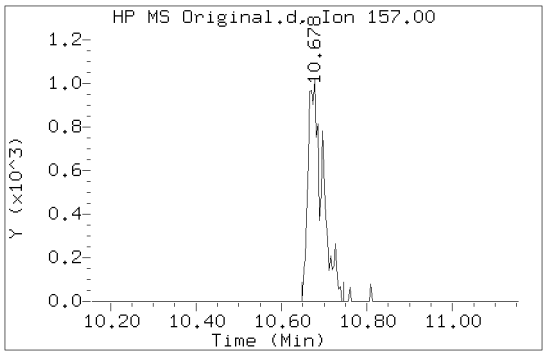
AFTER

MASS
155
AREA
1619
HEIGHT
806
27-Dec-2022
16:07
linh
pham



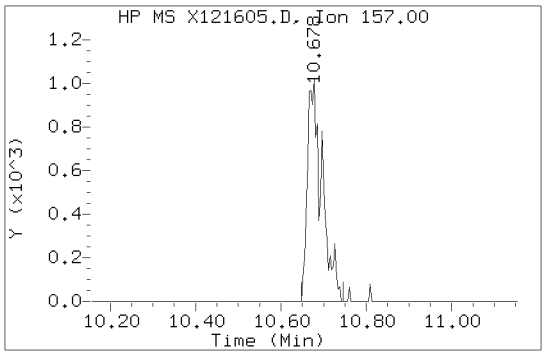
BEFORE

MASS
157
AREA
2422
HEIGHT
1016
27-Dec-2022
16:03
linh
pham



AFTER

MASS
157
AREA
2422
HEIGHT
1016
27-Dec-2022
16:07
linh
pham



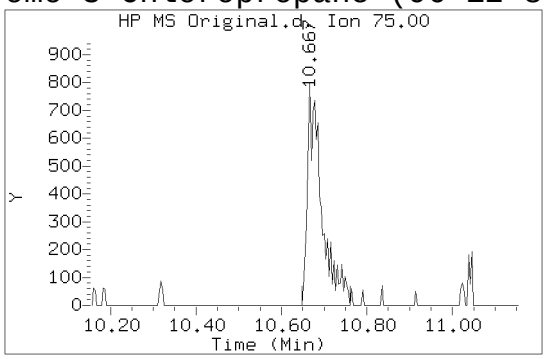
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

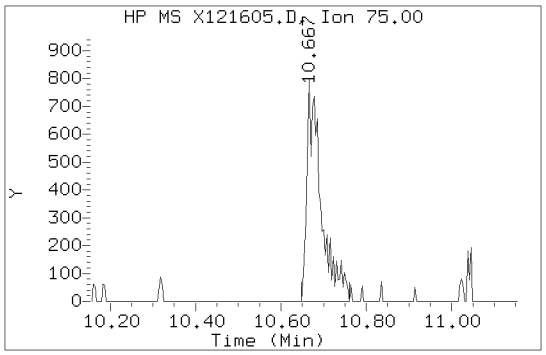
BEFORE

MASS
75
AREA
1843
HEIGHT
796
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
1843
HEIGHT
796
27-Dec-2022
16:07
linh
pham

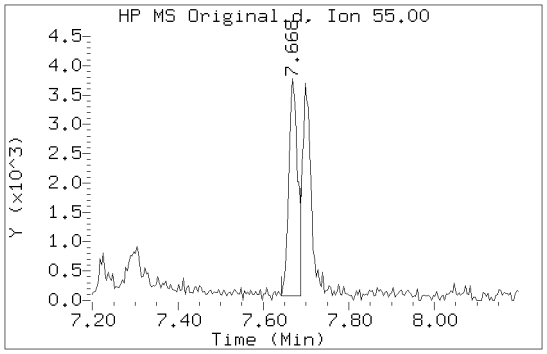


1-Chlorohexane (544-10-5)

Reason Code:

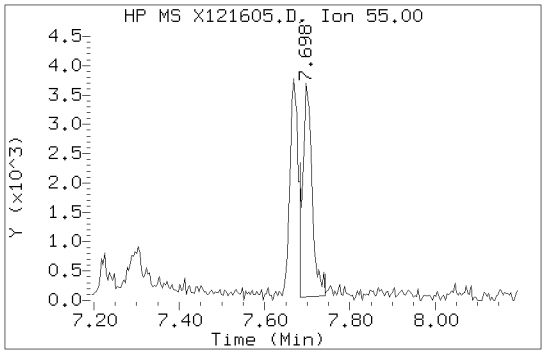
BEFORE

MASS
55
AREA
5357
HEIGHT
3703
27-Dec-2022
16:03
linh
pham



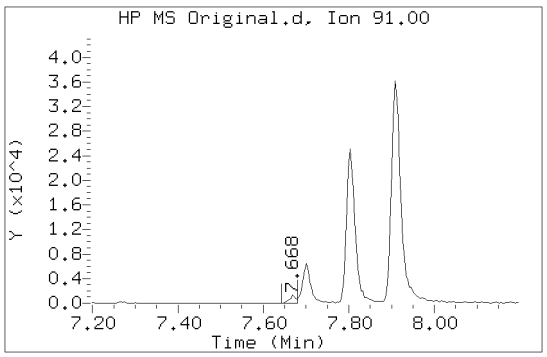
AFTER

MASS
55
AREA
5855
HEIGHT
3647
27-Dec-2022
16:07
linh
pham



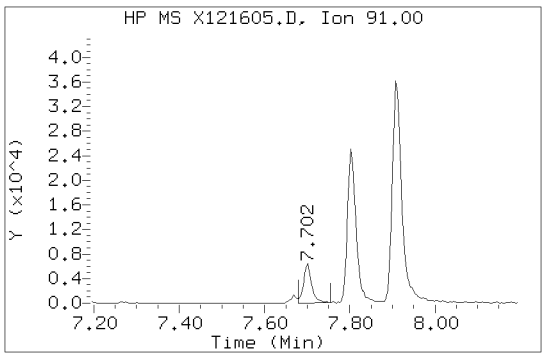
BEFORE

MASS
91
AREA
1356
HEIGHT
1324
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
8682
HEIGHT
6440
27-Dec-2022
16:07
linh
pham

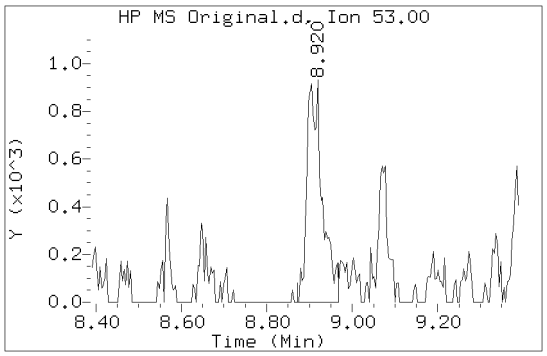


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

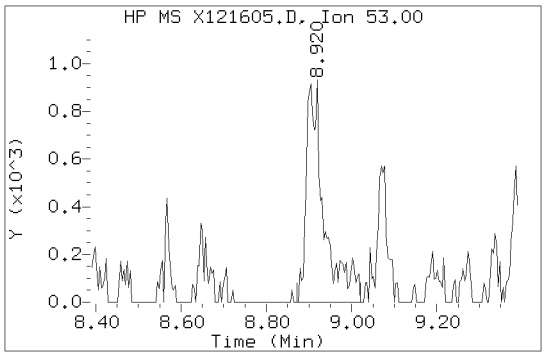
BEFORE

MASS
53
AREA
2313
HEIGHT
932
27-Dec-2022
16:03
linh
pham



AFTER

MASS
53
AREA
2690
HEIGHT
932
27-Dec-2022
16:07
linh
pham



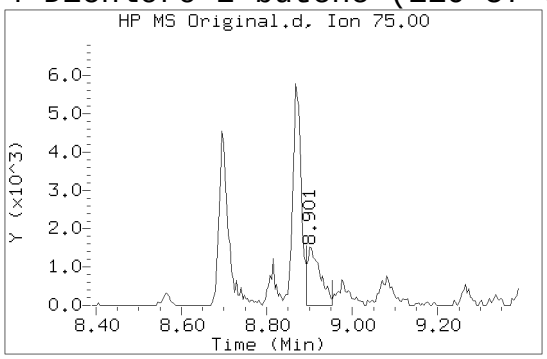
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

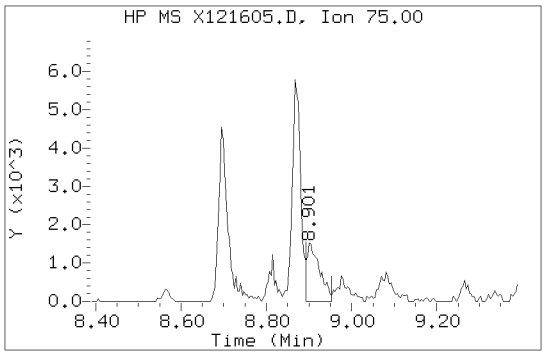
BEFORE

MASS
75
AREA
3228
HEIGHT
1526
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
3228
HEIGHT
1526
27-Dec-2022
16:07
linh
pham

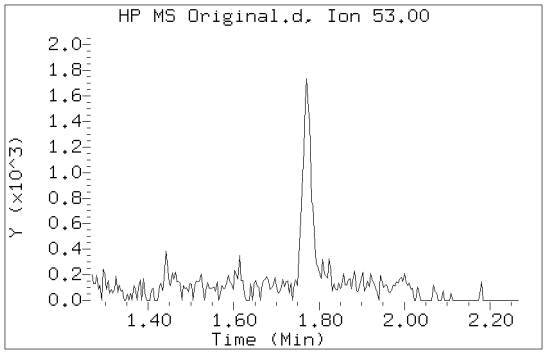


Chloroprene (126-99-8)

Reason Code:

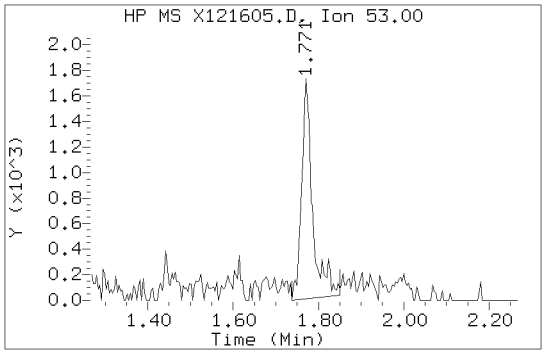
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



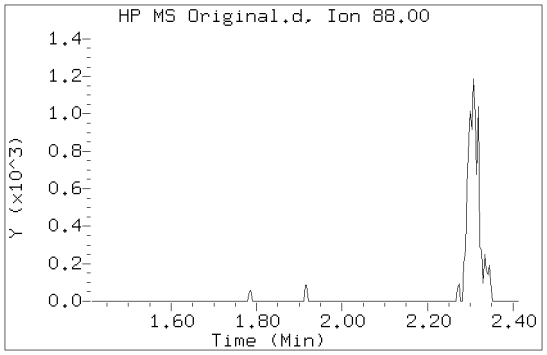
AFTER

MASS
53
AREA
3126
HEIGHT
1722
27-Dec-2022
16:07
linh
pham



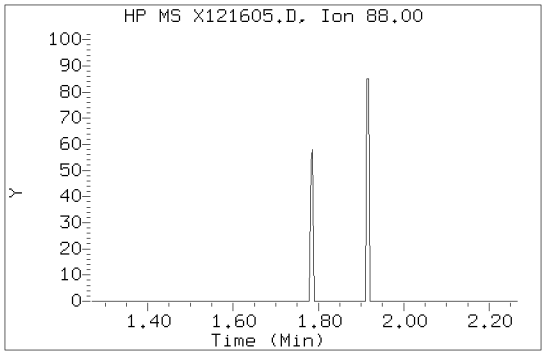
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

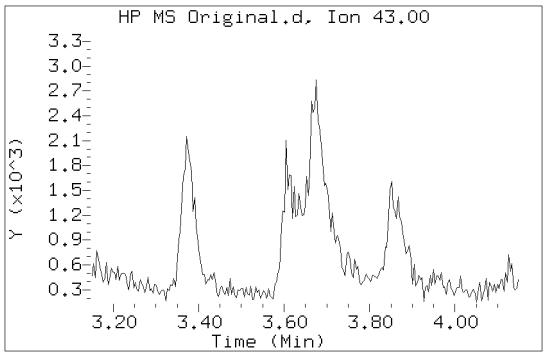


Ethyl Acetate (141-78-6)

Reason Code:

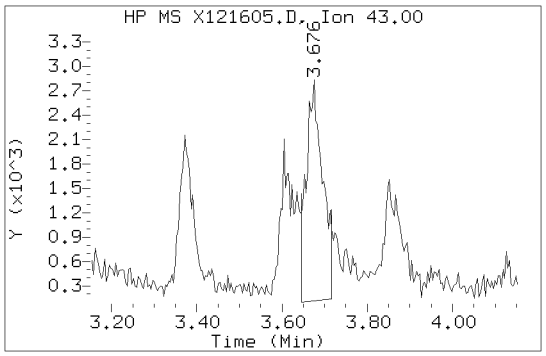
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

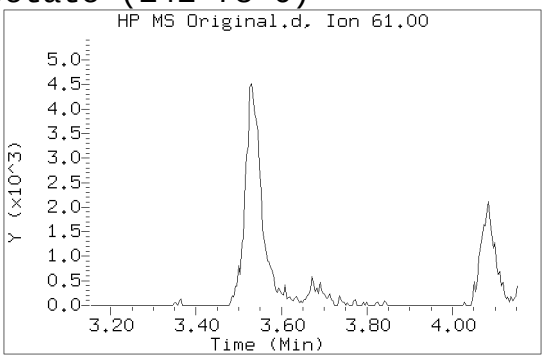
MASS
43
AREA
7422
HEIGHT
2716
27-Dec-2022
16:07
linh
pham



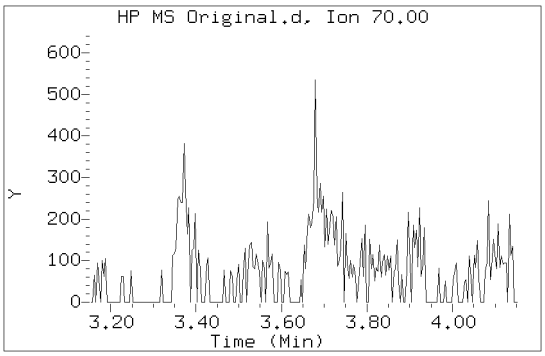
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

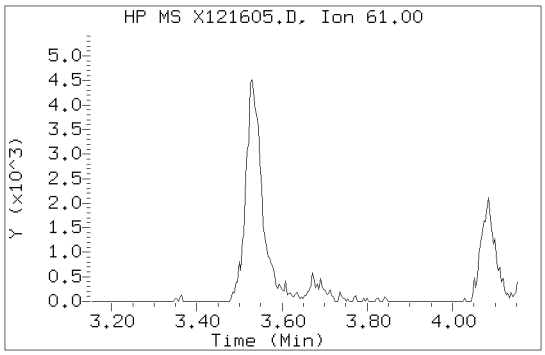


BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

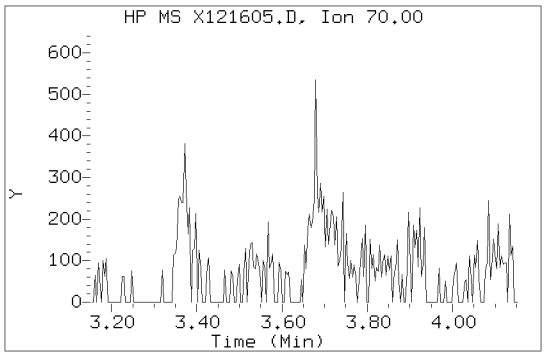


Reason Code:

AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

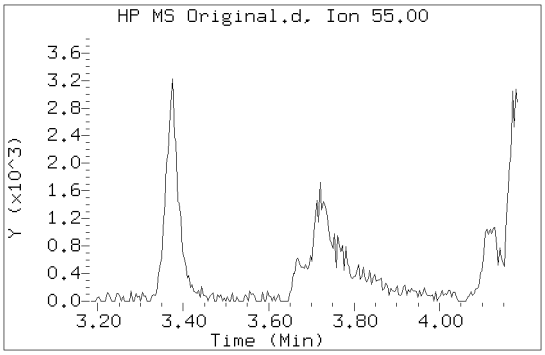


AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

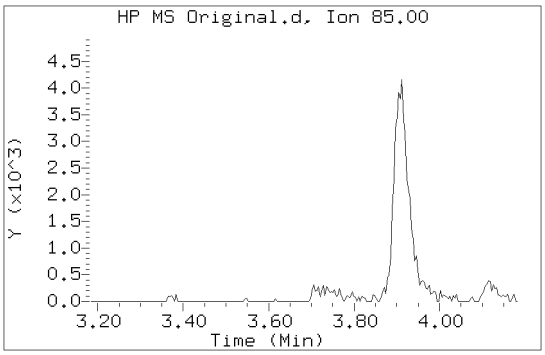


Methyl Acrylate (96-33-3)

BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

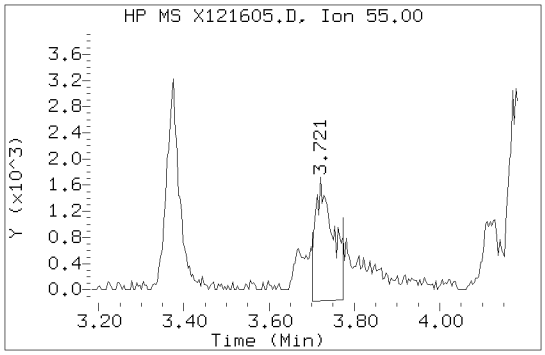


BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

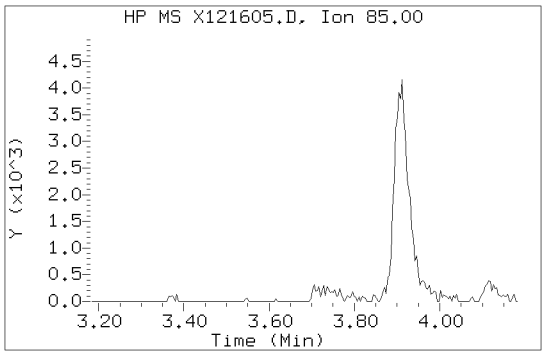


Reason Code:

AFTER
MASS
55
AREA
5443
HEIGHT
1892
27-Dec-2022
16:07
linh
pham



AFTER
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



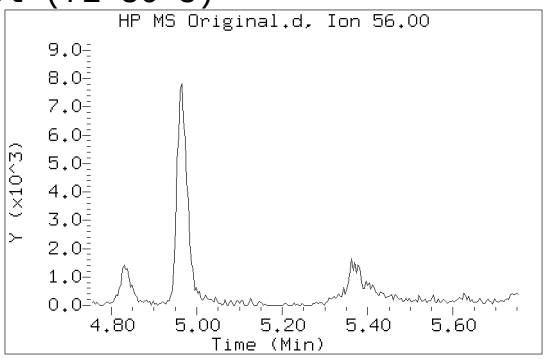
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

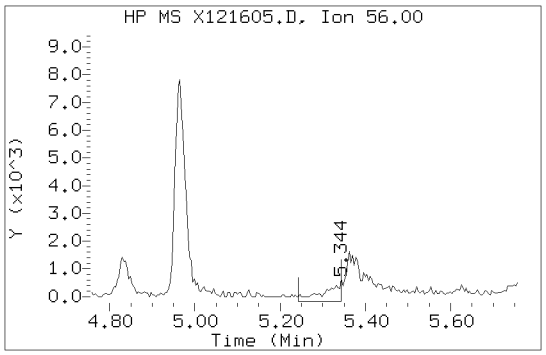
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



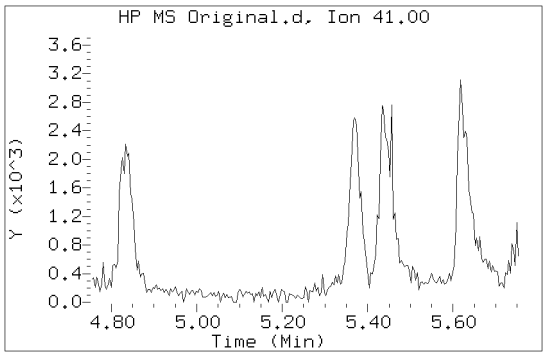
AFTER

MASS
56
AREA
2004
HEIGHT
808
27-Dec-2022
16:07
linh
pham



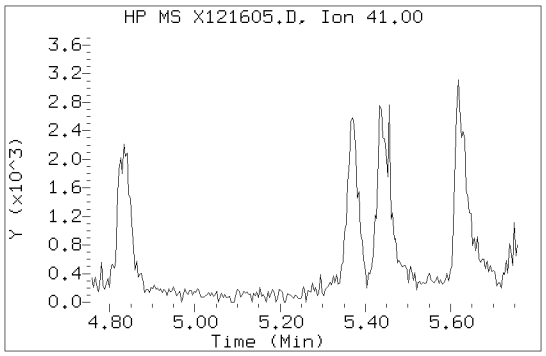
BEFORE

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

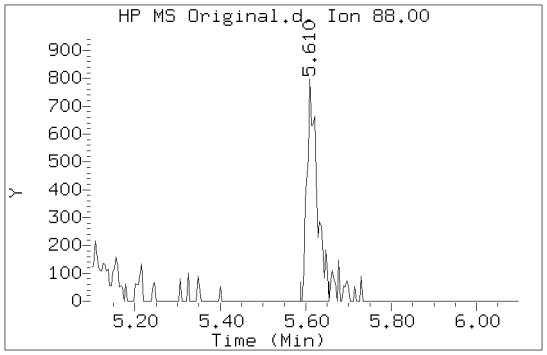


1,4-Dioxane ()

Reason Code:

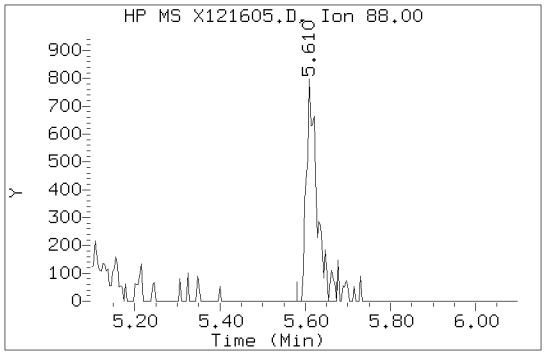
BEFORE

MASS
88
AREA
1335
HEIGHT
798
27-Dec-2022
16:03
linh
pham



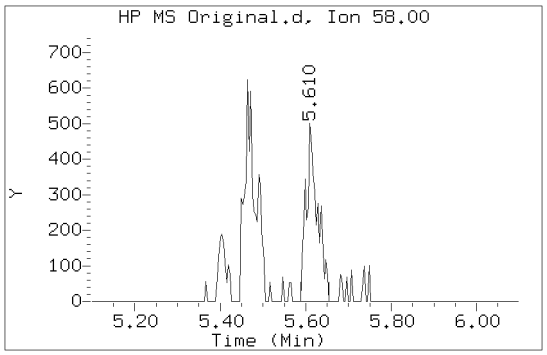
AFTER

MASS
88
AREA
1409
HEIGHT
798
27-Dec-2022
16:07
linh
pham



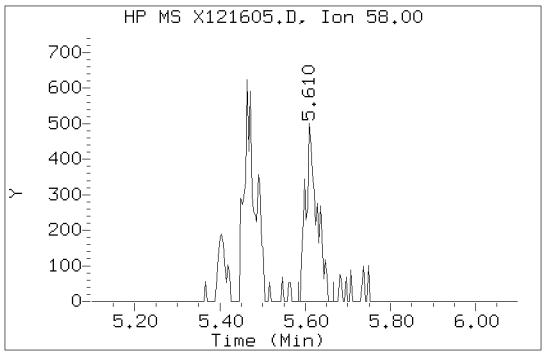
BEFORE

MASS
58
AREA
934
HEIGHT
501
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
934
HEIGHT
501
27-Dec-2022
16:07
linh
pham

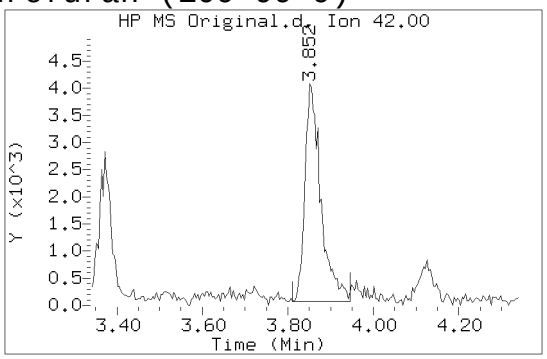


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

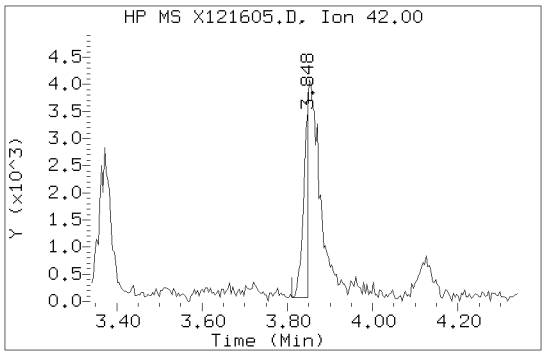
Tetrahydrofuran (109-99-9)

Reason Code:

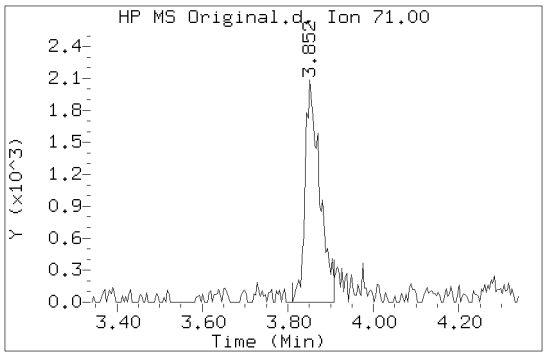
BEFORE
MASS
42
AREA
10469
HEIGHT
4012
27-Dec-2022
16:03
linh
pham



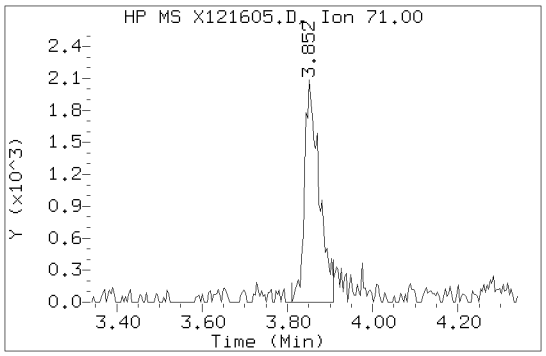
AFTER
MASS
42
AREA
2867
HEIGHT
3419
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
71
AREA
5020
HEIGHT
2086
27-Dec-2022
16:03
linh
pham



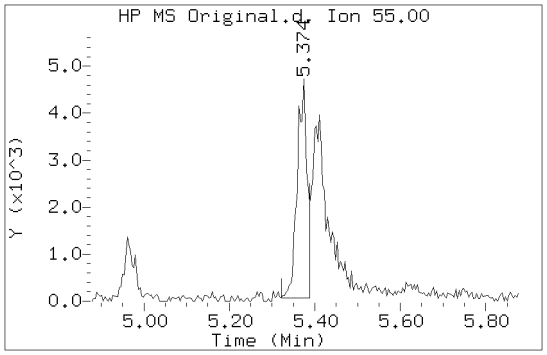
AFTER
MASS
71
AREA
5020
HEIGHT
2086
27-Dec-2022
16:07
linh
pham



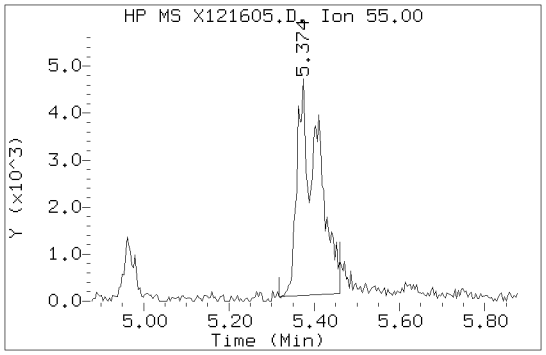
Methylcyclohexane (108-87-2)

Reason Code:

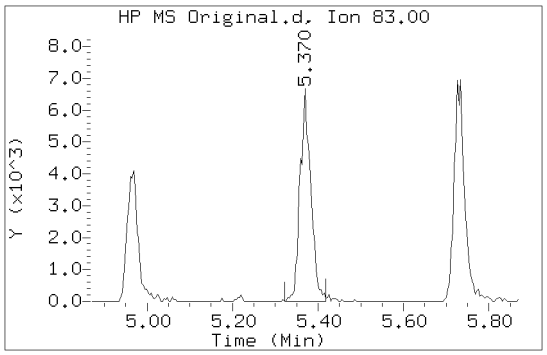
BEFORE
MASS
55
AREA
7676
HEIGHT
4656
27-Dec-2022
16:03
linh
pham



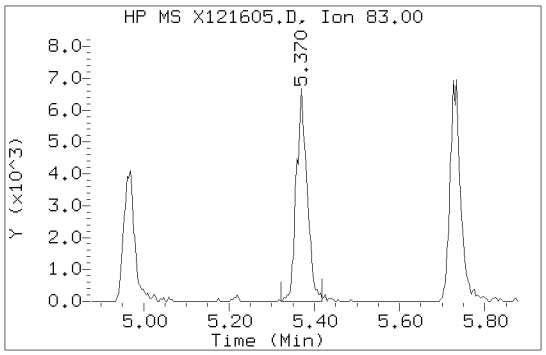
AFTER
MASS
55
AREA
16016
HEIGHT
4611
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
83
AREA
11881
HEIGHT
6672
27-Dec-2022
16:03
linh
pham



AFTER
MASS
83
AREA
11881
HEIGHT
6672
27-Dec-2022
16:07
linh
pham



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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Acetaldehyde (75-07-0)

Reason Code:

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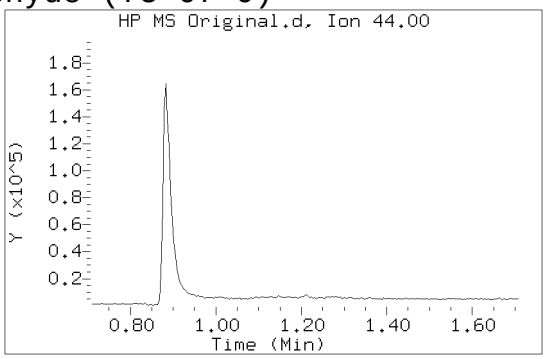

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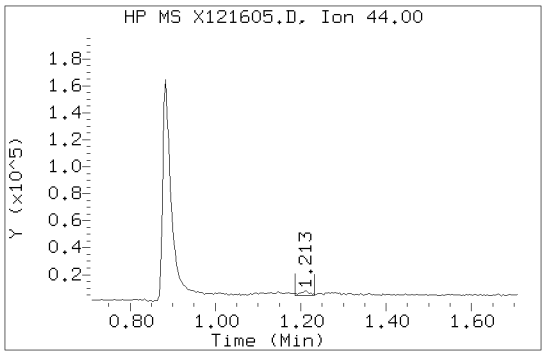

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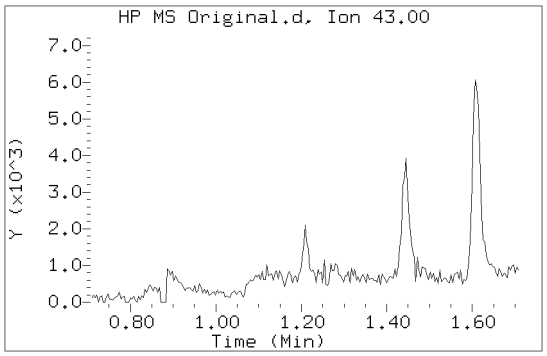

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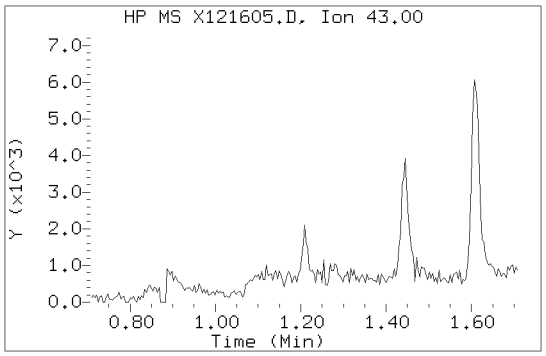

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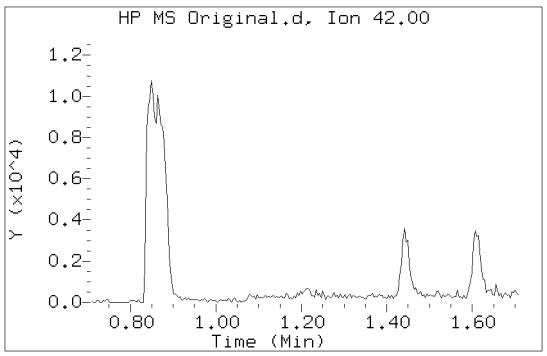

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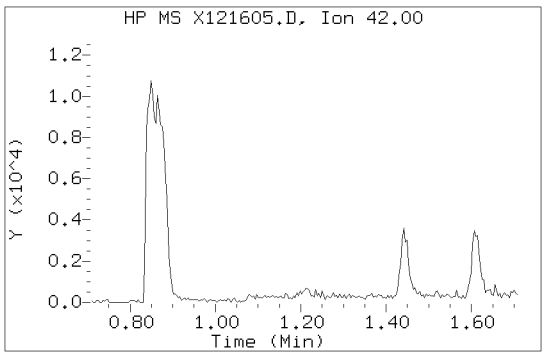

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
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Inj Date : 16-DEC-2022 13:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V6;WATER;0;1;
Comment :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 13:02 Cal File: X121605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	450664	50.0000	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	4197	100.000	101.88(M)
140	1,3-Butadiene	54	1.164	1.164	(0.279)	14283	5.00000	4.61
25	Methacrylonitrile	41	3.840	3.840	(0.919)	15701	5.00000	4.92(M)
12	Isobutyl Alcohol	43	4.680	4.680	(1.120)	51624	100.000	101.84
13	Acetonitrile	39	2.198	2.198	(0.526)	19635	50.0000	47.87
14	Allyl Chloride	41	2.198	2.198	(0.526)	37993	5.00000	4.86
4	Propionitrile	54	3.660	3.660	(0.876)	23049	50.0000	50.12
136	n-Hexane	57	2.772	2.772	(0.664)	14618	5.00000	4.50
72	trans-1,4-Dichloro-2-butene	53	8.901	8.901	(1.161)	6648	5.00000	4.70(M)
194	Acetaldehyde	44	1.209	1.209	(0.289)	6161	20.0000	0.80(M)
23	Chloroprene	53	1.771	1.771	(0.424)	7154	5.00000	4.66(M)
145	alpha-Methylstyrene	118	9.261	9.261	(0.958)	37831	5.00000	4.79
200	Dimethyl Disulfide	94	6.198	6.198	(0.808)	40144	5.00000	4.53
139	Diethyl ether	59	1.756	1.756	(0.420)	15119	5.00000	5.02
130	Ethyl Acetate	43	3.660	3.660	(0.876)	18020	5.00000	5.12(M)
40	Methyl Methacrylate	41	5.617	5.617	(1.345)	15119	5.00000	4.92
49	Ethyl Methacrylate	69	6.715	6.715	(1.353)	13801	5.00000	4.27
132	n-Butanol	56	5.287	5.287	(1.266)	4891	100.000	125.41(M)
142	Tetrahydrofuran	42	3.848	3.848	(0.921)	7598	10.0000	10.82(M)

150	Allyl alcohol	57	2.772	2.772 (0.664)	14618	100.000	83.50
166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	80329	5.00000	4.68

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D Page 2
Report Date: 27-Dec-2022 16:07

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.705	3.705	(0.887)	14950	5.00000	4.88(M)
	162 Butyl acrylate	55	8.260	8.260	(1.077)	38320	5.00000	4.48
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	15008	5.00000	5.11
	3 Chloromethane	50	1.077	1.077	(0.258)	19623	5.00000	6.81
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	19002	5.00000	4.82
	6 Bromomethane	94	1.336	1.336	(0.320)	15112	5.00000	6.66
	7 Chloroethane	64	1.400	1.400	(0.335)	14167	5.00000	5.17
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	26620	5.00000	4.83
	9 Acrolein	56	1.441	1.441	(0.345)	2699	10.0000	11.33
	10 Acetone	43	1.973	1.973	(0.472)	17632	10.0000	13.91
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	16850	5.00000	4.92
	15 Iodomethane	142	2.026	2.026	(0.485)	26708	10.0000	9.27
	16 Acrylonitrile	53	2.551	2.551	(0.611)	11047	10.0000	9.52
	17 Methylene Chloride	84	2.303	2.303	(0.551)	22932	5.00000	4.88(M)
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.606)	56330	5.00000	5.03
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	85418	10.0000	9.54
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	19006	5.00000	4.96
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	101238	10.0000	10.30
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	33810	5.00000	5.03
	24 2-Butanone	43	3.600	3.600	(0.862)	11771	10.0000	11.53(H)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	27881	5.00000	4.88
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.846)	22734	5.00000	4.88
	28 Chloroform	83	3.904	3.904	(0.935)	38156	5.00000	5.06
	29 Bromochloromethane	128	3.799	3.799	(0.909)	13213	5.00000	5.18
$	30 Dibromofluoromethane	113	4.103	4.103	(0.982)	24255	5.00000	5.45
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	29017	5.00000	4.85
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	23845	5.00000	4.90(M)
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	28173	5.00000	5.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	24171	5.00000	4.65
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	24938	5.00000	5.70(M)
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	685413	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	81981	5.00000	5.00
	38 Trichloroethene	130	5.208	5.208	(1.049)	22693	5.00000	4.88
	39 Bromodichloromethane	83	5.729	5.729	(1.154)	29358	5.00000	4.77
	41 2-Chloroethylvinyl ether	63	6.056	6.056	(1.220)	17700	10.0000	10.12
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	21679	5.00000	4.97
	44 Dibromomethane	93	5.557	5.557	(1.119)	14449	5.00000	4.88
	45 4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	34912	10.0000	9.98
	46 cis-1,3-Dichloropropene	75	6.161	6.161	(1.241)	35507	5.00000	4.92
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	654176	50.0000	
$	48 Toluene-d8	98	6.389	6.389	(0.833)	81640	5.00000	5.05
	50 Toluene	91	6.449	6.449	(0.841)	89594	5.00000	4.95
	51 trans-1,3-Dichloropropene	75	6.689	6.689	(1.347)	28399	5.00000	4.74(M)
	52 2-Hexanone	43	7.094	7.094	(0.925)	24056	10.0000	10.11
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	18638	5.00000	5.13
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	35759	5.00000	5.00
	55 Dibromochloromethane	129	7.176	7.176	(0.936)	25357	5.00000	4.84
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	17219	5.00000	4.60
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	23172	5.00000	5.10
	58 1-Chlorohexane	55	7.698	7.698	(1.550)	15210	5.00000	4.59(MH)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	62744	5.00000	4.89
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	22632	5.00000	4.74

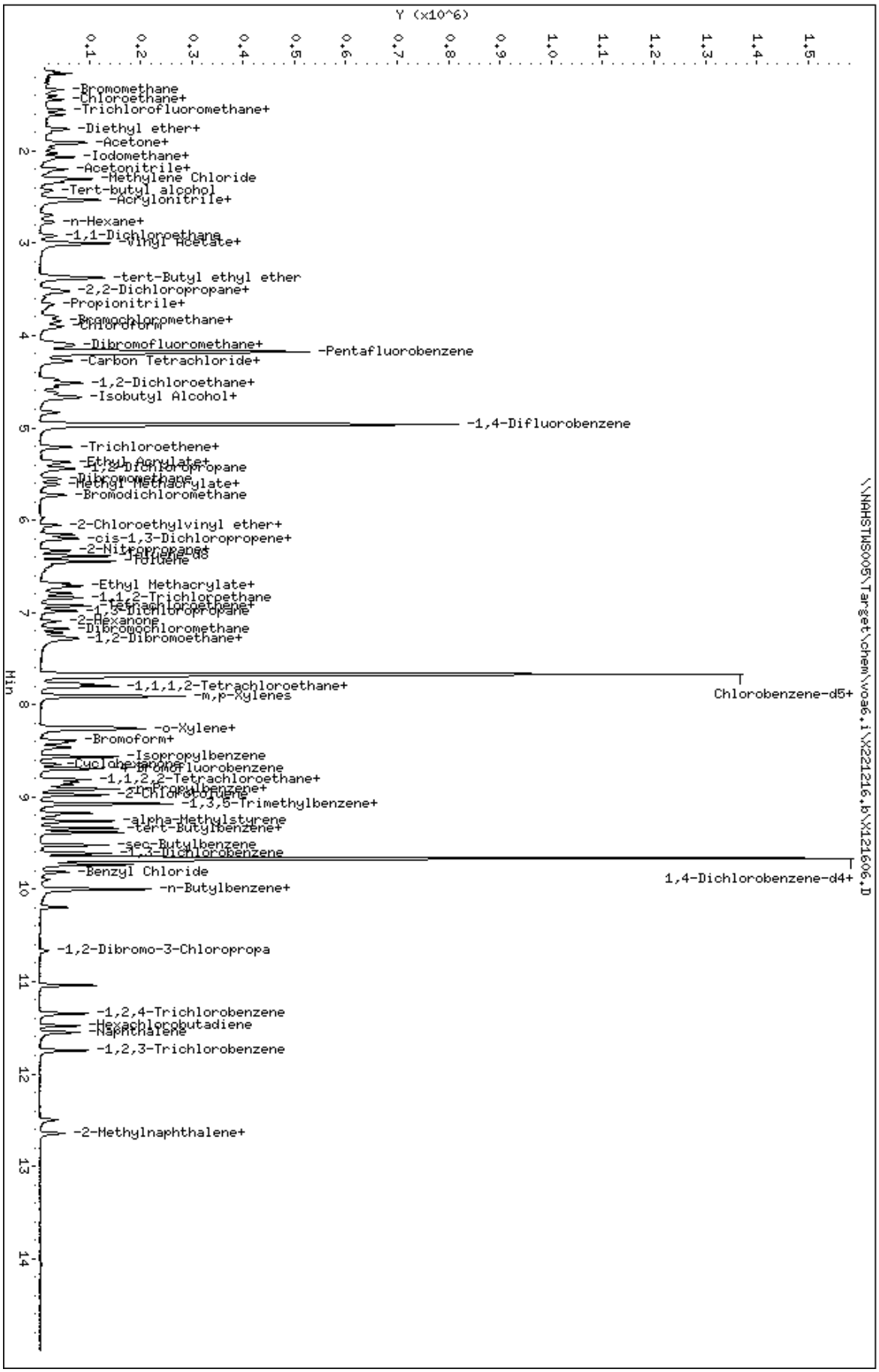
61 Ethylbenzene	106	7.802	7.802 (1.018)	29550	5.00000	4.89
62 m,p-Xylenes	106	7.907	7.907 (1.031)	73283	10.0000	9.40

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D Page 3
Report Date: 27-Dec-2022 16:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.245	8.245	(1.075)	37189	5.00000	4.83
	64 Styrene	104	8.267	8.267	(1.078)	62411	5.00000	4.84
	66 Bromoform	173	8.414	8.414	(1.097)	16801	5.00000	4.63
	67 Isopropylbenzene	105	8.563	8.563	(1.117)	85440	5.00000	4.86
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	29807	5.00000	5.24
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	32501	5.00000	5.43
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	356340	50.0000	
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	20685	5.00000	5.21(M)
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	97603	5.00000	4.94
	74 Bromobenzene	156	8.811	8.811	(0.912)	28887	5.00000	4.94
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	72501	5.00000	4.97
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	65973	5.00000	5.09
	77 4-Chlorotoluene	91	9.077	9.077	(0.939)	75073	5.00000	5.08
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	59375	5.00000	4.97
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	75723	5.00000	4.93
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	77577	5.00000	4.88
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	69666	5.00000	4.89
	83 1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	49954	5.00000	5.14
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	52655	5.00000	4.97
	86 Benzyl Chloride	91	9.816	9.816	(1.280)	35254	5.00000	5.95
	87 n-Butylbenzene	91	9.999	9.999	(1.035)	54831	5.00000	5.63
	88 1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	50895	5.00000	5.09
	89 1,2-Dibromo-3-Chloropropane	155	10.670	10.670	(1.104)	4911	5.00000	5.49
	90 1,2,4-Trichlorobenzene	180	11.345	11.345	(1.174)	31873	5.00000	5.05
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	13454	5.00000	4.81
	92 Naphthalene	128	11.551	11.551	(1.196)	72748	5.00000	5.06
	93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	30274	5.00000	5.01
M	94 1,2-Dichloroethylene (total)	96				41740	10.0000	
M	95 Xylenes (total)	106				110472	15.0000	
	141 Cyclohexane	56	4.118	4.118	(0.986)	19859	5.00000	5.52(H)
	138 Freon TF	101	1.913	1.913	(0.458)	14845	5.00000	4.48
	147 Methylcyclohexane	55	5.388	5.388	(1.085)	38650	5.00000	4.60(M)
	146 Methyl Acetate	43	2.236	2.236	(0.535)	8968	5.00000	4.42
	148 Tert-Butyl alcohol	59	2.431	2.431	(0.582)	30525	100.000	97.81
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	16518	100.000	101.35(T)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methylene Chloride (75-09-2)

Reason Code:

BEFORE
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HEIGHT
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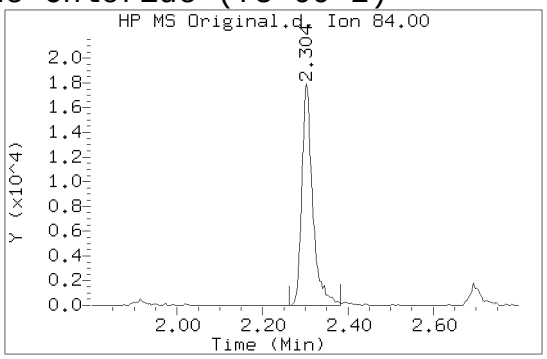
27-Dec-2022
16:03
linh
pham



AFTER
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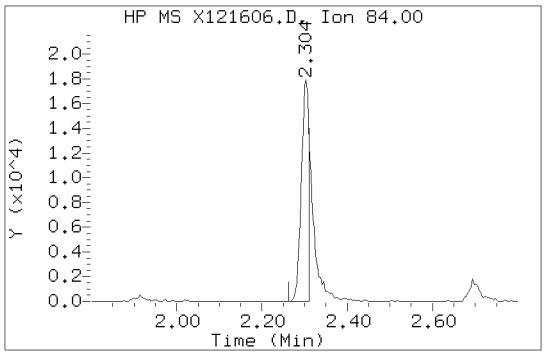

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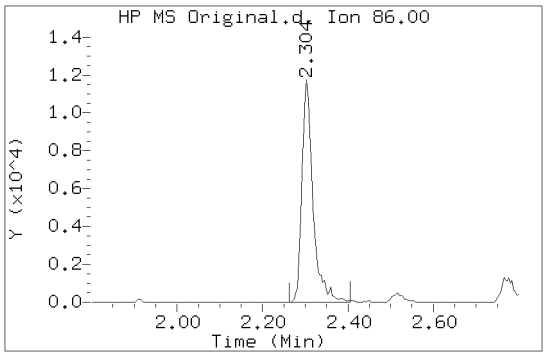

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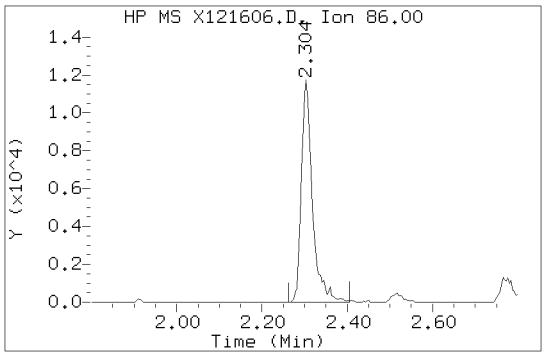

BEFORE
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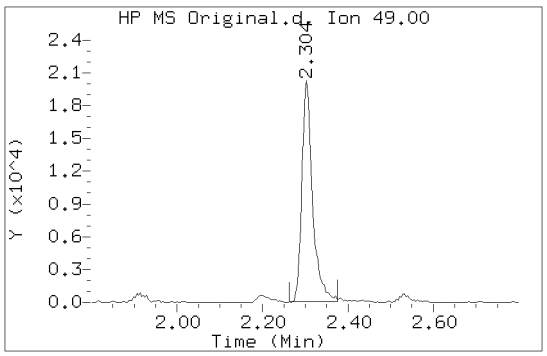

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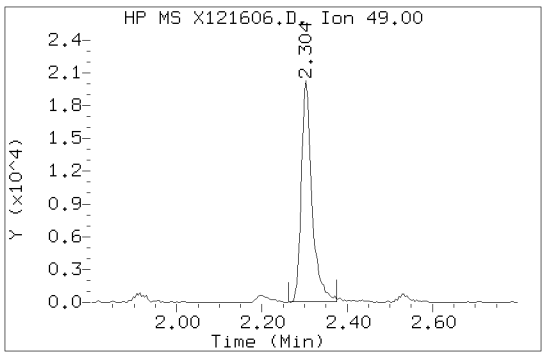

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

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16:03
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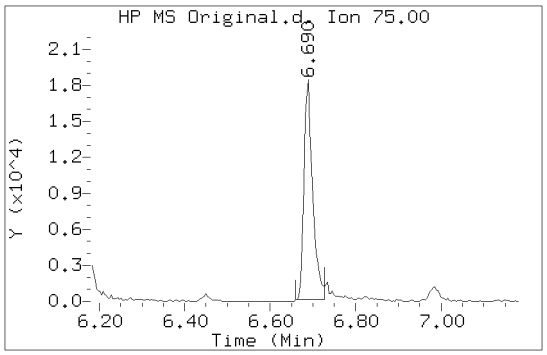

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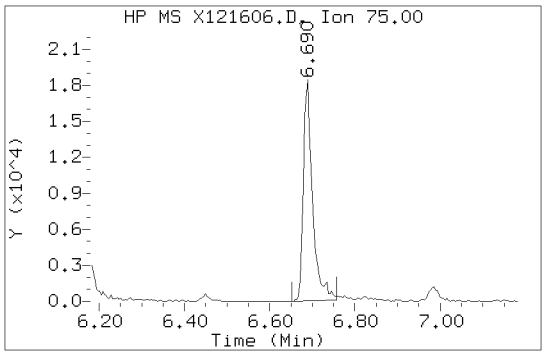

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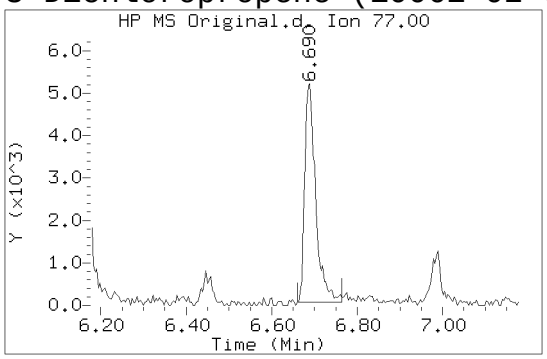
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

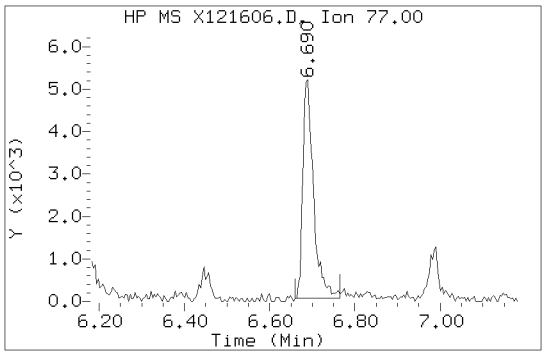
BEFORE

MASS
77
AREA
9244
HEIGHT
5154
27-Dec-2022
16:03
linh
pham



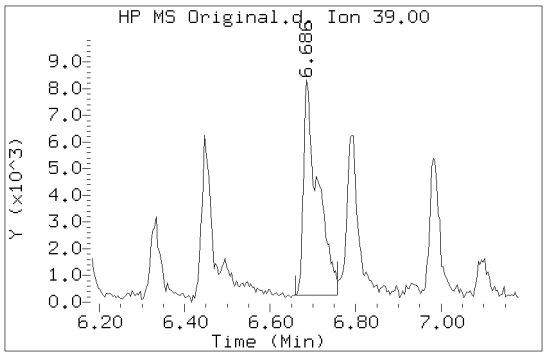
AFTER

MASS
77
AREA
9244
HEIGHT
5154
27-Dec-2022
16:07
linh
pham



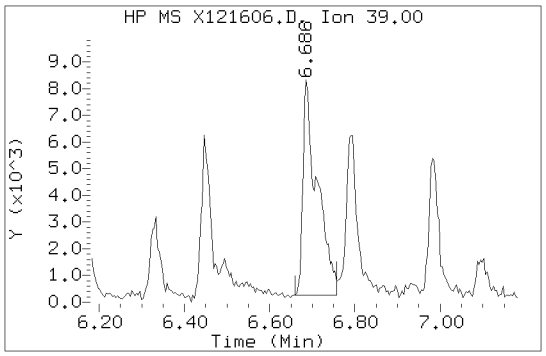
BEFORE

MASS
39
AREA
19092
HEIGHT
8065
27-Dec-2022
16:03
linh
pham



AFTER

MASS
39
AREA
19092
HEIGHT
8065
27-Dec-2022
16:07
linh
pham

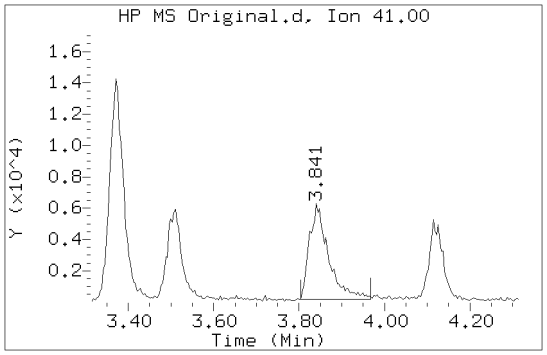


Methacrylonitrile (126-98-7)

Reason Code:

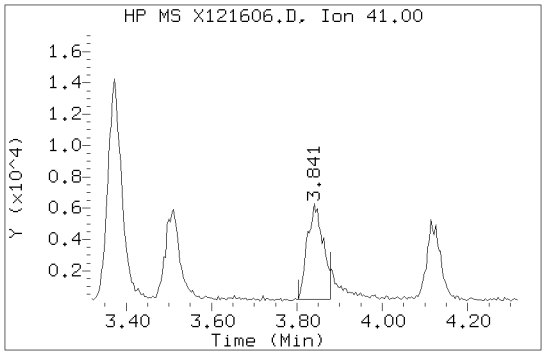
BEFORE

MASS
41
AREA
18790
HEIGHT
6109
27-Dec-2022
16:03
linh
pham



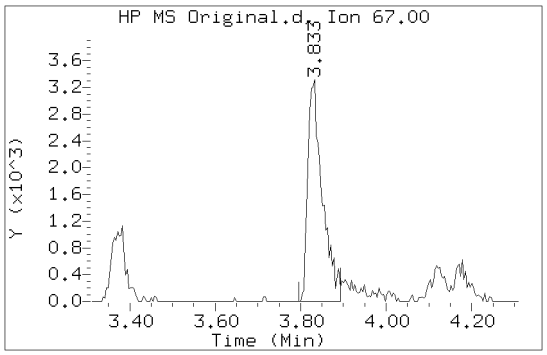
AFTER

MASS
41
AREA
15701
HEIGHT
6109
27-Dec-2022
16:07
linh
pham



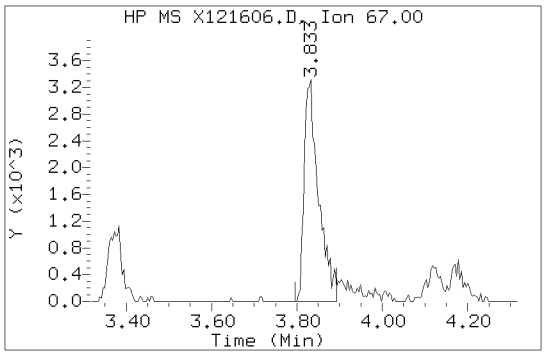
BEFORE

MASS
67
AREA
7866
HEIGHT
3315
27-Dec-2022
16:03
linh
pham



AFTER

MASS
67
AREA
7866
HEIGHT
3315
27-Dec-2022
16:07
linh
pham



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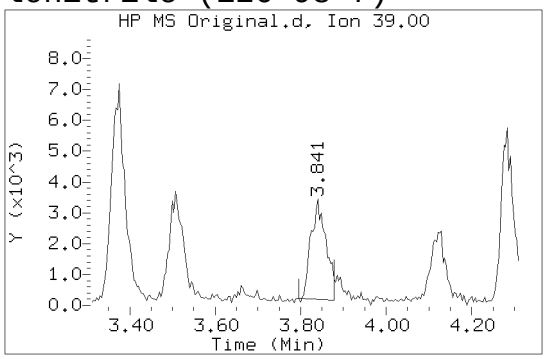
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methacrylonitrile (126-98-7)

Reason Code:

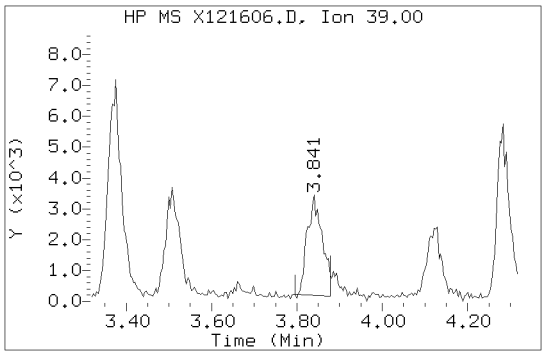
BEFORE

MASS
39
AREA
7951
HEIGHT
3252
27-Dec-2022
16:03
linh
pham



AFTER

MASS
39
AREA
7951
HEIGHT
3252
27-Dec-2022
16:07
linh
pham

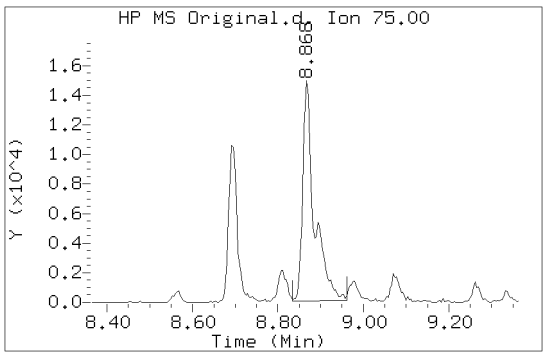


1,2,3-Trichloropropane (96-18-4)

Reason Code:

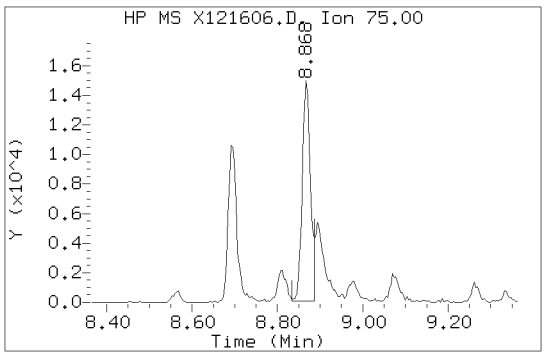
BEFORE

MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham



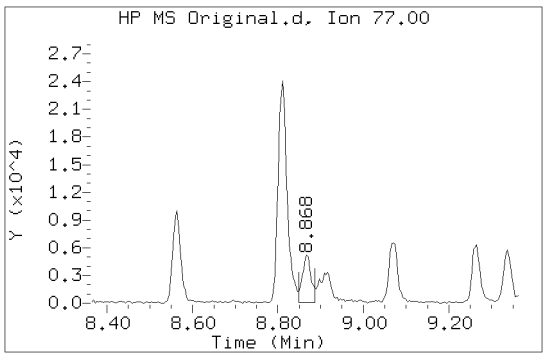
AFTER

MASS
75
AREA
20685
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



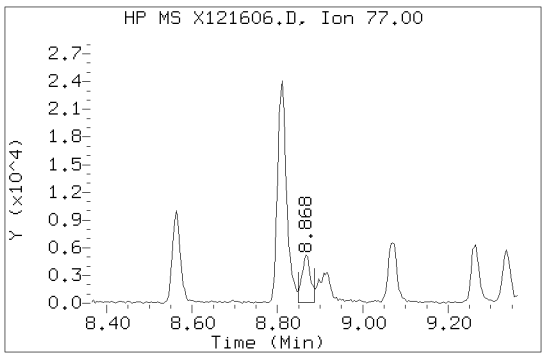
BEFORE

MASS
77
AREA
7524
HEIGHT
5143
27-Dec-2022
16:03
linh
pham



AFTER

MASS
77
AREA
7524
HEIGHT
5143
27-Dec-2022
16:07
linh
pham

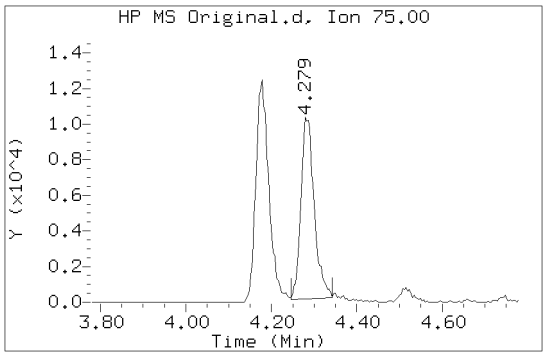


1,1-Dichloropropene (563-58-6)

Reason Code:

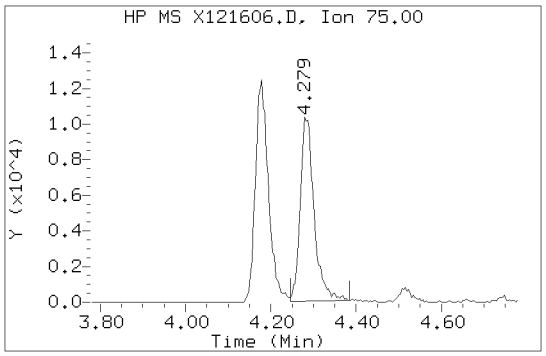
BEFORE

MASS
75
AREA
22411
HEIGHT
10201
27-Dec-2022
16:03
linh
pham



AFTER

MASS
75
AREA
23845
HEIGHT
10354
27-Dec-2022
16:07
linh
pham



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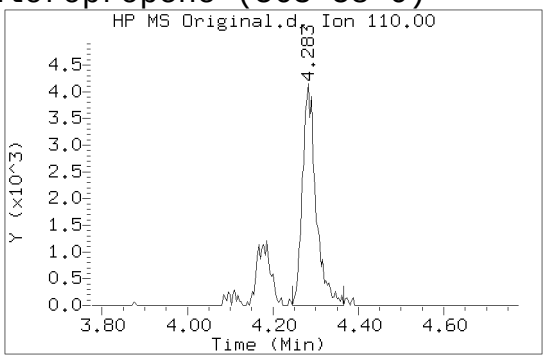
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

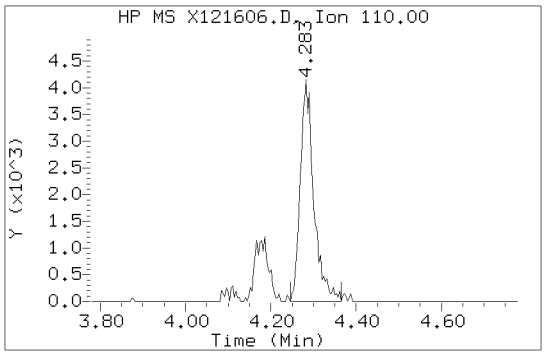
BEFORE

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:03
linh
pham



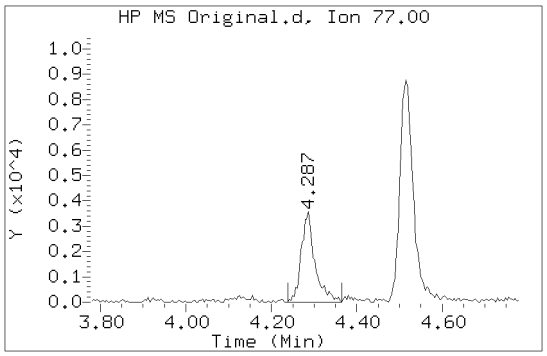
AFTER

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:07
linh
pham



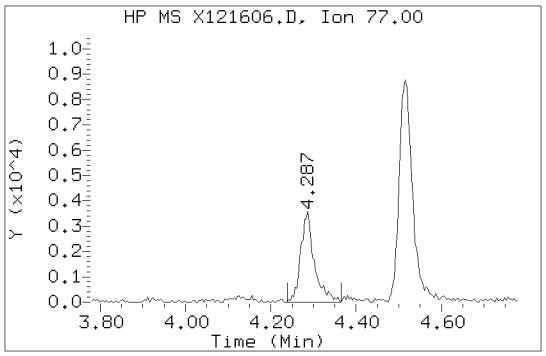
BEFORE

MASS
77
AREA
8083
HEIGHT
3567
27-Dec-2022
16:03
linh
pham



AFTER

MASS
77
AREA
8083
HEIGHT
3567
27-Dec-2022
16:07
linh
pham

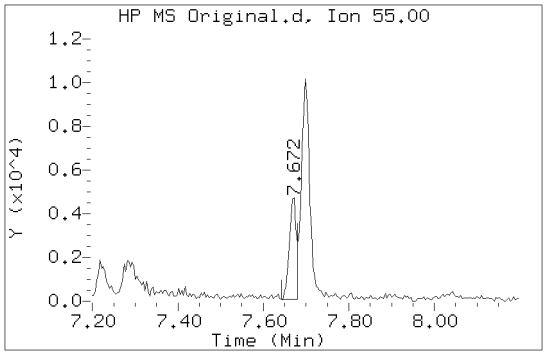


1-Chlorohexane (544-10-5)

Reason Code:

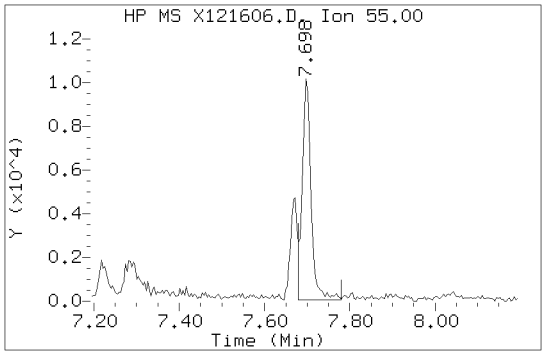
BEFORE

MASS
55
AREA
5371
HEIGHT
4660
27-Dec-2022
16:03
linh
pham



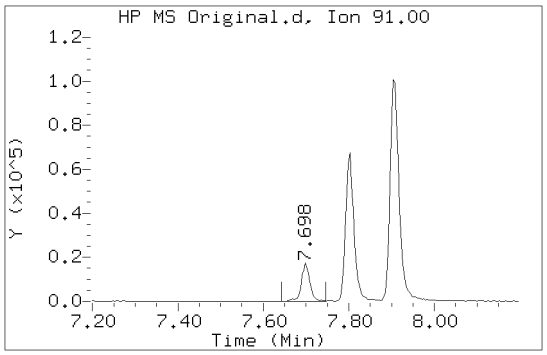
AFTER

MASS
55
AREA
15210
HEIGHT
10126
27-Dec-2022
16:07
linh
pham



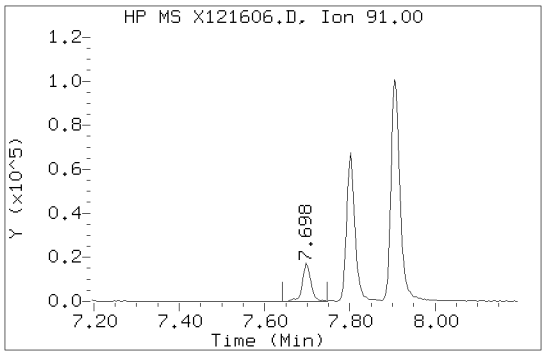
BEFORE

MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:03
linh
pham



AFTER

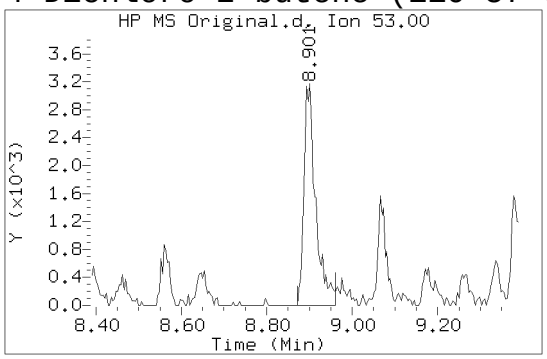
MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:07
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

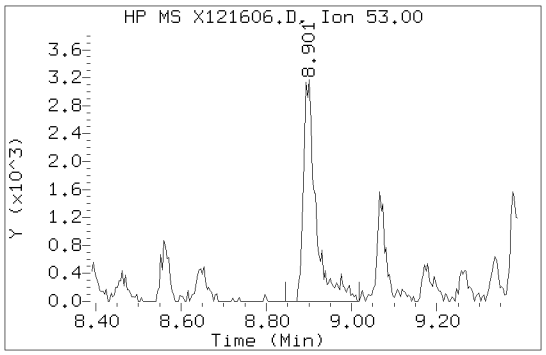
trans-1,4-Dichloro-2-butene (110-57-6)

BEFORE
MASS
53
AREA
6122
HEIGHT
3172
27-Dec-2022
16:03
linh
pham

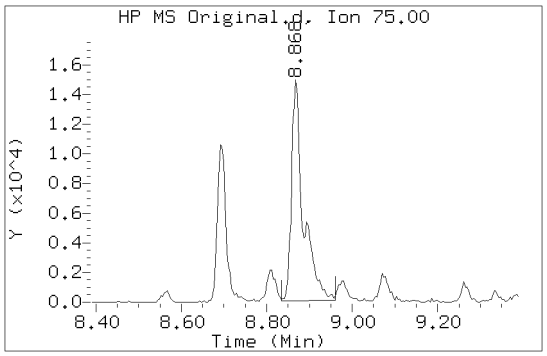


Reason Code:

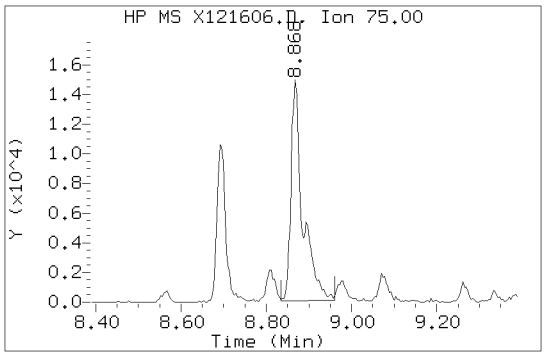
AFTER
MASS
53
AREA
6648
HEIGHT
3172
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham

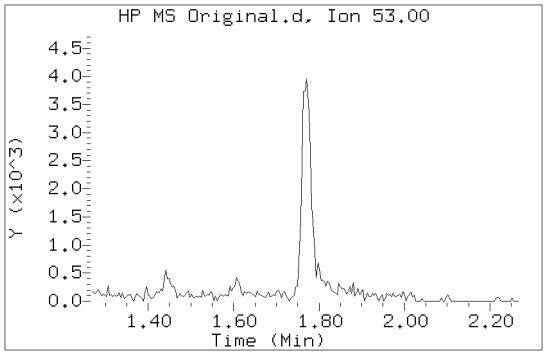


AFTER
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



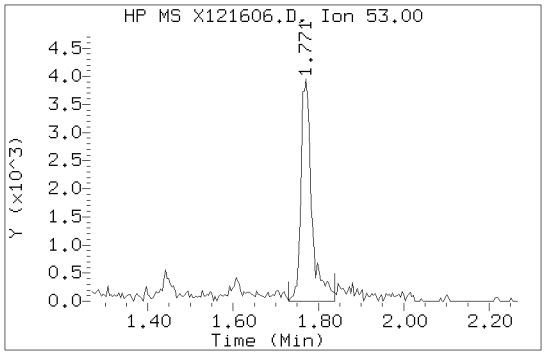
Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

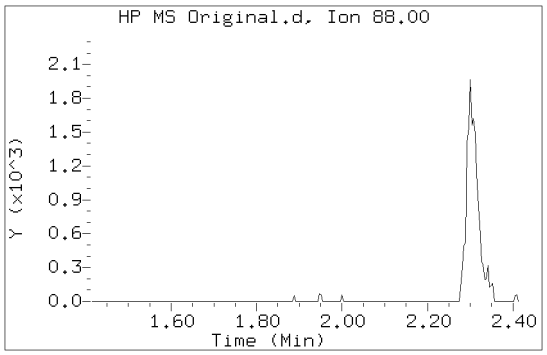


Reason Code:

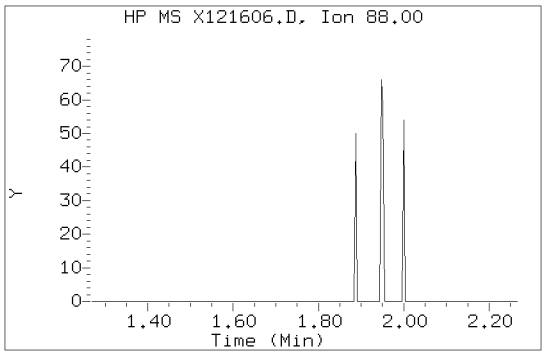
AFTER
MASS
53
AREA
7154
HEIGHT
3955
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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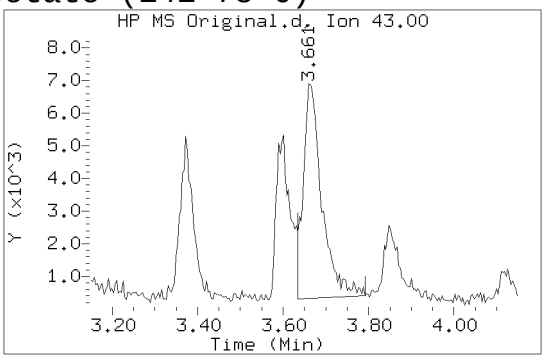
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

Reason Code:

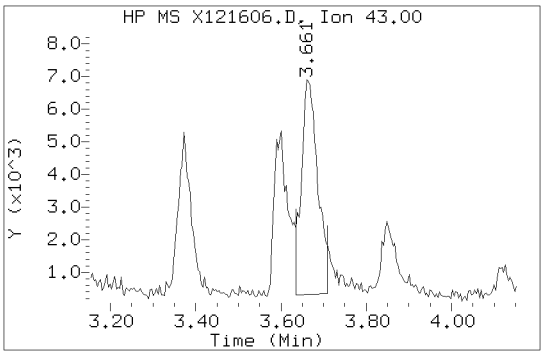
BEFORE

MASS
43
AREA
20113
HEIGHT
6576
27-Dec-2022
16:03
linh
pham



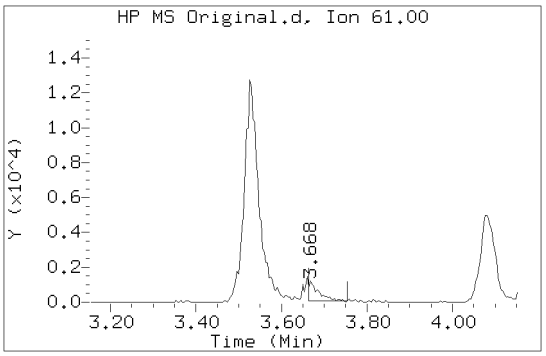
AFTER

MASS
43
AREA
18020
HEIGHT
6576
27-Dec-2022
16:07
linh
pham



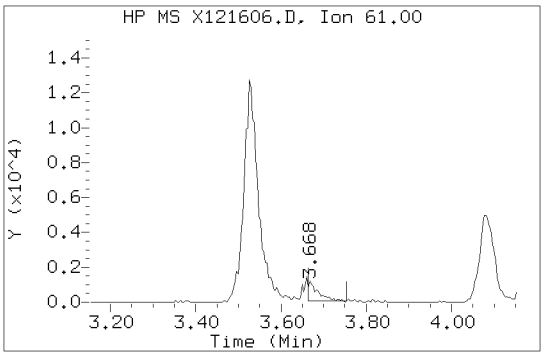
BEFORE

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:03
linh
pham



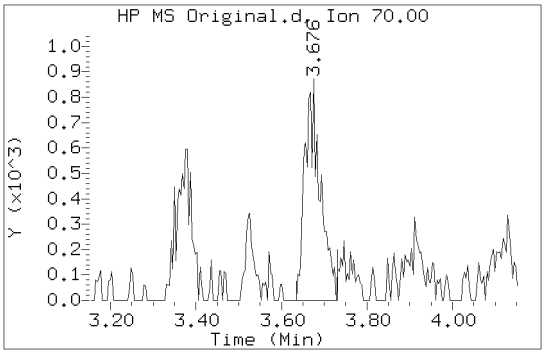
AFTER

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:07
linh
pham



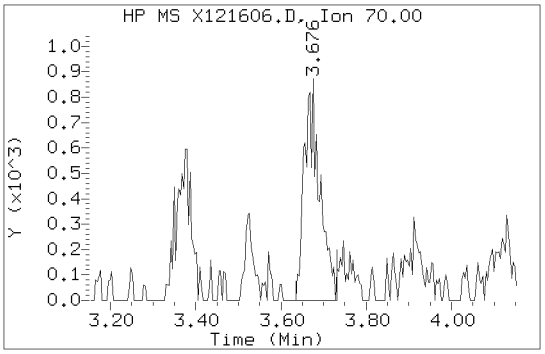
BEFORE

MASS
70
AREA
2205
HEIGHT
873
27-Dec-2022
16:03
linh
pham



AFTER

MASS
70
AREA
2205
HEIGHT
873
27-Dec-2022
16:07
linh
pham

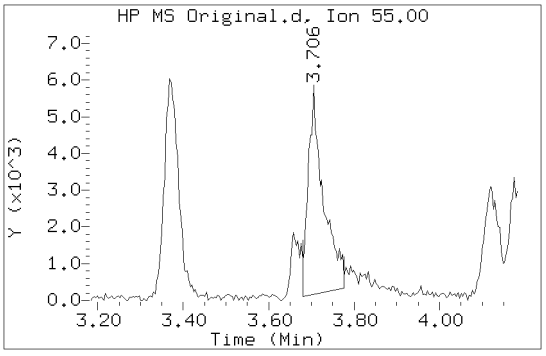


Methyl Acrylate (96-33-3)

Reason Code:

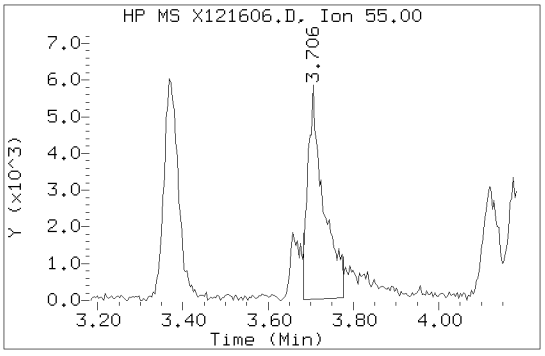
BEFORE

MASS
55
AREA
14157
HEIGHT
5696
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
14950
HEIGHT
5831
27-Dec-2022
16:07
linh
pham



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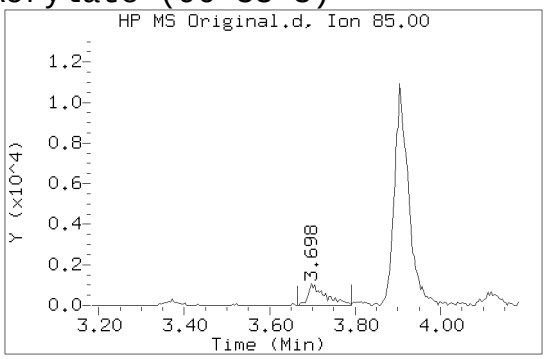
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methyl Acrylate (96-33-3)

Reason Code:

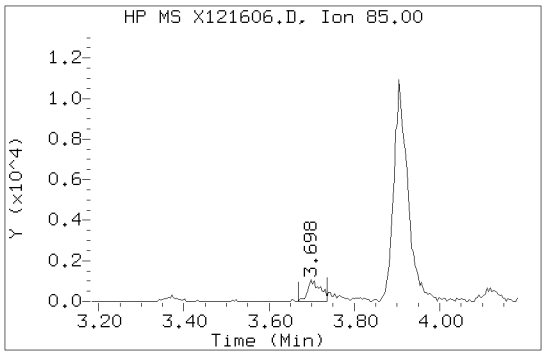
BEFORE

MASS
85
AREA
2934
HEIGHT
1073
27-Dec-2022
16:03
linh
pham



AFTER

MASS
85
AREA
2159
HEIGHT
1073
27-Dec-2022
16:07
linh
pham



n-Butanol (71-36-3)

Reason Code:

BEFORE

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922
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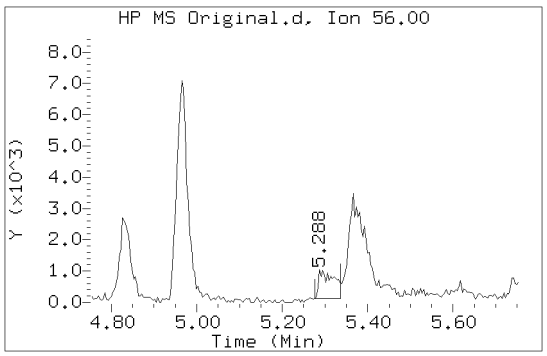
16:03
linh
pham



AFTER

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1266
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16:07
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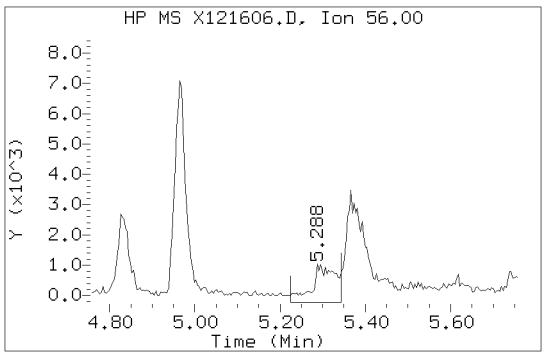

BEFORE

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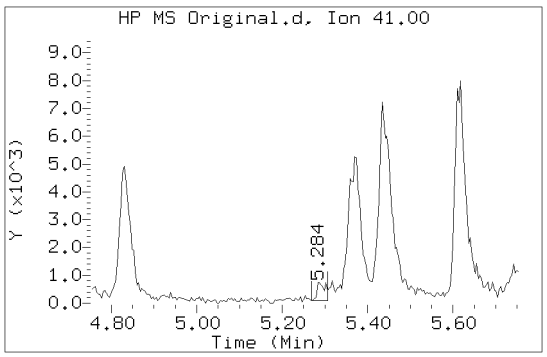
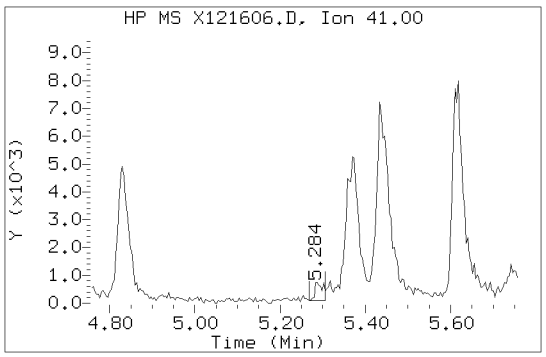
AREA
876
HEIGHT
641
27-Dec-2022
16:03
linh
pham



AFTER

MASS
41
AREA
876
HEIGHT
641
27-Dec-2022
16:07
linh
pham

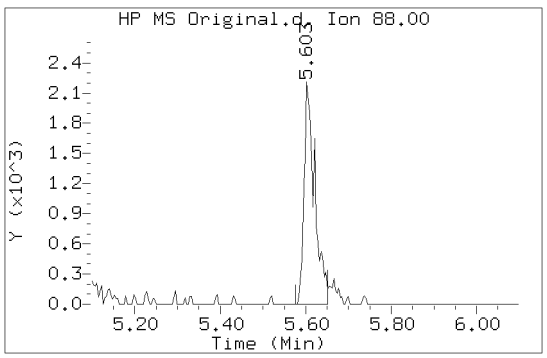


1,4-Dioxane ()

Reason Code:

BEFORE

MASS
88
AREA
3873
HEIGHT
2211
27-Dec-2022
16:03
linh
pham



AFTER

MASS
88
AREA
4197
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2211
27-Dec-2022
16:07
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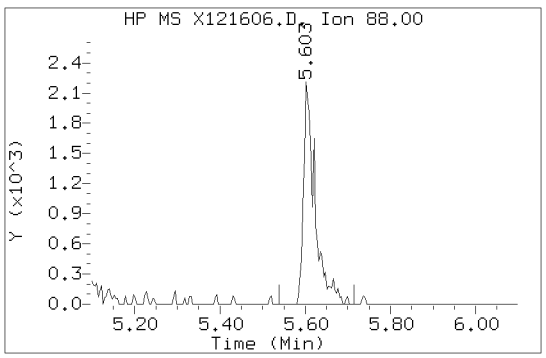
pham



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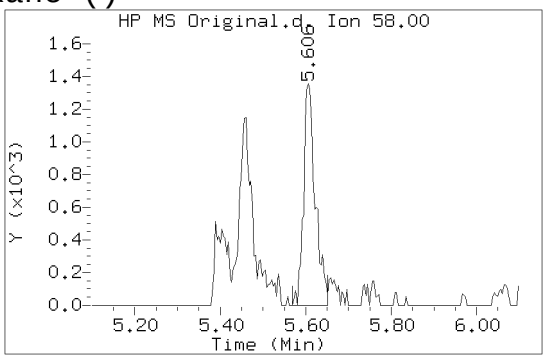
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

1,4-Dioxane ()

Reason Code:

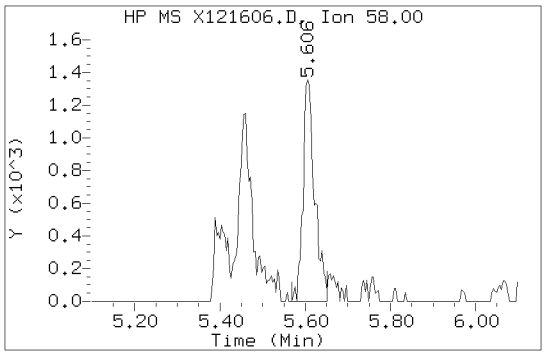
BEFORE

MASS
58
AREA
2625
HEIGHT
1356
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
AREA
2625
HEIGHT
1356
27-Dec-2022
16:07
linh
pham

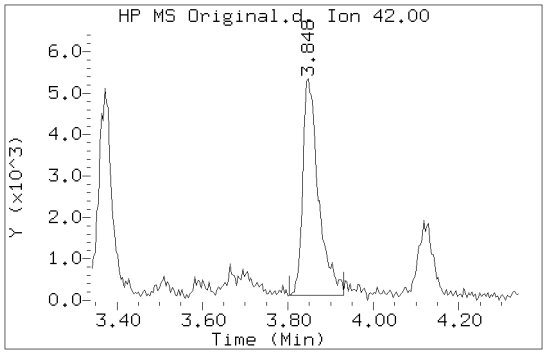


Tetrahydrofuran (109-99-9)

Reason Code:

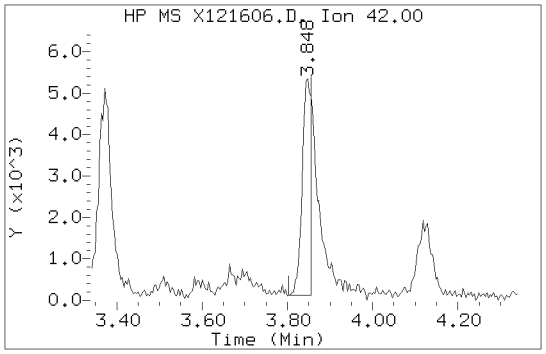
BEFORE

MASS
42
AREA
13557
HEIGHT
5225
27-Dec-2022
16:03
linh
pham



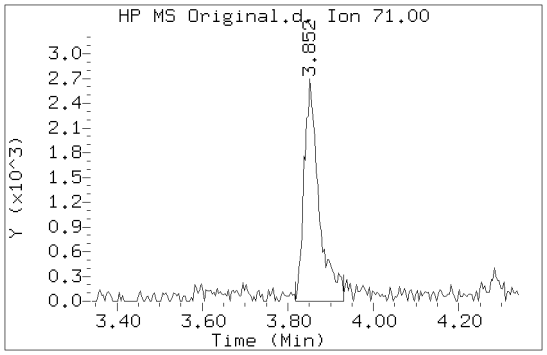
AFTER

MASS
42
AREA
7598
HEIGHT
5225
27-Dec-2022
16:07
linh
pham



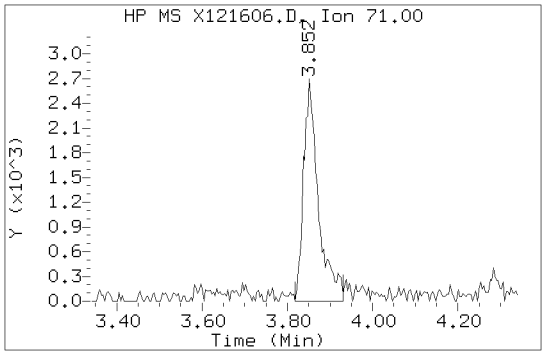
BEFORE

MASS
71
AREA
6572
HEIGHT
2695
27-Dec-2022
16:03
linh
pham



AFTER

MASS
71
AREA
6572
HEIGHT
2695
27-Dec-2022
16:07
linh
pham



Methylcyclohexane (108-87-2)

Reason Code:

BEFORE

MASS
55
AREA
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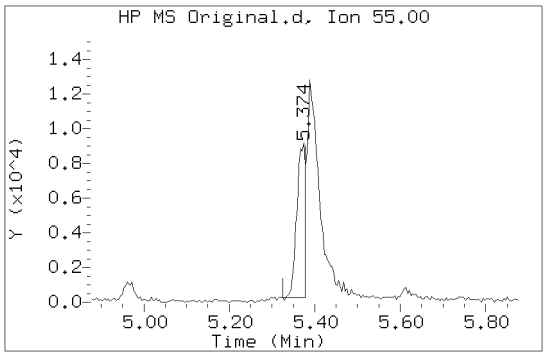
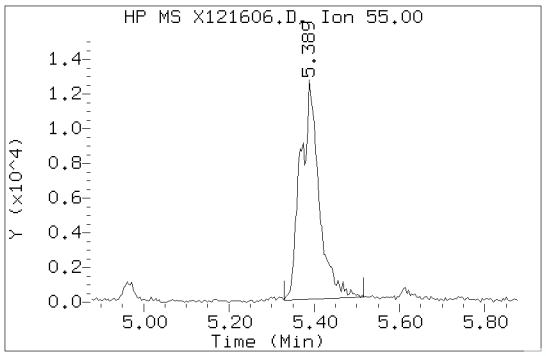
HEIGHT
8941
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
38650
HEIGHT
12647
27-Dec-2022
16:07
linh
pham



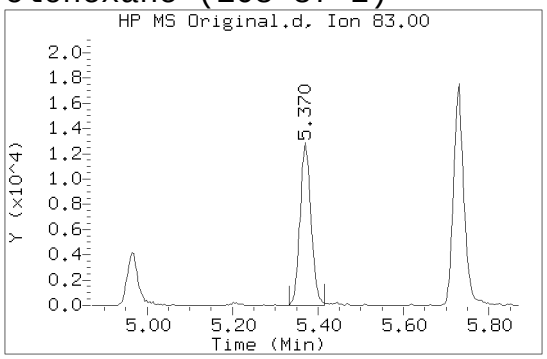
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methylcyclohexane (108-87-2)

Reason Code:

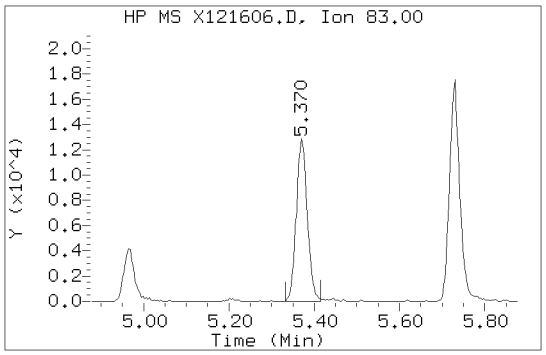
BEFORE

MASS
83
AREA
23564
HEIGHT
12870
27-Dec-2022
16:03
linh
pham



AFTER

MASS
83
AREA
23564
HEIGHT
12870
27-Dec-2022
16:07
linh
pham



Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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44
AREA
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HEIGHT
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27-Dec-2022
16:03
linh
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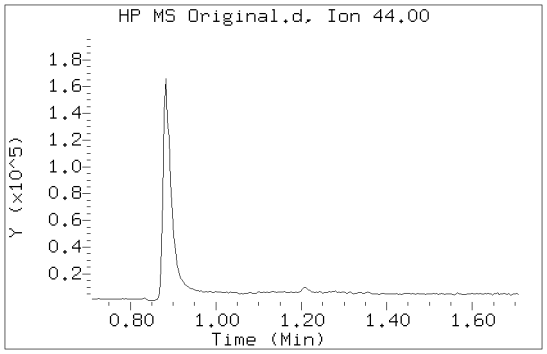

AFTER

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4314
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16:07
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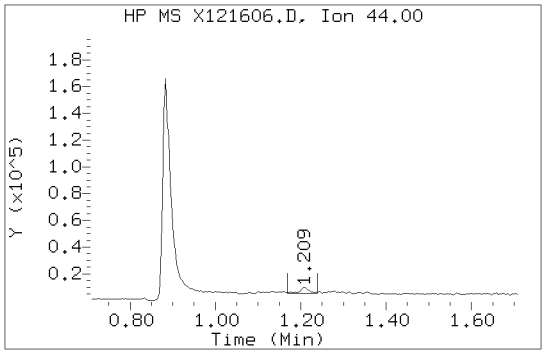

BEFORE

MASS
43
AREA
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HEIGHT
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27-Dec-2022
16:03
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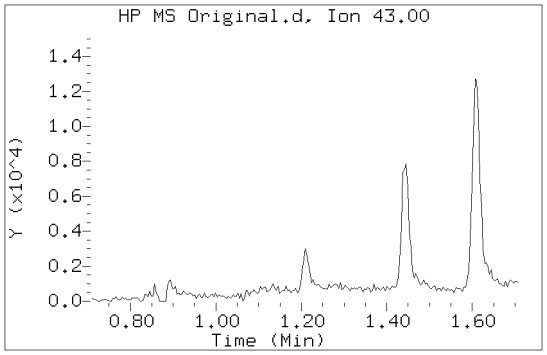
pham



AFTER

MASS
43
AREA
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HEIGHT
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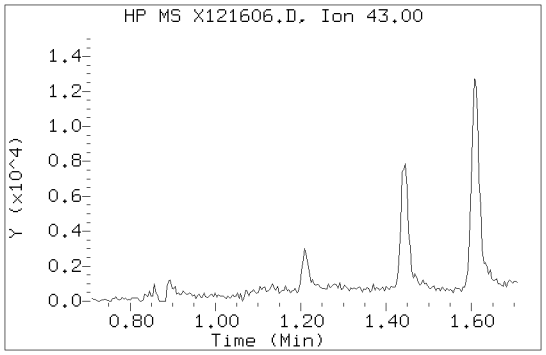
27-Dec-2022
16:07
linh
pham



BEFORE

MASS
42
AREA
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HEIGHT
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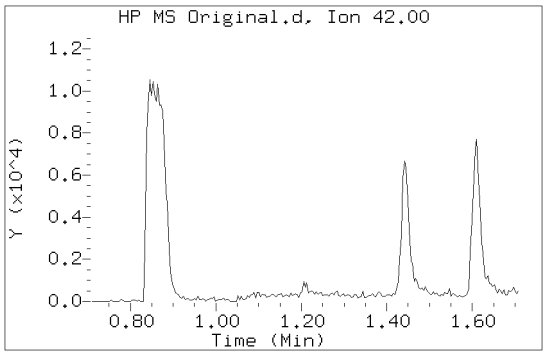
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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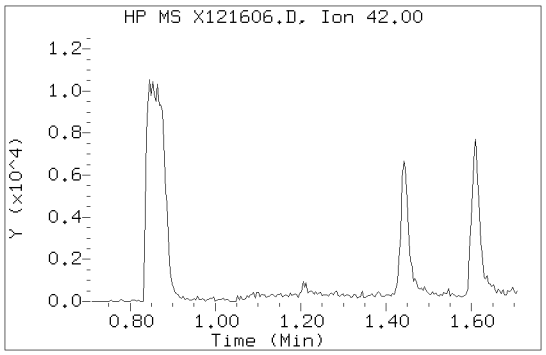
pham



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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

BEFORE

MASS
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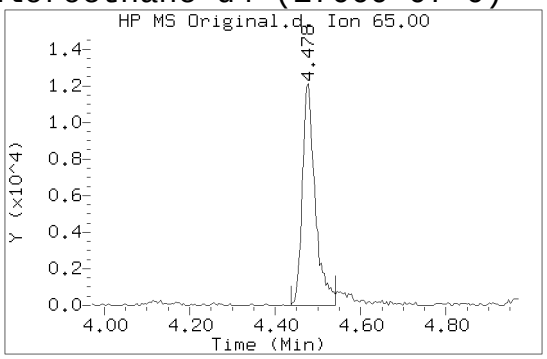
HEIGHT
12121
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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12121
27-Dec-2022
16:07
linh
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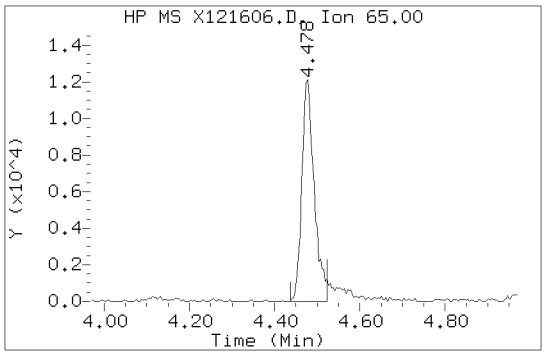

BEFORE

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AREA
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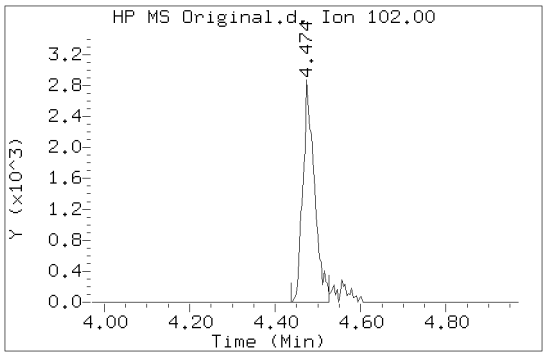
HEIGHT
2873
27-Dec-2022
16:03
linh
pham



AFTER

MASS
102
AREA
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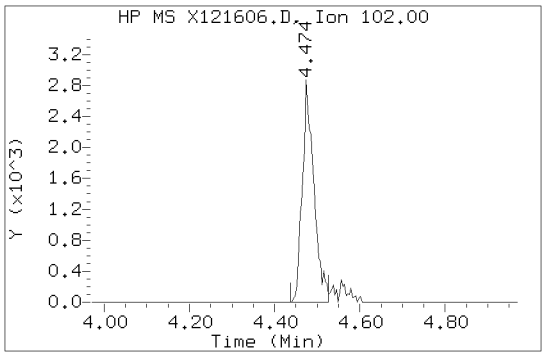
HEIGHT
2873
27-Dec-2022
16:07
linh
pham



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 16-DEC-2022 13:43
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 13:23 Cal File: X121606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	459407	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	16105	400.000	383.50(M)
140 1,3-Butadiene	54	1.164	1.164	(0.279)	58280	20.0000	18.48
25 Methacrylonitrile	41	3.821	3.821	(0.915)	62911	20.0000	19.33
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	201008	400.000	388.99
13 Acetonitrile	39	2.195	2.195	(0.525)	81163	200.000	194.11
14 Allyl Chloride	41	2.195	2.195	(0.525)	150748	20.0000	18.93
4 Propionitrile	54	3.653	3.653	(0.874)	85562	200.000	182.52
136 n-Hexane	57	2.768	2.768	(0.663)	65476	20.0000	19.79
72 trans-1,4-Dichloro-2-butene	53	8.893	8.893	(1.160)	26140	20.0000	18.70
194 Acetaldehyde	44	1.209	1.209	(0.289)	32393	80.0000	100.98(M)
23 Chloroprene	53	1.767	1.767	(0.423)	27967	20.0000	17.90(M)
145 alpha-Methylstyrene	118	9.261	9.261	(0.958)	155968	20.0000	19.76
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	171978	20.0000	19.62
139 Diethyl ether	59	1.756	1.756	(0.420)	55275	20.0000	18.00
130 Ethyl Acetate	43	3.660	3.660	(0.876)	75163	20.0000	20.96
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	56242	20.0000	17.95
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	58073	20.0000	18.07
132 n-Butanol	56	5.268	5.268	(1.261)	15012	400.000	294.62
142 Tetrahydrofuran	42	3.848	3.848	(0.921)	28221	40.0000	47.81

150	Allyl alcohol	57	2.768	2.768 (0.663)	65476	400.000	366.93
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	331546	20.0000	19.32

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D Page 2
Report Date: 27-Dec-2022 16:07

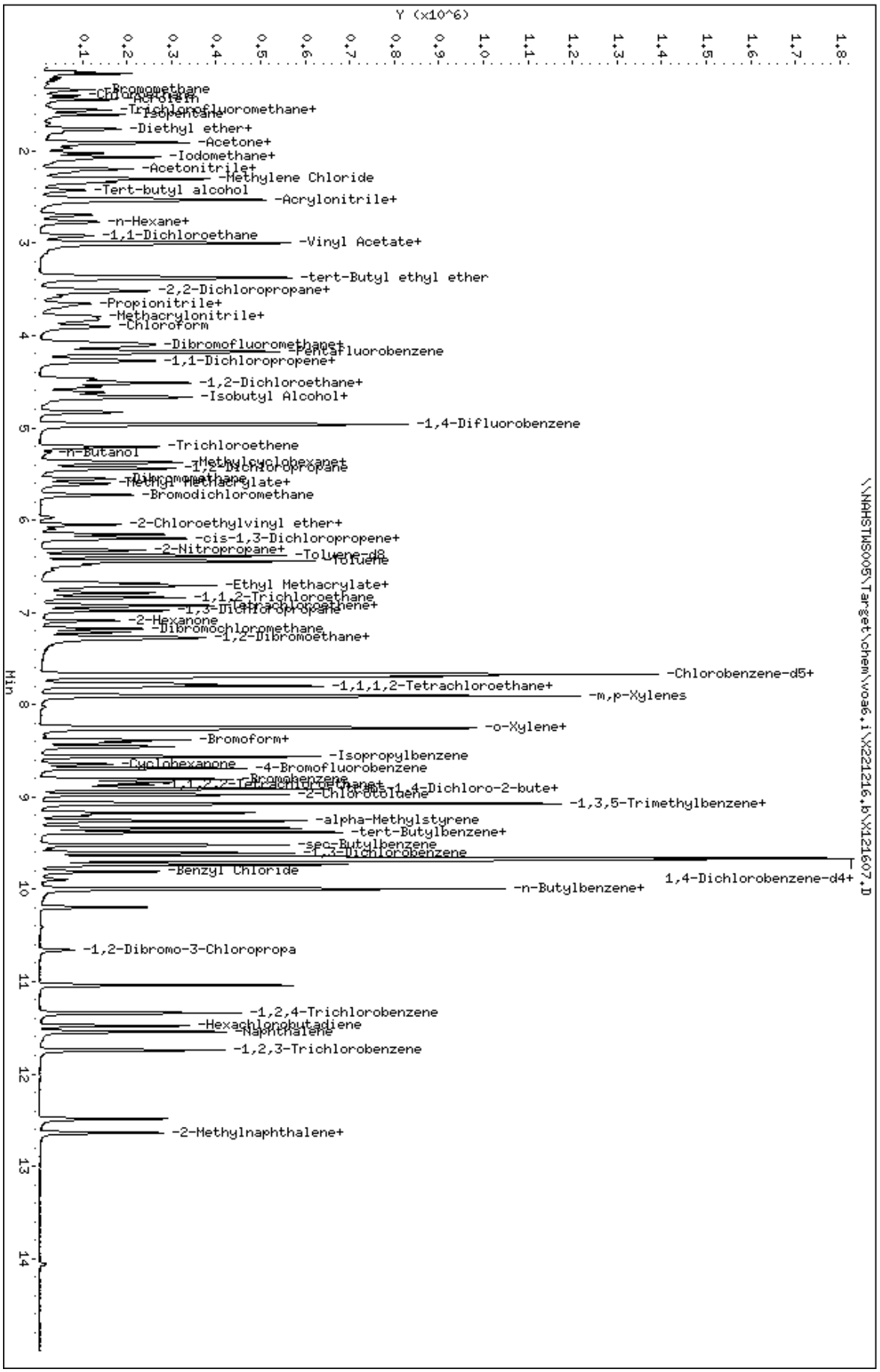
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.690	3.690	(0.883)	57874	20.0000	18.55(M)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	156518	20.0000	18.50
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	63382	20.0000	19.96
	3	Chloromethane	50	1.077	1.077	(0.258)	72324	20.0000	18.84
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	74461	20.0000	18.55
	6	Bromomethane	94	1.340	1.340	(0.321)	52034	20.0000	18.30
	7	Chloroethane	64	1.400	1.400	(0.335)	52021	20.0000	18.62
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	106188	20.0000	18.90
	9	Acrolein	56	1.441	1.441	(0.345)	12279	40.0000	40.80
	10	Acetone	43	1.973	1.973	(0.472)	50987	40.0000	39.53
	11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	65650	20.0000	18.82
	15	Iodomethane	142	2.026	2.026	(0.485)	143457	40.0000	34.36
	16	Acrylonitrile	53	2.532	2.532	(0.606)	46552	40.0000	39.36
	17	Methylene Chloride	84	2.303	2.303	(0.551)	94402	20.0000	19.73
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	214504	20.0000	18.79
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	337289	40.0000	36.97
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	74471	20.0000	19.08
	21	Vinyl Acetate	43	2.997	2.997	(0.717)	387538	40.0000	38.68
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	129644	20.0000	18.93
	24	2-Butanone	43	3.578	3.578	(0.856)	47830	40.0000	36.94(H)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	108952	20.0000	18.73
	27	cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	88894	20.0000	18.71
	28	Chloroform	83	3.904	3.904	(0.935)	145610	20.0000	18.96
	29	Bromochloromethane	128	3.795	3.795	(0.908)	47919	20.0000	18.42
$	30	Dibromofluoromethane	113	4.099	4.099	(0.981)	90108	20.0000	20.32
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	116049	20.0000	19.05
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	93914	20.0000	19.38
	33	1,2-Dichloroethane	62	4.556	4.556	(0.918)	108750	20.0000	19.45
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	93815	20.0000	18.13
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	92990	20.0000	20.13
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	682389	50.0000	
	37	Benzene	78	4.511	4.511	(0.909)	313141	20.0000	19.21
	38	Trichloroethene	130	5.205	5.205	(1.048)	90292	20.0000	19.53
	39	Bromodichloromethane	83	5.726	5.726	(1.153)	116178	20.0000	18.99
	41	2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	71559	40.0000	41.12
	42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	82954	20.0000	19.13
	44	Dibromomethane	93	5.553	5.553	(1.119)	57196	20.0000	19.41
	45	4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	138209	40.0000	39.93
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	142141	20.0000	19.79
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	647445	50.0000	
$	48	Toluene-d8	98	6.385	6.385	(0.833)	315179	20.0000	19.70
	50	Toluene	91	6.445	6.445	(0.841)	339968	20.0000	18.99
	51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	116330	20.0000	19.51
	52	2-Hexanone	43	7.086	7.086	(0.924)	93119	40.0000	39.54
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	69855	20.0000	19.45
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	137967	20.0000	19.52
	55	Dibromochloromethane	129	7.176	7.176	(0.936)	100749	20.0000	19.44
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	74611	20.0000	20.15
	57	1,2-Dibromoethane	107	7.263	7.263	(0.947)	88886	20.0000	19.80
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	66757	20.0000	20.24
	59	Chlorobenzene	112	7.694	7.694	(1.003)	240885	20.0000	18.97
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	90283	20.0000	19.11

61 Ethylbenzene	106	7.799	7.799 (1.017)	117560	20.0000	19.66
62 m,p-Xylenes	106	7.904	7.904 (1.031)	299082	40.0000	38.80

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	147602	20.0000	19.40
	64 Styrene	104	8.260	8.260	(1.077)	253280	20.0000	19.86
	66 Bromoform	173	8.410	8.410	(1.097)	69137	20.0000	19.25
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	344283	20.0000	19.80
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	112594	20.0000	19.83
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	116878	20.0000	19.58
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	356229	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	76967	20.0000	19.41
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	404399	20.0000	20.49
	74 Bromobenzene	156	8.803	8.803	(0.911)	117586	20.0000	20.11
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	295026	20.0000	20.23
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	256591	20.0000	19.81
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	294244	20.0000	19.93
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	242174	20.0000	20.29
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	305461	20.0000	19.91
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	326826	20.0000	20.58
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	294187	20.0000	20.67
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	197278	20.0000	20.33
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	207572	20.0000	19.60
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	163895	20.0000	17.99
	87 n-Butylbenzene	91	9.995	9.995	(1.035)	248190	20.0000	19.23
	88 1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	201166	20.0000	20.13
	89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.104)	18635	20.0000	20.58
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	130463	20.0000	20.69
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	55912	20.0000	20.12
	92 Naphthalene	128	11.544	11.544	(1.195)	300432	20.0000	20.94
	93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	124401	20.0000	20.60
M	94 1,2-Dichloroethylene (total)	96				163365	40.0000	
M	95 Xylenes (total)	106				446684	60.0000	
	141 Cyclohexane	56	4.118	4.118	(0.986)	84355	20.0000	19.01(M)
	138 Freon TF	101	1.910	1.910	(0.457)	64657	20.0000	19.17
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	172044	20.0000	20.59
	146 Methyl Acetate	43	2.228	2.228	(0.533)	38475	20.0000	18.61
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	117583	400.000	369.63
	149 Isopropyl Alcohol	45	2.090	2.090	(0.500)	61646	400.000	371.06

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Min
2 3 4 5 6 7 8 9 10 11 12 13 14
Bromomethane
Chloroethane
Acrolein
-Trichlorofluoromethane+
Isopentane
-Diethyl ether+
-Acetone+
-Iodomethane+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-Propionitrile+
-Methacrylonitrile+
-Chloroform
-Dibromofluoromethane+
-Perfluorobenzene
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene
-n-Butanol
-Methylcyclohexane+
-1,2-Dichloropropane
-Dibromomethane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Chloroethylvinyl ether+
-cis-1,3-Dichloropropene+
-2-Nitropropane+
-Toluene-d8
Toluene
-Ethyl Methacrylate+
-1,1,2-Trichloroethane
-Tetrachloroethene+
-1,3-Dichloropropane
-2-Hexanone
-Dibromochloromethane
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform+
-Isopropylbenzene
-Cyclohexanone
-4-Bromofluorobenzene
-Bromobenzene
-1,1,2,2-Tetrachloroethane+
-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-1,3-Dichlorobenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
-2-Methylnaphthalene+
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Date : 16-DEC-2022 13:43
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
Page 1

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D
Inj Date : 16-DEC-2022 13:43
InstruID : voa6.i
LabSampID : VSTD020

Chloroprene (126-99-8)

Reason Code:

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27-Dec-2022
16:03
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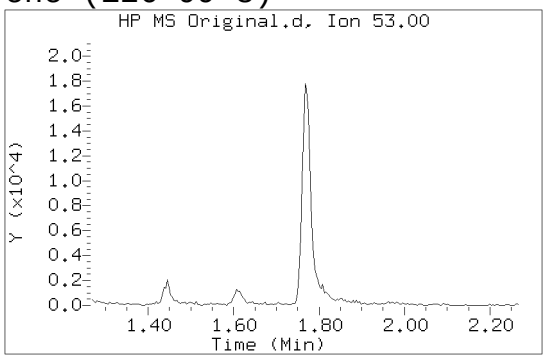

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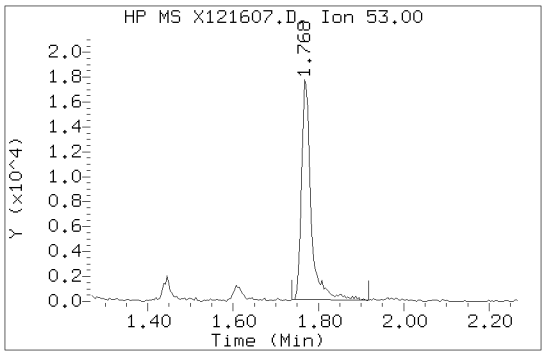

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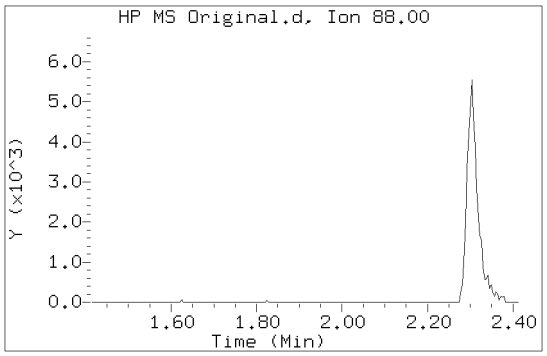

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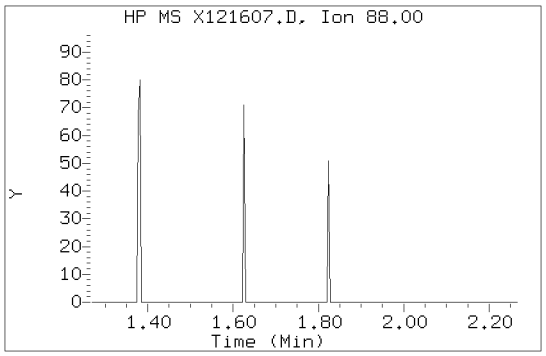

Methyl Acrylate (96-33-3)

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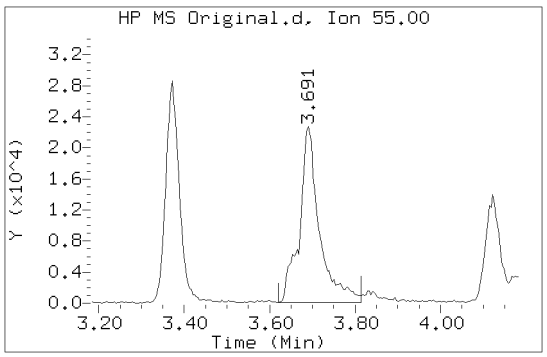

AFTER
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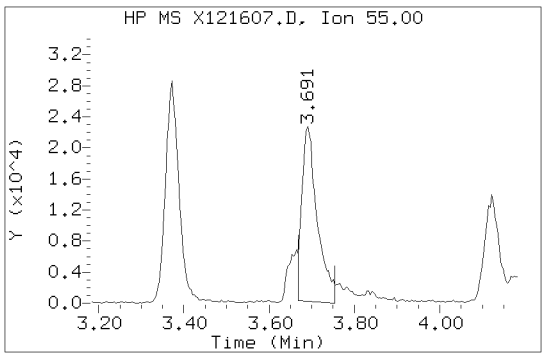

BEFORE
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AREA
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4239
27-Dec-2022
16:03
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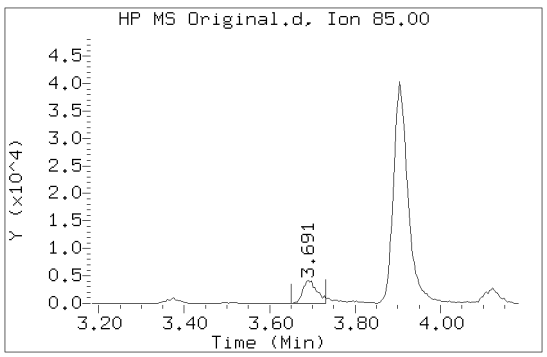

AFTER
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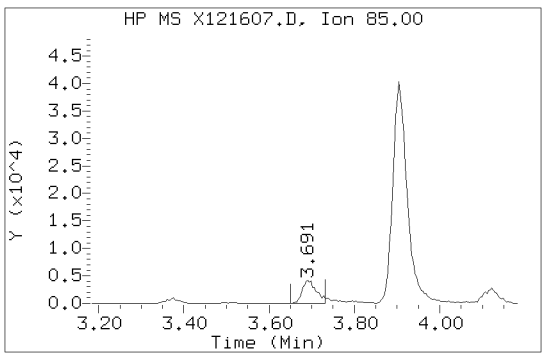

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Inj Date : 16-DEC-2022 13:43
InstruID : voa6.i
LabSampID : VSTD020

1,4-Dioxane ()

Reason Code:

BEFORE

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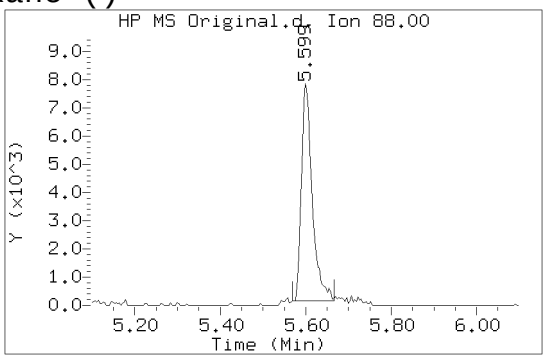

AFTER

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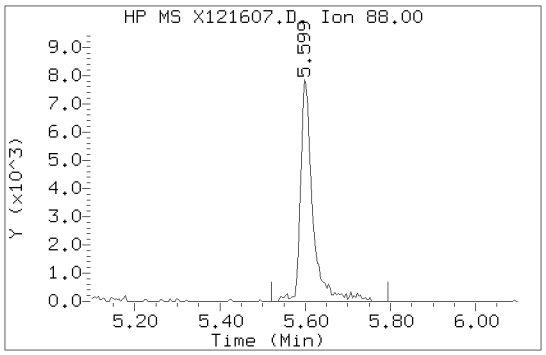

BEFORE

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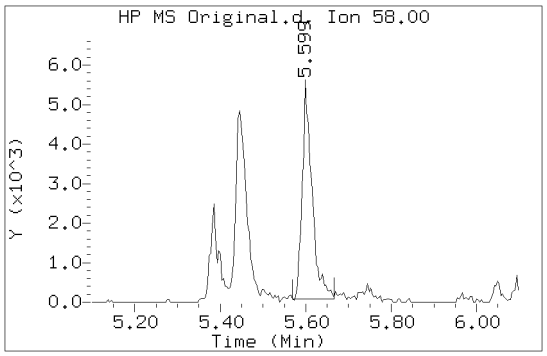

AFTER

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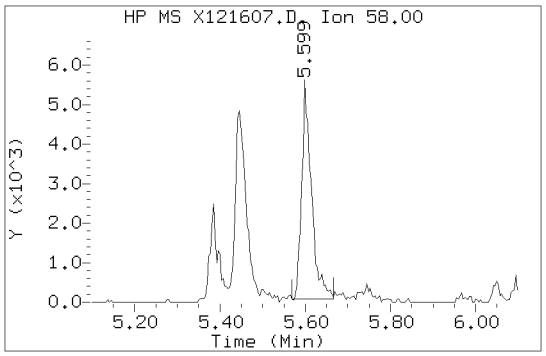

Cyclohexane (110-82-7)

Reason Code:

BEFORE

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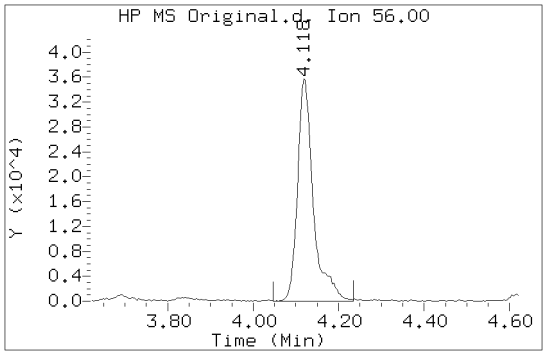

AFTER

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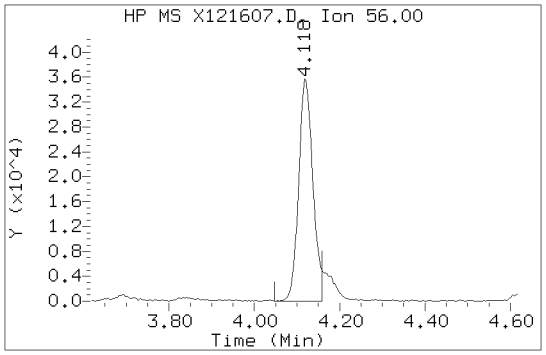

BEFORE

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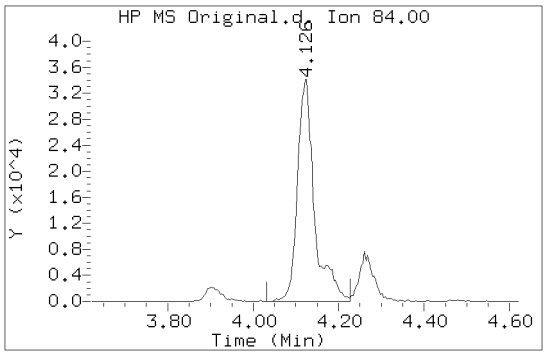

AFTER

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27-Dec-2022
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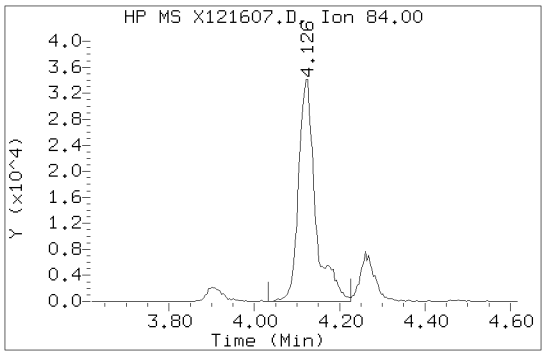

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InstruID : voa6.i
LabSampID : VSTD020

Cyclohexane (110-82-7)

Reason Code:

BEFORE

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HEIGHT
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27-Dec-2022
16:03
linh
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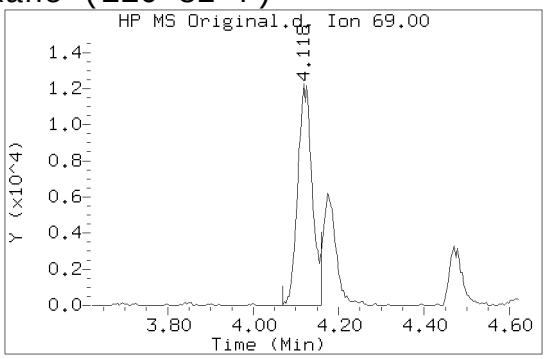

AFTER

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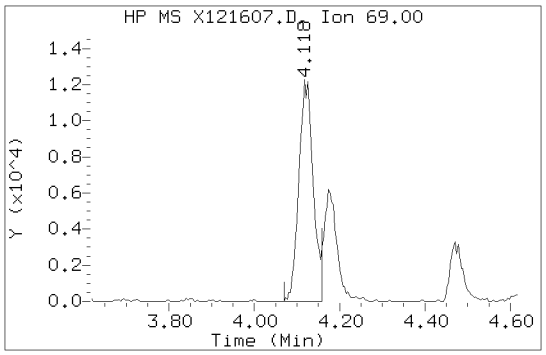

Acetaldehyde (75-07-0)

Reason Code:

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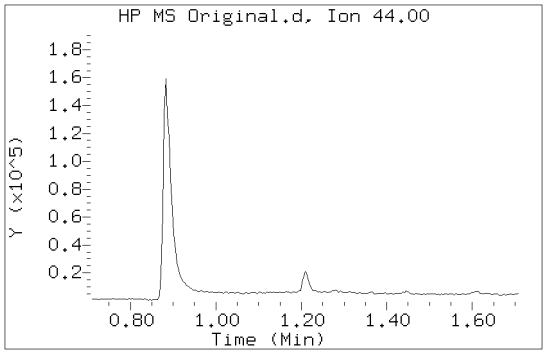

AFTER

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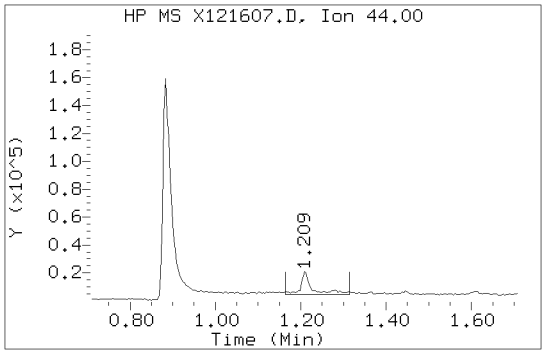

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27-Dec-2022
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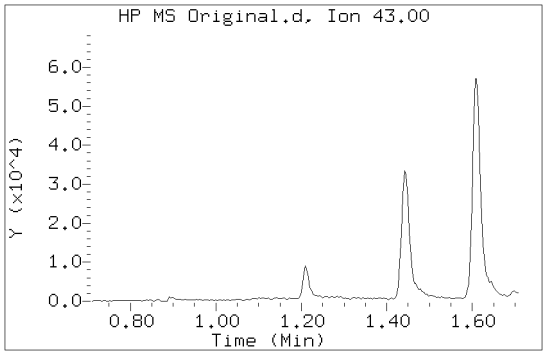

AFTER

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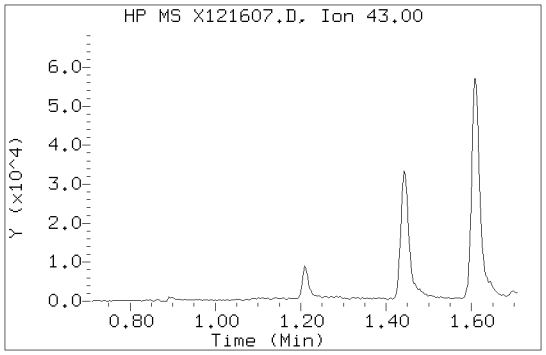

BEFORE

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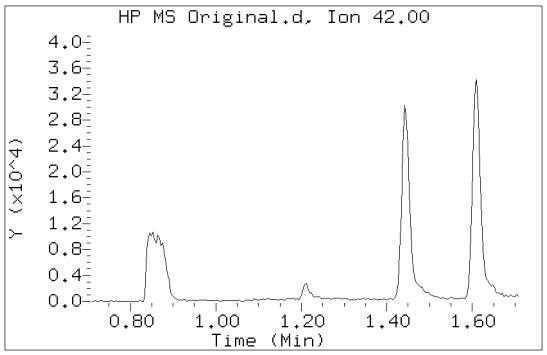

AFTER

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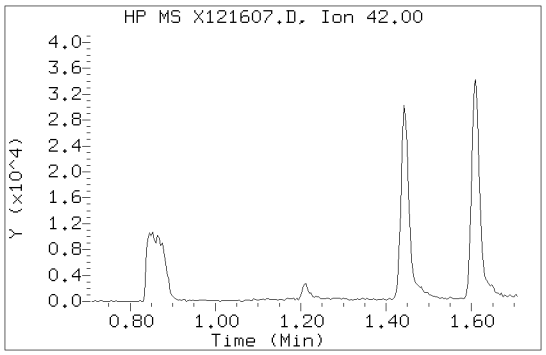

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D
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Inj Date : 16-DEC-2022 14:04
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 13:43 Cal File: X121607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	457591	50.0000	
135 1,4-Dioxane	88	5.595	5.595	(1.339)	40509	1000.00	968.45
140 1,3-Butadiene	54	1.160	1.160	(0.278)	152324	50.0000	48.50
25 Methacrylonitrile	41	3.821	3.821	(0.915)	147931	50.0000	45.65
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	499872	1000.00	971.21
13 Acetonitrile	39	2.195	2.195	(0.525)	202696	500.000	486.70
14 Allyl Chloride	41	2.195	2.195	(0.525)	372130	50.0000	46.91
4 Propionitrile	54	3.645	3.645	(0.873)	221995	500.000	475.45
136 n-Hexane	57	2.768	2.768	(0.663)	182358	50.0000	55.34
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	70497	50.0000	50.03
194 Acetaldehyde	44	1.209	1.209	(0.289)	67188	200.000	235.49(M)
23 Chloroprene	53	1.767	1.767	(0.423)	73877	50.0000	47.48(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	423646	50.0000	51.17
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	438695	50.0000	49.65
139 Diethyl ether	59	1.756	1.756	(0.420)	141705	50.0000	46.34
130 Ethyl Acetate	43	3.649	3.649	(0.873)	170590	50.0000	47.77
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	147516	50.0000	47.27
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	144135	50.0000	44.17
132 n-Butanol	56	5.253	5.253	(1.257)	54418	1000.00	935.85
142 Tetrahydrofuran	42	3.844	3.844	(0.920)	58181	100.000	102.34

150	Allyl alcohol	57	2.768	2.768 (0.663)	182358	1000.00	1026.00
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	826758	50.0000	45.95

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D Page 2
Report Date: 27-Dec-2022 16:07

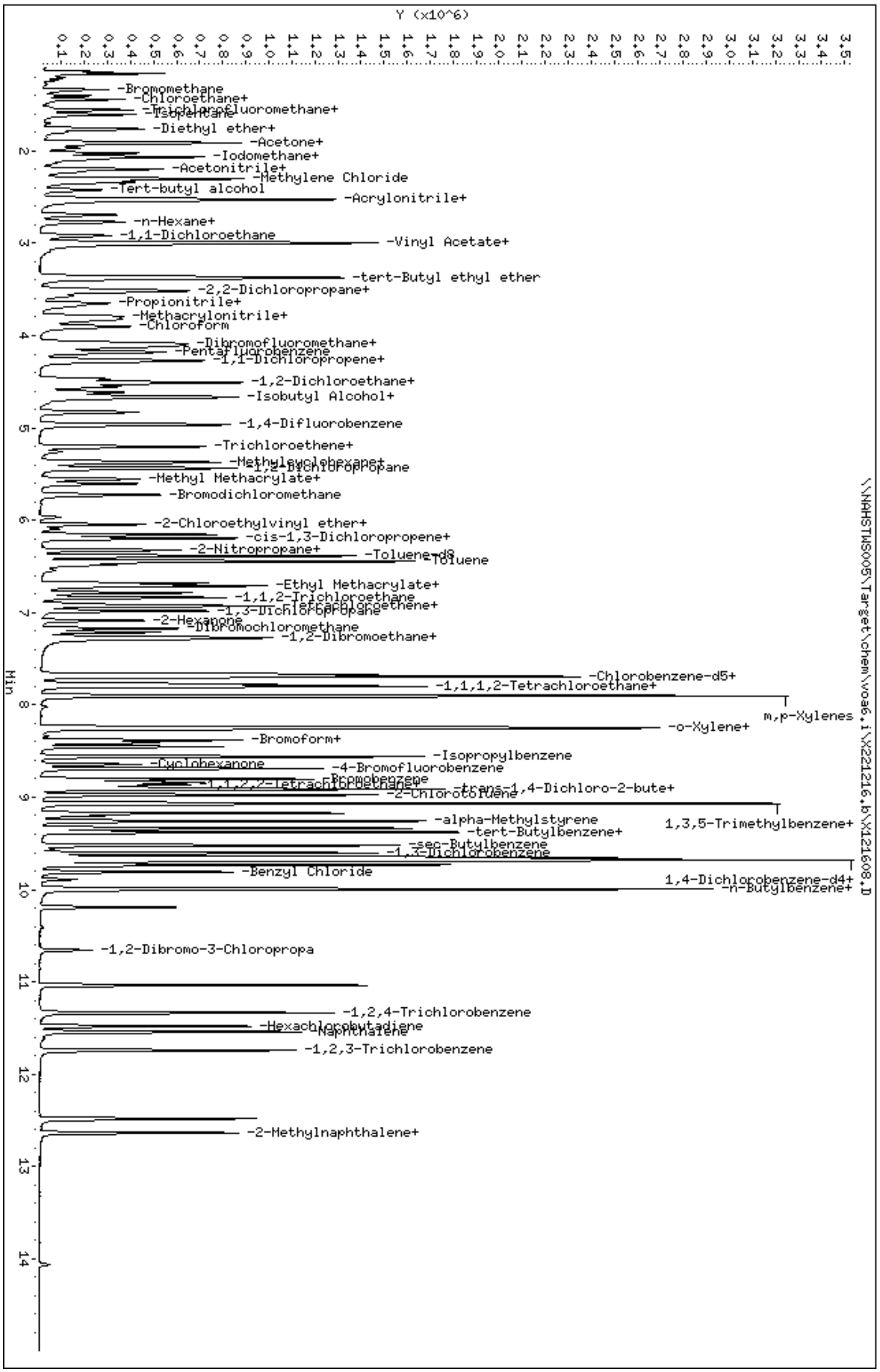
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	151068	50.0000	48.62(M)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	415774	50.0000	48.76
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	160392	50.0000	50.11
	3	Chloromethane	50	1.077	1.077	(0.258)	192710	50.0000	46.69
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	201812	50.0000	50.48
	6	Bromomethane	94	1.336	1.336	(0.320)	139689	50.0000	46.33
	7	Chloroethane	64	1.400	1.400	(0.335)	134745	50.0000	48.43
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	278013	50.0000	49.70
	9	Acrolein	56	1.441	1.441	(0.345)	27445	100.000	88.04
	10	Acetone	43	1.970	1.970	(0.472)	124798	100.000	97.19
	11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	168905	50.0000	48.63
	15	Iodomethane	142	2.022	2.022	(0.484)	455792	100.000	99.60
	16	Acrylonitrile	53	2.528	2.528	(0.605)	118697	100.000	100.77
	17	Methylene Chloride	84	2.300	2.300	(0.550)	225642	50.0000	47.36
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	534667	50.0000	47.03
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	892690	100.000	98.24
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	191505	50.0000	49.27
	21	Vinyl Acetate	43	2.993	2.993	(0.716)	983875	100.000	98.59
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	330037	50.0000	48.38
	24	2-Butanone	43	3.574	3.574	(0.856)	130179	100.000	95.71(H)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	283996	50.0000	49.03
	27	cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	228729	50.0000	48.35
	28	Chloroform	83	3.904	3.904	(0.935)	370755	50.0000	48.49
	29	Bromochloromethane	128	3.788	3.788	(0.907)	120638	50.0000	46.58
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	211939	50.0000	48.23
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	300650	50.0000	49.56
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	256928	50.0000	52.23
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	276500	50.0000	48.70
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	251833	50.0000	47.94
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	222293	50.0000	47.94
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	692830	50.0000	
	37	Benzene	78	4.507	4.507	(0.908)	812279	50.0000	49.09
	38	Trichloroethene	130	5.205	5.205	(1.048)	233833	50.0000	49.83
	39	Bromodichloromethane	83	5.722	5.722	(1.153)	297315	50.0000	47.88
	41	2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	180920	100.000	102.42
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	215079	50.0000	48.87
	44	Dibromomethane	93	5.553	5.553	(1.119)	143223	50.0000	47.87
	45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	336990	100.000	96.59
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	366231	50.0000	50.22
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	652727	50.0000	
$	48	Toluene-d8	98	6.386	6.386	(0.833)	772486	50.0000	47.89
	50	Toluene	91	6.446	6.446	(0.841)	889029	50.0000	49.27
	51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	309568	50.0000	51.15
	52	2-Hexanone	43	7.087	7.087	(0.924)	232879	100.000	98.10
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	172833	50.0000	47.75
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	345991	50.0000	48.56
	55	Dibromochloromethane	129	7.176	7.176	(0.936)	260477	50.0000	49.86
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	194749	50.0000	52.17
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	229442	50.0000	50.70
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	170128	50.0000	50.81
	59	Chlorobenzene	112	7.694	7.694	(1.003)	624151	50.0000	48.77
	60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	235373	50.0000	49.42

61 Ethylbenzene	106	7.799	7.799 (1.017)	311983	50.0000	51.75
62 m,p-Xylenes	106	7.904	7.904 (1.031)	785955	100.000	101.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	385427	50.0000	50.25
	64 Styrene	104	8.260	8.260	(1.077)	673066	50.0000	52.35
	66 Bromoform	173	8.410	8.410	(1.097)	181492	50.0000	50.14
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	920845	50.0000	52.55
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	276483	50.0000	46.43
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	292753	50.0000	48.55
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	373588	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	199888	50.0000	48.08(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1085689	50.0000	52.46
	74 Bromobenzene	156	8.803	8.803	(0.911)	299078	50.0000	48.79
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	793494	50.0000	51.90
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	670422	50.0000	49.37
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	782927	50.0000	50.57
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	652461	50.0000	52.14
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	815460	50.0000	50.69
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	889679	50.0000	53.43
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	810483	50.0000	54.32
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	520329	50.0000	51.14
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	544362	50.0000	49.03
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	472387	50.0000	46.44
	87 n-Butylbenzene	91	9.995	9.995	(1.035)	696355	50.0000	48.48
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	519532	50.0000	49.58
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	48660	50.0000	51.11
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	355455	50.0000	53.75
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	155390	50.0000	52.99
	92 Naphthalene	128	11.540	11.540	(1.194)	799829	50.0000	53.16
	93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	320836	50.0000	50.66
M	94 1,2-Dichloroethylene (total)	96				420234	100.000	
M	95 Xylenes (total)	106				1171382	150.000	
	141 Cyclohexane	56	4.121	4.121	(0.987)	237699	50.0000	51.49
	138 Freon TF	101	1.913	1.913	(0.458)	172155	50.0000	51.25
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	420886	50.0000	49.62
	146 Methyl Acetate	43	2.228	2.228	(0.533)	96420	50.0000	46.82
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	302677	1000.00	955.26
	149 Isopropyl Alcohol	45	2.090	2.090	(0.500)	157082	1000.00	949.28

QC Flag Legend

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



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Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

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

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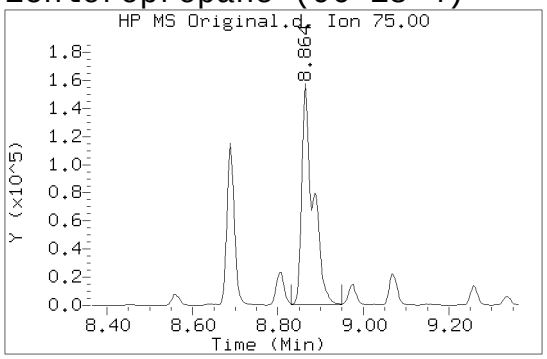

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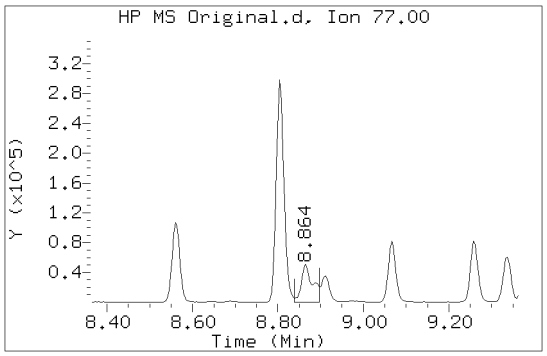

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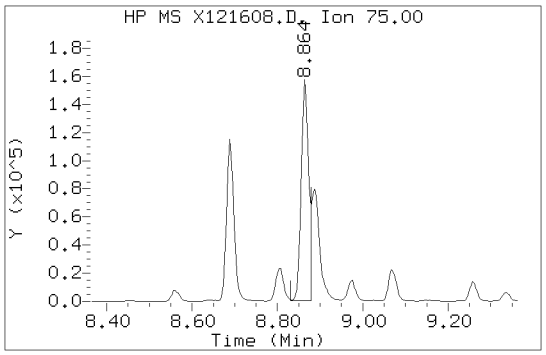

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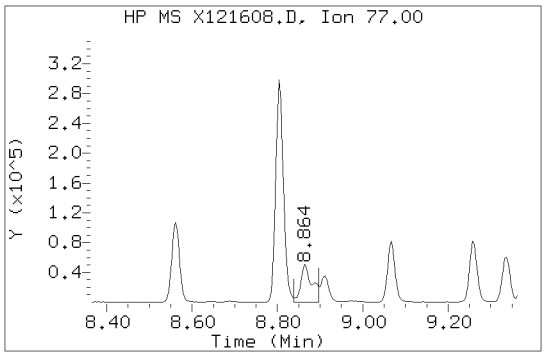

Chloroprene (126-99-8)

BEFORE

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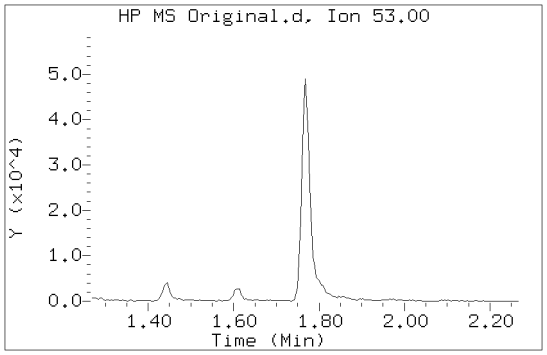

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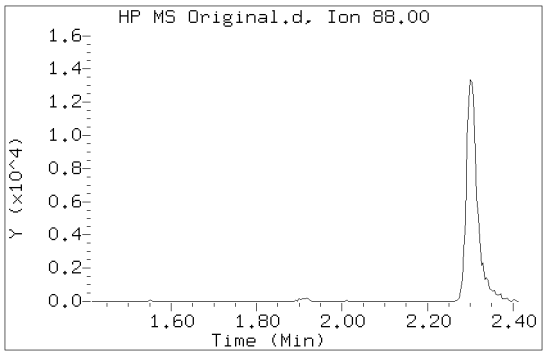

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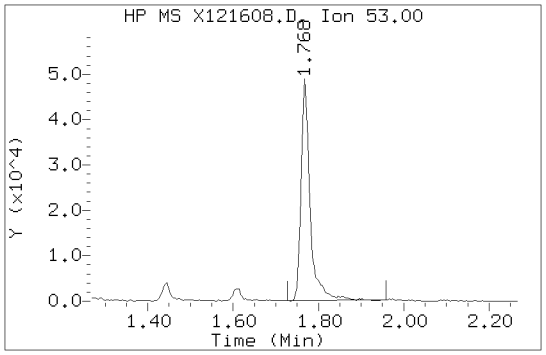

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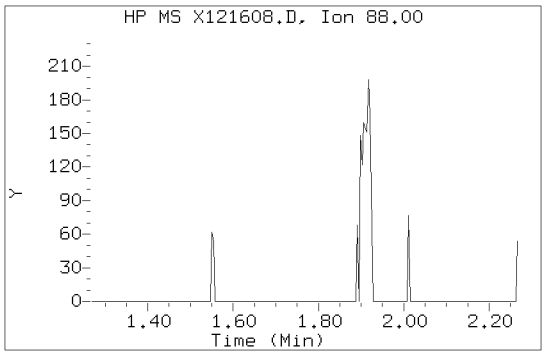

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Methyl Acrylate (96-33-3)

BEFORE

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27-Dec-2022
16:03
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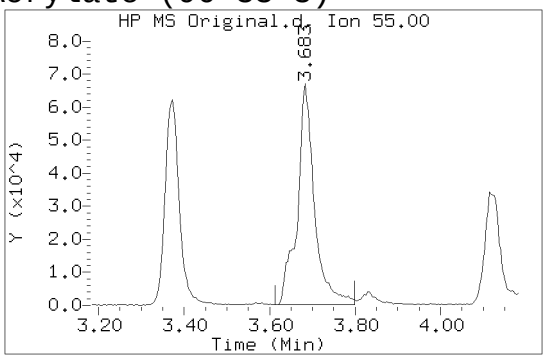

BEFORE

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AREA
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27-Dec-2022
16:03
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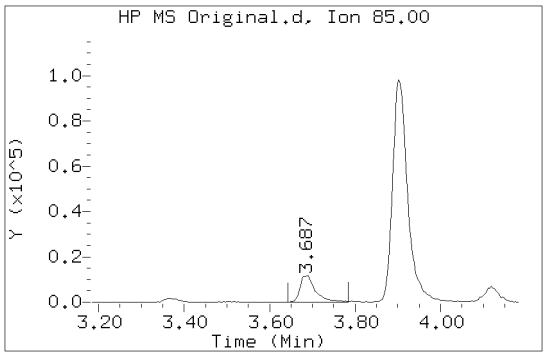

Reason Code:

AFTER

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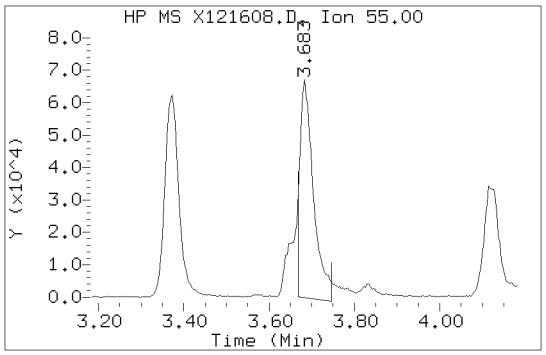

AFTER

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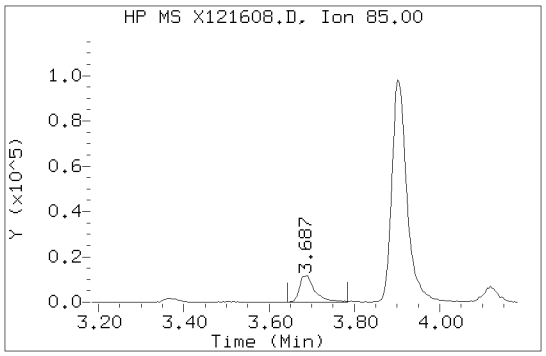

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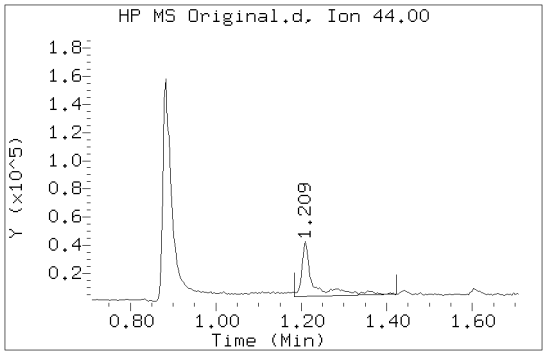

BEFORE

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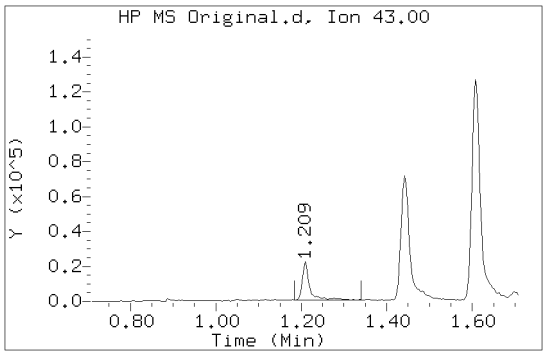

Reason Code:

AFTER

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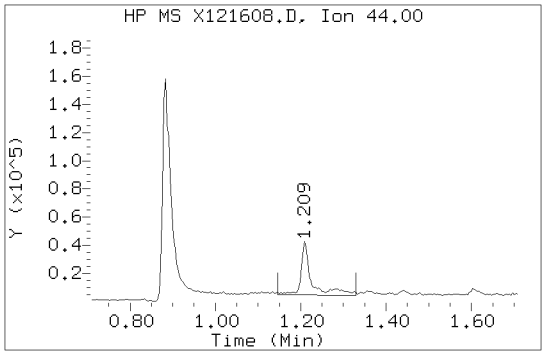

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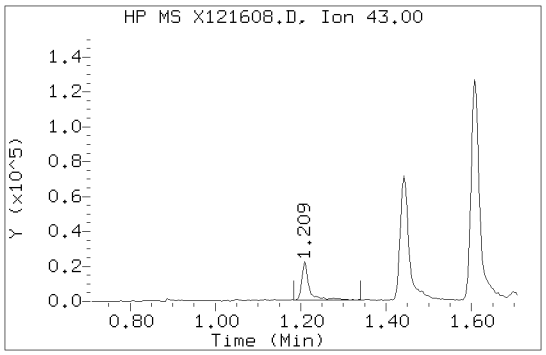

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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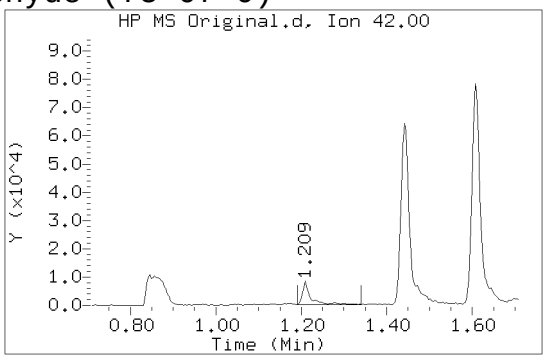

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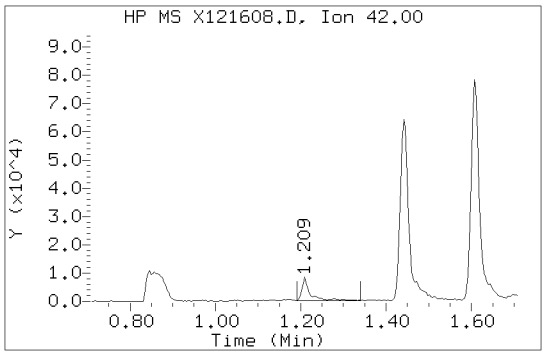

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 16-DEC-2022 14:25
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	454640	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	80329	2000.00	1932.89
140 1,3-Butadiene	54	1.160	1.160	(0.278)	300004	100.000	96.14
25 Methacrylonitrile	41	3.822	3.822	(0.915)	296105	100.000	91.97
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	1010956	2000.00	1976.95
13 Acetonitrile	39	2.195	2.195	(0.525)	413876	1000.00	1000.23
14 Allyl Chloride	41	2.195	2.195	(0.525)	756242	100.000	95.96
4 Propionitrile	54	3.645	3.645	(0.873)	447087	1000.00	963.76
136 n-Hexane	57	2.768	2.768	(0.663)	330416	100.000	100.93
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	144667	100.000	100.47
194 Acetaldehyde	44	1.209	1.209	(0.289)	107798	400.000	394.60(M)
23 Chloroprene	53	1.767	1.767	(0.423)	146540	100.000	94.79(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	857105	100.000	100.18
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	912573	100.000	101.09
139 Diethyl ether	59	1.752	1.752	(0.420)	288002	100.000	94.80
130 Ethyl Acetate	43	3.649	3.649	(0.873)	318062	100.000	89.65
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	295199	100.000	95.22
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	311883	100.000	96.06
132 n-Butanol	56	5.253	5.253	(1.258)	124057	2000.00	1971.40
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	109518	200.000	196.74

150	Allyl alcohol	57	2.768	2.768 (0.663)	330416	2000.00	1871.09
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	1772216	100.000	95.31

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D Page 2
Report Date: 27-Dec-2022 16:07

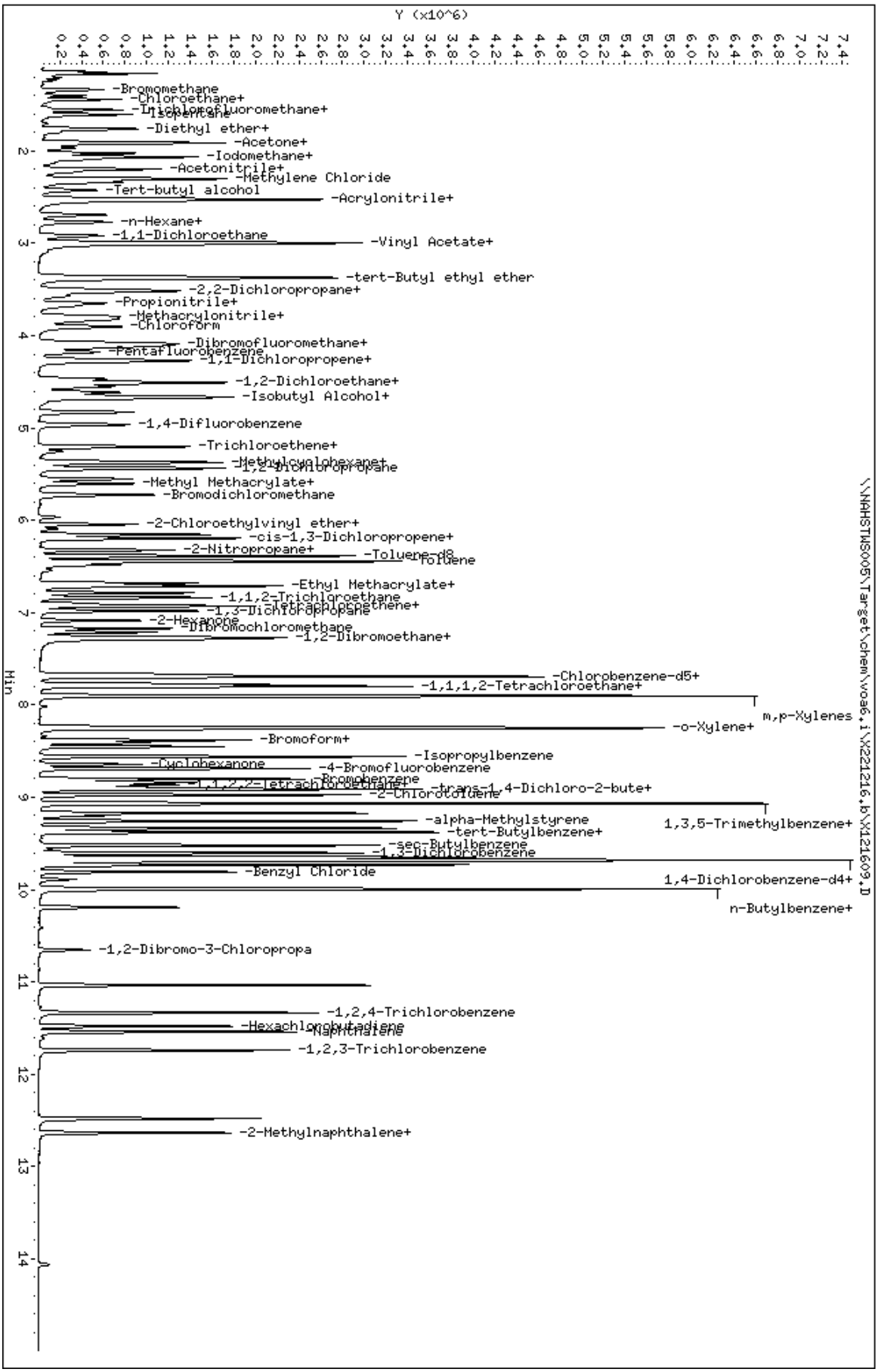
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.683	3.683	(0.882)	308372	100.000	99.90(M)
	162 Butyl acrylate	55	8.249	8.249	(1.076)	901265	100.000	103.44
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	309019	100.000	96.81
	3 Chloromethane	50	1.078	1.078	(0.258)	388163	100.000	92.40
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	390567	100.000	98.34
	6 Bromomethane	94	1.336	1.336	(0.320)	284165	100.000	93.02
	7 Chloroethane	64	1.400	1.400	(0.335)	261091	100.000	94.45
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	543907	100.000	97.86
	9 Acrolein	56	1.441	1.441	(0.345)	60756	200.000	192.70
	10 Acetone	43	1.970	1.970	(0.472)	243517	200.000	190.92
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	329394	100.000	95.46
	15 Iodomethane	142	2.026	2.026	(0.485)	958603	200.000	197.72
	16 Acrylonitrile	53	2.528	2.528	(0.605)	235604	200.000	201.32
	17 Methylene Chloride	84	2.300	2.300	(0.550)	423827	100.000	89.54
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.606)	1078258	100.000	95.46
	19 Carbon Disulfide	76	2.063	2.063	(0.494)	1765599	200.000	195.57
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	376933	100.000	97.60
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	1955305	200.000	197.21
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	641083	100.000	94.59
	24 2-Butanone	43	3.570	3.570	(0.855)	264221	200.000	192.38(H)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	554902	100.000	96.43
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	443532	100.000	94.37
	28 Chloroform	83	3.904	3.904	(0.935)	715830	100.000	94.23
	29 Bromochloromethane	128	3.792	3.792	(0.908)	239022	100.000	92.88
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	438954	100.000	100.72
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	583361	100.000	96.79
	32 1,1-Dichloropropene	75	4.275	4.275	(0.861)	496096	100.000	101.35
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	553661	100.000	98.01
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	487488	100.000	93.26
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	455890	100.000	98.67
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	689427	50.0000	
	37 Benzene	78	4.508	4.508	(0.908)	1590142	100.000	96.58
	38 Trichloroethene	130	5.205	5.205	(1.048)	456948	100.000	97.85
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	587419	100.000	95.07
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	345852	200.000	196.75
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	420835	100.000	96.09
	44 Dibromomethane	93	5.550	5.550	(1.118)	280146	100.000	94.11
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	671115	200.000	188.25
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	735867	100.000	101.41
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	666948	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1602890	100.000	97.25
	50 Toluene	91	6.446	6.446	(0.841)	1761917	100.000	95.57
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	618784	100.000	102.75
	52 2-Hexanone	43	7.087	7.087	(0.924)	458639	200.000	189.09
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	342194	100.000	92.52
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	682500	100.000	93.75
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	521219	100.000	97.64
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	373651	100.000	97.96
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	453499	100.000	98.07
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	326538	100.000	98.00
	59 Chlorobenzene	112	7.694	7.694	(1.003)	1229287	100.000	94.01
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	472962	100.000	97.19

61 Ethylbenzene	106	7.799	7.799 (1.017)	612289	100.000	99.40
62 m,p-Xylenes	106	7.904	7.904 (1.031)	1556563	200.000	196.03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	767814	100.000	97.97
	64 Styrene	104	8.260	8.260	(1.077)	1350780	100.000	102.83
	66 Bromoform	173	8.410	8.410	(1.097)	367943	100.000	99.50
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1818857	100.000	101.58
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	554091	100.000	90.03
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	615584	100.000	99.86
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386107	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	407425	100.000	94.83(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	2152414	100.000	100.64
	74 Bromobenzene	156	8.803	8.803	(0.911)	602819	100.000	95.16
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1603520	100.000	101.49
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	1326500	100.000	94.51
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1587855	100.000	99.24
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	1287608	100.000	99.56
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1640529	100.000	98.68
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1778581	100.000	103.36
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	1606121	100.000	104.16
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	1039293	100.000	98.84
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1114780	100.000	97.16
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	1009234	100.000	94.18
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	1425779	100.000	94.31
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	1054319	100.000	97.36
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	94321	100.000	95.78
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	697257	100.000	102.03
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	299042	100.000	97.63
	92 Naphthalene	128	11.540	11.540	(1.194)	1592534	100.000	102.42
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	642199	100.000	98.12
M	94 1,2-Dichloroethylene (total)	96				820465	200.000	
M	95 Xylenes (total)	106				2324377	300.000	
	141 Cyclohexane	56	4.118	4.118	(0.986)	432198	100.000	93.19
	138 Freon TF	101	1.913	1.913	(0.458)	327614	100.000	98.16
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	862071	100.000	102.15(A)
	146 Methyl Acetate	43	2.228	2.228	(0.533)	196542	100.000	96.07
	148 Tert-Butyl alcohol	59	2.427	2.427	(0.581)	592215	2000.00	1881.19
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	321288	2000.00	1954.21

QC Flag Legend

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



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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\X221216.b\X121609.D
Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

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

BEFORE

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27-Dec-2022
16:03
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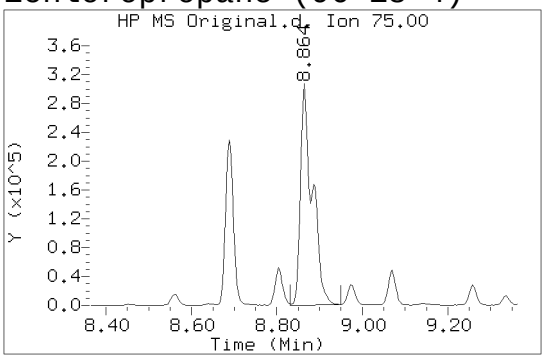

BEFORE

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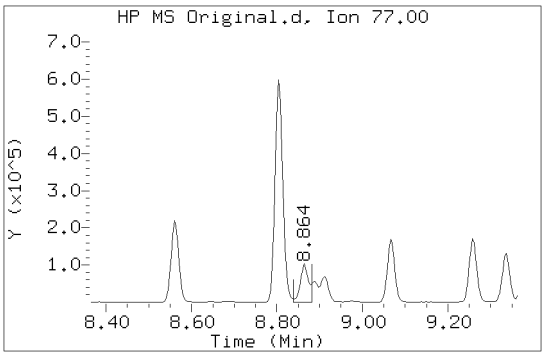

Reason Code:

AFTER

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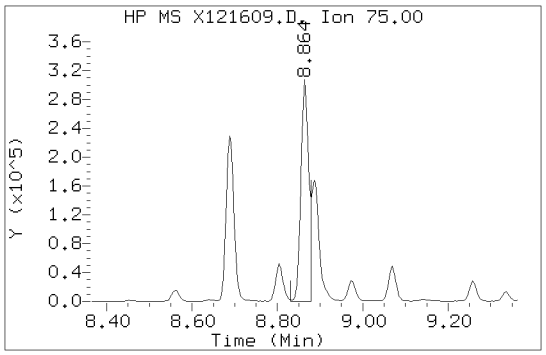

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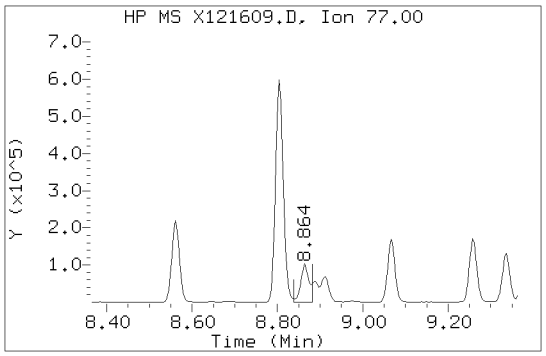

Chloroprene (126-99-8)

BEFORE

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27-Dec-2022
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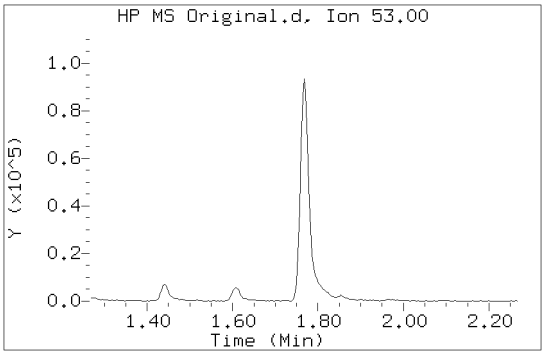

BEFORE

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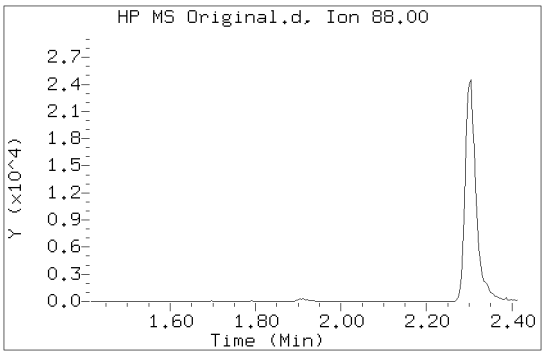

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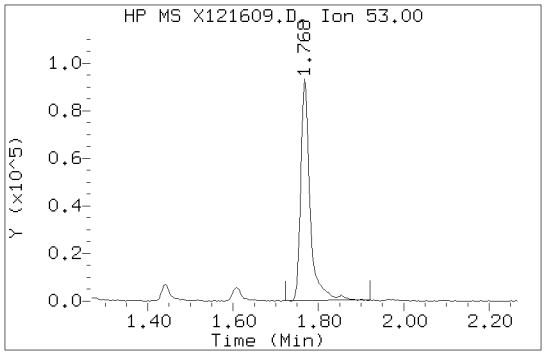

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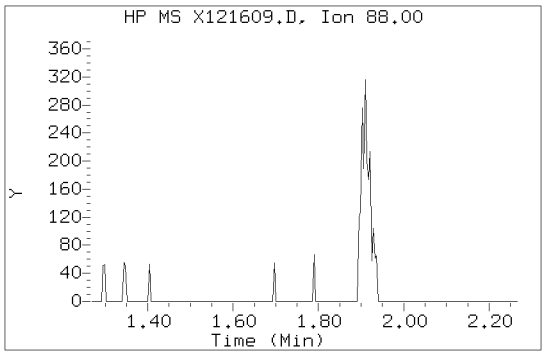

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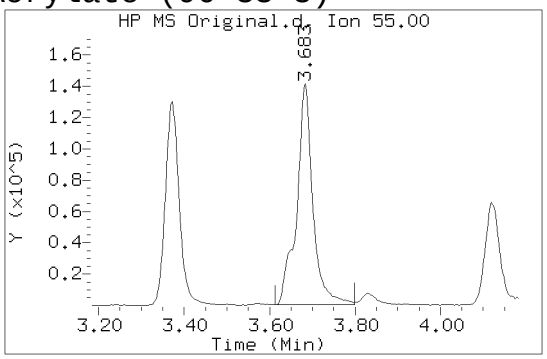
Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Methyl Acrylate (96-33-3)



BEFORE
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27-Dec-2022
16:03
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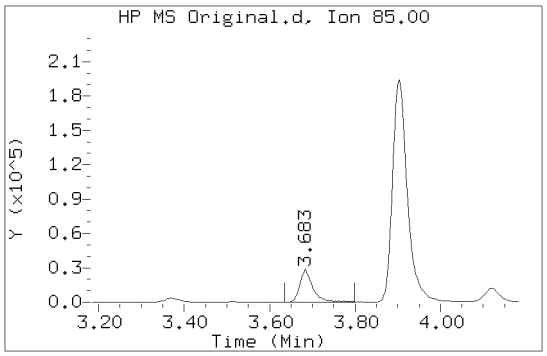

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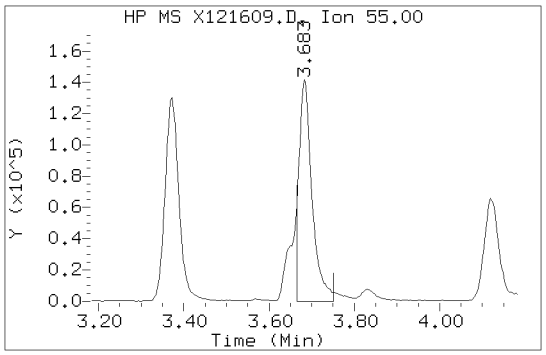
Reason Code:



AFTER
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27-Dec-2022
16:06
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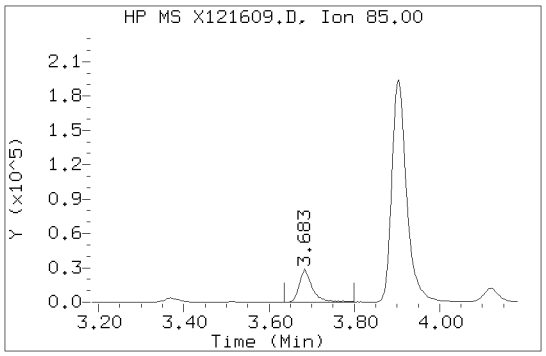

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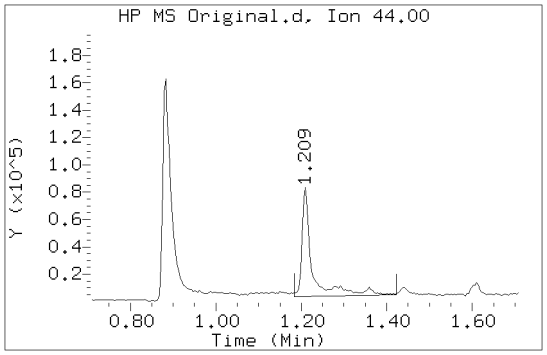
Acetaldehyde (75-07-0)



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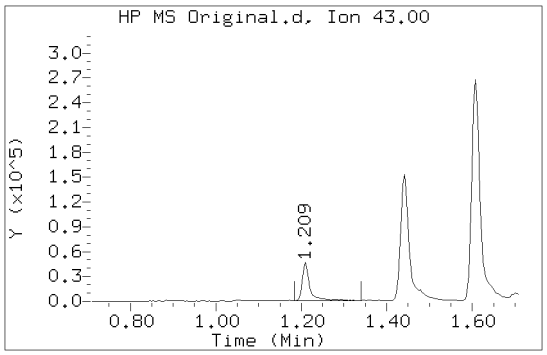

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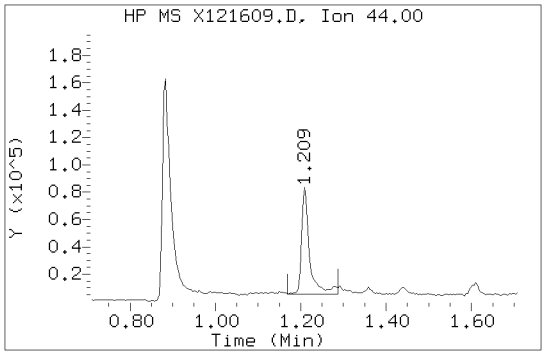

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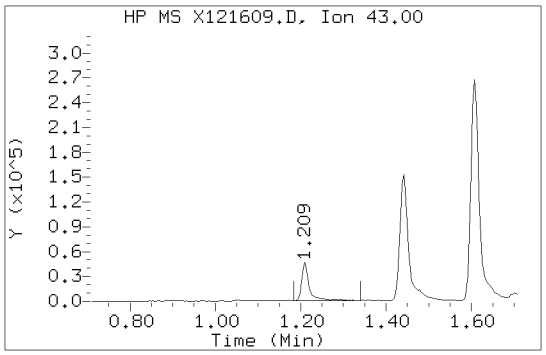

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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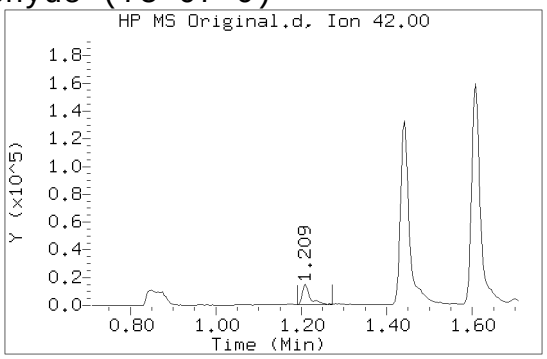

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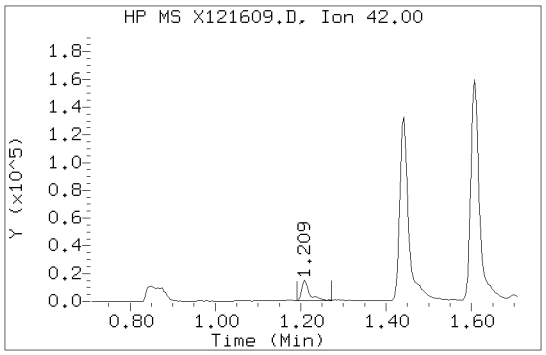

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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D
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Inj Date : 16-DEC-2022 14:46
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
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Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.177	(1.000)	447266	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	128845	3000.00	3151.41
140 1,3-Butadiene	54	1.160	1.160	(0.278)	468966	150.000	152.77
25 Methacrylonitrile	41	3.818	3.818	(0.914)	457301	150.000	144.39
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	1595753	3000.00	3171.99
13 Acetonitrile	39	2.194	2.194	(0.525)	642798	1500.00	1579.09
14 Allyl Chloride	41	2.194	2.194	(0.525)	1164663	150.000	150.22
4 Propionitrile	54	3.649	3.649	(0.873)	694740	1500.00	1522.31
136 n-Hexane	57	2.768	2.768	(0.663)	533876	150.000	165.78
72 trans-1,4-Dichloro-2-butene	53	8.889	8.889	(1.159)	234252	150.000	161.53
194 Acetaldehyde	44	1.209	1.209	(0.289)	161053	600.000	611.34(M)
23 Chloroprene	53	1.767	1.767	(0.423)	225733	150.000	148.43
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	1351001	150.000	157.73
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	1420820	150.000	156.27
139 Diethyl ether	59	1.752	1.752	(0.419)	443624	150.000	148.44
130 Ethyl Acetate	43	3.649	3.649	(0.873)	516433	150.000	147.97
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	465959	150.000	152.78
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	517063	150.000	157.90
132 n-Butanol	56	5.253	5.253	(1.258)	210842	3000.00	3100.52
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	162133	300.000	297.65

150	Allyl alcohol	57	2.768	2.768 (0.663)	533876	3000.00	3073.09
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	2744011	150.000	147.41

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D Page 2
Report Date: 27-Dec-2022 16:07

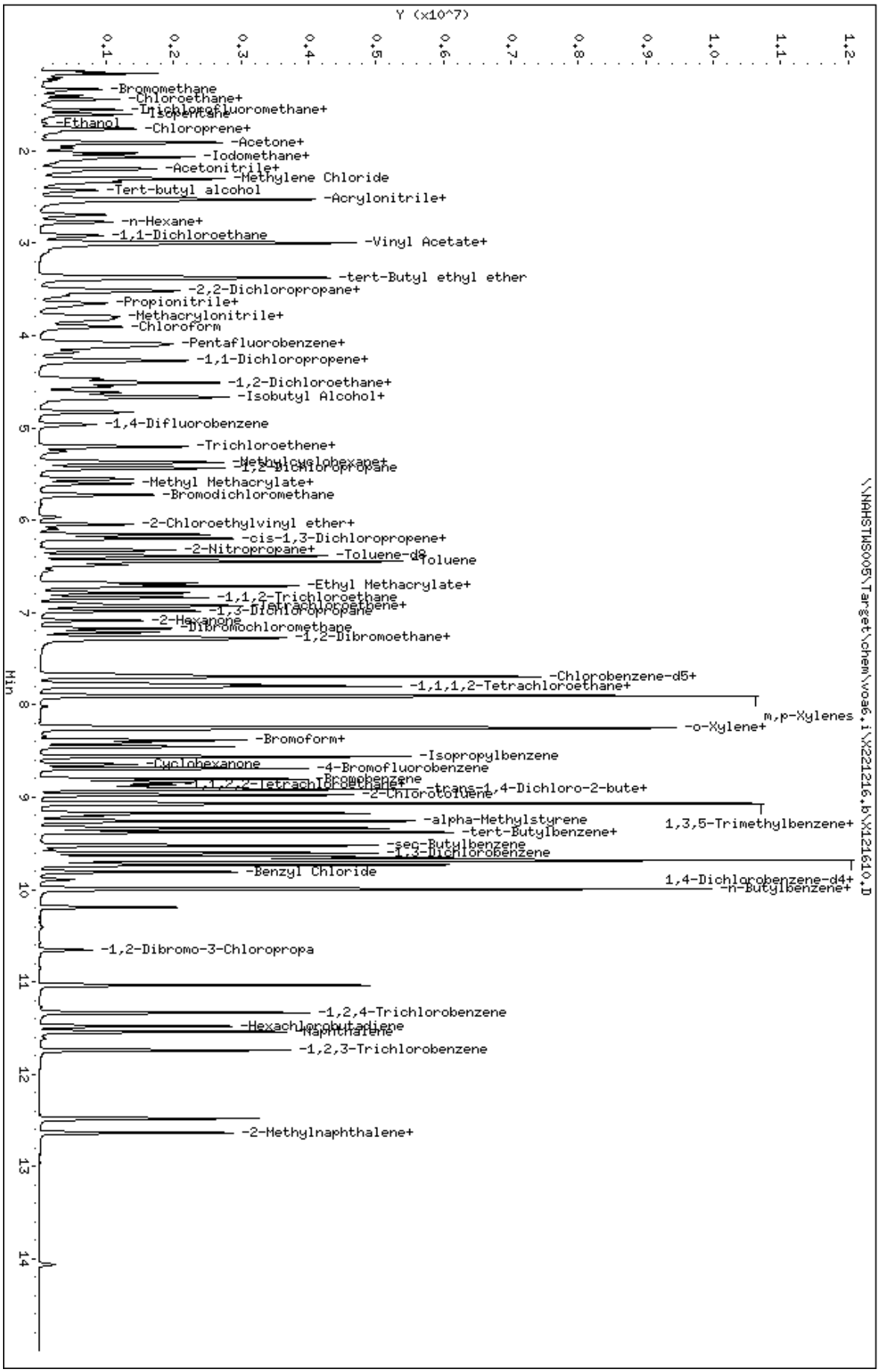
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	479571	150.000	157.93(M)
	162	Butyl acrylate	55	8.248	8.248	(1.076)	1470193	150.000	167.53
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	476130	150.000	151.40
	3	Chloromethane	50	1.077	1.077	(0.258)	621048	150.000	148.89
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	602774	150.000	154.27
	6	Bromomethane	94	1.332	1.332	(0.319)	470318	150.000	155.29
	7	Chloroethane	64	1.400	1.400	(0.335)	409168	150.000	150.45
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	866865	150.000	158.54
	9	Acrolein	56	1.441	1.441	(0.345)	96139	300.000	308.25
	10	Acetone	43	1.969	1.969	(0.472)	373504	300.000	297.68
	11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	516820	150.000	152.24
	15	Iodomethane	142	2.022	2.022	(0.484)	1554547	300.000	304.69
	16	Acrylonitrile	53	2.528	2.528	(0.605)	371872	300.000	323.00
	17	Methylene Chloride	84	2.299	2.299	(0.550)	656037	150.000	140.89
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	1661314	150.000	149.51
	19	Carbon Disulfide	76	2.063	2.063	(0.494)	2747788	300.000	309.38
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	579939	150.000	152.65
	21	Vinyl Acetate	43	2.993	2.993	(0.716)	3127175	300.000	320.61
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	993924	150.000	149.06
	24	2-Butanone	43	3.570	3.570	(0.855)	407629	300.000	299.97(H)
	26	2,2-Dichloropropane	77	3.506	3.506	(0.839)	858853	150.000	151.71
	27	cis-1,2-Dichloroethene	96	3.521	3.521	(0.843)	693846	150.000	150.07
	28	Chloroform	83	3.904	3.904	(0.935)	1135322	150.000	151.92
	29	Bromochloromethane	128	3.791	3.791	(0.908)	379595	150.000	149.95
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	652724	150.000	152.32
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	907111	150.000	152.99
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	766313	150.000	155.22
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	857022	150.000	150.42
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	758288	150.000	143.83
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	686218	150.000	150.83
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	695375	50.0000	
	37	Benzene	78	4.511	4.511	(0.909)	2450385	150.000	147.56
	38	Trichloroethene	130	5.205	5.205	(1.048)	707016	150.000	150.11
	39	Bromodichloromethane	83	5.722	5.722	(1.153)	932632	150.000	149.65
	41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	534005	300.000	301.19
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	658007	150.000	148.96
	44	Dibromomethane	93	5.549	5.549	(1.118)	444851	150.000	148.16
	45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	1052577	300.000	293.14
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1159982	150.000	158.49
*	47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	671780	50.0000	
$	48	Toluene-d8	98	6.385	6.385	(0.833)	2346444	150.000	141.35
	50	Toluene	91	6.445	6.445	(0.841)	2724692	150.000	146.73
	51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	982044	150.000	161.68
	52	2-Hexanone	43	7.086	7.086	(0.924)	738082	300.000	302.12
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	540625	150.000	145.13
	54	1,3-Dichloropropane	76	6.981	6.981	(0.911)	1079961	150.000	147.29
	55	Dibromochloromethane	129	7.176	7.176	(0.936)	822094	150.000	152.90
	56	Tetrachloroethene	164	6.929	6.929	(0.904)	574499	150.000	149.53
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	715678	150.000	153.66
	58	1-Chlorohexane	55	7.697	7.697	(1.550)	522502	150.000	155.48
	59	Chlorobenzene	112	7.694	7.694	(1.003)	1944205	150.000	147.62
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	744470	150.000	151.89

61 Ethylbenzene	106	7.799	7.799 (1.017)	946928	150.000	152.63
62 m,p-Xylenes	106	7.904	7.904 (1.031)	2421267	300.000	302.75

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	1210374	150.000	153.33
	64 Styrene	104	8.260	8.260	(1.077)	2169528	150.000	163.97
	66 Bromoform	173	8.410	8.410	(1.097)	588916	150.000	158.11
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	2877359	150.000	159.55
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	873933	150.000	141.84
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	936681	150.000	150.82
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386546	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	702545	150.000	163.33
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	3370402	150.000	157.41
	74 Bromobenzene	156	8.803	8.803	(0.911)	952608	150.000	150.20
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	2529726	150.000	159.93
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	2083510	150.000	148.28
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	2540753	150.000	158.62
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	2055293	150.000	158.74
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	2613455	150.000	157.03
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	2819238	150.000	163.65
	82 p-Isopropyltoluene	119	9.650	9.650	(0.999)	2542764	150.000	164.71
	83 1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	1650440	150.000	156.79
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	1766146	150.000	153.76
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	1650494	150.000	151.23
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	2293126	150.000	150.43
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	1672283	150.000	154.25
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	149691	150.000	151.78
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	1094701	150.000	160.01
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	466452	150.000	150.10
	92 Naphthalene	128	11.540	11.540	(1.194)	2498440	150.000	160.50
	93 1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	991236	150.000	151.28
M	94 1,2-Dichloroethylene (total)	96				1273785	300.000	
M	95 Xylenes (total)	106				3631641	450.000	
	141 Cyclohexane	56	4.117	4.117	(0.986)	682728	150.000	148.87
	138 Freon TF	101	1.910	1.910	(0.457)	517229	150.000	157.53
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	1358300	150.000	159.57(A)
	146 Methyl Acetate	43	2.224	2.224	(0.533)	301298	150.000	149.70
	148 Tert-Butyl alcohol	59	2.427	2.427	(0.581)	962267	3000.00	3107.07
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	514966	3000.00	3183.89

QC Flag Legend

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



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Column phase: DB624

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

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Inj Date : 16-DEC-2022 14:46
InstruID : voa6.i
LabSampID : VSTD150

Methyl Acrylate (96-33-3)

BEFORE

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27-Dec-2022
16:04
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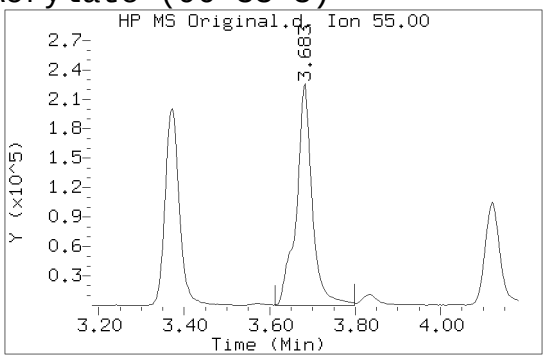

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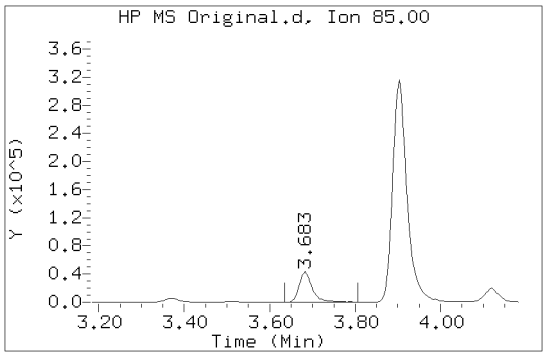

Reason Code:

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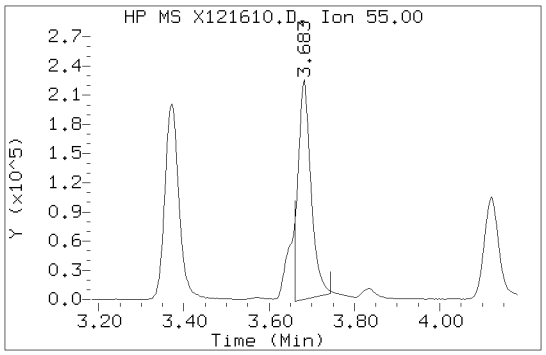

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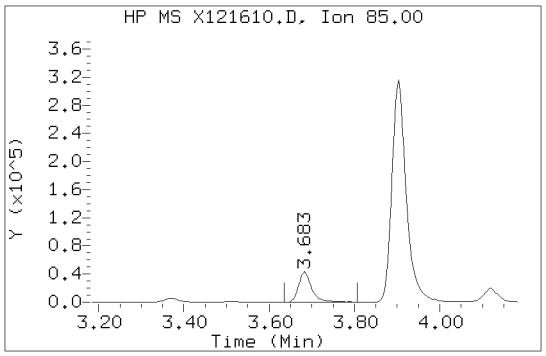

Acetaldehyde (75-07-0)

BEFORE

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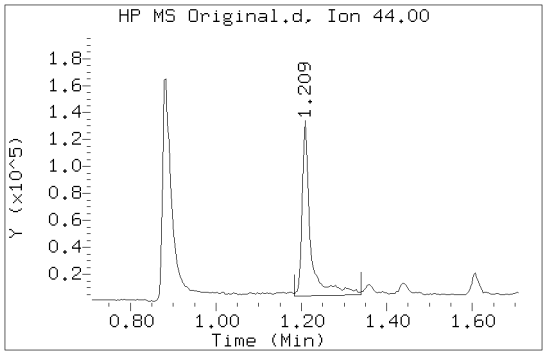

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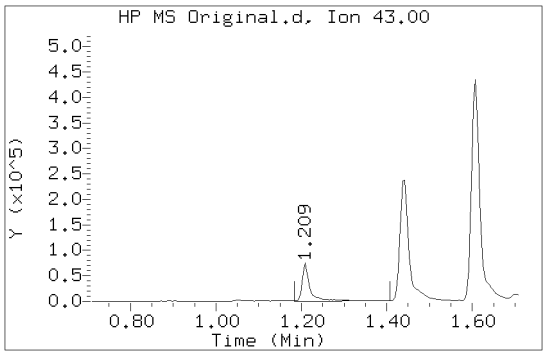

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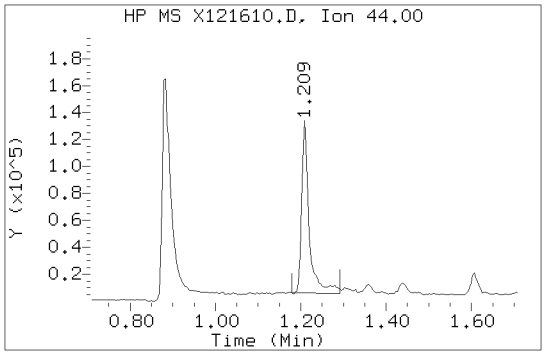

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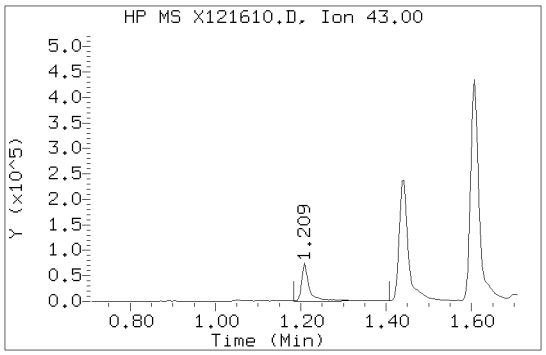

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Inj Date : 16-DEC-2022 14:46
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
42
AREA
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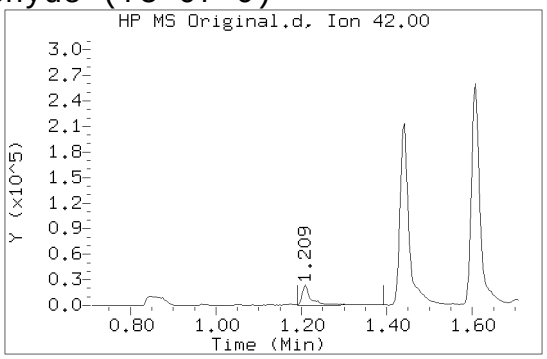
HEIGHT
23932
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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27-Dec-2022
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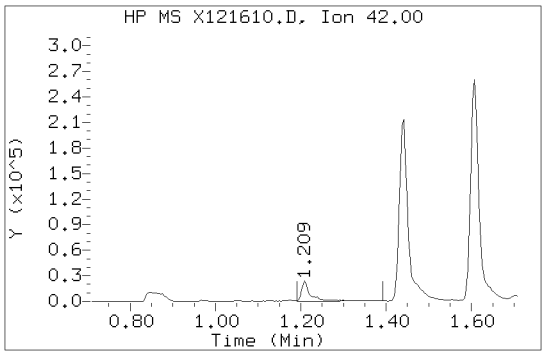

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D
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Inj Date : 16-DEC-2022 15:07
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Dec-2022 16:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:46 Cal File: X121610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	450847	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	179280	4000.00	4350.17(A)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	646265	200.000	208.86(A)
25 Methacrylonitrile	41	3.814	3.814	(0.913)	619479	200.000	194.04
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	2146631	4000.00	4233.12(A)
13 Acetonitrile	39	2.195	2.195	(0.525)	854153	2000.00	2081.63(A)
14 Allyl Chloride	41	2.195	2.195	(0.525)	1558053	200.000	199.36
4 Propionitrile	54	3.649	3.649	(0.873)	933721	2000.00	2029.71(A)
136 n-Hexane	57	2.768	2.768	(0.663)	726173	200.000	223.70(A)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	324976	200.000	217.73(A)
194 Acetaldehyde	44	1.209	1.209	(0.289)	205547	800.000	780.23(M)
23 Chloroprene	53	1.767	1.767	(0.423)	315248	200.000	205.64(A)
145 alpha-Methylstyrene	118	9.261	9.261	(0.958)	1880547	200.000	211.54(A)
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	1929723	200.000	206.22(A)
139 Diethyl ether	59	1.752	1.752	(0.419)	595638	200.000	197.72
130 Ethyl Acetate	43	3.649	3.649	(0.873)	706790	200.000	200.90(A)
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	643877	200.000	209.45(A)
49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	735246	200.000	222.23(A)
132 n-Butanol	56	5.253	5.253	(1.258)	297334	4000.00	3955.86
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	219995	400.000	401.77(A)

150 Allyl alcohol	57	2.768	2.768 (0.663)	726173	4000.00	4146.79(A)
166 1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	3701988	200.000	191.61

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D Page 2
Report Date: 27-Dec-2022 16:07

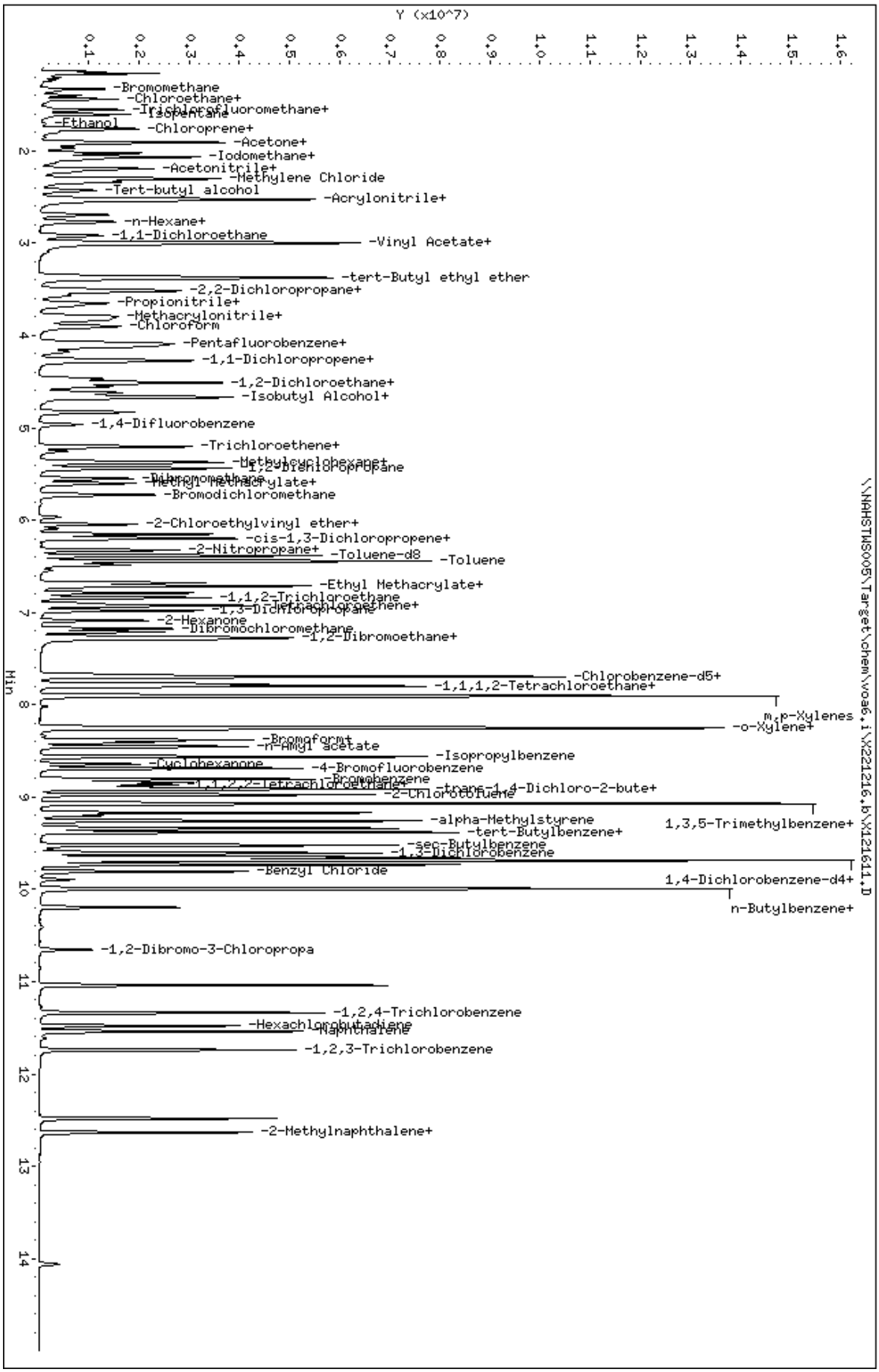
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.683	3.683	(0.882)	646827	200.000	211.32(AM)
	162 Butyl acrylate	55	8.252	8.252	(1.076)	2063916	200.000	228.52(A)
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	635808	200.000	200.44(A)
	3 Chloromethane	50	1.074	1.074	(0.257)	865151	200.000	204.92(A)
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	827926	200.000	210.21(A)
	6 Bromomethane	94	1.329	1.329	(0.318)	666705	200.000	217.67(A)
	7 Chloroethane	64	1.396	1.396	(0.334)	548415	200.000	200.06(A)
	8 Trichlorofluoromethane	101	1.553	1.553	(0.372)	1173529	200.000	212.92(A)
	9 Acrolein	56	1.437	1.437	(0.344)	125874	400.000	399.54
	10 Acetone	43	1.970	1.970	(0.472)	514105	400.000	406.50(A)
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	704695	200.000	205.94(A)
	15 Iodomethane	142	2.022	2.022	(0.484)	2193685	400.000	398.07
	16 Acrylonitrile	53	2.528	2.528	(0.605)	504850	400.000	435.02(A)
	17 Methylene Chloride	84	2.299	2.299	(0.550)	863945	200.000	184.07
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.606)	2237559	200.000	199.78
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	3829593	400.000	427.76(A)
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	785444	200.000	205.10(A)
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	4210603	400.000	428.26(A)
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	1342786	200.000	199.79
	24 2-Butanone	43	3.570	3.570	(0.855)	555896	400.000	404.77(AH)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	1175128	200.000	205.93(A)
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	927934	200.000	199.10
	28 Chloroform	83	3.904	3.904	(0.935)	1523082	200.000	202.19(A)
	29 Bromochloromethane	128	3.791	3.791	(0.908)	510028	200.000	199.87
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	856027	200.000	198.23
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	1257327	200.000	210.37(A)
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	1048877	200.000	210.29(A)
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	1153034	200.000	200.31(A)
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	1051824	200.000	197.48
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	919752	200.000	200.47(A)
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	702551	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	3321582	200.000	197.98
	38 Trichloroethene	130	5.205	5.205	(1.048)	973709	200.000	204.62(A)
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	1264834	200.000	200.88(A)
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	729151	400.000	407.06(A)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	895211	200.000	200.59(A)
	44 Dibromomethane	93	5.550	5.550	(1.118)	600170	200.000	197.85
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1447268	400.000	391.63
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1583645	200.000	214.16(A)
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	691386	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.832)	3061758	200.000	179.21
	50 Toluene	91	6.445	6.445	(0.840)	3757557	200.000	196.62
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	1365007	200.000	222.44(A)
	52 2-Hexanone	43	7.086	7.086	(0.924)	1026898	400.000	408.42(A)
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	736981	200.000	192.23
	54 1,3-Dichloropropane	76	6.982	6.982	(0.910)	1482067	200.000	196.39
	55 Dibromochloromethane	129	7.176	7.176	(0.936)	1128140	200.000	203.88(A)
	56 Tetrachloroethene	164	6.929	6.929	(0.903)	798932	200.000	202.05(A)
	57 1,2-Dibromoethane	107	7.259	7.259	(0.946)	970608	200.000	202.48(A)
	58 1-Chlorohexane	55	7.698	7.698	(1.550)	746326	200.000	219.81(A)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	2696715	200.000	198.95
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	1028448	200.000	203.88(A)

61 Ethylbenzene	106	7.799	7.799 (1.017)	1312165	200.000	205.50(A)
62 m,p-Xylenes	106	7.904	7.904 (1.030)	3401207	400.000	413.22(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.074)	1701245	200.000	209.41(A)
	64 Styrene	104	8.260	8.260	(1.077)	3030858	200.000	222.58(A)
	66 Bromoform	173	8.410	8.410	(1.096)	809693	200.000	211.22(A)
	67 Isopropylbenzene	105	8.563	8.563	(1.116)	4031708	200.000	217.22(A)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	1186926	200.000	185.61
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.132)	1277239	200.000	199.81
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	401196	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	864931	200.000	193.75(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	4694239	200.000	211.23(A)
	74 Bromobenzene	156	8.807	8.807	(0.911)	1313631	200.000	199.57
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	3532485	200.000	215.17(A)
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	2866849	200.000	196.59
	77 4-Chlorotoluene	91	9.070	9.070	(0.938)	3546402	200.000	213.32(A)
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	2865820	200.000	213.26(A)
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	3599947	200.000	208.40(A)
	81 sec-Butylbenzene	105	9.523	9.523	(0.985)	3952917	200.000	221.08(A)
	82 p-Isopropyltoluene	119	9.651	9.651	(0.998)	3537904	200.000	220.81(A)
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	2282597	200.000	208.93(A)
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	2442324	200.000	204.86(A)
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	2286488	200.000	202.63(A)
	87 n-Butylbenzene	91	9.995	9.995	(1.034)	3216534	200.000	202.68(A)
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	2296902	200.000	204.14(A)
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.102)	205063	200.000	200.30(A)
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	1524896	200.000	214.75(A)
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	654615	200.000	200.27(A)
	92 Naphthalene	128	11.540	11.540	(1.194)	3413593	200.000	211.29(A)
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.214)	1363987	200.000	200.56(A)
M	94 1,2-Dichloroethylene (total)	96				1713378	400.000	
M	95 Xylenes (total)	106				5102452	600.000	
	141 Cyclohexane	56	4.121	4.121	(0.987)	943314	200.000	203.60(A)
	138 Freon TF	101	1.910	1.910	(0.457)	714577	200.000	215.91(A)
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	1829310	200.000	212.71(A)
	146 Methyl Acetate	43	2.224	2.224	(0.533)	408781	200.000	201.49(A)
	148 Tert-Butyl alcohol	59	2.431	2.431	(0.582)	1308623	4000.00	4191.87(A)
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	697543	4000.00	4278.45(A)

QC Flag Legend

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



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Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D
Inj Date : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

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

BEFORE

MASS
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HEIGHT
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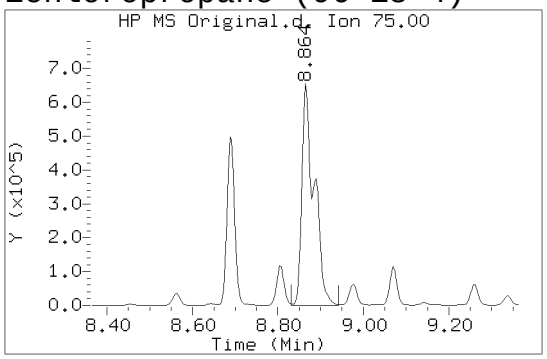
27-Dec-2022
16:04
linh
pham



BEFORE

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16:04
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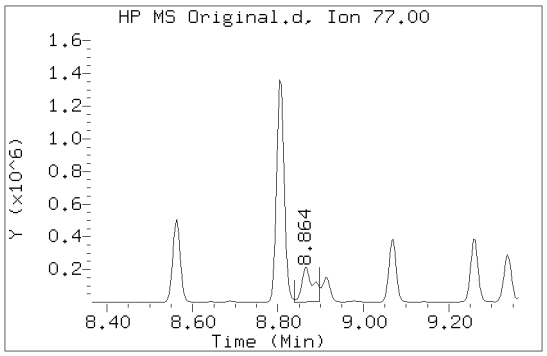

Reason Code:

AFTER

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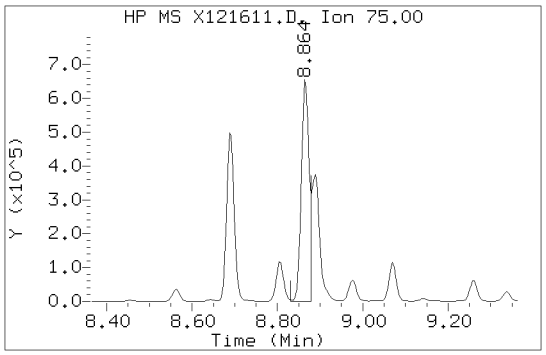

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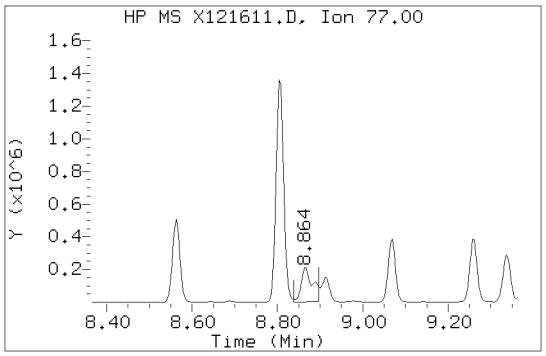

Methyl Acrylate (96-33-3)

BEFORE

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27-Dec-2022
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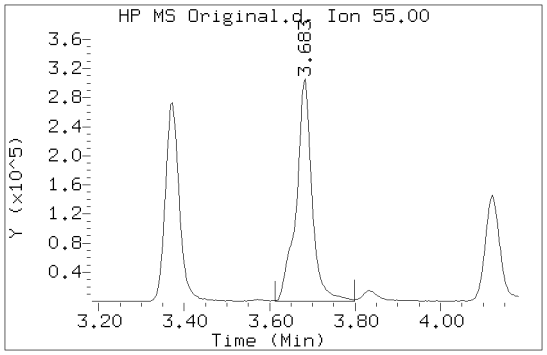
pham



BEFORE

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27-Dec-2022
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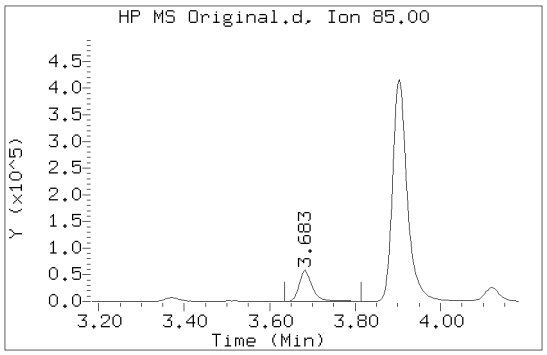

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AFTER

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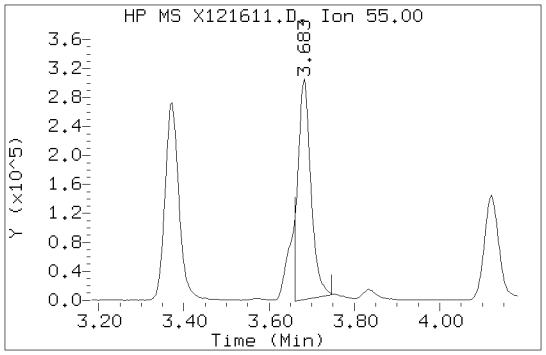

AFTER

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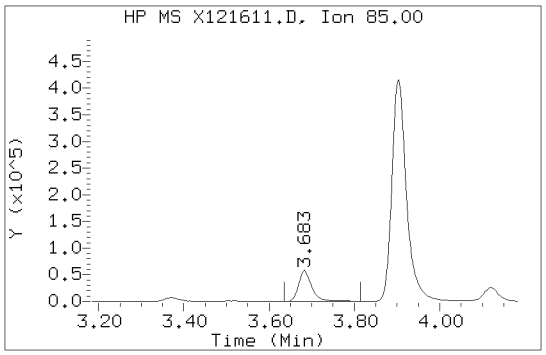

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Inj Date : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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AREA
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HEIGHT
172187
27-Dec-2022
16:04
linh
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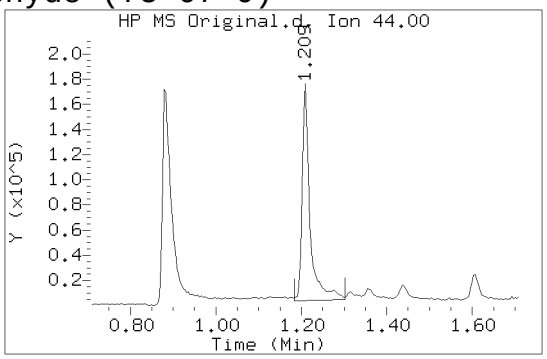

AFTER

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27-Dec-2022
16:06
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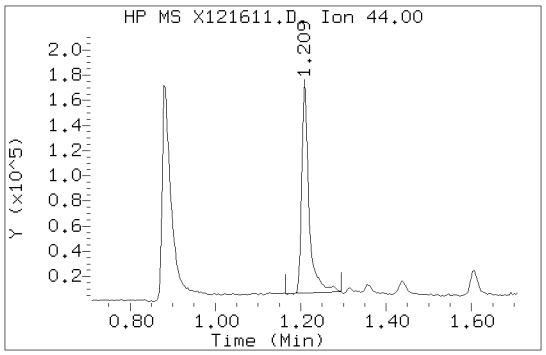

BEFORE

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27-Dec-2022
16:04
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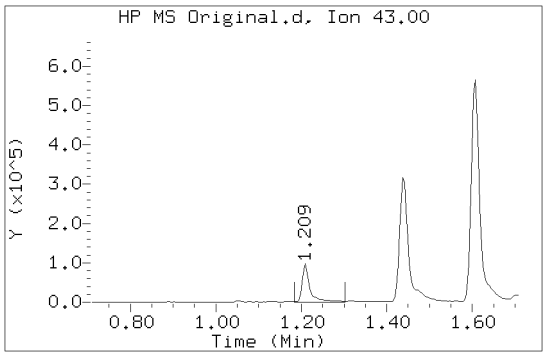

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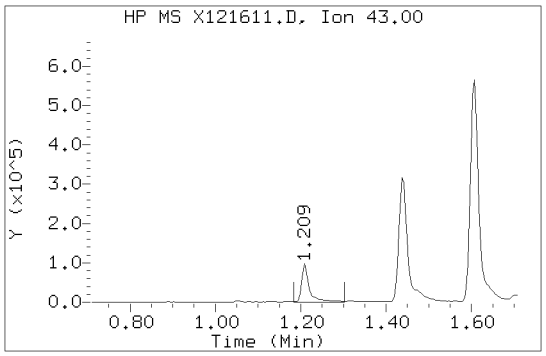

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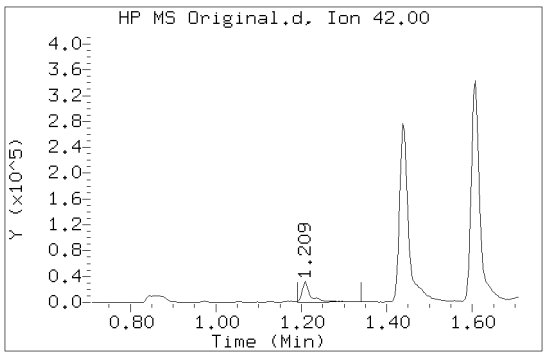

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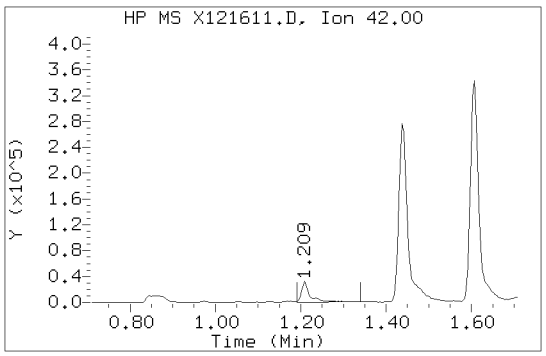

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D Page 1
Report Date: 13-Feb-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D
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Inj Date : 16-DEC-2022 15:49
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\8260W.m
Meth Date : 27-Dec-2022 16:38 Linh.Pham Quant Type: ISTD
Cal Date : 16-DEC-2022 15:07 Cal File: X121611.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	457291	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	42711	1021.77	1021.76
140 1,3-Butadiene	54	1.164	1.160	(0.279)	155959	49.6927	49.69
25 Methacrylonitrile	41	3.818	3.818	(0.914)	151341	46.7389	46.73
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	505171	982.151	982.15
13 Acetonitrile	39	2.194	2.195	(0.525)	197937	475.590	475.59
14 Allyl Chloride	41	2.194	2.195	(0.525)	375064	47.3168	47.31
4 Propionitrile	54	3.649	3.645	(0.873)	227186	486.896	486.89
136 n-Hexane	57	2.768	2.768	(0.663)	183599	55.7620	55.76
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	71513	49.7372	49.73
194 Acetaldehyde	44	1.209	1.209	(0.289)	52697	179.814	179.81(M)
23 Chloroprene	53	1.767	1.767	(0.423)	74243	47.7493	47.74(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	428317	51.3094	51.30
200 Dimethyl Disulfide	94	6.198	6.194	(0.808)	437905	48.5791	48.57
139 Diethyl ether	59	1.752	1.752	(0.419)	142672	46.6930	46.69
130 Ethyl Acetate	43	3.653	3.653	(0.874)	171211	47.9808	47.98
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	148777	47.7146	47.71
49 Ethyl Methacrylate	69	6.712	6.708	(1.352)	142471	44.0730	44.07
132 n-Butanol	56	5.257	5.253	(1.258)	56842	974.397	974.39
142 Tetrahydrofuran	42	3.840	3.844	(0.919)	61534	108.502	108.50

166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	846843	46.6777	46.67
131	Methyl Acrylate	55	3.683	3.683 (0.882)	162555	52.3594	52.35

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D Page 2
Report Date: 13-Feb-2023 13:08

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	417137	47.9449	47.94
	2	Dichlorodifluoromethane	85	0.972	0.969	(0.233)	166984	52.1924	52.19
	3	Chloromethane	50	1.077	1.077	(0.258)	207623	50.1741	50.17
	5	Vinyl Chloride	62	1.141	1.141	(0.273)	202038	50.5766	50.57
	6	Bromomethane	94	1.336	1.336	(0.320)	153541	50.7886	50.78
	7	Chloroethane	64	1.400	1.400	(0.335)	134354	48.3213	48.32
	8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	285144	51.0083	51.00
	9	Acrolein	56	1.441	1.441	(0.345)	29687	95.0682	95.06
	10	Acetone	43	1.970	1.970	(0.472)	130747	101.899	101.89
	11	1,1-Dichloroethene	96	1.913	1.910	(0.458)	171246	49.3414	49.34
	15	Iodomethane	142	2.026	2.026	(0.485)	440111	96.4856	96.48
	16	Acrylonitrile	53	2.532	2.528	(0.606)	119393	101.430	101.42
	17	Methylene Chloride	84	2.299	2.299	(0.550)	226449	47.5675	47.56
	18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	546711	48.1256	48.12
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	894433	98.5011	98.50
	20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	194181	49.9917	49.99
	21	Vinyl Acetate	43	2.997	2.993	(0.717)	1044658	104.756	104.75
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	328530	48.1931	48.19
	24	2-Butanone	43	3.574	3.574	(0.856)	132931	97.7407	97.74(H)
	26	2,2-Dichloropropane	77	3.507	3.503	(0.839)	295126	50.9895	50.98
	27	cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	228100	48.2538	48.25
	28	Chloroform	83	3.904	3.900	(0.935)	370227	48.4556	48.45
	29	Bromochloromethane	128	3.795	3.791	(0.908)	122310	47.2570	47.25
$	30	Dibromofluoromethane	113	4.095	4.099	(0.980)	223563	50.9182	50.91
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	304118	50.1673	50.16
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	254008	52.1195	52.11
	33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	278558	49.5262	49.52
	34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	255322	49.0600	49.06
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	233432	50.3661	50.36
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	686467	50.0000	
	37	Benzene	78	4.511	4.507	(0.909)	824422	50.2921	50.29
	38	Trichloroethene	130	5.205	5.205	(1.048)	238429	51.2807	51.28
	39	Bromodichloromethane	83	5.726	5.726	(1.153)	302844	49.2265	49.22
	41	2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	182363	104.194	104.19
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	216322	49.6089	49.60
	44	Dibromomethane	93	5.550	5.550	(1.118)	145797	49.1915	49.19
	45	4-Methyl-2-Pentanone	43	6.325	6.322	(0.825)	334751	94.0316	94.03
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	376514	52.1120	52.11
*	47	Chlorobenzene-d5	117	7.667	7.668	(1.000)	666040	50.0000	
$	48	Toluene-d8	98	6.385	6.386	(0.833)	814721	49.5021	49.50
	50	Toluene	91	6.445	6.446	(0.841)	905906	49.2085	49.20
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	314805	52.5028	52.50
	52	2-Hexanone	43	7.086	7.083	(0.924)	234303	96.7356	96.73
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	176962	47.9147	47.91
	54	1,3-Dichloropropane	76	6.981	6.982	(0.911)	347689	47.8282	47.82
	55	Dibromochloromethane	129	7.176	7.173	(0.936)	263907	49.5095	49.50
	56	Tetrachloroethene	164	6.929	6.925	(0.904)	194246	50.9965	50.99
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	232024	50.2468	50.24
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	172462	51.9860	51.98
	59	Chlorobenzene	112	7.694	7.694	(1.003)	631235	48.3416	48.34
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	236254	48.6176	48.61
	61	Ethylbenzene	106	7.799	7.799	(1.017)	315635	51.3153	51.31

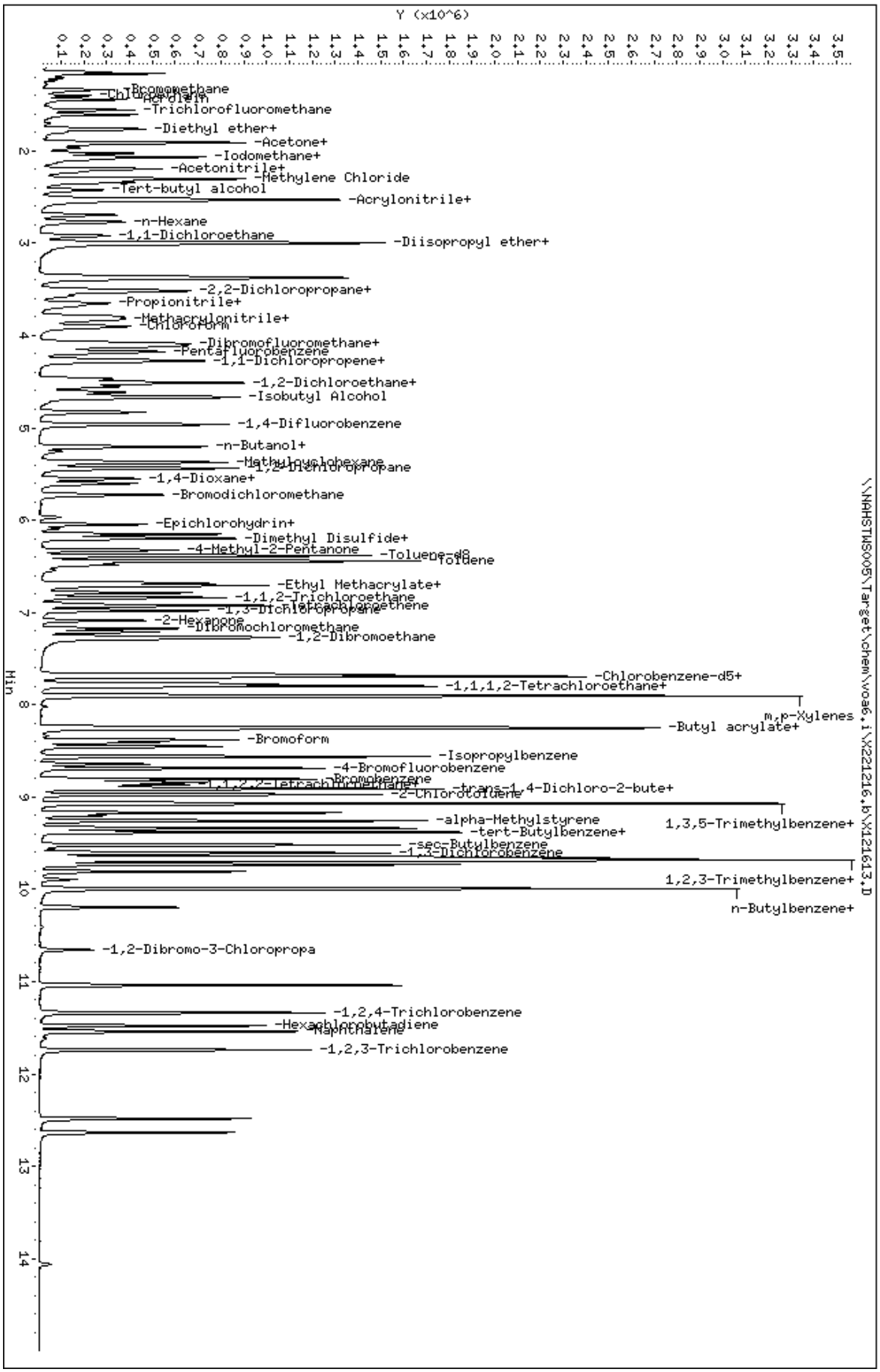
62 m,p-Xylenes	106	7.904	7.904 (1.031)	794307	100.175	100.17
63 o-Xylene	106	8.241	8.241 (1.075)	389371	49.7531	49.75

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D Page 3
Report Date: 13-Feb-2023 13:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	64 Styrene	104	8.260	8.256	(1.077)	683415	52.0997	52.09
	66 Bromoform	173	8.410	8.410	(1.097)	182169	49.3304	49.33
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	931467	52.0964	52.09
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	280729	46.7506	46.75
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	307493	49.9836	49.98
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	376748	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	201551	48.0786	48.07(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1099273	52.6761	52.67
	74 Bromobenzene	156	8.803	8.803	(0.911)	306751	49.6271	49.62
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	806374	52.3068	52.30
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	683941	49.9441	49.94
	77 4-Chlorotoluene	91	9.069	9.070	(0.939)	800114	51.2527	51.25
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	666730	52.8346	52.83
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	832541	51.3249	51.32
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	909529	54.1700	54.16
	82 p-Isopropyltoluene	119	9.651	9.647	(0.999)	823827	54.7550	54.75
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	525438	51.2160	51.21
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	556610	49.7188	49.71
	87 n-Butylbenzene	91	9.995	9.992	(1.035)	735043	50.6672	50.66
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	523296	49.5268	49.52
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	48516	50.5353	50.53
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	364475	54.6601	54.66
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	170927	57.7383	57.73
	92 Naphthalene	128	11.544	11.540	(1.195)	799121	52.6729	52.67
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	337140	52.7917	52.79
M	94 1,2-Dichloroethylene (total)	96				422281	98.2454	98.24
M	95 Xylenes (total)	106				1183678	149.928	149.92
	141 Cyclohexane	56	4.121	4.121	(0.987)	238664	51.7326	51.73
	138 Freon TF	101	1.913	1.913	(0.458)	177599	52.9072	52.90
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	427649	50.8929	50.89
	146 Methyl Acetate	43	2.228	2.228	(0.533)	99131	48.1755	48.17
	148 Tert-Butyl alcohol	59	2.423	2.427	(0.580)	311463	983.641	983.64
	149 Isopropyl Alcohol	45	2.090	2.090	(0.500)	170003	1028.04	1028.03

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 16-DEC-2022 15:49
InstruID : voa6.i
LabSampID : ICV

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

BEFORE

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27-Dec-2022
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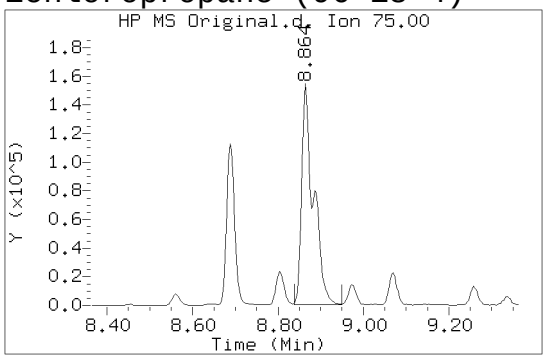

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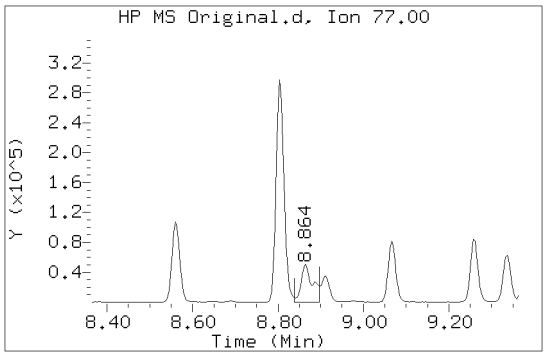

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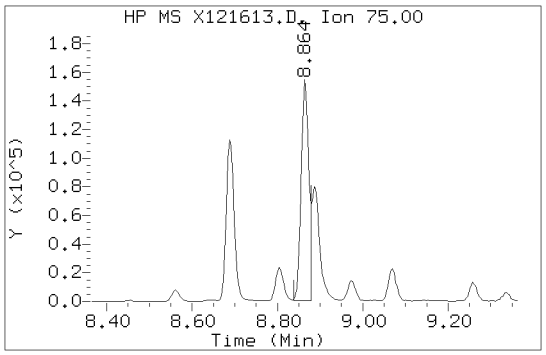

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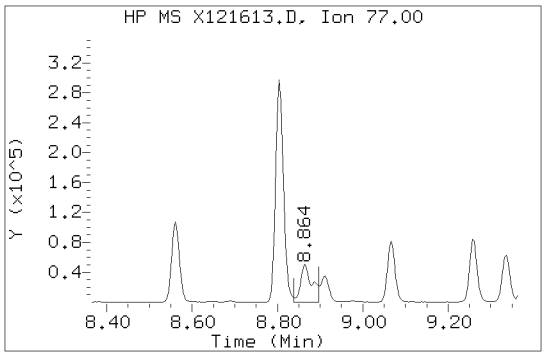

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BEFORE

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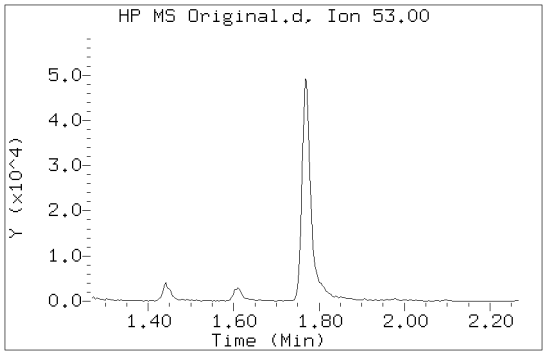

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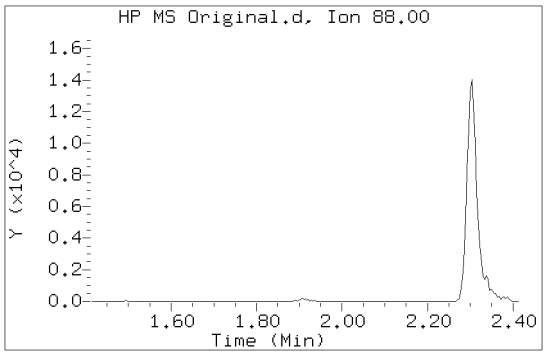

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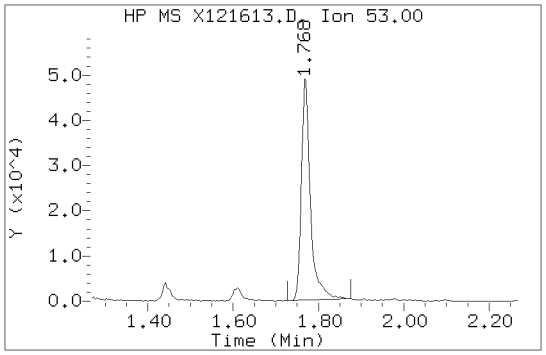

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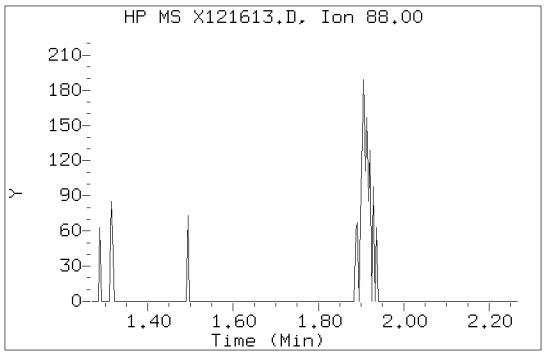

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Inj Date : 16-DEC-2022 15:49
InstruID : voa6.i
LabSampID : ICV

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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27-Dec-2022
16:04
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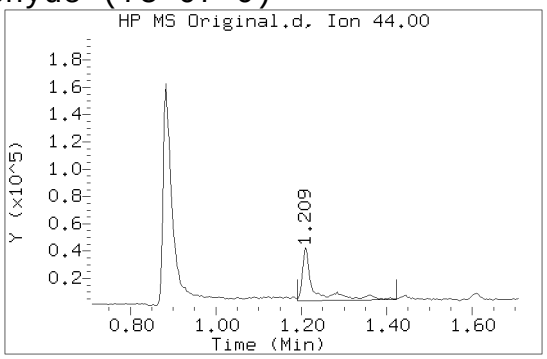

AFTER

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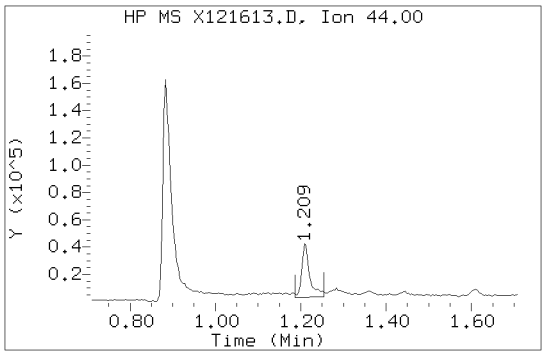

BEFORE

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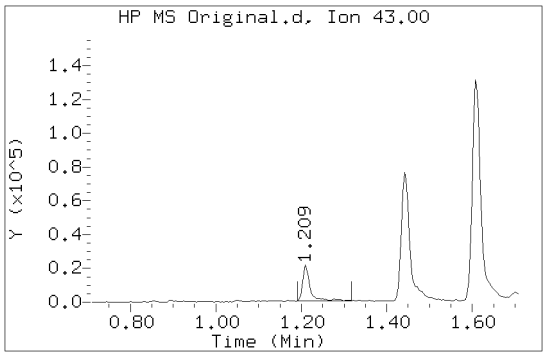
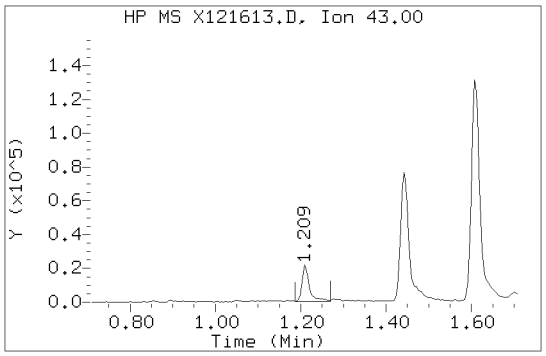
linh
pham



AFTER

MASS
43
AREA
26760
HEIGHT
21664
13-Feb-2023
13:08
linh
pham



BEFORE

MASS
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AREA
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HEIGHT
7131
27-Dec-2022
16:04
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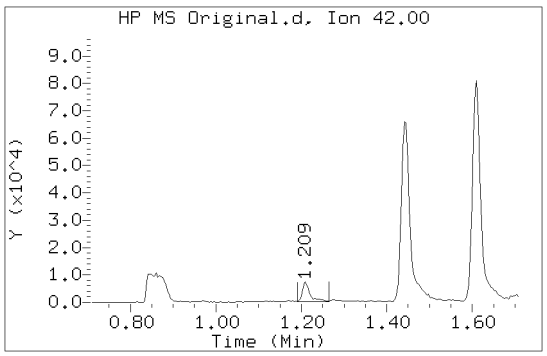
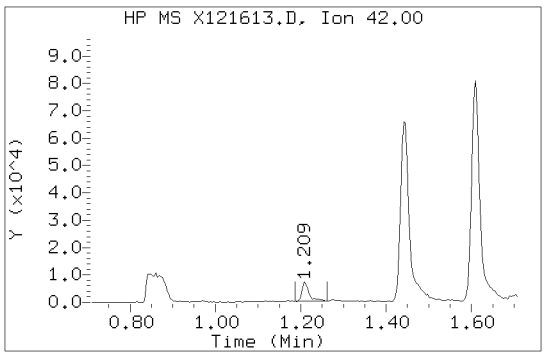
pham



AFTER

MASS
42
AREA
8550
HEIGHT
7027
13-Feb-2023
13:08
linh
pham



right solutions.
right partner.

Raw Data VOA6 426355

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\nahstws005\Target\chem\voa6.i\X230124.b\X012401.D Page 1
Report Date: 24-Jan-2023 07:49

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X230124.b\X012401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-JAN-2023 07:31
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230124.b\bfb.m
Meth Date : 01-Dec-2022 12:59 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: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	139072			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	26840			15.00- 40.00	19.30
8.687	8.889	(0.000)	75	69504			30.00- 60.00	49.98
8.687	8.889	(0.000)	96	9797			5.00- 9.00	7.04
8.687	8.889	(0.000)	173	989			0.00- 2.00	0.82
8.687	8.889	(0.000)	174	120704			50.00- 0.00	86.79
8.687	8.889	(0.000)	175	8511			5.00- 9.00	7.05
8.687	8.889	(0.000)	176	116088			95.00- 101.00	96.18
8.687	8.889	(0.000)	177	8022			5.00- 9.00	6.91

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.30
75	30.00 - 60.00% of mass 95	49.98
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.71 (0.82)
174	Greater than 50.00% of mass 95	86.79
175	5.00 - 9.00% of mass 174	6.12 (7.05)
176	95.00 - 101.00% of mass 174	83.47 (96.18)
177	5.00 - 9.00% of mass 176	5.77 (6.91)

Data File: X012401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1469	67.00	455	103.90	611	143.00	1332
37.00	7593	68.00	14524	104.80	454	143.80	82
38.00	6223	69.00	15791	105.90	587	145.00	82
39.00	3440	70.00	2012	106.80	329	145.70	99
40.00	1590	71.10	369	109.00	233	147.00	245
41.10	1911	72.00	990	109.70	75	147.70	379
42.00	2101	73.00	6057	110.80	166	148.60	162
43.00	1244	74.00	23456	111.60	207	149.80	160
44.00	1791	75.00	69504	112.80	165	152.80	56
44.90	1484	76.00	6011	114.80	179	153.90	122
46.00	138	77.00	1159	115.80	418	154.80	380
47.00	1373	77.90	647	116.90	982	156.80	71
48.00	896	78.90	5122	117.90	358	157.80	62
49.00	6948	79.90	1309	118.90	817	158.90	131
50.00	26840	80.90	5225	120.00	71	160.90	81
51.00	8739	81.80	1151	120.90	74	170.00	148
51.90	461	83.00	540	123.70	123	170.70	72
52.90	307	84.80	158	125.90	100	171.50	138
54.00	239	85.90	308	127.00	151	173.00	989
55.00	3454	86.90	5872	127.80	720	173.90	120704
56.00	2550	87.90	5682	128.90	256	174.90	8511
57.00	4809	90.80	583	129.80	318	175.90	116088
57.90	516	91.20	485	130.80	202	176.90	8022
59.10	73	92.00	4175	134.80	297	177.90	156
59.90	976	93.00	5899	136.10	58	186.10	274
61.00	7256	94.00	15180	136.80	292	187.00	67
62.00	7128	95.00	139072	138.60	115	207.00	62
63.00	5118	96.00	9797	139.20	52	235.60	52
64.10	378	97.00	514	140.00	120	277.80	50
64.70	203	97.90	1400	140.90	1536		
65.80	65	98.90	105	141.90	89		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012401.D

Date : 24-JAN-2023 07:31

Client ID: BFB

Instrument: voa6.i

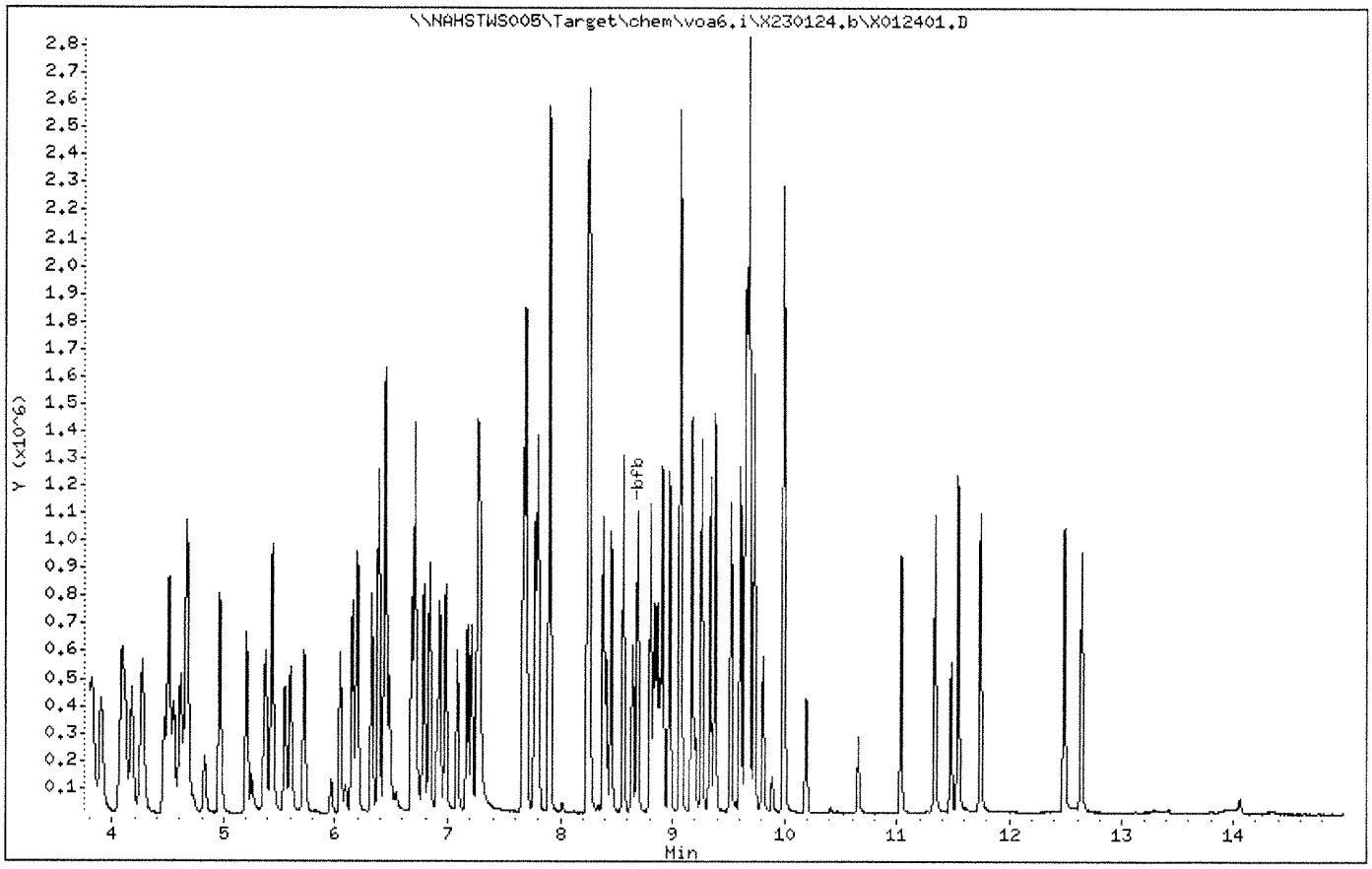
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012401.D

Date : 24-JAN-2023 07:31

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

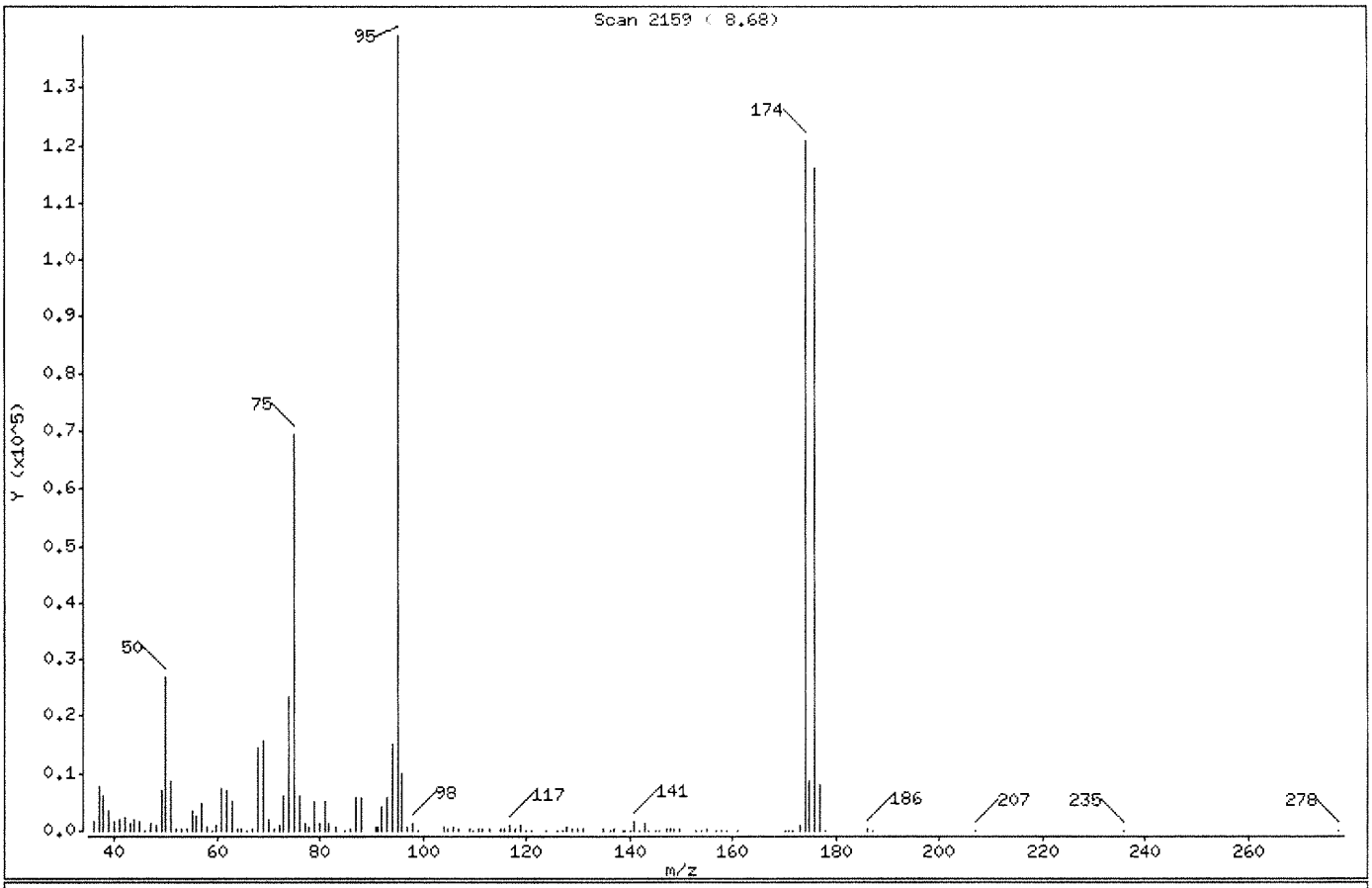
Volume Injected (uL): 2.0

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	19.30
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173	Less than 2.00% of mass 174	0.71 (0.82)
174	Greater than 50.00% of mass 95	86.79
175	5.00 - 9.00% of mass 174	6.12 (7.05)
176	95.00 - 101.00% of mass 174	83.47 (96.18)
177	5.00 - 9.00% of mass 176	5.77 (6.91)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012401.D

Date : 24-JAN-2023 07:31

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: X012401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1469	67.00	455	103.90	611	143.00	1332
37.00	7593	68.00	14524	104.80	454	143.80	82
38.00	6223	69.00	15791	105.90	587	145.00	82
39.00	3440	70.00	2012	106.80	329	145.70	99
40.00	1590	71.10	369	109.00	233	147.00	245
41.10	1911	72.00	990	109.70	75	147.70	379
42.00	2101	73.00	6057	110.80	166	148.60	162
43.00	1244	74.00	23456	111.60	207	149.80	160
44.00	1791	75.00	69504	112.80	165	152.80	56
44.90	1484	76.00	6011	114.80	179	153.90	122
46.00	138	77.00	1159	115.80	418	154.80	380
47.00	1373	77.90	647	116.90	982	156.80	71
48.00	896	78.90	5122	117.90	358	157.80	62
49.00	6948	79.90	1309	118.90	817	158.90	131
50.00	26840	80.90	5225	120.00	71	160.90	81
51.00	8739	81.80	1151	120.90	74	170.00	148
51.90	461	83.00	540	123.70	123	170.70	72
52.90	307	84.80	158	125.90	100	171.50	138
54.00	239	85.90	308	127.00	151	173.00	989
55.00	3454	86.90	5872	127.80	720	173.90	120704
56.00	2550	87.90	5682	128.90	256	174.90	8511
57.00	4809	90.80	583	129.80	318	175.90	116088
57.90	516	91.20	485	130.80	202	176.90	8022
59.10	73	92.00	4175	134.80	297	177.90	156
59.90	976	93.00	5899	136.10	58	186.10	274
61.00	7256	94.00	15180	136.80	292	187.00	67
62.00	7128	95.00	139072	138.60	115	207.00	62
63.00	5118	96.00	9797	139.20	52	235.60	52
64.10	378	97.00	514	140.00	120	277.80	50
64.70	203	97.90	1400	140.90	1536		
65.80	65	98.90	105	141.90	89		

Data File : \\nahstws005\Target\chem\voa6.i\X230124.b\X012401.D
Inj Date : 24-JAN-2023 07:31
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012402.D Page 1
Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012402.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 24-JAN-2023 07:52
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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	4.178	4.178	(1.000)	507505	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	154092	50.0000	43.46
3 Chloromethane	50	1.074	1.074	(0.257)	215373	50.0000	47.04
4 Propionitrile	54	3.645	3.645	(0.873)	287139	500.000	554.49
5 Vinyl Chloride	62	1.141	1.141	(0.273)	215871	50.0000	48.69
6 Bromomethane	94	1.336	1.336	(0.320)	155067	50.0000	46.37
7 Chloroethane	64	1.400	1.400	(0.335)	145676	50.0000	47.20
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	338394	50.0000	54.54
9 Acrolein	56	1.441	1.441	(0.345)	35688	100.000	102.74
10 Acetone	43	1.966	1.966	(0.471)	156002	100.000	109.55
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	192989	50.0000	50.10
12 Isobutyl Alcohol	43	4.669	4.669	(1.118)	669687	1000.00	1173.17
13 Acetonitrile	39	2.195	2.195	(0.525)	274083	500.000	593.39
14 Allyl Chloride	41	2.195	2.195	(0.525)	488047	50.0000	55.47
15 Iodomethane	142	2.022	2.022	(0.484)	520197	100.000	102.28
16 Acrylonitrile	53	2.528	2.528	(0.605)	150701	100.000	115.35
17 Methylene Chloride	84	2.300	2.300	(0.550)	246625	50.0000	46.67
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	676851	50.0000	53.68
19 Carbon Disulfide	76	2.067	2.067	(0.495)	1066793	100.000	105.85
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	222607	50.0000	51.63

21 Vinyl Acetate	43	2.993	2.993 (0.716)	1291106	100.000	116.65
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	389464	50.0000	51.47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	83208	50.0000	48.22(M)
	24 2-Butanone	43	3.570	3.570	(0.855)	168134	100.000	110.97
	25 Methacrylonitrile	41	3.818	3.818	(0.914)	199583	50.0000	55.53(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	374403	50.0000	58.28
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	256499	50.0000	48.89
	28 Chloroform	83	3.900	3.900	(0.934)	435864	50.0000	51.40
	29 Bromochloromethane	128	3.788	3.788	(0.907)	134366	50.0000	46.77
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	246285	50.0000	50.54
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	381342	50.0000	56.68
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	322539	50.0000	59.27
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	349665	50.0000	55.68
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	321681	50.0000	55.36
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	282664	50.0000	54.92
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	766430	50.0000	
	37 Benzene	78	4.508	4.508	(0.909)	944565	50.0000	51.60
	38 Trichloroethene	130	5.205	5.205	(1.049)	275087	50.0000	52.99
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	349078	50.0000	50.82
	40 Methyl Methacrylate	41	5.602	5.602	(1.341)	202573	50.0000	58.53
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	227973	100.000	116.66
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	245818	50.0000	50.49
	43 2-Nitropropane	43	5.966	5.966	(1.428)	79809	50.0000	62.27
	44 Dibromomethane	93	5.550	5.550	(1.119)	165976	50.0000	50.15
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	436226	100.000	110.79
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	430559	50.0000	53.37
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	736604	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	913964	50.0000	50.21
	49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	205272	50.0000	56.87
	50 Toluene	91	6.446	6.446	(0.841)	1058771	50.0000	52.00
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	376785	50.0000	56.28
	52 2-Hexanone	43	7.083	7.083	(0.924)	307039	100.000	114.62
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	200761	50.0000	49.15
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	412114	50.0000	51.25
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	299820	50.0000	50.85
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	236453	50.0000	56.13
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	266396	50.0000	52.16
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	227635	50.0000	61.45
	59 Chlorobenzene	112	7.694	7.694	(1.003)	724465	50.0000	50.16
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	276223	50.0000	51.39
	61 Ethylbenzene	106	7.799	7.799	(1.017)	374007	50.0000	54.98
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	953775	100.000	108.76
	63 o-Xylene	106	8.241	8.241	(1.075)	453186	50.0000	52.35
	64 Styrene	104	8.256	8.256	(1.077)	789506	50.0000	54.42
	66 Bromoform	173	8.410	8.410	(1.097)	210442	50.0000	51.52
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1172710	50.0000	59.30
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	329440	50.0000	48.57
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	362762	50.0000	53.31
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	425473	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	251028	50.0000	53.02(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	91108	50.0000	57.29
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1400792	50.0000	59.43
	74 Bromobenzene	156	8.803	8.803	(0.911)	346094	50.0000	49.57
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1015822	50.0000	58.34

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	847551	50.0000	54.80
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	993651	50.0000	56.36

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012402.D Page 3
Report Date: 09-Feb-2023 13:42

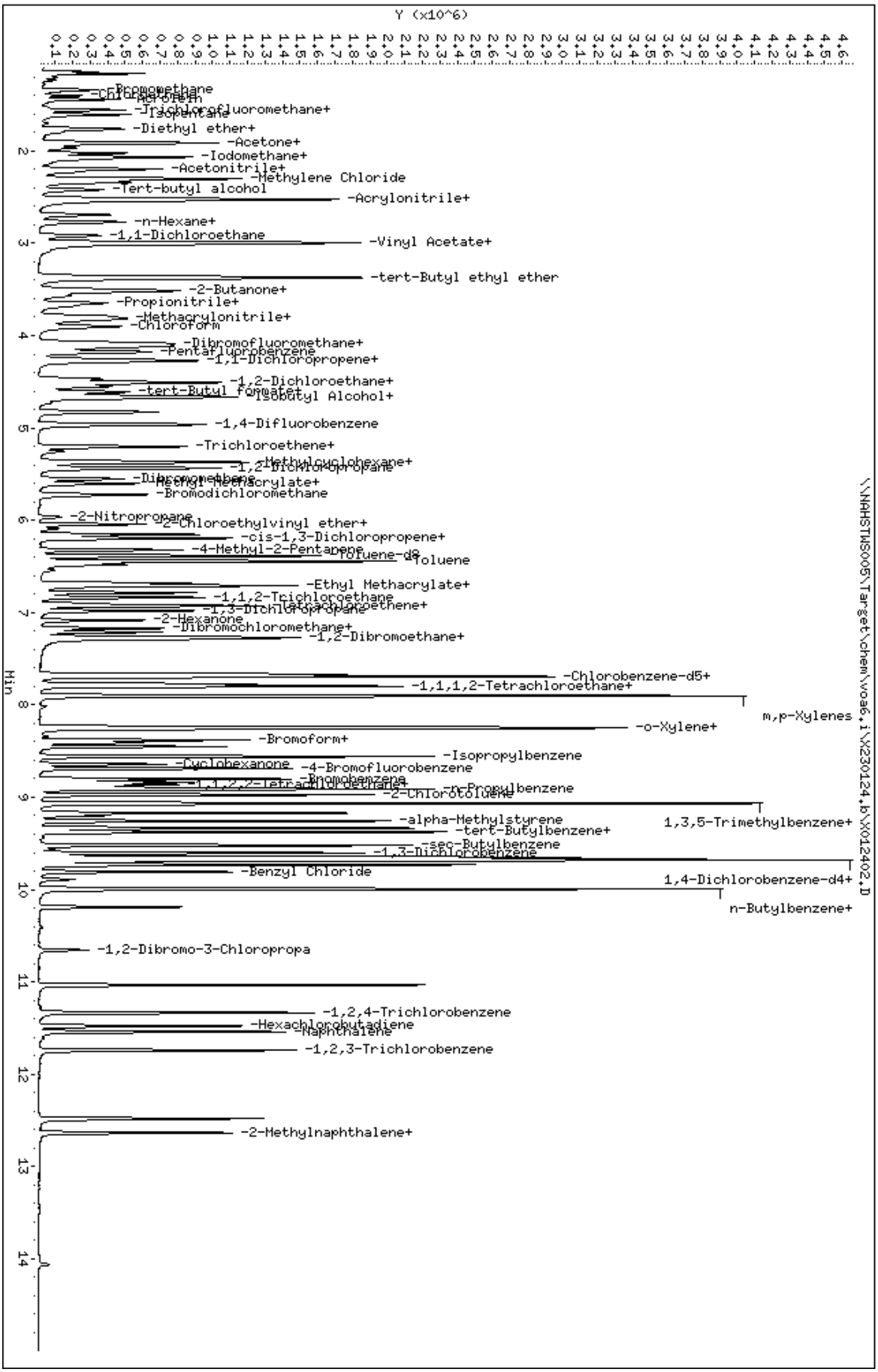
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	846915	50.0000	59.42	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1031770	50.0000	56.32	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1201894	50.0000	63.38	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1073554	50.0000	63.18	
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	624301	50.0000	53.88	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	658068	50.0000	52.04	
86	Benzyl Chloride	91	9.808	9.808	(1.279)	634707	50.0000	54.78	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	976563	50.0000	59.29	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	617170	50.0000	51.72	
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	57313	50.0000	52.85	
90	1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	448754	50.0000	59.59	
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	197414	50.0000	59.03	
92	Naphthalene	128	11.540	11.540	(1.194)	960961	50.0000	56.08	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	407820	50.0000	56.54	
146	Methyl acetate	43	2.225	2.225	(0.533)	130422	50.0000	57.11	
138	Freon TF	101	1.910	1.910	(0.457)	199870	50.0000	53.65	
141	Cyclohexane	56	4.121	4.121	(0.987)	307391	50.0000	59.83	
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	66643	100.000	105.80	
147	Methylcyclohexane	55	5.373	5.373	(1.083)	598166	50.0000	63.75	
135	1,4-Dioxane	88	5.598	5.598	(1.340)	51736	1000.00	1115.21	
132	n-Butanol	56	5.250	5.250	(1.257)	77147	1000.00	1170.23	
131	Methyl Acrylate	55	3.683	3.683	(0.882)	221779	50.0000	64.36	
133	Ethyl Acrylate	55	5.373	5.373	(1.286)	598166	50.0000	59.78	
136	n-Hexane	57	2.768	2.768	(0.663)	236946	50.0000	64.84	
139	Diethyl ether	59	1.752	1.752	(0.420)	161298	50.0000	47.56	
148	Tert-butyl alcohol	59	2.420	2.420	(0.579)	414531	1000.00	1179.61	
149	Isopropyl alcohol	45	2.086	2.086	(0.499)	222964	1000.00	1214.89	
156	Diisopropyl ether	45	2.997	2.997	(0.717)	716198	50.0000	54.40	
160	2-Methylnaphthalene	142	12.635	12.635	(1.308)	455715	50.0000	55.20	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1124346	50.0000	54.87	
167	Ethanol	45	1.700	1.700	(0.407)	36596	1000.00	1107.27	
172	tert-Butyl formate	59	4.612	4.612	(1.104)	325988	100.000	121.05	
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	422127	1000.00	1211.21	
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	768539	50.0000	52.53	
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	750478	50.0000	53.64	
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	325988	1000.00	1195.99	
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	874340	1000.00	1205.29	
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	455715	50.0000	(a)	
140	1,3-Butadiene	54	1.160	1.160	(0.278)	169233	50.0000	48.58	
152	Amyl alcohol	42	6.899	6.899	(0.900)	86783	1000.00	1191.41	
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	31804	50.0000	48.39	
159	Propylene oxide	43	1.752	1.752	(0.420)	32591	100.000	102.12	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	93010	1000.00	1277.14	
162	Butyl acrylate	55	8.249	8.249	(1.076)	559568	50.0000	58.15	
182	Epichlorohydrin	57	6.089	6.089	(1.227)	78561	200.000	228.51	
M 94	1,2-Dichloroethylene (total)	96				479106	100.000	(a)	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	491428	50.0000	52.12	
130	Ethyl Acetate	43	3.649	3.649	(0.873)	227429	50.0000	57.42	
134	Cyclohexanone	55	8.642	8.642	(0.894)	229738	1000.00	1294.43	
185	Isoprene	39	1.767	1.767	(0.423)	76442	50.0000	56.53	
186	Isopentane	42	1.606	1.606	(0.385)	146038	50.0000	(a)	
188	Isopropyl acetate	43	4.669	4.669	(0.941)	671984	50.0000	56.43	

187 n-Amyl acetate	43	8.451	8.451 (1.102)	453988	50.0000	52.85
189 n-Butyl acetate	43	7.210	7.210 (0.940)	374785	50.0000	59.23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	236946	1000.00	1270.23
194 Acetaldehyde	44	1.209	1.209	(0.289)	64437	200.000	200.48
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	554067	50.0000	56.57
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	535809	50.0000	53.74
168 1-Propanol	59	2.993	2.993	(0.716)	82662	1000.00	996.66

QC Flag Legend

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



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Purge Volume: 5.0
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Operator: PC
Column diameter: 0.18

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

Reason Code:

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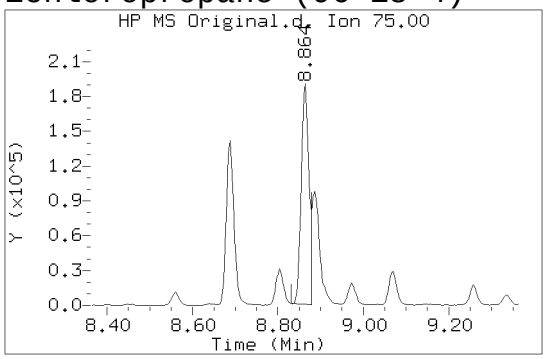

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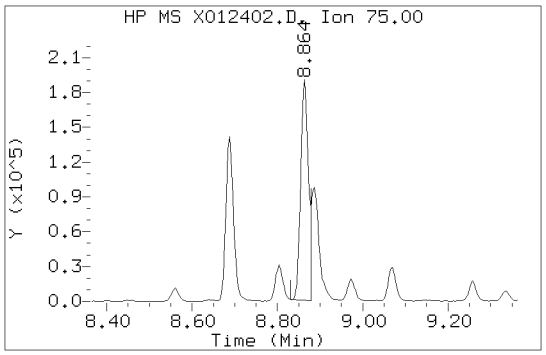

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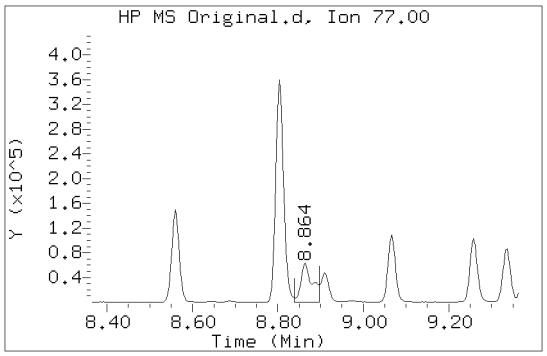

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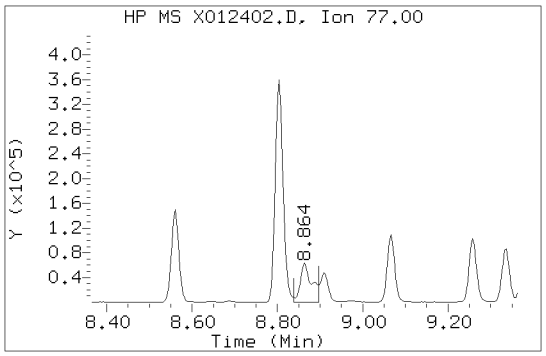

Chloroprene (126-99-8)

Reason Code:

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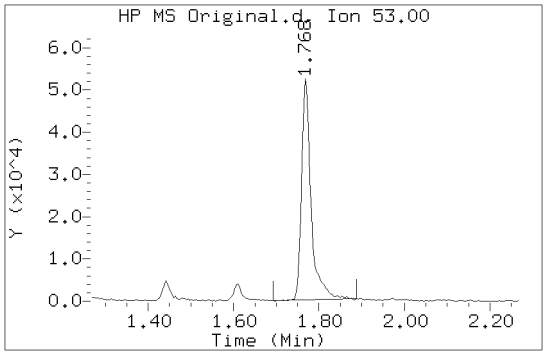

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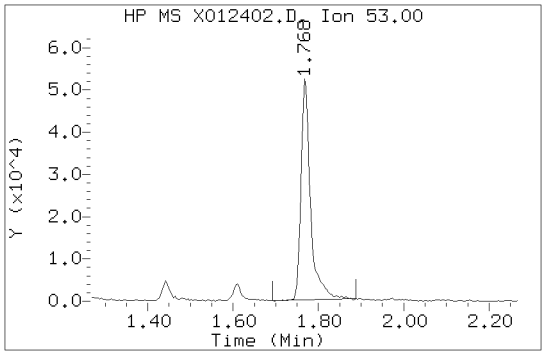

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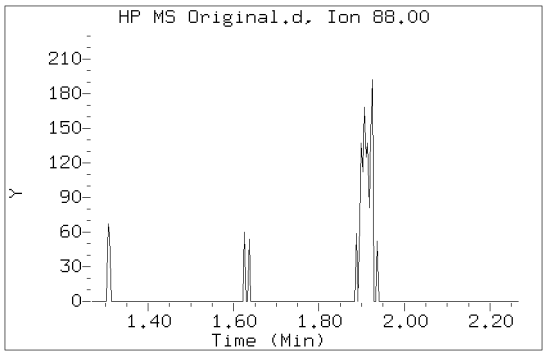

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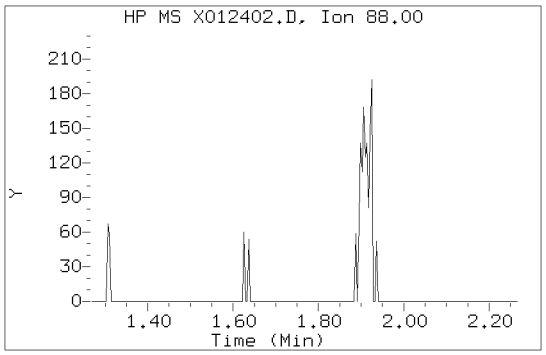

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Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012404.D
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Inj Date : 24-JAN-2023 08:55
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230124;VLCSW-230124;3;;LCS
Misc Info : V6;WATER;0;1;
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Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	506288	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	62469	17.8957	17.89
3 Chloromethane	50	1.074	1.074	(0.257)	90079	21.0067	21.00
4 Propionitrile	54	3.649	3.645	(0.873)	110314	213.540	213.54(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	88747	20.0662	20.06
6 Bromomethane	94	1.340	1.336	(0.321)	67045	21.0995	21.09
7 Chloroethane	64	1.400	1.400	(0.335)	60209	19.5589	19.55
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	135266	21.8555	21.85
9 Acrolein	56	1.445	1.441	(0.346)	15269	45.6755	45.67
10 Acetone	43	1.970	1.966	(0.472)	67482	47.4845	47.48
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	81077	21.1001	21.10
12 Isobutyl Alcohol	43	4.672	4.669	(1.118)	273658	480.555	480.55(a)
13 Acetonitrile	39	2.195	2.195	(0.525)	111916	242.881	242.88(a)
14 Allyl Chloride	41	2.198	2.195	(0.526)	199817	22.7686	22.76(a)
15 Iodomethane	142	2.026	2.022	(0.485)	196355	41.7582	41.75
16 Acrylonitrile	53	2.532	2.528	(0.606)	62715	48.1230	48.12
17 Methylene Chloride	84	2.300	2.300	(0.550)	106774	20.2582	20.25
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	275936	21.9392	21.93
19 Carbon Disulfide	76	2.067	2.067	(0.495)	430725	42.8438	42.84
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	91611	21.3026	21.30

21 Vinyl Acetate	43	2.993	2.993 (0.716)	523654	47.4290	47.42
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	158089	20.9462	20.94

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012404.D Page 2
Report Date: 09-Feb-2023 13:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	23 Chloroprene	53	1.771	1.767	(0.424)	32496	18.8772	18.87(M)
	24 2-Butanone	43	3.578	3.570	(0.856)	67501	46.4662	46.46
	25 Methacrylonitrile	41	3.818	3.818	(0.914)	79502	22.1766	22.17(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	147532	23.0226	23.02
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	106823	20.4111	20.41
	28 Chloroform	83	3.900	3.900	(0.934)	178133	21.0579	21.05
	29 Bromochloromethane	128	3.791	3.788	(0.908)	56511	19.7211	19.72
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	243009	49.9878	49.98
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	152525	22.7255	22.72
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	125127	22.9406	22.94
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	144499	22.9554	22.95
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	125520	21.5503	21.55
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	282777	55.0828	55.08
*	36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	768279	50.0000	
	37 Benzene	78	4.511	4.508	(0.909)	387650	21.1296	21.12
	38 Trichloroethene	130	5.205	5.205	(1.048)	109813	21.1032	21.10
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	142462	20.6909	20.69
	40 Methyl Methacrylate	41	5.606	5.602	(1.342)	83692	24.2435	24.24(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	90415	46.1579	46.15
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	98874	20.2601	20.26
	43 2-Nitropropane	43	5.966	5.966	(1.428)	31524	24.6570	24.65
	44 Dibromomethane	93	5.550	5.550	(1.118)	68046	20.5137	20.51
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	176568	45.2486	45.24
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	170594	21.0970	21.09
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	730061	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	895066	49.6147	49.61
	49 Ethyl Methacrylate	69	6.708	6.708	(1.351)	85092	23.5199	23.51(a)
	50 Toluene	91	6.446	6.446	(0.841)	422989	20.9617	20.96
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	146584	21.8438	21.84
	52 2-Hexanone	43	7.087	7.083	(0.924)	127418	47.9933	47.99
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	80110	19.7887	19.78
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	163805	20.5571	20.55
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	117422	20.0969	20.09
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	89643	21.4707	21.47
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	106098	20.9616	20.96
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	86825	23.3850	23.38
	59 Chlorobenzene	112	7.694	7.694	(1.003)	284874	19.9033	19.90
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	108445	20.3594	20.35
	61 Ethylbenzene	106	7.799	7.799	(1.017)	146027	21.6589	21.65
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	370485	42.6267	42.62
	63 o-Xylene	106	8.241	8.241	(1.075)	177616	20.7052	20.70
	64 Styrene	104	8.260	8.256	(1.077)	307584	21.3922	21.39
	66 Bromoform	173	8.410	8.410	(1.097)	82508	20.3834	20.38
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	442744	22.5909	22.59
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	134625	20.2630	20.26
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	343904	50.9987	50.99
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	416844	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	99436	21.4382	21.43(M)
	72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	35433	22.4826	22.48(a)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	521108	22.5691	22.56
	74 Bromobenzene	156	8.807	8.803	(0.912)	135925	19.8751	19.87
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	382078	22.4002	22.40

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	327457	21.6121	21.61
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	383169	22.1837	22.18

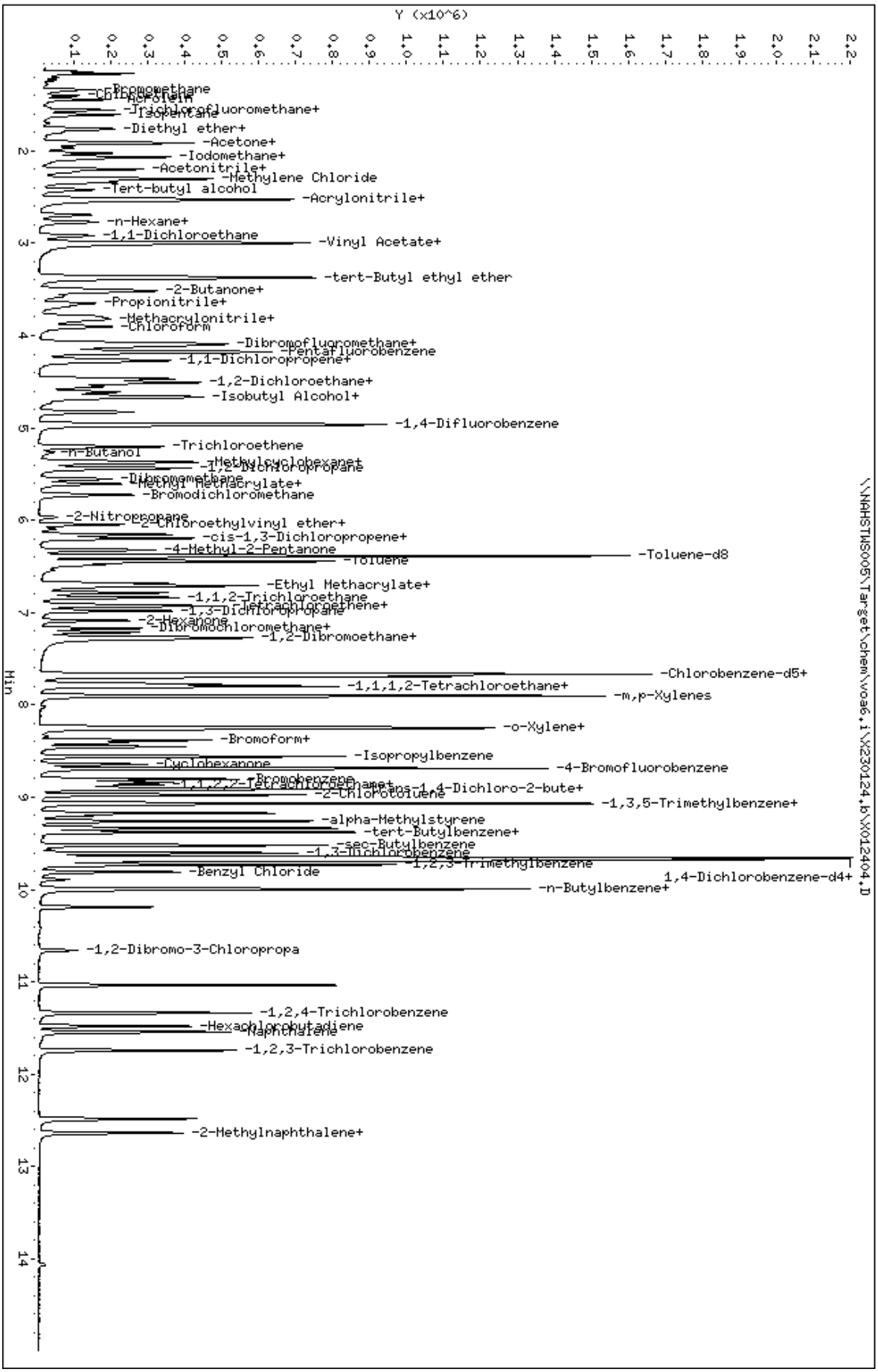
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	311579	22.3159	22.31
79	1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	387355	21.5829	21.58
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	426433	22.9546	22.95
82	p-Isopropyltoluene	119	9.651	9.647	(0.999)	388385	23.3307	23.33
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	241951	21.3152	21.31
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	254276	20.5283	20.52
86	Benzyl Chloride	91	9.808	9.808	(1.279)	224941	21.3216	21.32
87	n-Butylbenzene	91	9.995	9.992	(1.035)	332820	21.7838	21.78
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	239107	20.4533	20.45
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	22979	21.6858	21.68
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	163245	22.1269	22.12
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	66796	20.5422	20.54
92	Naphthalene	128	11.544	11.540	(1.195)	376622	22.4366	22.43
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	152265	21.5493	21.54
146	Methyl acetate	43	2.228	2.225	(0.533)	51445	22.5816	22.58
138	Freon TF	101	1.913	1.910	(0.458)	74921	20.1592	20.15
141	Cyclohexane	56	4.121	4.121	(0.987)	114430	23.1183	23.11
142	Tetrahydrofuran	42	3.844	3.840	(0.920)	29275	44.8187	44.81
147	Methylcyclohexane	55	5.377	5.373	(1.083)	236865	25.1867	25.18
135	1,4-Dioxane	88	5.598	5.598	(1.340)	19936	430.769	430.76
132	n-Butanol	56	5.261	5.250	(1.259)	24436	413.771	413.77(a)
131	Methyl Acrylate	55	3.690	3.683	(0.883)	85607	24.9057	24.90
133	Ethyl Acrylate	55	5.377	5.373	(1.287)	236865	24.8338	24.83
136	n-Hexane	57	2.768	2.768	(0.663)	76818	21.0730	21.07
139	Diethyl ether	59	1.756	1.752	(0.420)	66426	19.6357	19.63
148	Tert-butyl alcohol	59	2.419	2.420	(0.579)	170769	487.118	487.11
149	Isopropyl alcohol	45	2.090	2.086	(0.500)	91141	497.808	497.80
156	Diisopropyl ether	45	2.993	2.997	(0.716)	287962	21.9257	21.92
160	2-Methylnaphthalene	142	12.635	12.635	(1.308)	176642	21.8418	21.84
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	441927	22.0158	22.01
167	Ethanol	45	1.700	1.700	(0.407)	14764	445.819	445.81
172	tert-Butyl formate	59	4.612	4.612	(1.104)	129200	48.0920	48.09
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	164161	475.252	475.25
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	320910	21.9892	21.98
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	302902	21.7047	21.70
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	129200	475.154	475.15
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.351)	352283	484.462	484.46
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	176642		(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	68482	19.7085	19.70
152	Amyl alcohol	42	6.907	6.899	(0.901)	29470	408.211	408.21
158	Dichlorofluoromethane	67	1.527	1.531	(0.366)	13453	20.5217	20.52
159	Propylene oxide	43	1.756	1.752	(0.420)	13824	43.4204	43.42
161	3-Methyl-1-butanol	55	6.907	6.903	(0.901)	33775	467.930	467.93
162	Butyl acrylate	55	8.252	8.249	(1.076)	217697	22.8275	22.82
182	Epichlorohydrin	57	6.097	6.089	(1.228)	33208	97.8089	97.80
M 94	1,2-Dichloroethylene (total)	96				198434	41.7137	41.71
M 95	Xylenes (total)	106				548101	63.3319	63.33
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	183108	19.8252	19.82
130	Ethyl Acetate	43	3.653	3.649	(0.874)	93094	23.5642	23.56
134	Cyclohexanone	55	8.642	8.642	(0.894)	95712	550.442	550.44
185	Isoprene	39	1.767	1.767	(0.423)	31441	23.3110	23.31
186	Isopentane	42	1.610	1.606	(0.385)	55668		(a)

188 Isopropyl acetate	43	4.672	4.669 (0.941)	274060	22.9603	22.96
187 n-Amyl acetate	43	8.451	8.451 (1.102)	185654	21.8083	21.80

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.210	7.210	(0.940)	153357	24.4534	24.45
150 Allyl alcohol	57	2.768	2.768	(0.663)	76818	412.802	412.80
194 Acetaldehyde	44	1.209	1.209	(0.289)	52740	160.308	160.30
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	228908	23.5829	23.58
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	206858	20.9355	20.93
168 1-Propanol	59	2.997	2.993	(0.717)	31848	384.917	384.91

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Date : 24-JAN-2023 08:55
Client ID: VLCSW-230124
Sample Info: VLCSW-230124;VLCSW-230124;3;;LCS
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Dichlorodifluoromethane
Chloromethane
Vinyl Chloride
Bromomethane
Chloroethane
Trichlorofluoromethane+
Isopentane
Diethyl ether+
Acetone+
Iodomethane+
Acetonitrile+
Methylene Chloride
Tert-butyl alcohol
Acrylonitrile+
n-Hexane+
1,1-Dichloroethane
Vinyl Acetate+
tert-Butyl ethyl ether
2-Butanone+
Propionitrile+
Methacrylonitrile+
Chloroform
Dibromofluoromethane+
Pentafluorobenzene
1,1-Dichloropropene+
1,2-Dichloroethane+
Isobutyl Alcohol+
1,4-Difluorobenzene
Trichloroethene
n-Butanol
Methylcyclohexane+
1,2-Dichloropropane
Dibromomethane
Methyl Methacrylate+
Bromodichloromethane
2-Nitropropane
2-Chloroethylvinyl ether+
cis-1,3-Dichloropropene+
4-Methyl-2-Pentanone
Toluene-d8
Toluene
Ethyl Methacrylate+
1,1,2-Trichloroethane
Tetrachloroethene+
1,3-Dichloropropane
2-Hexanone
Dibromochloromethane+
1,2-Dibromoethane+
Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
Bromoform+
Isopropylbenzene
Cyclohexanone
4-Bromofluorobenzene
1,1,2,2-Tetrachloroethane+
Bromobenzene
trans-1,4-Dichloro-2-bute+
2-Chlorotoluene
1,3,5-Trimethylbenzene+
alpha-Methylstyrene
tert-Butylbenzene+
sec-Butylbenzene
1,3-Dichlorobenzene
1,2,3-Trimethylbenzene
1,4-Dichlorobenzene-d4+
Benzyl Chloride
n-Butylbenzene+
1,2-Dibromo-3-Chloropropa
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
2-Methylnaphthalene+

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Inj Date : 24-JAN-2023 08:55
InstruID : voa6.i
LabSampID : VLCSW-230124

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

Reason Code:

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03-Feb-2023
10:50
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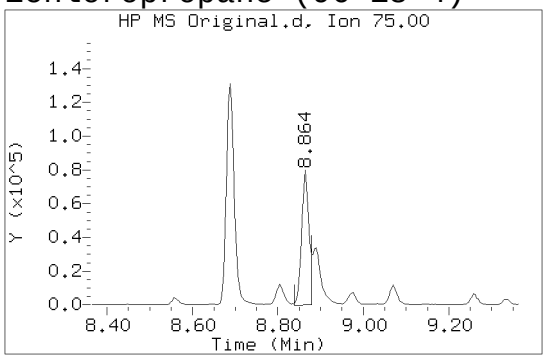
pham



AFTER

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09-Feb-2023
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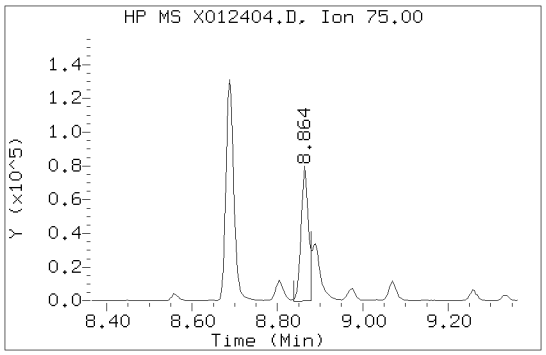

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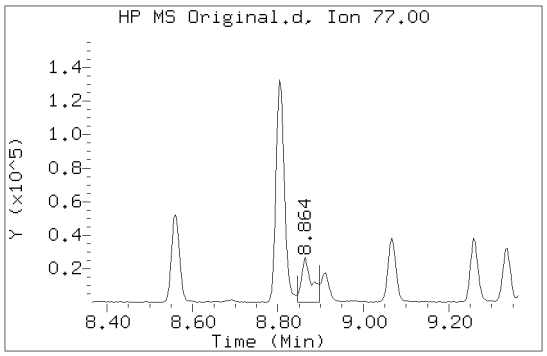

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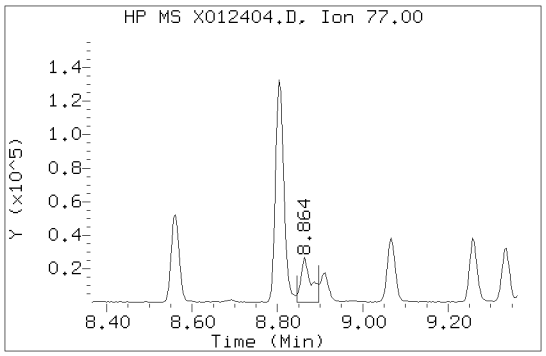

Chloroprene (126-99-8)

Reason Code:

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03-Feb-2023
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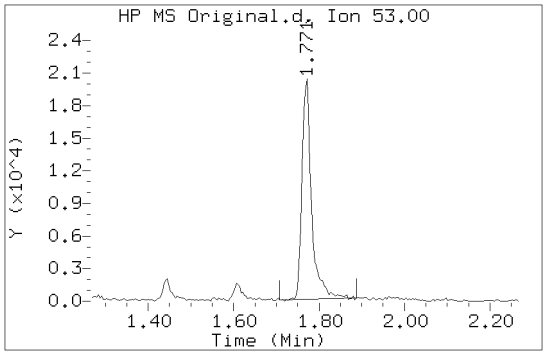
linh
pham



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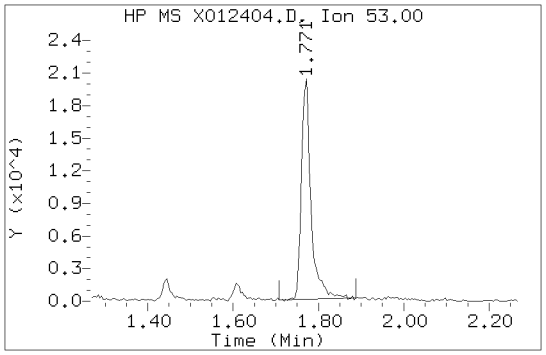

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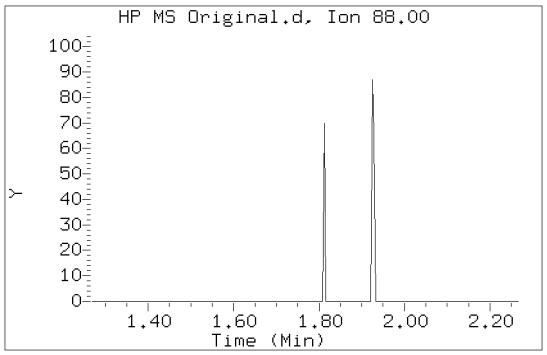

AFTER

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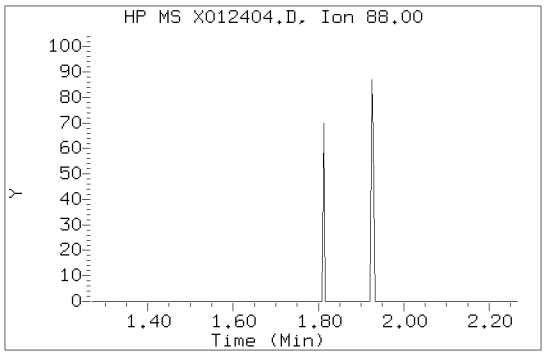

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Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012406.D
Lab Smp Id: VBLKW-230124 Client Smp ID: VBLKW-230124
Inj Date : 24-JAN-2023 09:37
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230124;VBLKW-230124;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

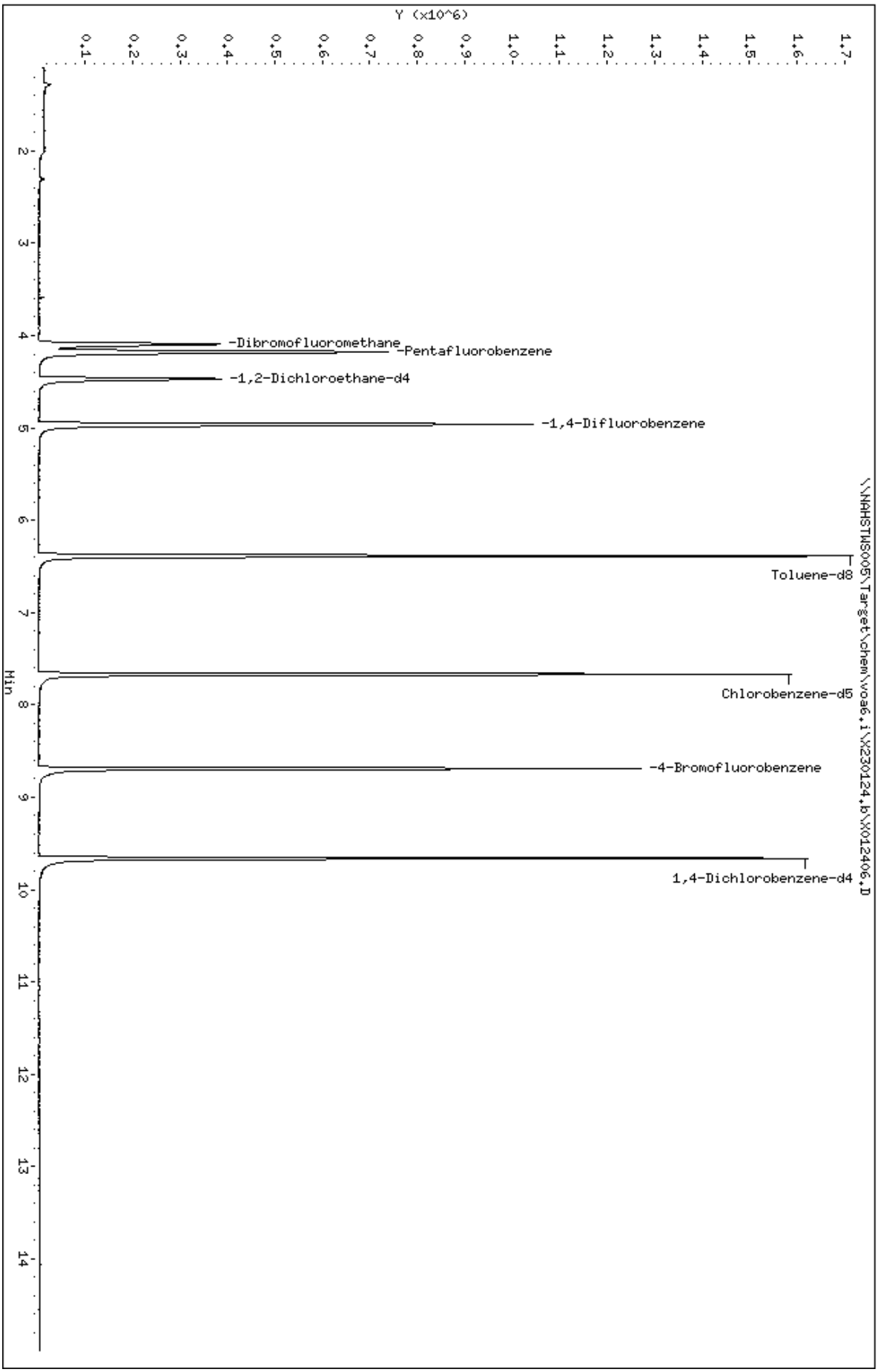
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	599102	50.0000	
$ 30 Dibromofluoromethane	113	4.091	4.095	(0.980)	270280	46.9742	46.97
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	299130	49.2700	49.26
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	853587	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	761276	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	993783	52.8280	52.82
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	352821	50.1767	50.17
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	394519	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6,i\X230124,b\X012406.D
Date : 24-JAN-2023 09:37
Client ID: VBLKW-230124
Sample Info: VBLKW-230124;VBLKW-230124;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

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



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InstruID : voa6.i
LabSampID : VBLKW-230124

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012410.D Page 1
Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012410.D
Lab Smp Id: HS23010982-05MS Client Smp ID: HS23010982-05MS
Inj Date : 24-JAN-2023 11:01
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-05MS;HS23010982-05MS;3;;MS
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 11 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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	4.174	4.178	(1.000)	607736	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	63839	15.2938	1529.37
3	Chloromethane	50	1.074	1.074	(0.257)	94253	18.5949	1859.48
4	Propionitrile	54	3.653	3.645	(0.875)	105024	169.364	16936.37(a)
5	Vinyl Chloride	62	1.141	1.141	(0.273)	1272140	239.623	23962.34(A)
6	Bromomethane	94	1.336	1.336	(0.320)	71217	18.8743	1887.42
7	Chloroethane	64	1.400	1.400	(0.335)	60898	16.4804	1648.04
8	Trichlorofluoromethane	101	1.561	1.557	(0.374)	160520	21.6064	2160.64
9	Acrolein	56	1.441	1.441	(0.345)	15280	38.5478	3854.77
10	Acetone	43	1.970	1.966	(0.472)	48073	28.1665	2816.64
11	1,1-Dichloroethene	96	1.913	1.910	(0.458)	222585	48.2575	4825.74
12	Isobutyl Alcohol	43	4.676	4.669	(1.120)	258586	378.288	37828.80(a)
13	Acetonitrile	39	2.195	2.195	(0.526)	75258	136.062	13606.18(a)
14	Allyl Chloride	41	2.195	2.195	(0.526)	152934	14.5175	1451.74(a)
15	Iodomethane	142	2.022	2.022	(0.485)	175286	32.0211	3202.10
16	Acrylonitrile	53	2.532	2.528	(0.607)	59913	38.2988	3829.87
17	Methylene Chloride	84	2.299	2.300	(0.551)	99223	15.6830	1568.30
18	Methyl tert-butyl ether	73	2.532	2.528	(0.607)	256835	17.0118	1701.17
19	Carbon Disulfide	76	2.067	2.067	(0.495)	483921	40.1001	4010.00
20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.606)	267626	51.8438	5184.38

21 Vinyl Acetate	43	2.997	2.993 (0.718)	489724	36.9517	3695.16
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	166414	18.3686	1836.86

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
24	2-Butanone	43	3.581	3.570	(0.858)	56884	33.5226	3352.26
25	Methacrylonitrile	41	3.829	3.818	(0.917)	69739	16.2060	1620.59(a)
26	2,2-Dichloropropane	77	3.510	3.507	(0.841)	143661	18.6762	1867.62
27	cis-1,2-Dichloroethene	96	3.510	3.522	(0.841)	30205762	4808.10	480809.85(A)
28	Chloroform	83	3.904	3.900	(0.935)	193523	19.0584	1905.83
29	Bromochloromethane	128	3.795	3.788	(0.909)	47186	13.7181	1371.81
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.981)	274190	46.9768	46.97
31	1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	160319	19.8994	1989.94
32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	142155	22.8753	2287.53
33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	207703	28.9611	2896.10
34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	139402	21.0068	2100.68
$ 35	1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	307933	49.9953	49.99
* 36	1,4-Difluorobenzene	114	4.965	4.961	(1.000)	875321	50.0000	
37	Benzene	78	4.511	4.508	(0.909)	397213	19.0032	1900.31
38	Trichloroethene	130	5.201	5.205	(1.048)	23800730	4014.55	401455.44(A)
39	Bromodichloromethane	83	5.726	5.722	(1.153)	140738	17.9409	1794.08
40	Methyl Methacrylate	41	5.606	5.602	(1.343)	72689	17.5413	1754.13(a)
42	1,2-Dichloropropane	63	5.437	5.433	(1.095)	97082	17.4602	1746.02
43	2-Nitropropane	43	5.969	5.966	(1.430)	29442	19.1844	1918.44
44	Dibromomethane	93	5.550	5.550	(1.118)	65115	17.2296	1722.95
45	4-Methyl-2-Pentanone	43	6.326	6.322	(0.825)	165040	38.1745	3817.45
46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.240)	166637	18.0876	1808.75
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	808850	50.0000	
$ 48	Toluene-d8	98	6.385	6.386	(0.833)	1026971	51.3813	51.38
49	Ethyl Methacrylate	69	6.712	6.708	(1.352)	73884	17.9246	1792.45(a)
50	Toluene	91	6.445	6.446	(0.841)	445312	19.9184	1991.83
51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	144790	18.9379	1893.78
52	2-Hexanone	43	7.086	7.083	(0.924)	115698	39.3339	3933.38
53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	87259	19.4550	1945.50
54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	161517	18.2955	1829.54
55	Dibromochloromethane	129	7.173	7.173	(0.935)	119349	18.4369	1843.69
56	Tetrachloroethene	164	6.925	6.925	(0.903)	103090	22.2863	2228.62
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	105515	18.8158	1881.57
58	1-Chlorohexane	55	7.694	7.694	(1.550)	105100	24.8455	2484.54
59	Chlorobenzene	112	7.694	7.694	(1.003)	303897	19.1641	1916.41
60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	110510	18.7262	1872.61
61	Ethylbenzene	106	7.799	7.799	(1.017)	154500	20.6834	2068.34
62	m,p-Xylenes	106	7.904	7.904	(1.031)	392379	40.7481	4074.81
63	o-Xylene	106	8.241	8.241	(1.075)	189624	19.9518	1995.17
64	Styrene	104	8.260	8.256	(1.077)	311845	19.5759	1957.59
66	Bromoform	173	8.410	8.410	(1.097)	81837	18.2483	1824.83
67	Isopropylbenzene	105	8.560	8.560	(1.116)	488309	22.4889	2248.88
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	131408	18.3413	1834.12
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387349	51.8450	51.84
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	449514	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	143855	28.7607	2876.06
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	36869	21.1150	2111.49(a)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	585836	23.5284	2352.83
74	Bromobenzene	156	8.807	8.803	(0.912)	141994	19.2535	1925.35
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	413268	22.4678	2246.78
76	2-Chlorotoluene	91	8.976	8.972	(0.929)	347562	21.2719	2127.18
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	402553	21.6121	2161.20

78	tert-Butylbenzene	119	9.336	9.336 (0.966)	356978	23.7092	2370.92
79	1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	414397	21.4115	2141.14

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012410.D Page 3
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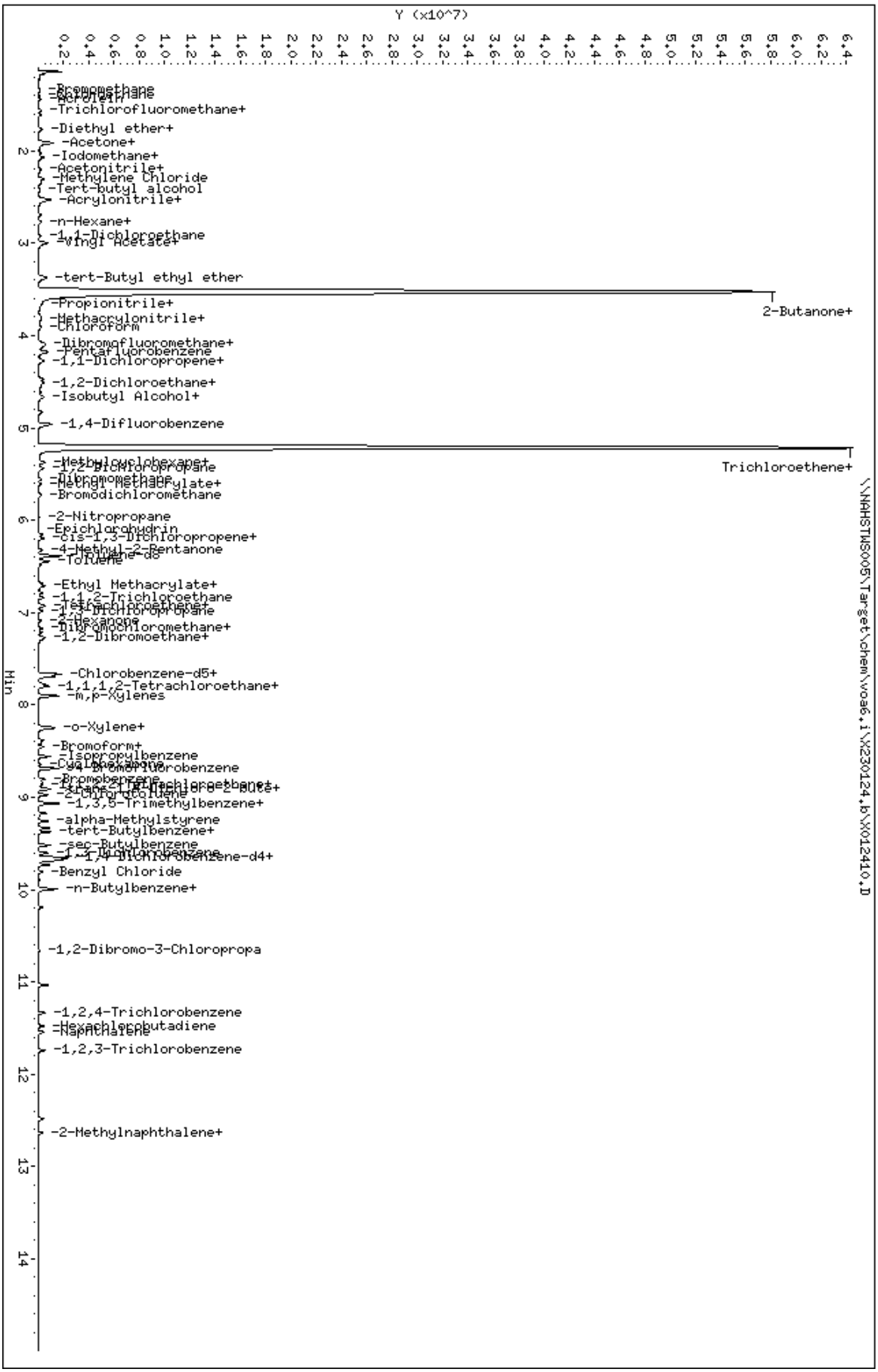
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	504375	25.1770	2517.69
82	p-Isopropyltoluene	119	9.651	9.647	(0.999)	440200	24.5214	2452.14
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	249385	20.3734	2037.33
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	260169	19.4775	1947.74
86	Benzyl Chloride	91	9.808	9.808	(1.279)	224825	19.4984	1949.83
87	n-Butylbenzene	91	9.992	9.992	(1.034)	391872	23.6216	2362.16
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	245160	19.4469	1944.69
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	21473	18.8040	1880.40
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	161081	20.2467	2024.67
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	78648	22.4241	2242.40
92	Naphthalene	128	11.544	11.540	(1.195)	355445	19.6361	1963.60
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	146487	19.2248	1922.48
146	Methyl acetate	43	2.232	2.225	(0.535)	46737	17.0905	1709.05
138	Freon TF	101	1.910	1.910	(0.458)	254373	57.0194	5701.94
141	Cyclohexane	56	4.118	4.121	(0.987)	151141	25.3113	2531.13
142	Tetrahydrofuran	42	3.848	3.840	(0.922)	25122	31.1377	3113.76
147	Methylcyclohexane	55	5.377	5.373	(1.083)	223790	20.8864	2088.63
135	1,4-Dioxane	88	5.598	5.598	(1.341)	20403	367.268	36726.81
132	n-Butanol	56	5.265	5.250	(1.261)	22363	326.259	32625.87(a)
131	Methyl Acrylate	55	3.686	3.683	(0.883)	88101	21.3527	2135.26
133	Ethyl Acrylate	55	5.377	5.373	(1.288)	223790	19.9361	1993.60
136	n-Hexane	57	2.772	2.768	(0.664)	113585	25.9577	2595.77
139	Diethyl ether	59	1.756	1.752	(0.421)	62652	15.4286	1542.85
148	Tert-butyl alcohol	59	2.427	2.420	(0.582)	165187	392.540	39253.96
149	Isopropyl alcohol	45	2.090	2.086	(0.501)	85537	389.211	38921.05
156	Diisopropyl ether	45	2.997	2.997	(0.718)	273189	17.3286	1732.85
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	163116	18.7034	1870.34
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	405271	18.7223	1872.23
167	Ethanol	45	1.696	1.700	(0.406)	15468	388.689	38868.94
172	tert-Butyl formate	59	4.616	4.612	(1.106)	128364	39.8049	3980.48
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	142090	371.286	37128.62
174	tert-Amyl methyl ether	73	4.665	4.661	(1.118)	298060	17.0143	1701.42
175	tert-Butyl ethyl ether	59	3.375	3.372	(0.809)	283988	16.9525	1695.24
176	tert-Amyl alcohol	59	4.616	4.612	(1.106)	128364	393.276	39327.60
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.351)	286518	345.837	34583.68
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	163116		(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	74588	17.8825	1788.25
152	Amyl alcohol	42	6.907	6.899	(0.901)	26849	335.679	33567.85
158	Dichlorofluoromethane	67	1.527	1.531	(0.366)	14184	18.0250	1802.50
159	Propylene oxide	43	1.752	1.752	(0.420)	12809	33.5164	3351.64
161	3-Methyl-1-butanol	55	6.907	6.903	(0.901)	30137	376.857	37685.71
162	Butyl acrylate	55	8.252	8.249	(1.076)	199804	18.9104	1891.03
182	Epichlorohydrin	57	6.097	6.089	(1.228)	27127	70.8350	7083.49
M 94	1,2-Dichloroethylene (total)	96				30473388	4859.94	485994.23
M 95	Xylenes (total)	106				582003	60.6999	6069.99
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	199435	20.0235	2002.35
134	Cyclohexanone	55	8.642	8.642	(0.894)	61501	327.988	32798.78(a)
185	Isoprene	39	1.767	1.767	(0.423)	31098	19.2079	1920.78
186	Isopentane	42	1.606	1.606	(0.385)	59091		(a)
188	Isopropyl acetate	43	4.676	4.669	(0.942)	261483	19.2277	1922.76
187	n-Amyl acetate	43	8.451	8.451	(1.102)	184173	19.5270	1952.69
189	n-Butyl acetate	43	7.214	7.210	(0.941)	148488	21.3707	2137.07

150 Allyl alcohol	57	2.772	2.768 (0.664)	113585	508.490	50849.02
194 Acetaldehyde	44	1.209	1.209 (0.290)	78004	202.927	20292.70

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	191863	17.8410	1784.09
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	200857	18.3480	1834.80
168 1-Propanol	59	2.997	2.993	(0.718)	32059	322.788	32278.79

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.



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Date : 24-JAN-2023 11:01
Client ID: HS230109B2-05HS
Sample Info: HS230109B2-05HS;HS230109B2-05HS;3;;HS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 24-JAN-2023 11:01
InstruID : voa6.i
LabSampID : HS23010982-05MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012411.D Page 1
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ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012411.D
Lab Smp Id: HS23010982-05MSD Client Smp ID: HS23010982-05MSD
Inj Date : 24-JAN-2023 11:22
Operator : PC Inst ID: voa6.i
Smp Info : HS23010982-05MSD;HS23010982-05MSD;3;;MSD
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 09-Feb-2023 13:42 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 11 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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	4.178	4.178	(1.000)	616157	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	58398	13.8375	1383.74
3	Chloromethane	50	1.074	1.074	(0.257)	94499	18.4131	1841.31
4	Propionitrile	54	3.653	3.645	(0.874)	106644	169.626	16962.58(a)
5	Vinyl Chloride	62	1.141	1.141	(0.273)	1215141	225.759	22575.87(A)
6	Bromomethane	94	1.336	1.336	(0.320)	64947	17.1546	1715.46
7	Chloroethane	64	1.400	1.400	(0.335)	56224	15.0076	1500.75
8	Trichlorofluoromethane	101	1.561	1.557	(0.374)	151743	20.1459	2014.58
9	Acrolein	56	1.441	1.441	(0.345)	13622	34.2359	3423.59
10	Acetone	43	1.970	1.966	(0.472)	47027	27.1758	2717.58
11	1,1-Dichloroethene	96	1.917	1.910	(0.459)	211816	45.2951	4529.50
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	257308	371.274	37127.39(a)
13	Acetonitrile	39	2.198	2.195	(0.526)	75516	134.662	13466.23(a)
14	Allyl Chloride	41	2.198	2.195	(0.526)	147729	13.8317	1383.17(a)
15	Iodomethane	142	2.022	2.022	(0.484)	157844	28.8451	2884.51
16	Acrylonitrile	53	2.532	2.528	(0.606)	58941	37.1625	3716.25
17	Methylene Chloride	84	2.299	2.300	(0.550)	96317	15.0157	1501.56
18	Methyl tert-butyl ether	73	2.528	2.528	(0.605)	252853	16.5191	1651.91
19	Carbon Disulfide	76	2.067	2.067	(0.495)	458023	37.4353	3743.53
20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	243811	46.5849	4658.49

21 Vinyl Acetate	43	2.993	2.993 (0.716)	480993	35.7969	3579.68
22 1,1-Dichloroethane	63	2.922	2.918 (0.699)	163434	17.7932	1779.31

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			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	3.578	3.570	(0.856)	55880	32.5749	3257.48
	25	Methacrylonitrile	41	3.825	3.818	(0.916)	69559	15.9433	1594.32(a)
	26	2,2-Dichloropropane	77	3.514	3.507	(0.841)	133881	17.1670	1716.69
	27	cis-1,2-Dichloroethene	96	3.510	3.522	(0.840)	29981128	4707.12	470711.82(A)
	28	Chloroform	83	3.900	3.900	(0.934)	188888	18.3477	1834.77
	29	Bromochloromethane	128	3.791	3.788	(0.908)	45981	13.1851	1318.51
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	277416	46.8796	46.87
	31	1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	153674	18.8140	1881.39
	32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	133698	21.3251	2132.51
	33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	204626	28.2809	2828.09
	34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	133810	19.9867	1998.67
$	35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	314528	50.3661	50.36
*	36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	883093	50.0000	
	37	Benzene	78	4.511	4.508	(0.909)	380187	18.0285	1802.85
	38	Trichloroethene	130	5.201	5.205	(1.048)	23418906	3915.39	391538.60(A)
	39	Bromodichloromethane	83	5.726	5.722	(1.154)	137789	17.4104	1741.03
	40	Methyl Methacrylate	41	5.606	5.602	(1.342)	71262	16.9619	1696.19(a)
	42	1,2-Dichloropropane	63	5.437	5.433	(1.096)	92999	16.5787	1657.87
	43	2-Nitropropane	43	5.969	5.966	(1.429)	29804	19.1549	1915.49
	44	Dibromomethane	93	5.553	5.550	(1.119)	63984	16.7813	1678.13
	45	4-Methyl-2-Pentanone	43	6.326	6.322	(0.825)	162783	37.3450	3734.50
	46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.241)	161896	17.4183	1741.83
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	815509	50.0000	
$	48	Toluene-d8	98	6.386	6.386	(0.833)	1034287	51.3248	51.32
	49	Ethyl Methacrylate	69	6.712	6.708	(1.353)	69578	16.7313	1673.13(a)
	50	Toluene	91	6.445	6.446	(0.841)	432199	19.1740	1917.39
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	141642	18.3631	1836.31
	52	2-Hexanone	43	7.087	7.083	(0.924)	114493	38.6064	3860.63
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	84670	18.7236	1872.36
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	158836	17.8449	1784.48
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	116772	17.8915	1789.15
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	98823	21.1894	2118.93
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	103386	18.2856	1828.55
	58	1-Chlorohexane	55	7.694	7.694	(1.551)	100956	23.6558	2365.58
	59	Chlorobenzene	112	7.694	7.694	(1.003)	292362	18.2862	1828.61
	60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	106586	17.9137	1791.37
	61	Ethylbenzene	106	7.799	7.799	(1.017)	148954	19.7781	1977.81
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	372076	38.3242	3832.41
	63	o-Xylene	106	8.241	8.241	(1.075)	181286	18.9187	1891.87
	64	Styrene	104	8.260	8.256	(1.077)	298926	18.6117	1861.17
	66	Bromoform	173	8.410	8.410	(1.097)	79284	17.5347	1753.46
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	465819	21.2779	2127.79
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	130175	18.2200	1822.00
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387636	51.4602	51.46
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	448260	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	139149	27.8977	2789.76
	72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	35874	20.3774	2037.73(a)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	557187	22.4404	2244.03
	74	Bromobenzene	156	8.803	8.803	(0.911)	134703	18.3160	1831.60
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	391646	21.3519	2135.19
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	331421	20.3407	2034.07
	77	4-Chlorotoluene	91	9.070	9.070	(0.939)	382720	20.6048	2060.47

78	tert-Butylbenzene	119	9.336	9.336 (0.966)	336739	22.4276	2242.76
79	1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	393541	20.3908	2039.07

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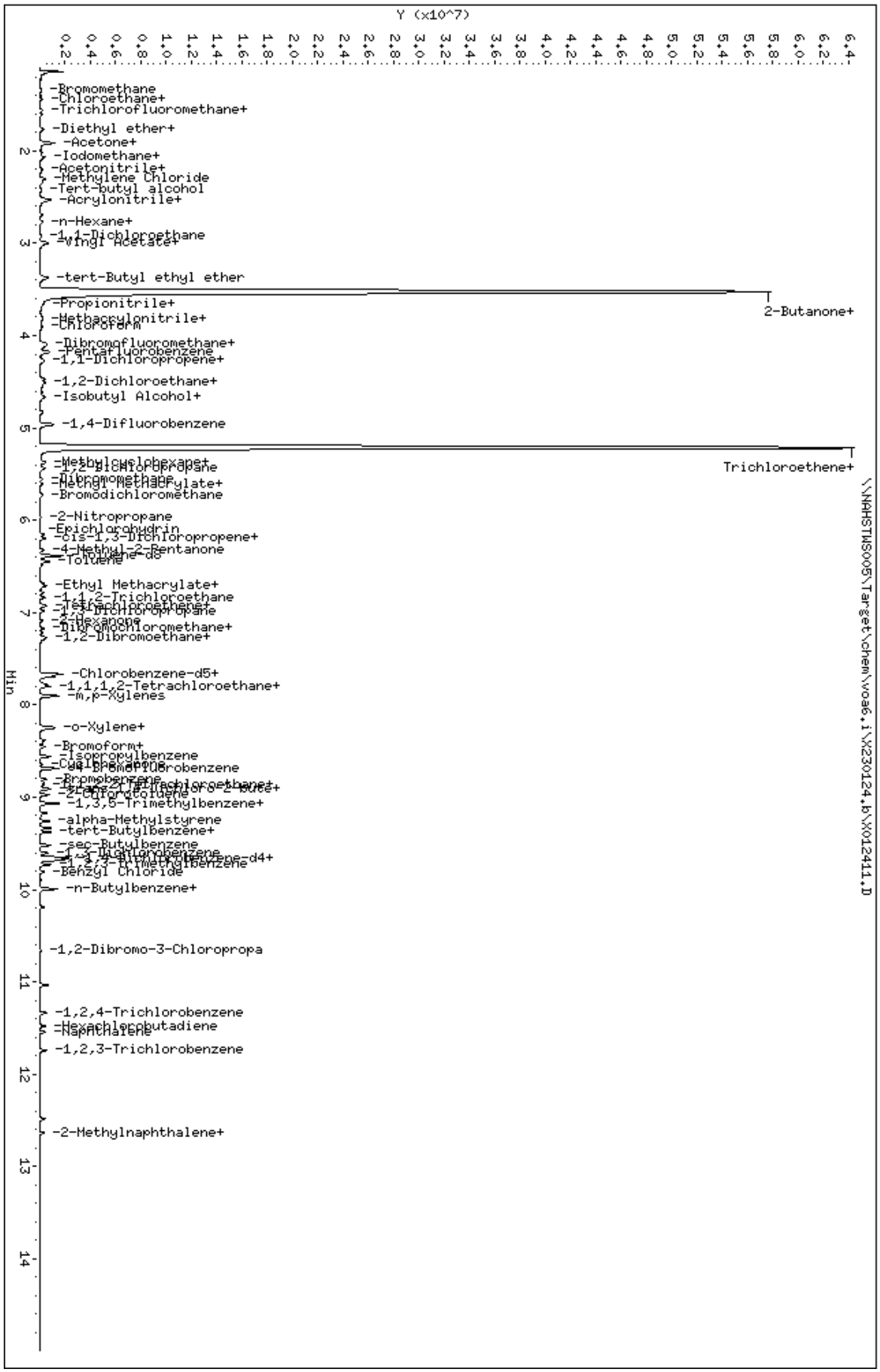
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	479175	23.9860	2398.59
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	421084	23.5222	2352.21
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	241201	19.7599	1975.98
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	253748	19.0499	1904.99
86	Benzyl Chloride	91	9.808	9.808	(1.279)	216542	18.7471	1874.70
87	n-Butylbenzene	91	9.995	9.992	(1.035)	376976	22.8500	2284.99
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	233459	18.5705	1857.05
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	20133	17.6854	1768.54
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	160721	20.2580	2025.79
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	76806	21.9615	2196.14
92	Naphthalene	128	11.544	11.540	(1.195)	352319	19.5178	1951.78
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	147095	19.3586	1935.86
146	Methyl acetate	43	2.228	2.225	(0.533)	46990	16.9482	1694.81
138	Freon TF	101	1.910	1.910	(0.457)	243829	53.9090	5390.89
141	Cyclohexane	56	4.121	4.121	(0.987)	144119	23.8805	2388.05
142	Tetrahydrofuran	42	3.844	3.840	(0.920)	26547	32.5881	3258.80
147	Methylcyclohexane	55	5.377	5.373	(1.084)	215219	19.9096	1990.96
135	1,4-Dioxane	88	5.598	5.598	(1.340)	21123	375.032	37503.20
132	n-Butanol	56	5.268	5.250	(1.261)	21282	308.941	30894.13(a)
131	Methyl Acrylate	55	3.690	3.683	(0.883)	75700	18.0964	1809.63
133	Ethyl Acrylate	55	5.377	5.373	(1.287)	215219	19.0047	1900.46
136	n-Hexane	57	2.768	2.768	(0.663)	102574	23.1210	2312.10
139	Diethyl ether	59	1.752	1.752	(0.419)	61554	14.9510	1495.10
148	Tert-butyl alcohol	59	2.423	2.420	(0.580)	163620	383.502	38350.19
149	Isopropyl alcohol	45	2.090	2.086	(0.500)	83172	373.277	37327.71
156	Diisopropyl ether	45	2.997	2.997	(0.717)	264208	16.5299	1652.98
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	164086	18.8673	1886.72
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	384553	17.8149	1781.49
167	Ethanol	45	1.700	1.700	(0.407)	15239	377.608	37760.82
172	tert-Butyl formate	59	4.616	4.612	(1.105)	125940	38.5195	3851.94
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	128576	333.230	33323.03
174	tert-Amyl methyl ether	73	4.665	4.661	(1.117)	301177	16.9572	1695.72
175	tert-Butyl ethyl ether	59	3.379	3.372	(0.809)	278519	16.3988	1639.88
176	tert-Amyl alcohol	59	4.616	4.612	(1.105)	125940	380.576	38057.60
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	258826	309.662	30966.22
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	164086		(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	70837	16.7511	1675.10
152	Amyl alcohol	42	6.910	6.899	(0.901)	25499	316.197	31619.71
158	Dichlorofluoromethane	67	1.524	1.531	(0.365)	13142	16.4726	1647.25
159	Propylene oxide	43	1.752	1.752	(0.419)	14174	36.5813	3658.12
161	3-Methyl-1-butanol	55	6.907	6.903	(0.901)	28225	350.066	35006.60
162	Butyl acrylate	55	8.252	8.249	(1.076)	190074	17.8426	1784.26
182	Epichlorohydrin	57	6.097	6.089	(1.229)	27000	69.9165	6991.64
M 94	1,2-Dichloroethylene (total)	96				30224939	4753.70	475370.31
M 95	Xylenes (total)	106				553362	57.2429	5724.29
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	189184	19.0475	1904.74
134	Cyclohexanone	55	8.642	8.642	(0.894)	58846	314.707	31470.65(a)
185	Isoprene	39	1.767	1.767	(0.423)	27928	17.0142	1701.41
186	Isopentane	42	1.606	1.606	(0.385)	54097		(a)
188	Isopropyl acetate	43	4.672	4.669	(0.942)	259211	18.8929	1889.28
187	n-Amyl acetate	43	8.451	8.451	(1.102)	179919	18.9202	1892.01
189	n-Butyl acetate	43	7.214	7.210	(0.941)	145559	20.7781	2077.81

150 Allyl alcohol	57	2.768	2.768 (0.663)	102574	452.921	45292.10
195 Methyl Amyl Ketone	43	8.380	8.380 (1.093)	184794	17.0433	1704.33

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	197589	17.9021	1790.21
168 1-Propanol	59	2.997	2.993	(0.717)	31639	314.205	31420.54

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230124,b\X012411.D
Date : 24-JAN-2023 11:22
Client ID: HS230109B2-05MSD
Sample Info: HS230109B2-05MSD;HS230109B2-05MSD;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\X230124.b\X012411.D
Inj Date : 24-JAN-2023 11:22
InstruID : voa6.i
LabSampID : HS23010982-05MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012416.D Page 1
Report Date: 03-Feb-2023 10:51

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012416.D
Lab Smp Id: HS23010986-08 Client Smp ID: HS23010986-08
Inj Date : 24-JAN-2023 13:08
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-08;HS23010986-08;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	600218	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	269055	46.6733	46.67
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	305574	50.2324	50.23
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	862177	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	762846	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1006645	53.4016	53.40
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	351944	49.9493	49.94
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	383976	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012416.D

Date : 24-JAN-2023 13:08

Client ID: HS23010986-08

Instrument: voa6.i

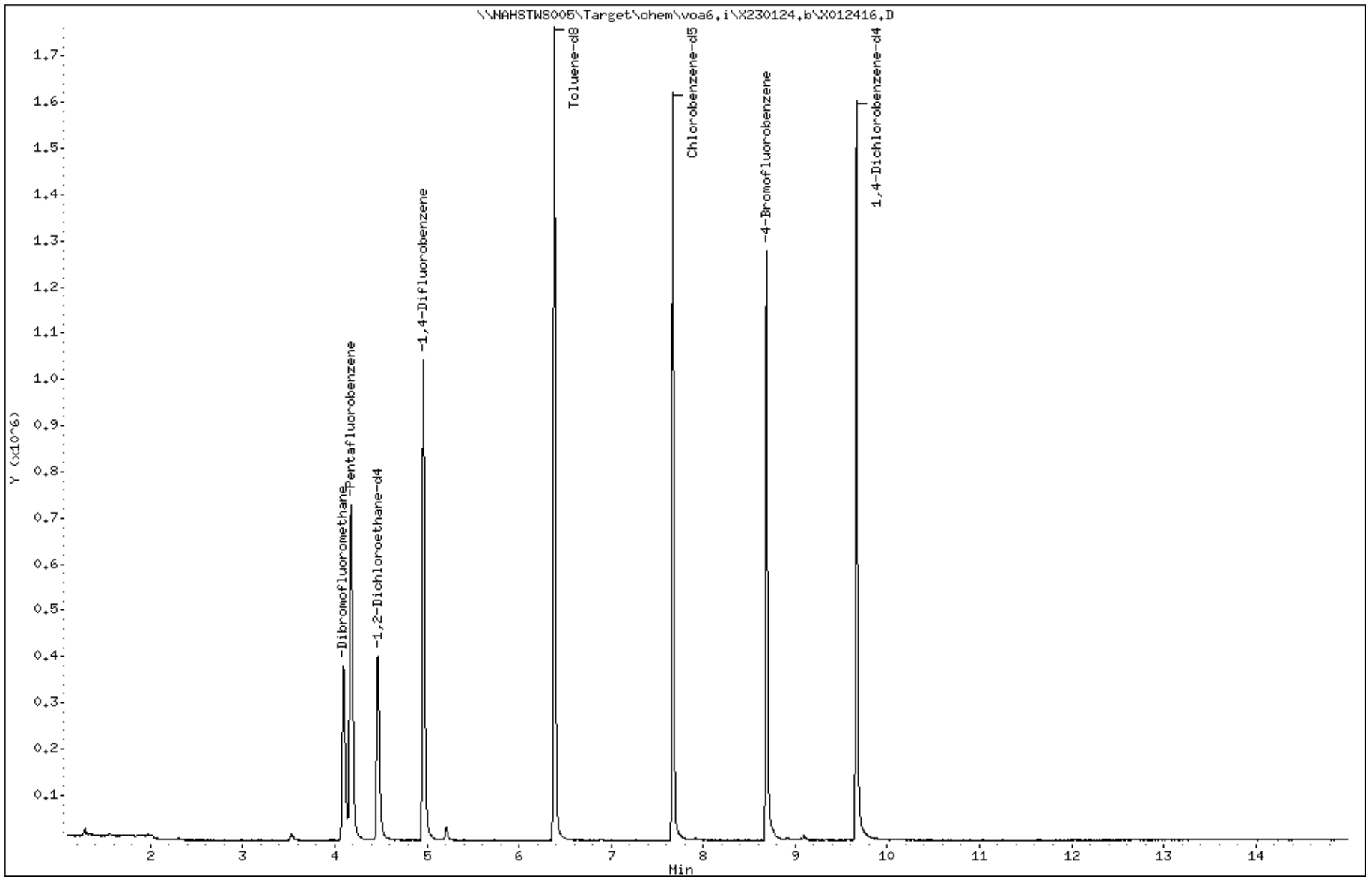
Sample Info: HS23010986-08;HS23010986-08;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 24-JAN-2023 13:08
InstruID : voa6.i
LabSampID : HS23010986-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012417.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012417.D
Lab Smp Id: HS23010986-09 Client Smp ID: HS23010986-09
Inj Date : 24-JAN-2023 13:29
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-09;HS23010986-09;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.178	(1.000)	594568	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	264492	46.3165	46.31
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	298890	49.6040	49.60
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	838318	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	747106	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	982390	53.2128	53.21
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	338394	49.0392	49.03
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	374004	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012417.D

Date : 24-JAN-2023 13:29

Client ID: HS23010986-09

Instrument: voa6.i

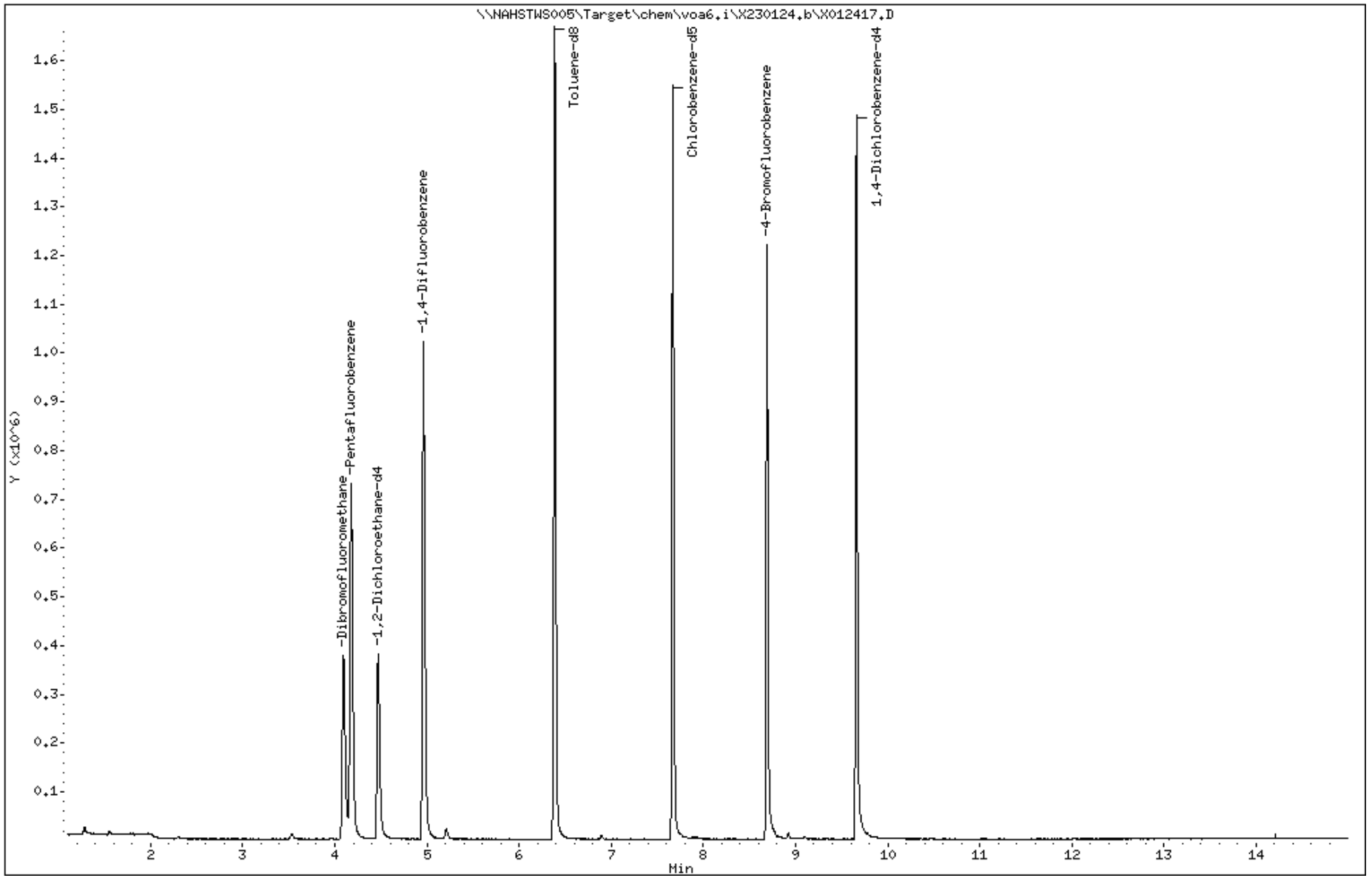
Sample Info: HS23010986-09;HS23010986-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012417.D
Inj Date : 24-JAN-2023 13:29
InstruID : voa6.i
LabSampID : HS23010986-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012419.D Page 1
Report Date: 03-Feb-2023 10:51

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012419.D
Lab Smp Id: HS23010986-02 Client Smp ID: HS23010986-02
Inj Date : 24-JAN-2023 14:11
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-02;HS23010986-02;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

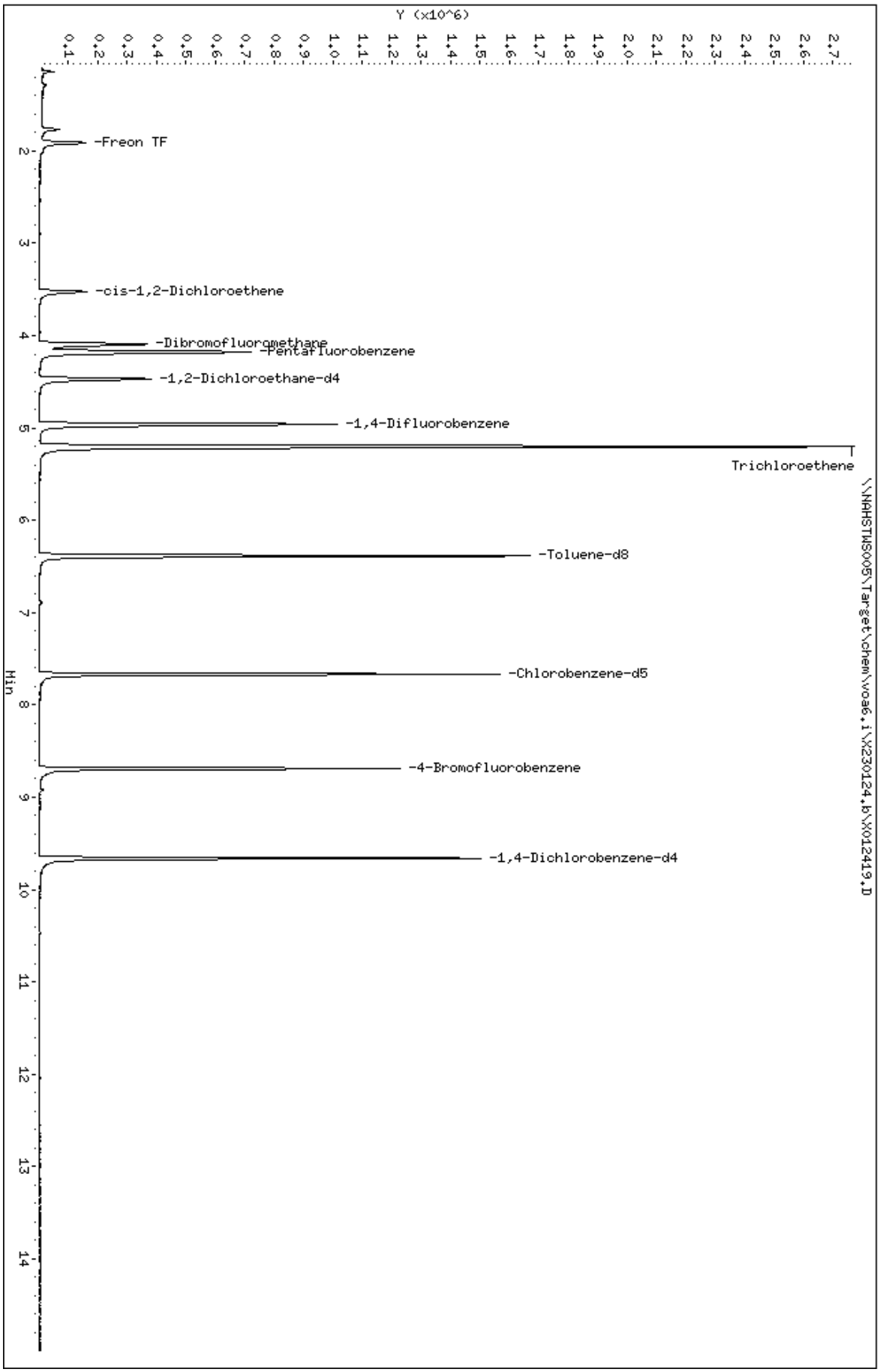
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.177	4.178	(1.000)	592528	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	26196	5.06099	5.06
	27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	90056	14.7029	14.70
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	262308	46.0914	46.09
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	299428	49.8630	49.86
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	840842	50.0000	
	38 Trichloroethene	130	5.205	5.205	(1.049)	905681	159.029	159.02
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	744883	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	972661	52.8431	52.84
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	340163	49.4422	49.44
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	383661	50.0000	
	138 Freon TF	101	1.913	1.910	(0.458)	53507	12.3018	12.30
M	94 1,2-Dichloroethylene (total)	96				90056	14.7029	14.70

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012419.D
Date : 24-JAN-2023 14:11
Client ID: HS23010986-02
Sample Info: HS23010986-02;HS23010986-02;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012419.D Page 2

Date : 24-JAN-2023 14:11

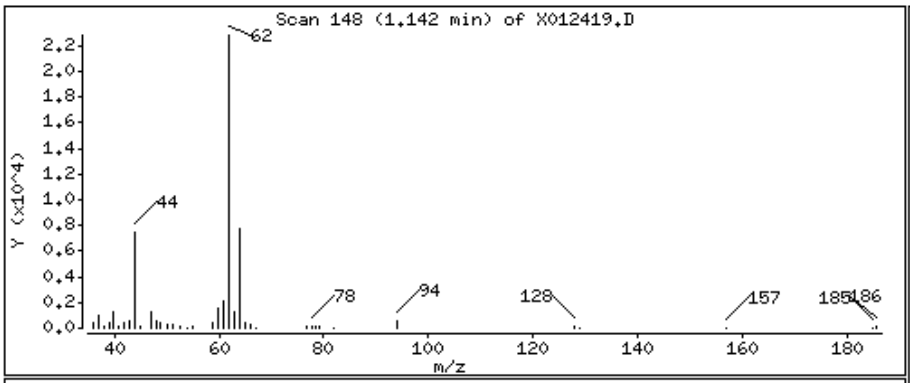
Client ID: HS23010986-02 Instrument: voa6.i

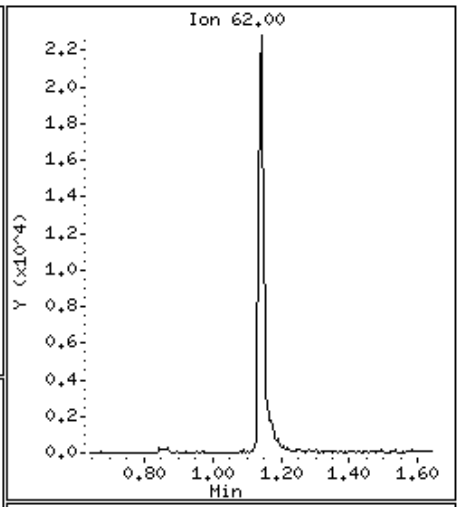
Sample Info: HS23010986-02;HS23010986-02;;;

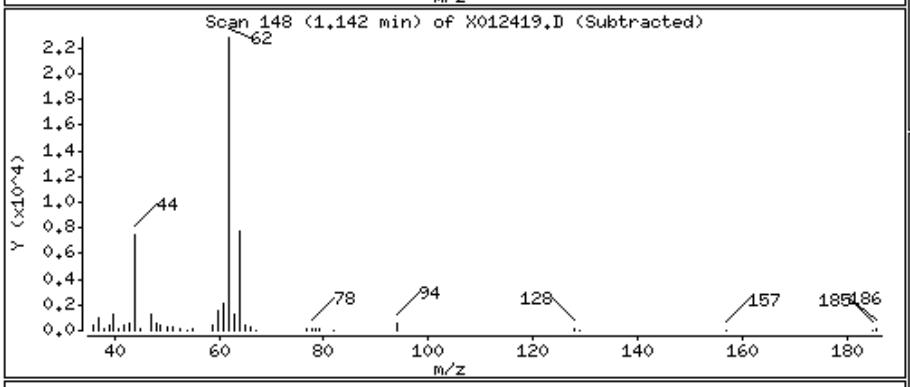
Purge Volume: 5.0 Operator: PC

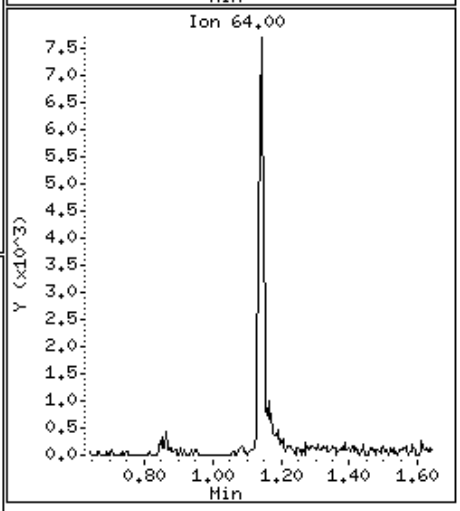
Column phase: DB624 Column diameter: 0.18

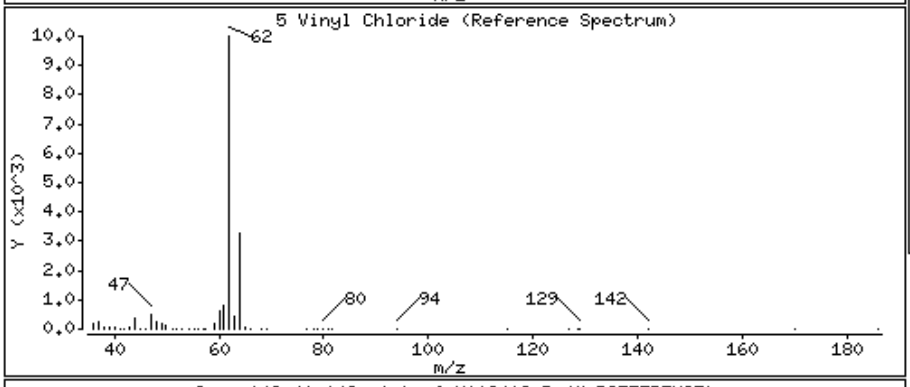
5 Vinyl Chloride Concentration: 5.06 ug/l

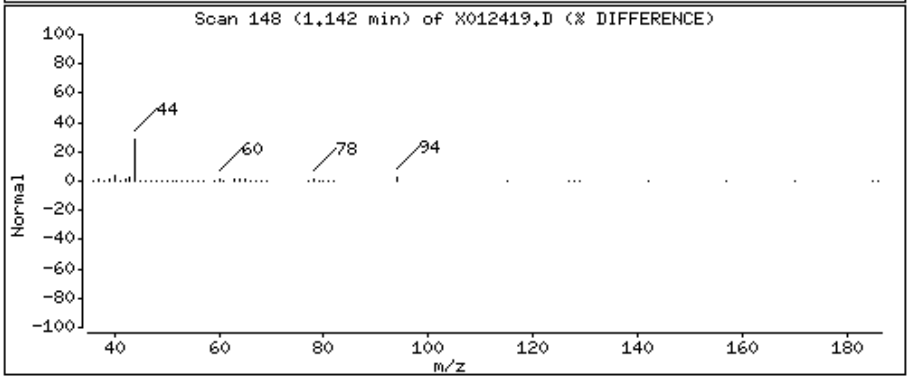












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Date : 24-JAN-2023 14:11

Client ID: HS23010986-02

Instrument: voa6.i

Sample Info: HS23010986-02;HS23010986-02;;;

Purge Volume: 5.0

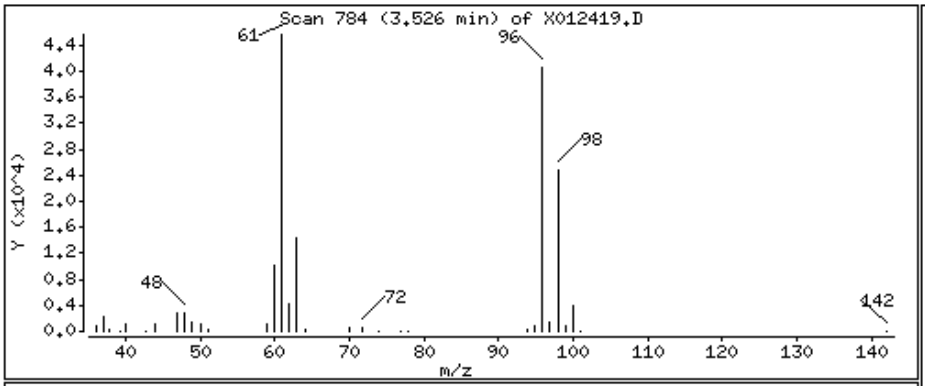
Operator: PC

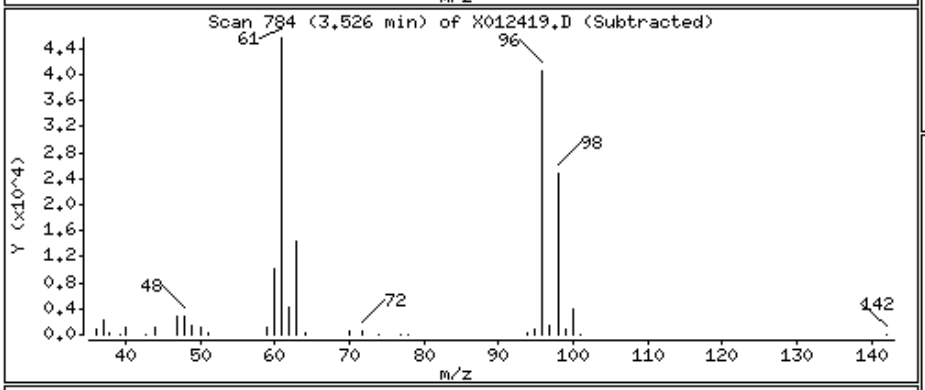
Column phase: DB624

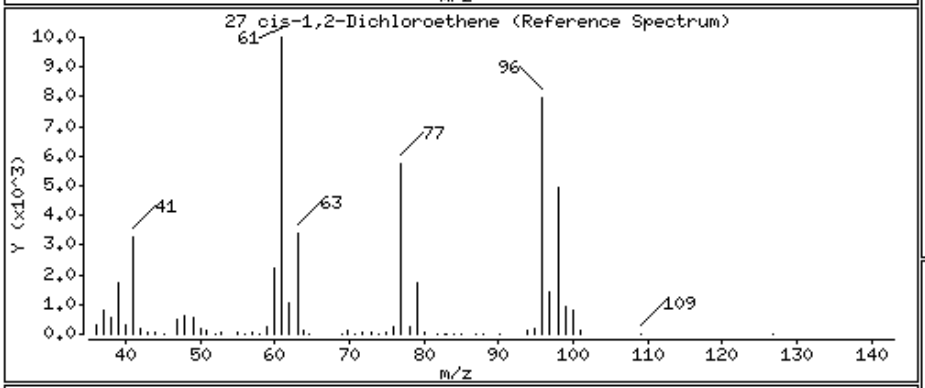
Column diameter: 0.18

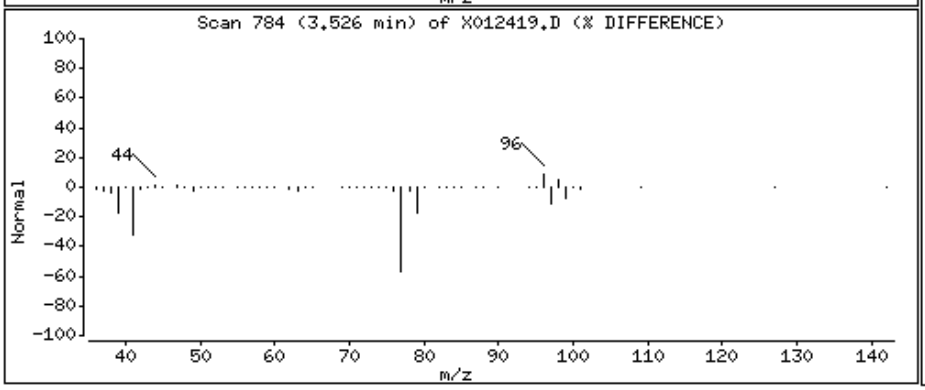
27 cis-1,2-Dichloroethene

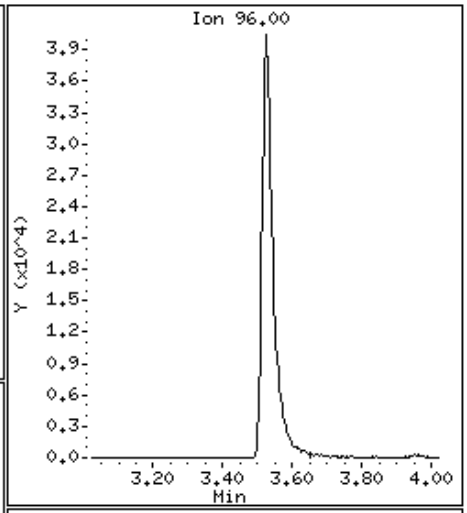
Concentration: 14.70 ug/l

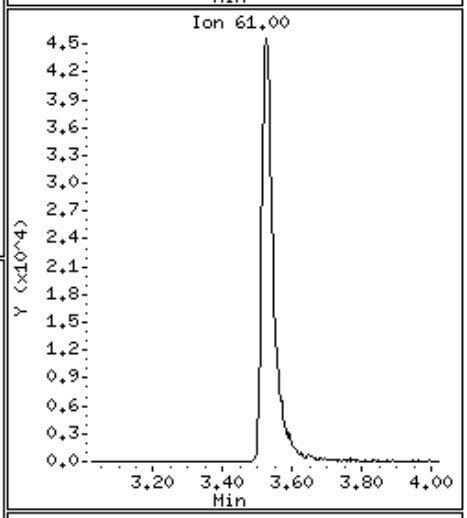


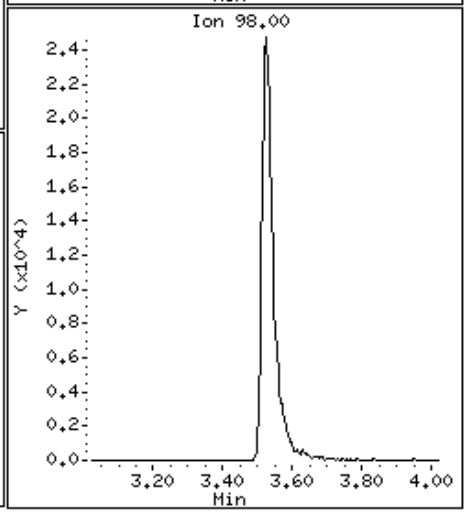












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012419.D

Date : 24-JAN-2023 14:11

Client ID: HS23010986-02

Instrument: voa6.i

Sample Info: HS23010986-02;HS23010986-02;;;

Purge Volume: 5.0

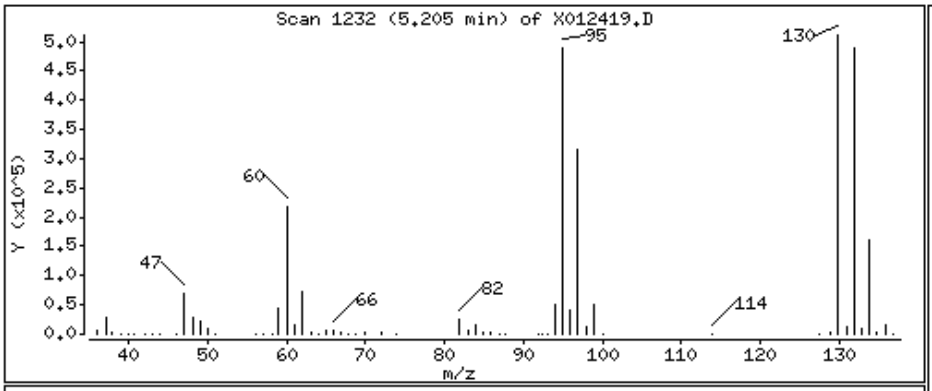
Operator: PC

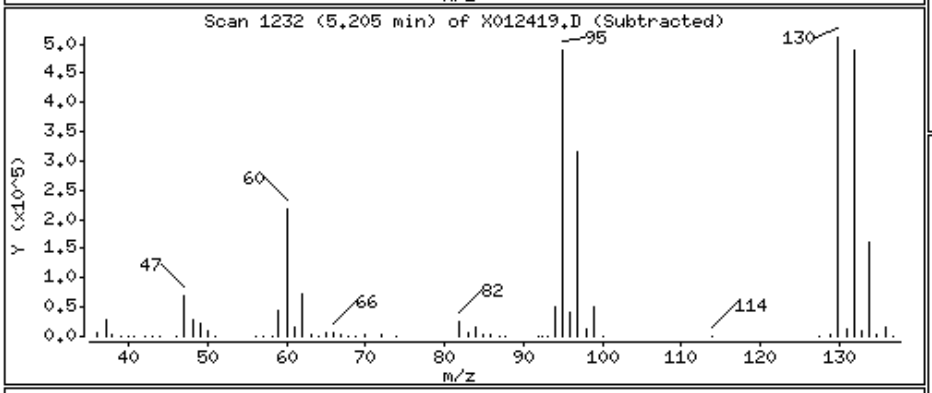
Column phase: DB624

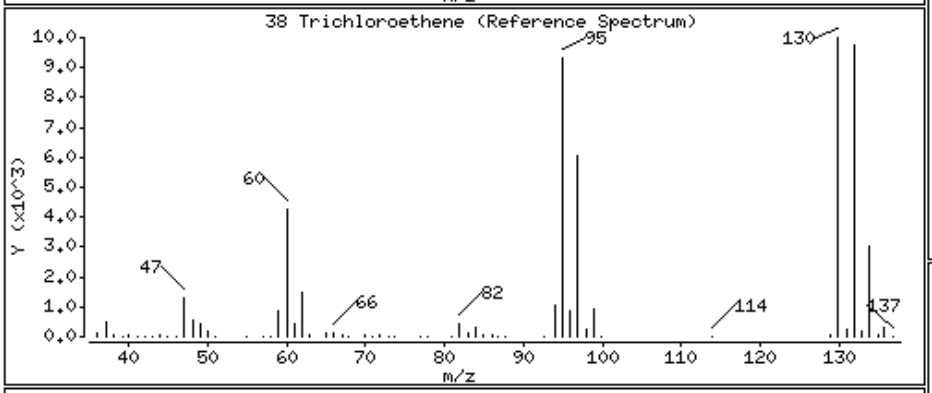
Column diameter: 0.18

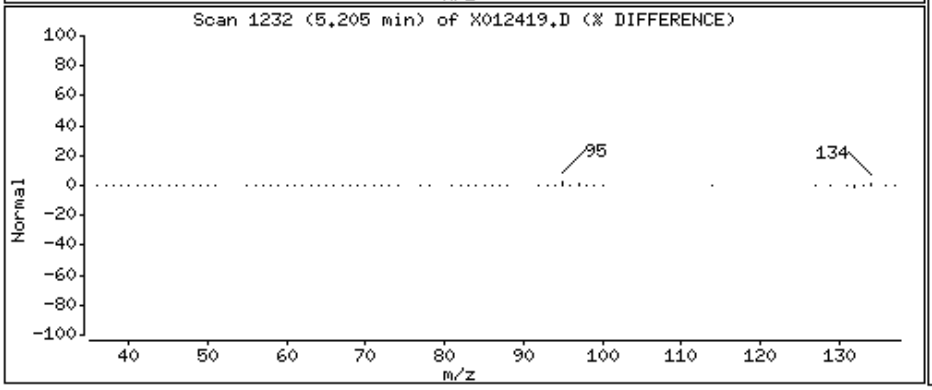
38 Trichloroethene

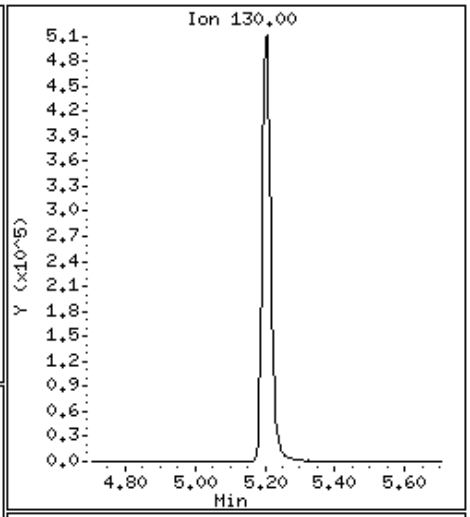
Concentration: 159.02 ug/l

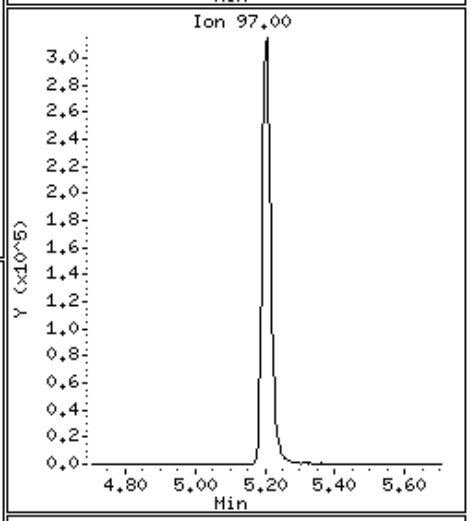


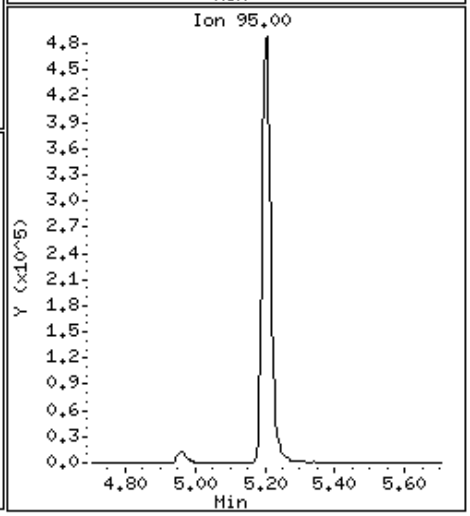












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012419.D Page 5

Date : 24-JAN-2023 14:11

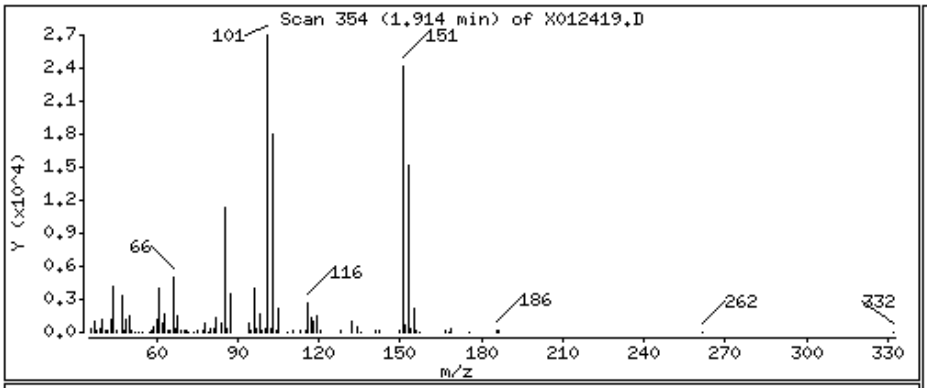
Client ID: HS23010986-02 Instrument: voa6.i

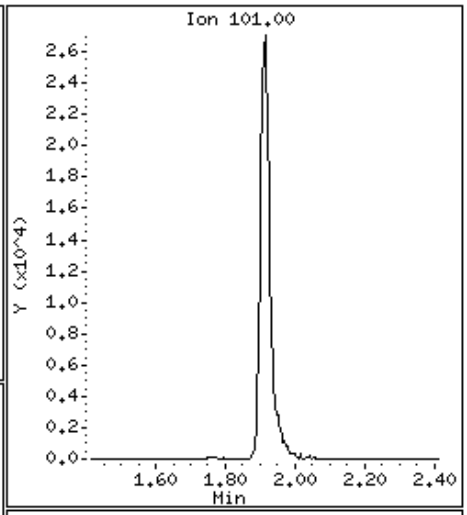
Sample Info: HS23010986-02;HS23010986-02;;;

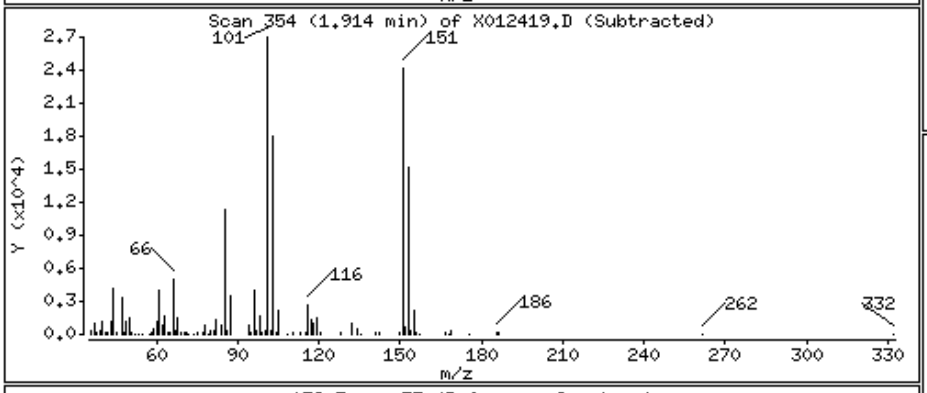
Purge Volume: 5.0 Operator: PC

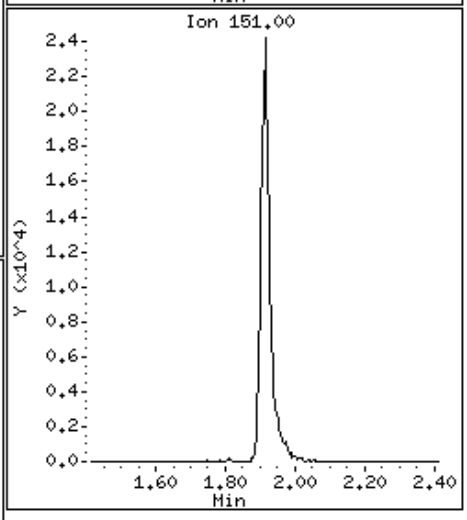
Column phase: DB624 Column diameter: 0.18

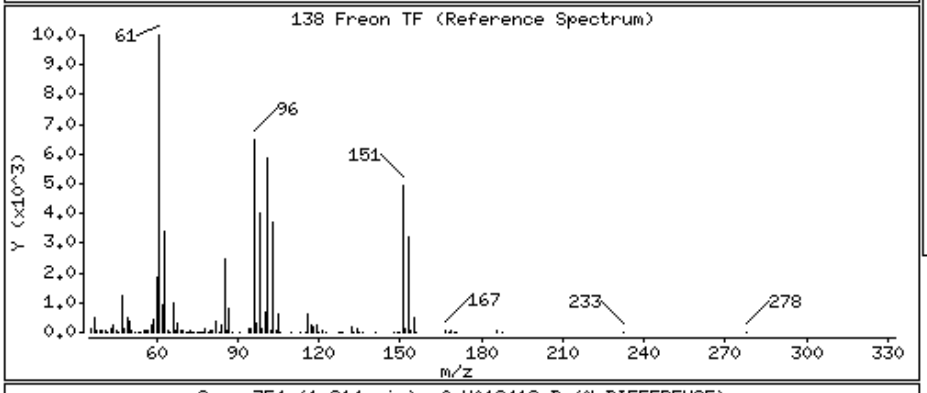
138 Freon TF Concentration: 12.30 ug/l

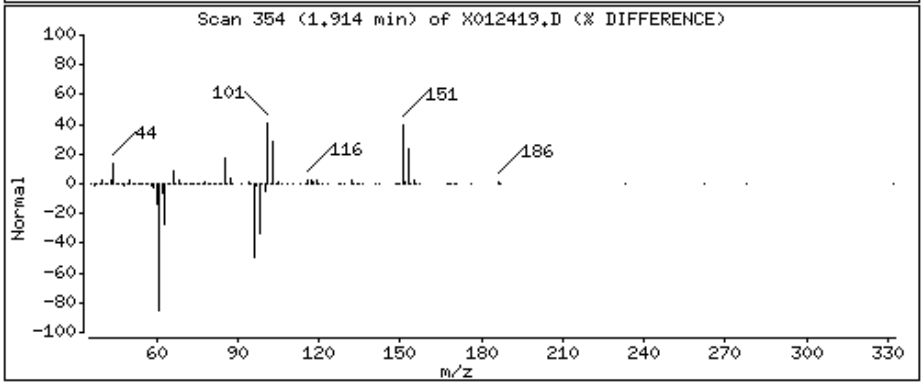












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012419.D
Inj Date : 24-JAN-2023 14:11
InstruID : voa6.i
LabSampID : HS23010986-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D
Lab Smp Id: HS23010986-03 Client Smp ID: HS23010986-03
Inj Date : 24-JAN-2023 14:32
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-03;HS23010986-03;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

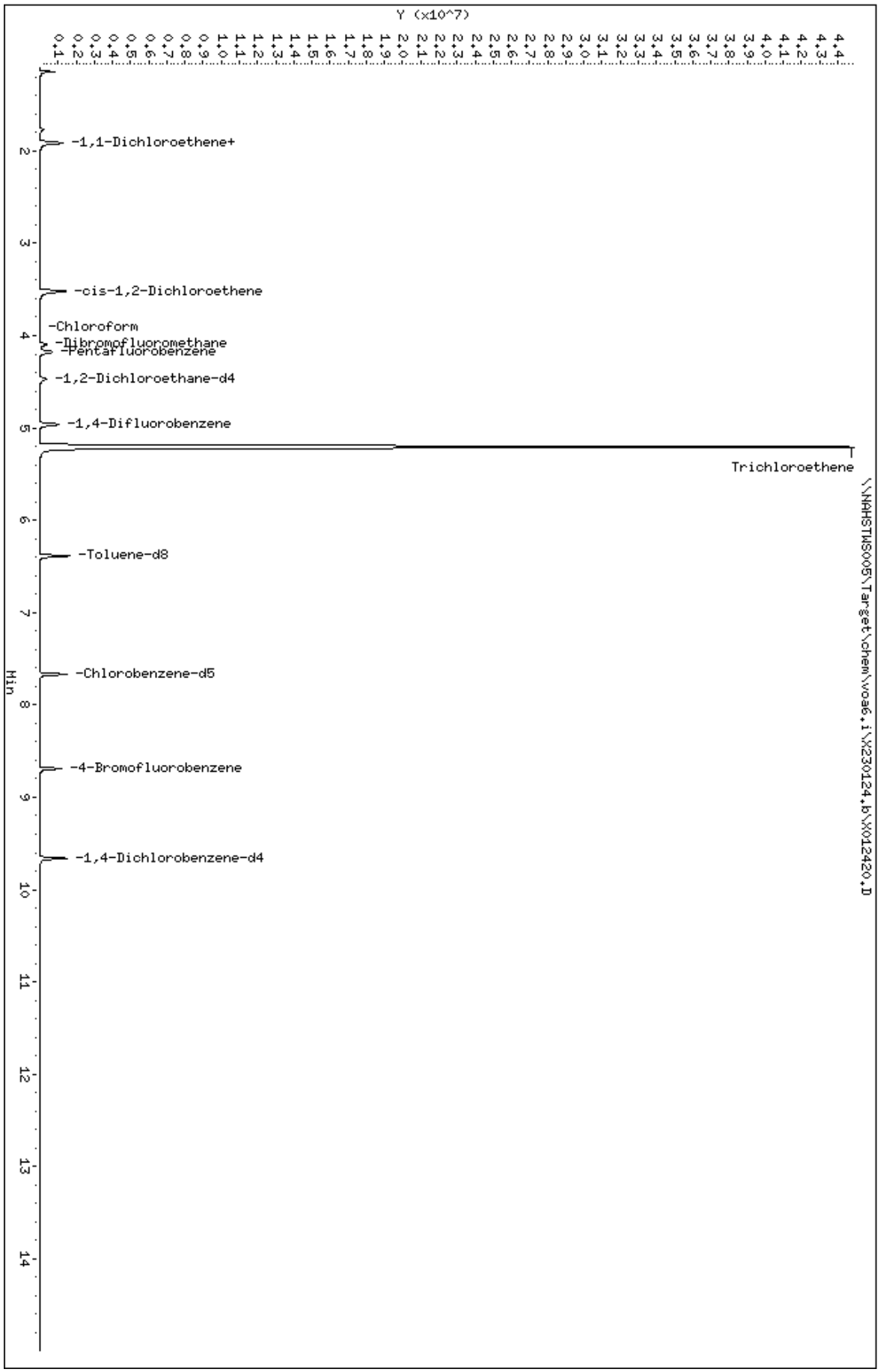
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.178	4.178	(1.000)	593177	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	525607	101.435	101.43
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	63159	14.0293	14.02
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	783199	127.728	127.72
	28 Chloroform	83	3.908	3.900	(0.935)	10702	1.07982	1.07
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	255910	44.9137	44.91
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	294834	49.0487	49.04
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	848534	50.0000	
	38 Trichloroethene	130	5.208	5.205	(1.050)	14408624	2507.08	2507.07(A)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	735271	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	958150	52.7352	52.73
$	69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	338826	49.8910	49.89
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	381708	50.0000	
	138 Freon TF	101	1.910	1.910	(0.457)	460418	105.739	105.73
M	94 1,2-Dichloroethylene (total)	96				783199	127.728	127.72

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D
Date : 24-JAN-2023 14:32
Client ID: HS23010986-03
Sample Info: HS23010986-03;HS23010986-03;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D

Date : 24-JAN-2023 14:32

Client ID: HS23010986-03

Instrument: voa6.i

Sample Info: HS23010986-03;HS23010986-03;;;

Purge Volume: 5.0

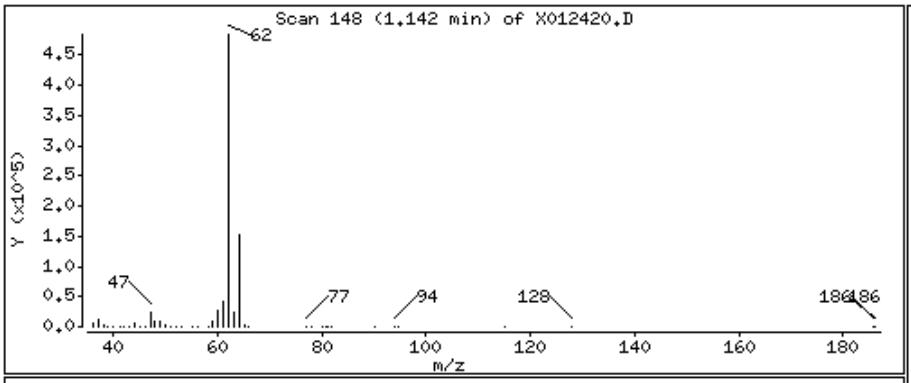
Operator: PC

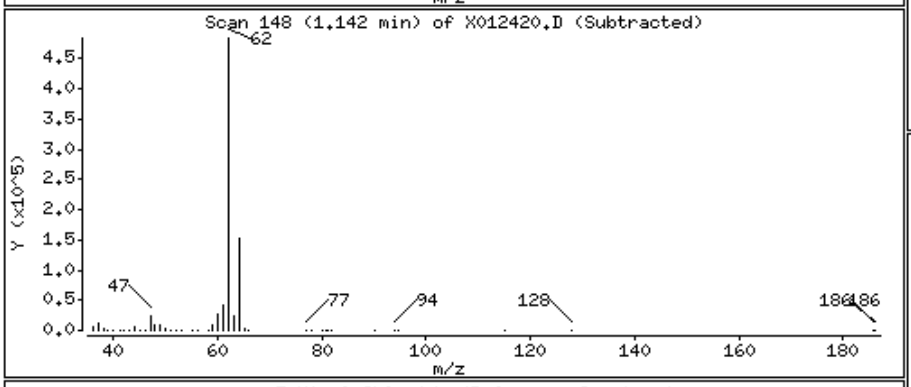
Column phase: DB624

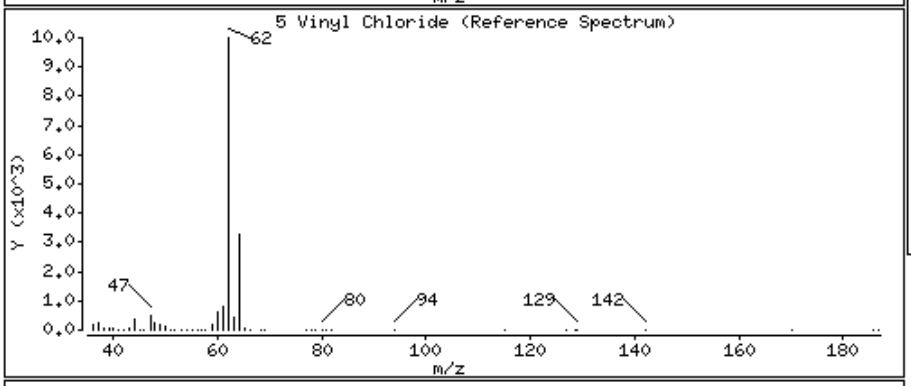
Column diameter: 0.18

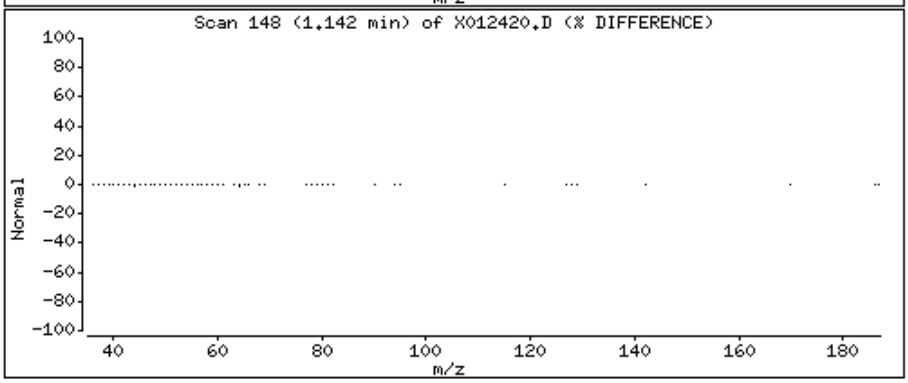
5 Vinyl Chloride

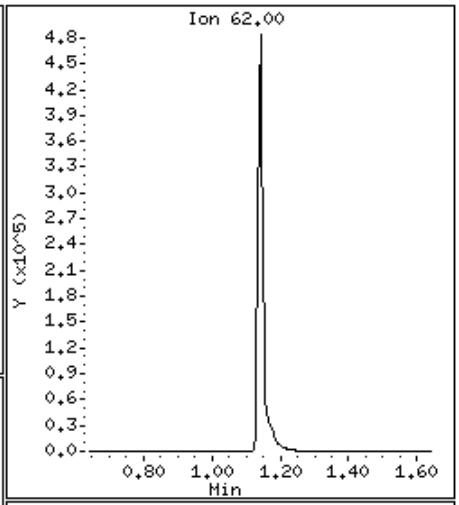
Concentration: 101.43 ug/l

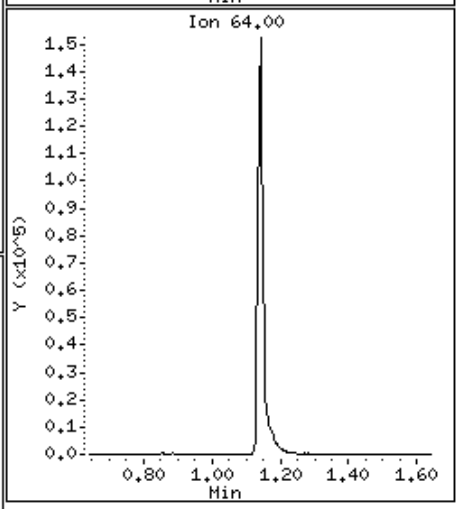












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D

Date : 24-JAN-2023 14:32

Client ID: HS23010986-03

Instrument: voa6.i

Sample Info: HS23010986-03;HS23010986-03;;;

Purge Volume: 5.0

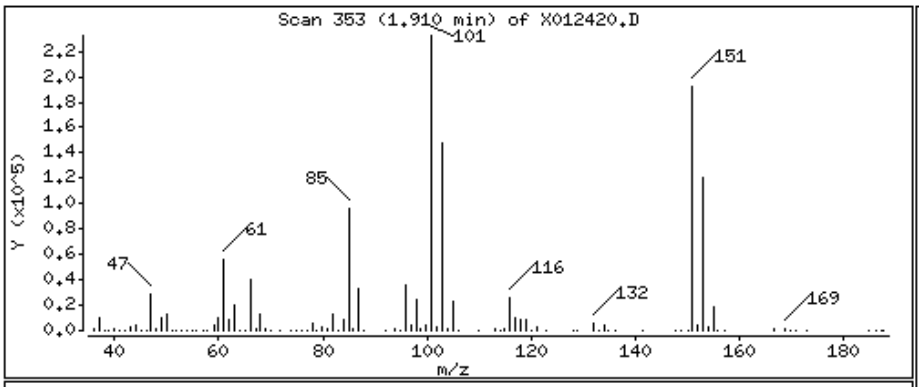
Operator: PC

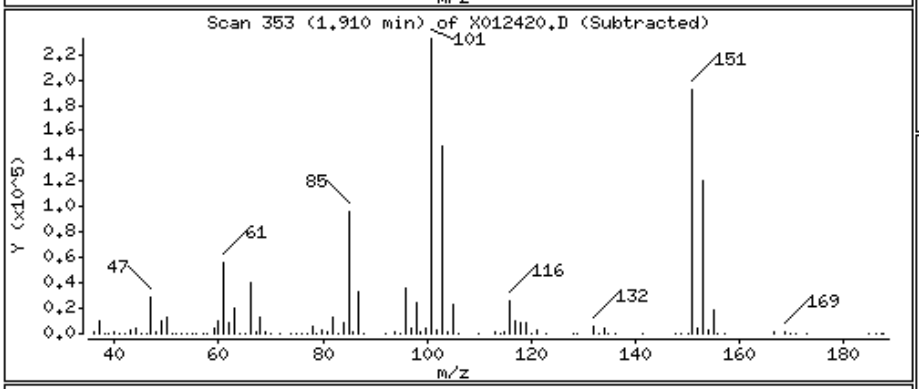
Column phase: DB624

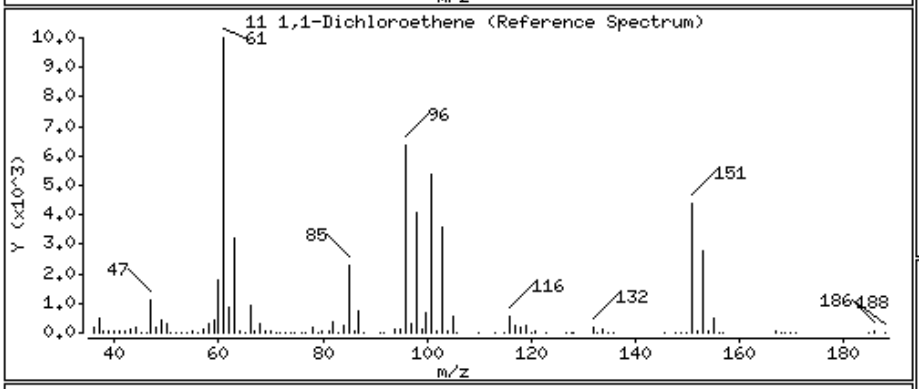
Column diameter: 0.18

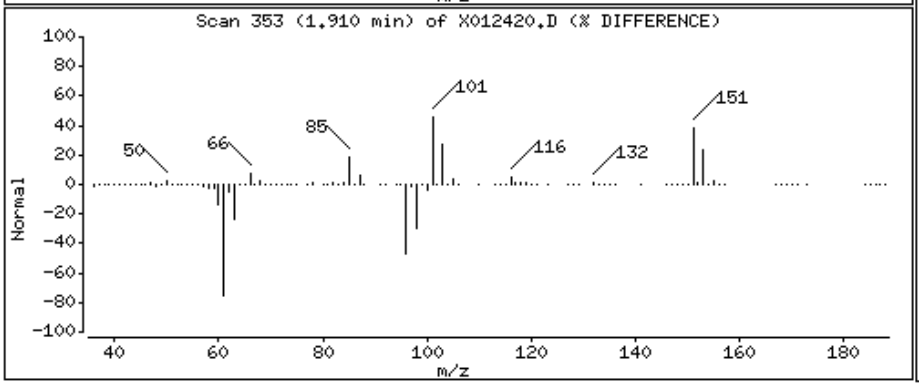
11 1,1-Dichloroethene

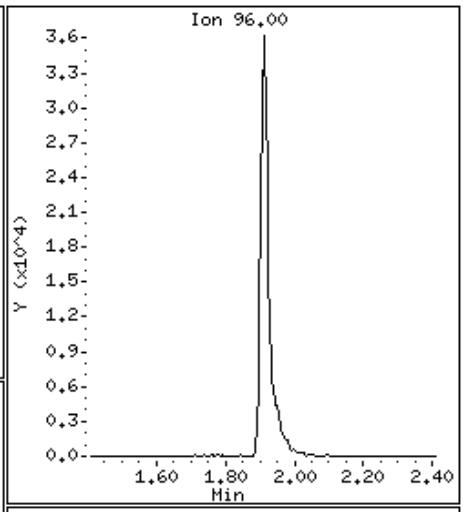
Concentration: 14.02 ug/l

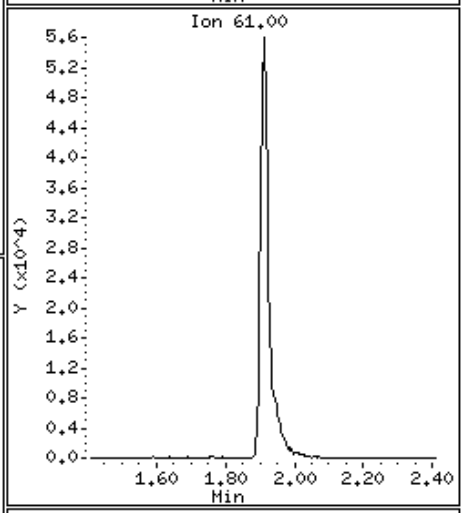


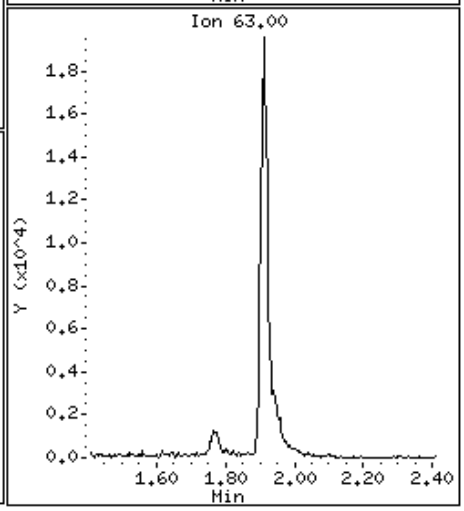












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D Page 4

Date : 24-JAN-2023 14:32

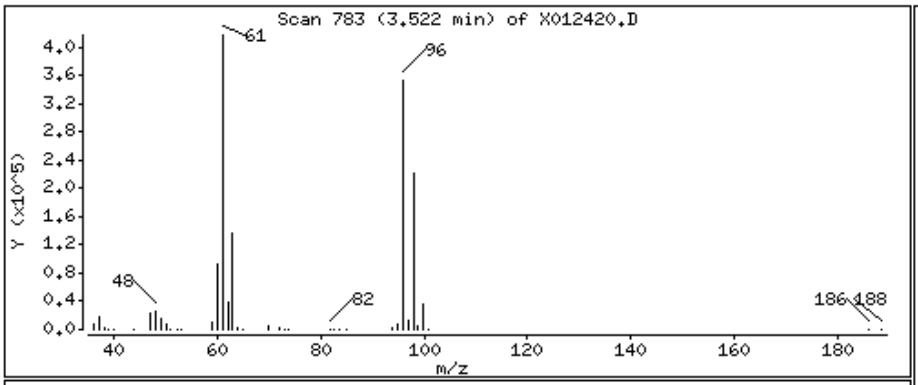
Client ID: HS23010986-03 Instrument: voa6.i

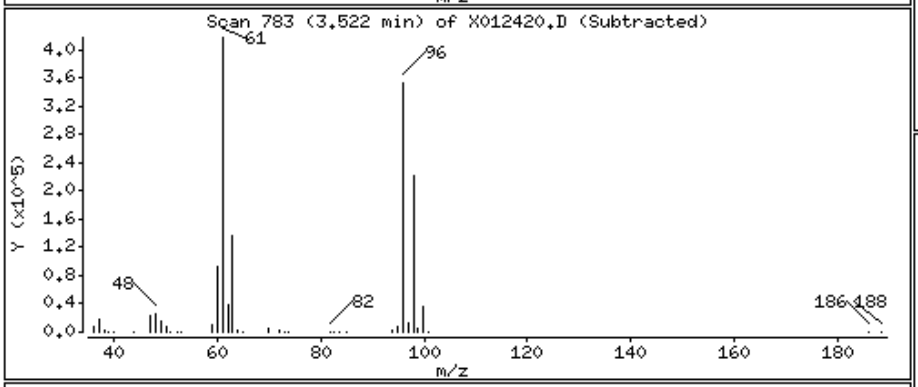
Sample Info: HS23010986-03;HS23010986-03;;;

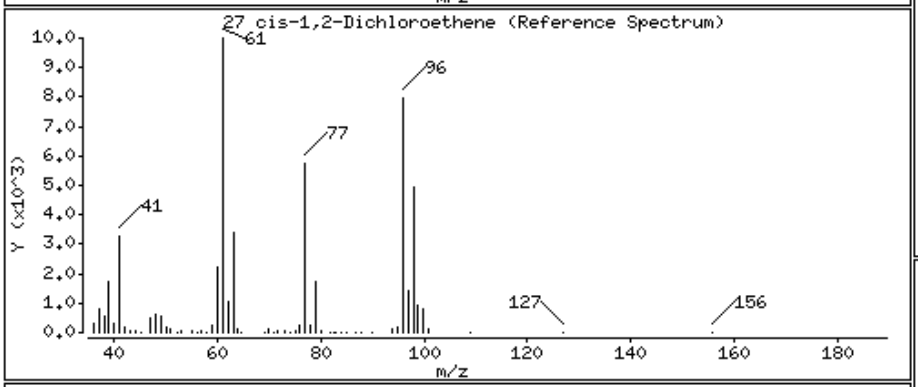
Purge Volume: 5.0 Operator: PC

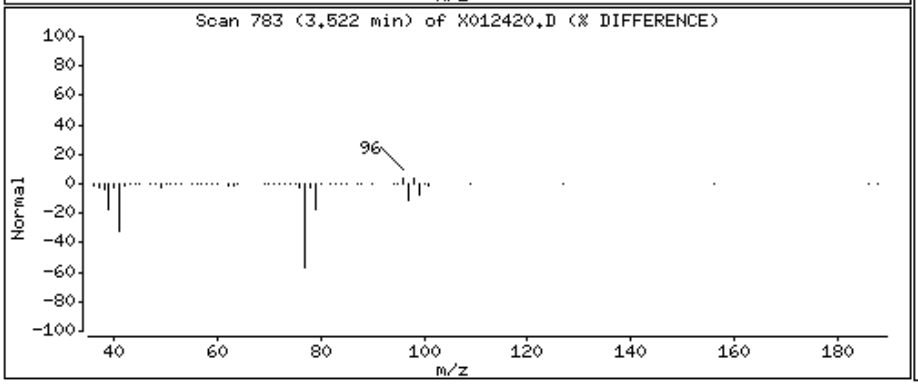
Column phase: DB624 Column diameter: 0.18

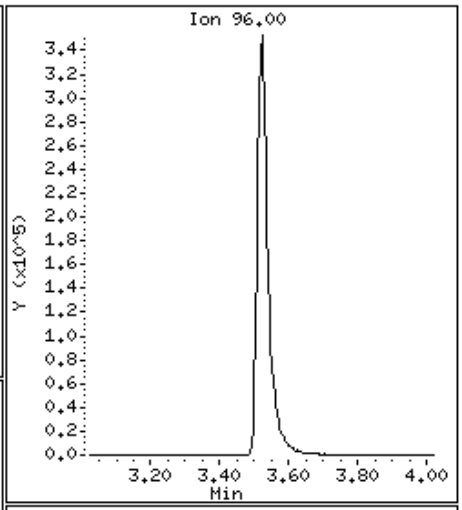
27 cis-1,2-Dichloroethene Concentration: 127.72 ug/l

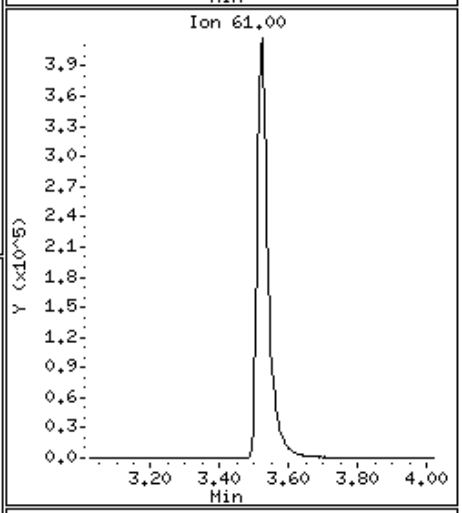


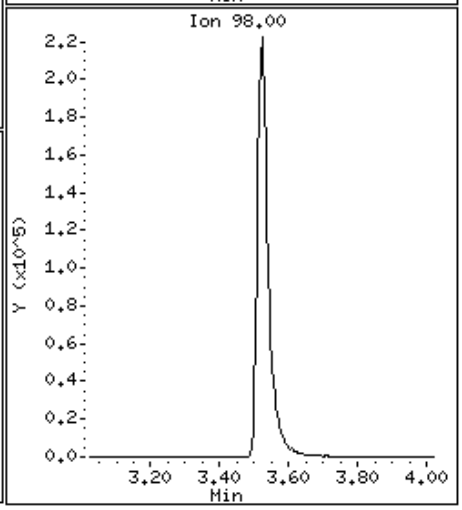












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D Page 5

Date : 24-JAN-2023 14:32

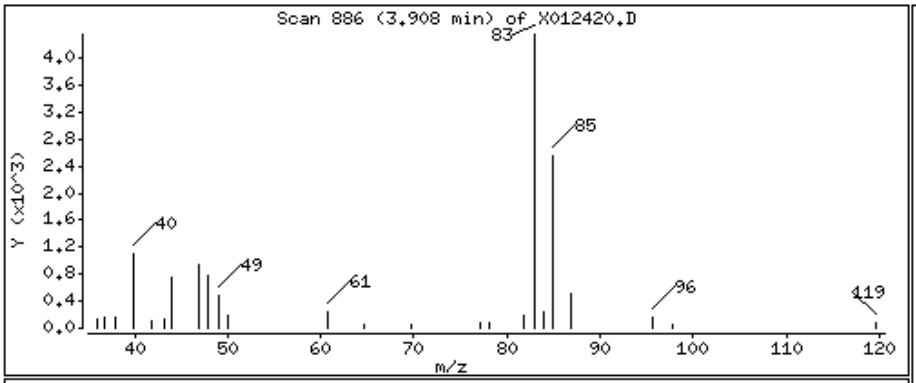
Client ID: HS23010986-03 Instrument: voa6.i

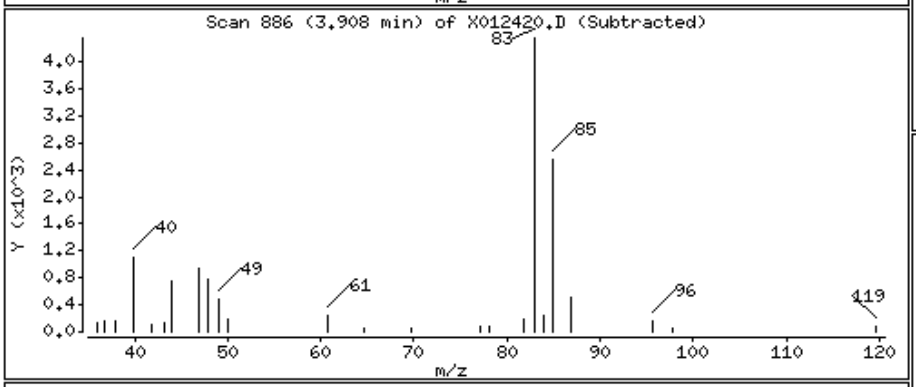
Sample Info: HS23010986-03;HS23010986-03;;;

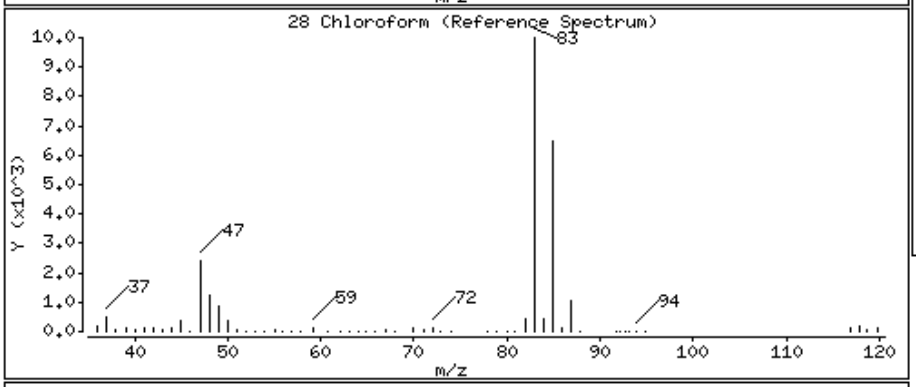
Purge Volume: 5.0 Operator: PC

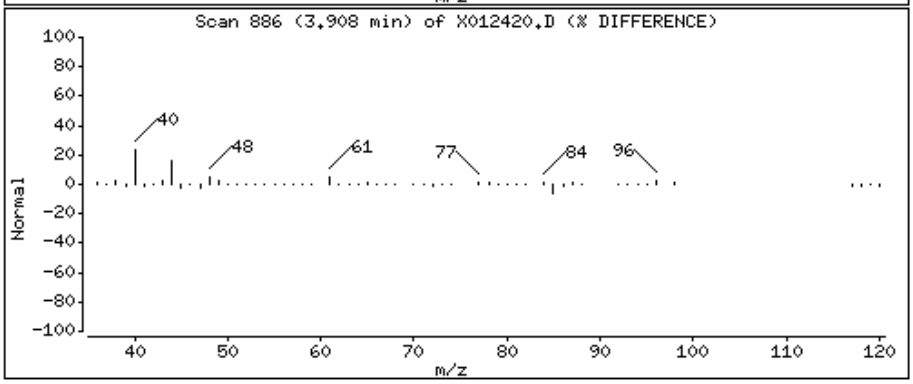
Column phase: DB624 Column diameter: 0.18

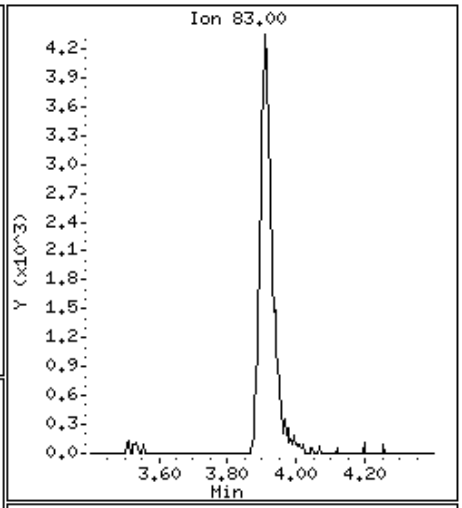
28 Chloroform Concentration: 1.07 ug/l

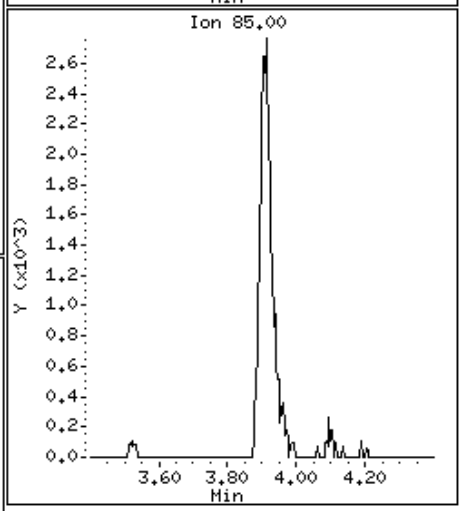












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D Page 6

Date : 24-JAN-2023 14:32

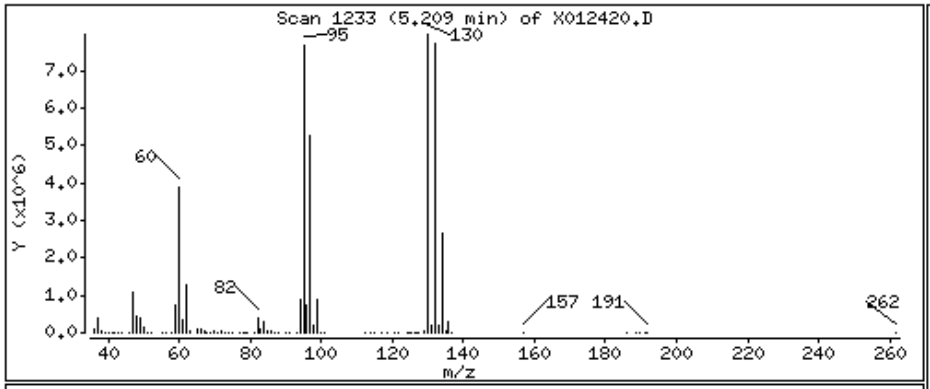
Client ID: HS23010986-03 Instrument: voa6.i

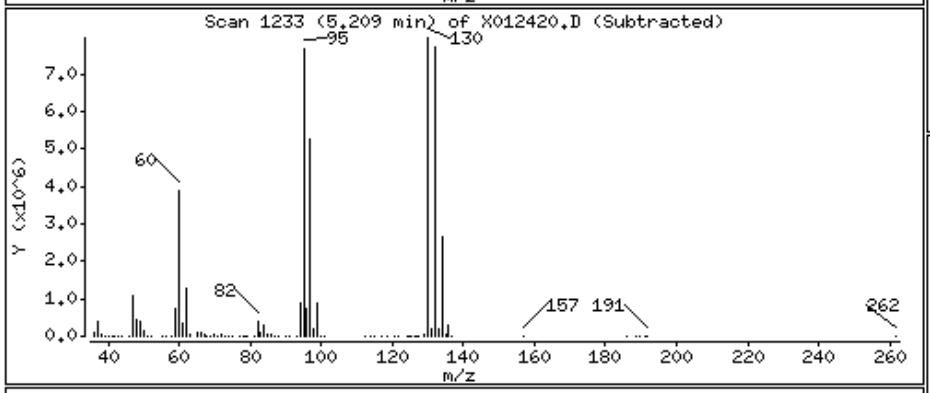
Sample Info: HS23010986-03;HS23010986-03;;;

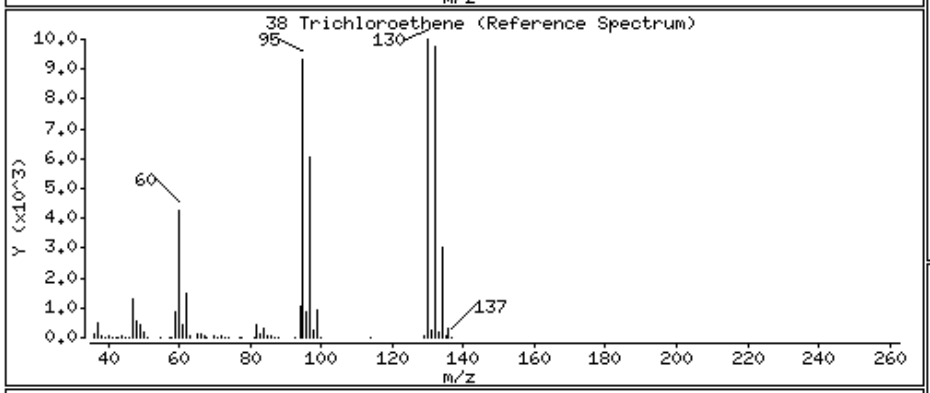
Purge Volume: 5.0 Operator: PC

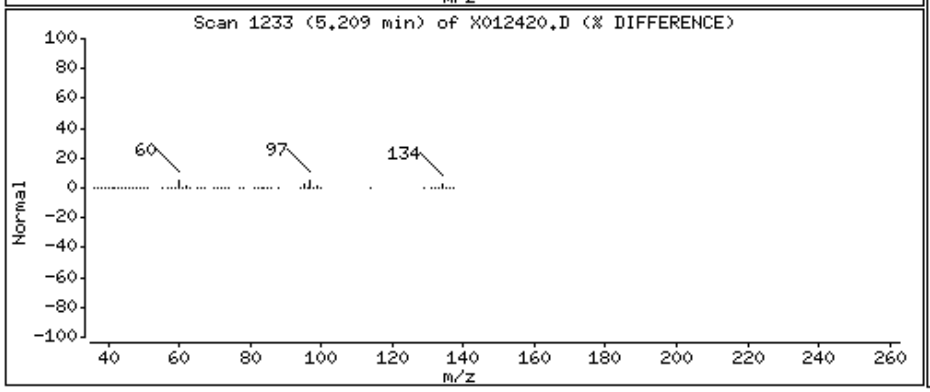
Column phase: DB624 Column diameter: 0.18

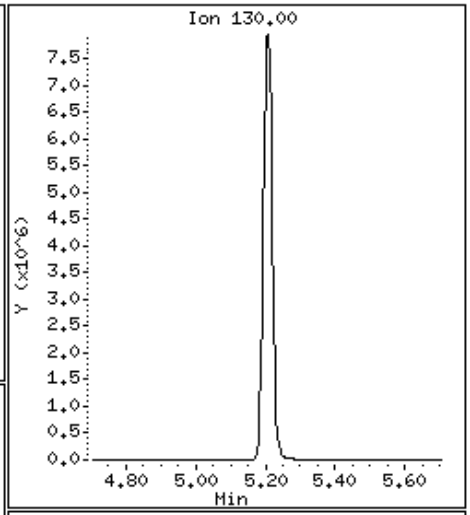
38 Trichloroethene Concentration: 2507.07 ug/l

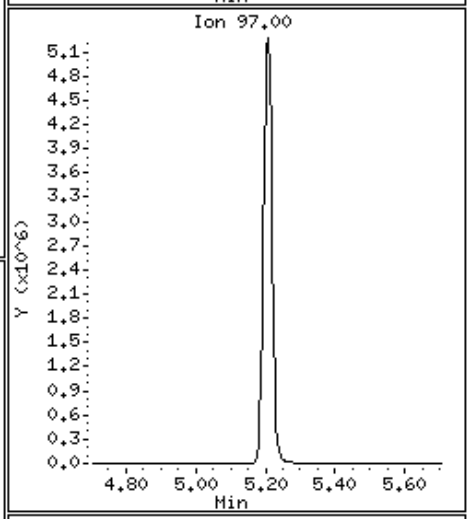


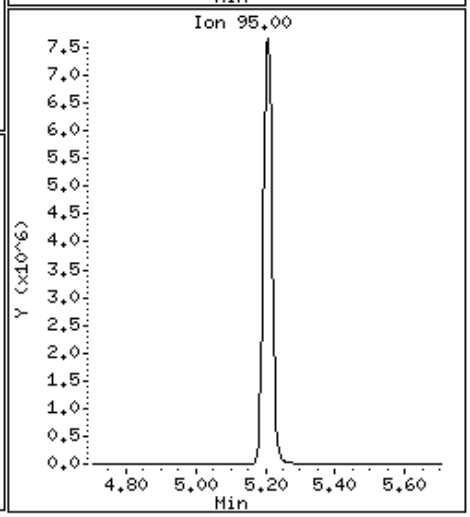












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D Page 7

Date : 24-JAN-2023 14:32

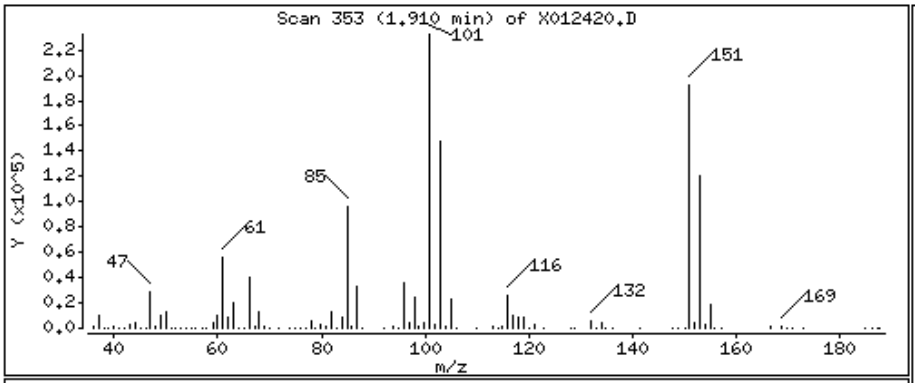
Client ID: HS23010986-03 Instrument: voa6.i

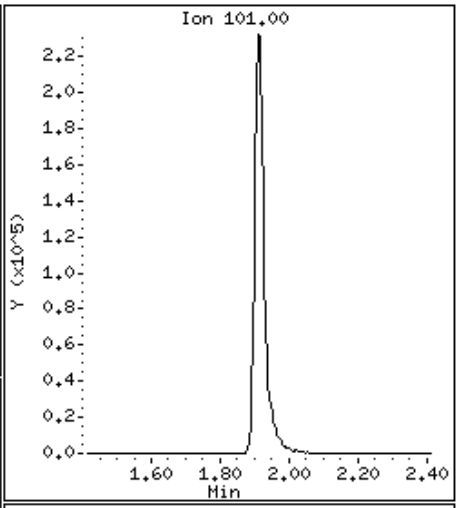
Sample Info: HS23010986-03;HS23010986-03;;;

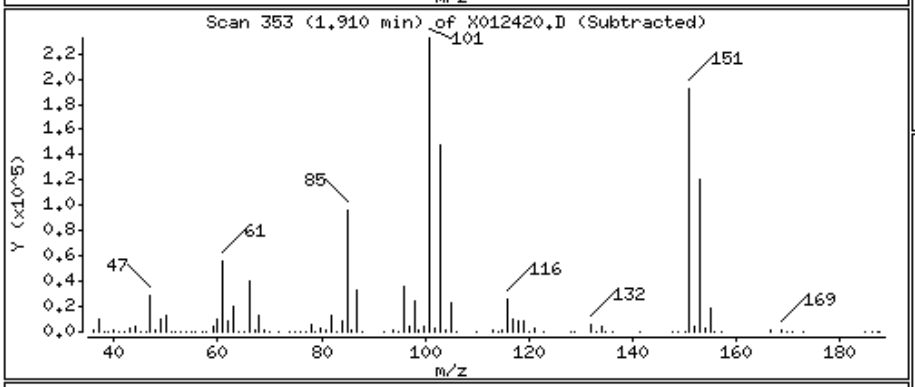
Purge Volume: 5.0 Operator: PC

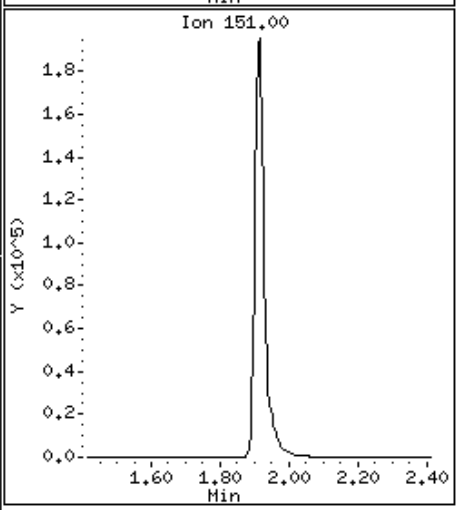
Column phase: DB624 Column diameter: 0.18

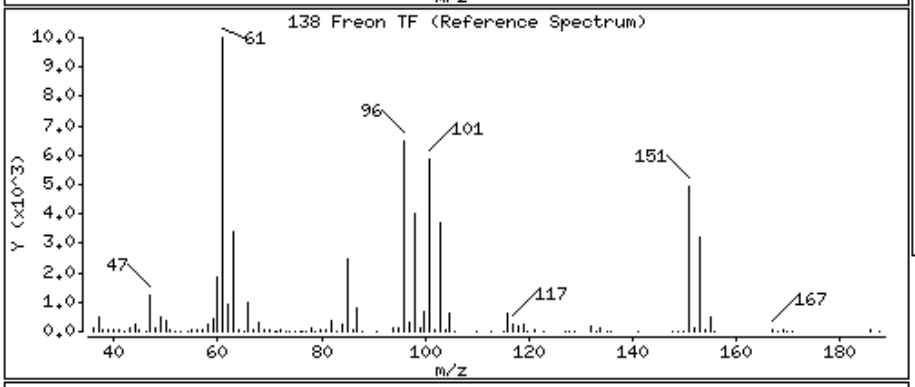
138 Freon TF Concentration: 105.73 ug/l

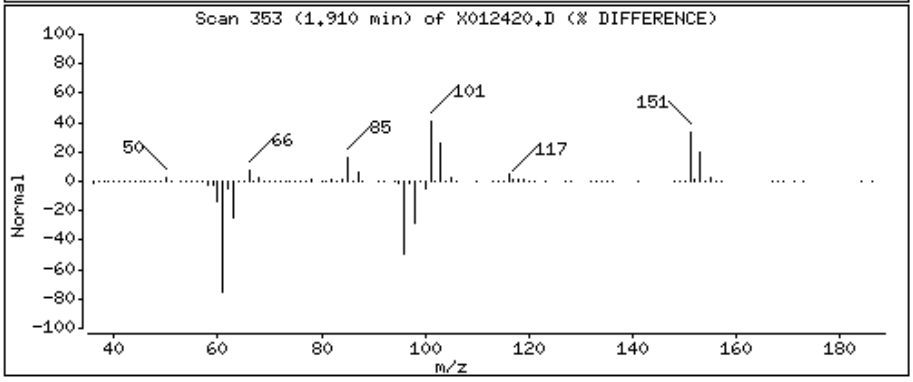












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012420.D
Inj Date : 24-JAN-2023 14:32
InstruID : voa6.i
LabSampID : HS23010986-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D
Lab Smp Id: HS23010986-04 Client Smp ID: HS23010986-04
Inj Date : 24-JAN-2023 14:53
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-04;HS23010986-04;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.178	4.178	(1.000)	597184	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	537883	103.107	103.10
	7 Chloroethane	64	1.400	1.400	(0.335)	10846	2.98705	2.98(H)
	11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	40151	8.85874	8.85
	20 trans-1,2-Dichloroethene	96	2.532	2.524	(0.606)	9214	1.81645	1.81
	27 cis-1,2-Dichloroethene	96	3.518	3.522	(0.842)	3562217	577.046	577.04(A)
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	260462	45.4078	45.40
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	17230	2.44603	2.44
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	299238	49.4451	49.44
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	859732	50.0000	
	38 Trichloroethene	130	5.208	5.205	(1.050)	13677634	2348.89	2348.88(A)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	750625	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	982659	52.9779	52.97
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	343668	49.5693	49.56
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	392042	50.0000	
	138 Freon TF	101	1.913	1.910	(0.458)	181431	41.3876	41.38
M	94 1,2-Dichloroethylene (total)	96				3571431	578.863	578.86

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D

Date : 24-JAN-2023 14:53

Client ID: HS23010986-04

Instrument: voa6.i

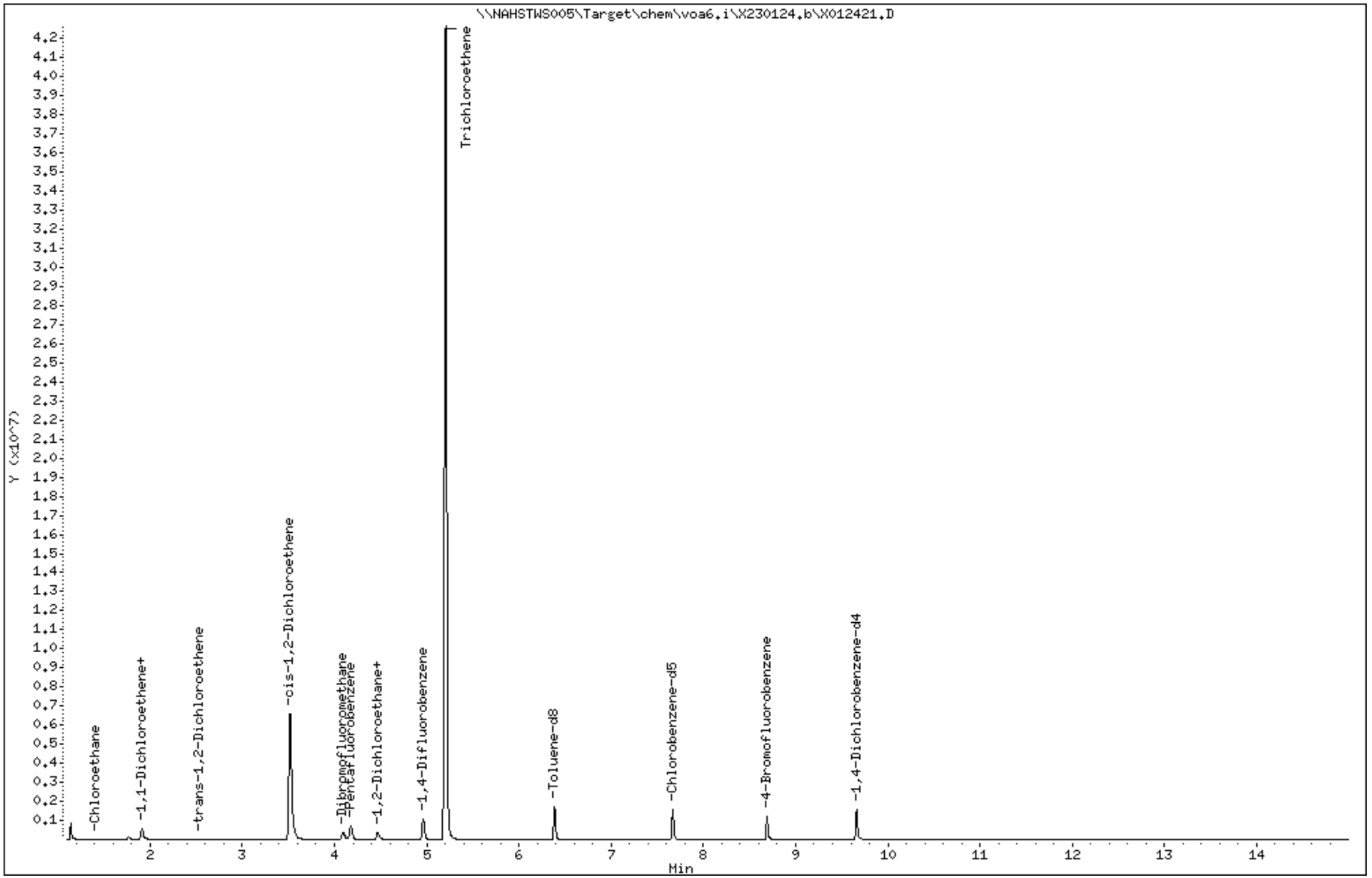
Sample Info: HS23010986-04;HS23010986-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D

Date : 24-JAN-2023 14:53

Client ID: HS23010986-04

Instrument: voa6.i

Sample Info: HS23010986-04;HS23010986-04;;;

Purge Volume: 5.0

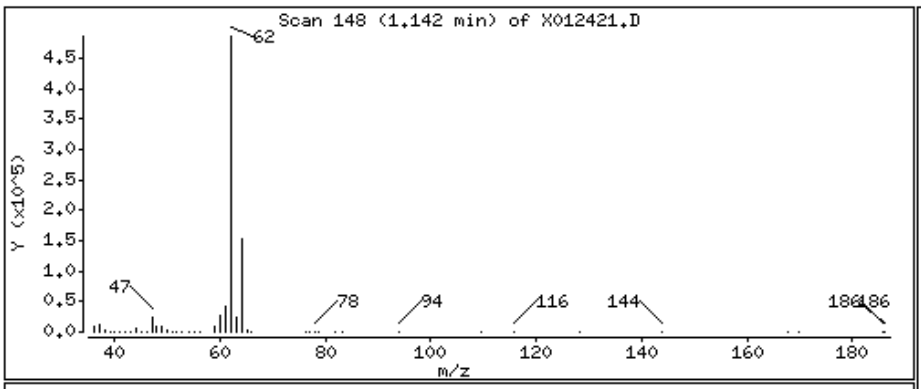
Operator: PC

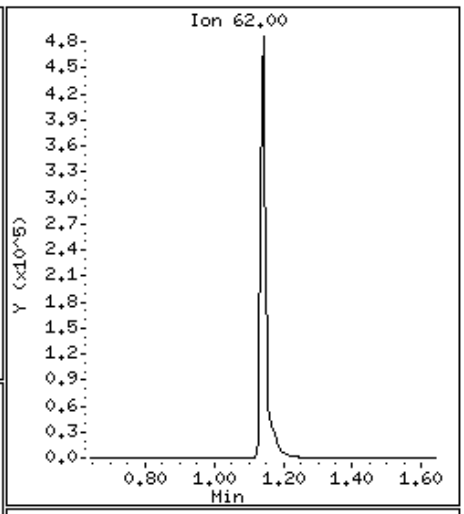
Column phase: DB624

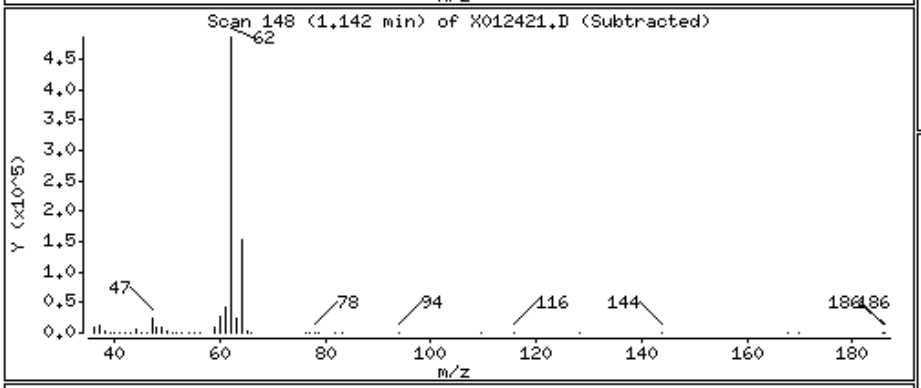
Column diameter: 0.18

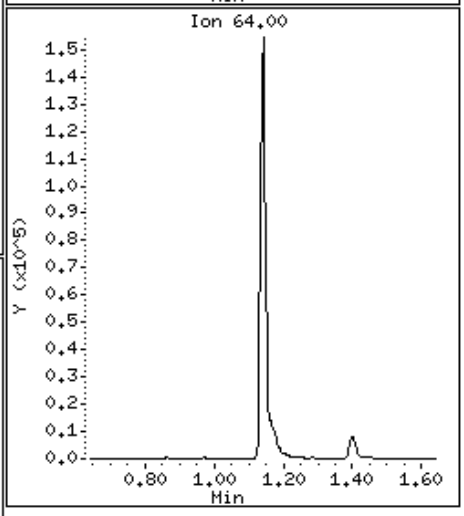
5 Vinyl Chloride

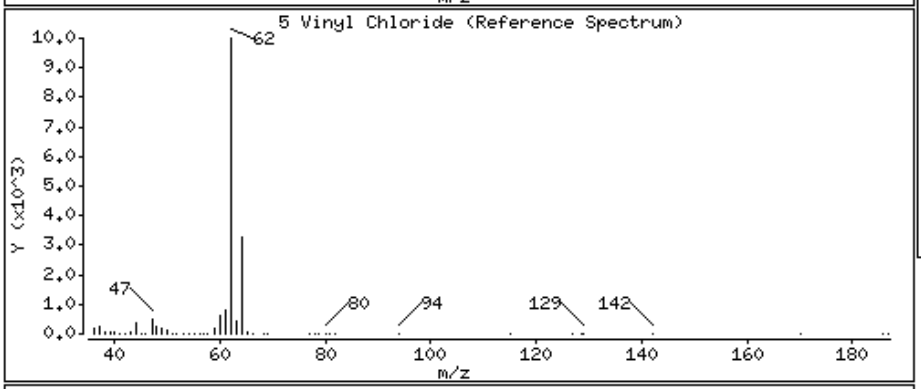
Concentration: 103.10 ug/l

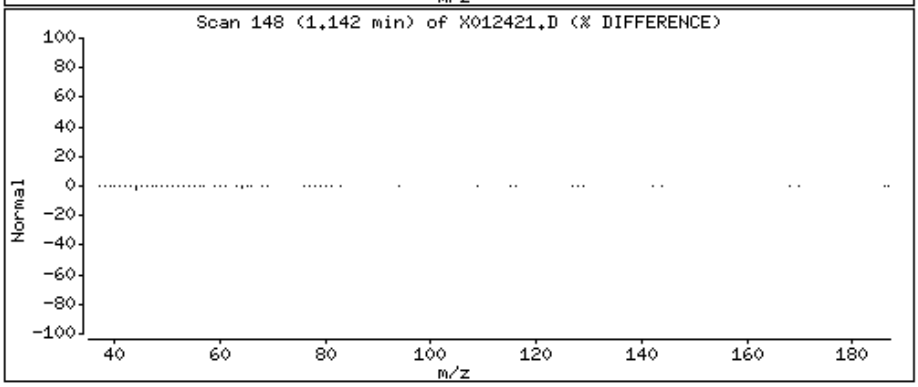












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D Page 3

Date : 24-JAN-2023 14:53

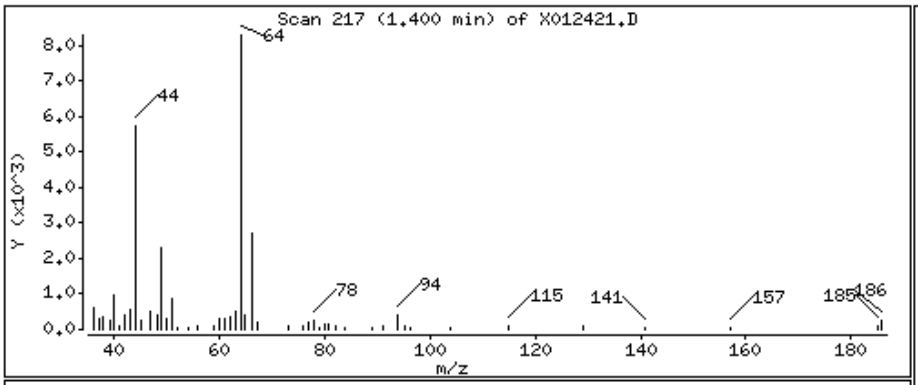
Client ID: HS23010986-04 Instrument: voa6.i

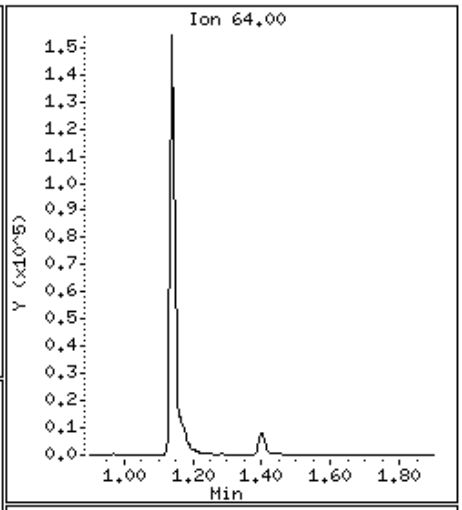
Sample Info: HS23010986-04;HS23010986-04;;;

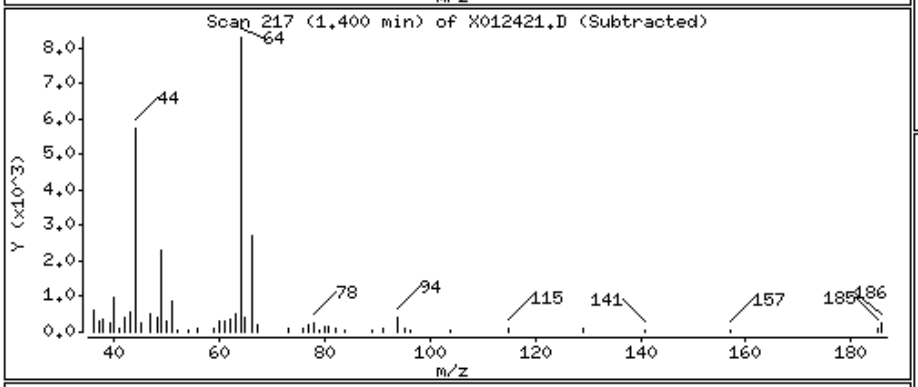
Purge Volume: 5.0 Operator: PC

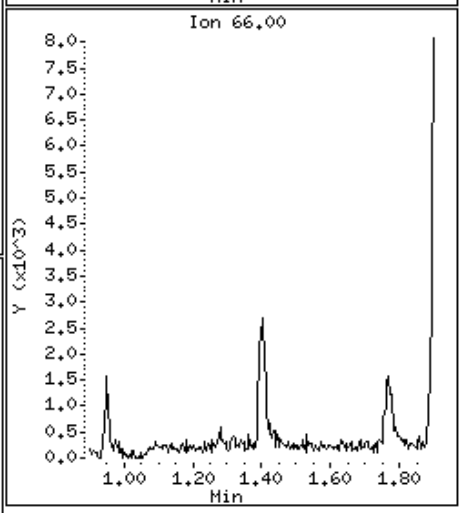
Column phase: DB624 Column diameter: 0.18

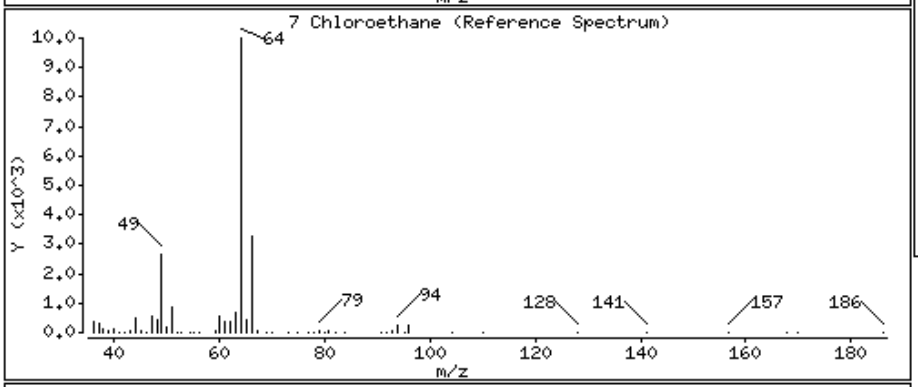
7 Chloroethane Concentration: 2.98 ug/l

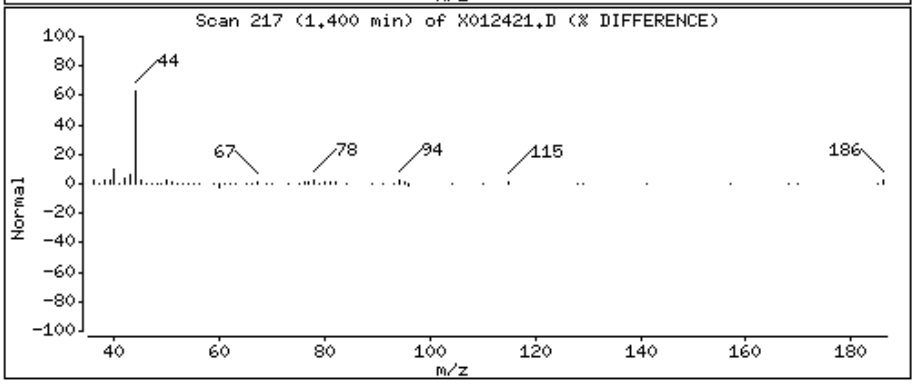












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D Page 4

Date : 24-JAN-2023 14:53

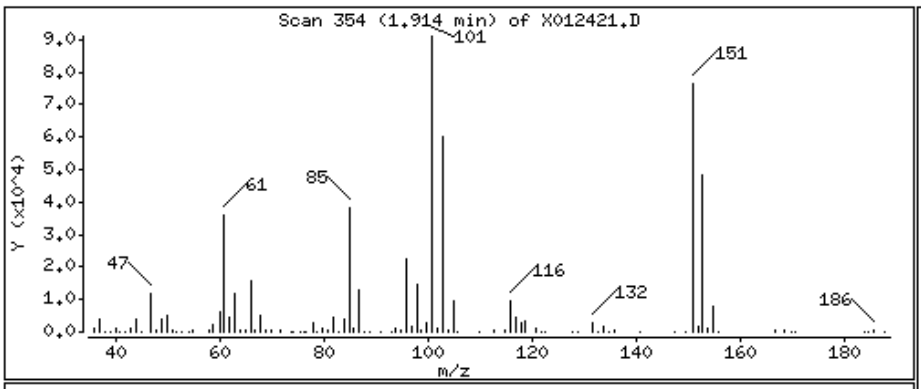
Client ID: HS23010986-04 Instrument: voa6.i

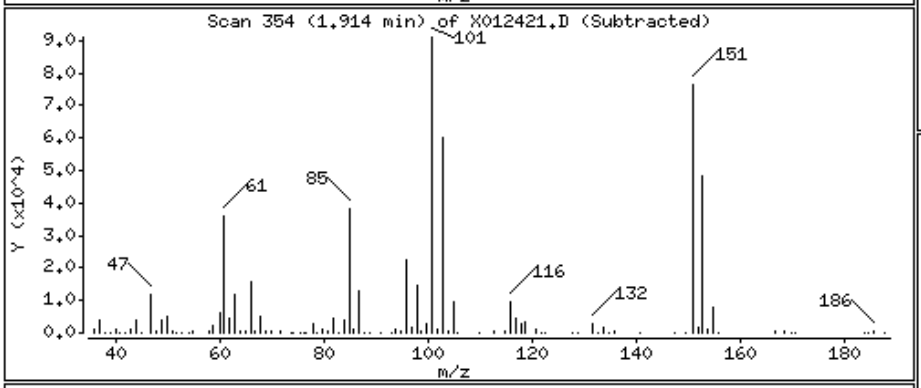
Sample Info: HS23010986-04;HS23010986-04;;;

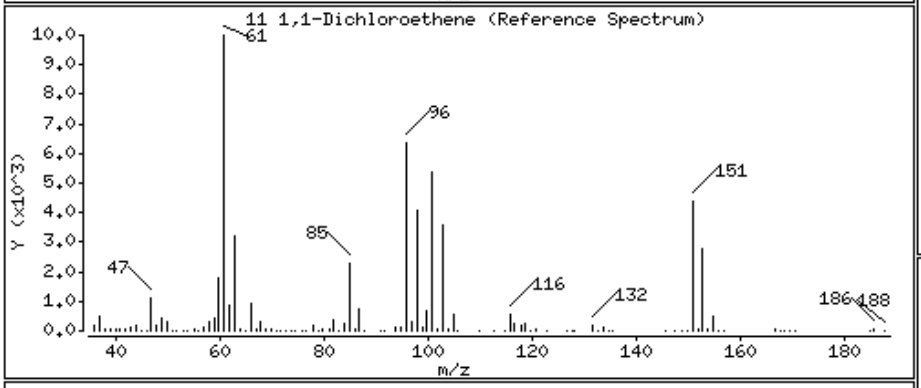
Purge Volume: 5.0 Operator: PC

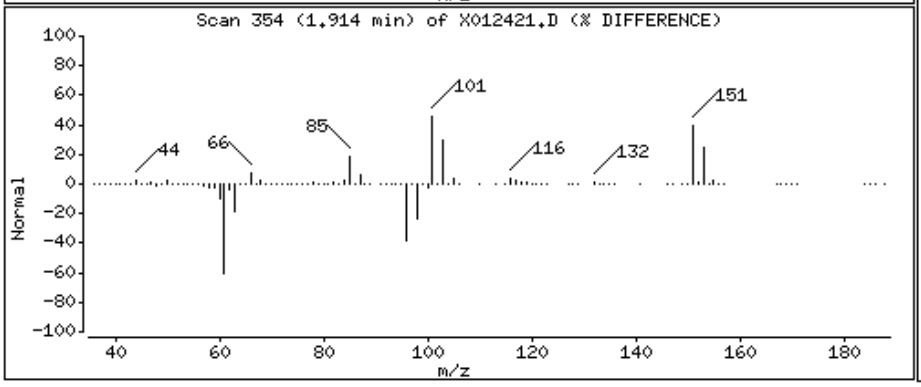
Column phase: DB624 Column diameter: 0.18

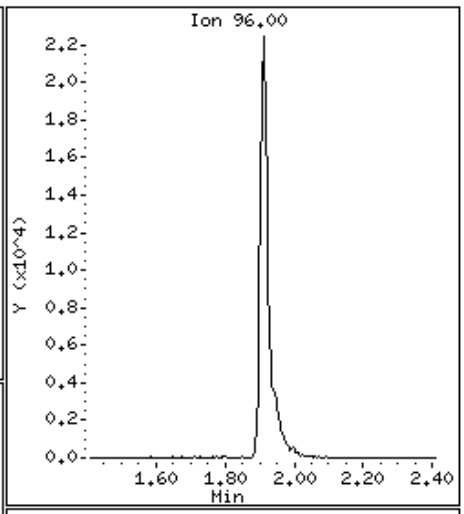
11 1,1-Dichloroethene Concentration: 8.85 ug/l

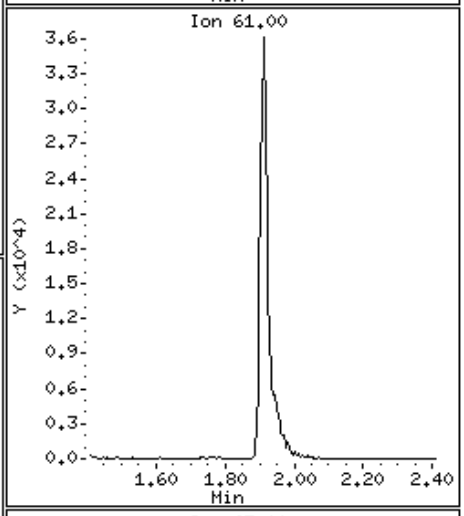


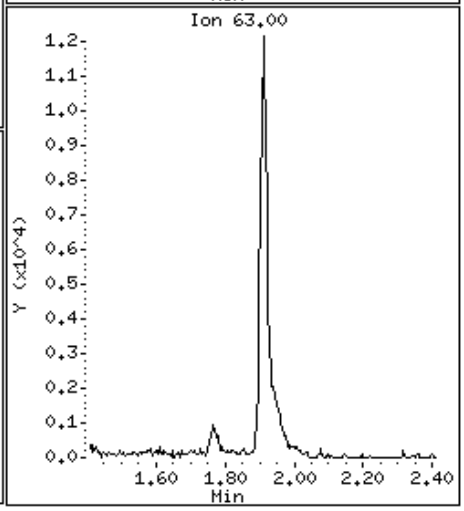












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D Page 5

Date : 24-JAN-2023 14:53

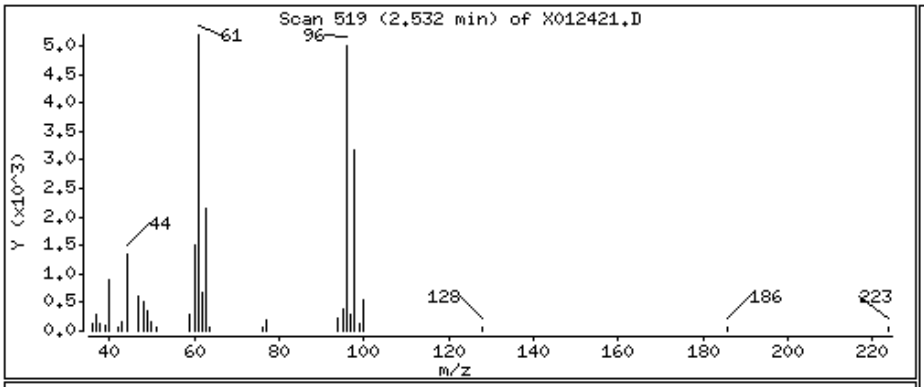
Client ID: HS23010986-04 Instrument: voa6.i

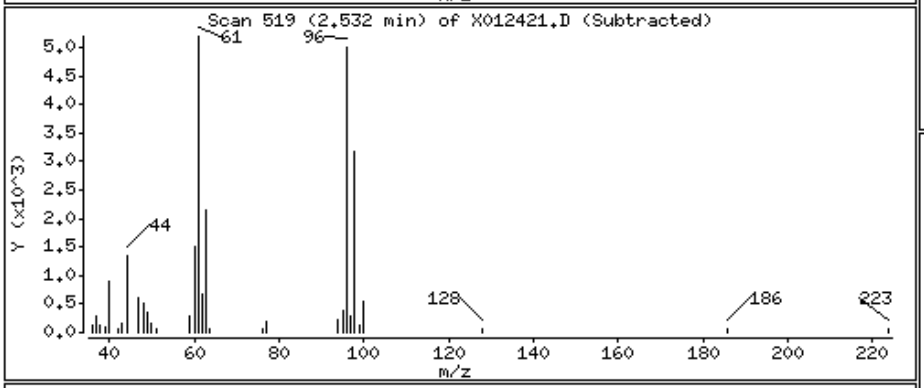
Sample Info: HS23010986-04;HS23010986-04;;;

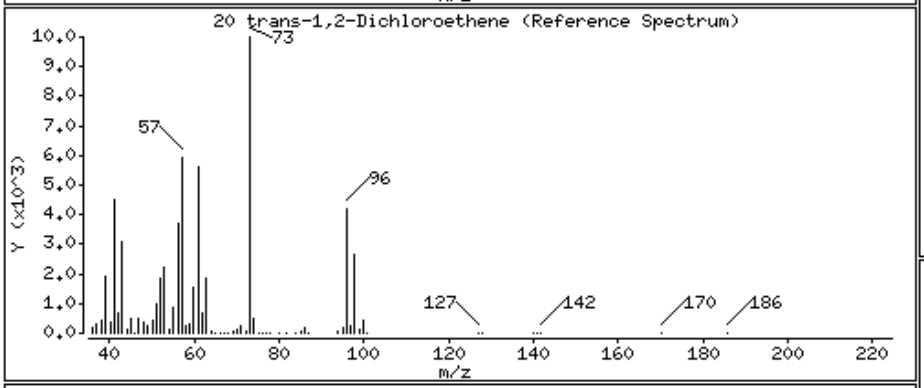
Purge Volume: 5.0 Operator: PC

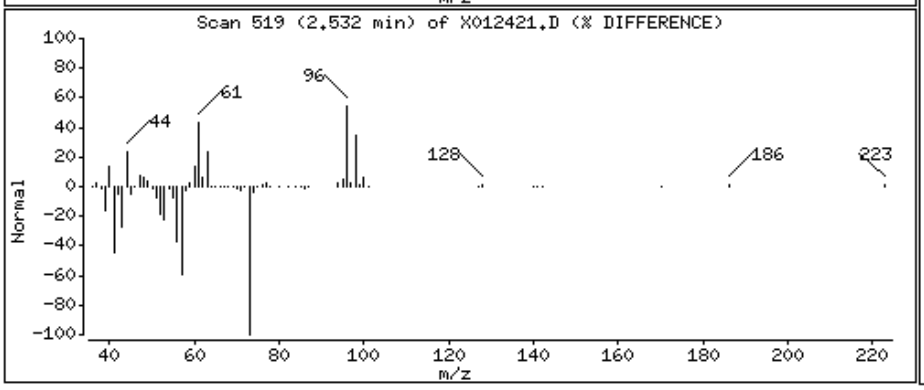
Column phase: DB624 Column diameter: 0.18

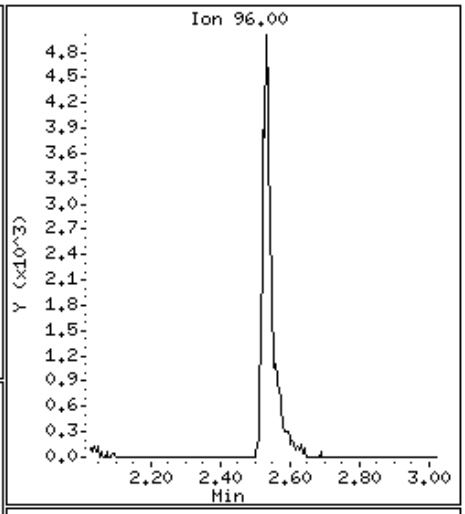
20 trans-1,2-Dichloroethene Concentration: 1.81 ug/l

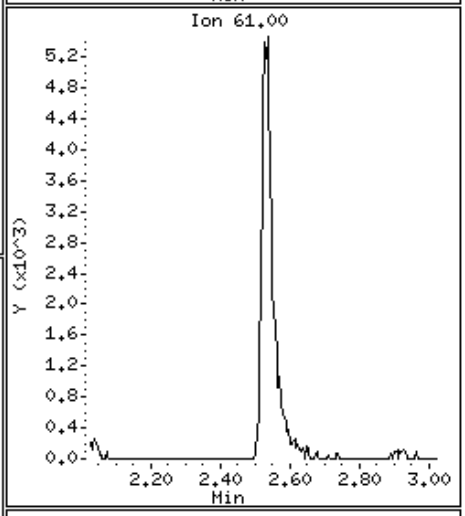


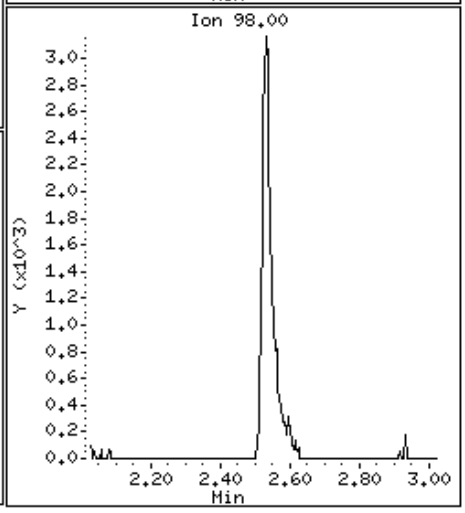












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D

Date : 24-JAN-2023 14:53

Client ID: HS23010986-04

Instrument: voa6.i

Sample Info: HS23010986-04;HS23010986-04;;;

Purge Volume: 5.0

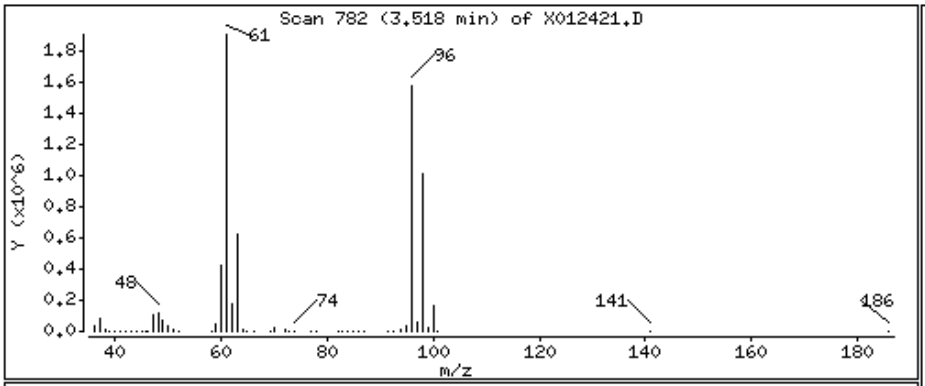
Operator: PC

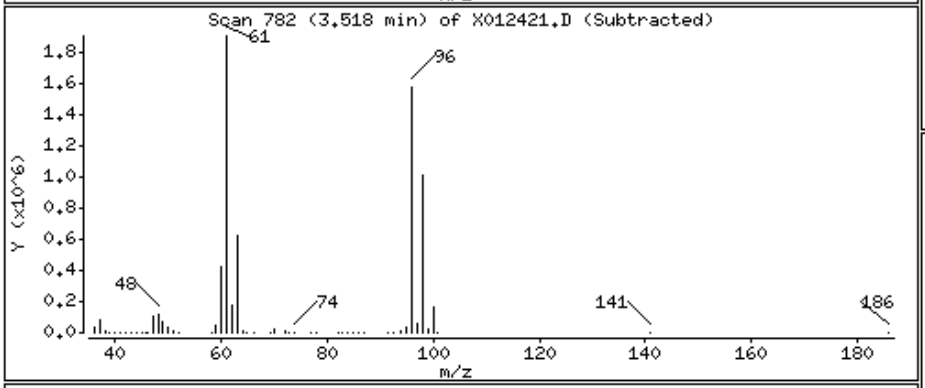
Column phase: DB624

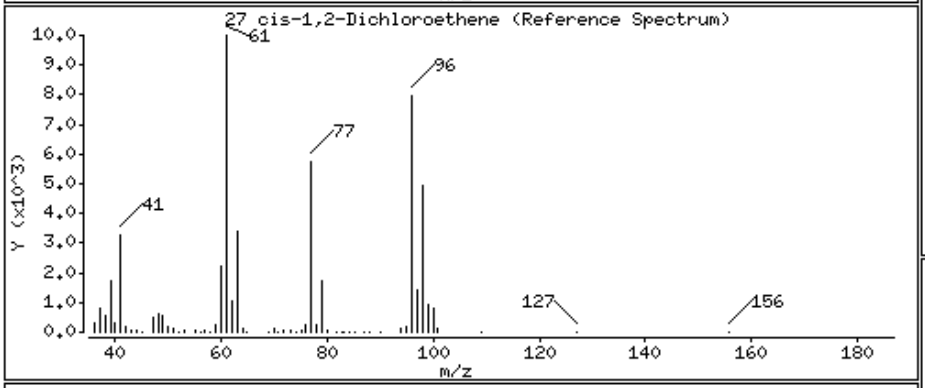
Column diameter: 0.18

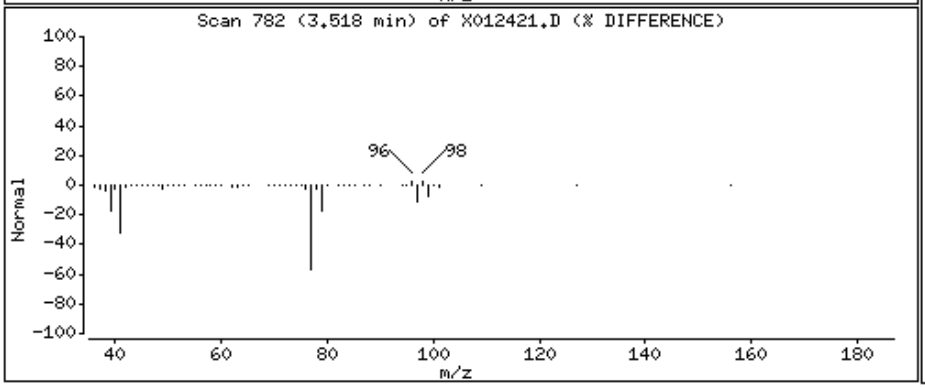
27 cis-1,2-Dichloroethene

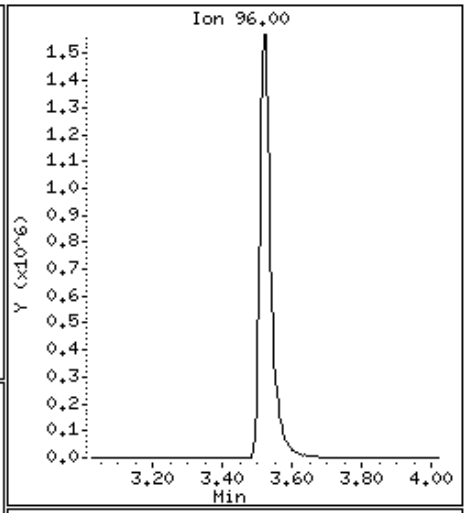
Concentration: 577.04 ug/l

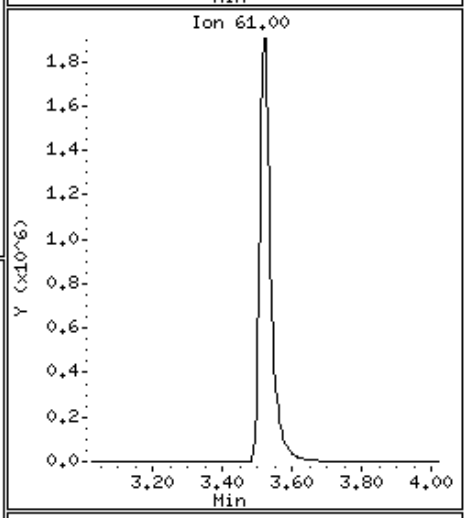


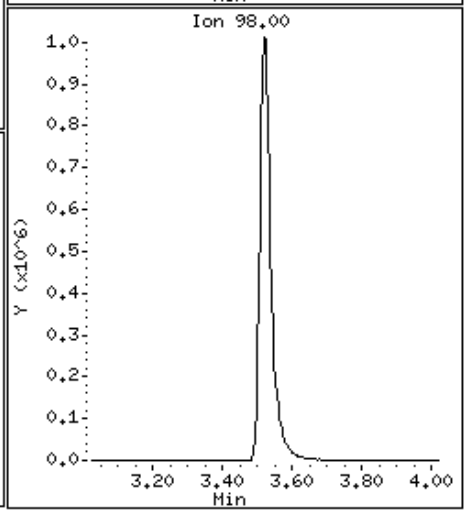












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D

Date : 24-JAN-2023 14:53

Client ID: HS23010986-04

Instrument: voa6.i

Sample Info: HS23010986-04;HS23010986-04;;;

Purge Volume: 5.0

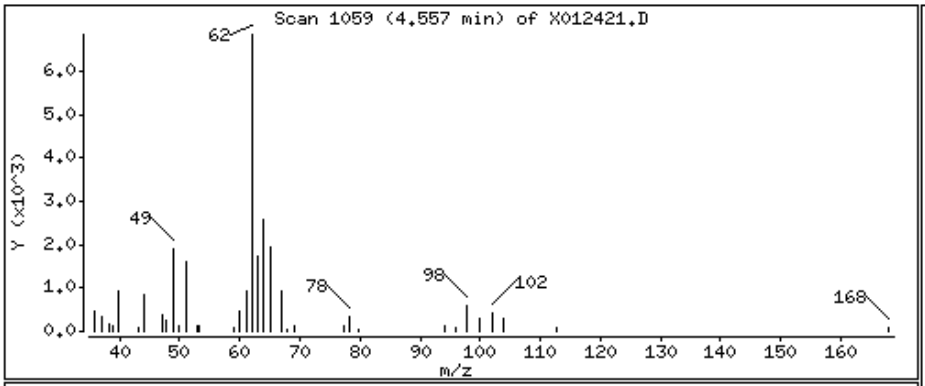
Operator: PC

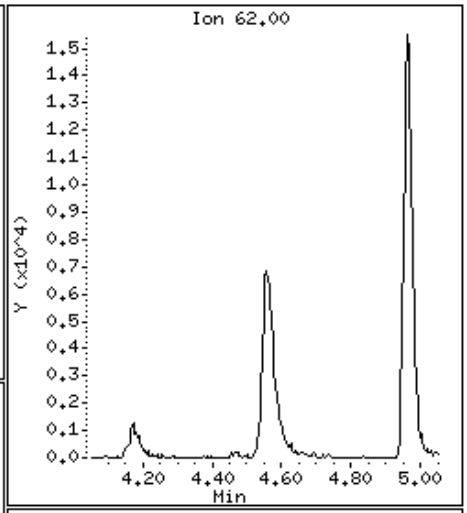
Column phase: DB624

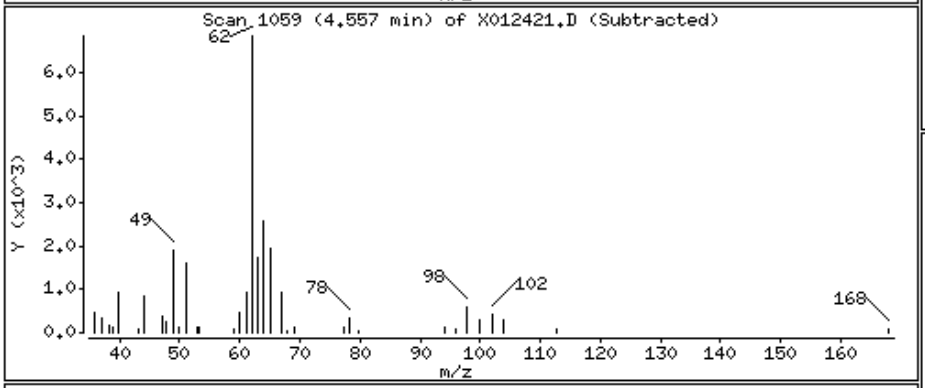
Column diameter: 0.18

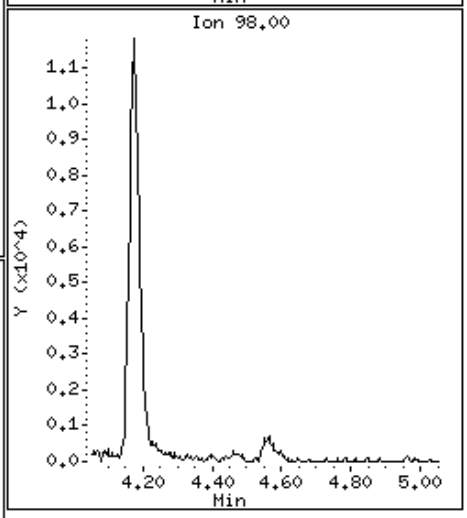
33 1,2-Dichloroethane

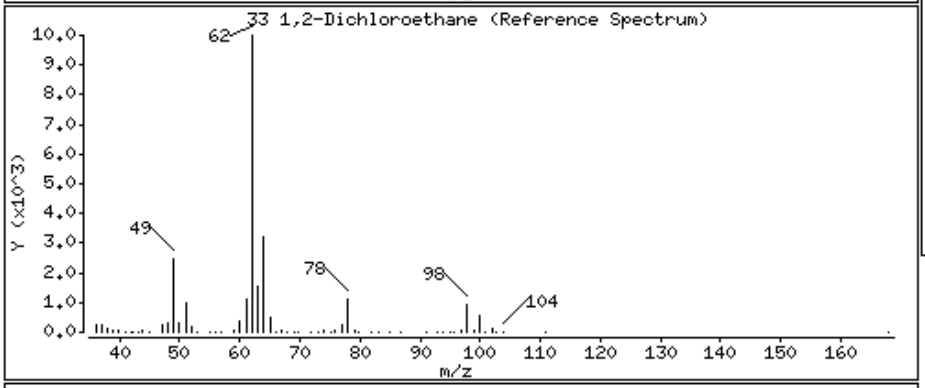
Concentration: 2.44 ug/l

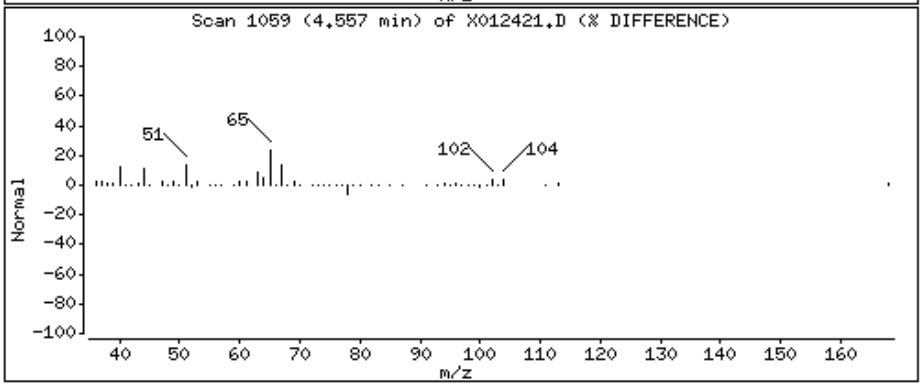












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D Page 8

Date : 24-JAN-2023 14:53

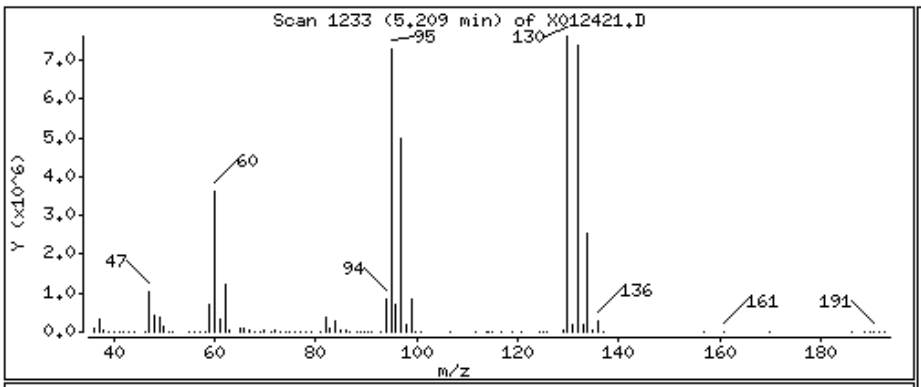
Client ID: HS23010986-04 Instrument: voa6.i

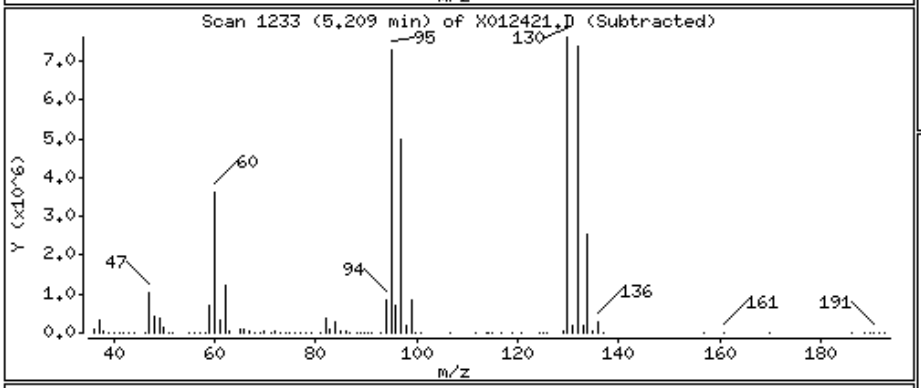
Sample Info: HS23010986-04;HS23010986-04;;;

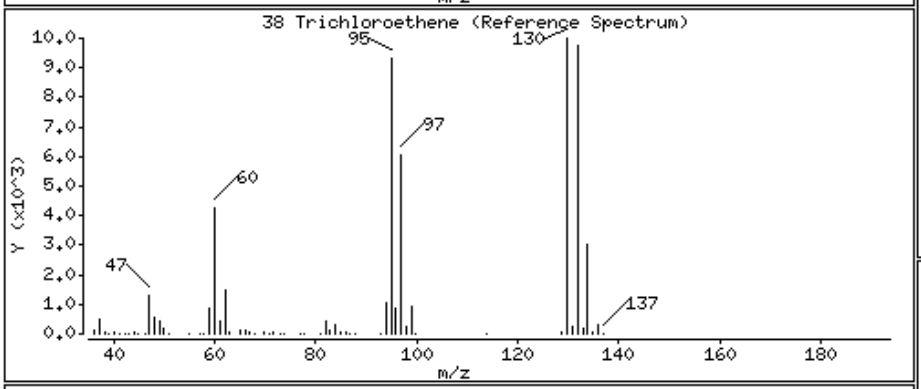
Purge Volume: 5.0 Operator: PC

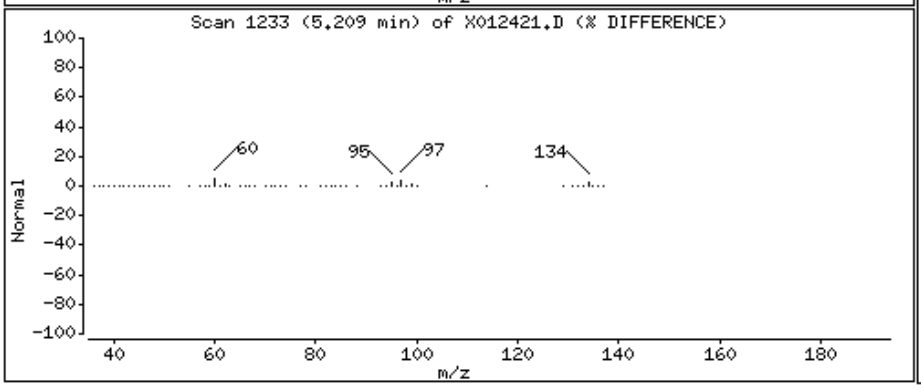
Column phase: DB624 Column diameter: 0.18

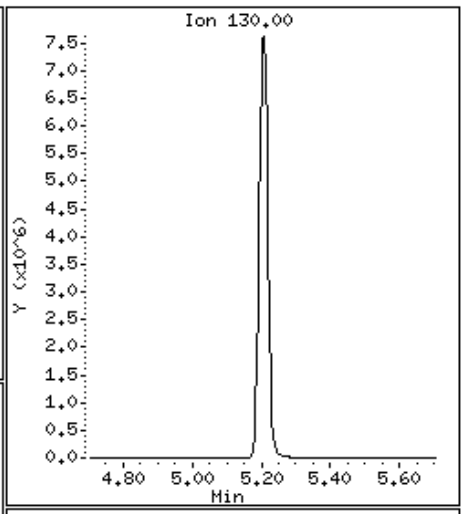
38 Trichloroethene Concentration: 2348.88 ug/l

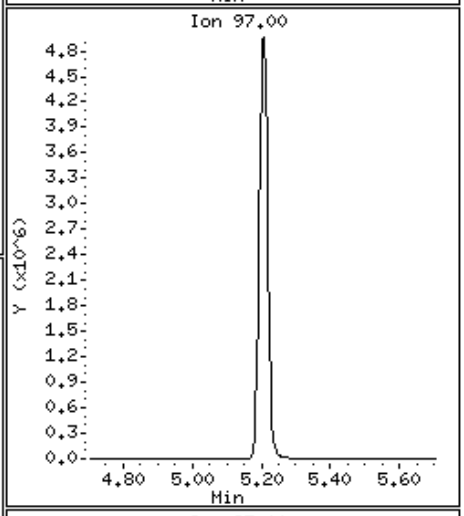


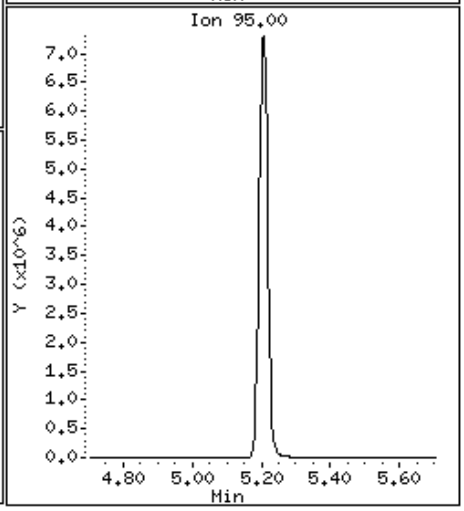












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D Page 9

Date : 24-JAN-2023 14:53

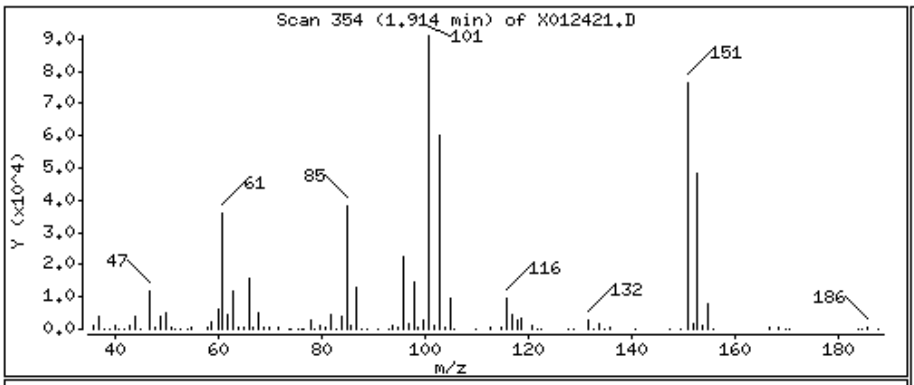
Client ID: HS23010986-04 Instrument: voa6.i

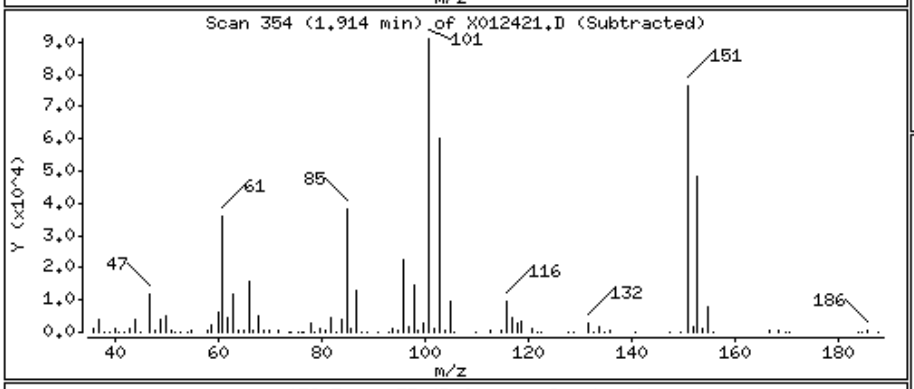
Sample Info: HS23010986-04;HS23010986-04;;;

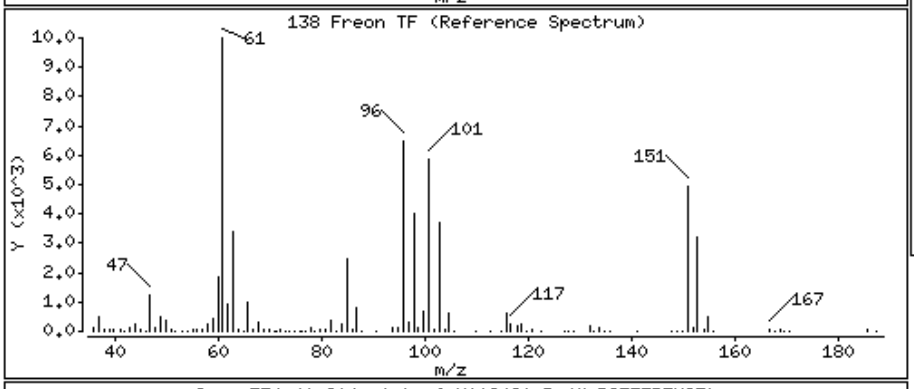
Purge Volume: 5.0 Operator: PC

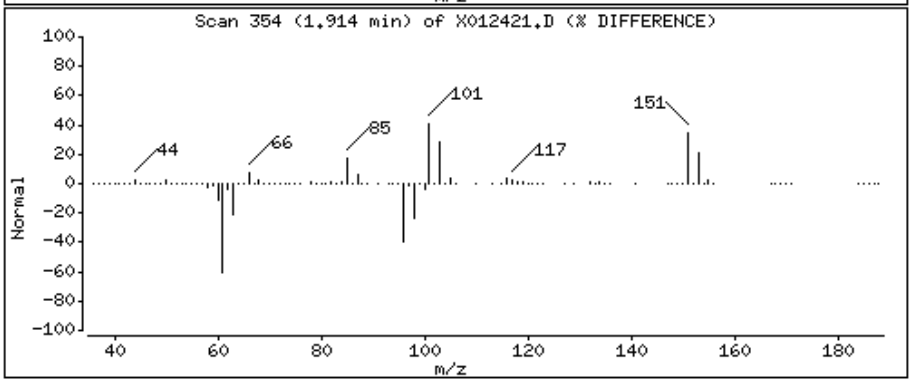
Column phase: DB624 Column diameter: 0.18

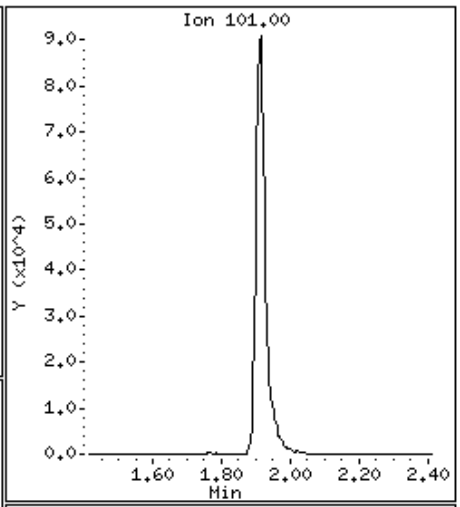
138 Freon TF Concentration: 41.38 ug/l

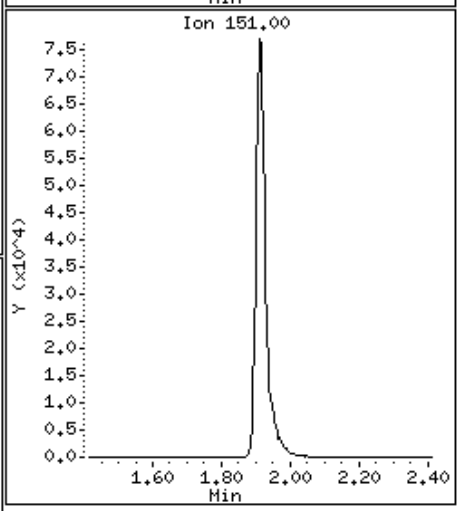












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012421.D
Inj Date : 24-JAN-2023 14:53
InstruID : voa6.i
LabSampID : HS23010986-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D
Lab Smp Id: HS23010986-01 Client Smp ID: HS23010986-01
Inj Date : 24-JAN-2023 15:14
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-01;HS23010986-01;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 22
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

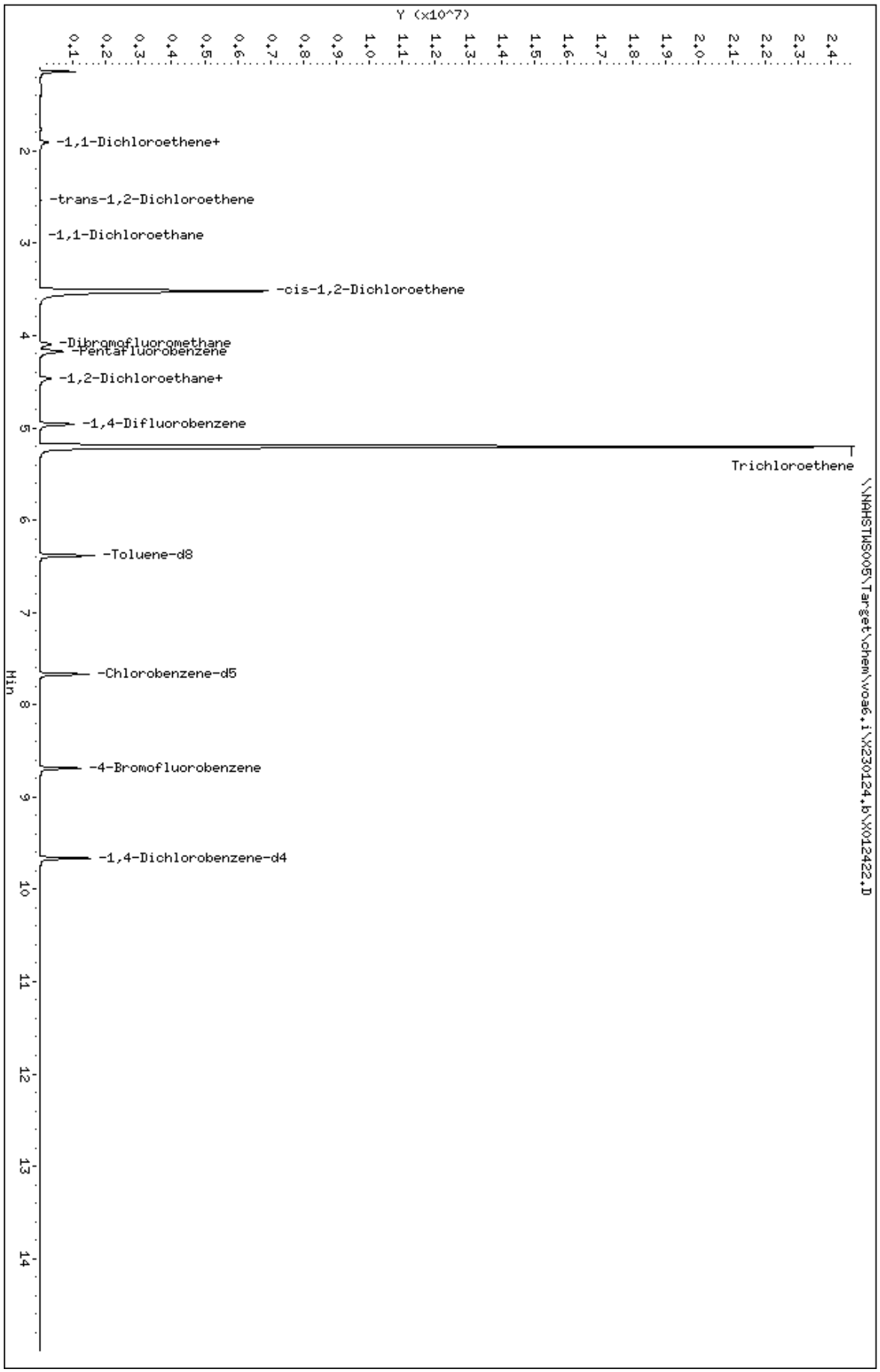
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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	4.174	4.178	(1.000)	579488	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	731201	144.445	722.22
	11 1,1-Dichloroethene	96	1.906	1.910	(0.457)	21638	4.91990	24.59
	20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.606)	8608	1.74881	8.74
	22 1,1-Dichloroethane	63	2.925	2.918	(0.701)	5423	0.62777	3.13
	27 cis-1,2-Dichloroethene	96	3.518	3.522	(0.843)	3819557	637.628	3188.13(A)
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	243197	43.6863	43.68
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	6004	0.88581	4.42
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	280656	47.7999	47.79
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	827258	50.0000	
	38 Trichloroethene	130	5.205	5.205	(1.049)	7724286	1378.58	6892.89(A)
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	728430	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	952658	52.9254	52.92
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	336914	50.0752	50.07
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	379166	50.0000	
	138 Freon TF	101	1.910	1.910	(0.458)	78463	18.4454	92.22
M	94 1,2-Dichloroethylene (total)	96				3828165	639.376	3196.88

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D
Date : 24-JAN-2023 15:14
Client ID: HS23010986-01
Sample Info: HS23010986-01;HS23010986-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D

Date : 24-JAN-2023 15:14

Client ID: HS23010986-01

Instrument: voa6.i

Sample Info: HS23010986-01;HS23010986-01;;;

Purge Volume: 5.0

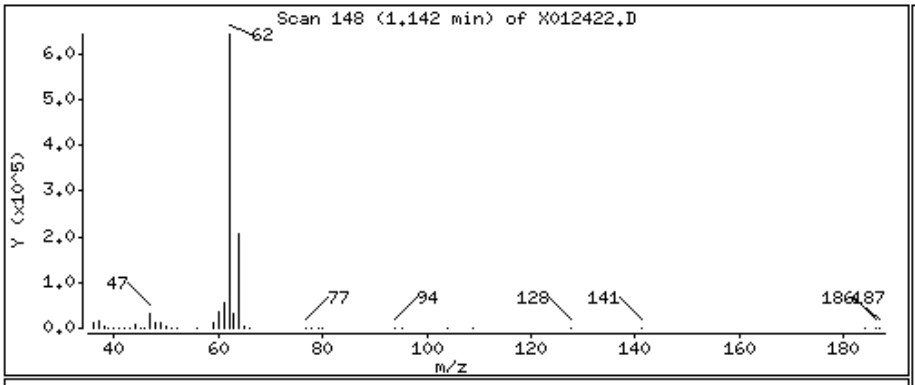
Operator: PC

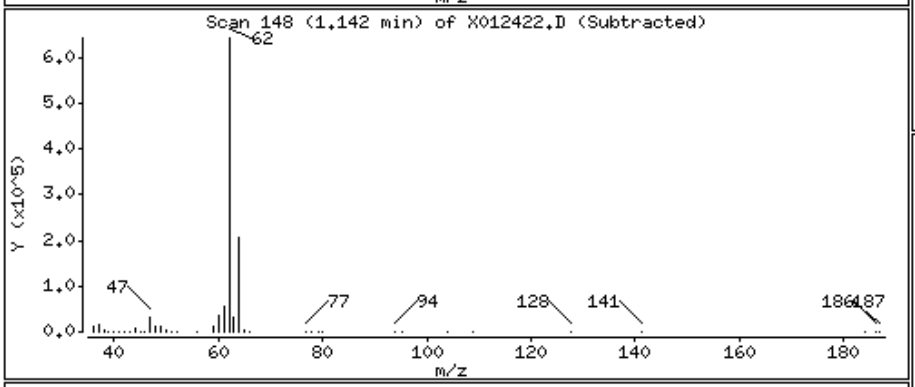
Column phase: DB624

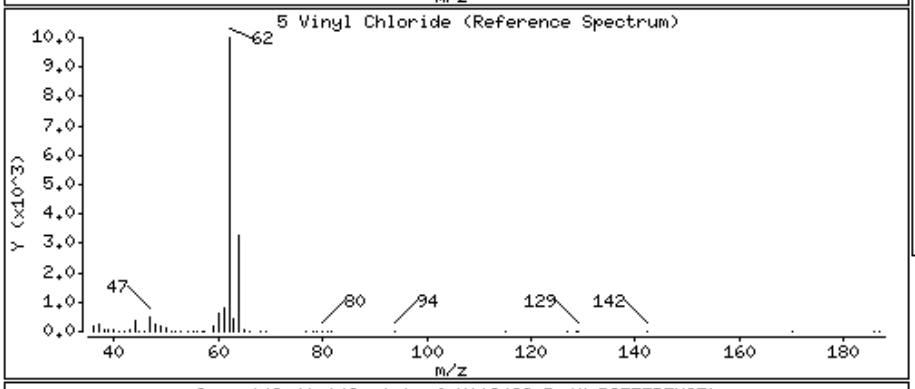
Column diameter: 0.18

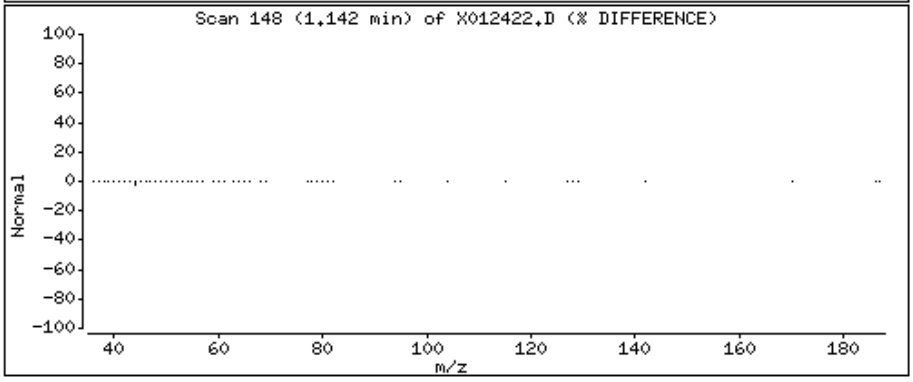
5 Vinyl Chloride

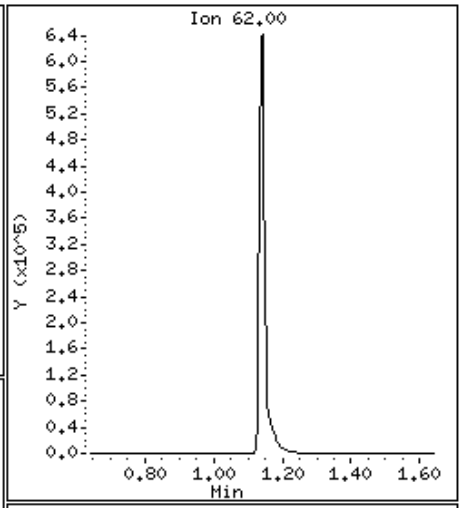
Concentration: 722.22 ug/l

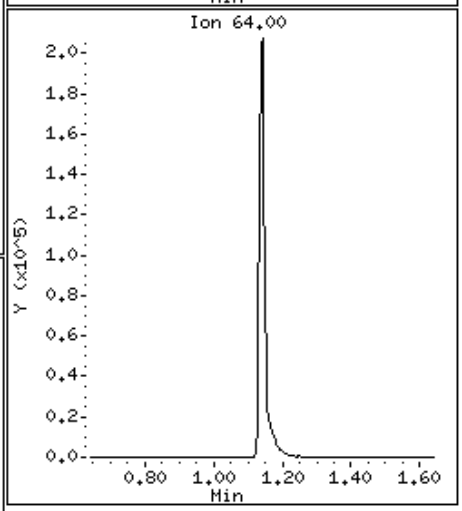












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D Page 3

Date : 24-JAN-2023 15:14

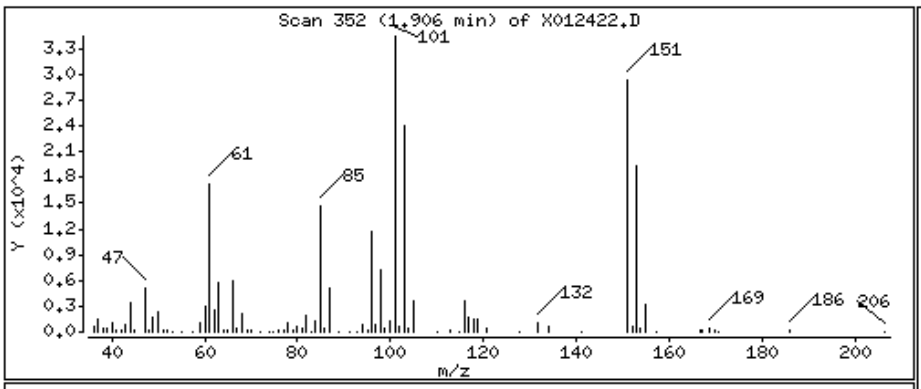
Client ID: HS23010986-01 Instrument: voa6.i

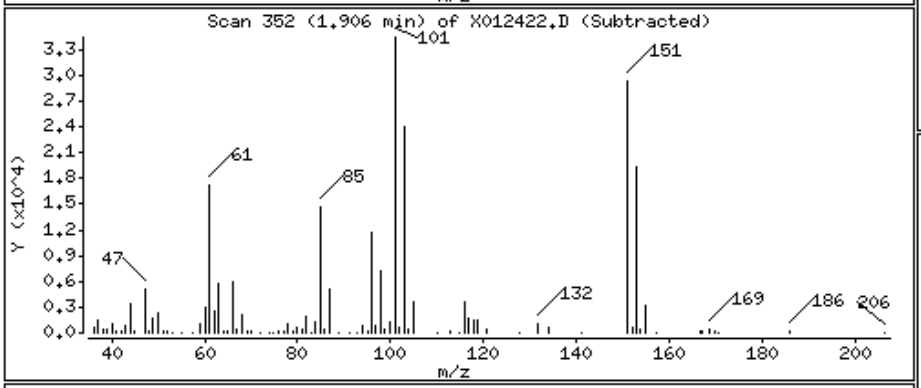
Sample Info: HS23010986-01;HS23010986-01;;;

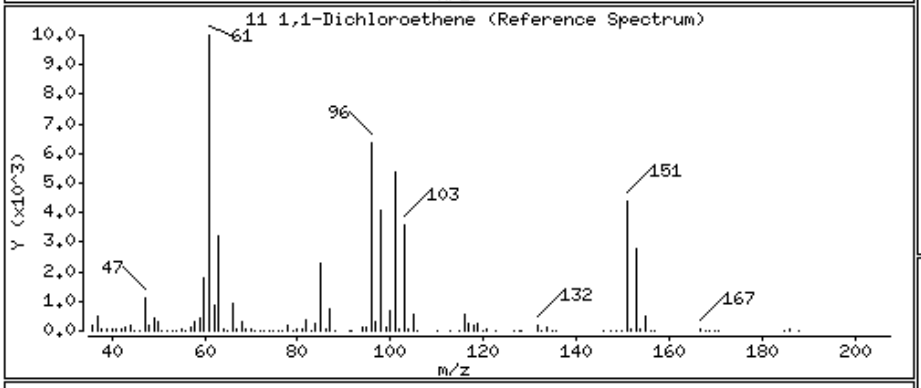
Purge Volume: 5.0 Operator: PC

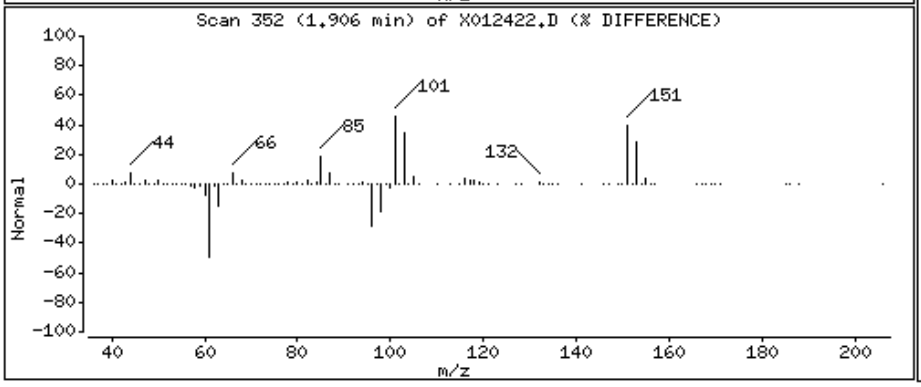
Column phase: DB624 Column diameter: 0.18

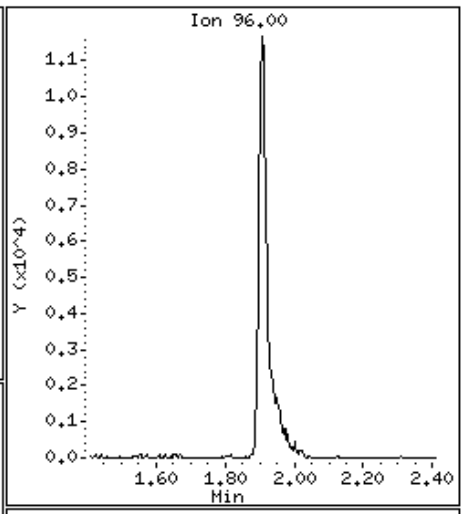
11 1,1-Dichloroethene Concentration: 24.59 ug/l

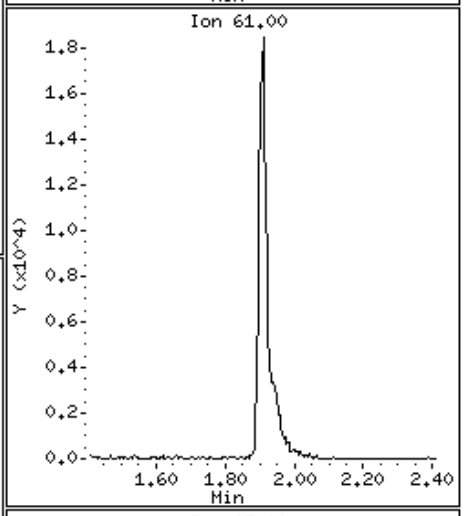


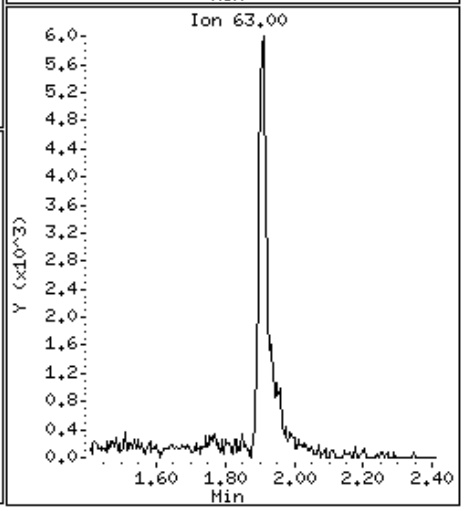












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D

Date : 24-JAN-2023 15:14

Client ID: HS23010986-01

Instrument: voa6.i

Sample Info: HS23010986-01;HS23010986-01;;;

Purge Volume: 5.0

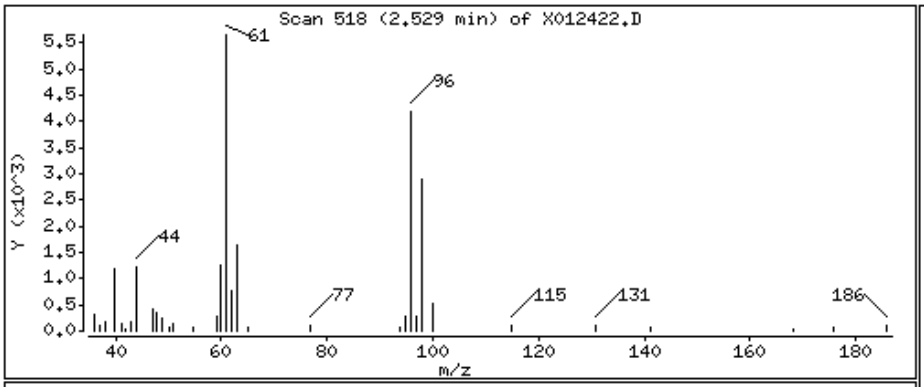
Operator: PC

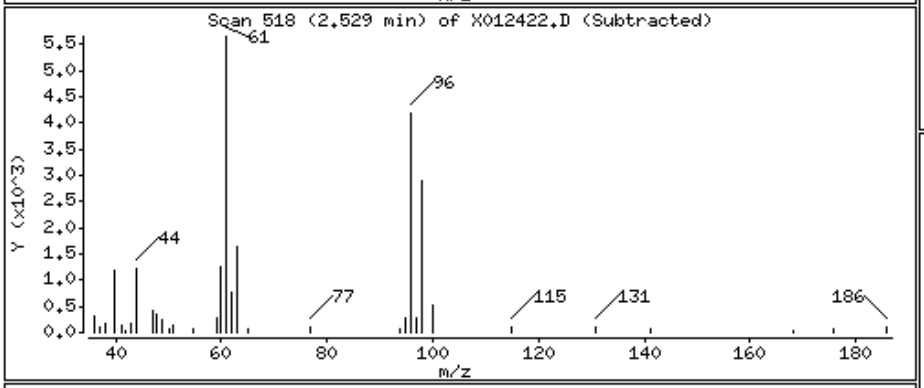
Column phase: DB624

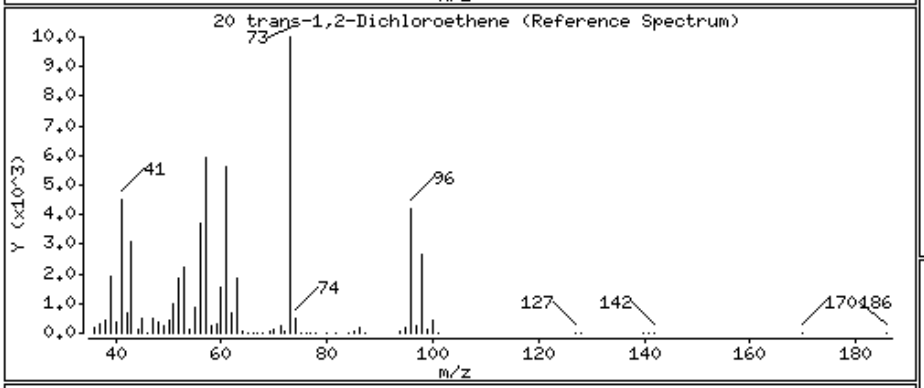
Column diameter: 0.18

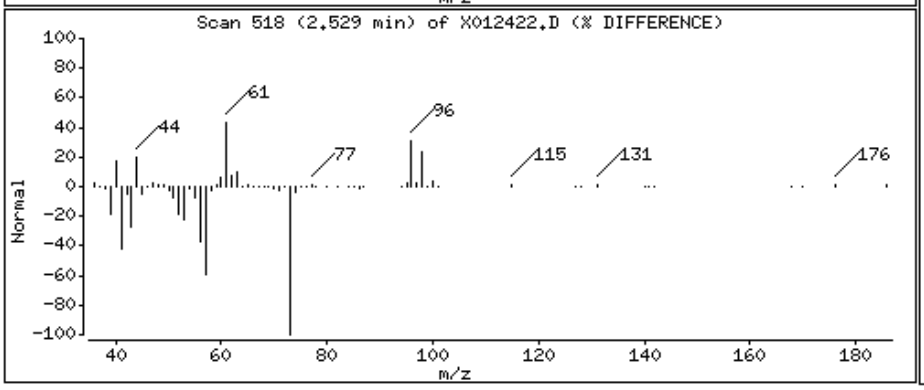
20 trans-1,2-Dichloroethene

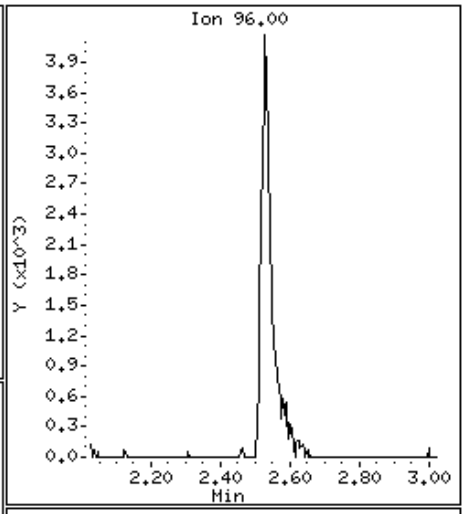
Concentration: 8.74 ug/l

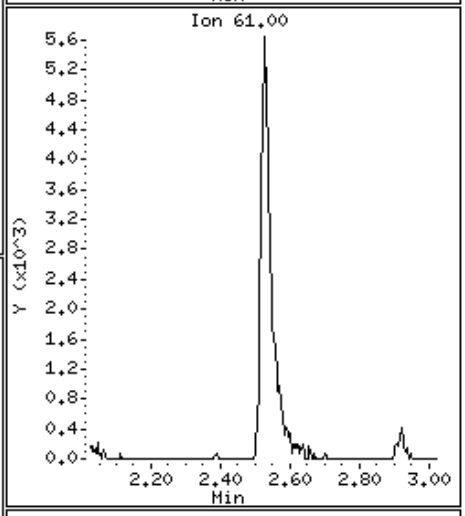


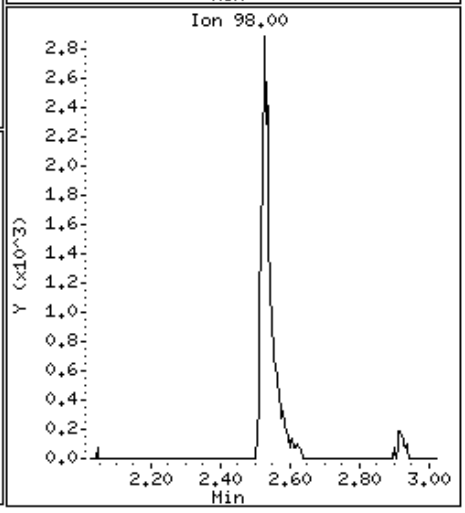












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D Page 5

Date : 24-JAN-2023 15:14

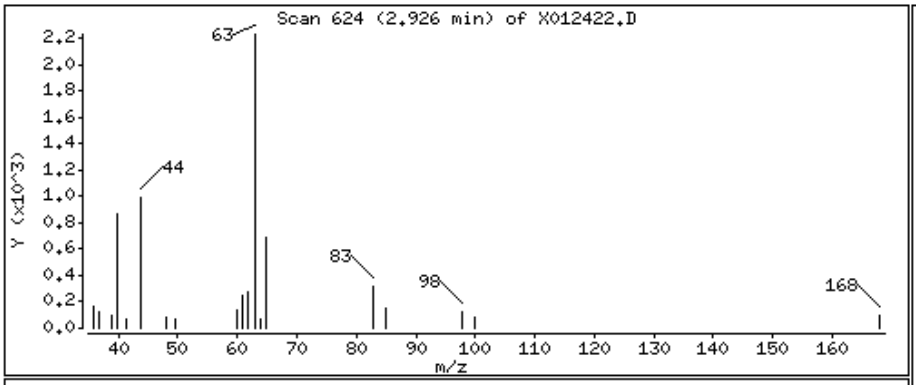
Client ID: HS23010986-01 Instrument: voa6.i

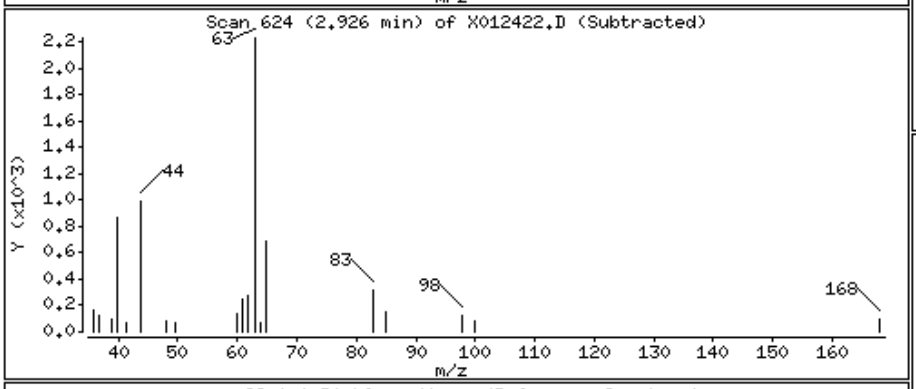
Sample Info: HS23010986-01;HS23010986-01;;;

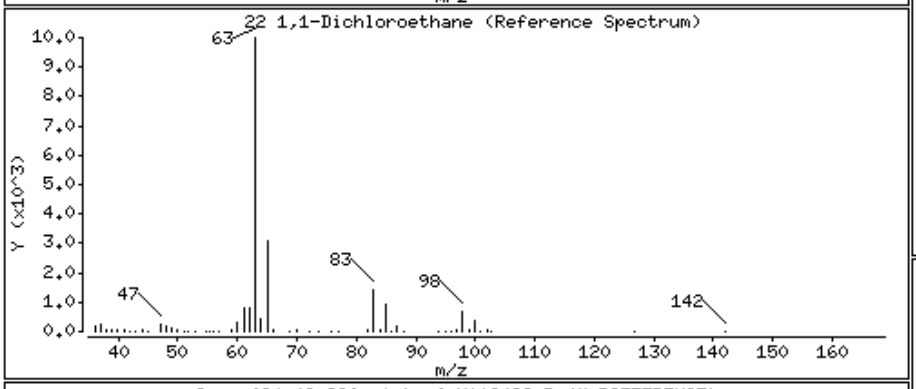
Purge Volume: 5.0 Operator: PC

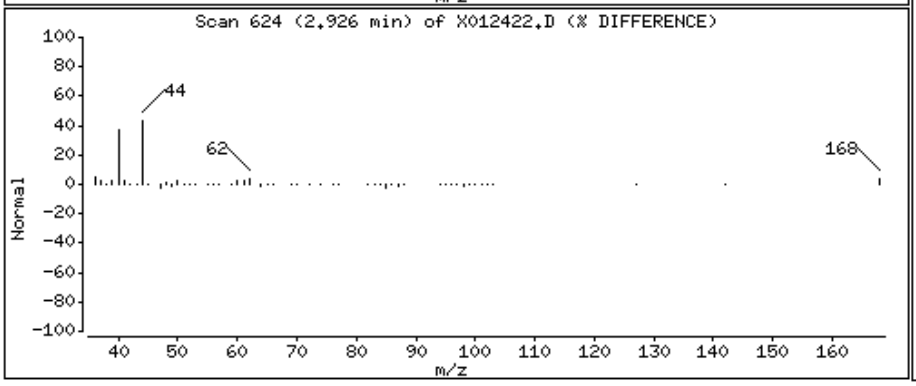
Column phase: DB624 Column diameter: 0.18

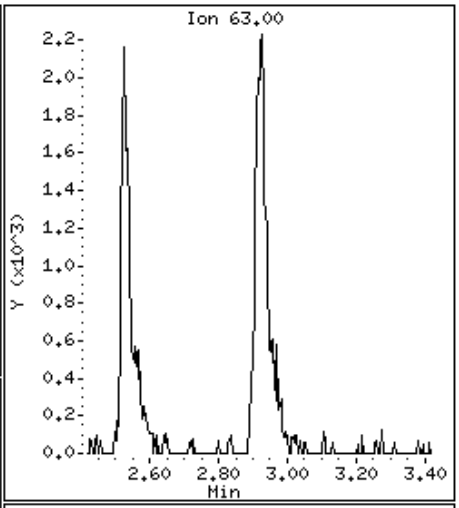
22 1,1-Dichloroethane Concentration: 3.13 ug/l

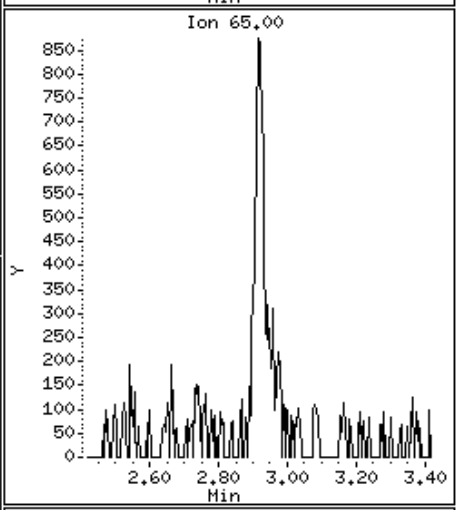


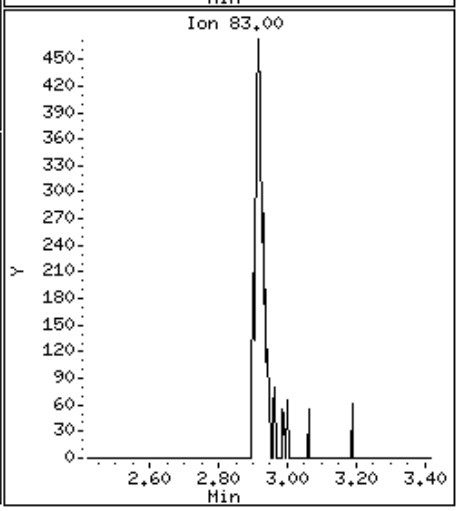












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D Page 6

Date : 24-JAN-2023 15:14

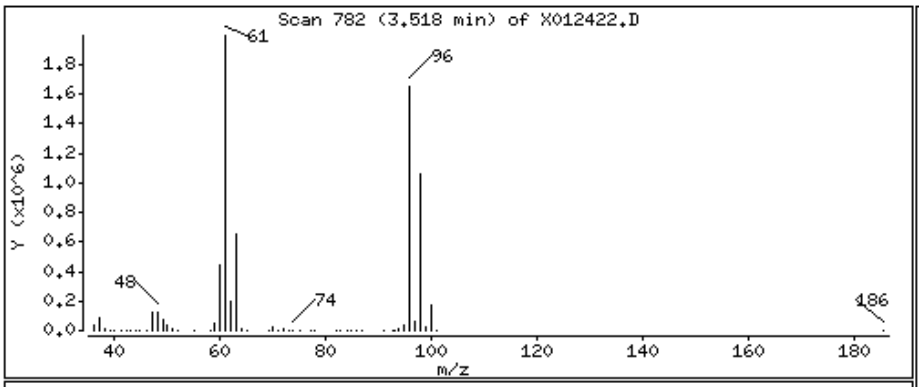
Client ID: HS23010986-01 Instrument: voa6.i

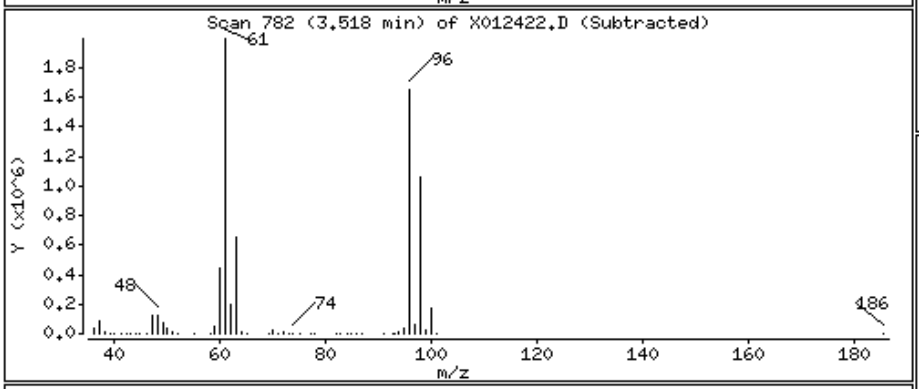
Sample Info: HS23010986-01;HS23010986-01;;;

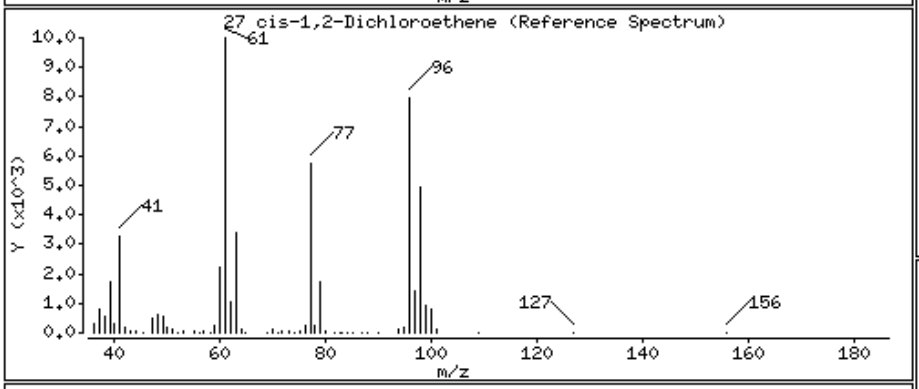
Purge Volume: 5.0 Operator: PC

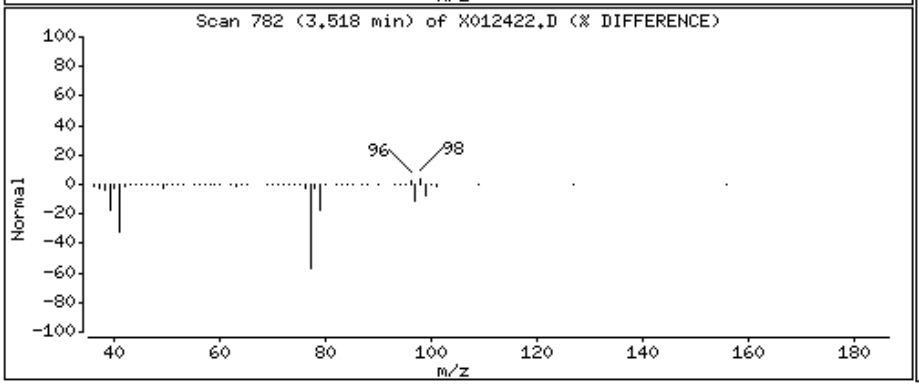
Column phase: DB624 Column diameter: 0.18

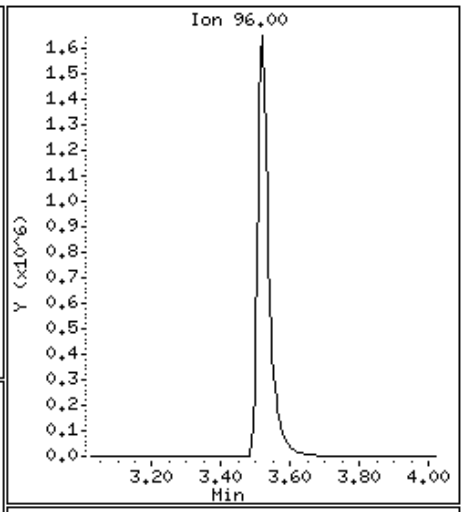
27 cis-1,2-Dichloroethene Concentration: 3188.13 ug/l

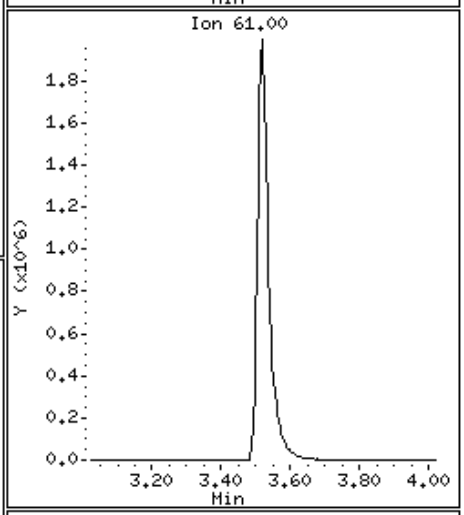


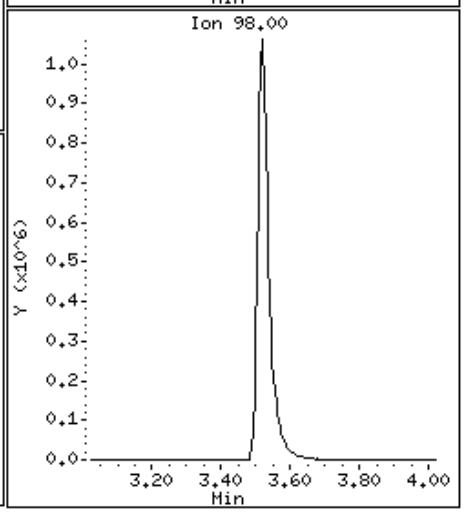












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D Page 7

Date : 24-JAN-2023 15:14

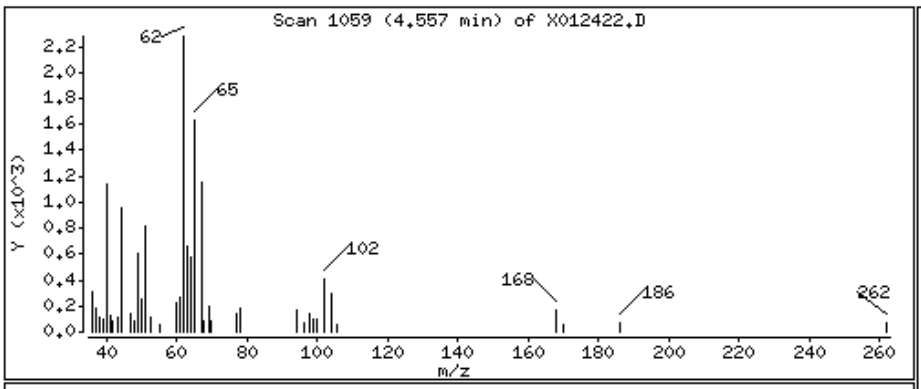
Client ID: HS23010986-01 Instrument: voa6.i

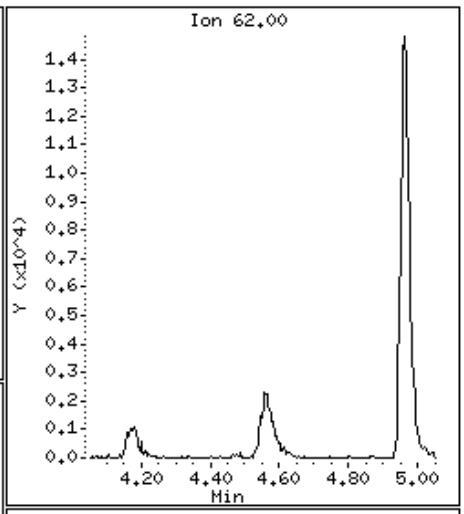
Sample Info: HS23010986-01;HS23010986-01;;;

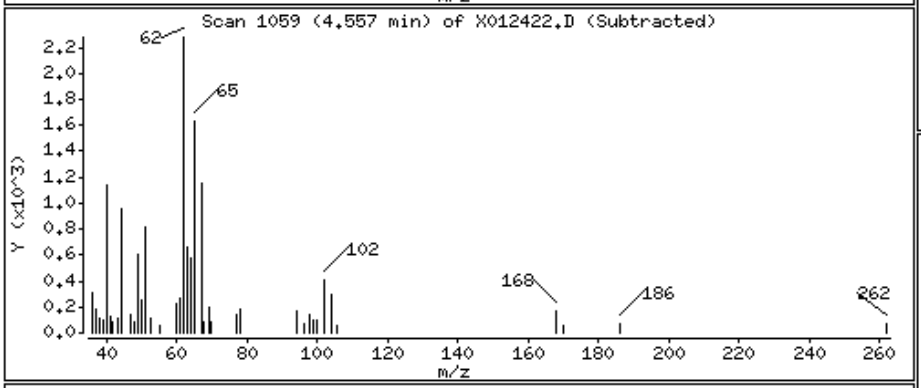
Purge Volume: 5.0 Operator: PC

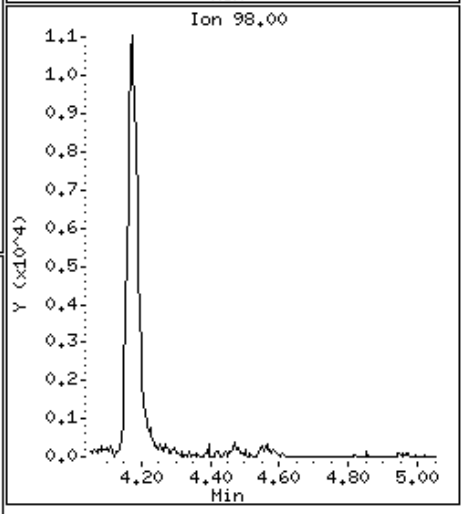
Column phase: DB624 Column diameter: 0.18

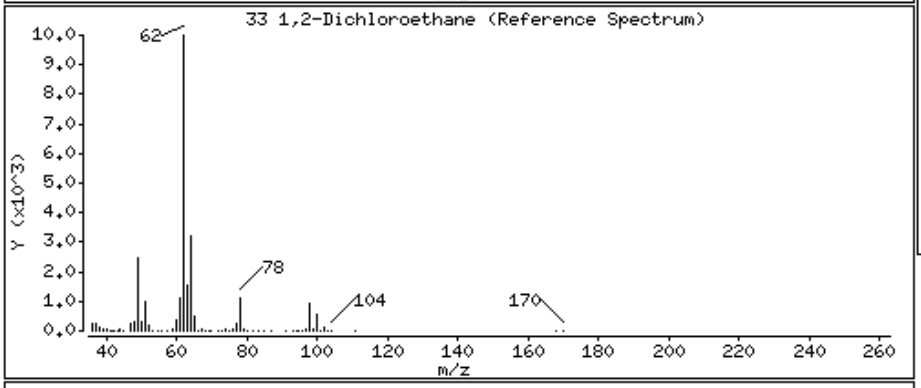
33 1,2-Dichloroethane Concentration: 4.42 ug/l

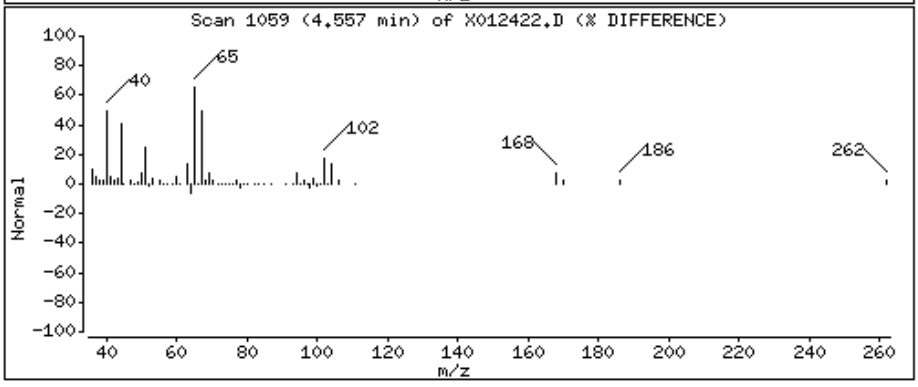












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D Page 8

Date : 24-JAN-2023 15:14

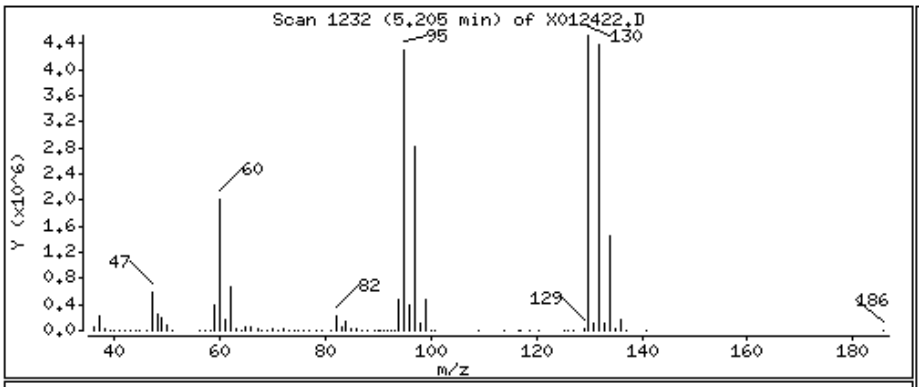
Client ID: HS23010986-01 Instrument: voa6.i

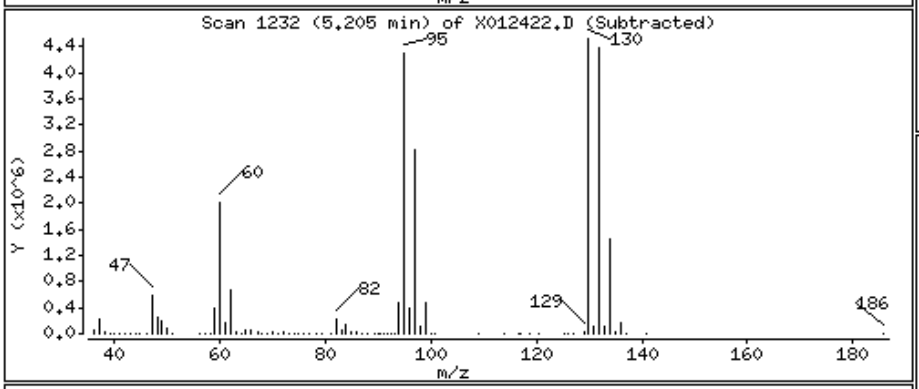
Sample Info: HS23010986-01;HS23010986-01;;;

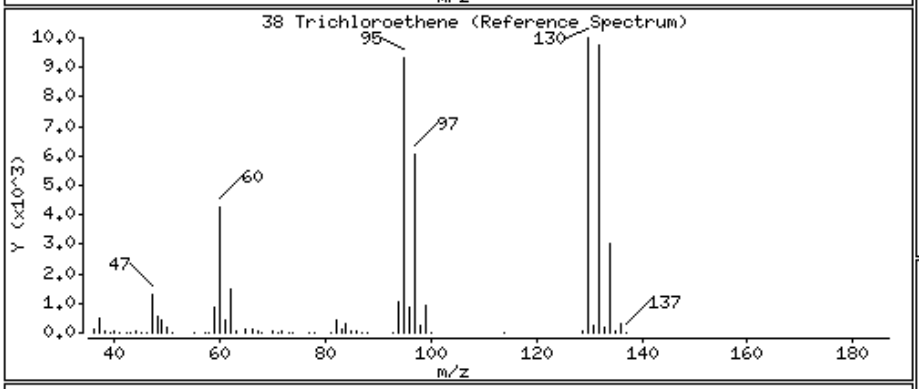
Purge Volume: 5.0 Operator: PC

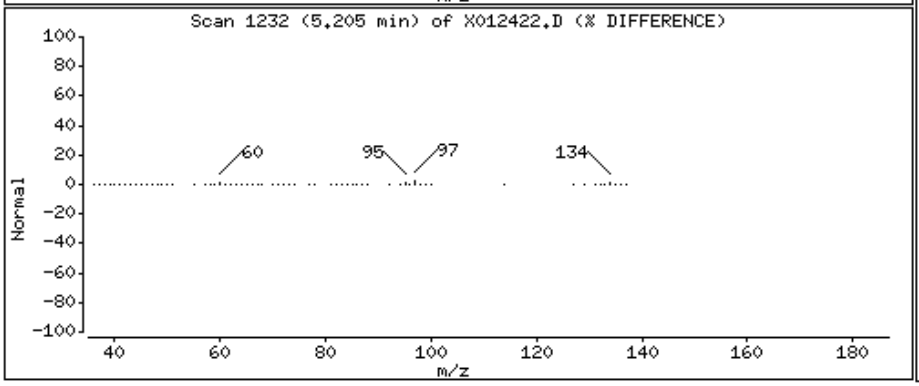
Column phase: DB624 Column diameter: 0.18

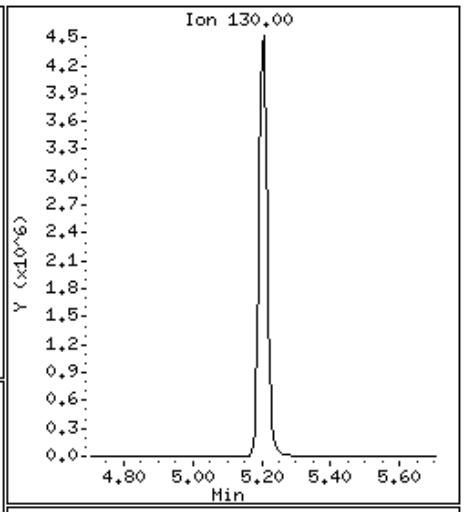
38 Trichloroethene Concentration: 6892.89 ug/l

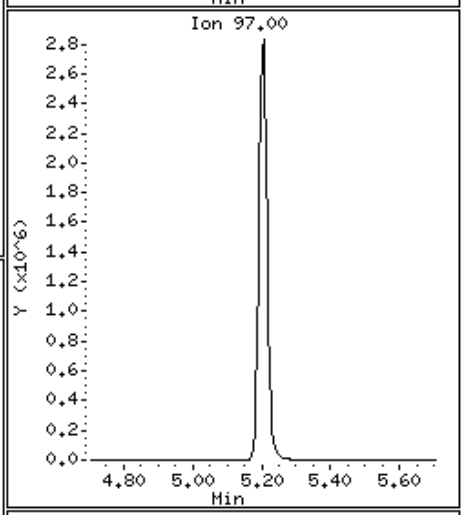


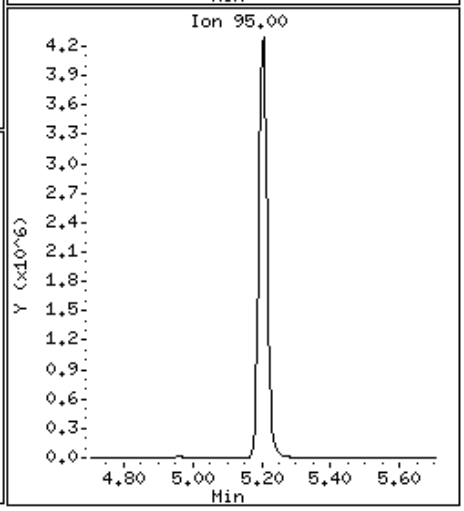












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D Page 9

Date : 24-JAN-2023 15:14

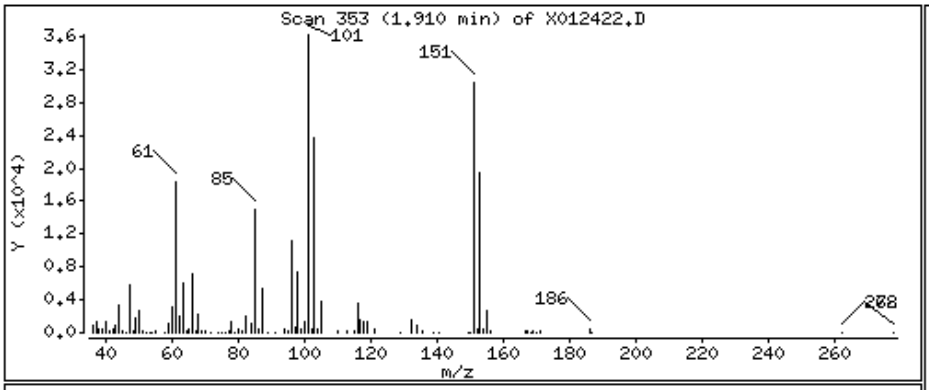
Client ID: HS23010986-01 Instrument: voa6.i

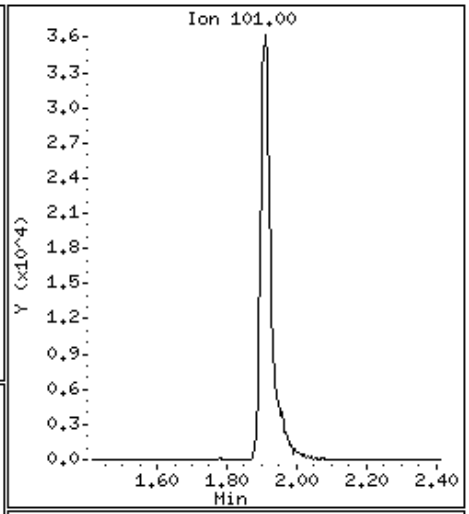
Sample Info: HS23010986-01;HS23010986-01;;;

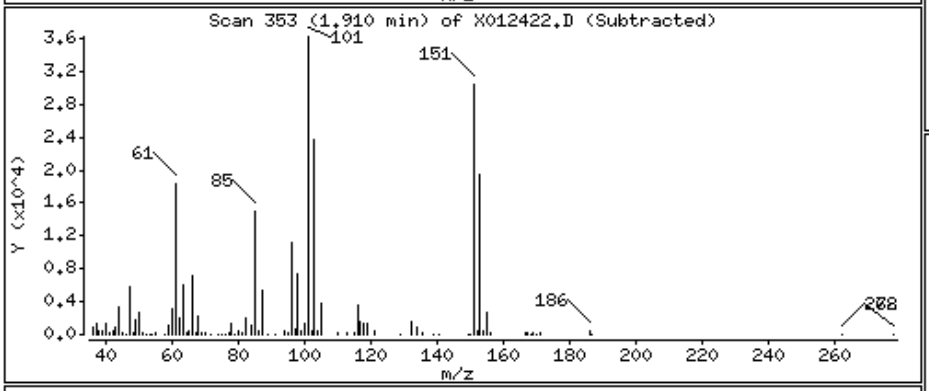
Purge Volume: 5.0 Operator: PC

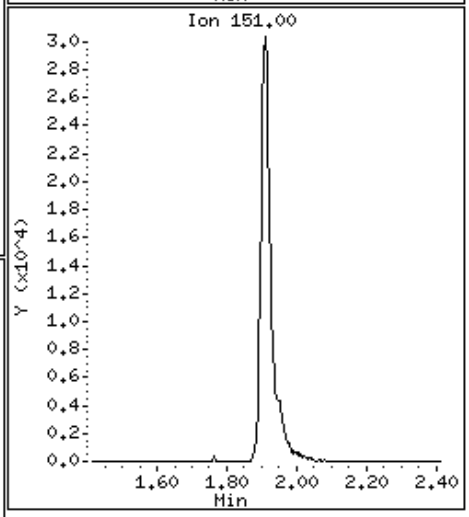
Column phase: DB624 Column diameter: 0.18

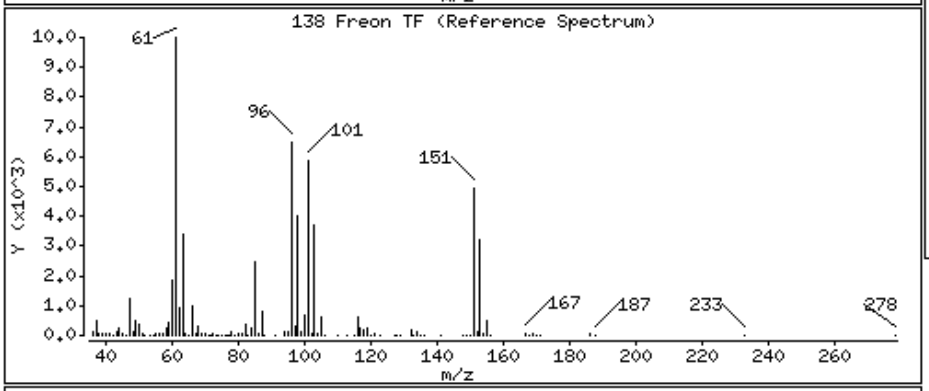
138 Freon TF Concentration: 92.22 ug/l

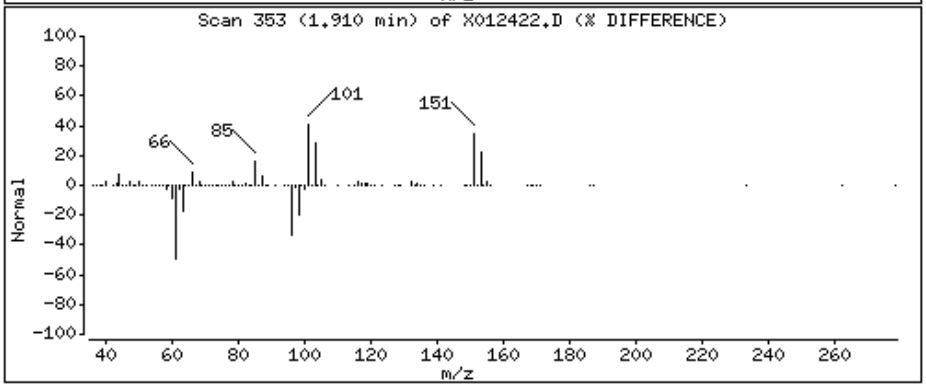












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012422.D
Inj Date : 24-JAN-2023 15:14
InstruID : voa6.i
LabSampID : HS23010986-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D
Lab Smp Id: HS23010986-06 Client Smp ID: HS23010986-06
Inj Date : 24-JAN-2023 15:35
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-06;HS23010986-06;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 23
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

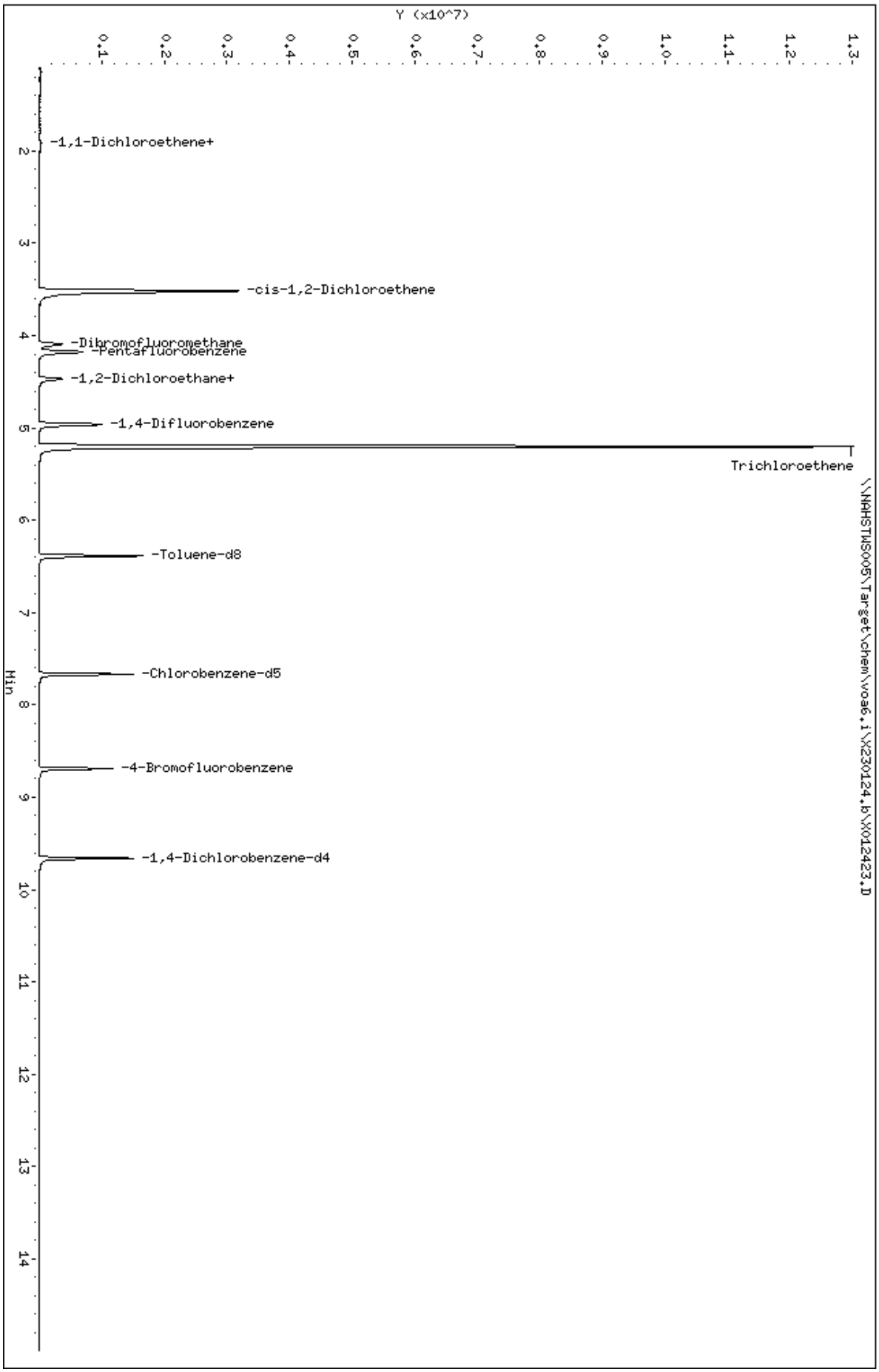
Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	583489	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	26470	5.19315	519.31
11 1,1-Dichloroethene	96	1.917	1.910	(0.459)	3834	0.86577	86.57
27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	1709728	283.461	28346.07(A)
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	258996	46.2149	46.21
33 1,2-Dichloroethane	62	4.564	4.552	(0.919)	4330	0.63781	63.78
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	295712	50.0062	50.00
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	828588	50.0000	
38 Trichloroethene	130	5.205	5.205	(1.048)	4102556	731.022	73102.17(A)
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	724720	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	959236	53.5636	53.56
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	333715	49.8539	49.85
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	370804	50.0000	
138 Freon TF	101	1.913	1.910	(0.458)	5228	1.22059	122.05(a)
M 94 1,2-Dichloroethylene (total)	96				1709728	283.461	28346.07

QC Flag Legend

a - Target compound detected but, quantitated amount

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D
Date : 24-JAN-2023 15:35
Client ID: HS23010986-06
Sample Info: HS23010986-06;HS23010986-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D Page 2

Date : 24-JAN-2023 15:35

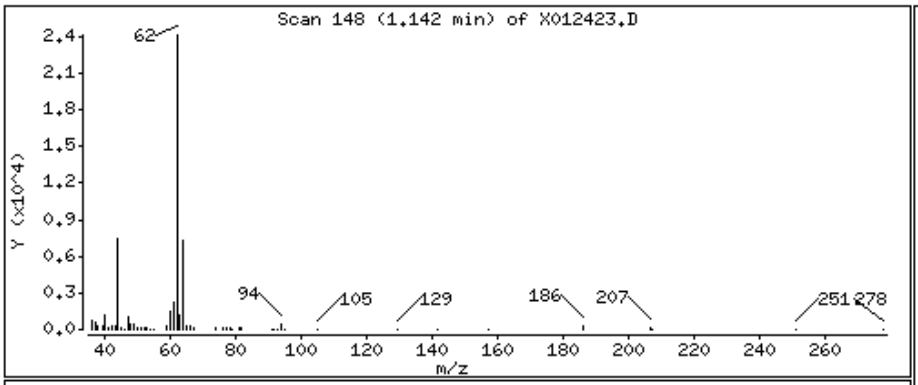
Client ID: HS23010986-06 Instrument: voa6.i

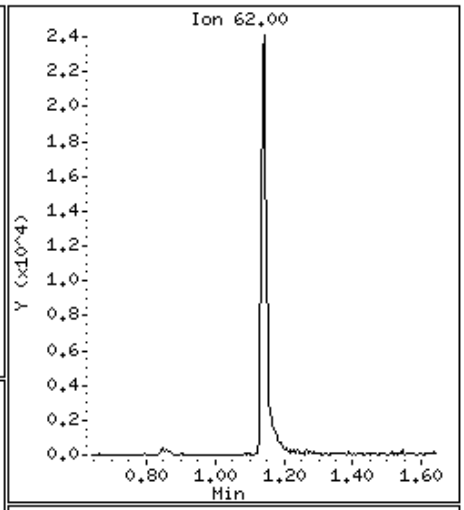
Sample Info: HS23010986-06;HS23010986-06;;;

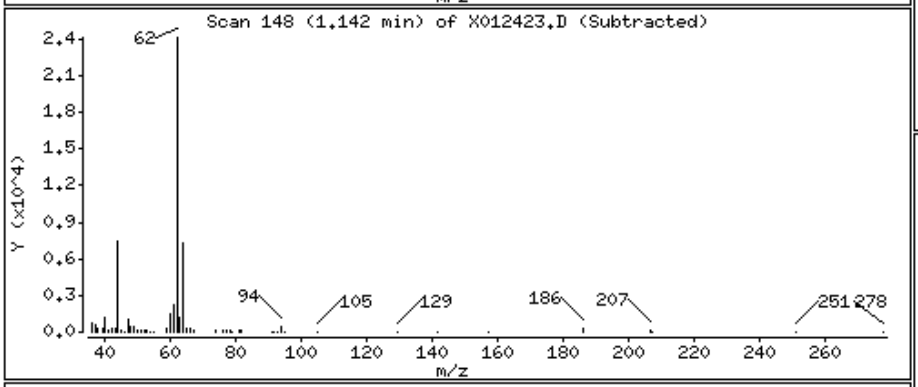
Purge Volume: 5.0 Operator: PC

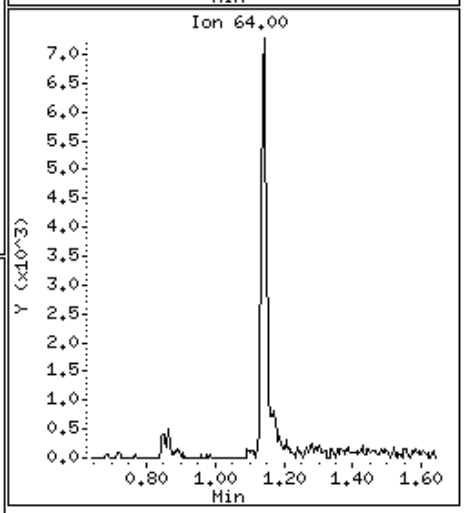
Column phase: DB624 Column diameter: 0.18

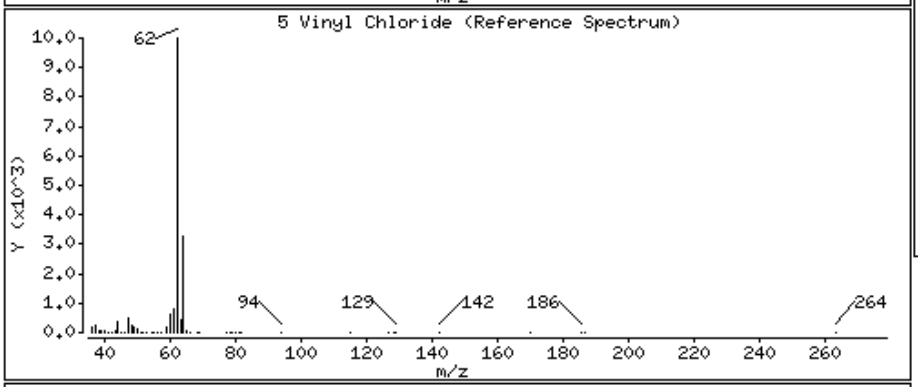
5 Vinyl Chloride Concentration: 519.31 ug/l

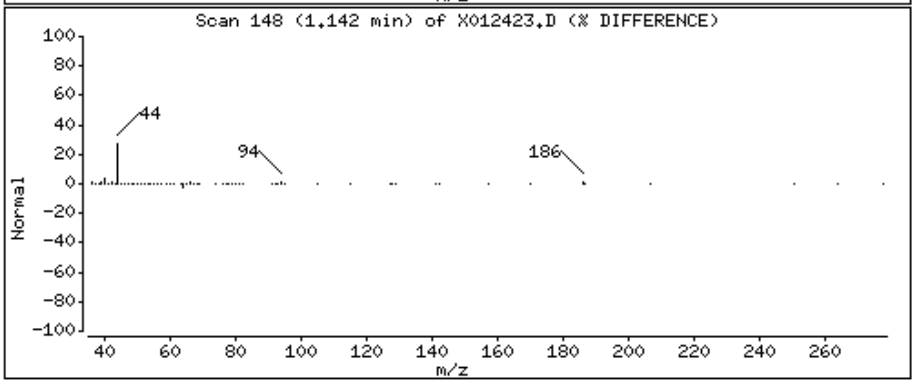












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D Page 3

Date : 24-JAN-2023 15:35

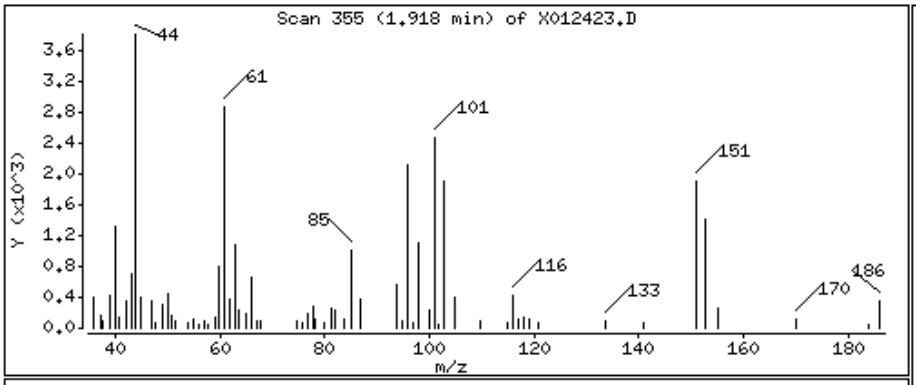
Client ID: HS23010986-06 Instrument: voa6.i

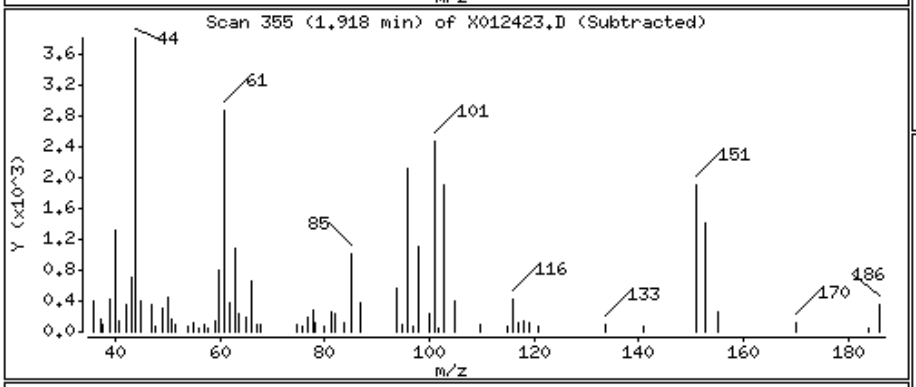
Sample Info: HS23010986-06;HS23010986-06;;;

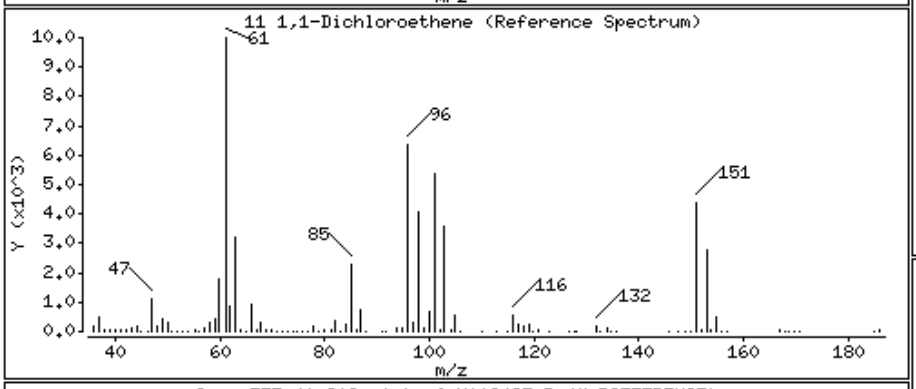
Purge Volume: 5.0 Operator: PC

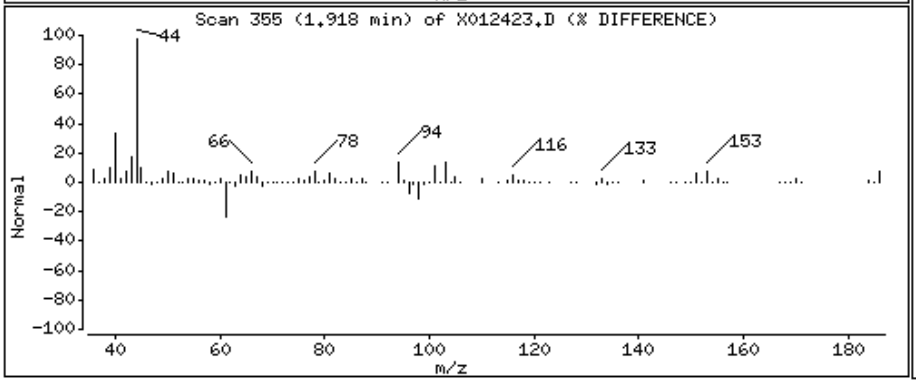
Column phase: DB624 Column diameter: 0.18

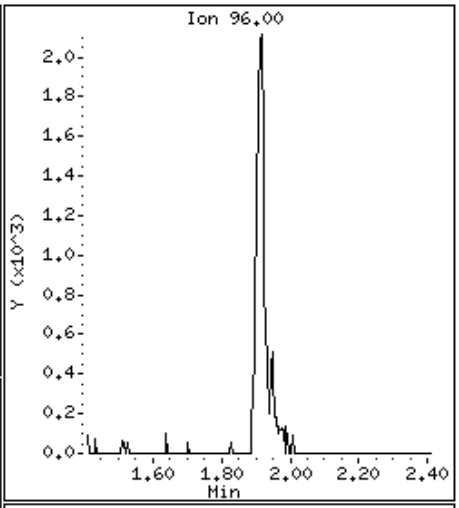
11 1,1-Dichloroethene Concentration: 86.57 ug/l

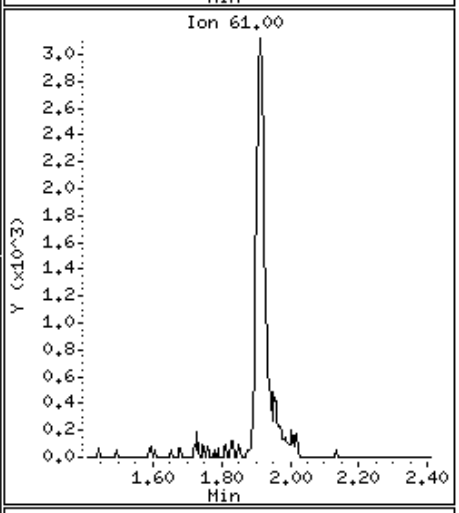


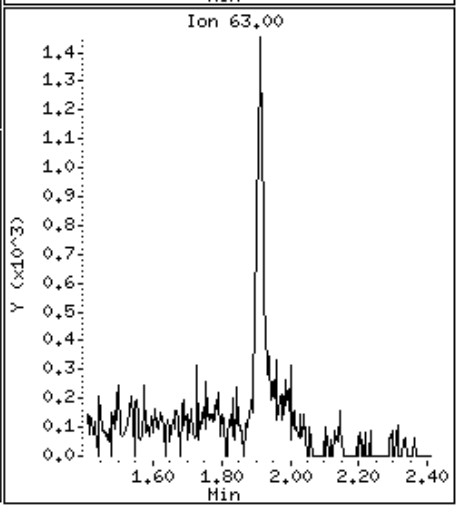












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D Page 4

Date : 24-JAN-2023 15:35

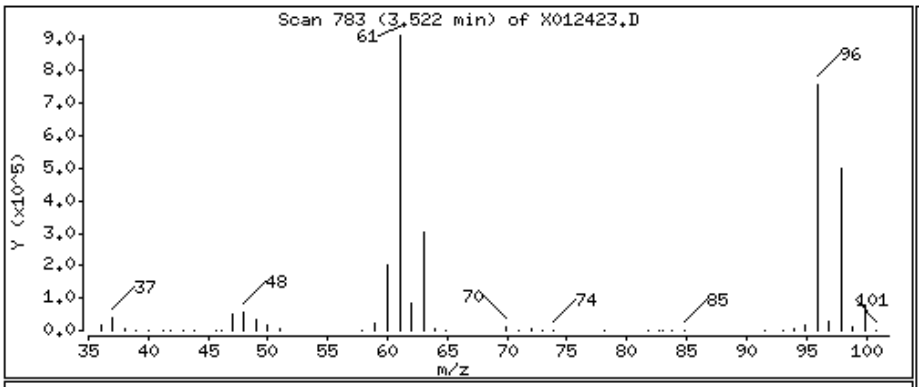
Client ID: HS23010986-06 Instrument: voa6.i

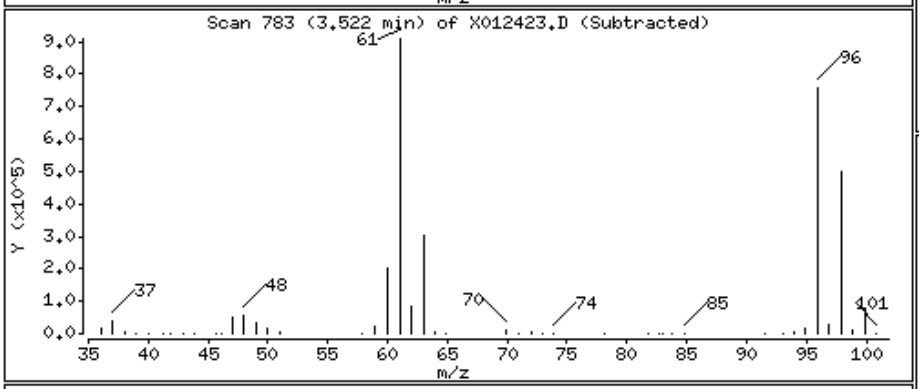
Sample Info: HS23010986-06;HS23010986-06;;;

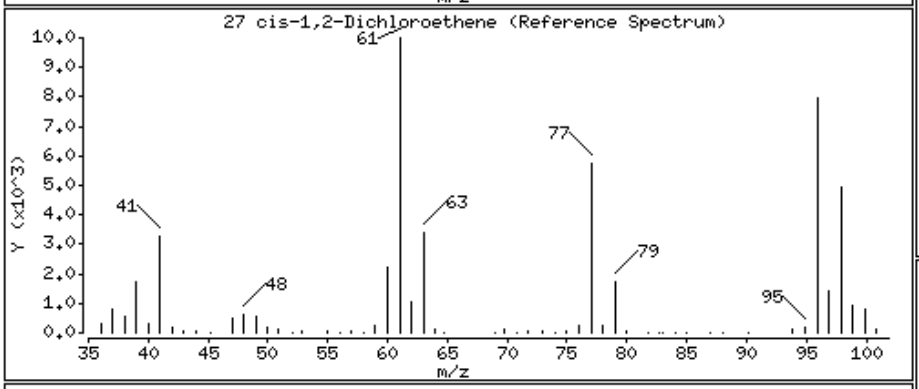
Purge Volume: 5.0 Operator: PC

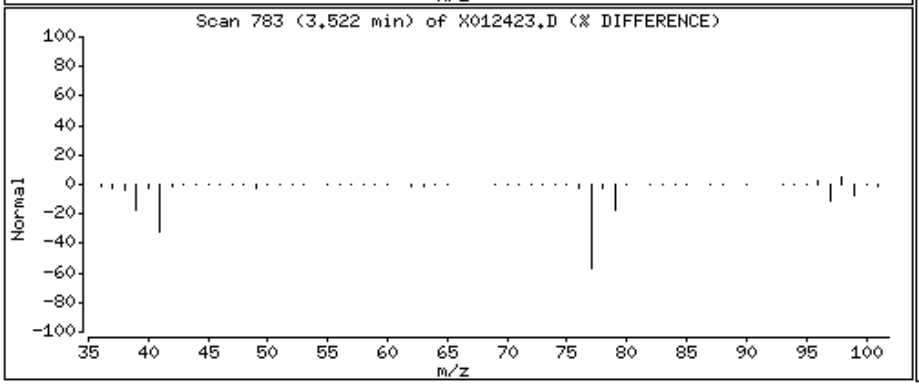
Column phase: DB624 Column diameter: 0.18

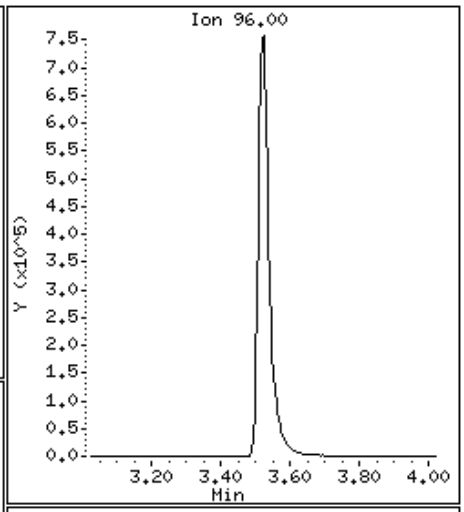
27 cis-1,2-Dichloroethene Concentration: 28346.07 ug/l

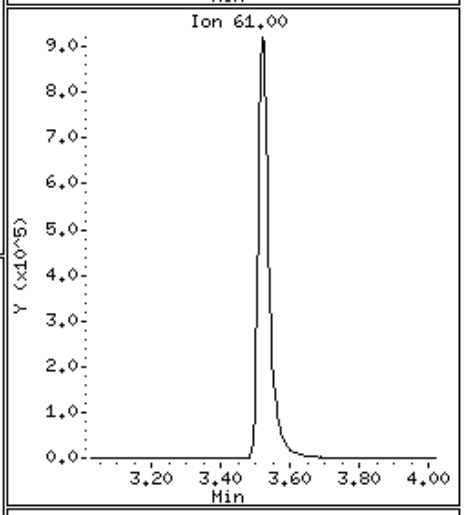


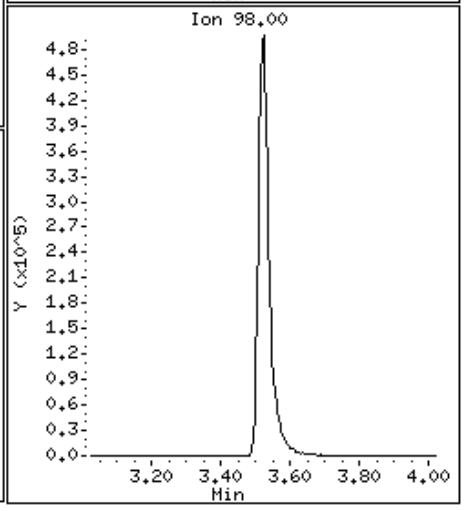












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D Page 5

Date : 24-JAN-2023 15:35

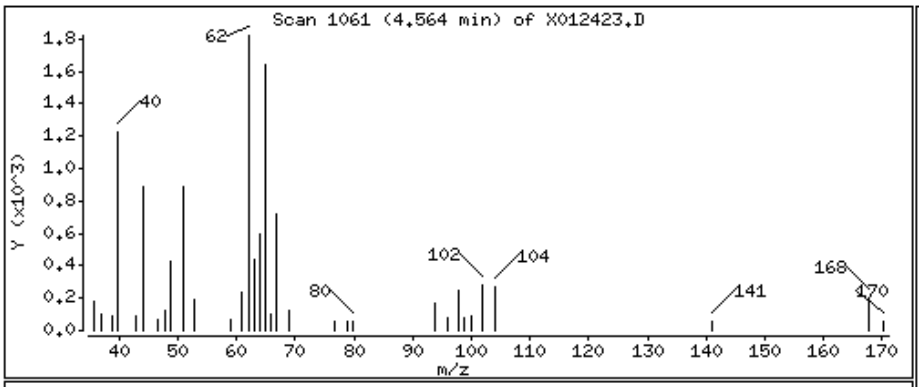
Client ID: HS23010986-06 Instrument: voa6.i

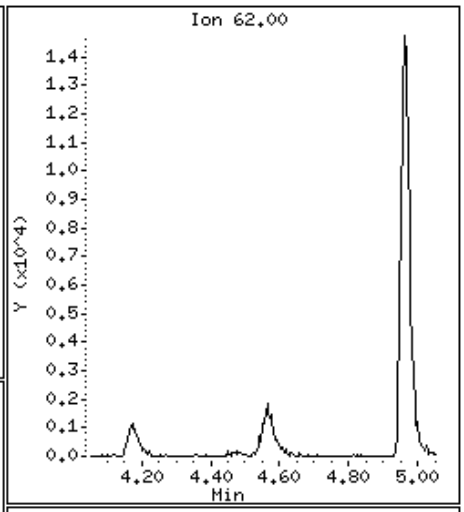
Sample Info: HS23010986-06;HS23010986-06;;;

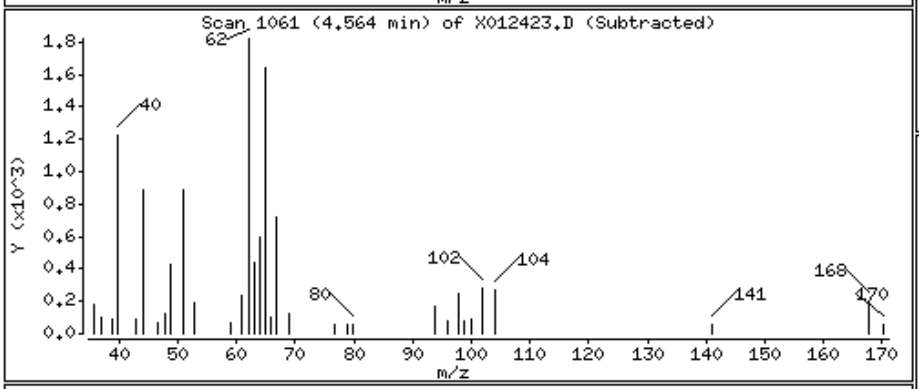
Purge Volume: 5.0 Operator: PC

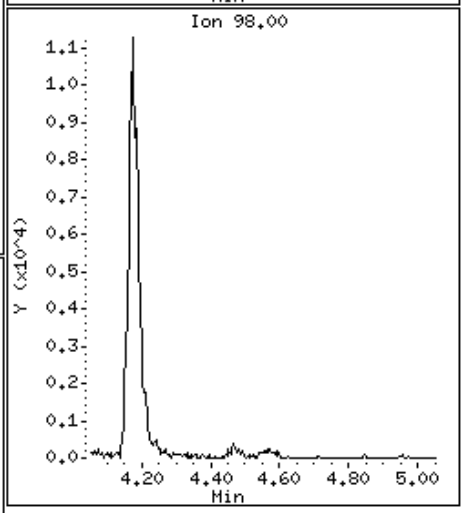
Column phase: DB624 Column diameter: 0.18

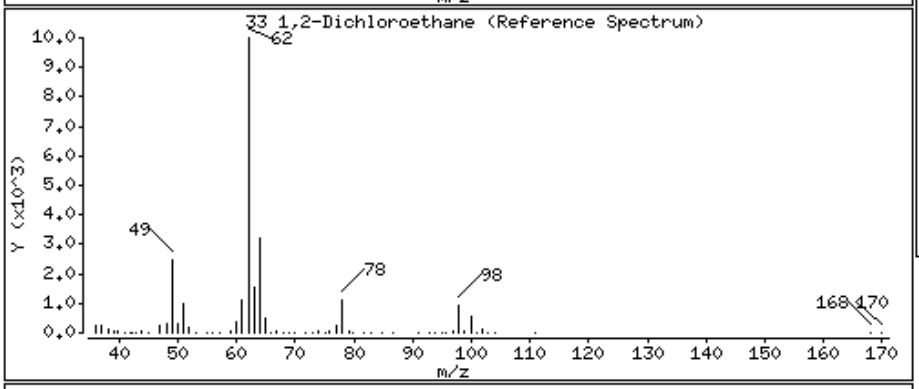
33 1,2-Dichloroethane Concentration: 63.78 ug/l

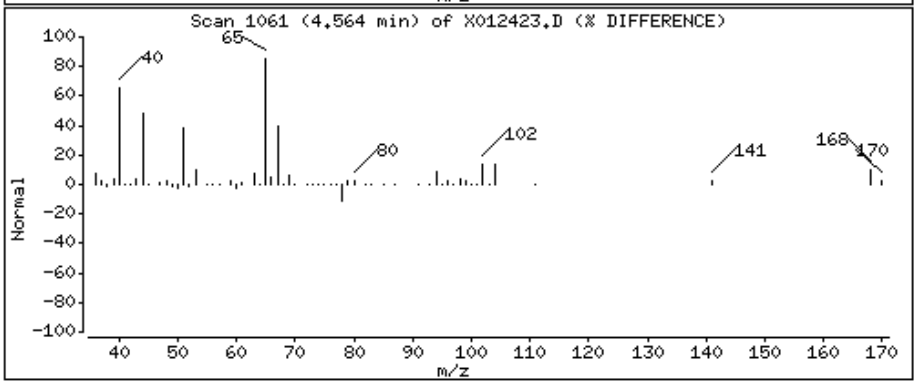












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D

Date : 24-JAN-2023 15:35

Client ID: HS23010986-06

Instrument: voa6.i

Sample Info: HS23010986-06;HS23010986-06;;;

Purge Volume: 5.0

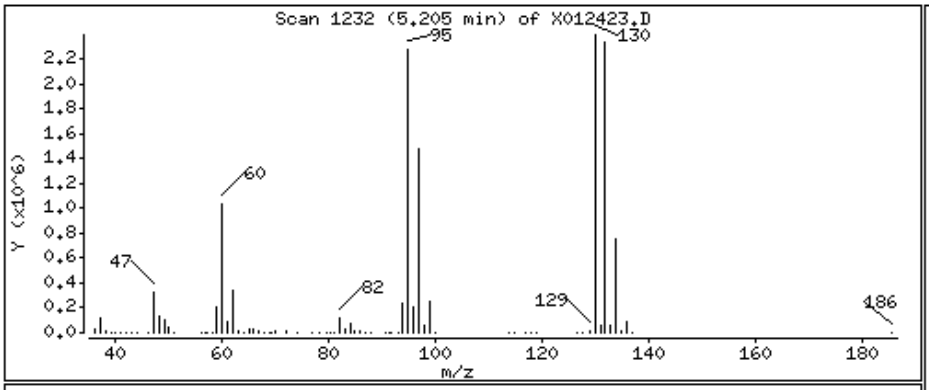
Operator: PC

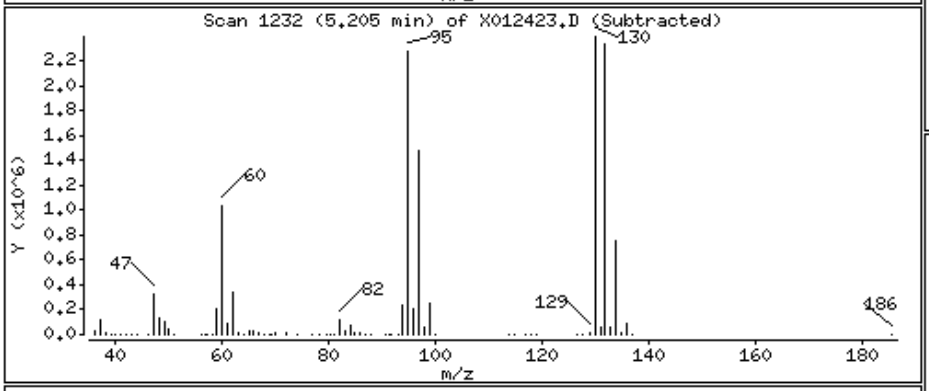
Column phase: DB624

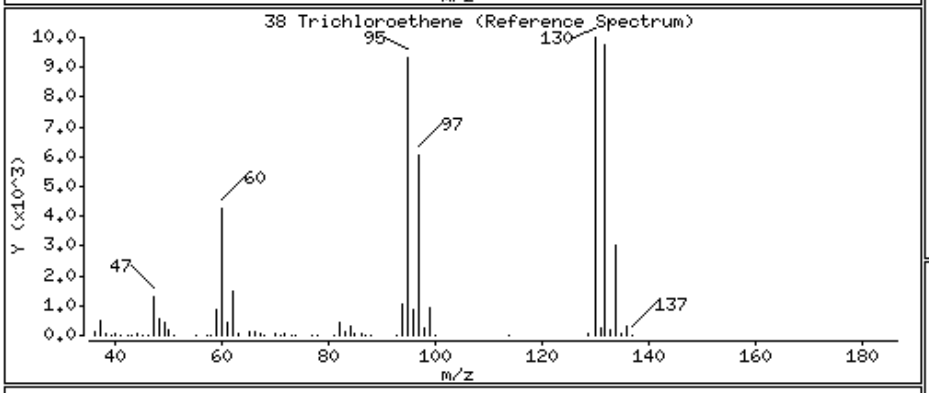
Column diameter: 0.18

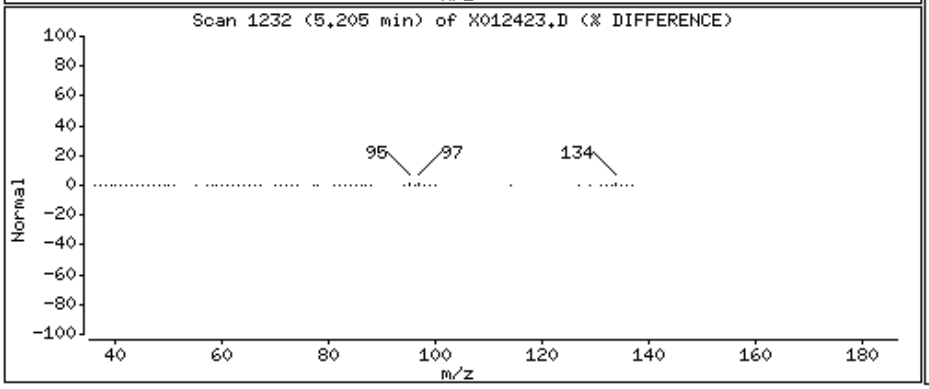
38 Trichloroethene

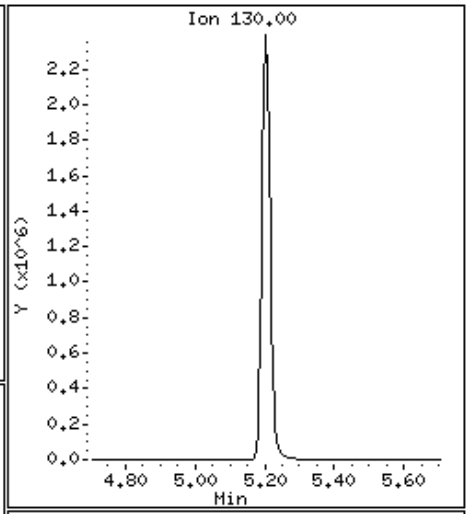
Concentration: 73102.17 ug/l

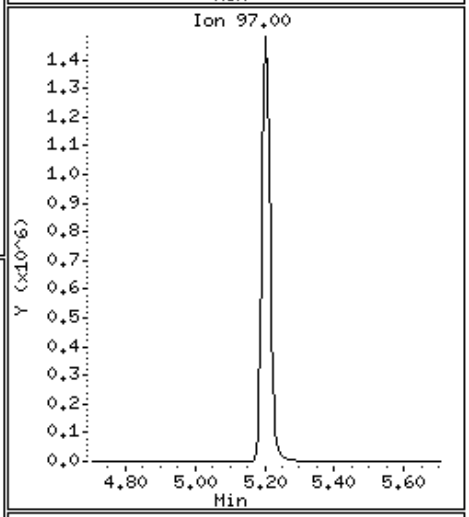


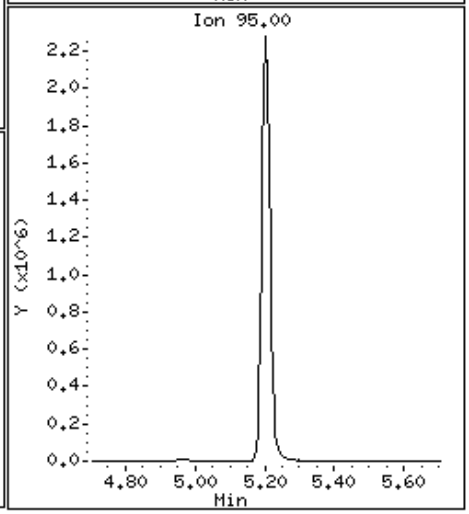












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D Page 7

Date : 24-JAN-2023 15:35

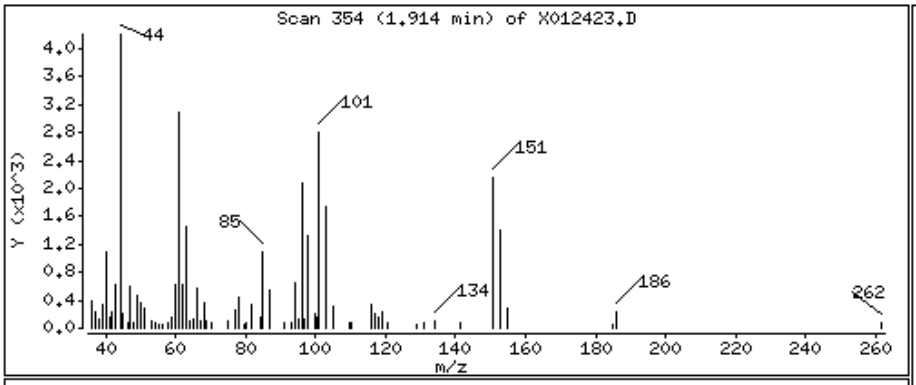
Client ID: HS23010986-06 Instrument: voa6.i

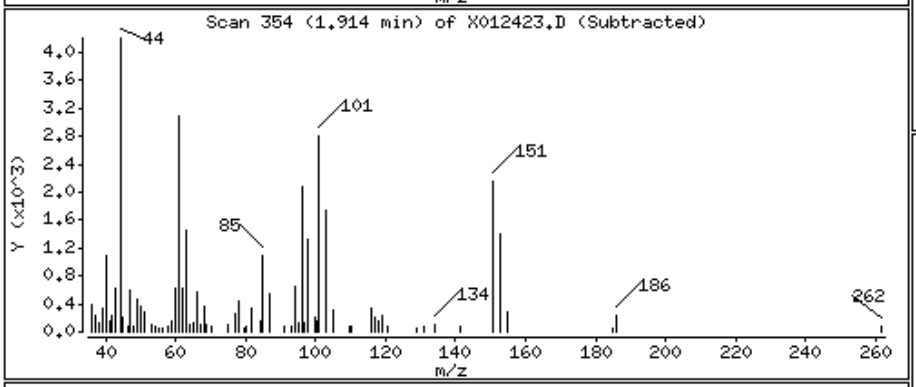
Sample Info: HS23010986-06;HS23010986-06;;;

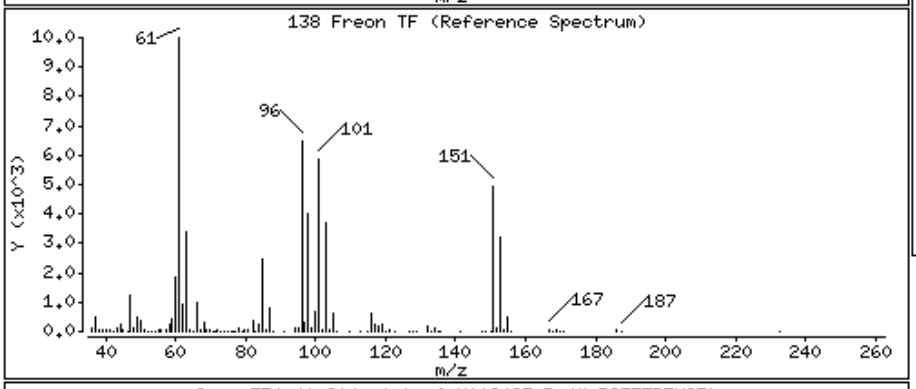
Purge Volume: 5.0 Operator: PC

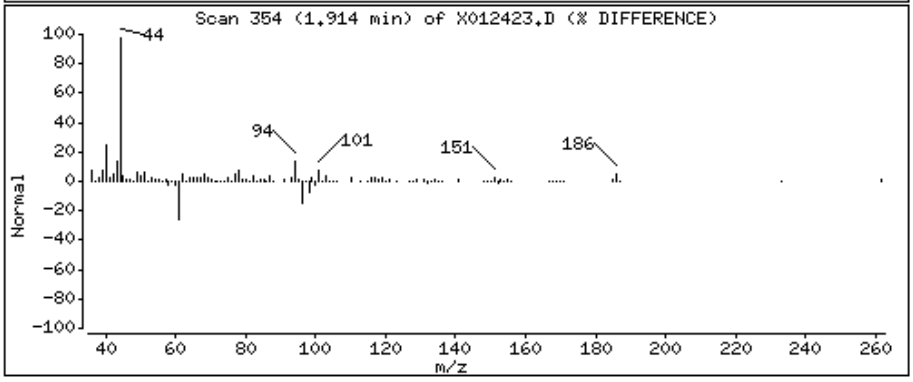
Column phase: DB624 Column diameter: 0.18

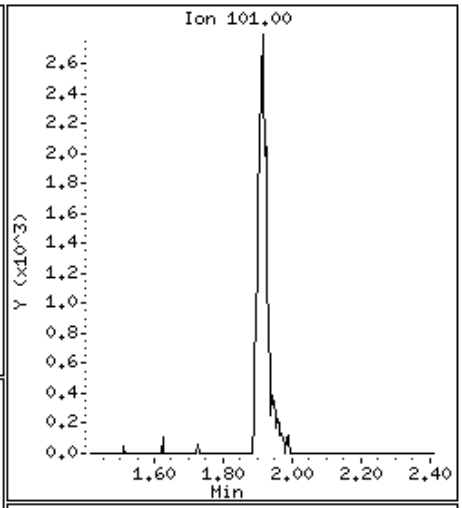
138 Freon TF Concentration: 122.05 ug/l

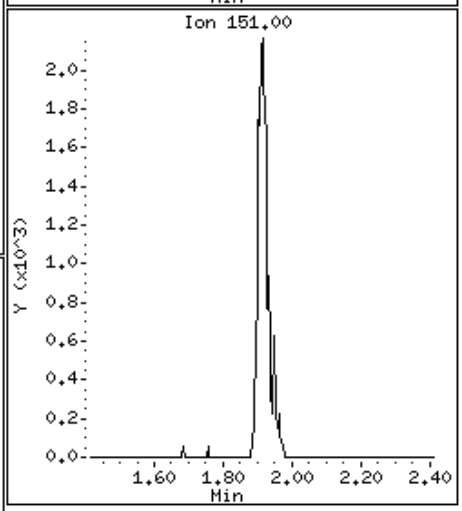












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012423.D
Inj Date : 24-JAN-2023 15:35
InstruID : voa6.i
LabSampID : HS23010986-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D Page 1
Report Date: 03-Feb-2023 10:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D
Lab Smp Id: HS23010986-07 Client Smp ID: HS23010986-07
Inj Date : 24-JAN-2023 15:56
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-07;HS23010986-07;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 24
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.178	4.178	(1.000)	586217	50.0000	
5	Vinyl Chloride	62	1.141	1.141	(0.273)	25570	4.99323	499.32
11	1,1-Dichloroethene	96	1.913	1.910	(0.458)	4040	0.90804	90.80
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	1648130	271.977	27197.66(A)
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.980)	258221	45.8609	45.86
33	1,2-Dichloroethane	62	4.567	4.552	(0.921)	4287	0.63048	63.04(H)
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	291554	49.0787	49.07
* 36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	829896	50.0000	
38	Trichloroethene	130	5.205	5.205	(1.049)	3843298	683.746	68374.60(A)
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	732269	50.0000	
$ 48	Toluene-d8	98	6.386	6.386	(0.833)	961675	53.1462	53.14
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	335111	49.5468	49.54
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	374919	50.0000	
138	Freon TF	101	1.910	1.910	(0.457)	5315	1.23513	123.51(a)
M 94	1,2-Dichloroethylene (total)	96				1648130	271.977	27197.66

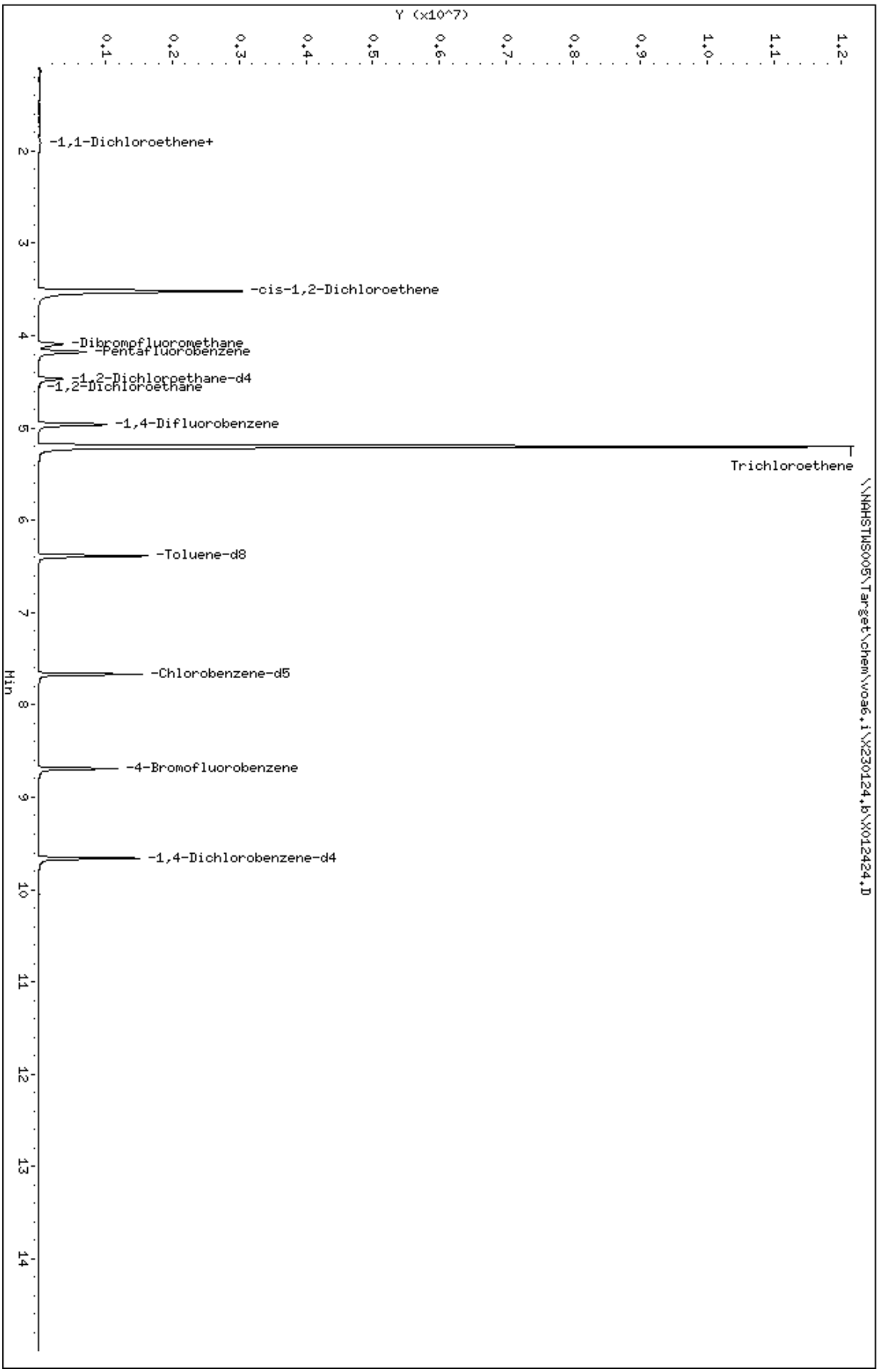
QC Flag Legend

a - Target compound detected but, quantitated amount

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

QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230124,b\X012424,D
Date : 24-JAN-2023 15:56
Client ID: HS230109B6-07
Sample Info: HS230109B6-07;HS230109B6-07;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D Page 2

Date : 24-JAN-2023 15:56

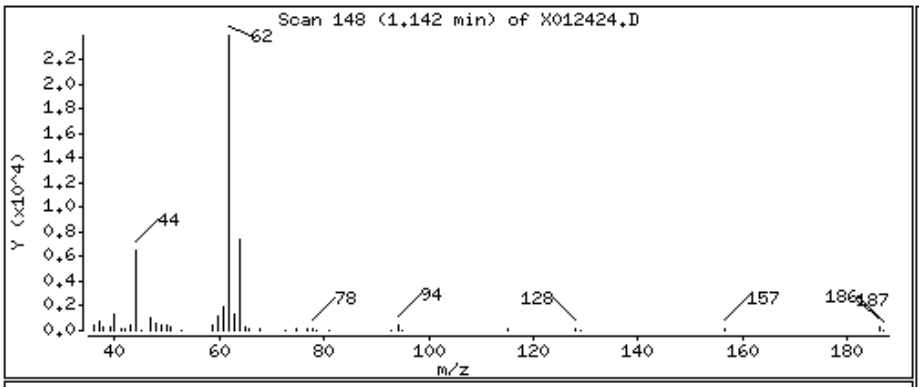
Client ID: HS23010986-07 Instrument: voa6.i

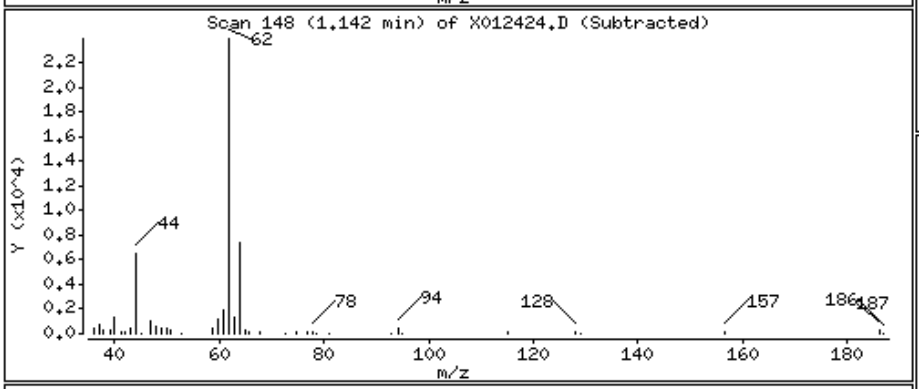
Sample Info: HS23010986-07;HS23010986-07;;;

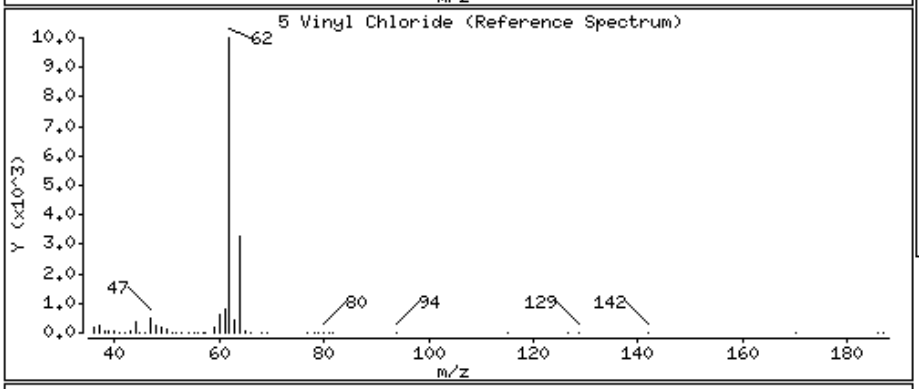
Purge Volume: 5.0 Operator: PC

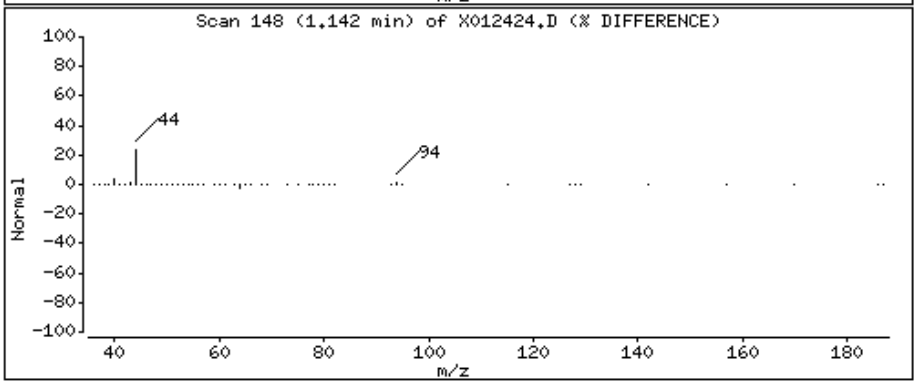
Column phase: DB624 Column diameter: 0.18

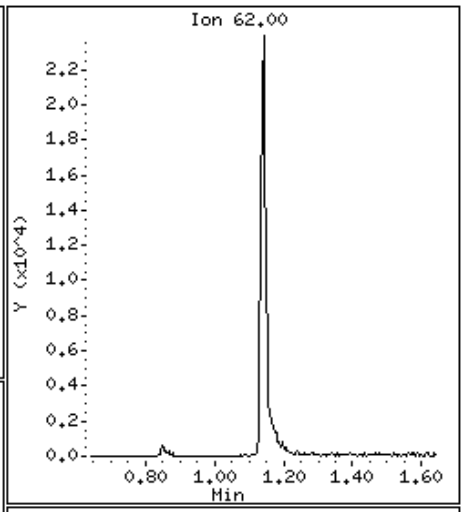
5 Vinyl Chloride Concentration: 499.32 ug/l

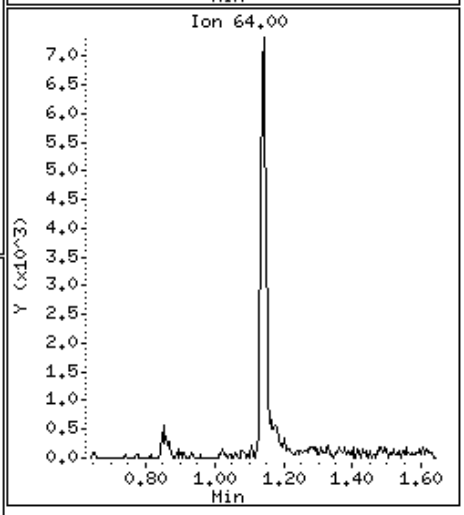












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D

Date : 24-JAN-2023 15:56

Client ID: HS23010986-07

Instrument: voa6.i

Sample Info: HS23010986-07;HS23010986-07;;;

Purge Volume: 5.0

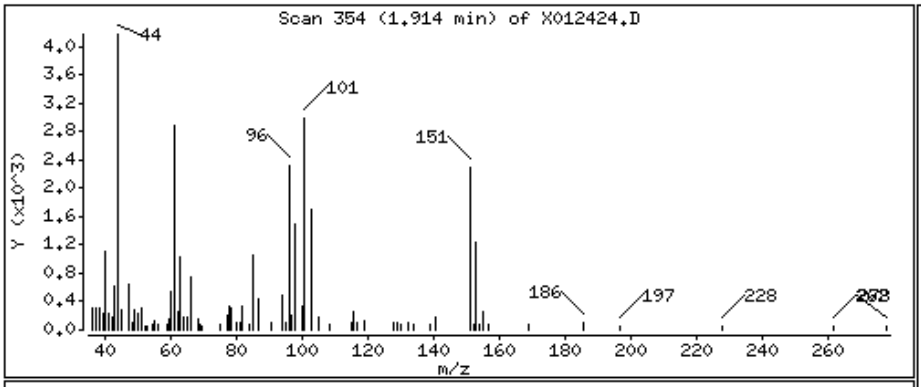
Operator: PC

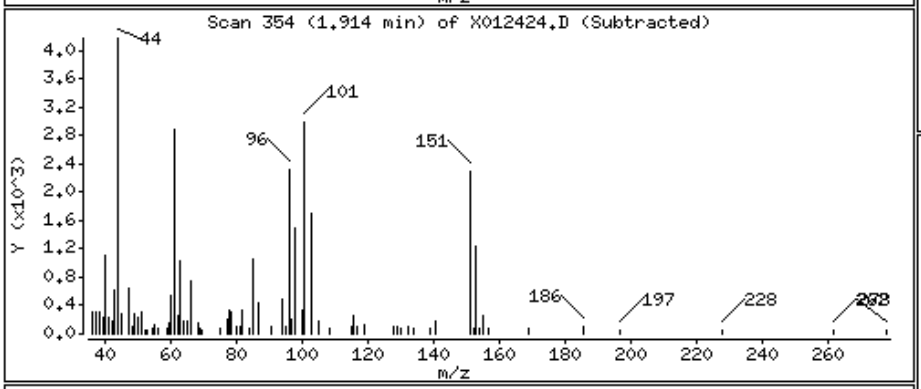
Column phase: DB624

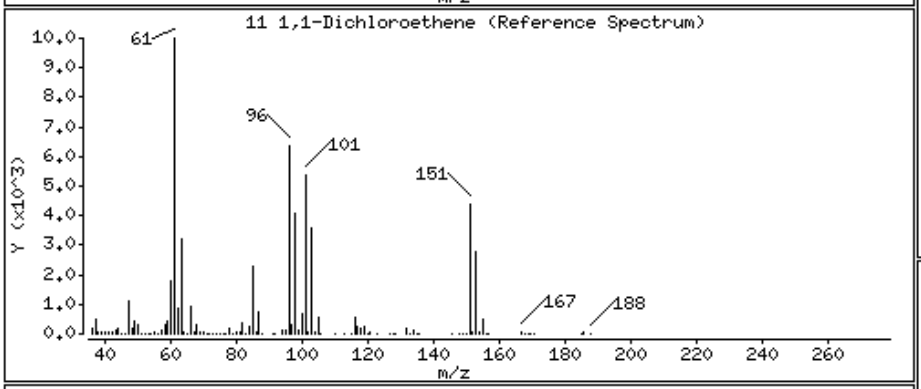
Column diameter: 0.18

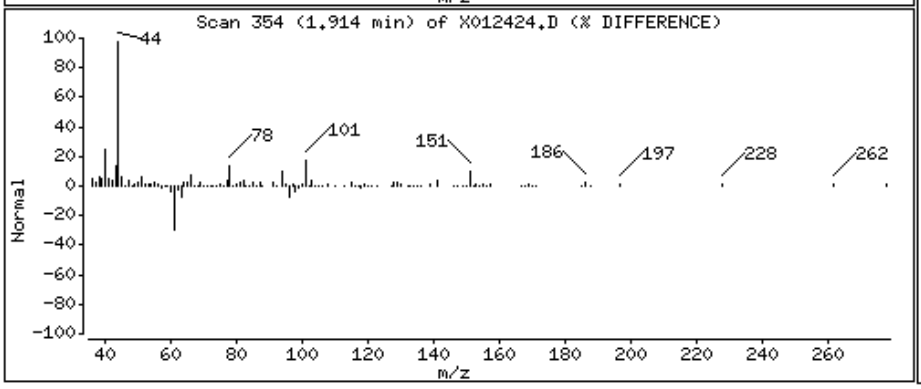
11 1,1-Dichloroethene

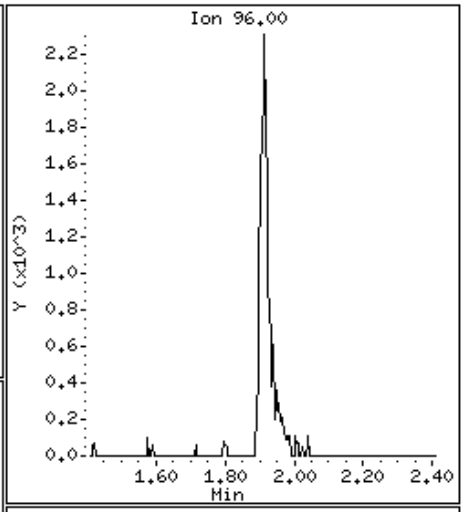
Concentration: 90.80 ug/l

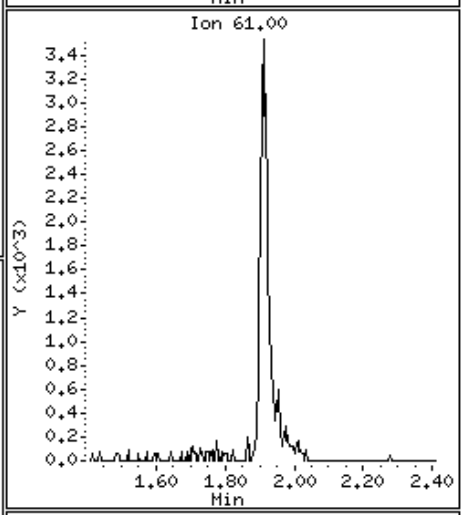


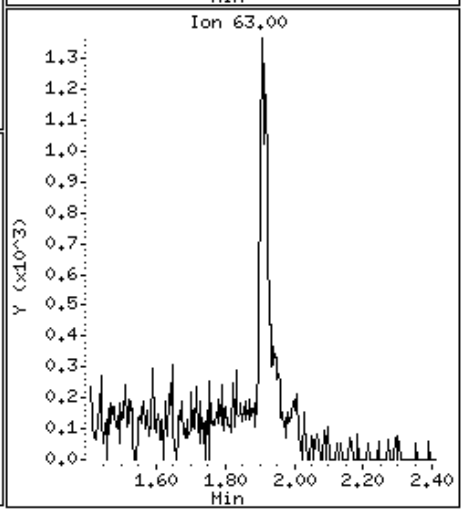












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D Page 4

Date : 24-JAN-2023 15:56

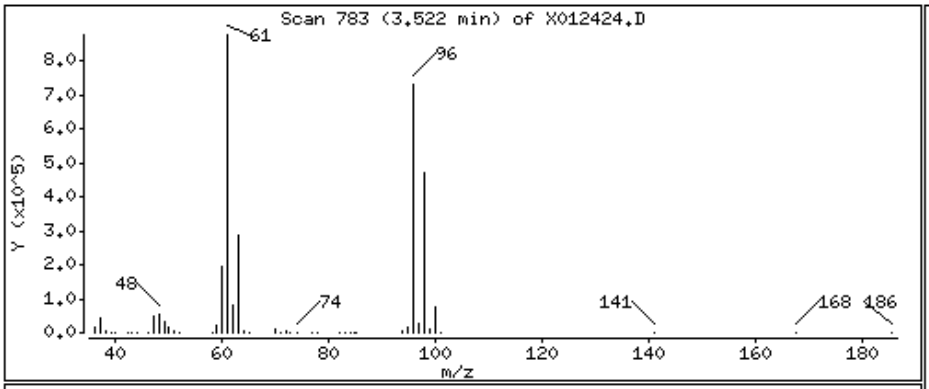
Client ID: HS23010986-07 Instrument: voa6.i

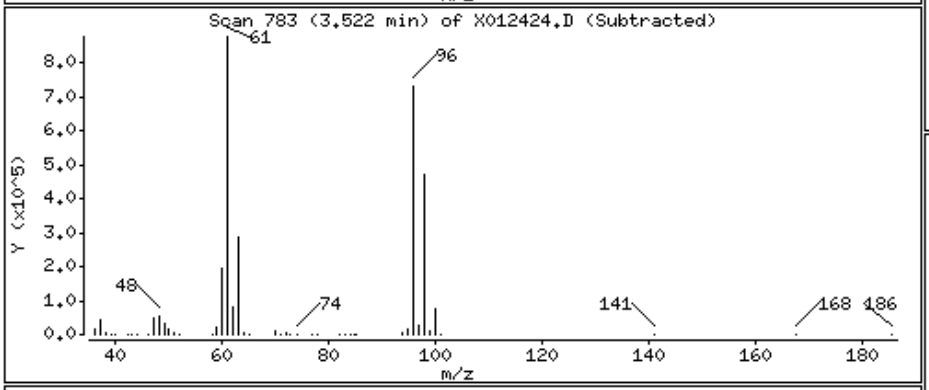
Sample Info: HS23010986-07;HS23010986-07;;;

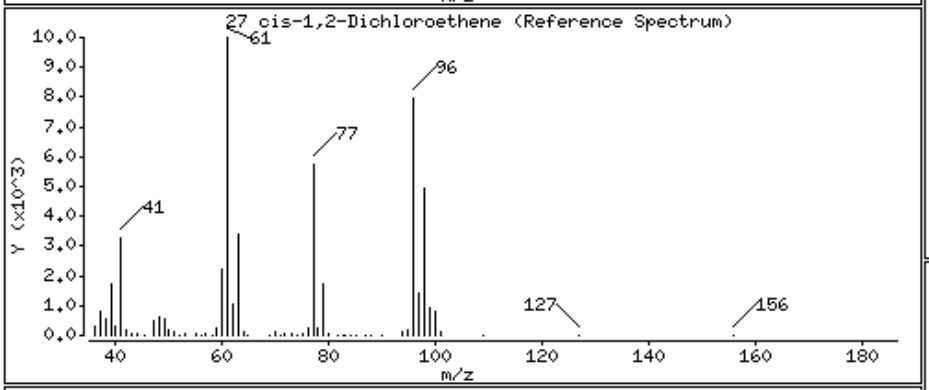
Purge Volume: 5.0 Operator: PC

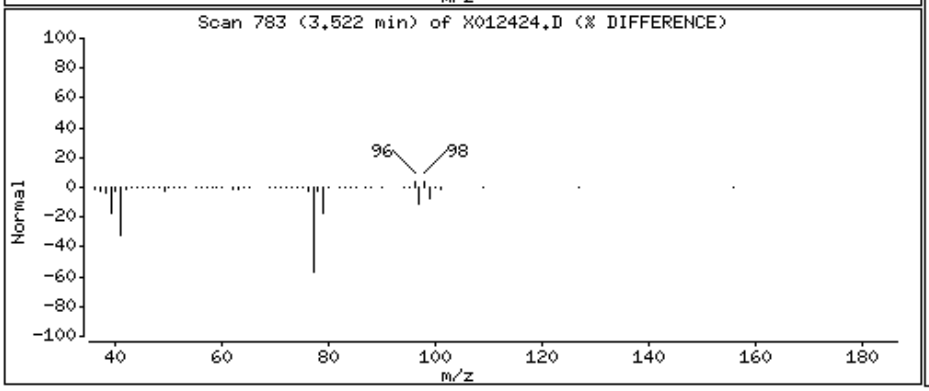
Column phase: DB624 Column diameter: 0.18

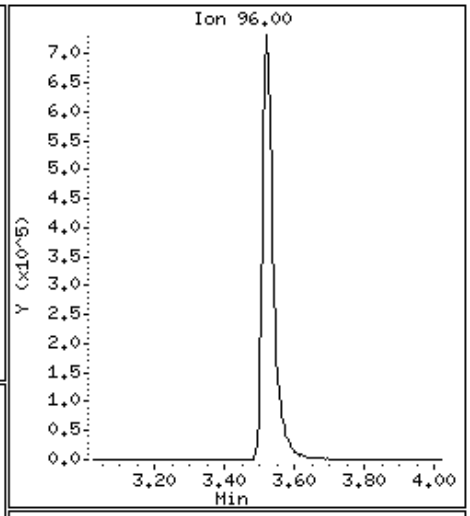
27 cis-1,2-Dichloroethene Concentration: 27197.66 ug/l

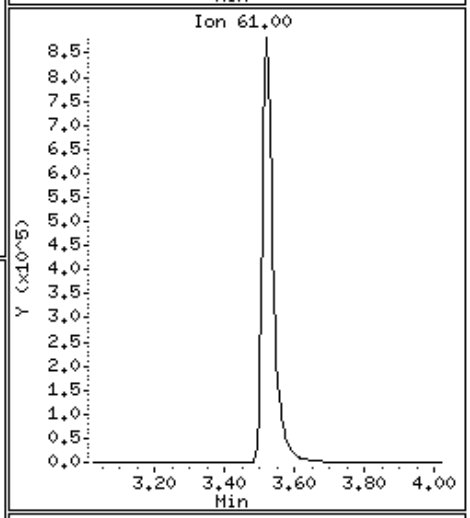


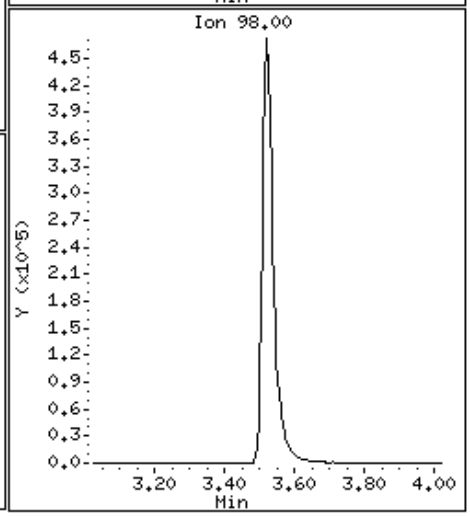












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D Page 5

Date : 24-JAN-2023 15:56

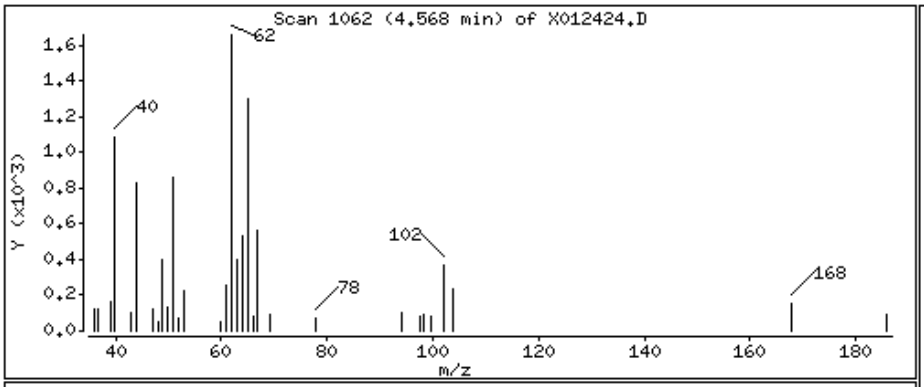
Client ID: HS23010986-07 Instrument: voa6.i

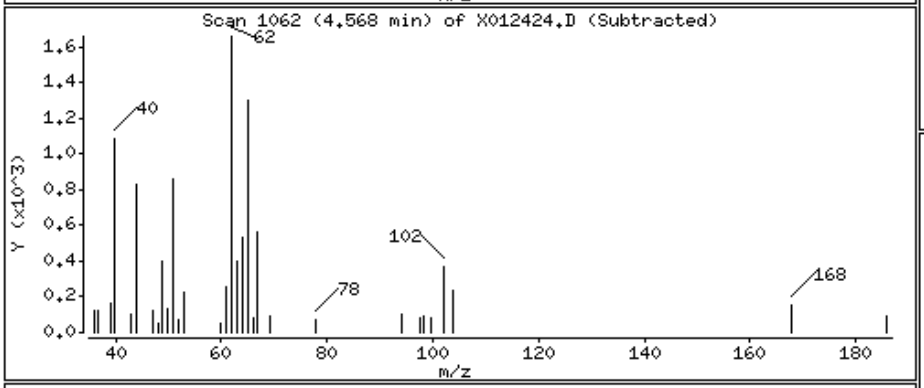
Sample Info: HS23010986-07;HS23010986-07;;;

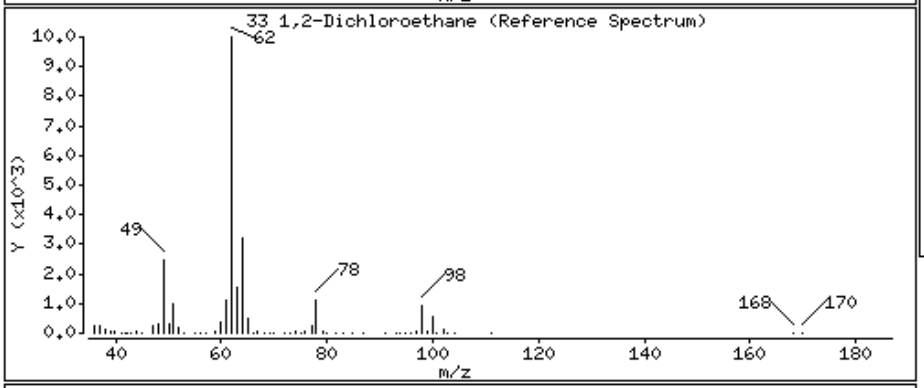
Purge Volume: 5.0 Operator: PC

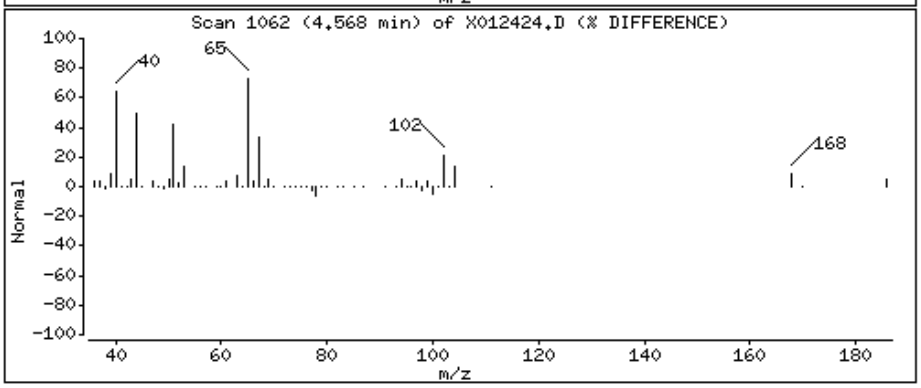
Column phase: DB624 Column diameter: 0.18

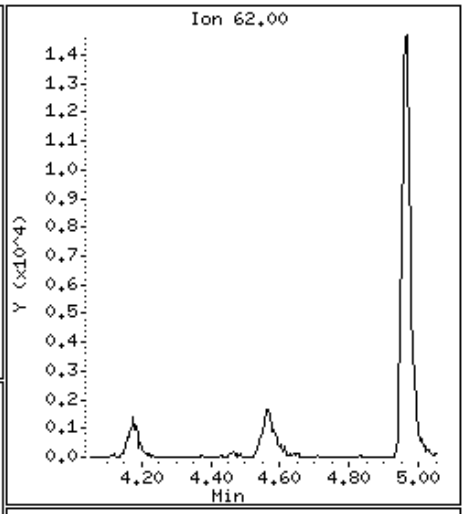
33 1,2-Dichloroethane Concentration: 63.04 ug/l

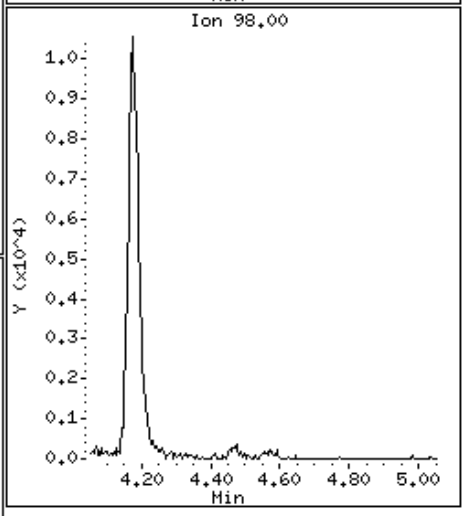












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D Page 6

Date : 24-JAN-2023 15:56

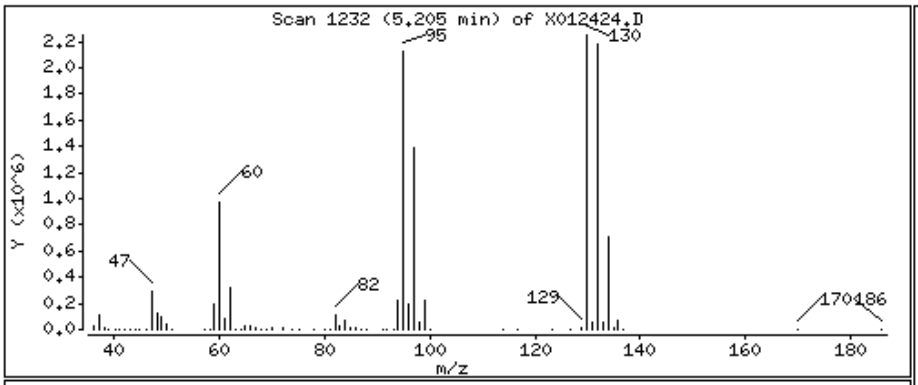
Client ID: HS23010986-07 Instrument: voa6.i

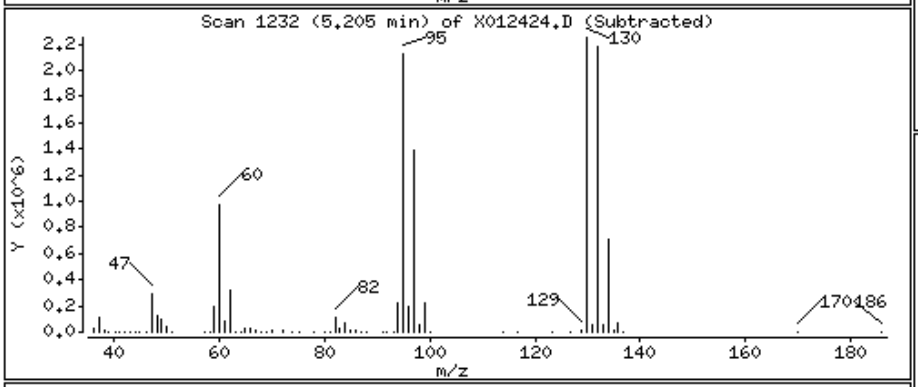
Sample Info: HS23010986-07;HS23010986-07;;;

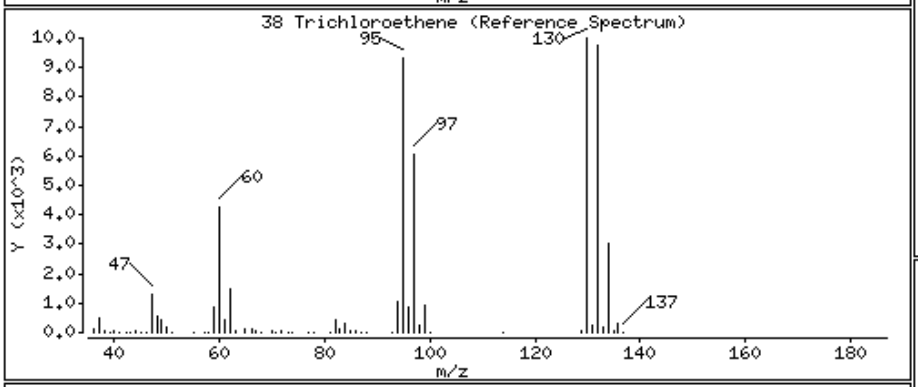
Purge Volume: 5.0 Operator: PC

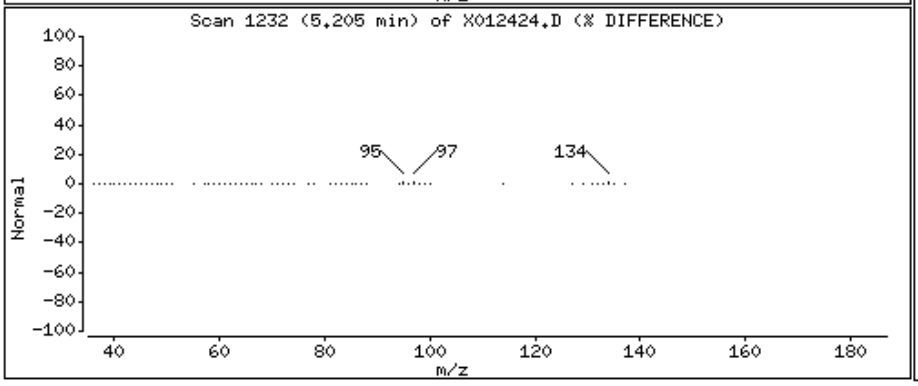
Column phase: DB624 Column diameter: 0.18

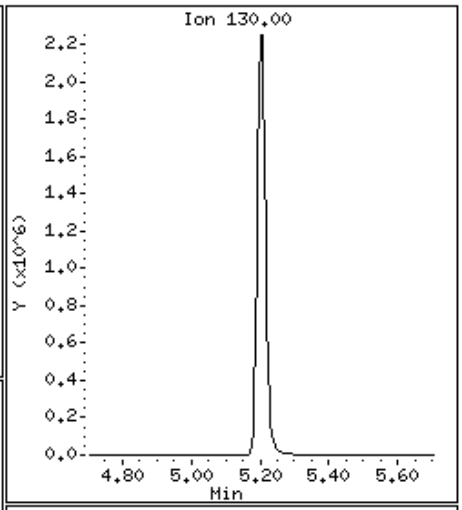
38 Trichloroethene Concentration: 68374.60 ug/l

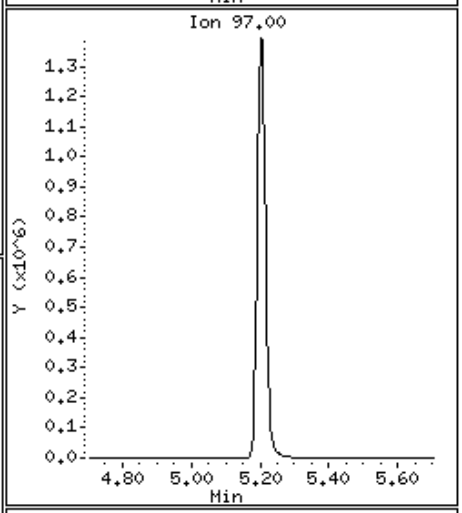


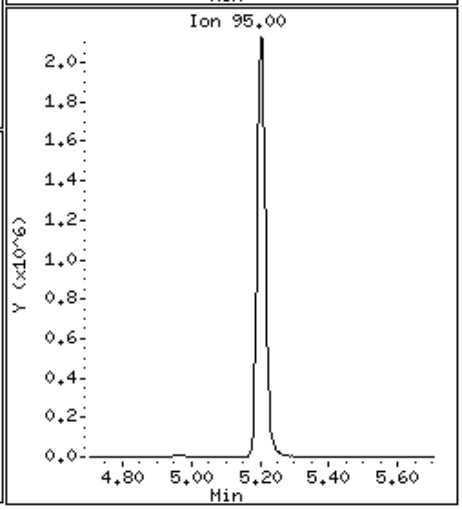












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Date : 24-JAN-2023 15:56

Client ID: HS23010986-07

Instrument: voa6.i

Sample Info: HS23010986-07;HS23010986-07;;;

Purge Volume: 5.0

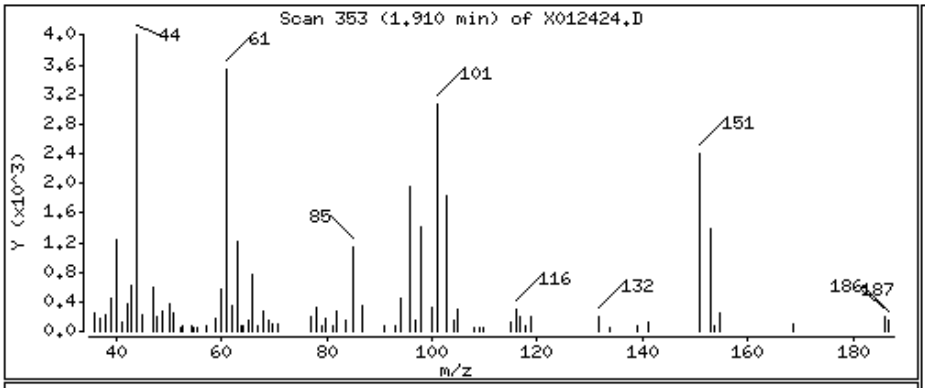
Operator: PC

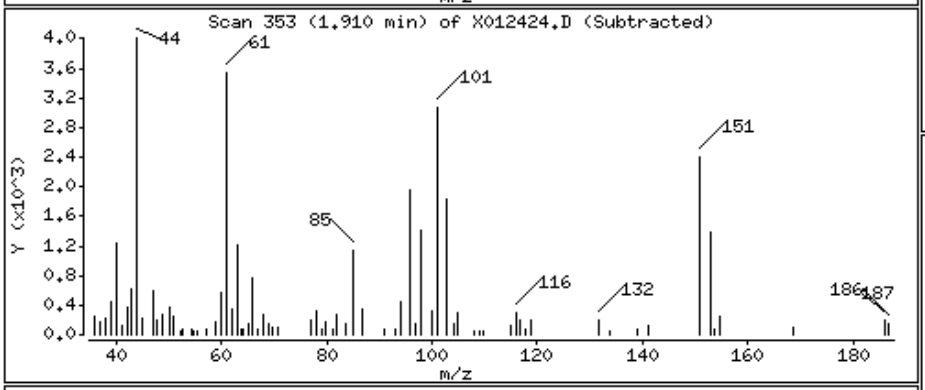
Column phase: DB624

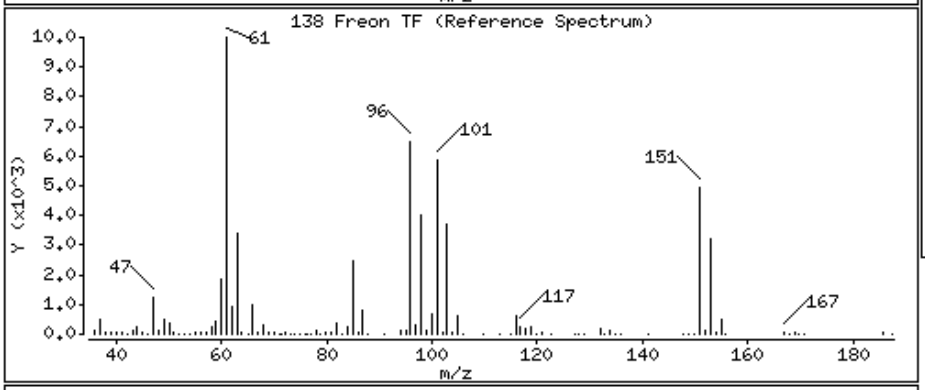
Column diameter: 0.18

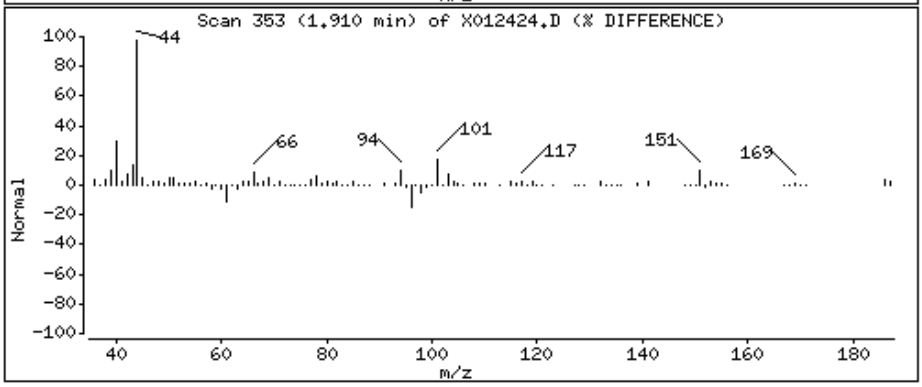
138 Freon TF

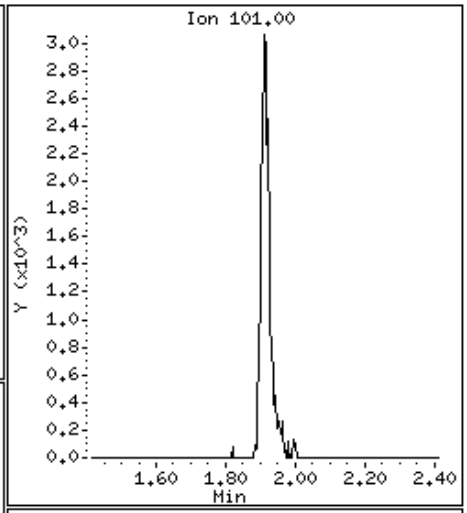
Concentration: 123.51 ug/l

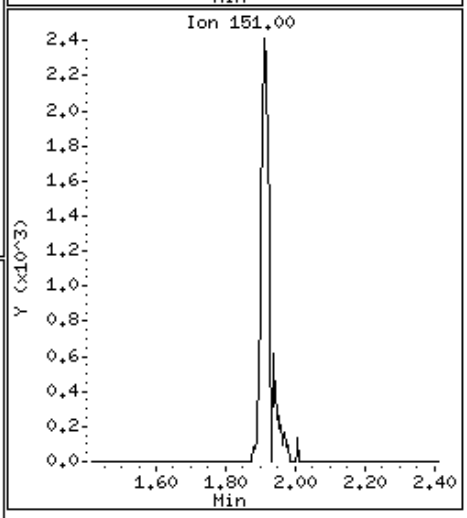












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012424.D
Inj Date : 24-JAN-2023 15:56
InstruID : voa6.i
LabSampID : HS23010986-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012430.D Page 1
Report Date: 03-Feb-2023 10:52

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012430.D
Lab Smp Id: HS23010986-05 Client Smp ID: HS23010986-05
Inj Date : 24-JAN-2023 18:02
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-05;HS23010986-05;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 30
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

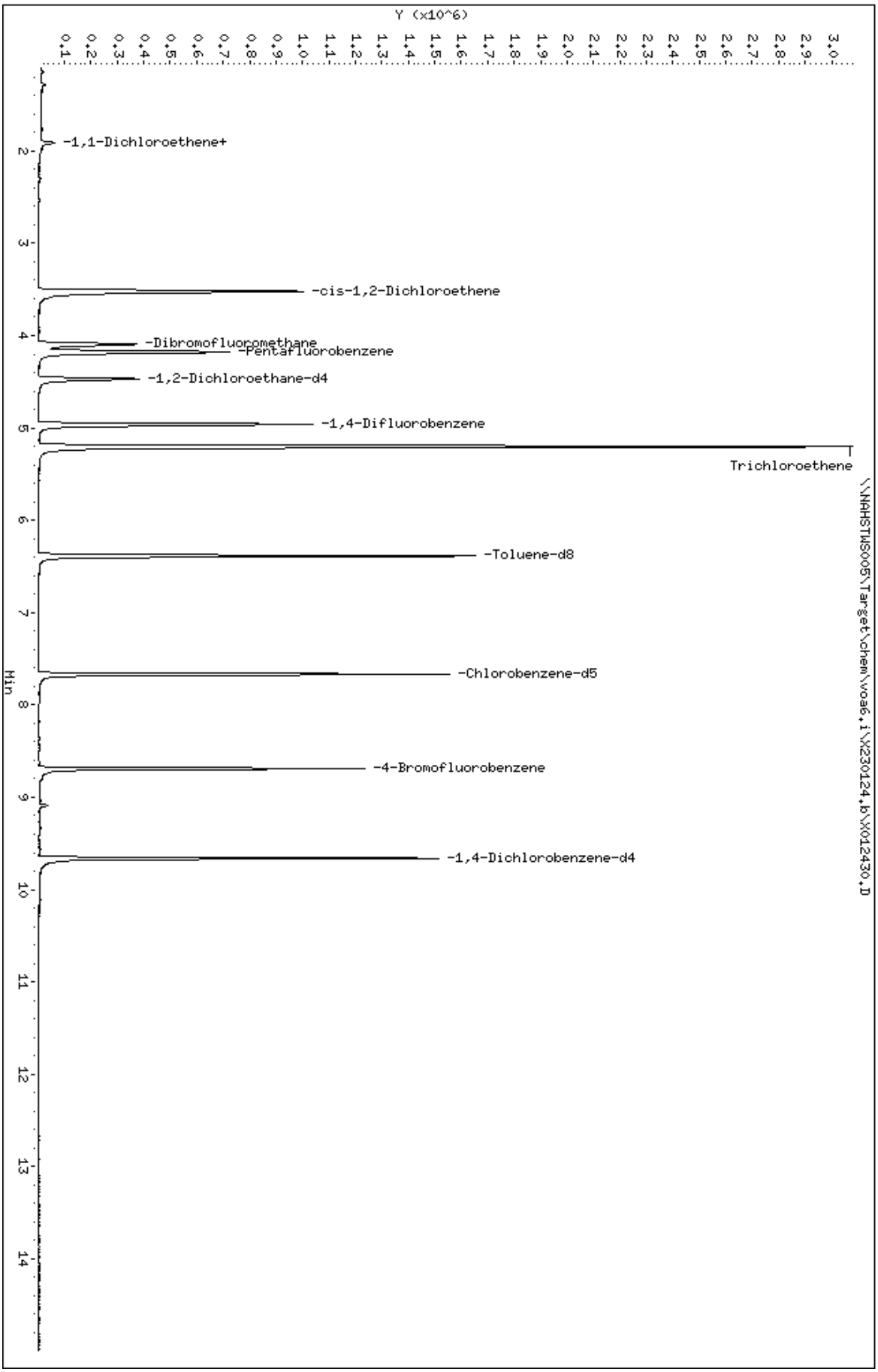
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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	4.177	4.178	(1.000)	590309	50.0000	
	5 Vinyl Chloride	62	1.141	1.141	(0.273)	6146	1.19185	119.18
	11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	6678	1.49056	149.05
	27 cis-1,2-Dichloroethene	96	3.521	3.522	(0.843)	537643	88.1075	8810.75
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	263619	46.4974	46.49
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	298164	49.8392	49.83
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	839375	50.0000	
	38 Trichloroethene	130	5.205	5.205	(1.049)	987561	173.709	17370.90
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	734612	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	970474	53.4614	53.46
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	337199	49.6963	49.69
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	382646	50.0000	
	138 Freon TF	101	1.917	1.910	(0.459)	12025	2.77506	277.50(a)
M	94 1,2-Dichloroethylene (total)	96				537643	88.1075	8810.75

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012430.D
Date : 24-JAN-2023 18:02
Client ID: HS23010986-05
Sample Info: HS23010986-05;HS23010986-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012430.D

Date : 24-JAN-2023 18:02

Client ID: HS23010986-05

Instrument: voa6.i

Sample Info: HS23010986-05;HS23010986-05;;;

Purge Volume: 5.0

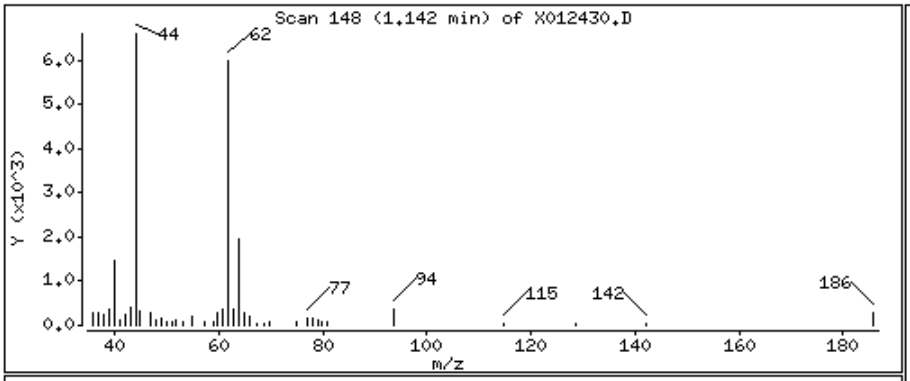
Operator: PC

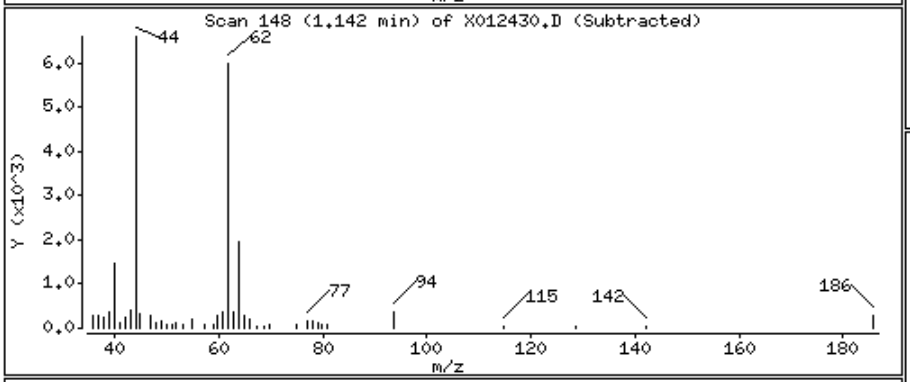
Column phase: DB624

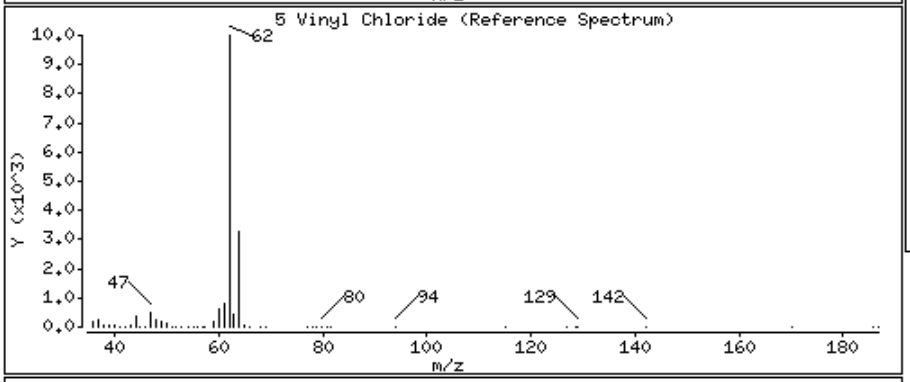
Column diameter: 0.18

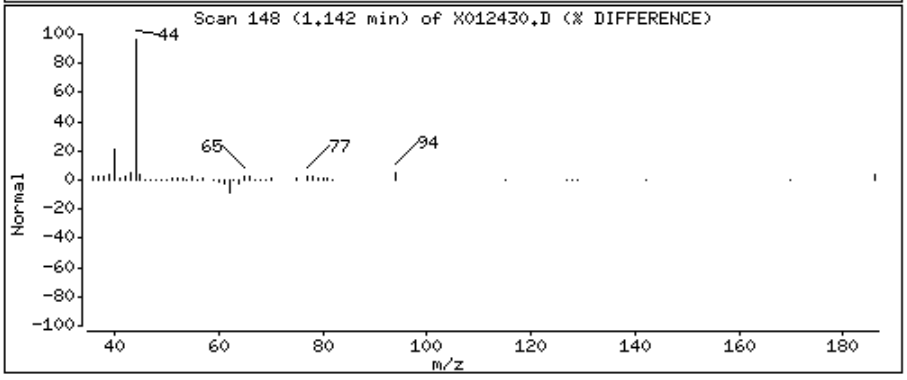
5 Vinyl Chloride

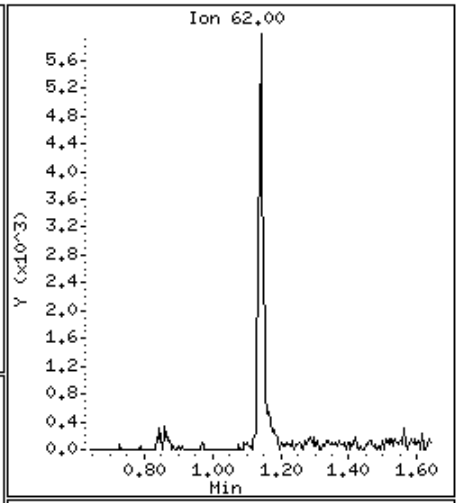
Concentration: 119.18 ug/l

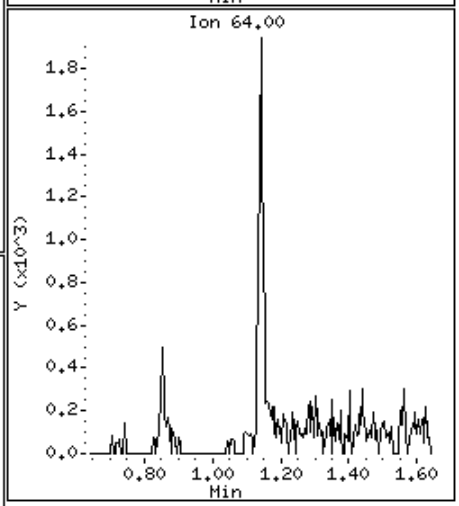












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012430.D Page 3

Date : 24-JAN-2023 18:02

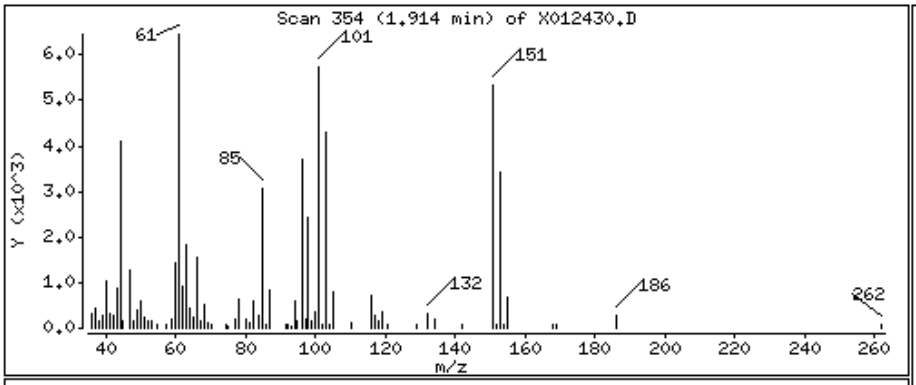
Client ID: HS23010986-05 Instrument: voa6.i

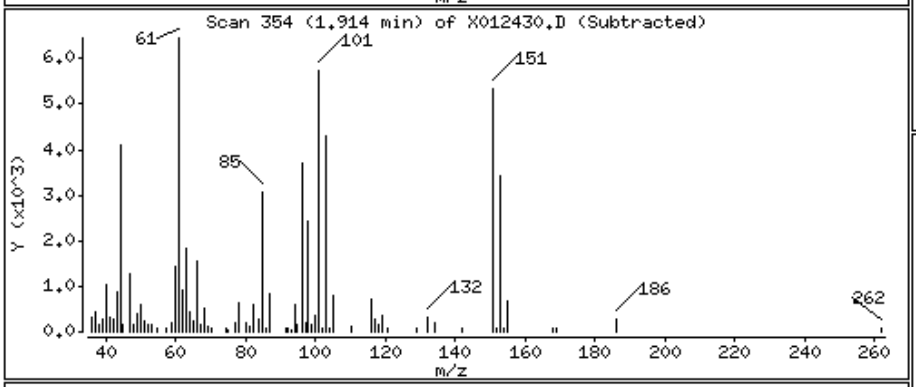
Sample Info: HS23010986-05;HS23010986-05;;;

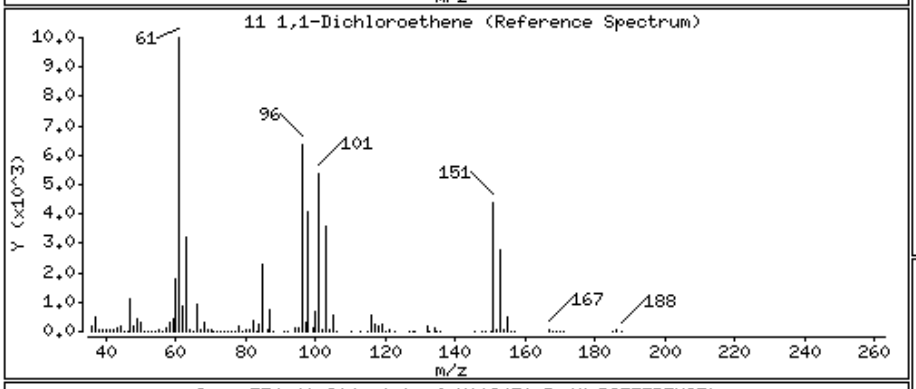
Purge Volume: 5.0 Operator: PC

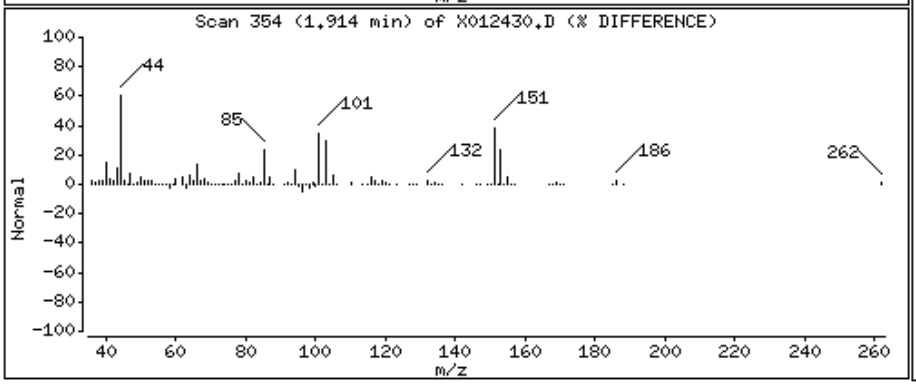
Column phase: DB624 Column diameter: 0.18

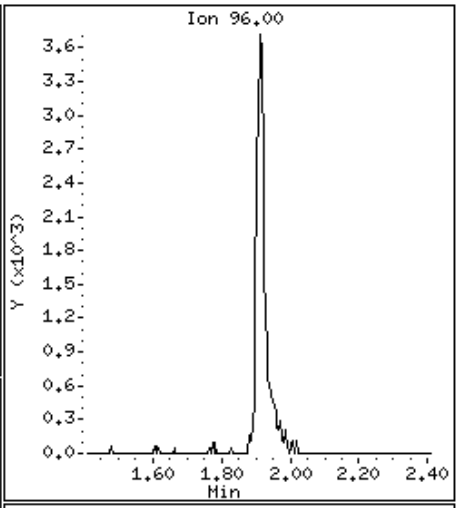
11 1,1-Dichloroethene Concentration: 149.05 ug/l

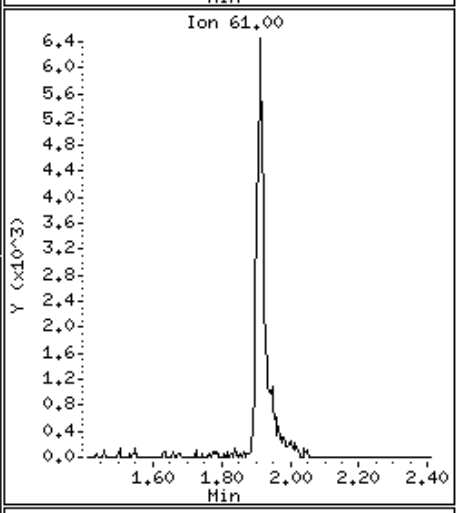


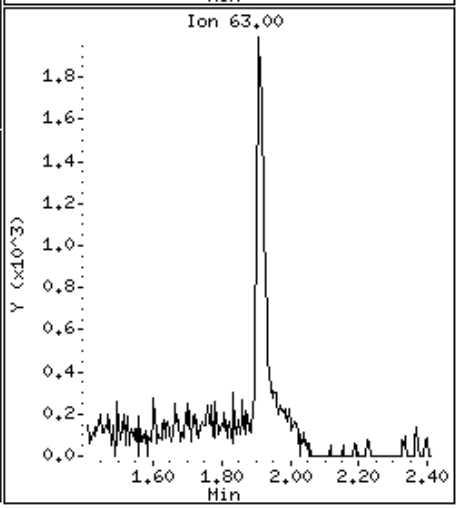












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012430.D

Date : 24-JAN-2023 18:02

Client ID: HS23010986-05

Instrument: voa6.i

Sample Info: HS23010986-05;HS23010986-05;;;

Purge Volume: 5.0

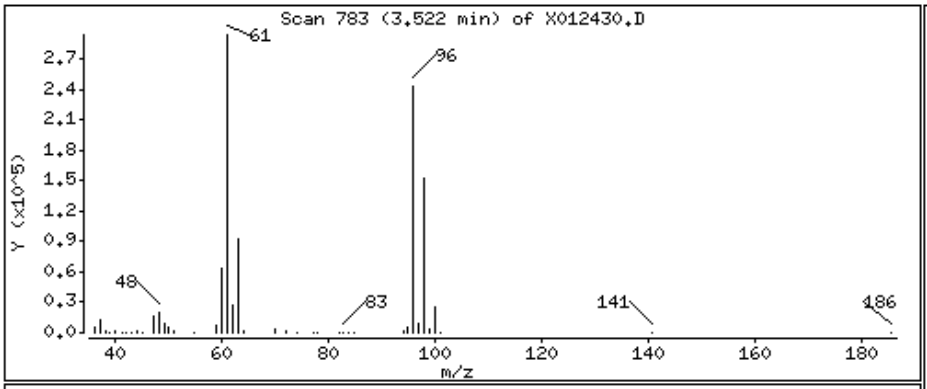
Operator: PC

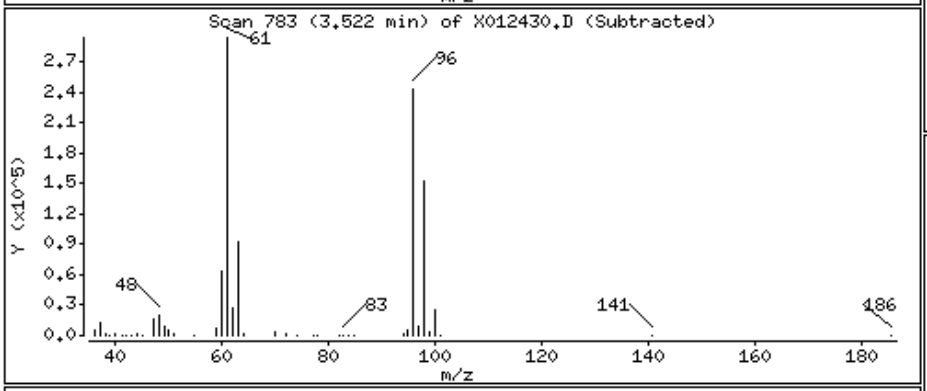
Column phase: DB624

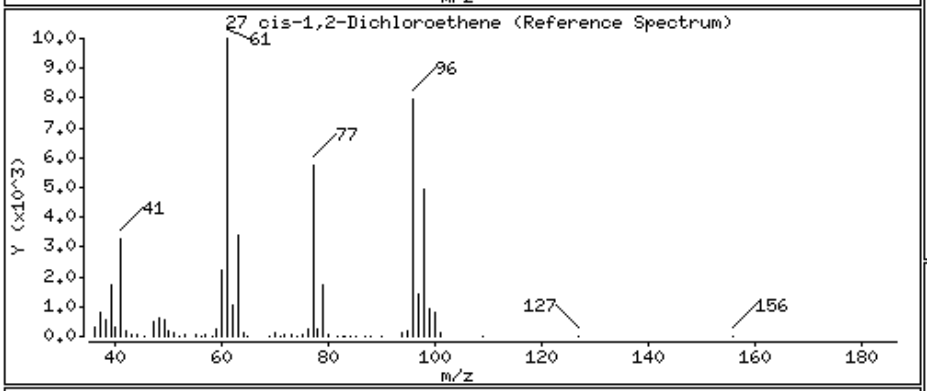
Column diameter: 0.18

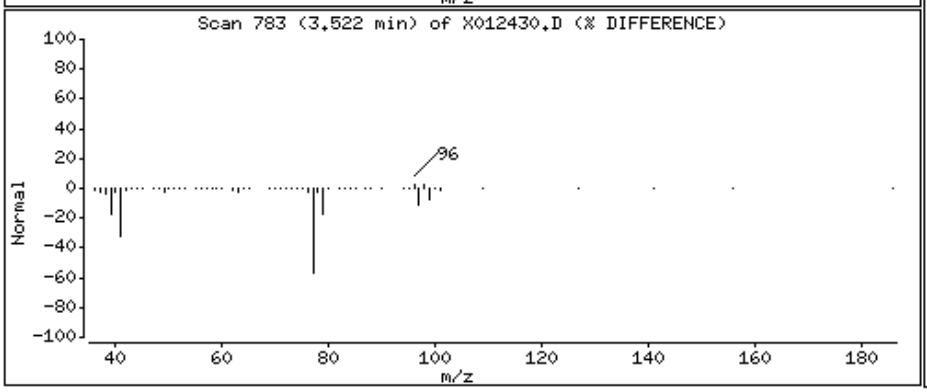
27 cis-1,2-Dichloroethene

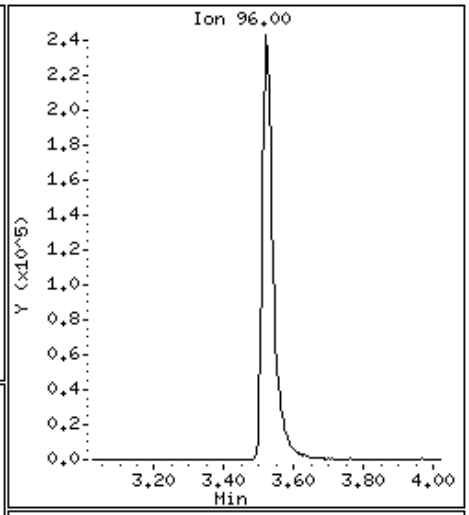
Concentration: 8810.75 ug/l

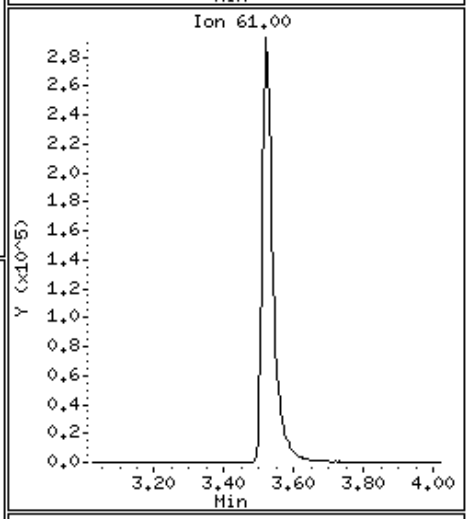


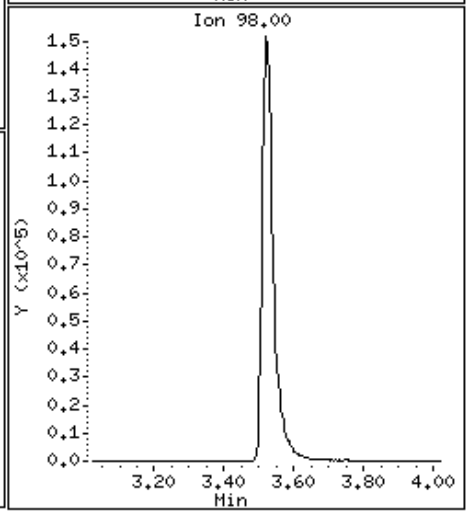












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012430.D Page 5

Date : 24-JAN-2023 18:02

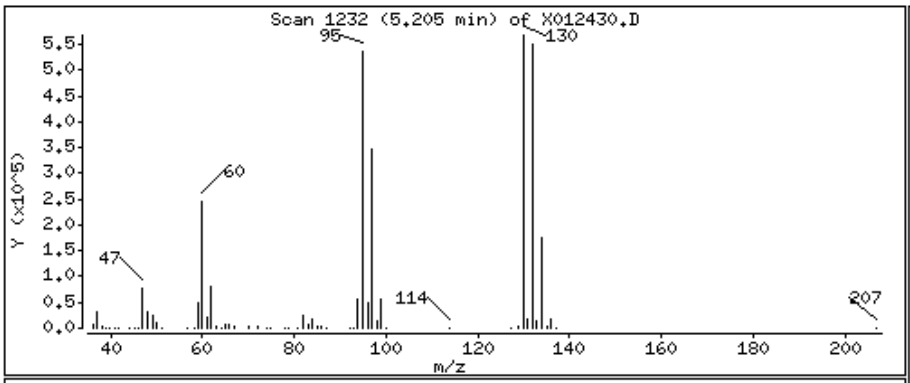
Client ID: HS23010986-05 Instrument: voa6.i

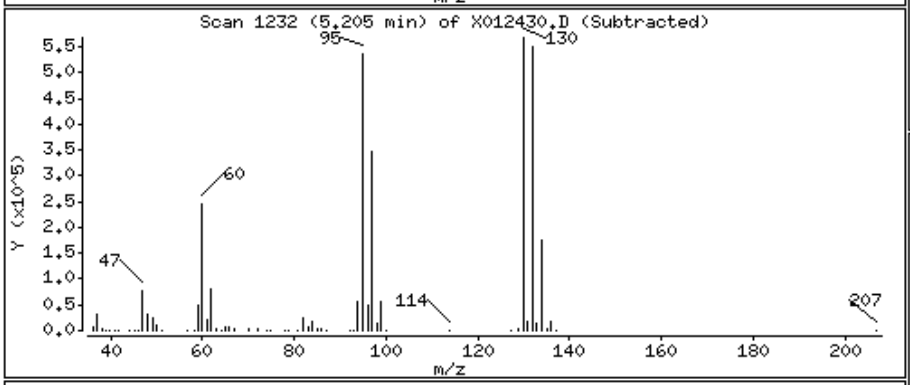
Sample Info: HS23010986-05;HS23010986-05;;;

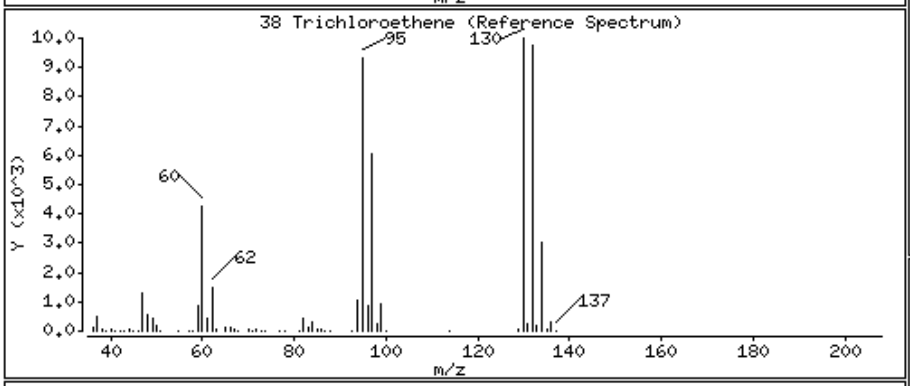
Purge Volume: 5.0 Operator: PC

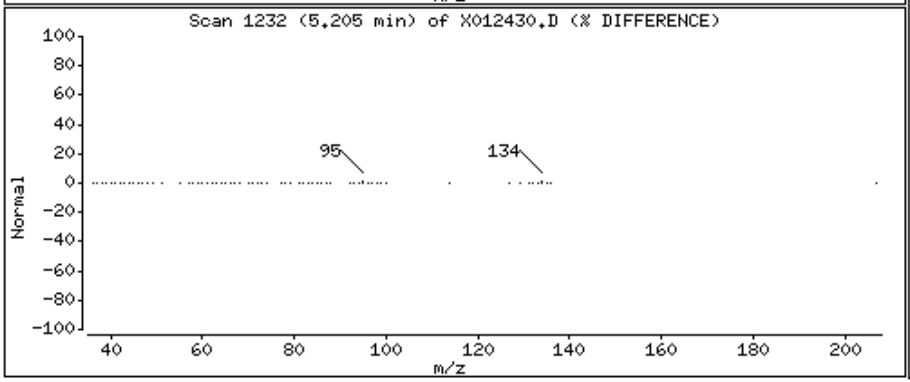
Column phase: DB624 Column diameter: 0.18

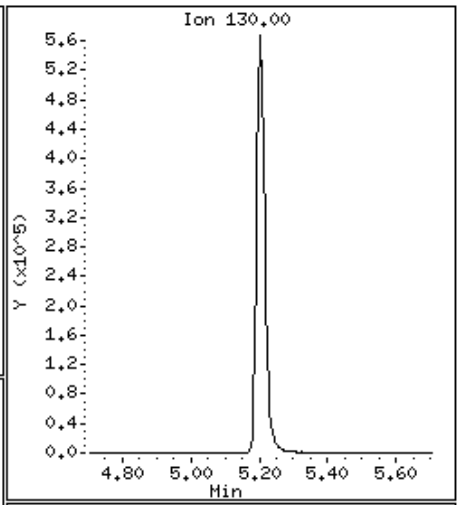
38 Trichloroethene Concentration: 17370.90 ug/l

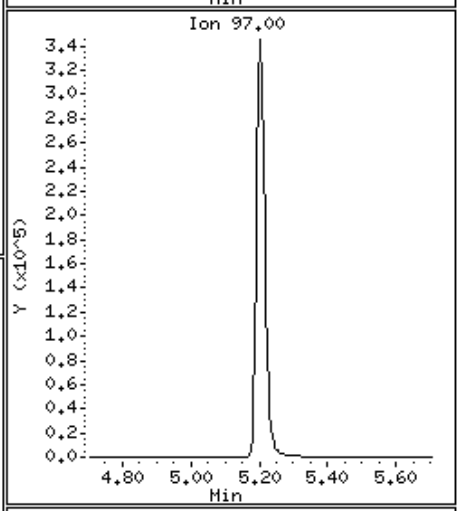


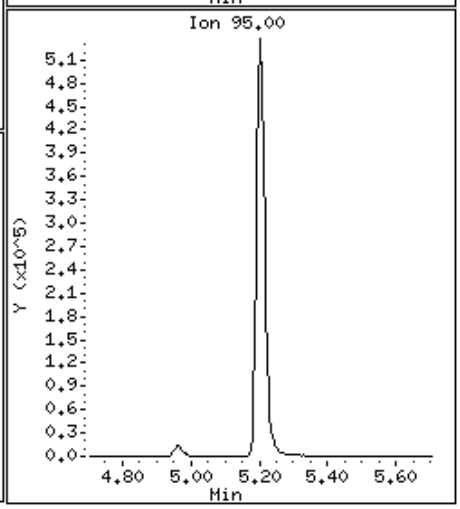












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Date : 24-JAN-2023 18:02

Client ID: HS23010986-05

Instrument: voa6.i

Sample Info: HS23010986-05;HS23010986-05;;;

Purge Volume: 5.0

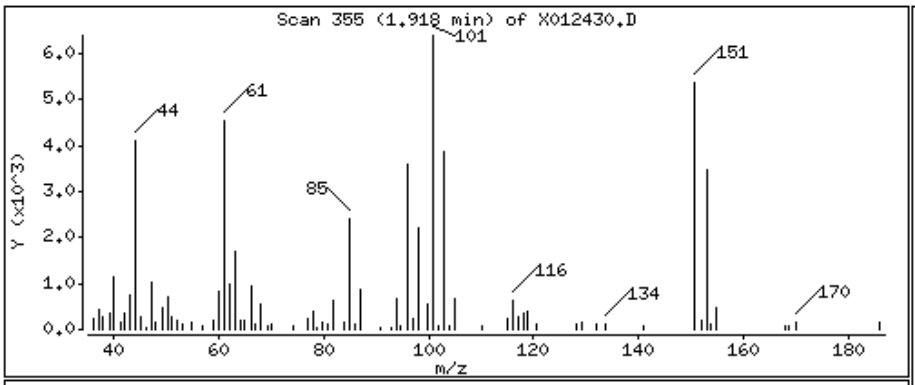
Operator: PC

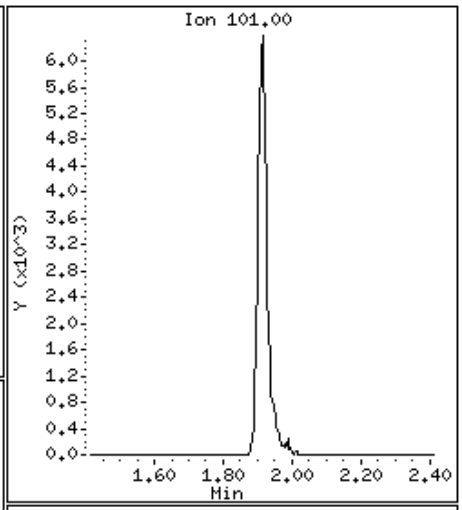
Column phase: DB624

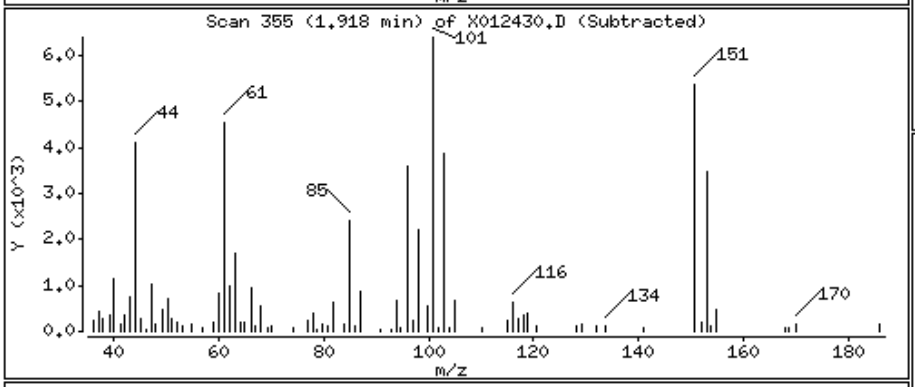
Column diameter: 0.18

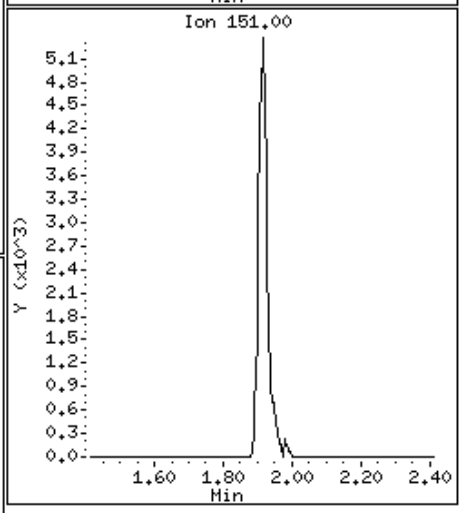
138 Freon TF

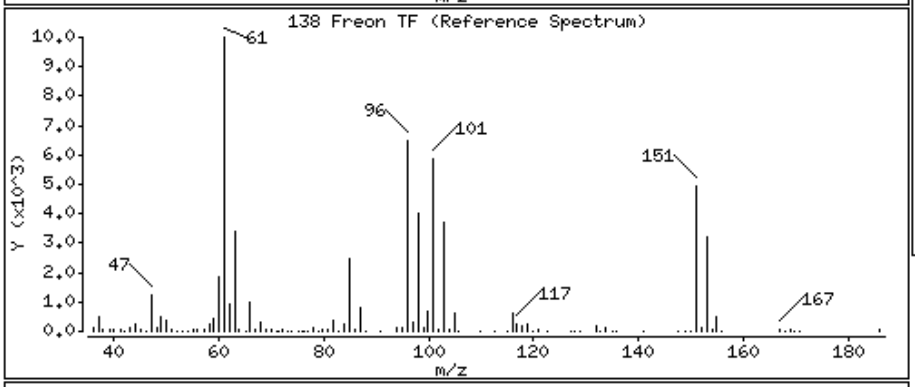
Concentration: 277.50 ug/l

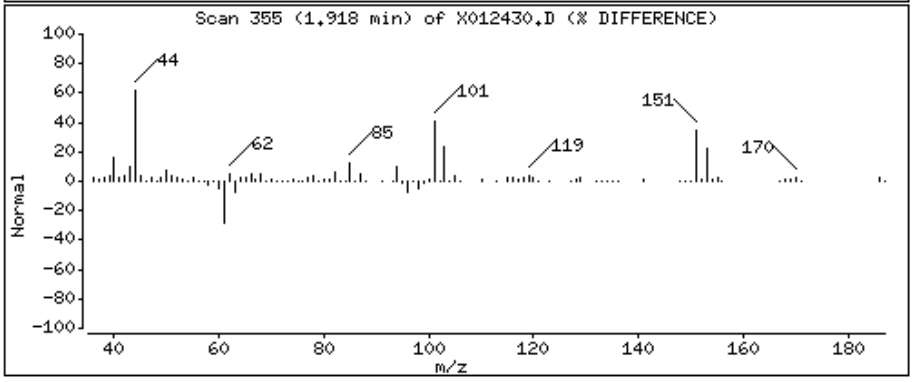












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Inj Date : 24-JAN-2023 18:02
InstruID : voa6.i
LabSampID : HS23010986-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012431.D Page 1
Report Date: 03-Feb-2023 10:52

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012431.D
Lab Smp Id: HS23010986-05MS Client Smp ID: HS23010986-05MS
Inj Date : 24-JAN-2023 18:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23010986-05MS;HS23010986-05MS;3;;MS
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\8260W.m
Meth Date : 03-Feb-2023 10:51 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 31 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.178	4.178	(1.000)	609595	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	52571	12.6262	1262.62
3 Chloromethane	50	1.074	1.074	(0.257)	79015	15.9043	1590.42
4 Propionitrile	54	3.649	3.645	(0.873)	103274	166.034	16603.37(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	86395	16.2239	1622.39
6 Bromomethane	94	1.336	1.336	(0.320)	64302	17.1658	1716.58
7 Chloroethane	64	1.400	1.400	(0.335)	52078	14.0506	1405.05
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	131672	17.6694	1766.93
9 Acrolein	56	1.441	1.441	(0.345)	12959	33.0287	3302.86
10 Acetone	43	1.970	1.966	(0.472)	45518	26.5862	2658.62
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	80062	17.3049	1730.48
12 Isobutyl Alcohol	43	4.676	4.669	(1.119)	232885	339.651	33965.08(a)
13 Acetonitrile	39	2.194	2.195	(0.525)	99650	179.612	17961.17(a)
14 Allyl Chloride	41	2.194	2.195	(0.525)	172786	16.3520	1635.19(a)
15 Iodomethane	142	2.022	2.022	(0.484)	133340	25.1476	2514.76
16 Acrylonitrile	53	2.532	2.528	(0.606)	47952	30.5594	3055.93
17 Methylene Chloride	84	2.299	2.300	(0.550)	87198	13.7404	1374.03
18 Methyl tert-butyl ether	73	2.532	2.528	(0.606)	242479	16.0119	1601.19
19 Carbon Disulfide	76	2.067	2.067	(0.495)	378497	31.2685	3126.84
20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	80435	15.5341	1553.41

21 Vinyl Acetate	43	2.997	2.993 (0.717)	439018	33.0247	3302.46
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	138184	15.2061	1520.61

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012431.D Page 2
Report Date: 03-Feb-2023 10:52

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	3.578	3.570	(0.856)	46981	28.1365	2813.64
	25	Methacrylonitrile	41	3.821	3.818	(0.915)	69811	16.1733	1617.32(a)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	115977	15.0313	1503.12
	27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	602582	95.6254	9562.54
	28	Chloroform	83	3.904	3.900	(0.935)	153946	15.1146	1511.45
	29	Bromochloromethane	128	3.791	3.788	(0.908)	46261	13.4082	1340.81
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	266061	45.4396	45.43
	31	1,1,1-Trichloroethane	97	4.084	4.076	(0.978)	137532	17.0190	1701.89
	32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	119732	19.5607	1956.07
	33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	122058	17.2785	1727.85
	34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	117898	18.0371	1803.71
$	35	1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	307719	49.8092	49.80
*	36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	862181	50.0000	
	37	Benzene	78	4.511	4.508	(0.909)	338611	16.4465	1644.64
	38	Trichloroethene	130	5.201	5.205	(1.048)	1058028	181.181	18118.12
	39	Bromodichloromethane	83	5.726	5.722	(1.154)	119994	15.5296	1552.96
	40	Methyl Methacrylate	41	5.606	5.602	(1.342)	69666	16.7605	1676.05(a)
	41	2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	27352	12.4427	1244.27(a)
	42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	83903	15.3200	1531.99
	43	2-Nitropropane	43	5.969	5.966	(1.429)	26158	16.9926	1699.26
	44	Dibromomethane	93	5.553	5.550	(1.119)	57214	15.3697	1536.96
	45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	146239	34.5348	3453.48
	46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.241)	139200	15.3397	1533.97
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	792242	50.0000	
$	48	Toluene-d8	98	6.385	6.386	(0.833)	1012685	51.7287	51.72
	49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	67724	16.6805	1668.05(a)
	50	Toluene	91	6.445	6.446	(0.841)	375362	17.1415	1714.15
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	118991	15.8007	1580.06
	52	2-Hexanone	43	7.086	7.083	(0.924)	100396	34.8472	3484.71
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	70113	15.9599	1595.98
	54	1,3-Dichloropropane	76	6.978	6.982	(0.910)	139834	16.1714	1617.14
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	98942	15.6049	1560.48
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	84240	18.5930	1859.29
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	91328	16.6273	1662.73
	58	1-Chlorohexane	55	7.694	7.694	(1.551)	90908	21.8181	2181.80
	59	Chlorobenzene	112	7.694	7.694	(1.003)	253528	16.3229	1632.29
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	92972	16.0846	1608.45
	61	Ethylbenzene	106	7.799	7.799	(1.017)	131892	18.0270	1802.69
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	329625	34.9488	3494.87
	63	o-Xylene	106	8.241	8.241	(1.075)	158801	17.0589	1705.89
	64	Styrene	104	8.260	8.256	(1.077)	267913	17.1707	1717.06
	66	Bromoform	173	8.410	8.410	(1.097)	67317	15.3253	1532.52
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	412384	19.3903	1939.03
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	112159	15.9367	1593.67
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	373998	51.1083	51.10
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	441556	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	120118	24.4478	2444.78
	72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	28611	16.7291	1672.90(a)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	482800	19.7397	1973.97
	74	Bromobenzene	156	8.807	8.803	(0.912)	118118	16.3048	1630.47
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	346054	19.1527	1915.27
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	290916	18.1258	1812.58

77 4-Chlorotoluene	91	9.069	9.070 (0.939)	336516	18.3923	1839.23
78 tert-Butylbenzene	119	9.336	9.336 (0.966)	300890	20.3442	2034.42

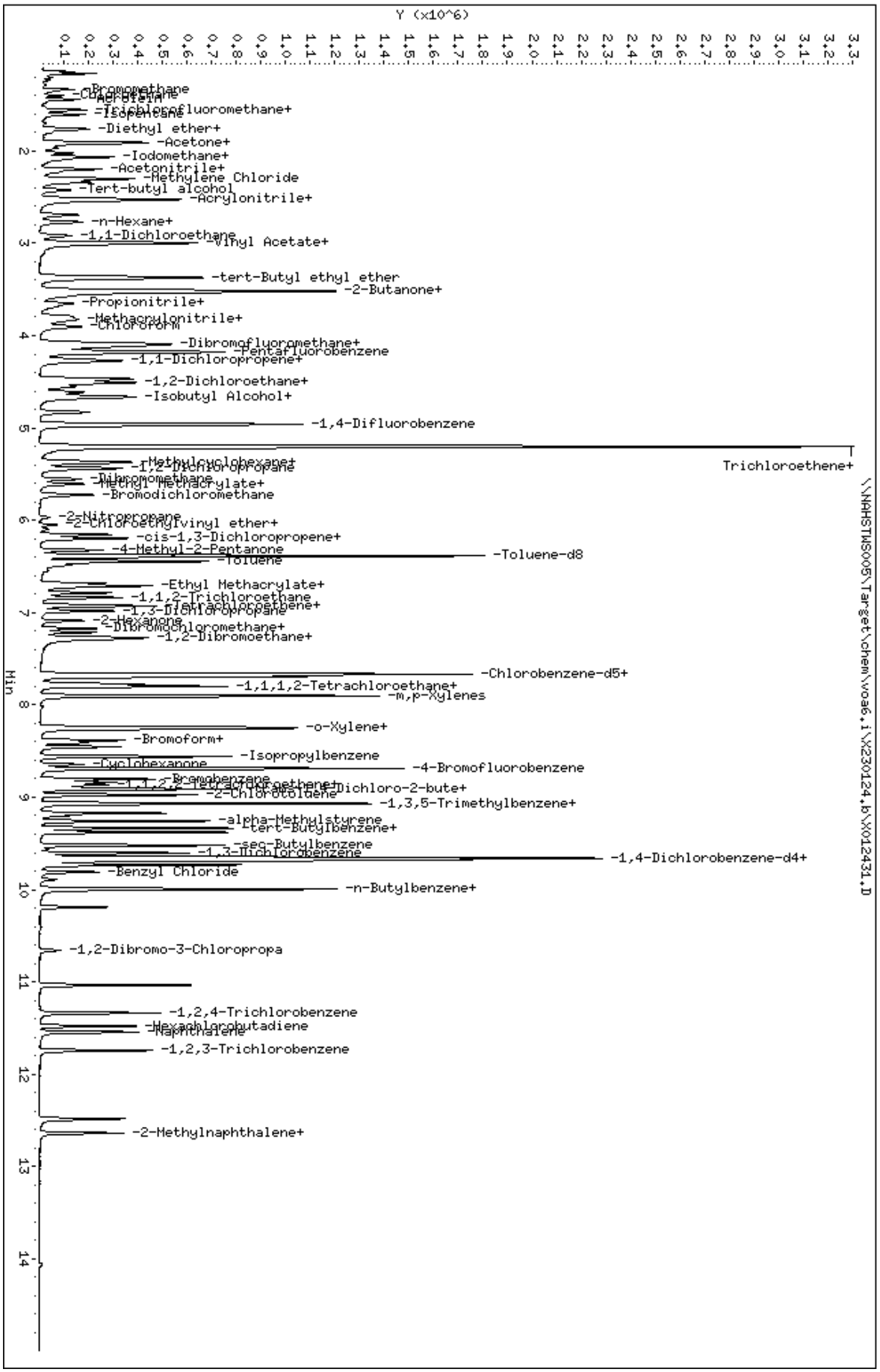
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	345204	18.1578	1815.78
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	418811	21.2826	2128.26
82	p-Isopropyltoluene	119	9.651	9.647	(0.999)	365192	20.7097	2070.97
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	207367	17.2460	1724.60
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	221520	16.8829	1688.29
86	Benzyl Chloride	91	9.808	9.808	(1.279)	143113	13.6149	1361.48
87	n-Butylbenzene	91	9.995	9.992	(1.035)	316978	19.7649	1976.49
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	203138	16.4040	1640.39
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	18026	16.0834	1608.33
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	134286	17.1830	1718.29
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	65079	18.8972	1889.71
92	Naphthalene	128	11.544	11.540	(1.195)	306846	17.2568	1725.67
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	127555	17.0419	1704.18
146	Methyl acetate	43	2.228	2.225	(0.533)	45894	16.7311	1673.10
138	Freon TF	101	1.910	1.910	(0.457)	90731	20.2760	2027.59
141	Cyclohexane	56	4.118	4.121	(0.986)	133101	22.3761	2237.61
142	Tetrahydrofuran	42	3.844	3.840	(0.920)	24361	29.9971	2999.70
147	Methylcyclohexane	55	5.381	5.373	(1.085)	202770	19.2130	1921.29
135	1,4-Dioxane	88	5.602	5.598	(1.341)	18766	336.771	33677.08
132	n-Butanol	56	5.268	5.250	(1.261)	16496	251.348	25134.83(a)
131	Methyl Acrylate	55	3.686	3.683	(0.882)	74003	17.8811	1788.11
133	Ethyl Acrylate	55	5.381	5.373	(1.288)	202770	18.1854	1818.54
136	n-Hexane	57	2.768	2.768	(0.663)	83256	18.9686	1896.85
139	Diethyl ether	59	1.752	1.752	(0.419)	59684	14.6529	1465.28
148	Tert-butyl alcohol	59	2.423	2.420	(0.580)	141675	335.641	33564.05
149	Isopropyl alcohol	45	2.090	2.086	(0.500)	76271	345.990	34599.00
156	Diisopropyl ether	45	2.997	2.997	(0.717)	254386	16.0867	1608.67
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	137685	16.0719	1607.19
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	364936	17.1628	1716.28
167	Ethanol	45	1.700	1.700	(0.407)	14390	360.259	36025.89
172	tert-Butyl formate	59	4.612	4.612	(1.104)	108287	33.4767	3347.67
173	3,3-Dimethyl-1-butanol	57	7.289	7.285	(0.951)	131018	349.532	34953.15
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	287181	16.3433	1634.32
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	267874	15.9418	1594.18
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	108287	330.753	33075.32
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	263100	322.410	32241.04
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	137685		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	62633	14.9705	1497.05
152	Amyl alcohol	42	6.910	6.899	(0.901)	19301	246.369	24636.86
158	Dichlorofluoromethane	67	1.527	1.531	(0.366)	12087	15.3133	1531.33
159	Propylene oxide	43	1.752	1.752	(0.419)	12190	31.7995	3179.94
161	3-Methyl-1-butanol	55	6.914	6.903	(0.902)	25523	325.851	32585.06
162	Butyl acrylate	55	8.252	8.249	(1.076)	178181	17.2174	1721.74
182	Epichlorohydrin	57	6.097	6.089	(1.229)	24771	65.8510	6585.09
M 94	1,2-Dichloroethylene (total)	96				683017	111.160	11115.95
M 95	Xylenes (total)	106				488426	52.0077	5200.77
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	164425	16.8060	1680.60
130	Ethyl Acetate	43	3.649	3.649	(0.873)	80530	16.9295	1692.95
134	Cyclohexanone	55	8.642	8.642	(0.894)	58569	317.981	31798.07(a)
185	Isoprene	39	1.767	1.767	(0.423)	29390	18.0976	1809.75
186	Isopentane	42	1.606	1.606	(0.385)	45872		(a)
188	Isopropyl acetate	43	4.676	4.669	(0.943)	232885	17.3858	1738.57

187 n-Amyl acetate	43	8.455	8.451 (1.103)	154662	16.7418	1674.18
189 n-Butyl acetate	43	7.214	7.210 (0.941)	127844	18.7853	1878.53

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	83256	371.579	37157.86
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	171647	16.2957	1629.57
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	180842	16.8660	1686.59
168 1-Propanol	59	3.000	2.993	(0.718)	32439	325.618	32561.79

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

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NO MANUAL INTEGRATIONS

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Report Date: 03-Feb-2023 10:52

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012432.D
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Operator : PC Inst ID: voa6.i
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Misc Info : V6;WATER;0;100;
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Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 31 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.174	4.178	(1.000)	615830	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	44671	10.6826	1068.26
3 Chloromethane	50	1.074	1.074	(0.257)	74094	14.9215	1492.15
4 Propionitrile	54	3.649	3.645	(0.874)	102161	162.582	16258.15(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	78653	14.6206	1462.05
6 Bromomethane	94	1.336	1.336	(0.320)	57074	15.2962	1529.61
7 Chloroethane	64	1.400	1.400	(0.335)	48788	13.0297	1302.96
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	120649	16.0263	1602.62
9 Acrolein	56	1.437	1.441	(0.344)	12003	30.5170	3051.70
10 Acetone	43	1.970	1.966	(0.472)	42236	24.4167	2441.67
11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	73243	15.6707	1567.07
12 Isobutyl Alcohol	43	4.672	4.669	(1.119)	229439	331.237	33123.70(a)
13 Acetonitrile	39	2.194	2.195	(0.526)	90346	161.193	16119.32(a)
14 Allyl Chloride	41	2.194	2.195	(0.526)	169469	15.8757	1587.56(a)
15 Iodomethane	142	2.026	2.022	(0.485)	141796	26.2862	2628.61
16 Acrylonitrile	53	2.536	2.528	(0.608)	48469	30.5761	3057.60
17 Methylene Chloride	84	2.299	2.300	(0.551)	84473	13.1762	1317.61
18 Methyl tert-butyl ether	73	2.528	2.528	(0.606)	233744	15.2788	1527.88
19 Carbon Disulfide	76	2.067	2.067	(0.495)	351023	28.7052	2870.51
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	75371	14.4088	1440.87

21 Vinyl Acetate	43	2.993	2.993 (0.717)	421837	31.4110	3141.09
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	130914	14.2603	1426.02

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012432.D Page 2
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			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	3.574	3.570	(0.856)	48423	28.6452	2864.51
	25	Methacrylonitrile	41	3.821	3.818	(0.916)	69168	15.8621	1586.20(a)
	26	2,2-Dichloropropane	77	3.507	3.507	(0.840)	107613	13.8061	1380.60
	27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	587806	92.3361	9233.61
	28	Chloroform	83	3.900	3.900	(0.934)	146571	14.2448	1424.47
	29	Bromochloromethane	128	3.791	3.788	(0.908)	46403	13.3132	1331.31
$	30	Dibromofluoromethane	113	4.095	4.095	(0.981)	266608	45.0707	45.07
	31	1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	130469	15.9815	1598.14
	32	1,1-Dichloropropene	75	4.275	4.275	(0.861)	110424	17.8492	1784.91
	33	1,2-Dichloroethane	62	4.556	4.552	(0.918)	120201	16.8356	1683.56
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	112307	16.9999	1699.99
$	35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	307369	49.2519	49.25
*	36	1,4-Difluorobenzene	114	4.965	4.961	(1.000)	871402	50.0000	
	37	Benzene	78	4.511	4.508	(0.909)	319169	15.3381	1533.81
	38	Trichloroethene	130	5.201	5.205	(1.048)	1016699	172.262	17226.15
	39	Bromodichloromethane	83	5.726	5.722	(1.153)	114676	14.6843	1468.43
	40	Methyl Methacrylate	41	5.606	5.602	(1.343)	65283	15.5470	1554.70(a)
	41	2-Chloroethylvinyl ether	63	6.052	6.044	(1.219)	25024	11.2632	1126.32(a)
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	80800	14.5973	1459.72
	43	2-Nitropropane	43	5.969	5.966	(1.430)	24854	15.9820	1598.20
	44	Dibromomethane	93	5.550	5.550	(1.118)	56804	15.0981	1509.80
	45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	141080	33.1140	3311.39
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	134575	14.6731	1467.31
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	797088	50.0000	
$	48	Toluene-d8	98	6.385	6.386	(0.833)	1014868	51.5250	51.52
	49	Ethyl Methacrylate	69	6.708	6.708	(1.351)	64879	15.8107	1581.06(a)
	50	Toluene	91	6.445	6.446	(0.841)	355185	16.1215	1612.15
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	113677	14.9353	1493.53
	52	2-Hexanone	43	7.086	7.083	(0.924)	98276	33.9039	3390.39
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	65782	14.8830	1488.29
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	135788	15.6080	1560.80
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	96593	15.1418	1514.17
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	77523	17.0064	1700.64
	57	1,2-Dibromoethane	107	7.263	7.259	(0.947)	87804	15.8885	1588.85
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	84818	20.1410	2014.10
	59	Chlorobenzene	112	7.694	7.694	(1.003)	241082	15.4273	1542.72
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	89566	15.4011	1540.11
	61	Ethylbenzene	106	7.799	7.799	(1.017)	123766	16.8134	1681.34
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	313660	33.0539	3305.39
	63	o-Xylene	106	8.241	8.241	(1.075)	150394	16.0576	1605.76
	64	Styrene	104	8.260	8.256	(1.077)	251612	16.0279	1602.78
	66	Bromoform	173	8.410	8.410	(1.097)	65794	14.8875	1488.74
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	391713	18.3064	1830.63
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	111816	15.9052	1590.52
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	376614	51.1528	51.15
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	441078	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	116977	23.8343	2383.43
	72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	28717	16.6890	1668.89(a)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	457389	18.7210	1872.10
	74	Bromobenzene	156	8.807	8.803	(0.912)	114795	15.8632	1586.32
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	325604	18.0404	1804.04
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	276385	17.2391	1723.91

77 4-Chlorotoluene	91	9.070	9.070 (0.939)	318285	17.4147	1741.47
78 tert-Butylbenzene	119	9.336	9.336 (0.966)	283715	19.2038	1920.37

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012432.D Page 3
Report Date: 03-Feb-2023 10:52

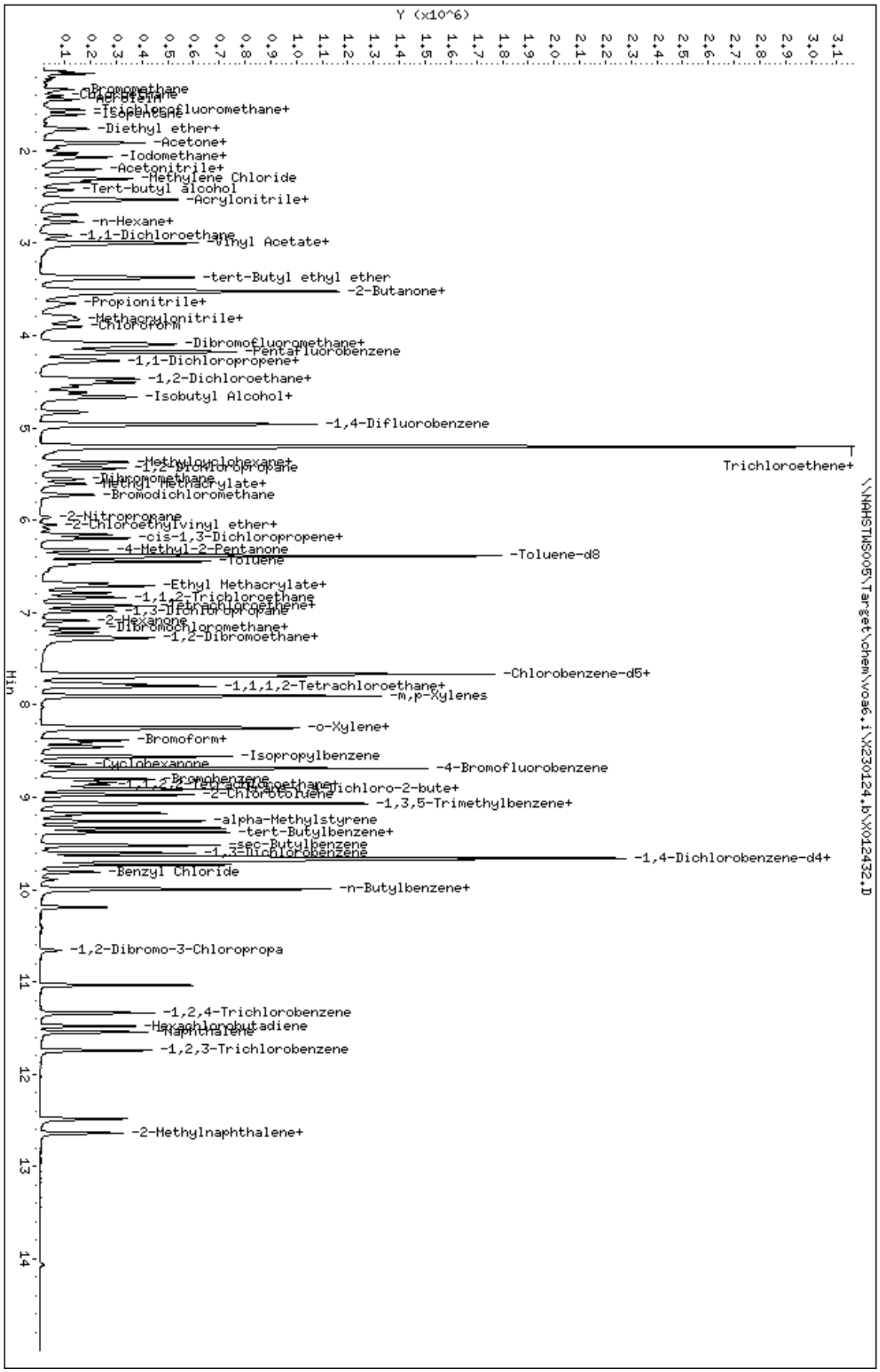
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	328729	17.3100	1730.99
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	393792	20.0329	2003.29
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	345349	19.6057	1960.56
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	199714	16.6276	1662.75
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	212890	16.2428	1624.27
86	Benzyl Chloride	91	9.808	9.808	(1.279)	138294	13.1830	1318.29
87	n-Butylbenzene	91	9.995	9.992	(1.035)	296997	18.6492	1864.91
88	1,2-Dichlorobenzene	146	9.995	9.992	(1.035)	200636	16.2195	1621.95
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	17683	15.7961	1579.60
90	1,2,4-Trichlorobenzene	180	11.337	11.338	(1.173)	134903	17.2806	1728.06
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	63787	18.5427	1854.26
92	Naphthalene	128	11.544	11.540	(1.195)	302313	17.0203	1702.02
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	125325	16.7621	1676.20
146	Methyl acetate	43	2.232	2.225	(0.535)	42763	15.4318	1543.18
138	Freon TF	101	1.913	1.910	(0.458)	84052	18.5932	1859.32
141	Cyclohexane	56	4.118	4.121	(0.987)	123539	20.6608	2066.07
142	Tetrahydrofuran	42	3.840	3.840	(0.920)	25277	30.8957	3089.56
147	Methylcyclohexane	55	5.377	5.373	(1.083)	190732	17.8811	1788.11
135	1,4-Dioxane	88	5.598	5.598	(1.341)	18121	321.903	32190.33
132	n-Butanol	56	5.265	5.250	(1.261)	18309	271.946	27194.61(a)
131	Methyl Acrylate	55	3.690	3.683	(0.884)	68971	16.4965	1649.65
133	Ethyl Acrylate	55	5.377	5.373	(1.288)	190732	17.0587	1705.86
136	n-Hexane	57	2.768	2.768	(0.663)	77657	17.5138	1751.38
139	Diethyl ether	59	1.752	1.752	(0.420)	55982	13.6048	1360.48
148	Tert-butyl alcohol	59	2.423	2.420	(0.581)	141836	332.620	33261.99
149	Isopropyl alcohol	45	2.090	2.086	(0.501)	76836	345.024	34502.41
156	Diisopropyl ether	45	2.997	2.997	(0.718)	236008	14.7734	1477.34
160	2-Methylnaphthalene	142	12.638	12.635	(1.308)	137592	16.0785	1607.84
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	338455	15.9347	1593.46
167	Ethanol	45	1.700	1.700	(0.407)	14490	359.079	35907.89
172	tert-Butyl formate	59	4.616	4.612	(1.106)	109382	33.4729	3347.28
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	129542	343.493	34349.28
174	tert-Amyl methyl ether	73	4.665	4.661	(1.118)	268413	15.1205	1512.05
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.808)	255180	15.0326	1503.26
176	tert-Amyl alcohol	59	4.616	4.612	(1.106)	109382	330.715	33071.52
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.351)	246226	298.540	29853.97
180	1-Methylnaphthalene	142	12.638	12.635	(1.308)	137592		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	56223	13.3023	1330.23
152	Amyl alcohol	42	6.910	6.899	(0.901)	20636	261.808	26180.79
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	11146	13.9782	1397.81
159	Propylene oxide	43	1.756	1.752	(0.421)	12109	31.2684	3126.83
161	3-Methyl-1-butanol	55	6.910	6.903	(0.901)	19640	249.218	24921.83
162	Butyl acrylate	55	8.252	8.249	(1.076)	171160	16.4384	1643.84
182	Epichlorohydrin	57	6.097	6.089	(1.228)	24515	64.5328	6453.28
M 94	1,2-Dichloroethylene (total)	96				663177	106.745	10674.49
M 95	Xylenes (total)	106				464054	49.1115	4911.15
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	158194	16.1867	1618.66
130	Ethyl Acetate	43	3.653	3.649	(0.875)	79929	16.6331	1663.30
134	Cyclohexanone	55	8.646	8.642	(0.895)	57876	314.559	31455.88(a)
185	Isoprene	39	1.767	1.767	(0.423)	25410	15.4884	1548.83
186	Isopentane	42	1.606	1.606	(0.385)	43366		(a)
188	Isopropyl acetate	43	4.672	4.669	(0.941)	229100	16.9222	1692.22

187 n-Amyl acetate	43	8.455	8.451 (1.103)	148175	15.9421	1594.20
189 n-Butyl acetate	43	7.214	7.210 (0.941)	126654	18.4973	1849.72

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	77657	343.081	34308.07
195 Methyl Amyl Ketone	43	8.384	8.380	(1.093)	166173	15.6801	1568.01
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	169858	15.7453	1574.52
168 1-Propanol	59	3.000	2.993	(0.719)	29960	297.689	29768.93

QC Flag Legend

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



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NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012433.D Page 1
Report Date: 09-Feb-2023 13:42

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012433.D
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Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	503782	50.0000	
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	155587	50.0000	44.20
3	Chloromethane	50	1.074	1.074	(0.257)	209947	50.0000	46.23
4	Propionitrile	54	3.645	3.645	(0.873)	274093	500.000	533.21
5	Vinyl Chloride	62	1.141	1.141	(0.273)	213553	50.0000	48.52
6	Bromomethane	94	1.336	1.336	(0.320)	153086	50.0000	46.13
7	Chloroethane	64	1.400	1.400	(0.335)	140773	50.0000	45.95
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	339865	50.0000	55.18
9	Acrolein	56	1.441	1.441	(0.345)	33743	100.000	97.99
10	Acetone	43	1.966	1.966	(0.471)	139467	100.000	98.66
11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	190648	50.0000	49.86
12	Isobutyl Alcohol	43	4.672	4.672	(1.118)	642833	1000.00	1134.45
13	Acetonitrile	39	2.195	2.195	(0.525)	264439	500.000	576.74
14	Allyl Chloride	41	2.195	2.195	(0.525)	469871	50.0000	53.80
15	Iodomethane	142	2.022	2.022	(0.484)	490438	100.000	97.51
16	Acrylonitrile	53	2.528	2.528	(0.605)	145809	100.000	112.43
17	Methylene Chloride	84	2.300	2.300	(0.550)	241058	50.0000	45.96
18	Methyl tert-butyl ether	73	2.528	2.528	(0.605)	651878	50.0000	52.08
19	Carbon Disulfide	76	2.067	2.067	(0.495)	1016362	100.000	101.59
20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	217769	50.0000	50.89

21 Vinyl Acetate	43	2.993	2.993 (0.716)	1095602	100.000	99.72
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	372985	50.0000	49.66

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230124.b\X012433.D Page 2
Report Date: 09-Feb-2023 13:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	1.767	1.767	(0.423)	83627	50.0000	48.82(M)
24	2-Butanone	43	3.570	3.570	(0.855)	158138	100.000	105.30
25	Methacrylonitrile	41	3.814	3.814	(0.913)	191557	50.0000	53.69(a)
26	2,2-Dichloropropane	77	3.503	3.503	(0.839)	311773	50.0000	48.89
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	254424	50.0000	48.85
28	Chloroform	83	3.900	3.900	(0.934)	430391	50.0000	51.13
29	Bromochloromethane	128	3.791	3.791	(0.908)	133040	50.0000	46.65
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.980)	241236	50.0000	49.86
31	1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	373247	50.0000	55.88
32	1,1-Dichloropropene	75	4.275	4.275	(0.862)	313963	50.0000	56.63
33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	339174	50.0000	53.01
34	Carbon Tetrachloride	117	4.260	4.260	(0.859)	318093	50.0000	53.72
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	276867	50.0000	54.20
* 36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	780908	50.0000	
37	Benzene	78	4.507	4.507	(0.909)	928937	50.0000	49.81
38	Trichloroethene	130	5.205	5.205	(1.049)	282221	50.0000	53.35
39	Bromodichloromethane	83	5.722	5.722	(1.153)	338735	50.0000	48.40
40	Methyl Methacrylate	41	5.602	5.602	(1.341)	200840	50.0000	58.46
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	217478	100.000	109.22
42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	238077	50.0000	47.99
43	2-Nitropropane	43	5.966	5.966	(1.428)	72632	50.0000	57.09
44	Dibromomethane	93	5.550	5.550	(1.119)	162130	50.0000	48.08
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	412674	100.000	102.70
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	403901	50.0000	49.14
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	751713	50.0000	
$ 48	Toluene-d8	98	6.386	6.386	(0.833)	897577	50.0000	48.32
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	200213	50.0000	54.44
50	Toluene	91	6.446	6.446	(0.841)	1040120	50.0000	50.05
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	348574	50.0000	51.10
52	2-Hexanone	43	7.083	7.083	(0.924)	288329	100.000	105.47
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	197286	50.0000	47.32
54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	396598	50.0000	48.33
55	Dibromochloromethane	129	7.173	7.173	(0.935)	290272	50.0000	48.24
56	Tetrachloroethene	164	6.925	6.925	(0.903)	231192	50.0000	53.77
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	256750	50.0000	49.26
58	1-Chlorohexane	55	7.694	7.694	(1.551)	220382	50.0000	58.39
59	Chlorobenzene	112	7.694	7.694	(1.003)	707893	50.0000	48.03
60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	270655	50.0000	49.34
61	Ethylbenzene	106	7.799	7.799	(1.017)	370235	50.0000	53.33
62	m,p-Xylenes	106	7.904	7.904	(1.031)	933389	100.000	104.29
63	o-Xylene	106	8.241	8.241	(1.075)	445953	50.0000	50.48
64	Styrene	104	8.260	8.260	(1.077)	773042	50.0000	52.21
66	Bromoform	173	8.410	8.410	(1.097)	202668	50.0000	48.62
67	Isopropylbenzene	105	8.560	8.560	(1.116)	1165982	50.0000	57.78
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	312718	50.0000	44.80
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	352722	50.0000	50.80
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	437932	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	345607	50.0000	70.92
72	trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	83894	50.0000	51.69
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1367431	50.0000	56.37
74	Bromobenzene	156	8.803	8.803	(0.911)	343000	50.0000	47.73
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1005922	50.0000	56.13

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	831166	50.0000	52.21
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	974416	50.0000	53.69

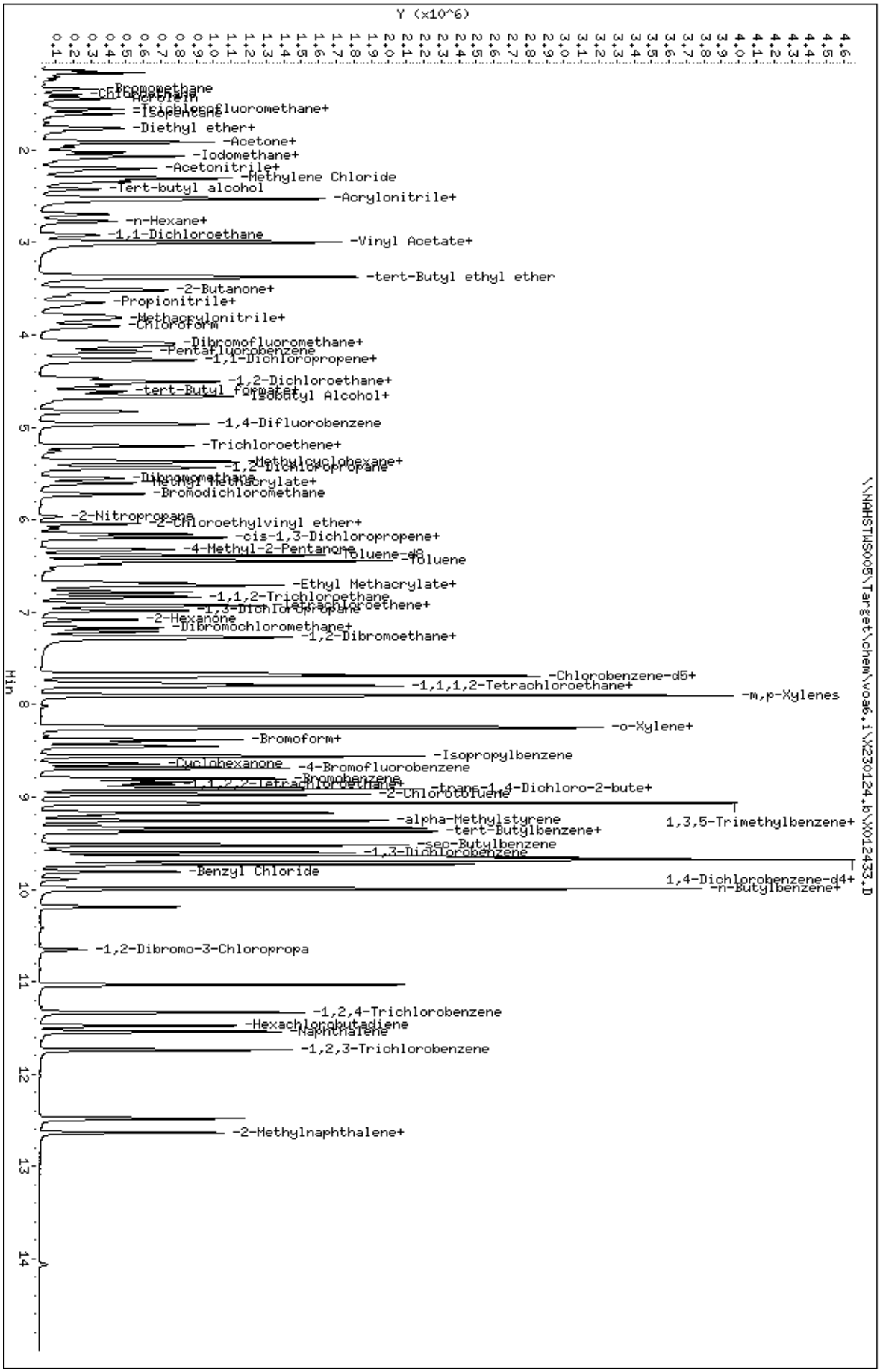
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	844813	50.0000	57.59
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1012381	50.0000	53.69
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1186719	50.0000	60.80
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1049404	50.0000	60.00
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	608094	50.0000	50.99
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	643687	50.0000	49.46
86	Benzyl Chloride	91	9.808	9.808	(1.279)	451031	50.0000	38.96
87	n-Butylbenzene	91	9.992	9.992	(1.034)	921964	50.0000	54.53
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	610219	50.0000	49.68
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54384	50.0000	48.73
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	424924	50.0000	54.82
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	186823	50.0000	54.33
92	Naphthalene	128	11.540	11.540	(1.194)	928291	50.0000	52.63
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	395312	50.0000	53.25
146	Methyl acetate	43	2.225	2.225	(0.533)	121601	50.0000	53.64
138	Freon TF	101	1.910	1.910	(0.457)	199808	50.0000	54.03
141	Cyclohexane	56	4.121	4.121	(0.987)	307059	50.0000	60.20
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	67162	100.000	107.46
147	Methylcyclohexane	55	5.377	5.377	(1.084)	573848	50.0000	60.03
135	1,4-Dioxane	88	5.595	5.595	(1.339)	54529	1000.00	1184.10
132	n-Butanol	56	5.253	5.253	(1.258)	68388	1000.00	1055.84
131	Methyl Acrylate	55	3.683	3.683	(0.882)	232484	50.0000	67.97
133	Ethyl Acrylate	55	5.377	5.377	(1.287)	573848	50.0000	57.83
136	n-Hexane	57	2.768	2.768	(0.663)	206505	50.0000	56.93
139	Diethyl ether	59	1.752	1.752	(0.420)	157362	50.0000	46.74
148	Tert-butyl alcohol	59	2.423	2.423	(0.580)	388001	1000.00	1112.27
149	Isopropyl alcohol	45	2.086	2.086	(0.499)	209841	1000.00	1151.84
156	Diisopropyl ether	45	2.997	2.997	(0.717)	693396	50.0000	53.05
160	2-Methylnaphthalene	142	12.635	12.635	(1.308)	435417	50.0000	51.24
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1120380	50.0000	53.12
167	Ethanol	45	1.696	1.696	(0.406)	35439	1000.00	1080.10
172	tert-Butyl formate	59	4.612	4.612	(1.104)	301899	100.000	112.93
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	387089	1000.00	1088.35
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	760202	50.0000	52.34
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.807)	726073	50.0000	52.28
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	301899	1000.00	1115.80
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	737901	1000.00	998.35
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	435417	50.0000	(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	165206	50.0000	47.78
152	Amyl alcohol	42	6.903	6.903	(0.900)	80519	1000.00	1083.20
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	33117	50.0000	50.76
159	Propylene oxide	43	1.752	1.752	(0.420)	30911	100.000	97.57
161	3-Methyl-1-butanol	55	6.899	6.899	(0.900)	82085	1000.00	1104.47
162	Butyl acrylate	55	8.249	8.249	(1.076)	533492	50.0000	54.33
182	Epichlorohydrin	57	6.093	6.093	(1.228)	73843	200.000	211.00
M 94	1,2-Dichloroethylene (total)	96				472193	100.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	476649	50.0000	49.12
130	Ethyl Acetate	43	3.653	3.653	(0.874)	210655	50.0000	53.58
134	Cyclohexanone	55	8.642	8.642	(0.894)	218179	1000.00	1194.33
185	Isoprene	39	1.767	1.767	(0.423)	72921	50.0000	54.33
186	Isopentane	42	1.606	1.606	(0.385)	130208	50.0000	(a)
188	Isopropyl acetate	43	4.672	4.672	(0.942)	642833	50.0000	52.98

187 n-Amyl acetate	43	8.451	8.451 (1.102)	432768	50.0000	49.37
189 n-Butyl acetate	43	7.210	7.210 (0.940)	362030	50.0000	56.06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	206505	1000.00	1115.23
194 Acetaldehyde	44	1.209	1.209	(0.289)	79653	200.000	255.37
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	525143	50.0000	52.54
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	520675	50.0000	51.17
168 1-Propanol	59	2.997	2.997	(0.717)	80072	1000.00	972.56

QC Flag Legend

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



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Instrument: voa6,i
Operator: PC
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Chloroprene (126-99-8)

Reason Code:

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03-Feb-2023
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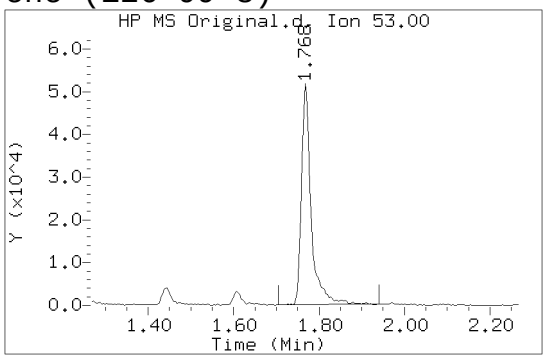

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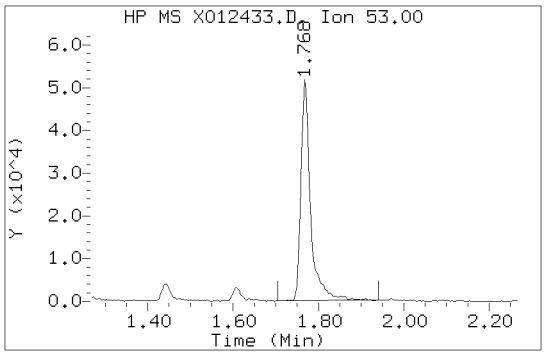

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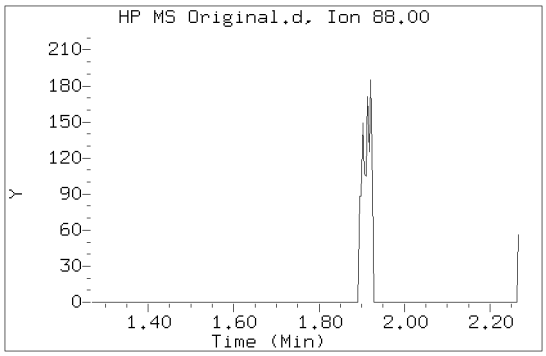
linh
pham



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09-Feb-2023
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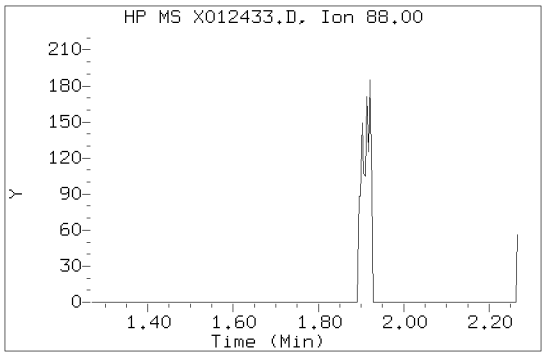


right solutions.
right partner.

Raw Data VOA6 426481

Volatiles by by EPA 8260

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\nahstws005\Target\chem\voa6.i\X230125.b\X012501.D Page 1
Report Date: 25-Jan-2023 08:05

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X230125.b\X012501.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JAN-2023 07:18
Operator : FT Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230125.b\bfb.m
Meth Date : 01-Dec-2022 12:59 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: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	177600			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	33896			15.00- 40.00	19.09
8.687	8.889	(0.000)	75	90328			30.00- 60.00	50.86
8.687	8.889	(0.000)	96	12967			5.00- 9.00	7.30
8.687	8.889	(0.000)	173	1382			0.00- 2.00	0.92
8.687	8.889	(0.000)	174	149824			50.00- 0.00	84.36
8.687	8.889	(0.000)	175	10828			5.00- 9.00	7.23
8.687	8.889	(0.000)	176	146240			95.00- 101.00	97.61
8.687	8.889	(0.000)	177	9470			5.00- 9.00	6.48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.09
75	30.00 - 60.00% of mass 95	50.86
96	5.00 - 9.00% of mass 95	7.30
173	Less than 2.00% of mass 174	0.78 (0.92)
174	Greater than 50.00% of mass 95	84.36
175	5.00 - 9.00% of mass 174	6.10 (7.23)
176	95.00 - 101.00% of mass 174	82.34 (97.61)
177	5.00 - 9.00% of mass 176	5.33 (6.48)

Data File: X012501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2253	66.00	174	99.10	245	141.90	248
37.00	9333	67.00	577	103.00	121	142.90	2055
38.00	8745	68.00	17944	103.90	773	144.00	77
39.00	4614	69.00	19064	105.00	707	144.70	115
40.00	1694	70.00	2308	105.90	1053	146.00	246
41.10	1835	70.90	286	106.90	427	147.00	182
42.00	2387	72.00	811	108.80	285	147.80	464
42.90	1385	73.00	8213	109.80	75	148.60	136
44.00	2114	74.00	30976	110.70	192	149.70	208
45.00	1992	75.00	90328	111.80	142	151.80	71
46.00	178	76.00	7743	112.80	107	152.90	79
47.00	1843	77.10	1385	115.00	315	153.80	136
47.90	1119	77.90	856	115.80	659	154.80	627
49.00	7069	78.90	5965	117.00	996	155.80	54
50.00	33896	80.00	1711	117.90	576	156.80	419
51.00	10700	80.90	5857	118.90	973	158.70	178
52.00	661	81.90	1216	120.10	99	160.70	417
52.90	240	83.00	488	123.90	103	170.00	91
54.10	239	84.90	161	125.00	124	170.80	82
55.00	3786	85.80	187	125.90	115	171.10	82
56.00	3409	86.90	7194	126.90	142	171.80	90
57.00	5992	88.00	6349	127.90	760	173.00	1382
58.00	578	91.00	928	128.70	328	173.90	149824
58.90	124	91.90	4866	129.80	643	174.90	10828
60.00	1756	93.00	7041	130.80	146	175.90	146240
61.00	8161	94.00	19792	134.70	192	176.90	9470
62.00	8719	95.00	177600	136.70	297	177.90	291
63.10	6615	96.00	12967	138.90	68	233.70	60
63.90	815	97.00	516	139.80	126	235.70	81
64.80	119	97.90	1674	140.90	1426		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012501.D

Date : 25-JAN-2023 07:18

Client ID: BFB

Instrument: voa6.i

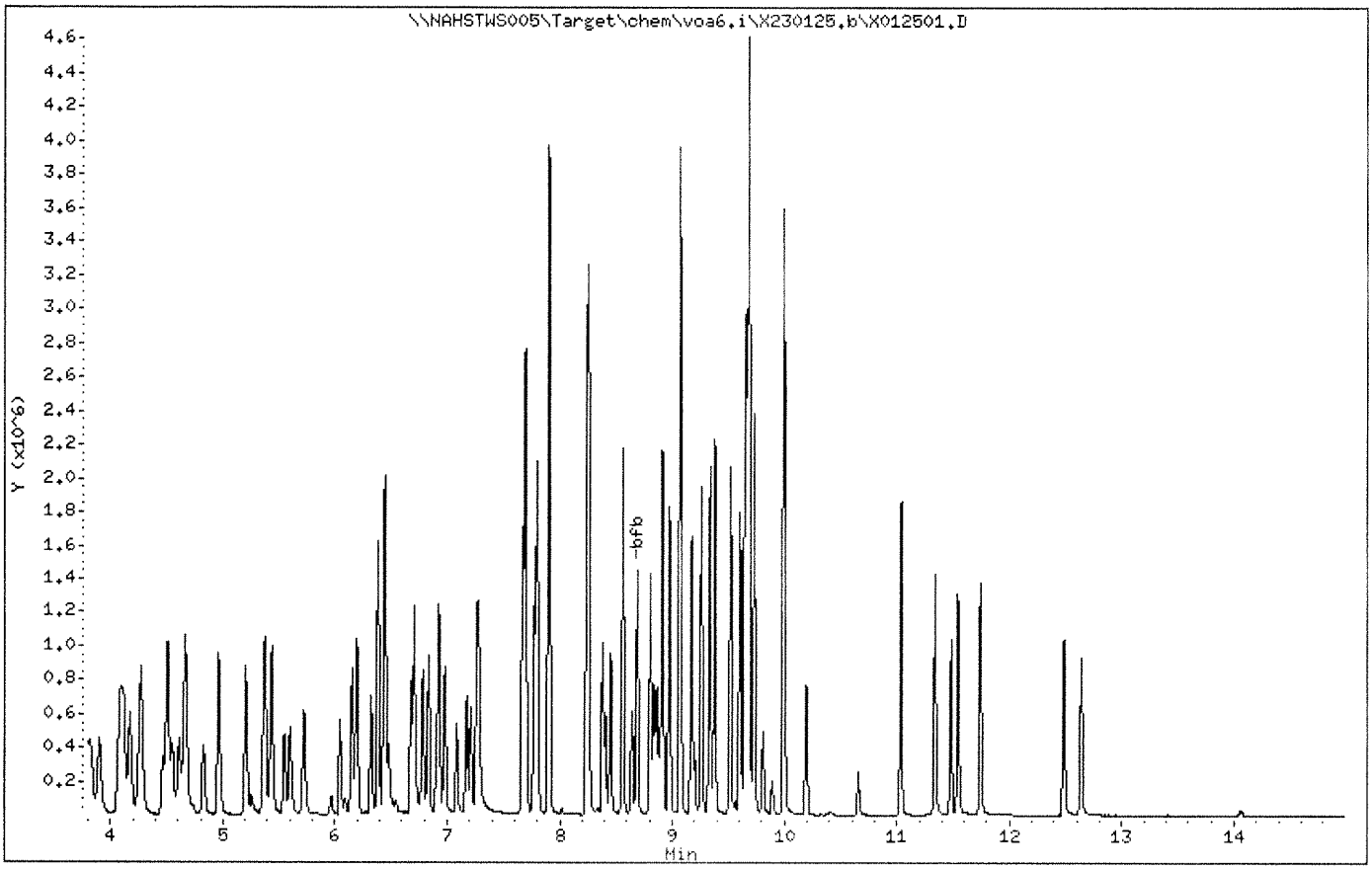
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: FT

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012501.D

Date : 25-JAN-2023 07:18

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

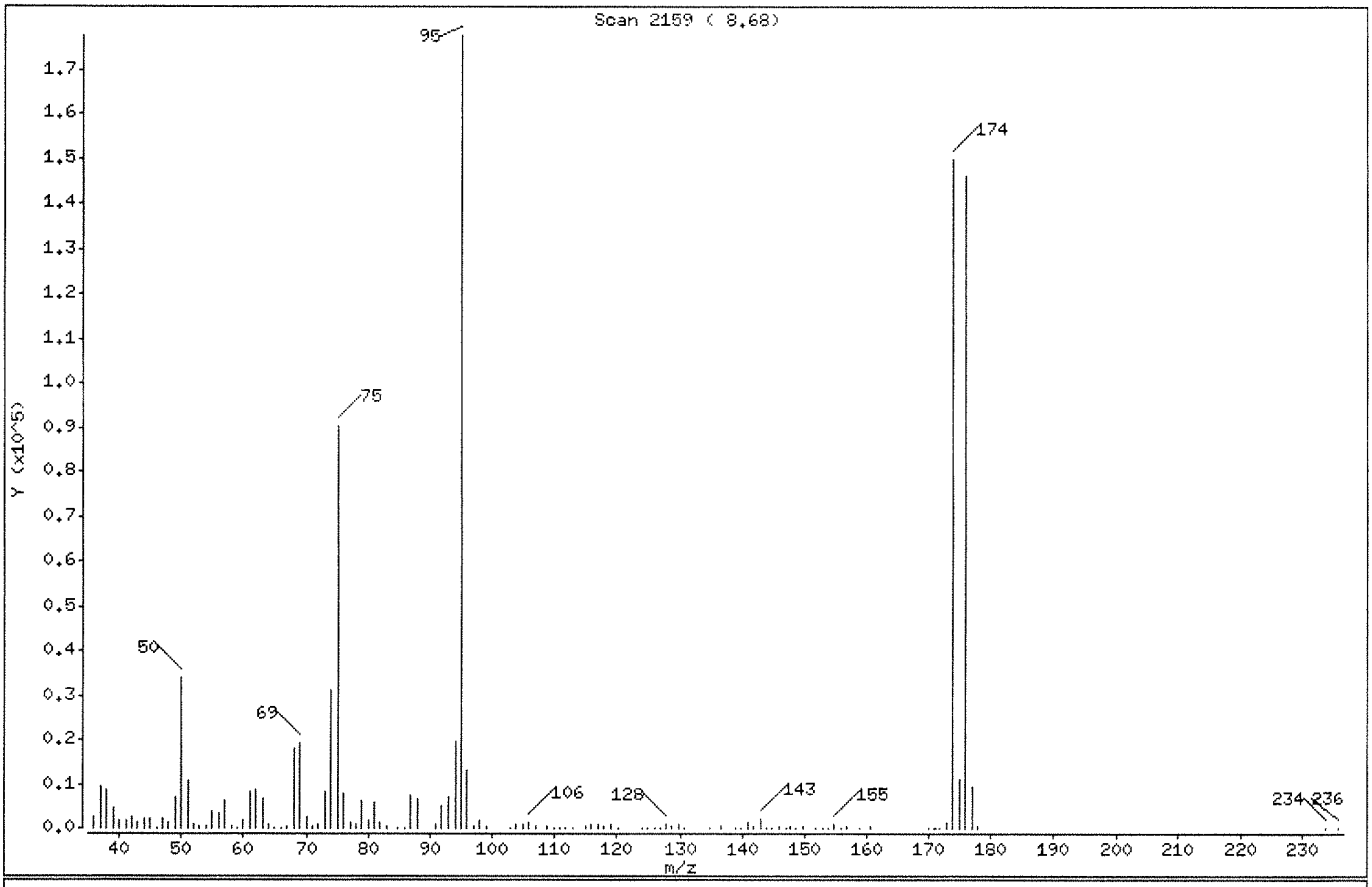
Volume Injected (uL): 2.0

Operator: FT

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
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174	Greater than 50.00% of mass 95	84.36
175	5.00 - 9.00% of mass 174	6.10 (7.23)
176	95.00 - 101.00% of mass 174	82.34 (97.61)
177	5.00 - 9.00% of mass 176	5.33 (6.48)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012501.D

Date : 25-JAN-2023 07:18

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25

Data File: X012501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2253	66.00	174	99.10	245	141.90	248
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42.90	1385	73.00	8213	109.80	75	148.60	136
44.00	2114	74.00	30976	110.70	192	149.70	208
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46.00	178	76.00	7743	112.80	107	152.90	79
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57.00	5992	88.00	6349	127.90	760	173.00	1382
58.00	578	91.00	928	128.70	328	173.90	149824
58.90	124	91.90	4866	129.80	643	174.90	10828
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63.10	6615	96.00	12967	138.90	68	233.70	60
63.90	815	97.00	516	139.80	126	235.70	81
64.80	119	97.90	1674	140.90	1426		

Data File : \\nahstws005\Target\chem\voa6.i\X230125.b\X012501.D
Inj Date : 25-JAN-2023 07:18
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012502.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JAN-2023 07:39
Operator : FT Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	518521	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	155523	50.0000	42.94
3 Chloromethane	50	1.074	1.074	(0.257)	204825	50.0000	43.94
4 Propionitrile	54	3.645	3.645	(0.873)	262037	500.000	495.27
5 Vinyl Chloride	62	1.141	1.141	(0.273)	212431	50.0000	46.89
6 Bromomethane	94	1.336	1.336	(0.320)	144856	50.0000	42.55
7 Chloroethane	64	1.400	1.400	(0.335)	138239	50.0000	43.84
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	345506	50.0000	54.50
9 Acrolein	56	1.441	1.441	(0.345)	34347	100.000	96.94
10 Acetone	43	1.966	1.966	(0.471)	136741	100.000	93.98
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	192302	50.0000	48.86
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	627349	1000.00	1075.66
13 Acetonitrile	39	2.195	2.195	(0.525)	262169	500.000	555.53
14 Allyl Chloride	41	2.195	2.195	(0.525)	452650	50.0000	50.36
15 Iodomethane	142	2.022	2.022	(0.484)	504847	100.000	97.52
16 Acrylonitrile	53	2.528	2.528	(0.605)	141286	100.000	105.85
17 Methylene Chloride	84	2.299	2.299	(0.550)	239078	50.0000	44.29
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	625481	50.0000	48.55
19 Carbon Disulfide	76	2.063	2.063	(0.494)	1039906	100.000	100.99
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	220813	50.0000	50.13

21 Vinyl Acetate	43	2.993	2.993 (0.716)	1213272	100.000	107.29
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	376145	50.0000	48.66

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	83955	50.0000	47.61(M)
	24 2-Butanone	43	3.570	3.570	(0.855)	157641	100.000	102.08
	25 Methacrylonitrile	41	3.814	3.814	(0.913)	182615	50.0000	49.73(a)
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	361772	50.0000	55.12
	27 cis-1,2-Dichloroethene	96	3.518	3.518	(0.842)	254143	50.0000	47.41
	28 Chloroform	83	3.900	3.900	(0.934)	431364	50.0000	49.79
	29 Bromochloromethane	128	3.791	3.791	(0.908)	131464	50.0000	44.79
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	243385	50.0000	48.88
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	378394	50.0000	55.04
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	317381	50.0000	58.77(M)
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	337549	50.0000	54.16
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	322670	50.0000	55.95
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	277015	50.0000	52.69
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	760669	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	933643	50.0000	51.39
	38 Trichloroethene	130	5.205	5.205	(1.049)	276303	50.0000	53.62
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	339233	50.0000	49.76
	40 Methyl Methacrylate	41	5.602	5.602	(1.341)	189231	50.0000	53.52
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	215903	100.000	111.32
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	237004	50.0000	49.04
	43 2-Nitropropane	43	5.966	5.966	(1.428)	70071	50.0000	53.51
	44 Dibromomethane	93	5.550	5.550	(1.119)	159966	50.0000	48.70
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	408675	100.000	104.20
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	414815	50.0000	51.81
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	733760	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	899442	50.0000	49.60
	49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	185118	50.0000	51.67
	50 Toluene	91	6.445	6.445	(0.841)	1040804	50.0000	51.31
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	359516	50.0000	54.11
	52 2-Hexanone	43	7.086	7.086	(0.924)	283240	100.000	106.14
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	195678	50.0000	48.09
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	396641	50.0000	49.52
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	289849	50.0000	49.35
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	239078	50.0000	56.97
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	257178	50.0000	50.55
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	216487	50.0000	58.89(M)
	59 Chlorobenzene	112	7.690	7.690	(1.003)	716434	50.0000	49.80
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	271898	50.0000	50.78
	61 Ethylbenzene	106	7.799	7.799	(1.017)	374972	50.0000	55.33
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	944872	100.000	108.16
	63 o-Xylene	106	8.241	8.241	(1.075)	450159	50.0000	52.21
	64 Styrene	104	8.256	8.256	(1.077)	780573	50.0000	54.01
	66 Bromoform	173	8.410	8.410	(1.097)	201206	50.0000	49.45
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1175500	50.0000	59.67
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	319045	50.0000	47.31
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355286	50.0000	52.41
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	423046	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	241260	50.0000	51.25(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	86551	50.0000	54.64
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1402243	50.0000	59.84
	74 Bromobenzene	156	8.803	8.803	(0.911)	346006	50.0000	49.85
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1018794	50.0000	58.85

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	845832	50.0000	55.00
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	985999	50.0000	56.24

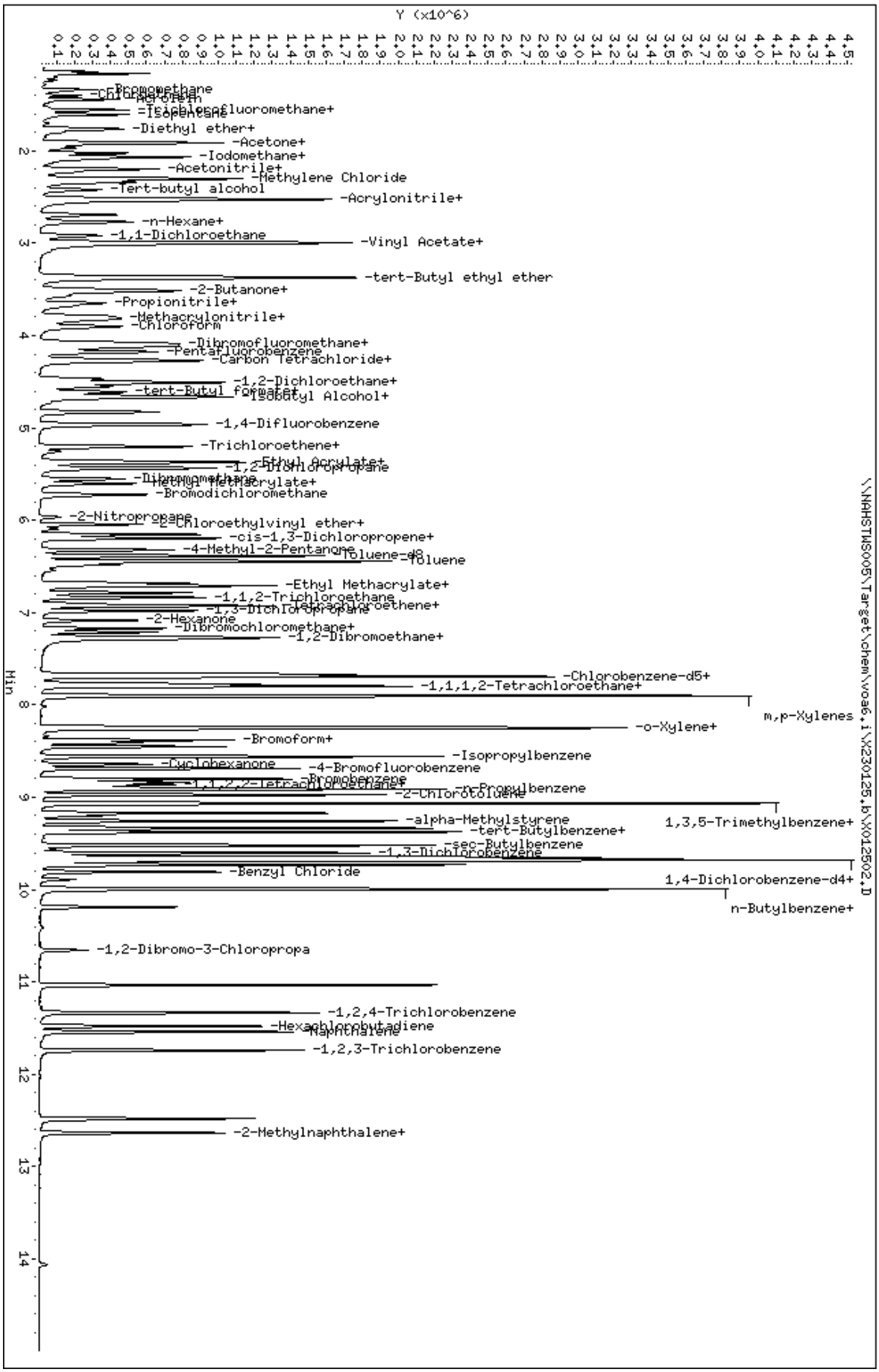
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	857670	50.0000	60.52
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1031275	50.0000	56.61
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1219683	50.0000	64.69
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1079764	50.0000	63.91
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	616324	50.0000	53.50
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	653904	50.0000	52.01
86	Benzyl Chloride	91	9.808	9.808	(1.279)	577645	50.0000	50.28
87	n-Butylbenzene	91	9.992	9.992	(1.034)	972004	50.0000	59.35
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	608551	50.0000	51.29
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54578	50.0000	50.62
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	441529	50.0000	58.96
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	207290	50.0000	62.29
92	Naphthalene	128	11.540	11.540	(1.194)	930814	50.0000	54.63
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	394678	50.0000	55.03
146	Methyl acetate	43	2.225	2.225	(0.533)	116654	50.0000	49.99
138	Freon TF	101	1.913	1.913	(0.458)	208429	50.0000	54.75
141	Cyclohexane	56	4.118	4.118	(0.986)	313337	50.0000	59.69
142	Tetrahydrofuran	42	3.836	3.836	(0.918)	60342	100.000	93.40
147	Methylcyclohexane	55	5.373	5.373	(1.083)	553206	50.0000	59.41(M)
135	1,4-Dioxane	88	5.595	5.595	(1.339)	51276	1000.00	1081.81
132	n-Butanol	56	5.253	5.253	(1.258)	66754	1000.00	1006.06
131	Methyl Acrylate	55	3.683	3.683	(0.882)	222447	50.0000	63.18
133	Ethyl Acrylate	55	5.373	5.373	(1.286)	568929	50.0000	55.77
136	n-Hexane	57	2.768	2.768	(0.663)	247408	50.0000	66.26
139	Diethyl ether	59	1.752	1.752	(0.419)	148169	50.0000	42.76
148	Tert-butyl alcohol	59	2.419	2.419	(0.579)	377965	1000.00	1052.70
149	Isopropyl alcohol	45	2.090	2.090	(0.500)	204601	1000.00	1091.15
156	Diisopropyl ether	45	2.993	2.993	(0.716)	669544	50.0000	49.77
160	2-Methylnaphthalene	142	12.634	12.634	(1.308)	431512	50.0000	52.57
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1084628	50.0000	53.24
167	Ethanol	45	1.696	1.696	(0.406)	34024	1000.00	1007.28
172	tert-Butyl formate	59	4.612	4.612	(1.104)	296380	100.000	107.71
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	365985	1000.00	1054.19
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	722423	50.0000	48.33
175	tert-Butyl ethyl ether	59	3.368	3.368	(0.806)	703116	50.0000	49.19
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	296380	1000.00	1064.26
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	761954	1000.00	1058.32
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	431512	50.0000	(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	171209	50.0000	48.10
152	Amyl alcohol	42	6.903	6.903	(0.900)	74779	1000.00	1030.59
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	29038	50.0000	43.25
159	Propylene oxide	43	1.752	1.752	(0.419)	30303	100.000	92.93
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	81625	1000.00	1125.15
162	Butyl acrylate	55	8.249	8.249	(1.076)	514604	50.0000	53.68
182	Epichlorohydrin	57	6.093	6.093	(1.228)	71930	200.000	211.00
M 94	1,2-Dichloroethylene (total)	96				474956	100.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	485289	50.0000	51.77
130	Ethyl Acetate	43	3.649	3.649	(0.873)	202944	50.0000	50.15
134	Cyclohexanone	55	8.642	8.642	(0.894)	209208	1000.00	1185.52
185	Isoprene	39	1.767	1.767	(0.423)	72538	50.0000	52.51
186	Isopentane	42	1.606	1.606	(0.385)	136194	50.0000	(a)
188	Isopropyl acetate	43	4.672	4.672	(0.942)	627349	50.0000	53.08

187 n-Amyl acetate	43	8.451	8.451 (1.102)	434896	50.0000	50.82
189 n-Butyl acetate	43	7.210	7.210 (0.940)	351609	50.0000	55.78

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	247408	1000.00	1298.14
194 Acetaldehyde	44	1.209	1.209	(0.289)	59193	200.000	177.91
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	500691	50.0000	51.32
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	494411	50.0000	49.78
168 1-Propanol	59	2.993	2.993	(0.716)	77882	1000.00	919.07

QC Flag Legend

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



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Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012502.D
Inj Date : 25-JAN-2023 07:39
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

BEFORE

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HEIGHT
149247
03-Feb-2023
10:53
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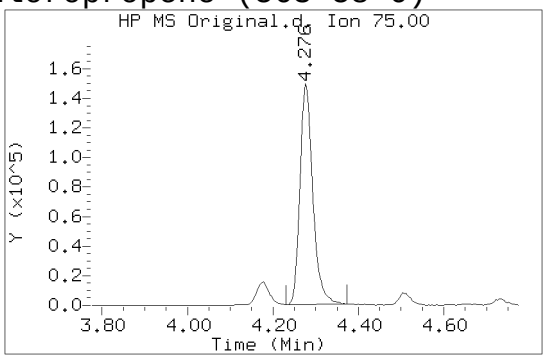

AFTER

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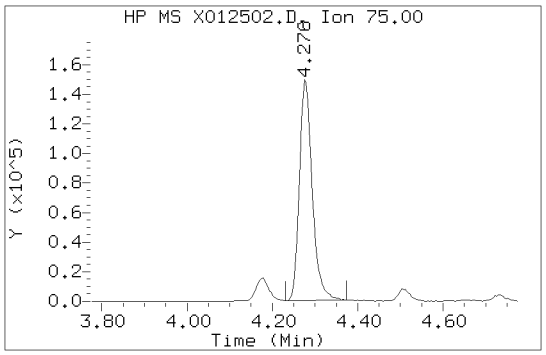

BEFORE

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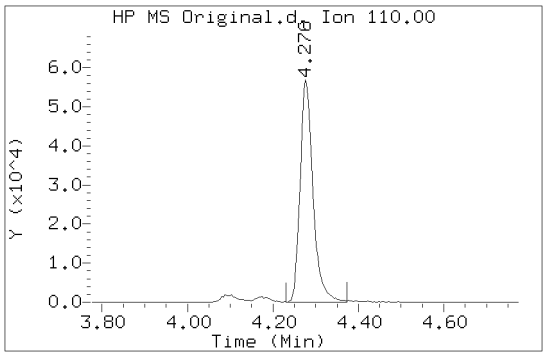

AFTER

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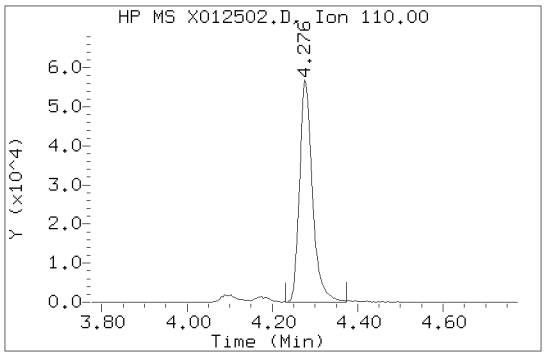

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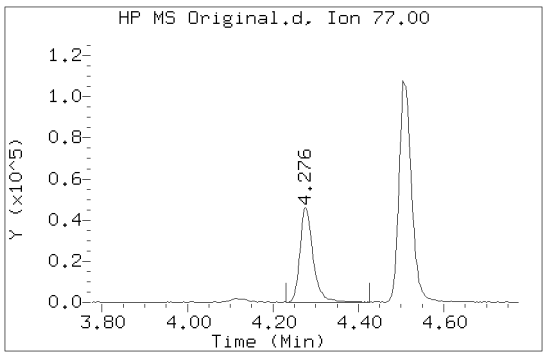

AFTER

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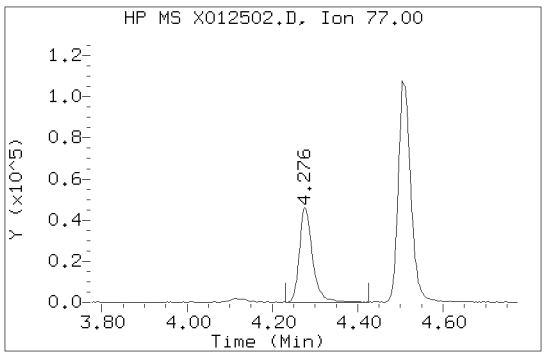

1-Chlorohexane (544-10-5)

Reason Code:

BEFORE

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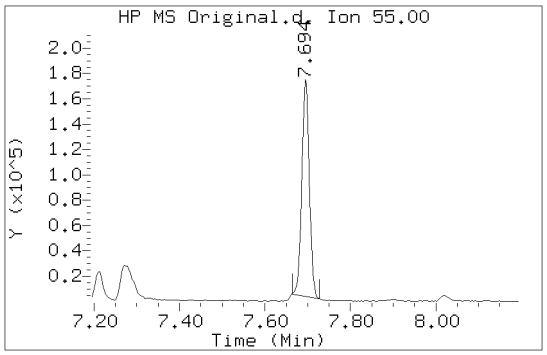

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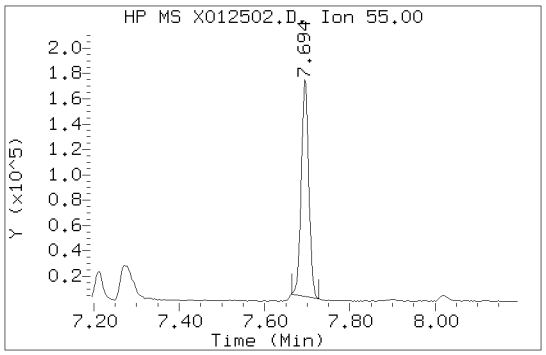

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InstruID : voa6.i
LabSampID : CCV

1-Chlorohexane (544-10-5)

Reason Code:

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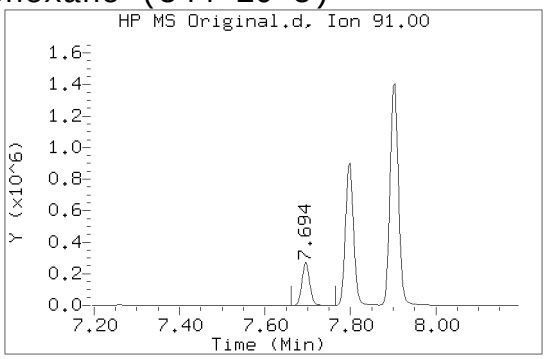

AFTER

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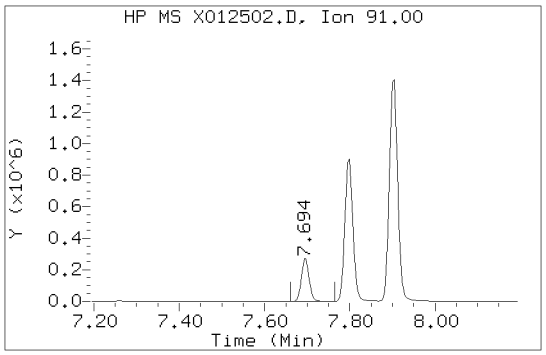

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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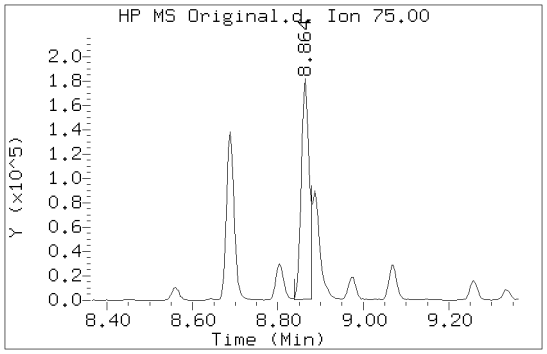

AFTER

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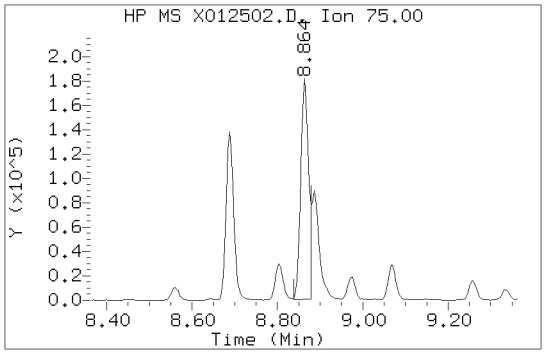

BEFORE

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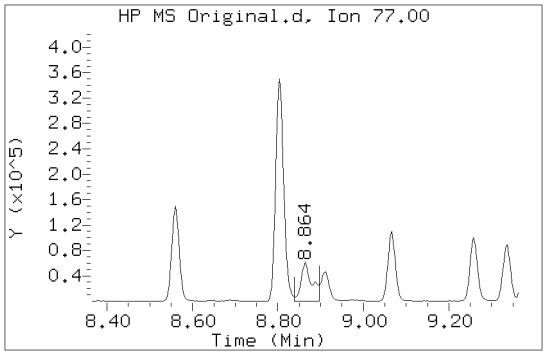

AFTER

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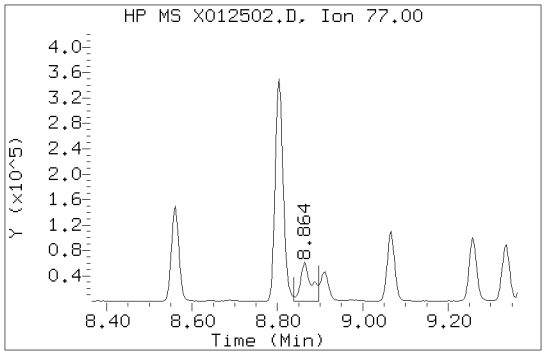

Chloroprene (126-99-8)

Reason Code:

BEFORE

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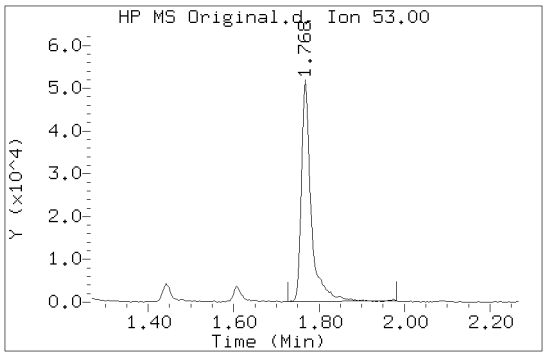

AFTER

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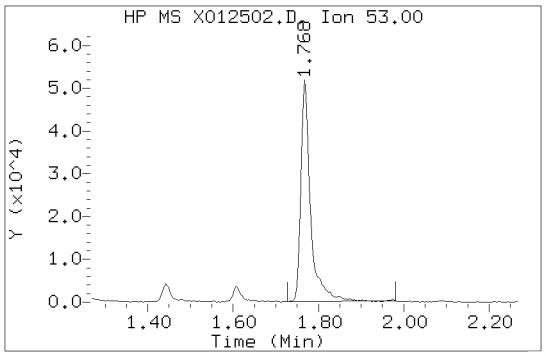

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LabSampID : CCV

Chloroprene (126-99-8)

Reason Code:

BEFORE

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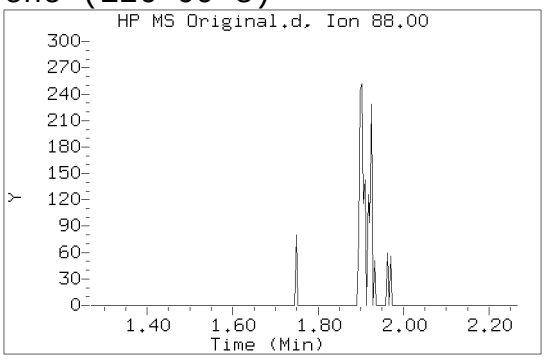

AFTER

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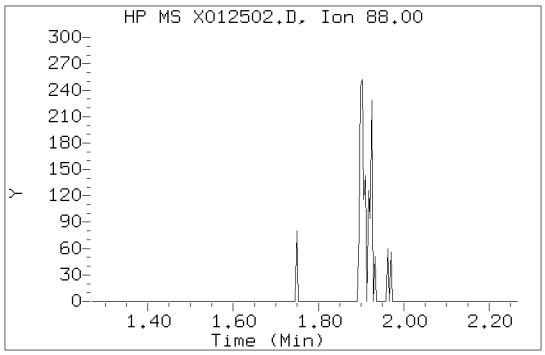

Methylcyclohexane (108-87-2)

Reason Code:

BEFORE

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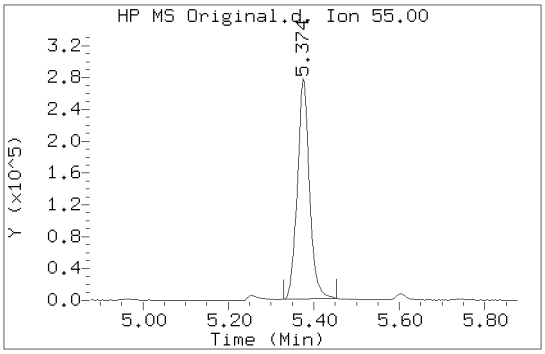

AFTER

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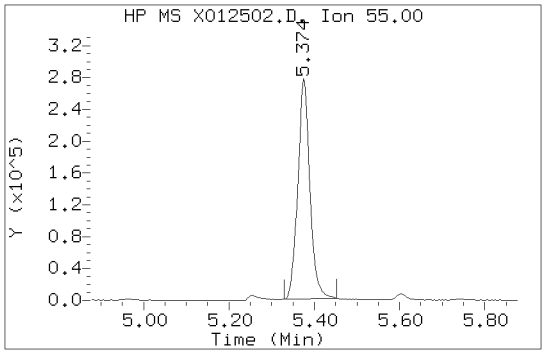

BEFORE

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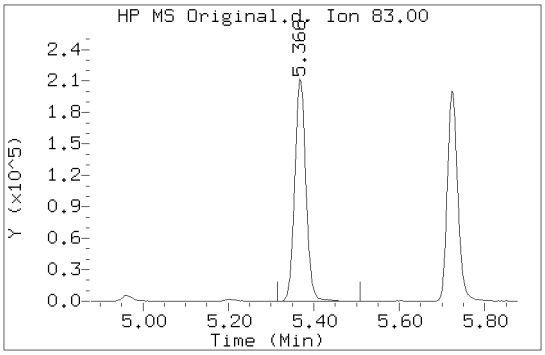

AFTER

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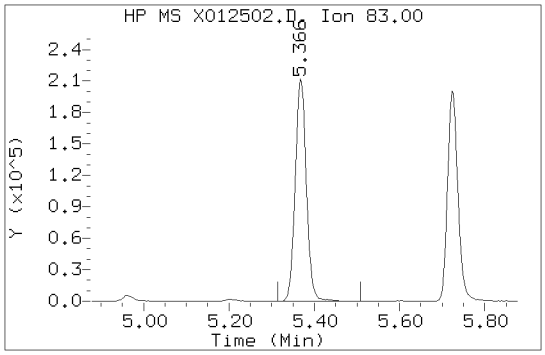

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012504.D
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Inj Date : 25-JAN-2023 08:42
Operator : FT Inst ID: voa6.i
Smp Info : VLCSW-230125;VLCSW-230125;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	500560	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	58102	16.8584	16.85
3 Chloromethane	50	1.074	1.074	(0.257)	77964	18.6651	18.66
4 Propionitrile	54	3.649	3.645	(0.874)	94823	185.654	185.65(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	80772	18.4720	18.47
6 Bromomethane	94	1.336	1.336	(0.320)	60028	19.2740	19.27
7 Chloroethane	64	1.400	1.400	(0.335)	53237	17.4919	17.49
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	128371	20.9788	20.97
9 Acrolein	56	1.441	1.441	(0.345)	11817	36.3667	36.36
10 Acetone	43	1.969	1.966	(0.472)	56289	40.0563	40.05
11 1,1-Dichloroethene	96	1.909	1.910	(0.458)	71528	18.8280	18.82
12 Isobutyl Alcohol	43	4.672	4.672	(1.119)	241151	428.317	428.31(a)
13 Acetonitrile	39	2.194	2.195	(0.526)	89588	196.649	196.64(a)
14 Allyl Chloride	41	2.194	2.195	(0.526)	162924	18.7772	18.77(a)
15 Iodomethane	142	2.022	2.022	(0.485)	172604	37.5550	37.55
16 Acrylonitrile	53	2.532	2.528	(0.607)	51527	39.9906	39.99
17 Methylene Chloride	84	2.299	2.299	(0.551)	95857	18.3950	18.39
18 Methyl tert-butyl ether	73	2.532	2.528	(0.607)	224063	18.0188	18.01
19 Carbon Disulfide	76	2.067	2.063	(0.495)	385111	38.7450	38.74
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	81438	19.1538	19.15

21 Vinyl Acetate	43	2.993	2.993 (0.717)	454083	41.5984	41.59
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	143741	19.2631	19.26

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012504.D Page 2
Report Date: 03-Feb-2023 10:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	31586	18.5585	18.55(M)
	24 2-Butanone	43	3.581	3.570	(0.858)	56646	39.8975	39.89
	25 Methacrylonitrile	41	3.825	3.814	(0.916)	67374	19.0086	19.00(a)
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	133716	21.1054	21.10
	27 cis-1,2-Dichloroethene	96	3.521	3.518	(0.844)	90823	17.5525	17.55
	28 Chloroform	83	3.904	3.900	(0.935)	159752	19.1011	19.10
	29 Bromochloromethane	128	3.791	3.791	(0.908)	49642	17.5223	17.52
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	240632	50.0655	50.06
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	138918	20.9350	20.93
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	119854	22.5685	22.56
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	123151	20.0935	20.09
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	118780	20.9450	20.94
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	290294	57.1837	57.18
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	748036	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	346195	19.3806	19.38
	38 Trichloroethene	130	5.205	5.205	(1.049)	102547	20.2402	20.24
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	126582	18.8821	18.88
	40 Methyl Methacrylate	41	5.606	5.602	(1.343)	65230	19.1117	19.11(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	80217	42.0600	42.05
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	88209	18.5639	18.56
	43 2-Nitropropane	43	5.969	5.966	(1.430)	24703	19.5430	19.54
	44 Dibromomethane	93	5.553	5.550	(1.119)	61297	18.9792	18.97
	45 4-Methyl-2-Pentanone	43	6.325	6.322	(0.825)	155646	41.3057	41.30
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	150359	19.0978	19.09
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	704985	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	902781	51.8224	51.82
	49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	70323	19.9637	19.96(a)
	50 Toluene	91	6.445	6.445	(0.841)	385056	19.7607	19.76
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	130343	19.9492	19.94
	52 2-Hexanone	43	7.086	7.086	(0.924)	112836	44.0126	44.01
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	75254	19.2504	19.25
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	148834	19.3426	19.34
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	107999	19.1416	19.14
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	87789	21.7745	21.77
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	95798	19.5998	19.59
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	74809	20.6940	20.69(M)
	59 Chlorobenzene	112	7.694	7.690	(1.003)	266989	19.3172	19.31
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	97688	18.9923	18.99
	61 Ethylbenzene	106	7.799	7.799	(1.017)	137251	21.0813	21.08
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	345150	41.1242	41.12
	63 o-Xylene	106	8.241	8.241	(1.075)	167192	20.1833	20.18
	64 Styrene	104	8.260	8.256	(1.077)	279485	20.1294	20.12
	66 Bromoform	173	8.410	8.410	(1.097)	71875	18.3882	18.38
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	432601	22.8585	22.85
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	121485	18.8726	18.87
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	348912	53.5785	53.57
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	403871	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	91194	20.2928	20.29(M)
	72 trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	31311	20.5738	20.57(a)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	508543	22.7324	22.73
	74 Bromobenzene	156	8.803	8.803	(0.911)	127167	19.1918	19.19
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	369105	22.3347	22.33

76	2-Chlorotoluene	91	8.976	8.972 (0.929)	307477	20.9453	20.94
77	4-Chlorotoluene	91	9.069	9.070 (0.939)	353351	21.1145	21.11

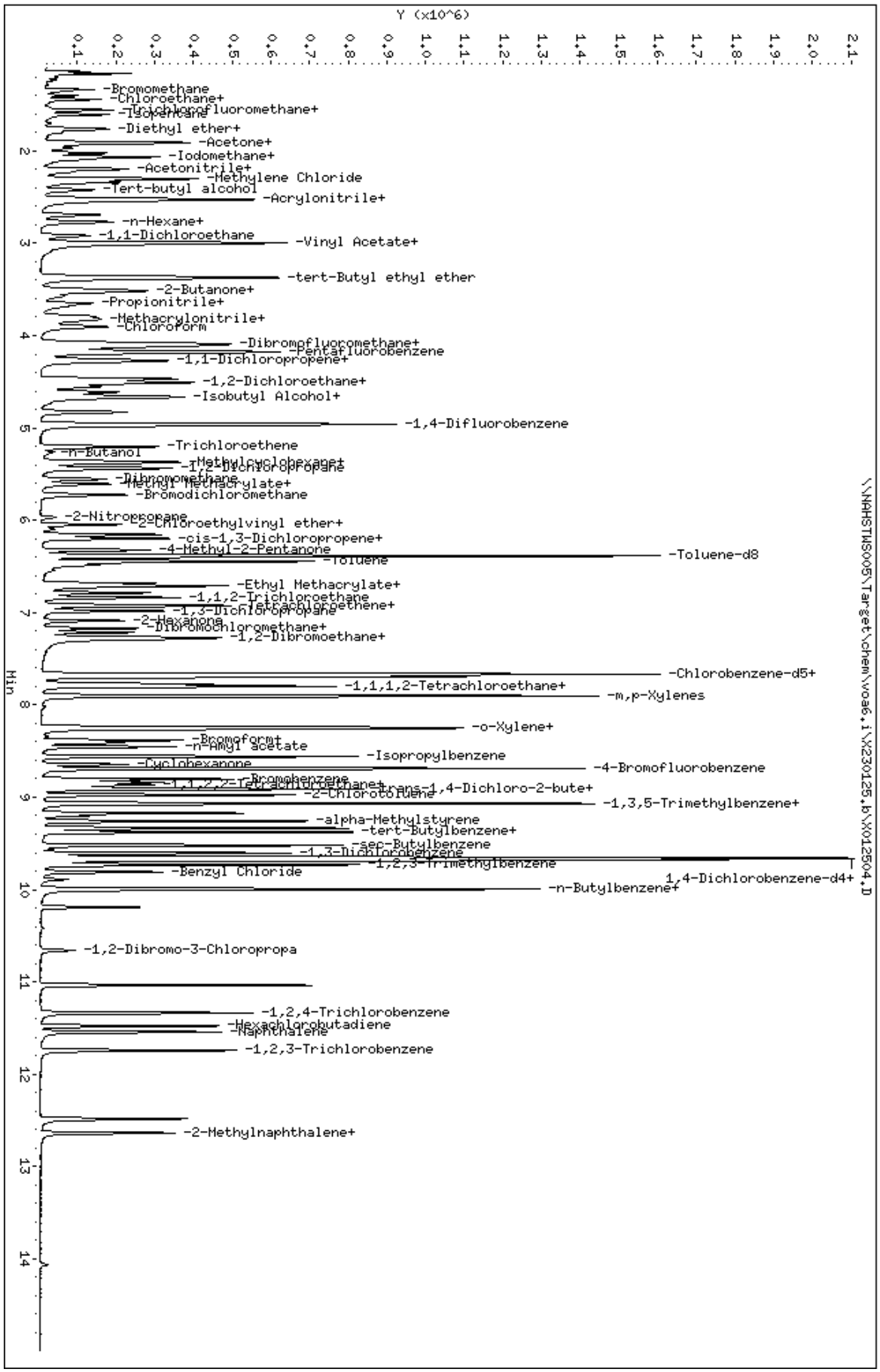
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	312563	23.1055	23.10
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	369439	21.2458	21.24
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	440103	24.4515	24.45
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	388937	24.1143	24.11
83	1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	223225	20.2972	20.29
84	1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	239001	19.9149	19.91
86	Benzyl Chloride	91	9.808	9.808	(1.279)	188980	18.9002	18.90
87	n-Butylbenzene	91	9.995	9.992	(1.035)	345863	23.2357	23.23
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	221634	19.5676	19.56
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	19712	19.2107	19.21
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	157201	21.9921	21.99
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	76005	24.1139	24.11
92	Naphthalene	128	11.544	11.540	(1.195)	340798	20.9546	20.95
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	142560	20.8239	20.82
146	Methyl acetate	43	2.228	2.225	(0.534)	44007	19.5378	19.53
138	Freon TF	101	1.909	1.913	(0.458)	79786	21.7139	21.71
141	Cyclohexane	56	4.117	4.118	(0.987)	124391	25.2928	25.29
142	Tetrahydrofuran	42	3.836	3.836	(0.919)	23654	36.0489	36.04
147	Methylcyclohexane	55	5.381	5.373	(1.085)	199934	21.8350	21.83
135	1,4-Dioxane	88	5.606	5.595	(1.343)	18241	398.655	398.65
132	n-Butanol	56	5.265	5.253	(1.261)	20794	362.557	362.55(a)
131	Methyl Acrylate	55	3.690	3.683	(0.884)	80680	23.7409	23.74
133	Ethyl Acrylate	55	5.381	5.373	(1.289)	199934	21.4694	21.46
136	n-Hexane	57	2.768	2.768	(0.663)	89810	24.9189	24.91
139	Diethyl ether	59	1.752	1.752	(0.420)	52897	15.8154	15.81
148	Tert-butyl alcohol	59	2.419	2.419	(0.580)	160526	463.140	463.13
149	Isopropyl alcohol	45	2.089	2.090	(0.501)	84296	465.689	465.68
156	Diisopropyl ether	45	2.997	2.993	(0.718)	232079	17.8729	17.87
160	2-Methylnaphthalene	142	12.638	12.634	(1.308)	158438	20.2201	20.22
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	365806	18.8090	18.80
167	Ethanol	45	1.696	1.696	(0.406)	14417	440.282	440.28
172	tert-Butyl formate	59	4.612	4.612	(1.105)	123453	46.4786	46.47
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	142490	427.187	427.18
174	tert-Amyl methyl ether	73	4.661	4.661	(1.117)	270138	18.7221	18.72
175	tert-Butyl ethyl ether	59	3.371	3.368	(0.808)	246515	17.8664	17.86
176	tert-Amyl alcohol	59	4.612	4.612	(1.105)	123453	459.214	459.21
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	295694	417.645	417.64
180	1-Methylnaphthalene	142	12.638	12.634	(1.308)	158438		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	63631	18.5220	18.52
152	Amyl alcohol	42	6.906	6.903	(0.901)	24526	351.812	351.81
158	Dichlorofluoromethane	67	1.531	1.527	(0.367)	11582	17.8698	17.86
159	Propylene oxide	43	1.752	1.752	(0.420)	11215	35.6288	35.62
161	3-Methyl-1-butanol	55	6.906	6.903	(0.901)	26789	384.345	384.34
162	Butyl acrylate	55	8.252	8.249	(1.076)	179243	19.4638	19.46
182	Epichlorohydrin	57	6.097	6.093	(1.229)	26494	80.5970	80.59
M 94	1,2-Dichloroethylene (total)	96				172261	36.7063	36.70
M 95	Xylenes (total)	106				512342	61.3075	61.30
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	170664	19.0714	19.07
130	Ethyl Acetate	43	3.649	3.649	(0.874)	86826	22.2291	22.22
134	Cyclohexanone	55	8.642	8.642	(0.894)	73448	435.970	435.96(a)
185	Isoprene	39	1.767	1.767	(0.423)	29172	21.8762	21.87
186	Isopentane	42	1.606	1.606	(0.385)	47504		(a)

188 Isopropyl acetate	43	4.672	4.672 (0.942)	241722	20.7991	20.79
187 n-Amyl acetate	43	8.455	8.451 (1.103)	167448	20.3693	20.36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	135699	22.4074	22.40
150 Allyl alcohol	57	2.768	2.768	(0.663)	89810	488.141	488.14
194 Acetaldehyde	44	1.209	1.209	(0.290)	70479	224.867	224.86
195 Methyl Amyl Ketone	43	8.383	8.380	(1.093)	180161	19.2210	19.22
200 Dimethyl Disulfide	94	6.198	6.194	(0.808)	164007	17.1891	17.18
168 1-Propanol	59	2.993	2.993	(0.717)	26745	326.941	326.94

QC Flag Legend

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



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Client ID: VLCSW-230125
Sample Info: VLCSW-230125;VLCSW-230125;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: FT
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012504.D
Inj Date : 25-JAN-2023 08:42
InstruID : voa6.i
LabSampID : VLCSW-230125

1-Chlorohexane (544-10-5)

Reason Code:

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03-Feb-2023
10:53
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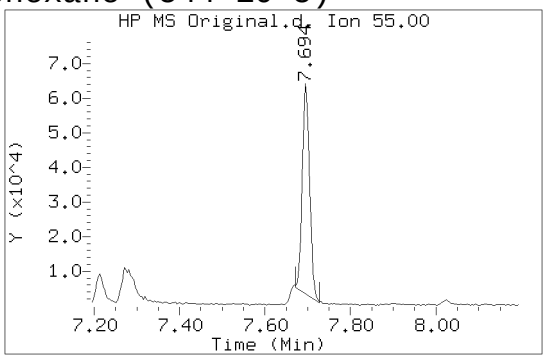

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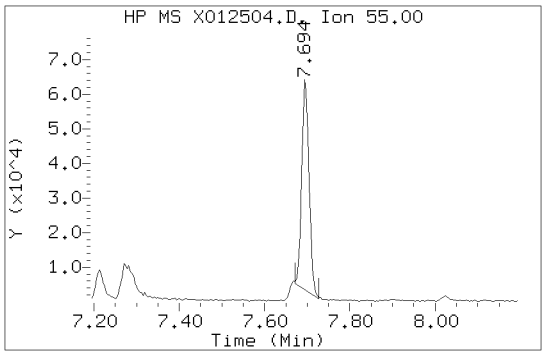

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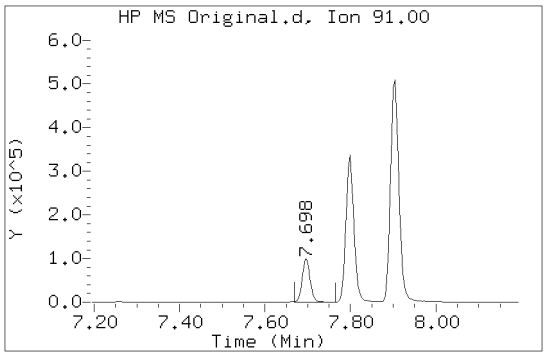

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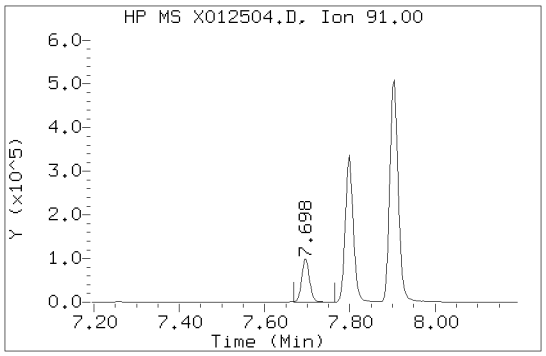

1,2,3-Trichloropropane (96-18-4)

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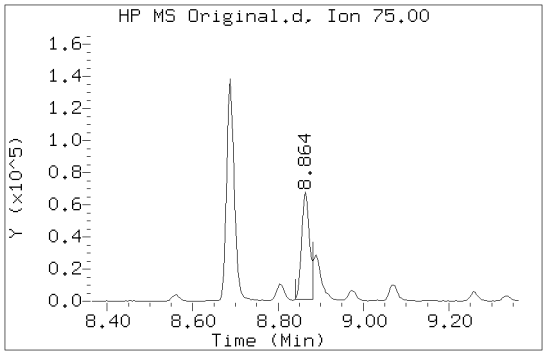

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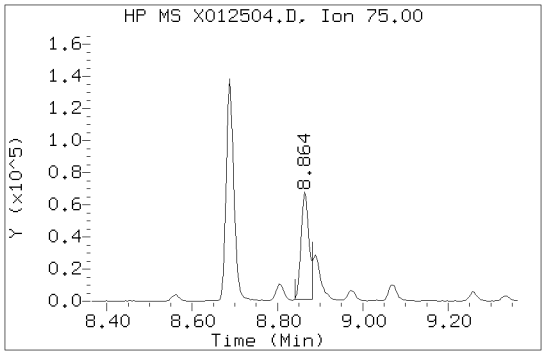

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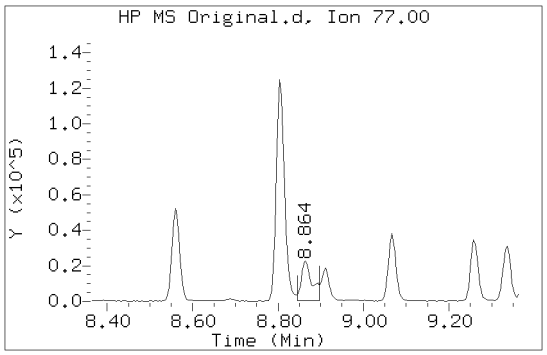

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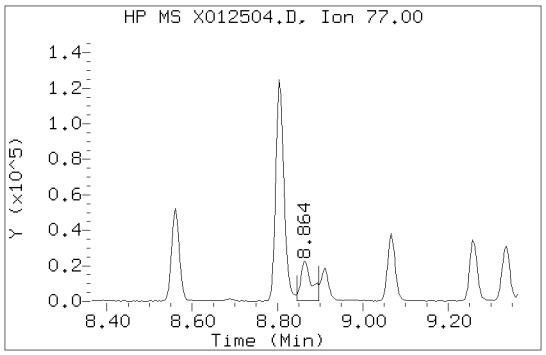

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InstruID : voa6.i
LabSampID : VLCSW-230125

Chloroprene (126-99-8)

Reason Code:

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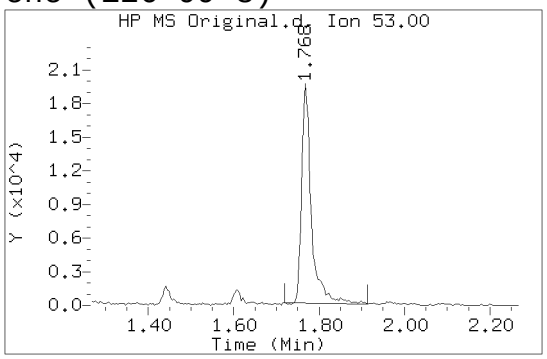

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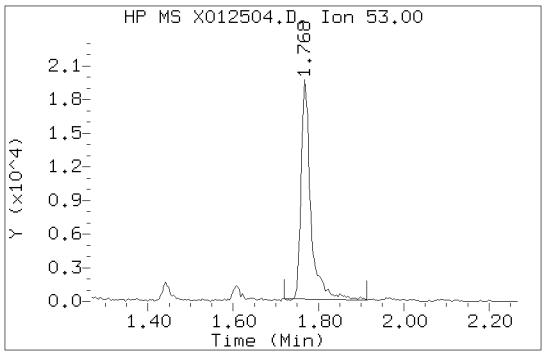

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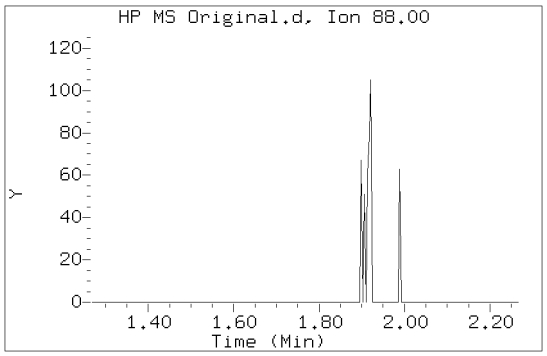

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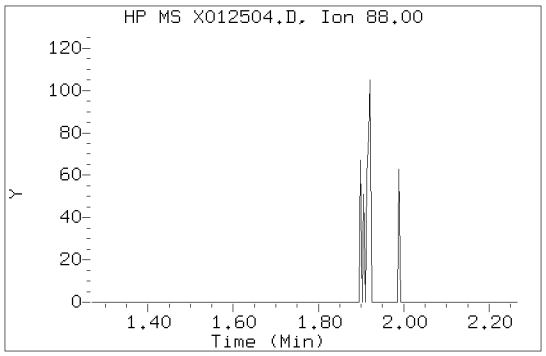

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012506.D
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Inj Date : 25-JAN-2023 09:24
Operator : FT Inst ID: voa6.i
Smp Info : VBLKW-230125;VBLKW-230125;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	637607	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	279017	45.5593	45.55
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	314418	48.6639	48.66
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	893865	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	802467	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1042794	52.5879	52.58
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	372513	50.2578	50.25
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	420093	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012506.D

Date : 25-JAN-2023 09:24

Client ID: VBLKW-230125

Instrument: voa6.i

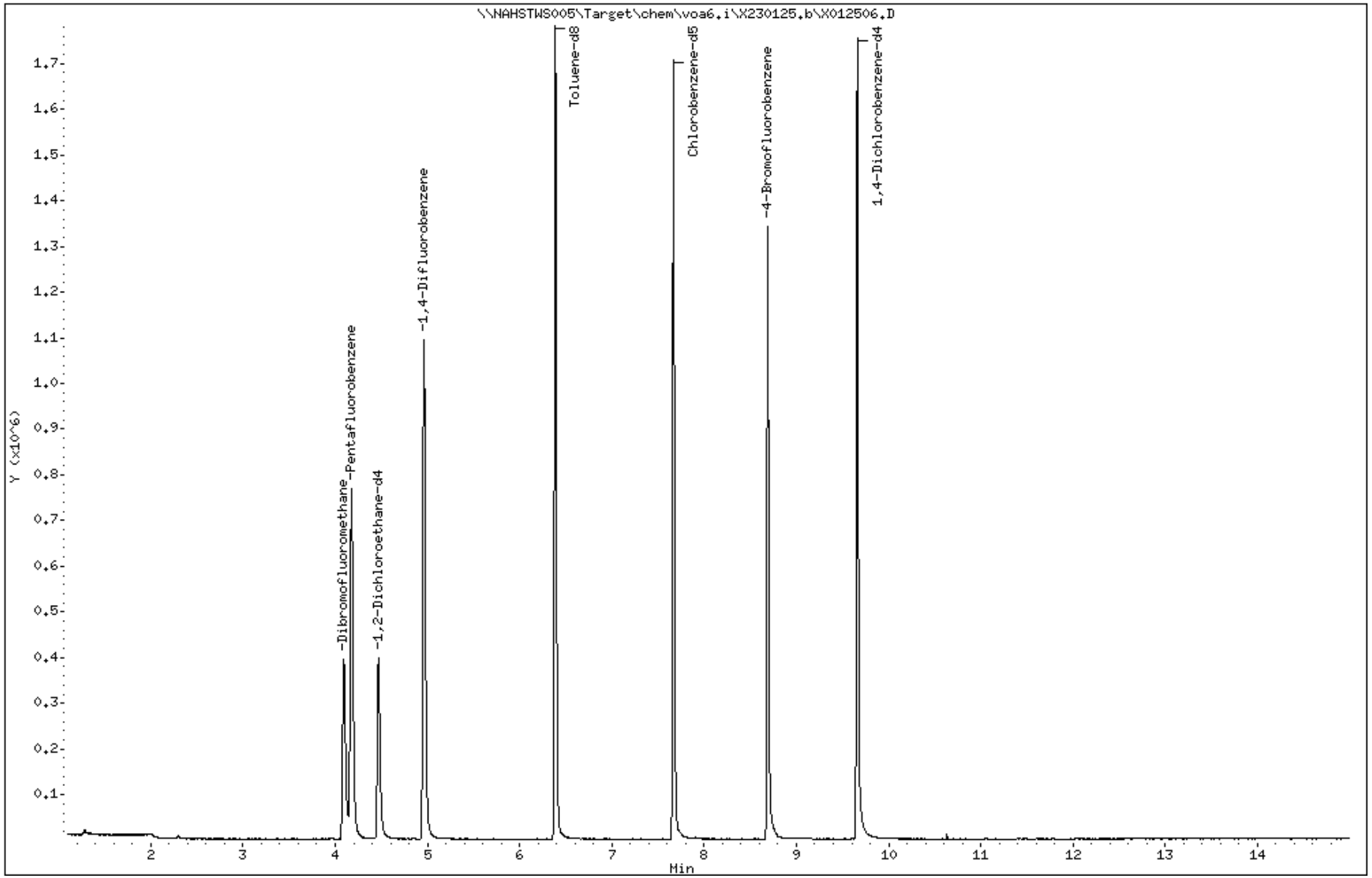
Sample Info: VBLKW-230125;VBLKW-230125;3;;BLANK

Purge Volume: 5.0

Operator: FT

Column phase: DB624

Column diameter: 0.18



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NO MANUAL INTEGRATIONS

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

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Lab Smp Id: HS23010982-02MS Client Smp ID: HS23010982-02MS
Inj Date : 25-JAN-2023 10:27
Operator : FT Inst ID: voa6.i
Smp Info : HS23010982-02MS;HS23010982-02MS;3;;MS
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.174	4.178	(1.000)	626410	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	58311	13.5977	1359.77
3 Chloromethane	50	1.074	1.074	(0.257)	77240	15.2374	1523.73
4 Propionitrile	54	3.645	3.645	(0.873)	111110	173.837	17383.66(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	84724	15.4831	1548.30
6 Bromomethane	94	1.336	1.336	(0.320)	63753	16.6244	1662.44
7 Chloroethane	64	1.400	1.400	(0.335)	54181	14.2255	1422.55
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	141816	18.5198	1851.97
9 Acrolein	56	1.441	1.441	(0.345)	16423	40.0755	4007.55
10 Acetone	43	1.970	1.966	(0.472)	43279	24.5974	2459.73
11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	77833	16.3715	1637.15
12 Isobutyl Alcohol	43	4.672	4.672	(1.119)	249489	354.099	35409.94(a)
13 Acetonitrile	39	2.194	2.195	(0.526)	115716	202.971	20297.07(a)
14 Allyl Chloride	41	2.194	2.195	(0.526)	198552	18.2860	1828.59(a)
15 Iodomethane	142	2.022	2.022	(0.485)	165580	29.6492	2964.92
16 Acrylonitrile	53	2.532	2.528	(0.607)	54651	33.8936	3389.36
17 Methylene Chloride	84	2.299	2.299	(0.551)	92265	14.1485	1414.85
18 Methyl tert-butyl ether	73	2.528	2.528	(0.606)	270567	17.3871	1738.70
19 Carbon Disulfide	76	2.063	2.063	(0.494)	412065	33.1278	3312.78
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	87056	16.3615	1636.15

21 Vinyl Acetate	43	2.993	2.993 (0.717)	472551	34.5929	3459.29
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	141489	15.1519	1515.18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	36667	17.2156	1721.55(M)
	24 2-Butanone	43	3.574	3.570	(0.856)	49346	28.6925	2869.25
	25 Methacrylonitrile	41	3.818	3.814	(0.915)	73869	16.6540	1665.39(a)
	26 2,2-Dichloropropane	77	3.506	3.503	(0.840)	139883	17.6430	1764.29
	27 cis-1,2-Dichloroethene	96	3.521	3.518	(0.844)	104263	16.1016	1610.16
	28 Chloroform	83	3.904	3.900	(0.935)	164111	15.6801	1568.00
	29 Bromochloromethane	128	3.788	3.791	(0.907)	50653	14.2871	1428.70
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	267502	44.4558	44.45
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	149190	17.9660	1796.60
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	124689	20.1273	2012.72
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	127874	17.8857	1788.56
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	129292	19.5441	1954.40
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	309465	48.7530	48.75
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	872602	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	359547	17.2548	1725.47
	38 Trichloroethene	130	5.205	5.205	(1.049)	309209	52.3179	5231.79
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	128172	16.3899	1638.99
	40 Methyl Methacrylate	41	5.602	5.602	(1.342)	76130	17.8240	1782.40(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	62675	28.1710	2817.10
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	90573	16.3404	1634.03
	43 2-Nitropropane	43	5.966	5.966	(1.429)	26071	16.4815	1648.14
	44 Dibromomethane	93	5.549	5.550	(1.119)	62046	16.4687	1646.86
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	145959	34.2330	3423.30
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	152472	16.6016	1660.16
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	797697	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	1026458	52.0736	52.07
	49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	68211	16.5998	1659.98(a)
	50 Toluene	91	6.445	6.445	(0.841)	404282	18.3360	1833.59
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	128081	16.8046	1680.46
	52 2-Hexanone	43	7.086	7.086	(0.924)	96285	33.1917	3319.17
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	72710	16.4379	1643.78
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	148922	17.1046	1710.46
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	105925	16.5920	1659.19
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	93665	20.5319	2053.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	95245	17.2219	1722.18
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	100828	23.9099	2390.98
	59 Chlorobenzene	112	7.694	7.690	(1.003)	274218	17.5343	1753.43
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	99237	17.0510	1705.10
	61 Ethylbenzene	106	7.799	7.799	(1.017)	142652	19.3643	1936.42
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	361570	38.0736	3807.36
	63 o-Xylene	106	8.241	8.241	(1.075)	171317	18.2776	1827.75
	64 Styrene	104	8.260	8.256	(1.077)	287098	18.2744	1827.44
	66 Bromoform	173	8.410	8.410	(1.097)	70090	15.8474	1584.74
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	450574	21.0411	2104.11
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	118286	16.6484	1664.83
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	380141	51.5919	51.59
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	445771	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	125906	25.3835	2538.35
	72 trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	29802	17.3063	1730.63(a)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	530723	21.4939	2149.39
	74 Bromobenzene	156	8.803	8.803	(0.911)	129497	17.7065	1770.64
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	382531	20.9714	2097.14

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	321393	19.8354	1983.54
77	4-Chlorotoluene	91	9.069	9.070 (0.939)	368587	19.9547	1995.46

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012509.D Page 3
Report Date: 03-Feb-2023 10:54

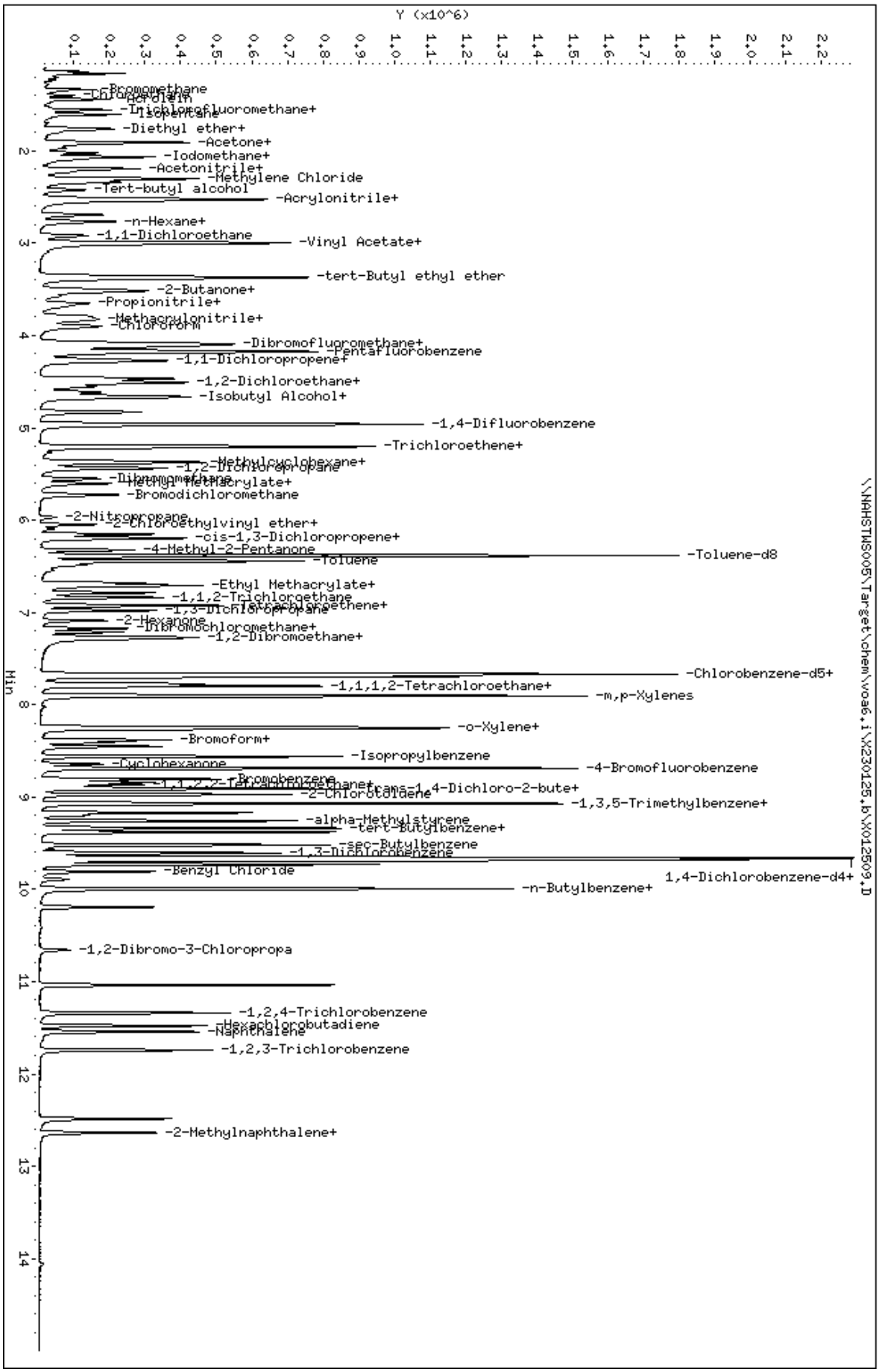
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	325176	21.7784	2177.84
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	381672	19.8862	1988.61
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	463660	23.3389	2333.89
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	406021	22.8074	2280.73
83	1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	227898	18.7743	1877.43
84	1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	241824	18.2561	1825.60
86	Benzyl Chloride	91	9.808	9.808	(1.279)	185241	16.7332	1673.31
87	n-Butylbenzene	91	9.995	9.992	(1.035)	360426	22.0373	2203.72
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	223454	17.8739	1787.39
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	18561	16.4023	1640.22
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	159274	20.1877	2018.77
91	Hexachlorobutadiene	225	11.476	11.480	(1.188)	76456	21.9834	2198.34
92	Naphthalene	128	11.544	11.540	(1.195)	321623	17.9168	1791.68
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	141439	18.7182	1871.81
146	Methyl acetate	43	2.228	2.225	(0.534)	44452	15.7704	1577.03
138	Freon TF	101	1.910	1.913	(0.458)	88921	19.3380	1933.80
141	Cyclohexane	56	4.117	4.118	(0.987)	141893	23.1666	2316.66
142	Tetrahydrofuran	42	3.844	3.836	(0.921)	27078	32.7063	3270.63
147	Methylcyclohexane	55	5.377	5.373	(1.084)	238673	22.3448	2234.47
135	1,4-Dioxane	88	5.598	5.595	(1.341)	18376	320.920	32091.97
132	n-Butanol	56	5.265	5.253	(1.261)	18418	269.417	26941.70(a)
131	Methyl Acrylate	55	3.686	3.683	(0.883)	67558	15.8856	1588.56
133	Ethyl Acrylate	55	5.377	5.373	(1.288)	238673	20.5645	2056.45
136	n-Hexane	57	2.768	2.768	(0.663)	104178	23.0982	2309.82
139	Diethyl ether	59	1.752	1.752	(0.420)	65763	15.7119	1571.19
148	Tert-butyl alcohol	59	2.423	2.419	(0.581)	142924	329.510	32951.03
149	Isopropyl alcohol	45	2.089	2.090	(0.501)	75912	335.118	33511.76
156	Diisopropyl ether	45	2.997	2.993	(0.718)	287410	17.6872	1768.71
160	2-Methylnaphthalene	142	12.638	12.634	(1.308)	148430	17.1624	1716.23
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	424374	19.7695	1976.94
167	Ethanol	45	1.700	1.696	(0.407)	11888	288.985	28898.48
172	tert-Butyl formate	59	4.616	4.612	(1.106)	104539	31.4505	3145.04
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	127279	337.235	33723.46
174	tert-Amyl methyl ether	73	4.661	4.661	(1.117)	312908	17.3293	1732.93
175	tert-Butyl ethyl ether	59	3.371	3.368	(0.808)	300701	17.4151	1741.50
176	tert-Amyl alcohol	59	4.616	4.612	(1.106)	104539	310.734	31073.40
151	4-Methyl-2-pentanol	45	6.712	6.708	(1.353)	245618	297.393	29739.30
180	1-Methylnaphthalene	142	12.638	12.634	(1.308)	148430		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	64921	15.1008	1510.08
152	Amyl alcohol	42	6.906	6.903	(0.901)	19876	251.973	25197.33
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	13540	16.6937	1669.36
159	Propylene oxide	43	1.752	1.752	(0.420)	13277	33.7054	3370.53
161	3-Methyl-1-butanol	55	6.910	6.903	(0.901)	22134	280.651	28065.10
162	Butyl acrylate	55	8.252	8.249	(1.076)	198091	19.0104	1901.03
182	Epichlorohydrin	57	6.097	6.093	(1.229)	27198	71.2273	7122.73
M 94	1,2-Dichloroethylene (total)	96				191319	32.4632	3246.31
M 95	Xylenes (total)	106				532887	56.3512	5635.12
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	181870	18.4133	1841.33
130	Ethyl Acetate	43	3.656	3.649	(0.876)	80368	16.4419	1644.19
134	Cyclohexanone	55	8.642	8.642	(0.894)	58798	316.206	31620.56(a)
185	Isoprene	39	1.767	1.767	(0.423)	31738	19.0188	1901.87
186	Isopentane	42	1.606	1.606	(0.385)	61743		(a)

188 Isopropyl acetate	43	4.672	4.672 (0.942)	250591	18.4842	1848.41
187 n-Amyl acetate	43	8.451	8.451 (1.102)	159497	17.1471	1714.71

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	130084	18.9837	1898.37
150 Allyl alcohol	57	2.768	2.768	(0.663)	104178	452.474	45247.43
194 Acetaldehyde	44	1.209	1.209	(0.290)	36110	78.3117	7831.16
195 Methyl Amyl Ketone	43	8.383	8.380	(1.093)	184039	17.3527	1735.26
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	204932	18.9820	1898.19
168 1-Propanol	59	2.993	2.993	(0.717)	31924	311.847	31184.65

QC Flag Legend

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



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Date : 25-JAN-2023 10:27
Client ID: HS23010982-02MS
Sample Info: HS23010982-02MS;HS23010982-02MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 25-JAN-2023 10:27
InstruID : voa6.i
LabSampID : HS23010982-02MS

Chloroprene (126-99-8)

Reason Code:

BEFORE

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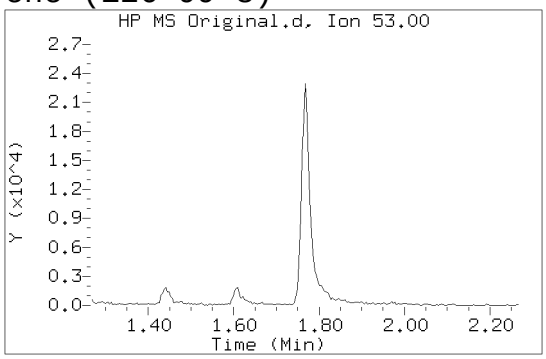
25-Jan-2023
10:43
ALSHS
Server



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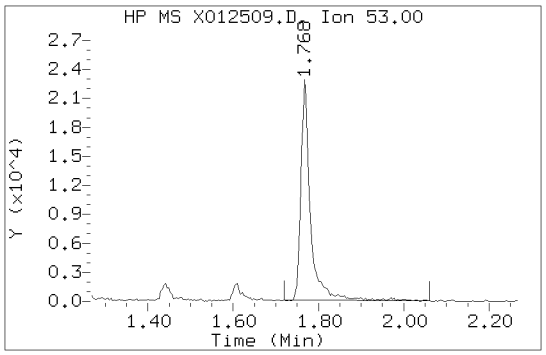

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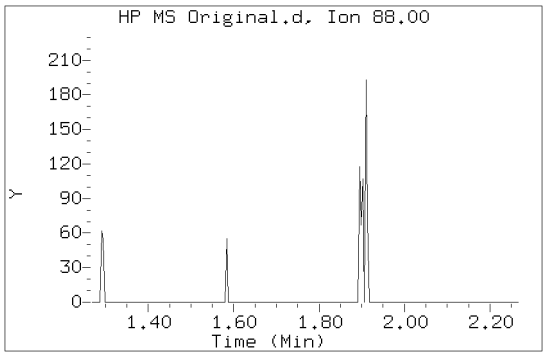

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03-Feb-2023
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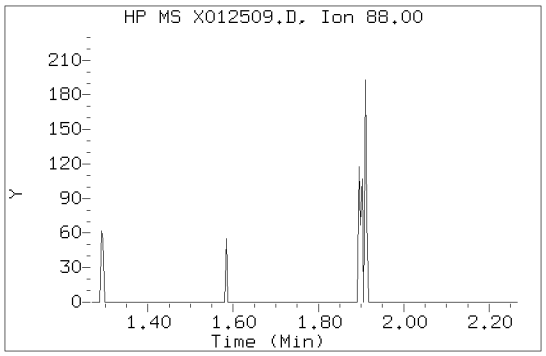

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012510.D
Lab Smp Id: HS23010982-02MSD Client Smp ID: HS23010982-02MSD
Inj Date : 25-JAN-2023 10:48
Operator : FT Inst ID: voa6.i
Smp Info : HS23010982-02MSD;HS23010982-02MSD;3;;MSD
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	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	4.177	4.178	(1.000)	632455	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	50356	11.6872	1168.72
3 Chloromethane	50	1.074	1.074	(0.257)	72365	14.2986	1429.86
4 Propionitrile	54	3.649	3.645	(0.873)	103989	161.140	16114.04(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	75145	13.6013	1360.12
6 Bromomethane	94	1.336	1.336	(0.320)	57240	14.9788	1497.87
7 Chloroethane	64	1.400	1.400	(0.335)	50290	13.0777	1307.77
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	125840	16.2764	1627.63
9 Acrolein	56	1.441	1.441	(0.345)	13732	33.6736	3367.35
10 Acetone	43	1.970	1.966	(0.472)	40961	23.0553	2305.52
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	69366	14.4511	1445.10
12 Isobutyl Alcohol	43	4.672	4.672	(1.118)	235824	331.506	33150.56(a)
13 Acetonitrile	39	2.194	2.195	(0.525)	101610	176.525	17652.47(a)
14 Allyl Chloride	41	2.194	2.195	(0.525)	179427	16.3667	1636.66(a)
15 Iodomethane	142	2.026	2.022	(0.485)	162412	28.9064	2890.63
16 Acrylonitrile	53	2.528	2.528	(0.605)	50045	30.7404	3074.04
17 Methylene Chloride	84	2.299	2.299	(0.550)	86384	13.1201	1312.00
18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	251787	16.0256	1602.56
19 Carbon Disulfide	76	2.067	2.063	(0.495)	374618	29.8294	2982.94
20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	78709	14.6514	1465.13

21 Vinyl Acetate	43	2.993	2.993 (0.716)	443804	32.1780	3217.80
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	137617	14.5964	1459.63

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012510.D Page 2
Report Date: 03-Feb-2023 10:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	33173	15.4262	1542.62(M)
	24 2-Butanone	43	3.578	3.570	(0.856)	43625	25.4999	2549.98
	25 Methacrylonitrile	41	3.825	3.814	(0.916)	68886	15.3821	1538.21(a)
	26 2,2-Dichloropropane	77	3.506	3.503	(0.839)	131279	16.3995	1639.95
	27 cis-1,2-Dichloroethene	96	3.521	3.518	(0.843)	98349	15.0432	1504.31
	28 Chloroform	83	3.904	3.900	(0.935)	155081	14.6757	1467.56
	29 Bromochloromethane	128	3.795	3.791	(0.908)	47646	13.3105	1331.04
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	271287	44.6546	44.65
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	139045	16.5843	1658.42
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	116522	18.5516	1855.16
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	126431	17.4419	1744.18
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	118310	17.6393	1763.93
$	35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	310087	48.3861	48.38
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	884706	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	332700	15.7479	1574.79
	38 Trichloroethene	130	5.205	5.205	(1.049)	292146	48.7546	4875.45
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	121126	15.2770	1527.70
	40 Methyl Methacrylate	41	5.606	5.602	(1.342)	67421	15.6341	1563.41(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.219)	55168	24.4576	2445.75
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	85609	15.2335	1523.34
	43 2-Nitropropane	43	5.969	5.966	(1.429)	24143	15.1168	1511.67
	44 Dibromomethane	93	5.549	5.550	(1.119)	58076	15.2040	1520.40
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	138341	32.1056	3210.56
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	145914	15.6702	1567.02
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	806161	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1038595	52.1362	52.13
	49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	61598	14.7854	1478.53(a)
	50 Toluene	91	6.445	6.445	(0.841)	371749	16.6834	1668.34
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	123452	15.9757	1597.56
	52 2-Hexanone	43	7.086	7.086	(0.924)	93546	31.9089	3190.89
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	70094	15.6801	1568.00
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	140924	16.0161	1601.60
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	100143	15.5216	1552.16
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	85300	18.5019	1850.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	91103	16.3000	1629.99
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	91685	21.4443	2144.42
	59 Chlorobenzene	112	7.694	7.690	(1.003)	253762	16.0559	1605.59
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	93672	15.9259	1592.58
	61 Ethylbenzene	106	7.799	7.799	(1.017)	132598	17.8105	1781.05
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	336613	35.0735	3507.34
	63 o-Xylene	106	8.241	8.241	(1.075)	158693	16.7530	1675.29
	64 Styrene	104	8.260	8.256	(1.077)	265706	16.7352	1673.51
	66 Bromoform	173	8.410	8.410	(1.097)	66572	14.8940	1489.39
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	415139	19.1828	1918.28
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	111821	15.9223	1592.23
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	379681	50.9892	50.98
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	440623	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	116021	23.6639	2366.39
	72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	29035	16.6839	1668.38(a)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	495046	20.2833	2028.32
	74 Bromobenzene	156	8.803	8.803	(0.911)	120020	16.6024	1660.23
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	353139	19.5863	1958.62

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	295544	18.4532	1845.31
77	4-Chlorotoluene	91	9.069	9.070 (0.939)	343139	18.7940	1879.39

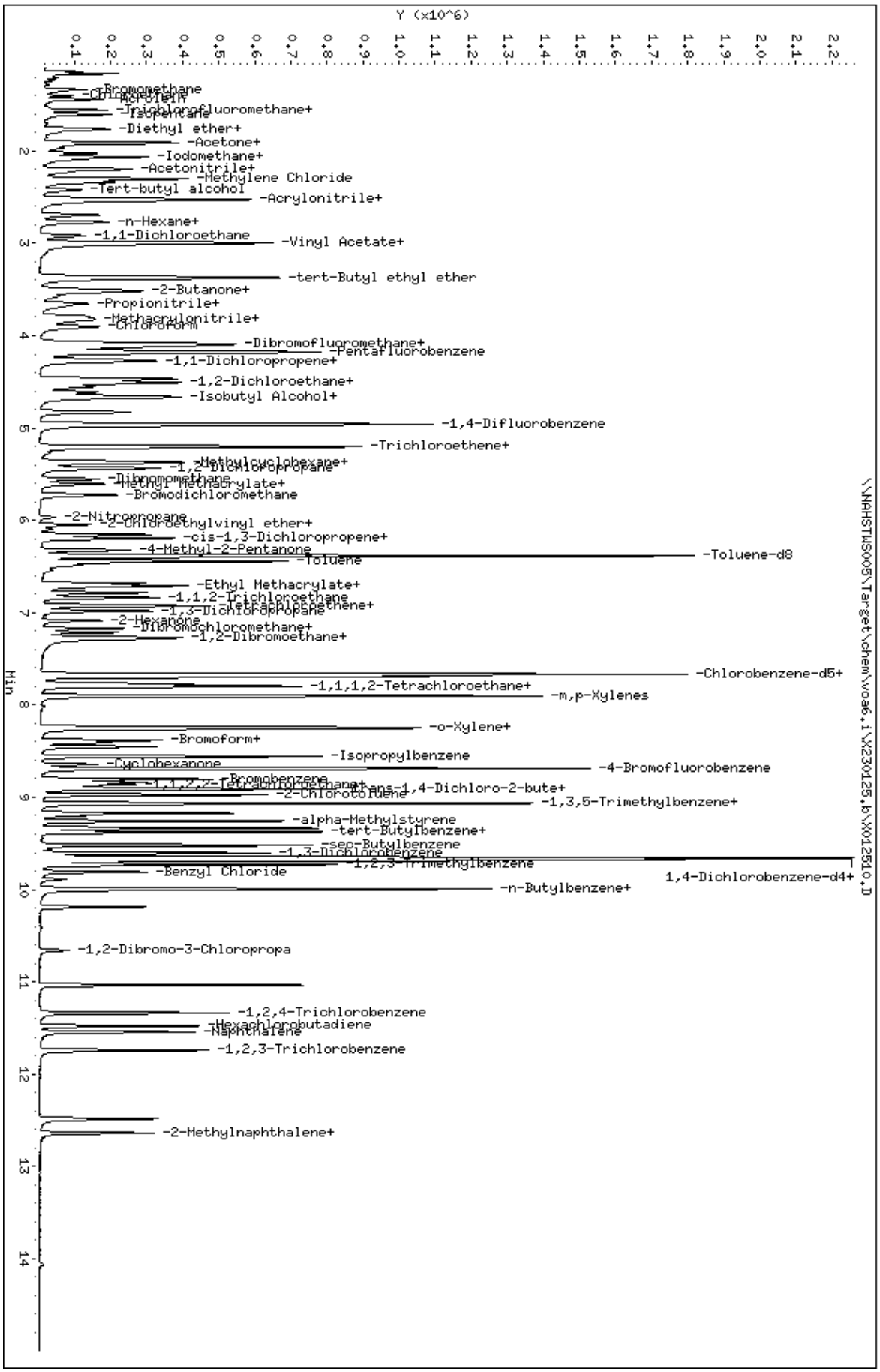
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	302910	20.5242	2052.41
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	352954	18.6048	1860.47
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	425079	21.6469	2164.68
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	376663	21.4055	2140.54
83	1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	214019	17.8369	1783.69
84	1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	228023	17.4153	1741.53
86	Benzyl Chloride	91	9.808	9.808	(1.279)	174440	15.7757	1577.57
87	n-Butylbenzene	91	9.995	9.992	(1.035)	333958	20.7687	2076.86
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	212806	17.2211	1722.10
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	18031	16.1217	1612.16
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	145358	18.6391	1863.91
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	71697	20.8588	2085.87
92	Naphthalene	128	11.544	11.540	(1.195)	306540	17.2761	1727.60
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	133231	17.8379	1783.79
146	Methyl acetate	43	2.228	2.225	(0.533)	42423	14.9067	1490.66
138	Freon TF	101	1.913	1.913	(0.458)	79143	17.0471	1704.70
141	Cyclohexane	56	4.121	4.118	(0.987)	128815	20.9575	2095.75
142	Tetrahydrofuran	42	3.848	3.836	(0.921)	23991	28.3129	2831.28
147	Methylcyclohexane	55	5.377	5.373	(1.084)	213209	19.6877	1968.77
135	1,4-Dioxane	88	5.602	5.595	(1.341)	16834	291.180	29118.02
132	n-Butanol	56	5.272	5.253	(1.262)	16509	243.951	24395.11(a)
131	Methyl Acrylate	55	3.686	3.683	(0.882)	67448	15.7082	1570.81
133	Ethyl Acrylate	55	5.377	5.373	(1.287)	213209	18.4058	1840.58
136	n-Hexane	57	2.772	2.768	(0.664)	92585	20.3316	2033.16
139	Diethyl ether	59	1.756	1.752	(0.420)	60245	14.2560	1425.59
148	Tert-butyl alcohol	59	2.423	2.419	(0.580)	130243	297.404	29740.43
149	Isopropyl alcohol	45	2.089	2.090	(0.500)	72113	315.304	31530.40
156	Diisopropyl ether	45	2.993	2.993	(0.716)	262805	16.0184	1601.84
160	2-Methylnaphthalene	142	12.638	12.634	(1.308)	138918	16.2502	1625.02
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	381219	17.9666	1796.65
167	Ethanol	45	1.703	1.696	(0.408)	12630	304.260	30425.99
172	tert-Butyl formate	59	4.612	4.612	(1.104)	97750	29.1269	2912.69
173	3,3-Dimethyl-1-butanol	57	7.289	7.285	(0.951)	110013	288.427	28842.67
174	tert-Amyl methyl ether	73	4.661	4.661	(1.116)	287932	15.7937	1579.37
175	tert-Butyl ethyl ether	59	3.368	3.368	(0.806)	272437	15.6273	1562.73
176	tert-Amyl alcohol	59	4.612	4.612	(1.104)	97750	287.777	28777.71
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	224228	267.780	26777.96
180	1-Methylnaphthalene	142	12.638	12.634	(1.308)	138918		(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	59453	13.6968	1369.67
152	Amyl alcohol	42	6.910	6.903	(0.901)	18742	235.103	23510.27
158	Dichlorofluoromethane	67	1.527	1.527	(0.366)	11777	14.3813	1438.12
159	Propylene oxide	43	1.752	1.752	(0.419)	11473	28.8473	2884.72
161	3-Methyl-1-butanol	55	6.910	6.903	(0.901)	22658	284.279	28427.88
162	Butyl acrylate	55	8.252	8.249	(1.076)	176886	16.7972	1679.71
182	Epichlorohydrin	57	6.093	6.093	(1.228)	26808	69.3150	6931.50
M 94	1,2-Dichloroethylene (total)	96				177058	29.6945	2969.45
M 95	Xylenes (total)	106				495306	51.8265	5182.64
145	alpha-Methylstyrene	118	9.261	9.257	(0.958)	172091	17.6268	1762.68
130	Ethyl Acetate	43	3.653	3.649	(0.874)	84036	17.0280	1702.80
134	Cyclohexanone	55	8.642	8.642	(0.894)	53284	289.900	28990.01(a)
185	Isoprene	39	1.767	1.767	(0.423)	28626	16.9900	1698.99
186	Isopentane	42	1.606	1.606	(0.384)	55659		(a)

188 Isopropyl acetate	43	4.672	4.672 (0.942)	236539	17.2090	1720.89
187 n-Amyl acetate	43	8.451	8.451 (1.102)	150389	15.9982	1599.81

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	122436	17.6800	1768.00
150 Allyl alcohol	57	2.772	2.768	(0.664)	92585	398.279	39827.91
195 Methyl Amyl Ketone	43	8.383	8.380	(1.093)	168599	15.7300	1572.99
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	190098	17.4231	1742.31
168 1-Propanol	59	2.993	2.993	(0.716)	28203	272.865	27286.50

QC Flag Legend

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



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Sample Info: HS230109B2-02MSD;HS230109B2-02MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 25-JAN-2023 10:48
InstruID : voa6.i
LabSampID : HS23010982-02MSD

Chloroprene (126-99-8)

Reason Code:

BEFORE

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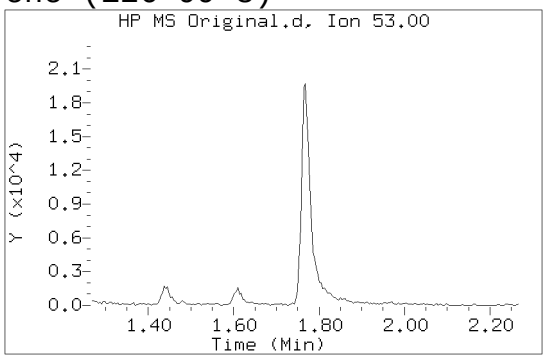

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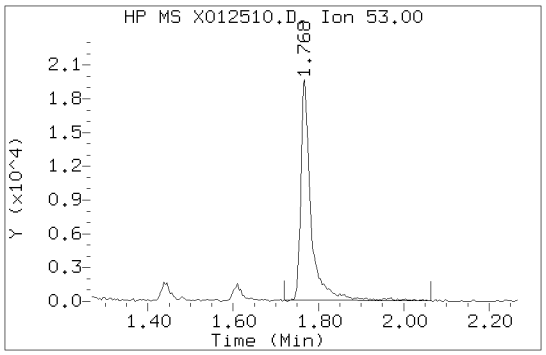

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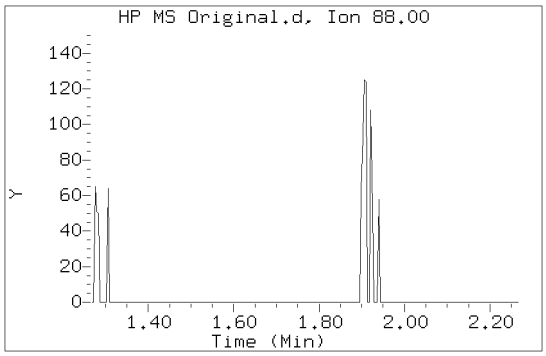

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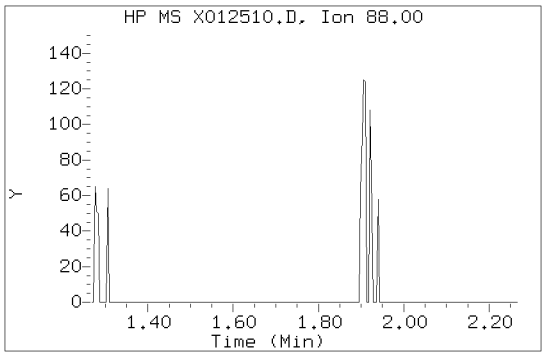

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Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012513.D
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Inj Date : 25-JAN-2023 11:51
Operator : FT Inst ID: voa6.i
Smp Info : HS23010986-01;HS23010986-01;;;
Misc Info : V6;WATER;0;500;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 13
Dil Factor: 500.00000
Integrator: HP RTE Compound Sublist: 8260-dryclean.sub
Target Version: 4.14
Processing Host: NAHSTW7056

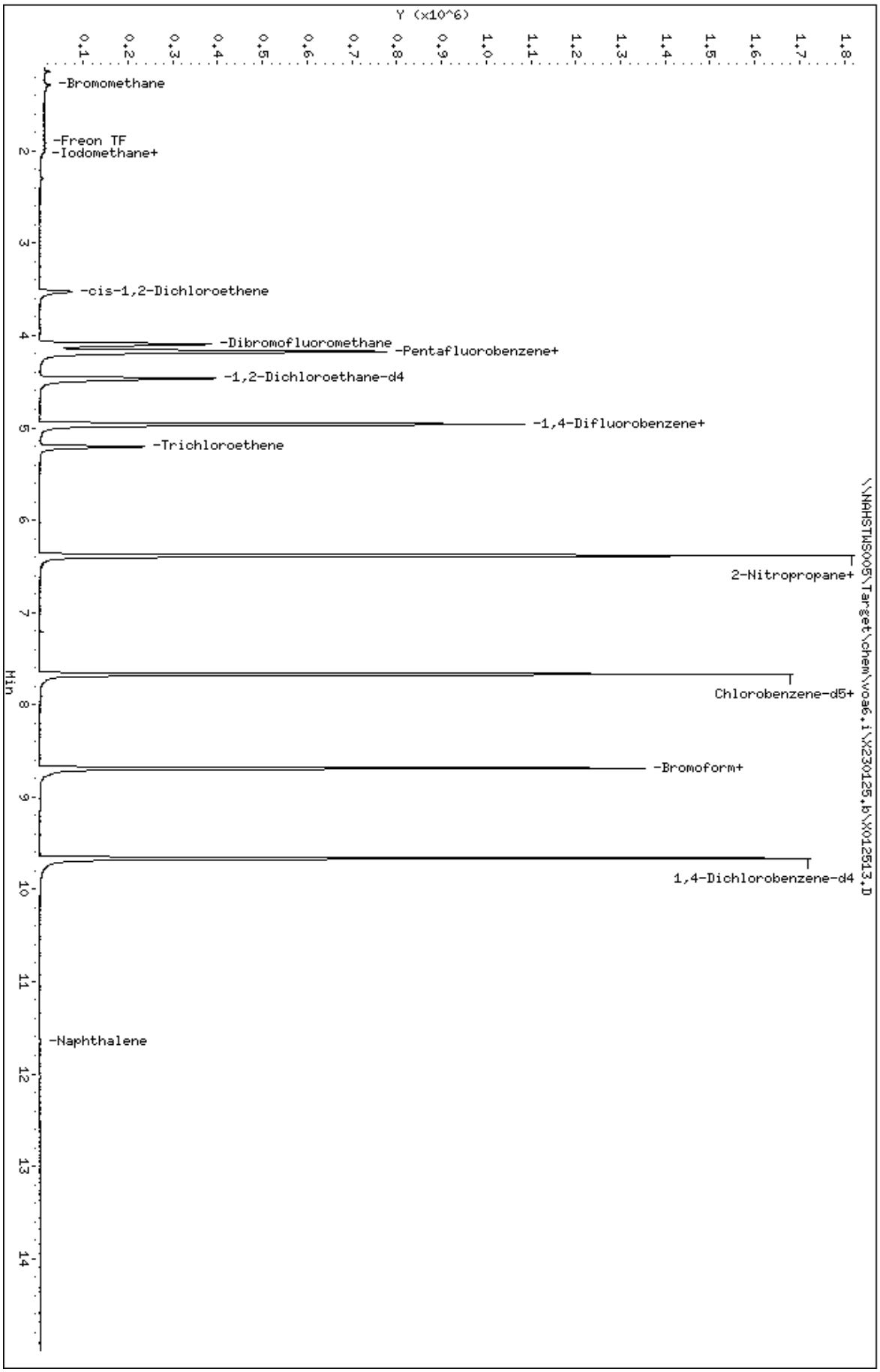
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	500.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.178	(1.000)	641117	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	276066	44.8280	44.82
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	315913	48.6278	48.62
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	897403	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	809507	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1047906	52.3862	52.38
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	373638	49.9715	49.97
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419975	50.0000	
5 Vinyl Chloride	62	1.137	1.141	(0.272)	8006	1.42951	714.75(a)
27 cis-1,2-Dichloroethene	96	3.525	3.518	(0.844)	44839	6.76577	3382.88
38 Trichloroethene	130	5.208	5.205	(1.050)	82197	13.5233	6761.65

QC Flag Legend

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



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Sample Info: HS23010986-01;HS23010986-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012513.D

Date : 25-JAN-2023 11:51

Client ID: HS23010986-01

Instrument: voa6.i

Sample Info: HS23010986-01;HS23010986-01;;;

Purge Volume: 5.0

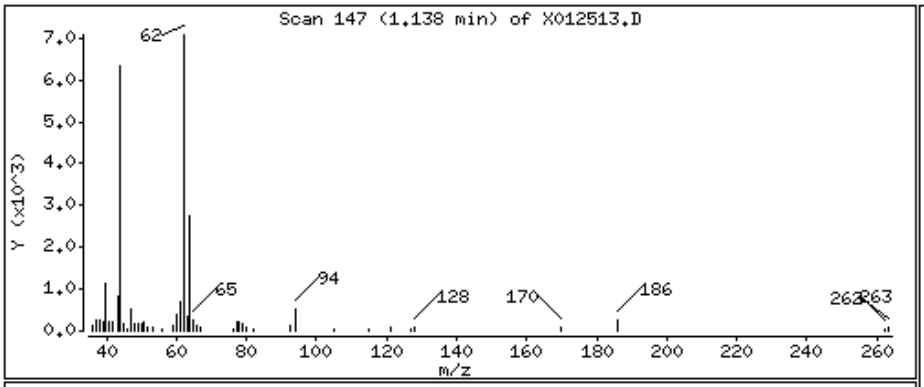
Operator: FT

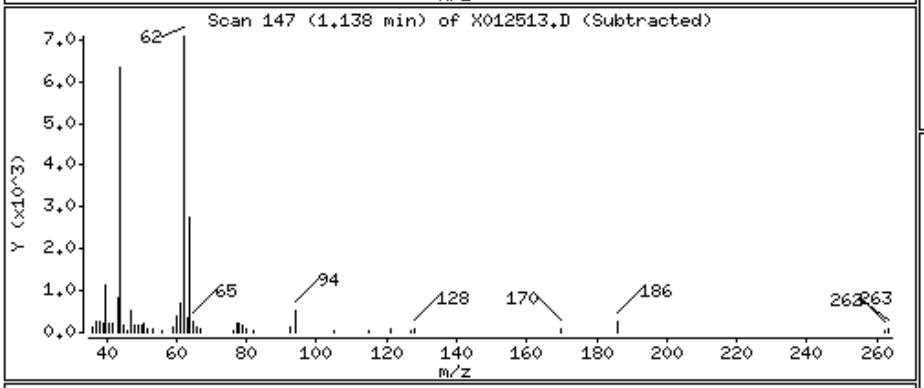
Column phase: DB624

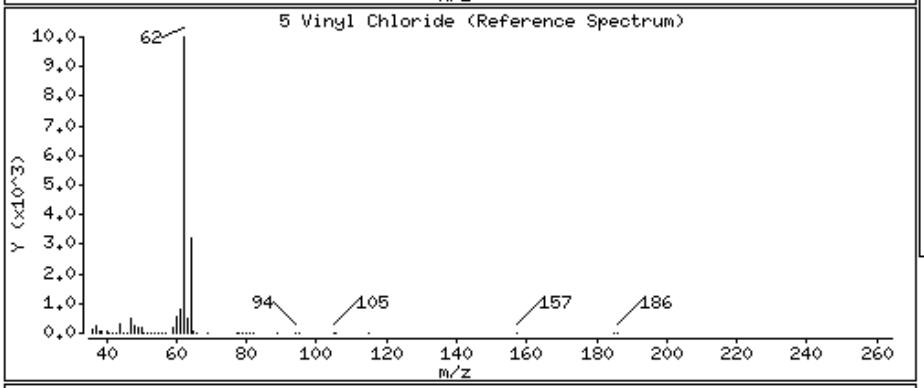
Column diameter: 0.18

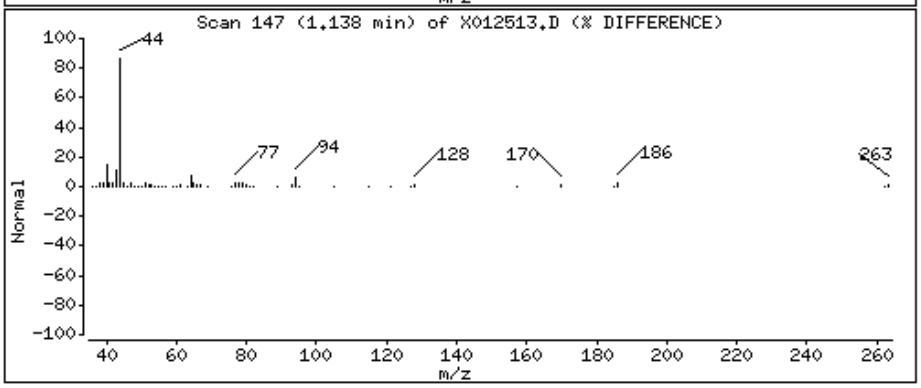
5 Vinyl Chloride

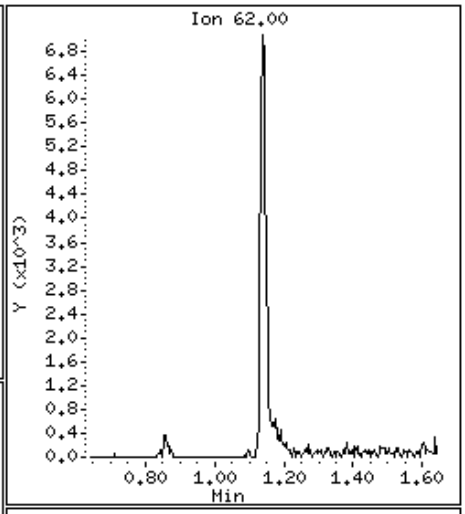
Concentration: 714.75 ug/l

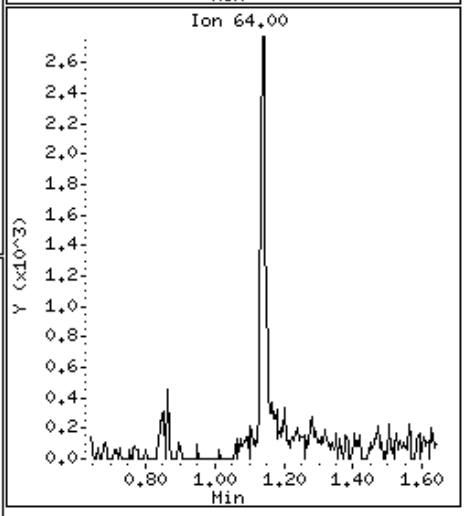












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012513.D Page 3

Date : 25-JAN-2023 11:51

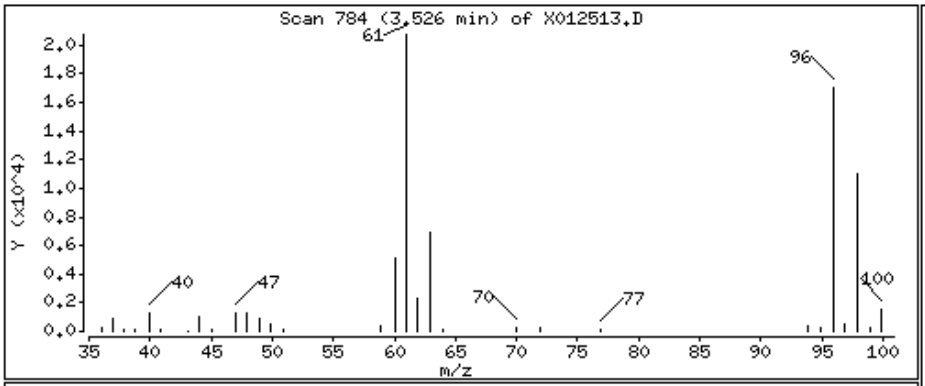
Client ID: HS23010986-01 Instrument: voa6.i

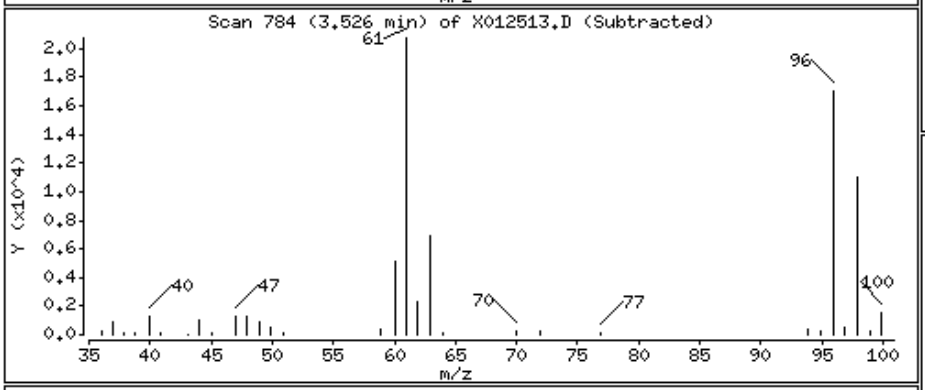
Sample Info: HS23010986-01;HS23010986-01;;;

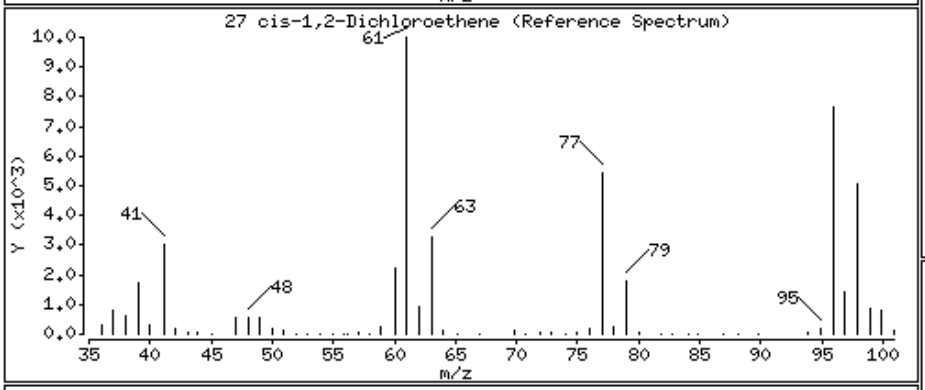
Purge Volume: 5.0 Operator: FT

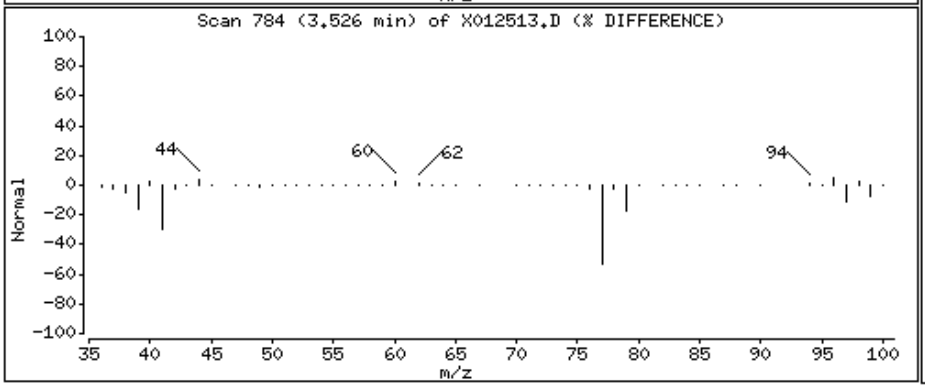
Column phase: DB624 Column diameter: 0.18

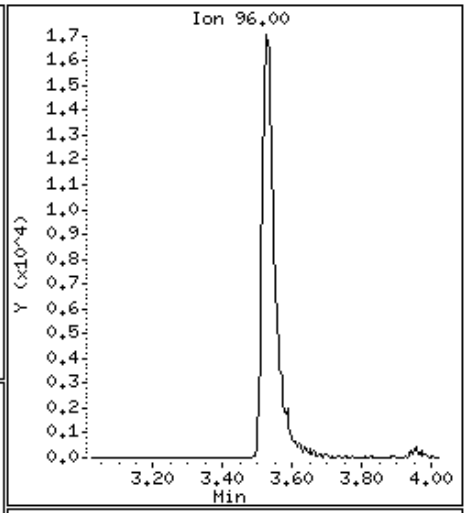
27 cis-1,2-Dichloroethene Concentration: 3382.88 ug/l

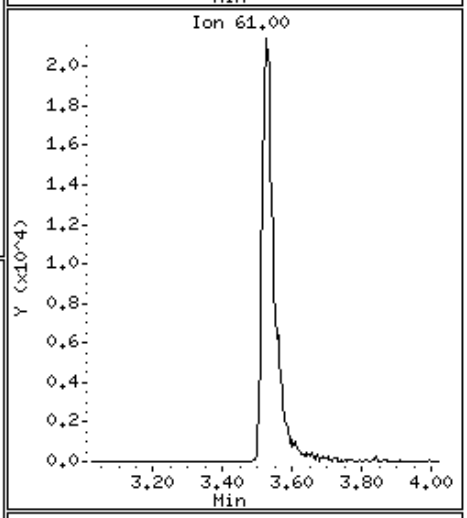


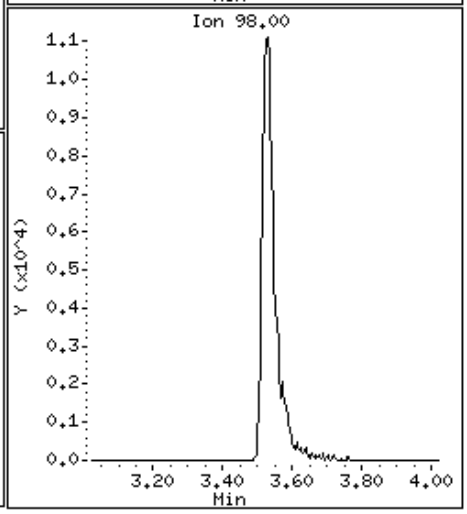












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012513.D Page 4

Date : 25-JAN-2023 11:51

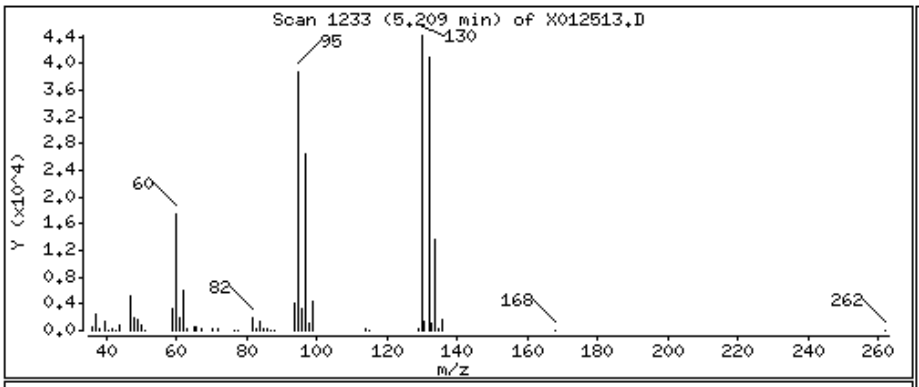
Client ID: HS23010986-01 Instrument: voa6.i

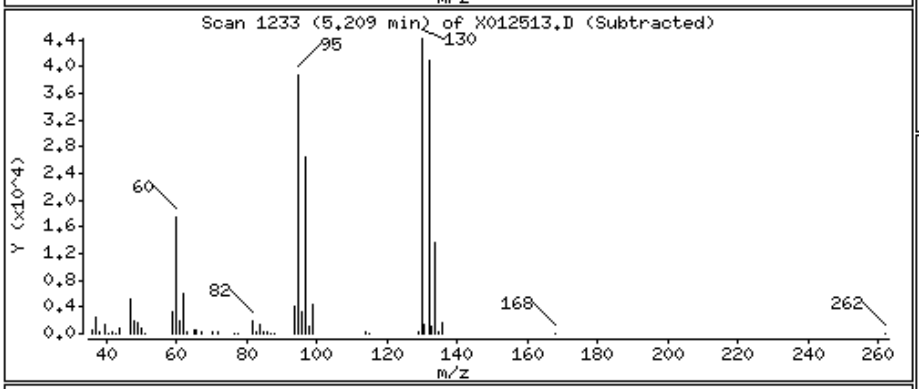
Sample Info: HS23010986-01;HS23010986-01;;;

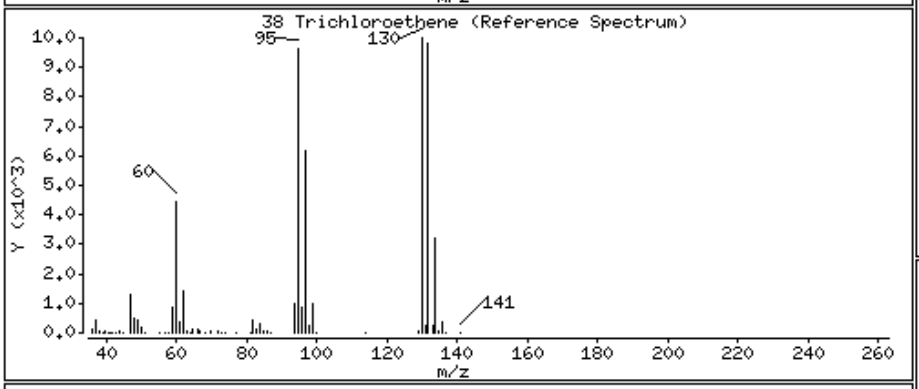
Purge Volume: 5.0 Operator: FT

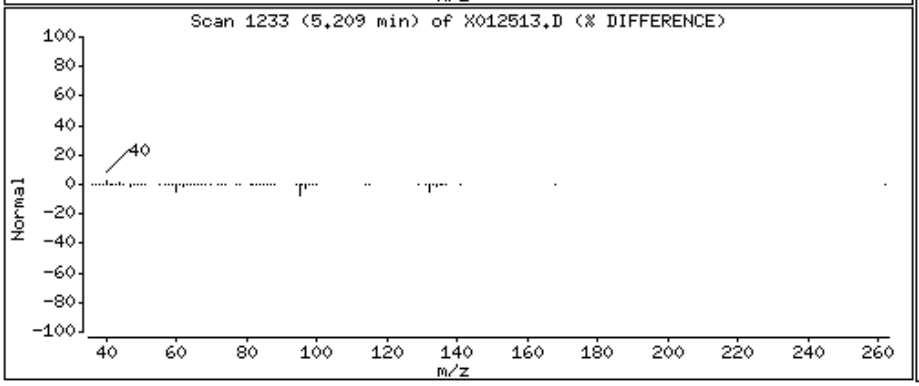
Column phase: DB624 Column diameter: 0.18

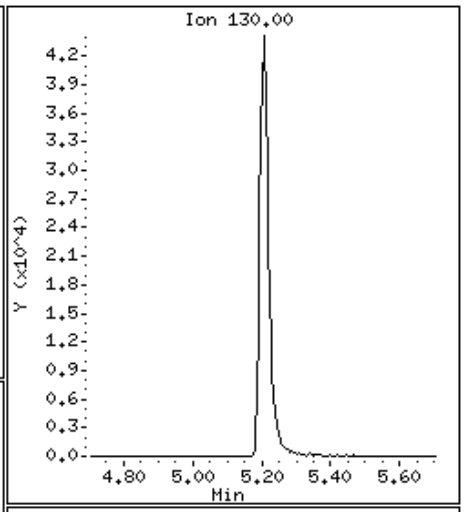
38 Trichloroethene Concentration: 6761.65 ug/l

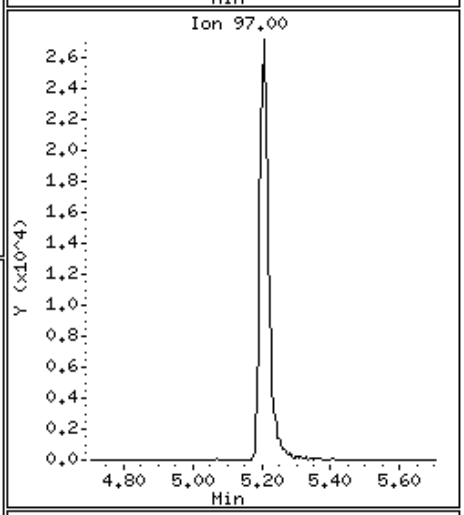


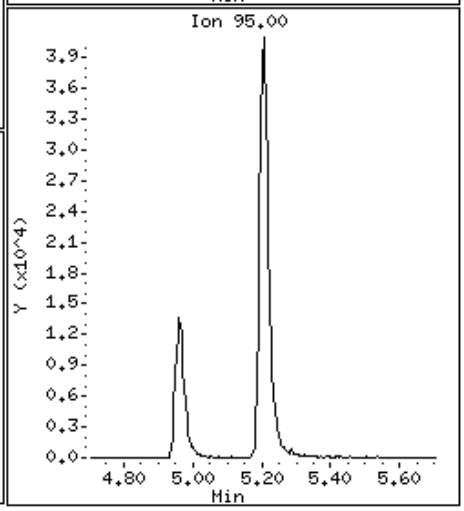












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012513.D
Inj Date : 25-JAN-2023 11:51
InstruID : voa6.i
LabSampID : HS23010986-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012514.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012514.D
Lab Smp Id: HS23010986-03 Client Smp ID: HS23010986-03
Inj Date : 25-JAN-2023 12:12
Operator : FT Inst ID: voa6.i
Smp Info : HS23010986-03;HS23010986-03;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 14
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 8260-dryclean.sub
Target Version: 4.14
Processing Host: NAHSTW7056

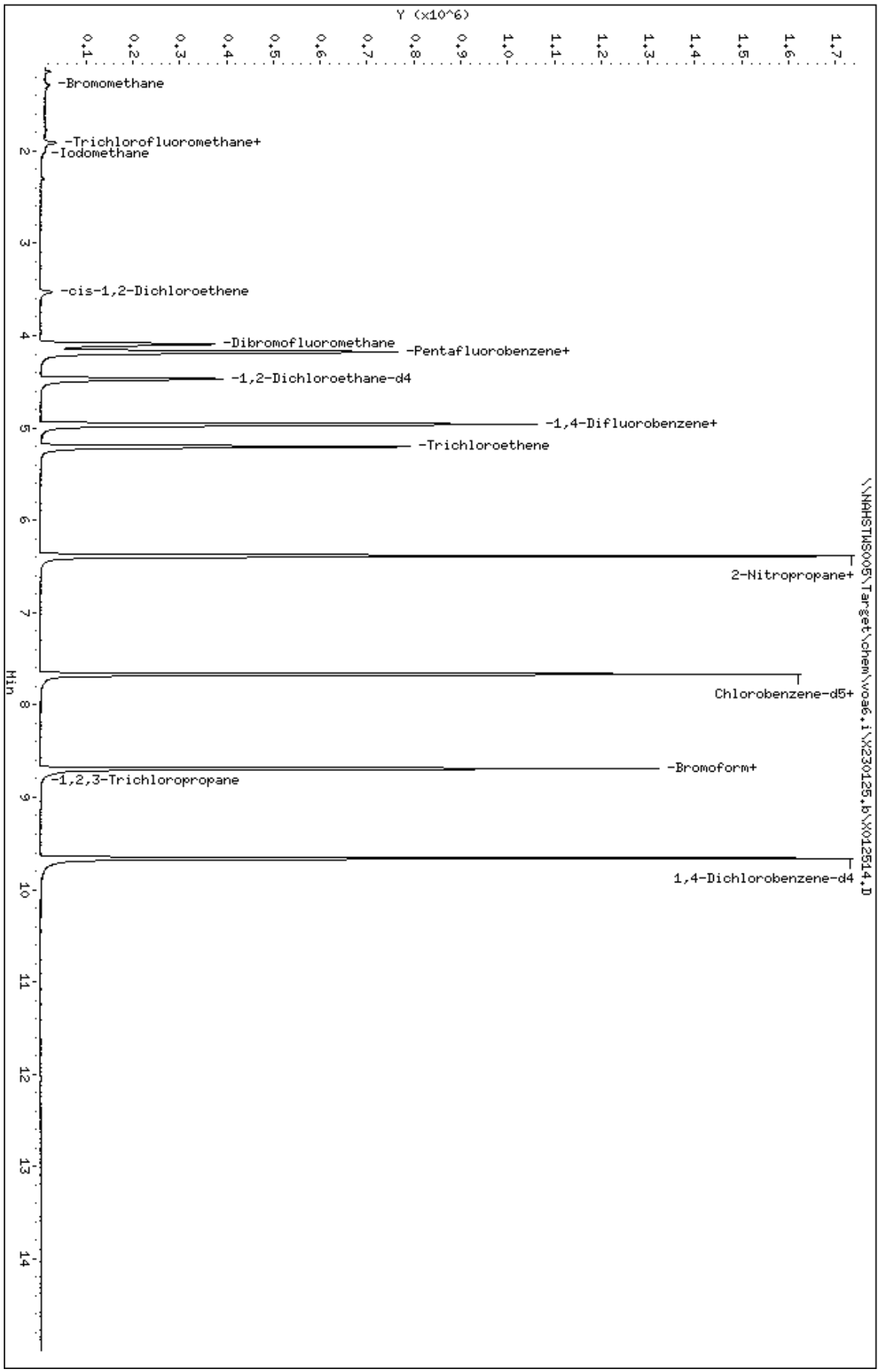
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.178	4.178	(1.000)	625495	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	272671	45.3846	45.38
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	310523	48.9899	48.98
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	882569	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	787053	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1017422	52.3133	52.31
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	366110	50.3612	50.36
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419868	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	9301	1.70222	85.11(a)
27 cis-1,2-Dichloroethene	96	3.533	3.518	(0.846)	14502	2.24286	112.14(a)
38 Trichloroethene	130	5.205	5.205	(1.049)	263698	44.1136	2205.68

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012514.D
Date : 25-JAN-2023 12:12
Client ID: HS23010986-03
Sample Info: HS23010986-03;HS23010986-03;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012514.D

Date : 25-JAN-2023 12:12

Client ID: HS23010986-03

Instrument: voa6.i

Sample Info: HS23010986-03;HS23010986-03;;;

Purge Volume: 5.0

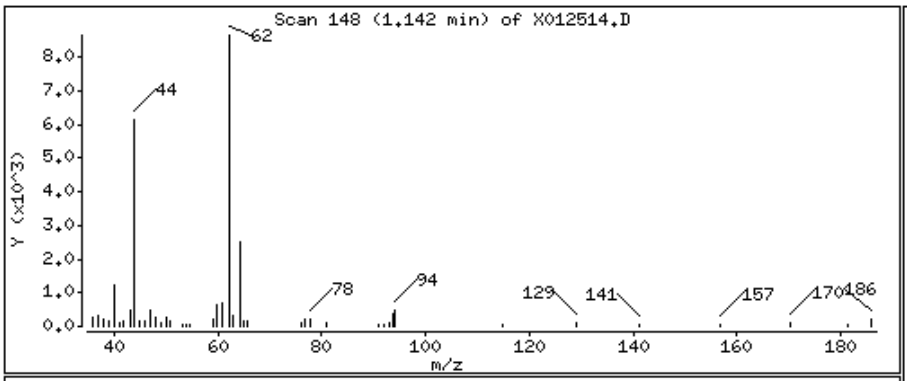
Operator: FT

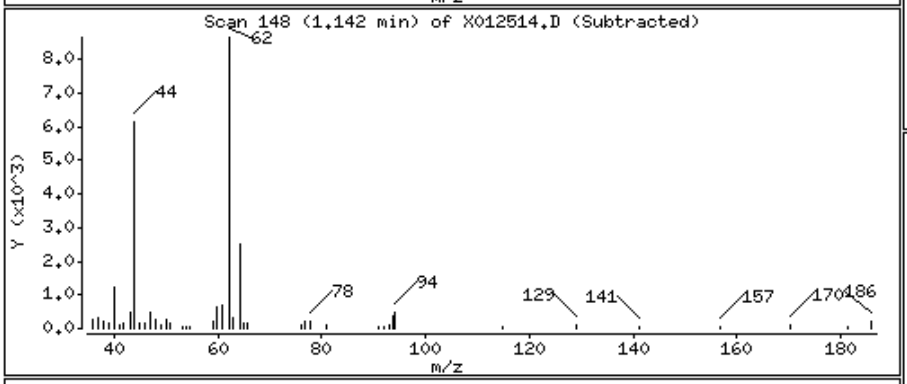
Column phase: DB624

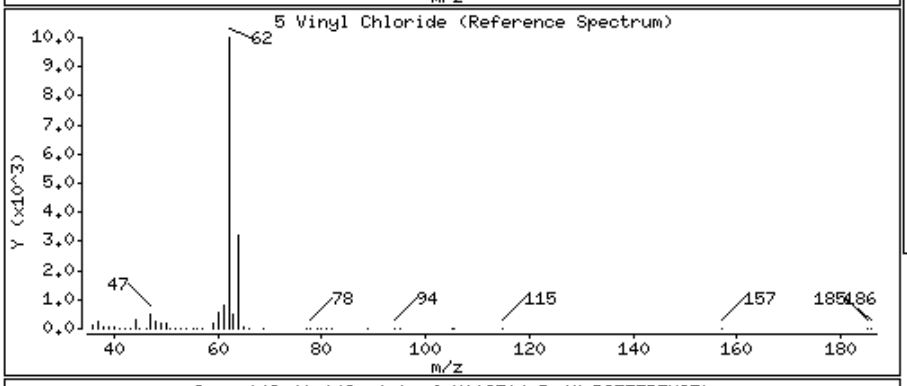
Column diameter: 0.18

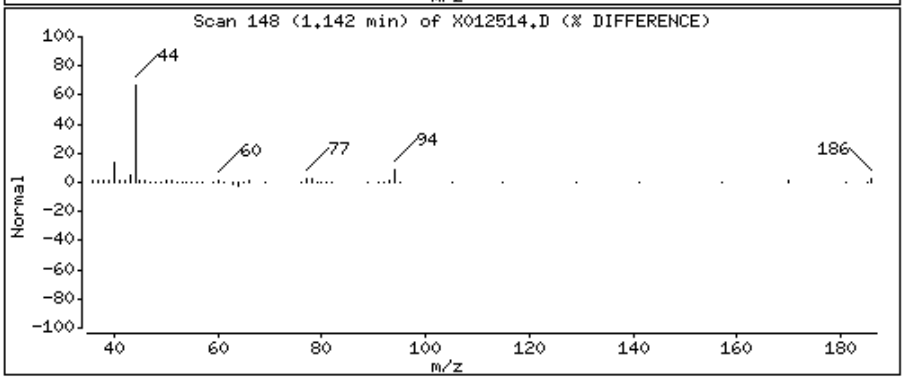
5 Vinyl Chloride

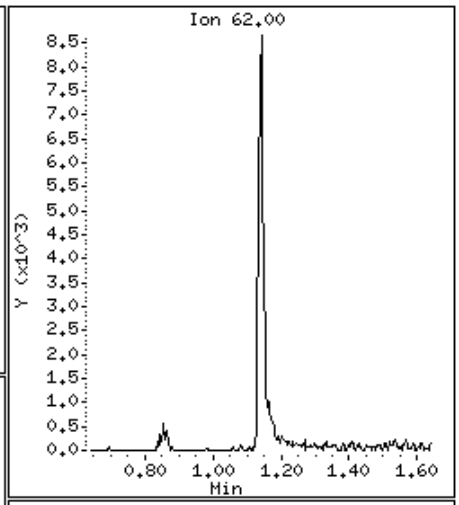
Concentration: 85.11 ug/l

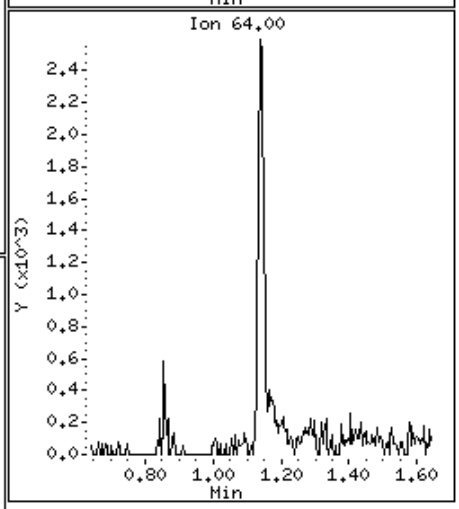












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012514.D

Date : 25-JAN-2023 12:12

Client ID: HS23010986-03

Instrument: voa6.i

Sample Info: HS23010986-03;HS23010986-03;;;

Purge Volume: 5.0

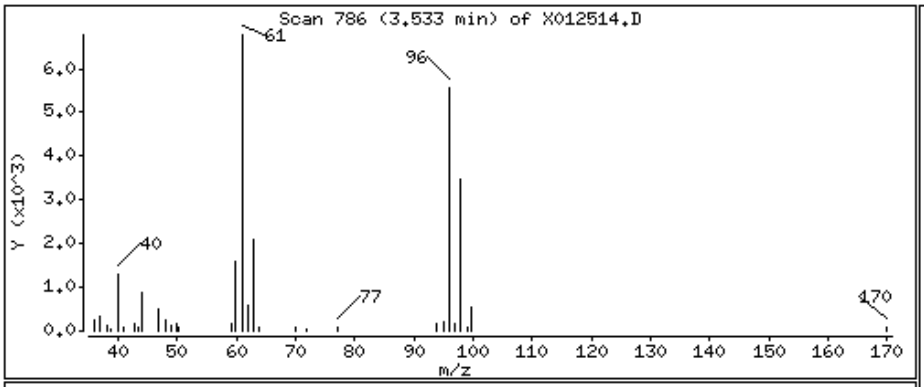
Operator: FT

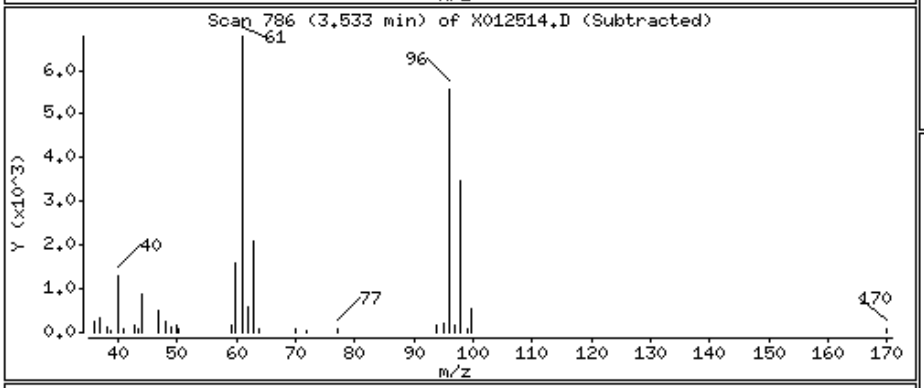
Column phase: DB624

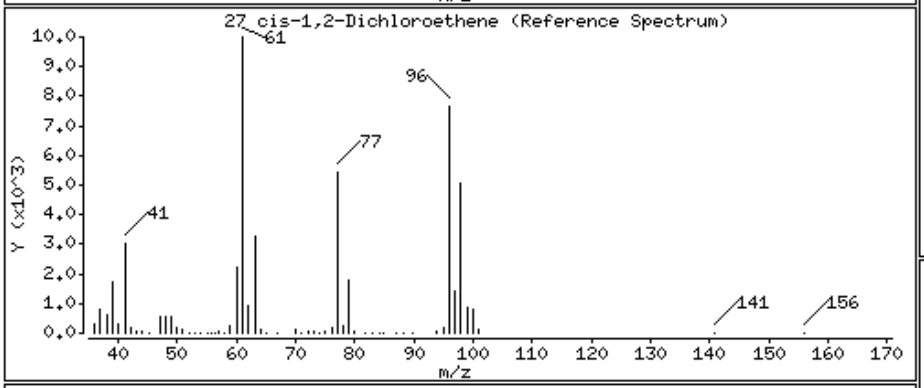
Column diameter: 0.18

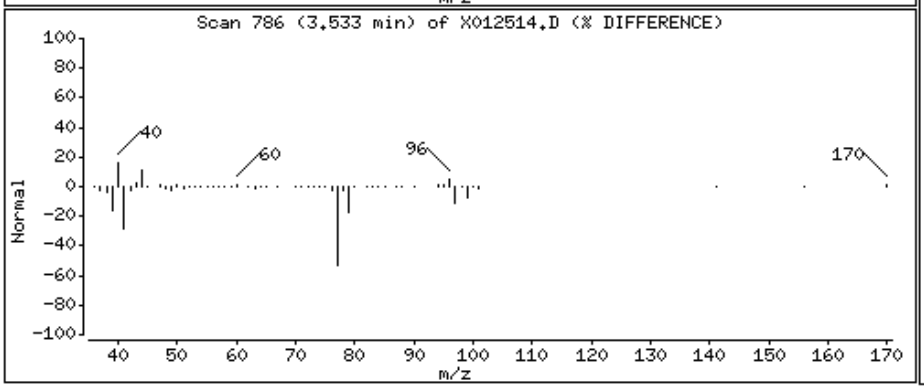
27 cis-1,2-Dichloroethene

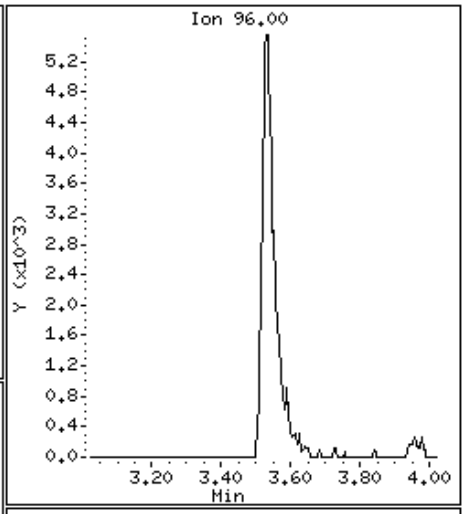
Concentration: 112.14 ug/l

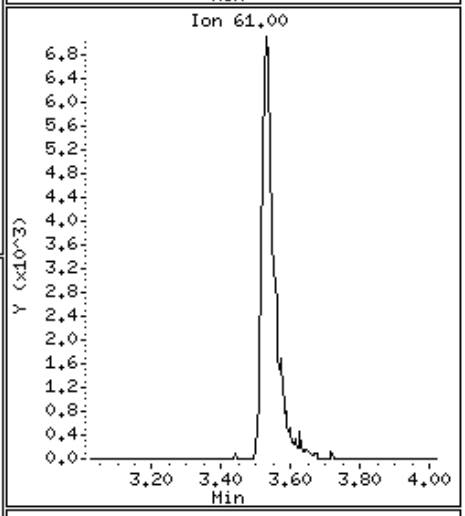


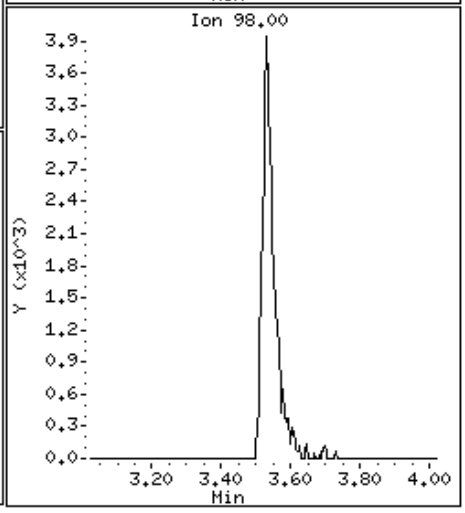












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012514.D Page 4

Date : 25-JAN-2023 12:12

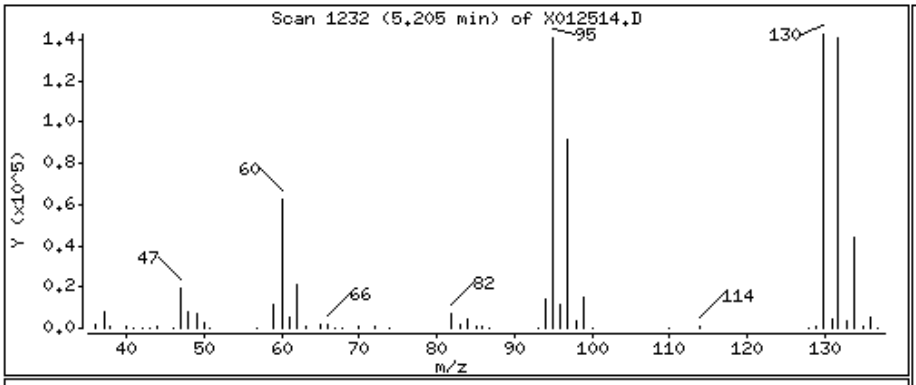
Client ID: HS23010986-03 Instrument: voa6.i

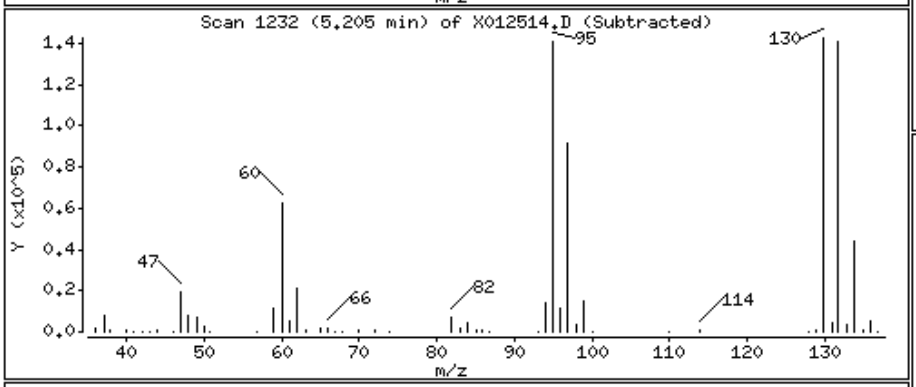
Sample Info: HS23010986-03;HS23010986-03;;;

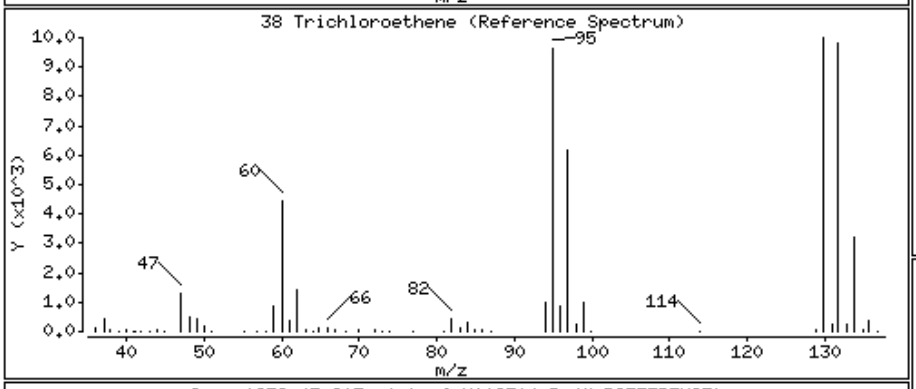
Purge Volume: 5.0 Operator: FT

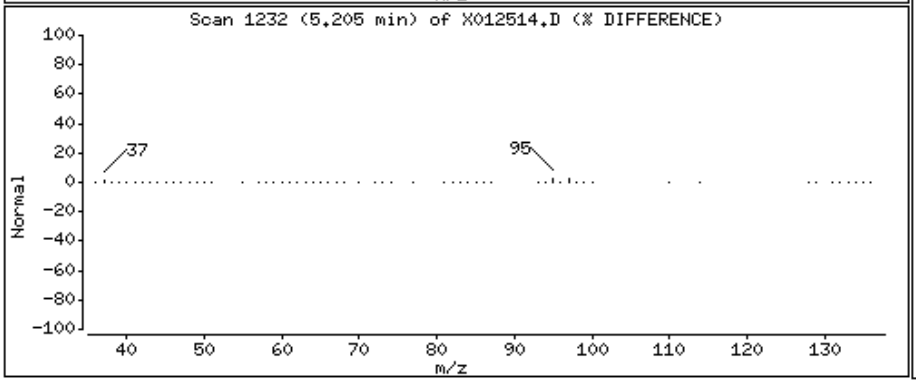
Column phase: DB624 Column diameter: 0.18

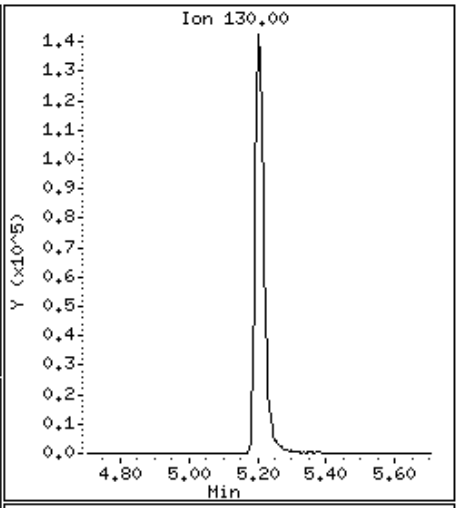
38 Trichloroethene Concentration: 2205.68 ug/l

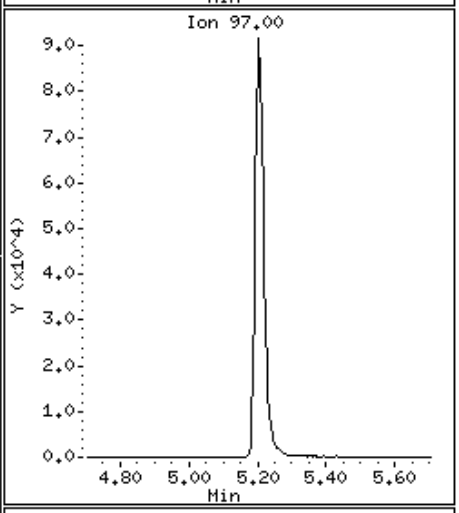


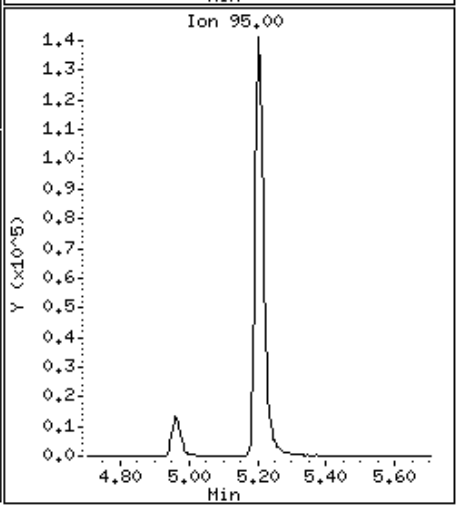












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Inj Date : 25-JAN-2023 12:12
InstruID : voa6.i
LabSampID : HS23010986-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012515.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012515.D
Lab Smp Id: HS23010986-04 Client Smp ID: HS23010986-04
Inj Date : 25-JAN-2023 12:33
Operator : FT Inst ID: voa6.i
Smp Info : HS23010986-04;HS23010986-04;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 15
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 8260-dryclean.sub
Target Version: 4.14
Processing Host: NAHSTW7056

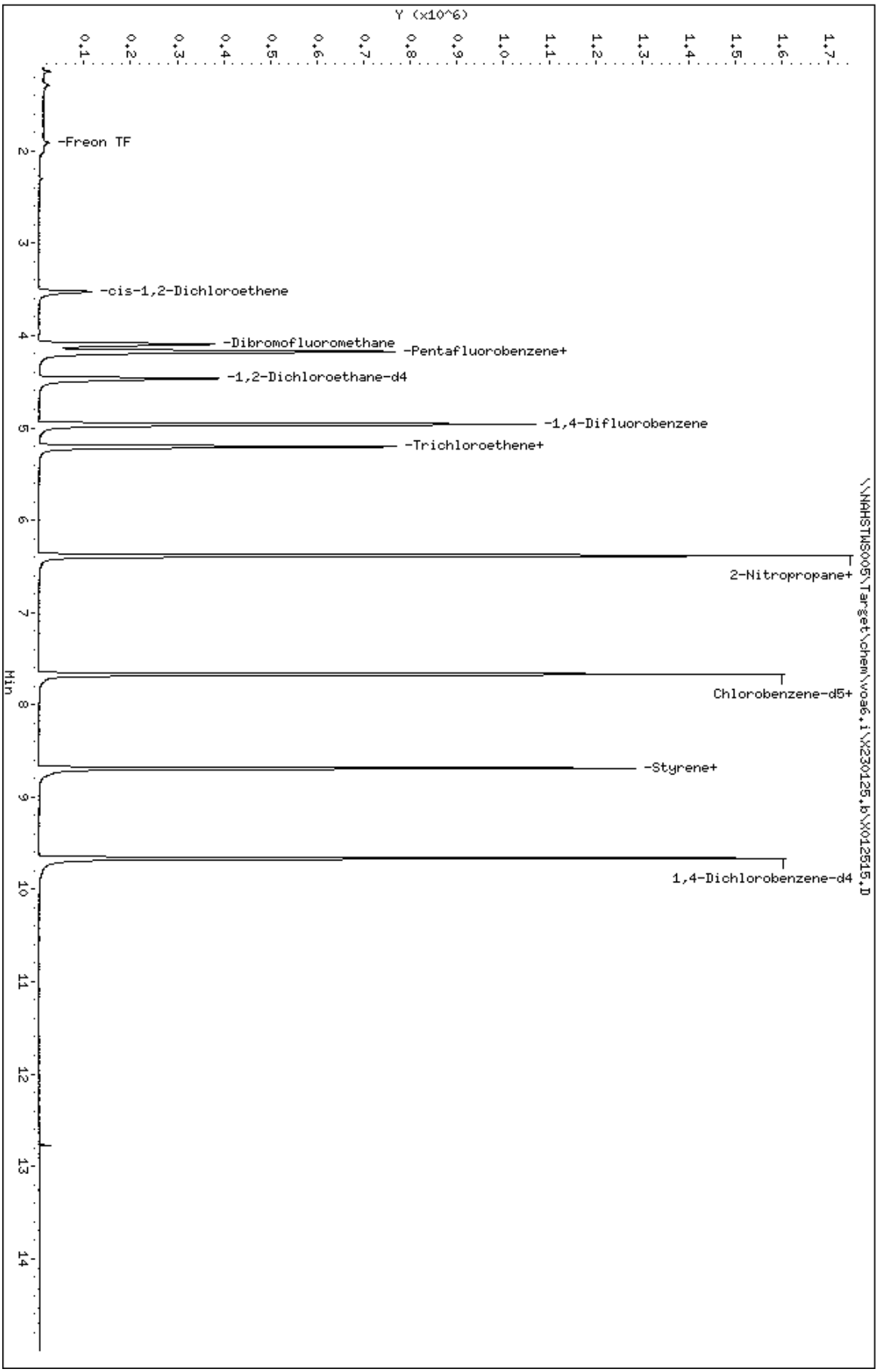
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.174	4.178	(1.000)	628398	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	271732	45.0180	45.01
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	311991	48.9941	48.99
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	887809	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	784877	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1025876	52.8942	52.89
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	361571	49.8753	49.87
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	407890	50.0000	
5 Vinyl Chloride	62	1.137	1.141	(0.273)	10104	1.84064	92.03(a)
27 cis-1,2-Dichloroethene	96	3.529	3.518	(0.846)	65478	10.0800	503.99
38 Trichloroethene	130	5.205	5.205	(1.048)	253456	42.1500	2107.49

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012515.D
Date : 25-JAN-2023 12:33
Client ID: HS230109B6-04
Sample Info: HS230109B6-04;HS230109B6-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Page 1

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012515.D Page 2

Date : 25-JAN-2023 12:33

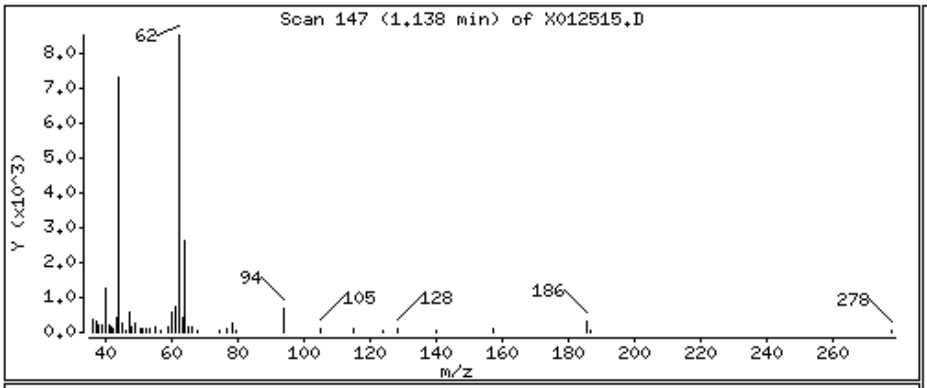
Client ID: HS23010986-04 Instrument: voa6.i

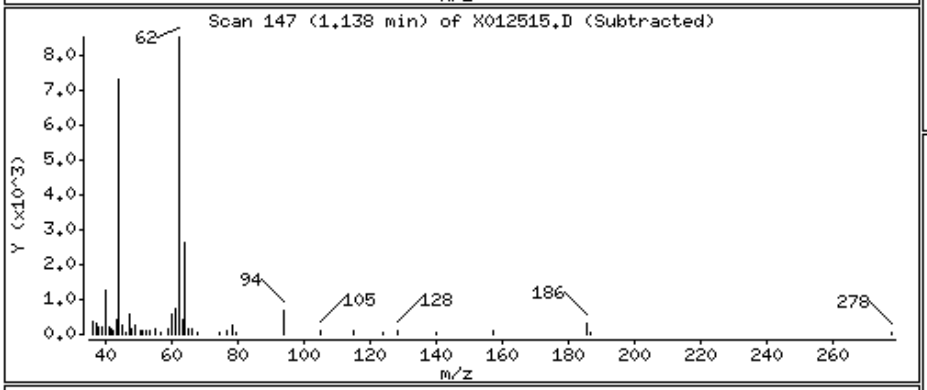
Sample Info: HS23010986-04;HS23010986-04;;;

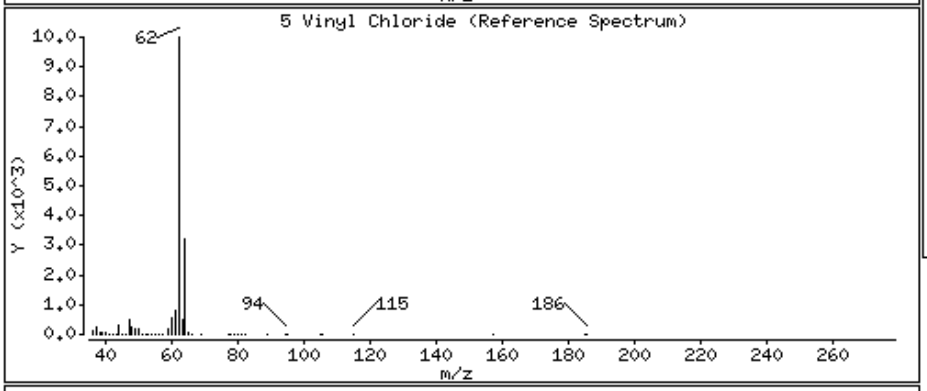
Purge Volume: 5.0 Operator: FT

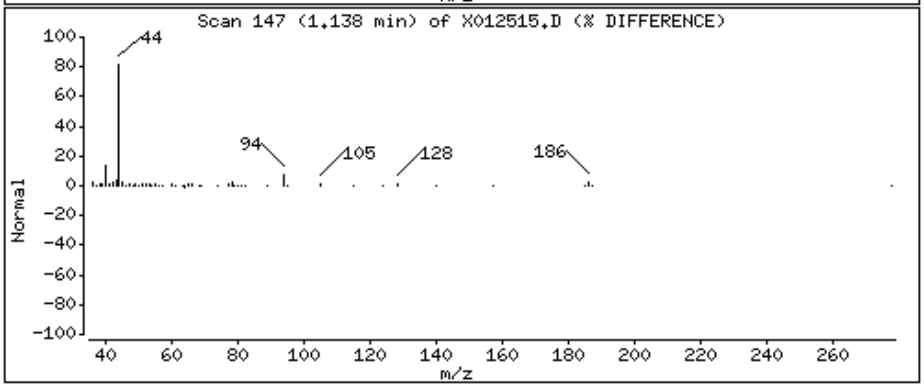
Column phase: DB624 Column diameter: 0.18

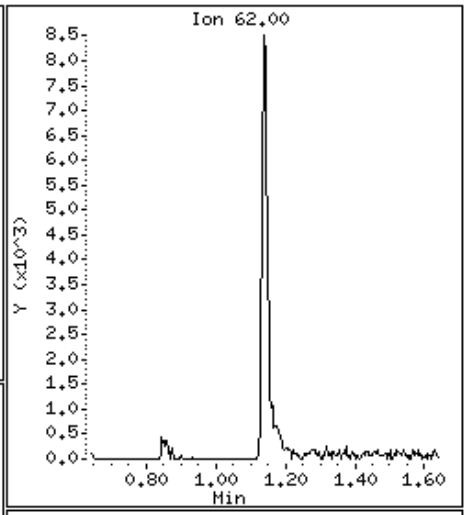
5 Vinyl Chloride Concentration: 92.03 ug/l

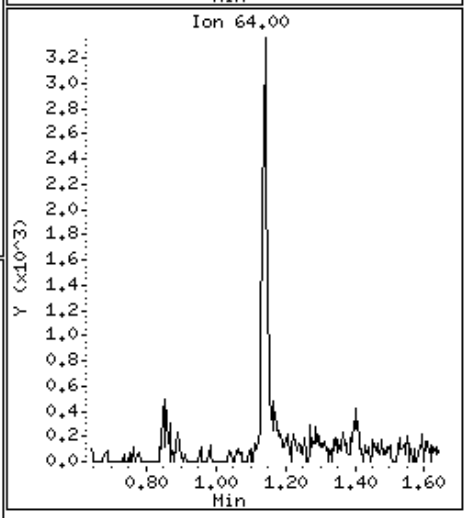












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012515.D

Date : 25-JAN-2023 12:33

Client ID: HS23010986-04

Instrument: voa6.i

Sample Info: HS23010986-04;HS23010986-04;;;

Purge Volume: 5.0

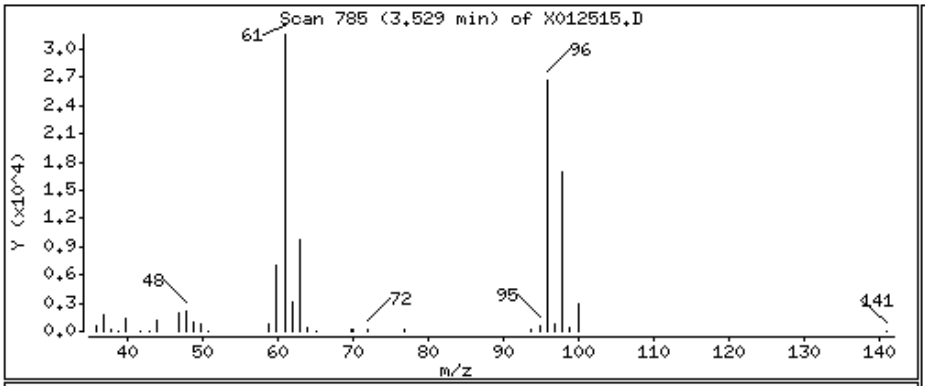
Operator: FT

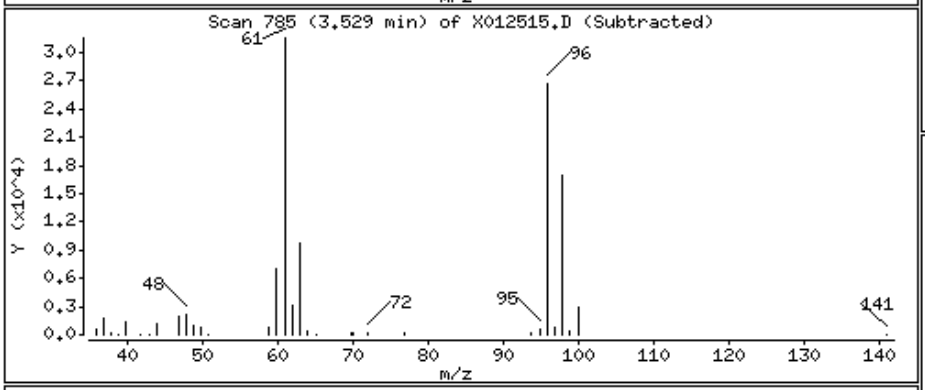
Column phase: DB624

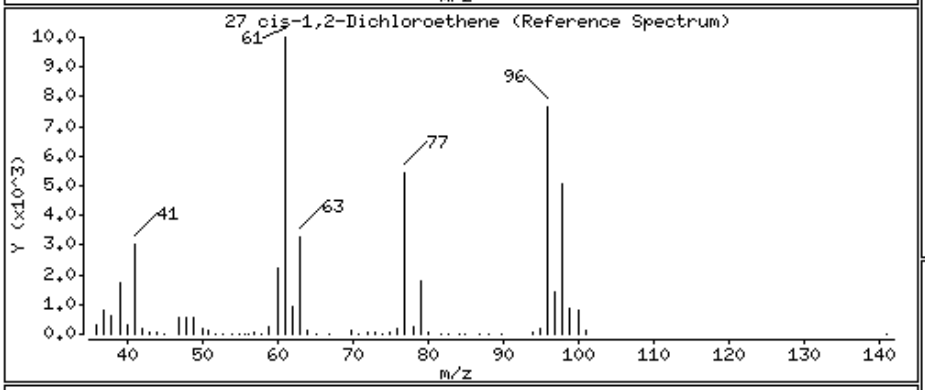
Column diameter: 0.18

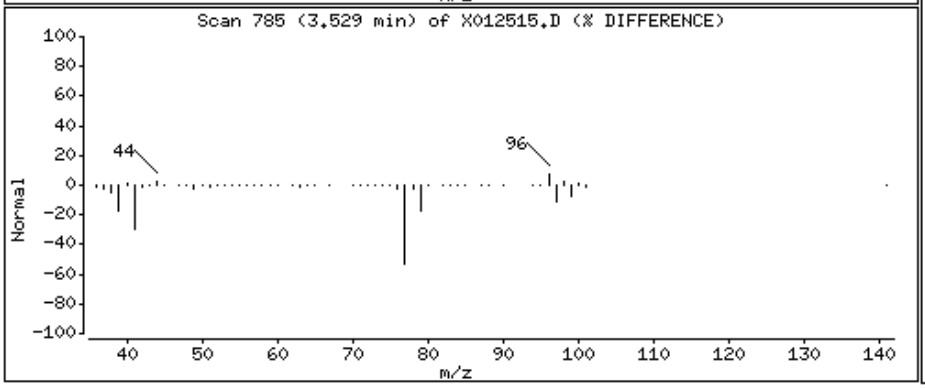
27 cis-1,2-Dichloroethene

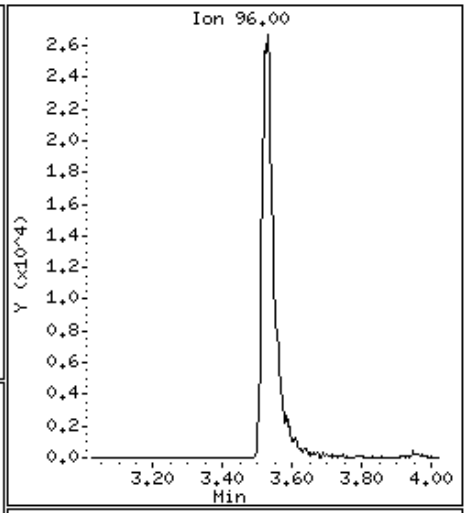
Concentration: 503.99 ug/l

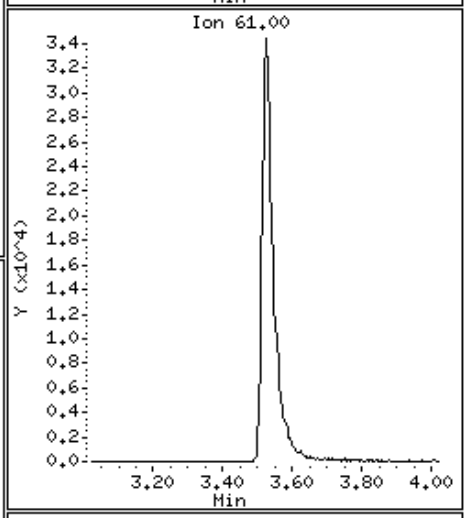


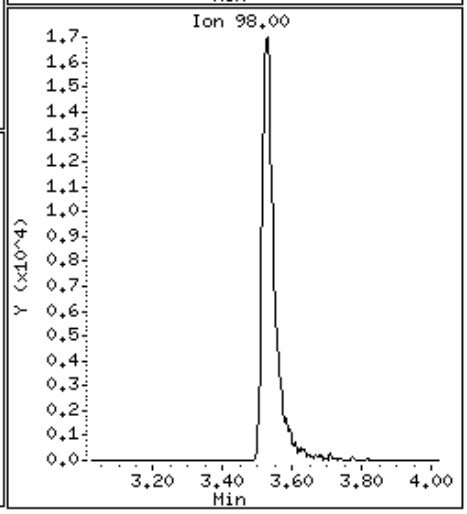












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012515.D Page 4

Date : 25-JAN-2023 12:33

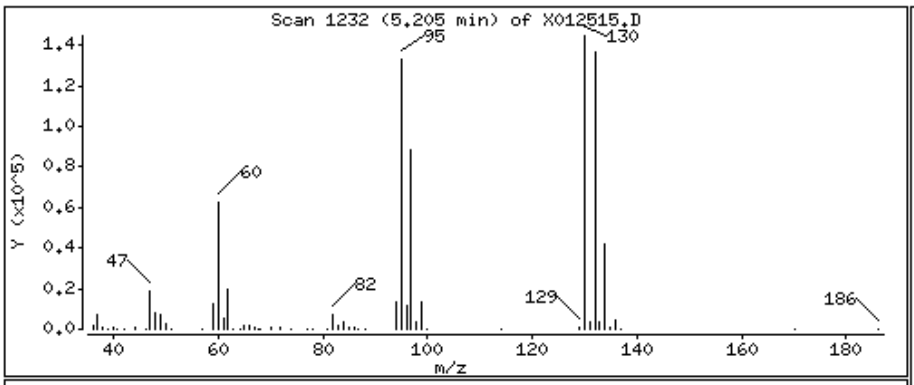
Client ID: HS23010986-04 Instrument: voa6.i

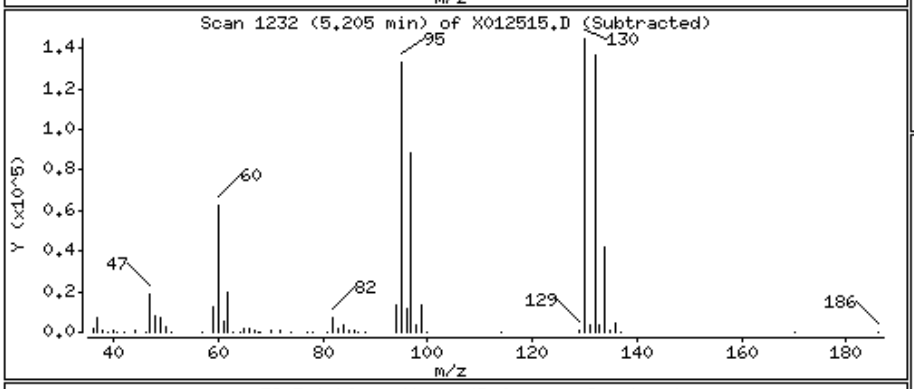
Sample Info: HS23010986-04;HS23010986-04;;;

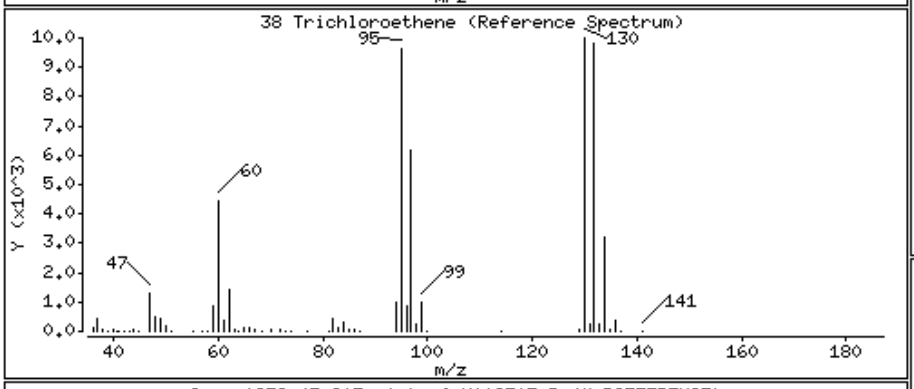
Purge Volume: 5.0 Operator: FT

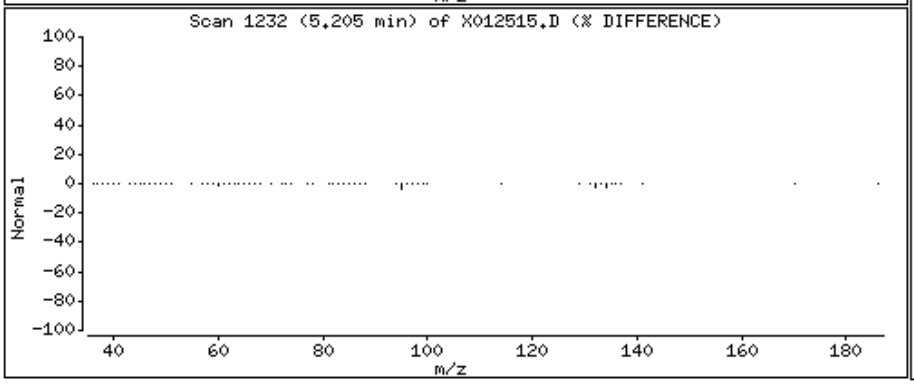
Column phase: DB624 Column diameter: 0.18

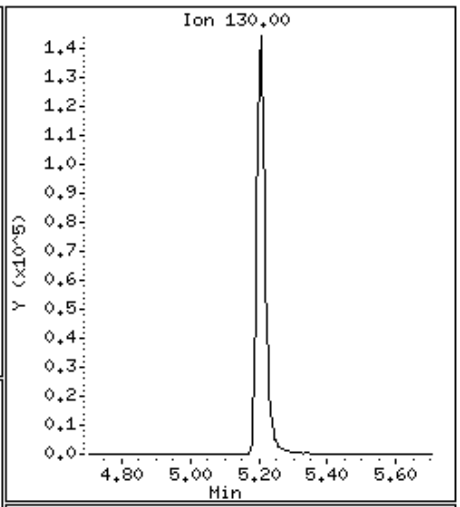
38 Trichloroethene Concentration: 2107.49 ug/l

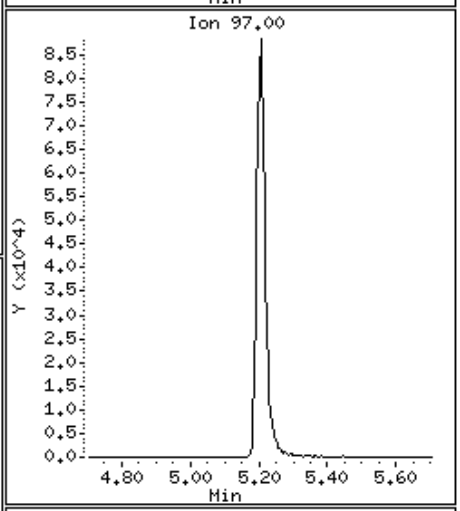


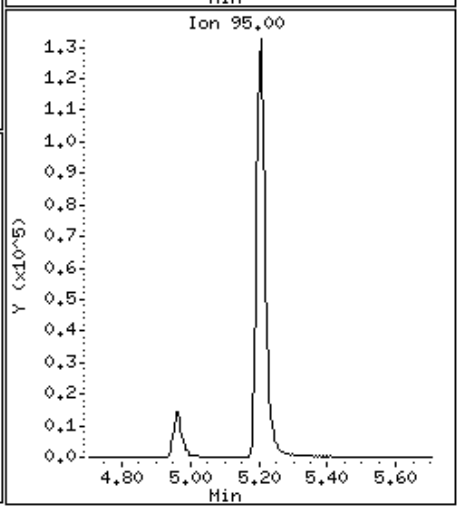












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012515.D
Inj Date : 25-JAN-2023 12:33
InstruID : voa6.i
LabSampID : HS23010986-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012516.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012516.D
Lab Smp Id: HS23010986-06 Client Smp ID: HS23010986-06
Inj Date : 25-JAN-2023 12:54
Operator : FT Inst ID: voa6.i
Smp Info : HS23010986-06;HS23010986-06;;;
Misc Info : V6;WATER;0;1000;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 16
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: 8260-dryclean.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

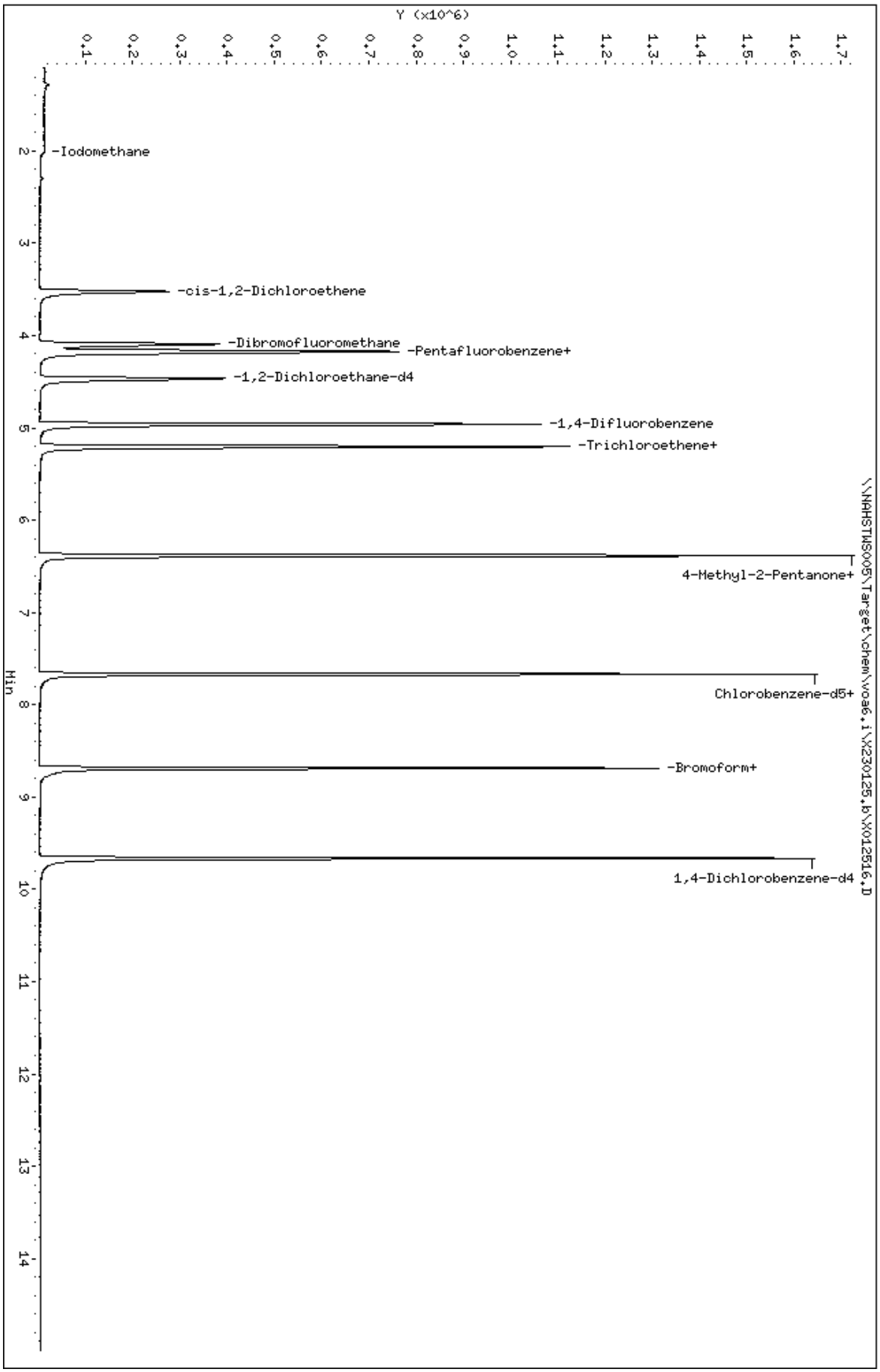
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	627372	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	271231	45.0084	45.00
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	314099	49.4035	49.40
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	876111	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	791904	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1023426	52.2996	52.29
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	359860	49.1997	49.19
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408361	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	2876	0.52477	524.77(a)
27 cis-1,2-Dichloroethene	96	3.522	3.518	(0.844)	155120	23.9189	23918.89
38 Trichloroethene	130	5.205	5.205	(1.049)	376668	63.4767	63476.65

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012516.D
Date : 25-JAN-2023 12:54
Client ID: HS23010986-06
Sample Info: HS23010986-06;HS23010986-06;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012516.D

Date : 25-JAN-2023 12:54

Client ID: HS23010986-06

Instrument: voa6.i

Sample Info: HS23010986-06;HS23010986-06;;;

Purge Volume: 5.0

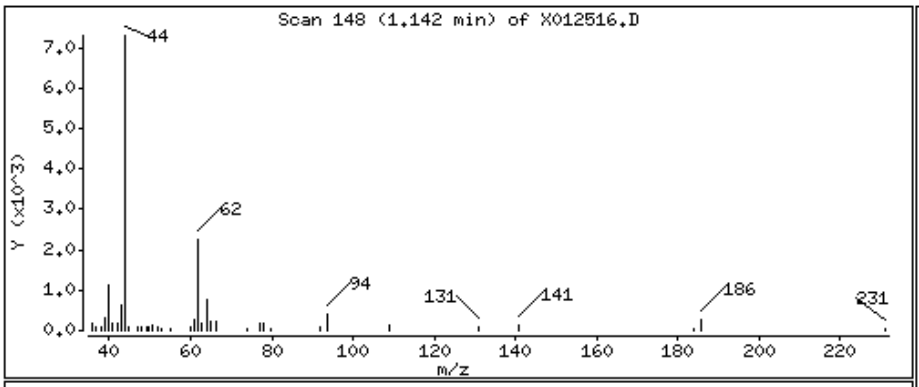
Operator: FT

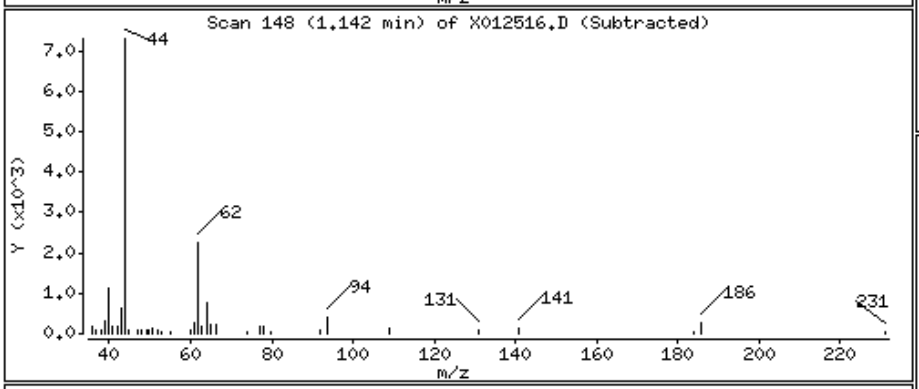
Column phase: DB624

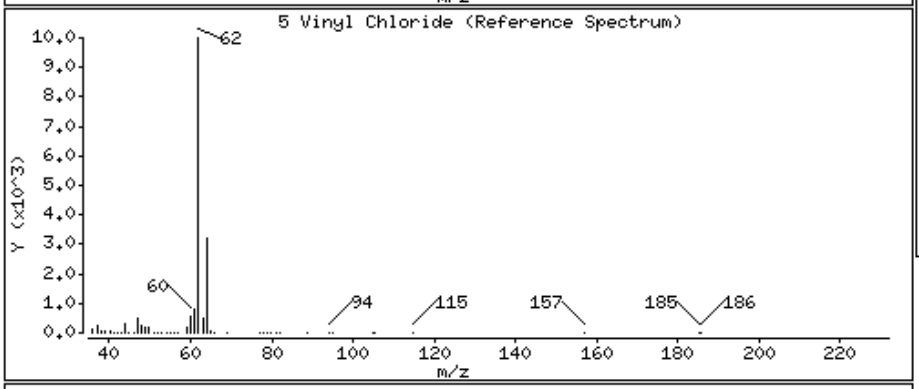
Column diameter: 0.18

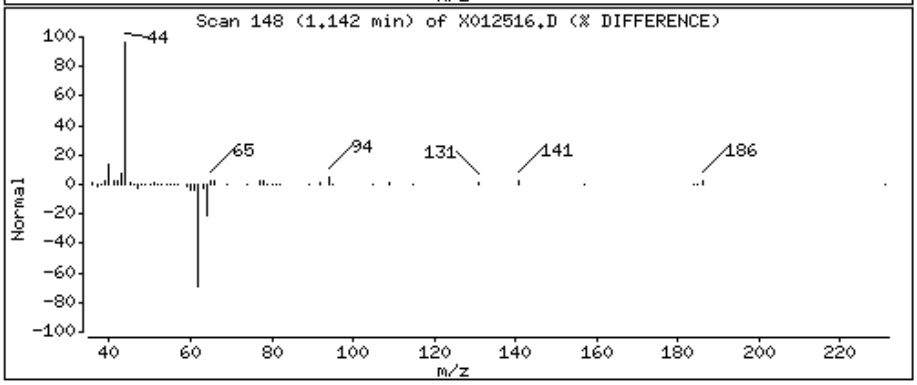
5 Vinyl Chloride

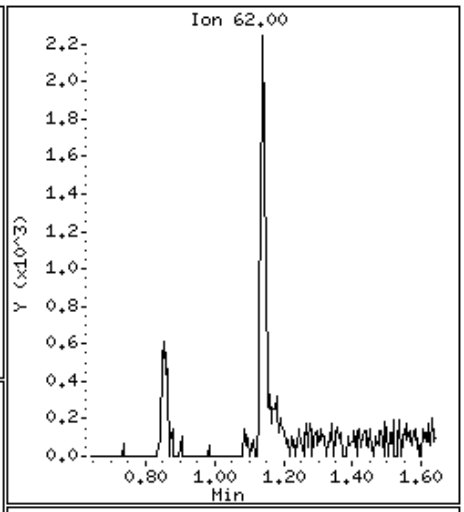
Concentration: 524.77 ug/l

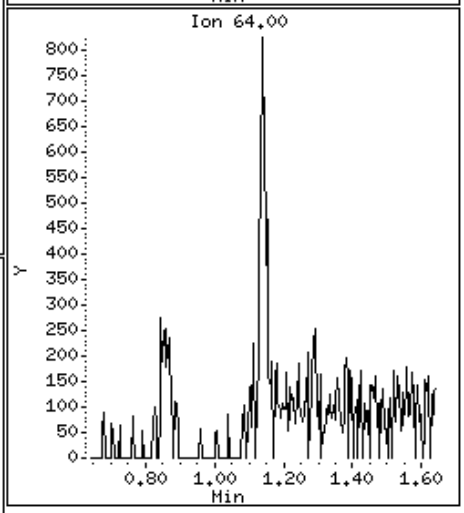












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012516.D Page 3

Date : 25-JAN-2023 12:54

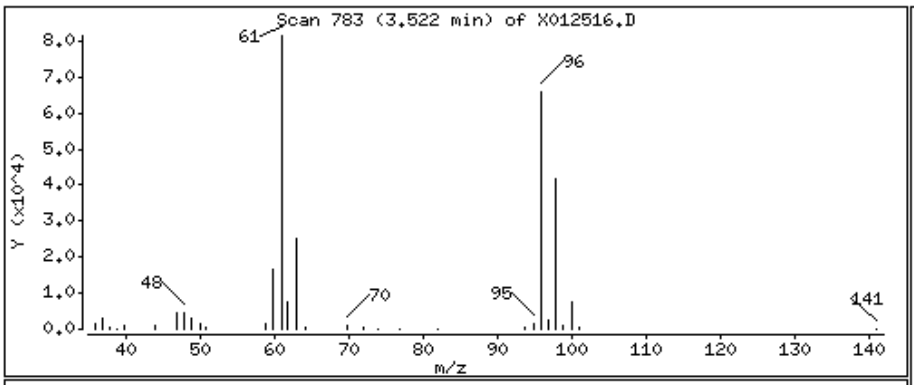
Client ID: HS23010986-06 Instrument: voa6.i

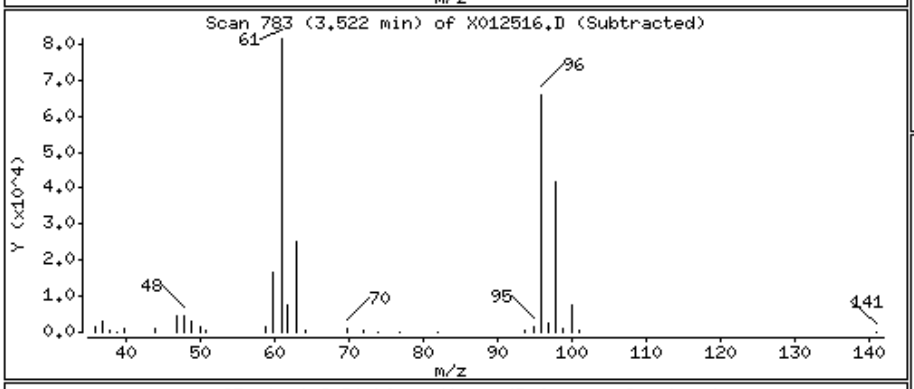
Sample Info: HS23010986-06;HS23010986-06;;;

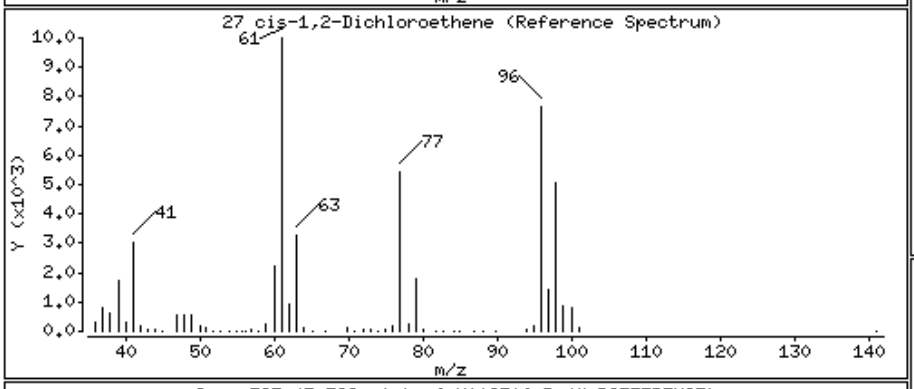
Purge Volume: 5.0 Operator: FT

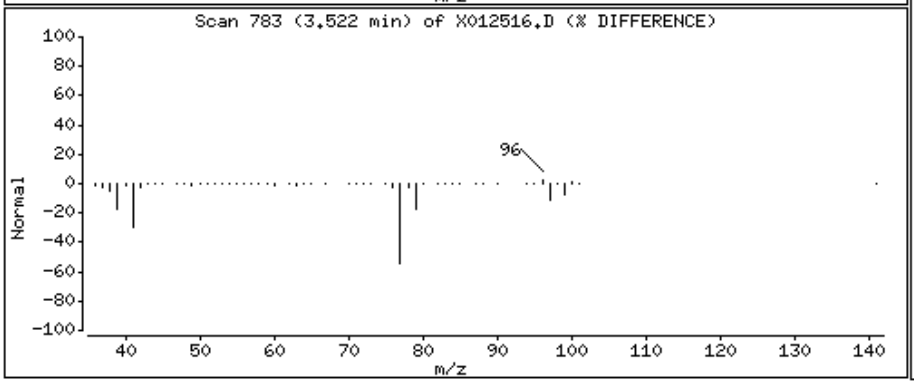
Column phase: DB624 Column diameter: 0.18

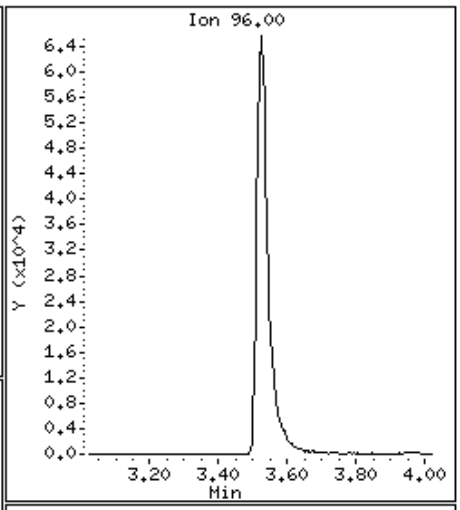
27 cis-1,2-Dichloroethene Concentration: 23918.89 ug/l

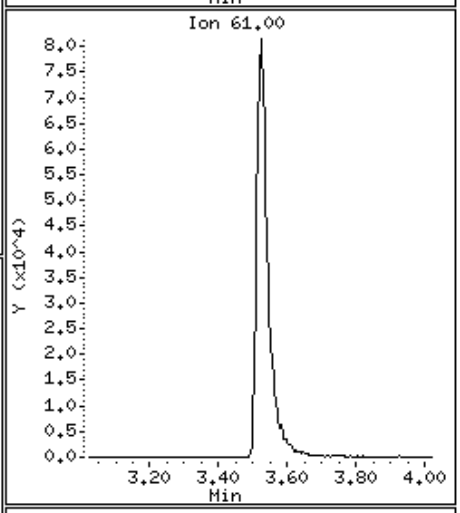


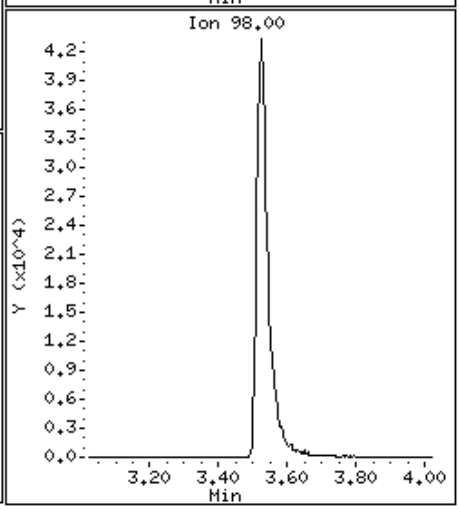












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012516.D Page 4

Date : 25-JAN-2023 12:54

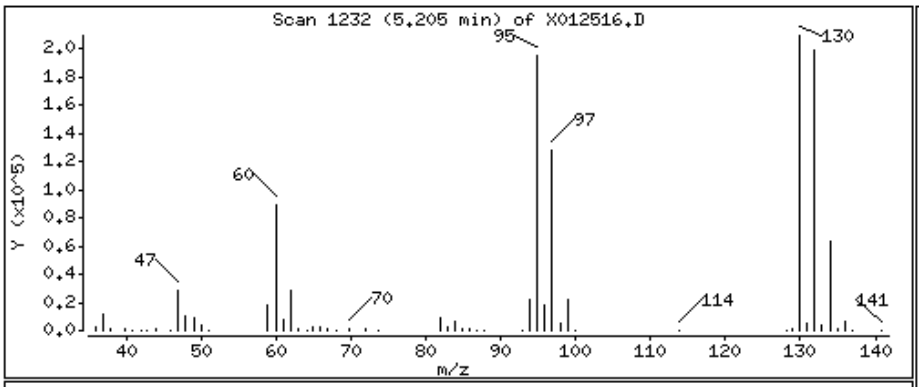
Client ID: HS23010986-06 Instrument: voa6.i

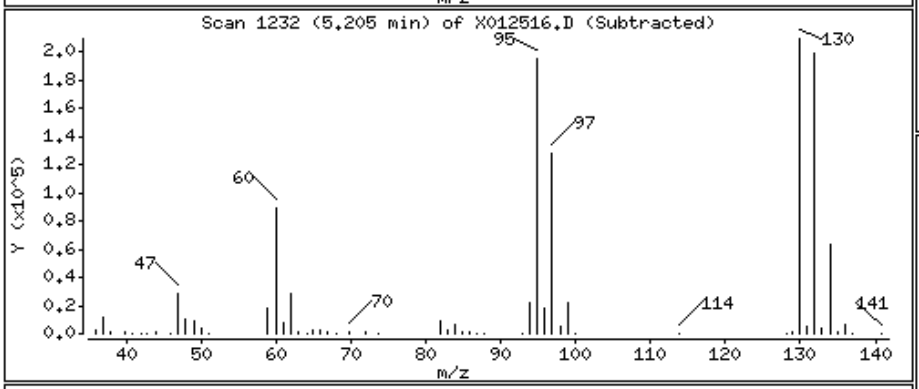
Sample Info: HS23010986-06;HS23010986-06;;;

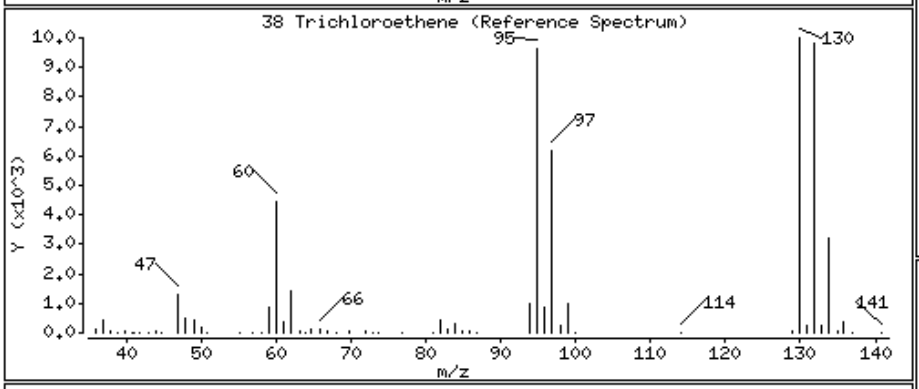
Purge Volume: 5.0 Operator: FT

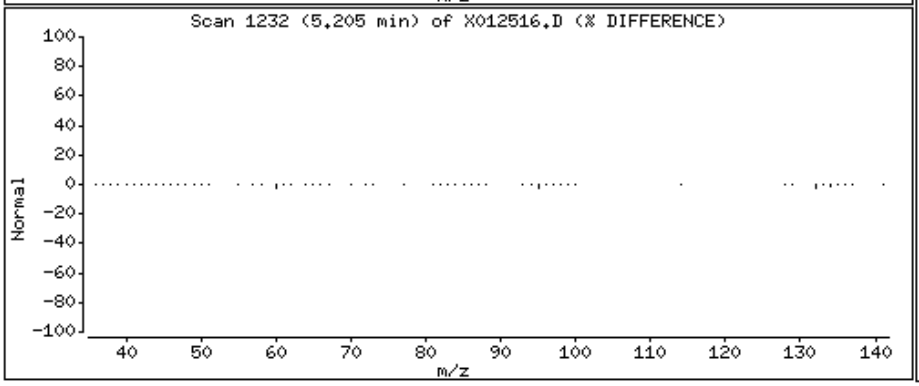
Column phase: DB624 Column diameter: 0.18

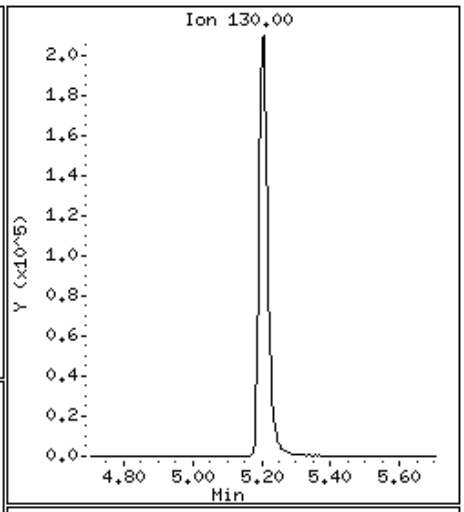
38 Trichloroethene Concentration: 63476.65 ug/l

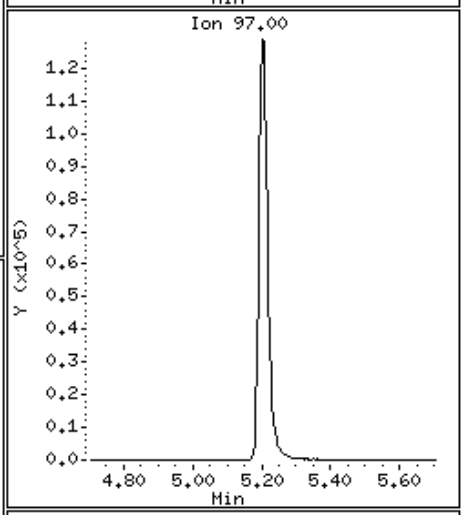


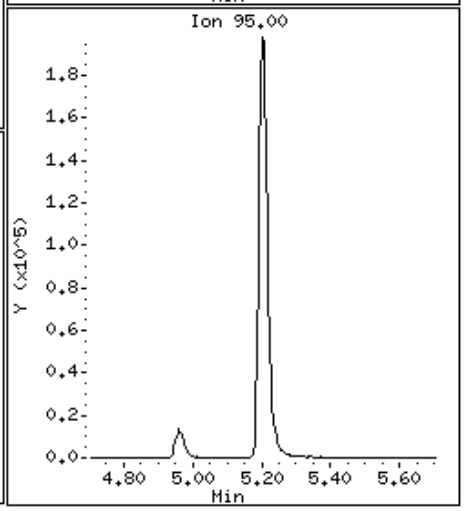












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Inj Date : 25-JAN-2023 12:54
InstruID : voa6.i
LabSampID : HS23010986-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012517.D Page 1
Report Date: 03-Feb-2023 10:54

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012517.D
Lab Smp Id: HS23010986-07 Client Smp ID: HS23010986-07
Inj Date : 25-JAN-2023 13:15
Operator : FT Inst ID: voa6.i
Smp Info : HS23010986-07;HS23010986-07;;;
Misc Info : V6;WATER;0;1000;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 17
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: 8260-dryclean.sub
Target Version: 4.14
Processing Host: NAHSTW7056

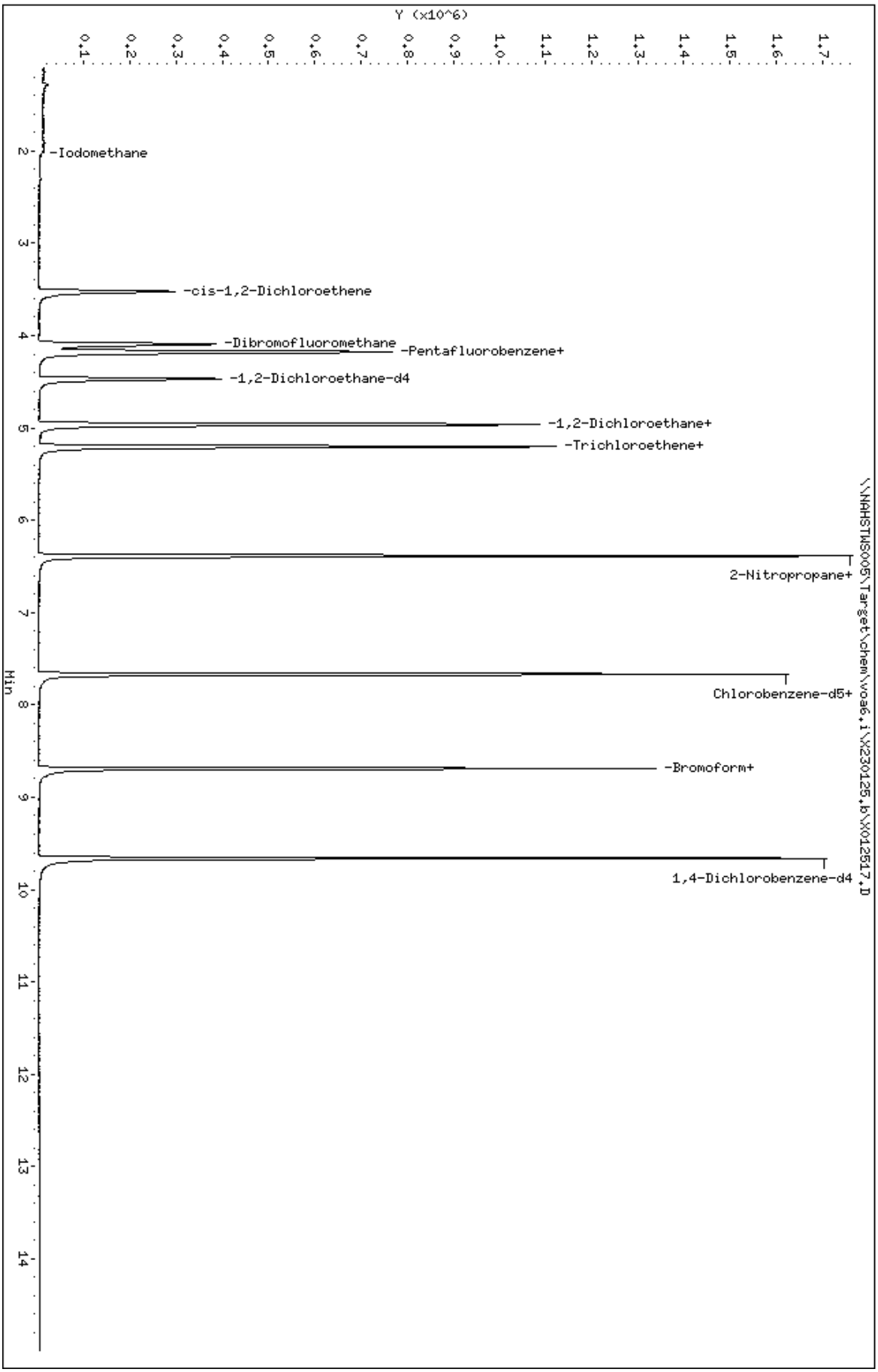
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.178	4.178	(1.000)	632766	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	272951	44.9074	44.90
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	313932	48.9588	48.95
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	882783	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	787567	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1022859	52.5585	52.55
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	362960	49.8959	49.89
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	410844	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	2631	0.47598	475.97(a)
27 cis-1,2-Dichloroethene	96	3.525	3.518	(0.844)	162065	24.7768	24776.76
38 Trichloroethene	130	5.205	5.205	(1.049)	376006	62.8862	62886.18

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012517.D
Date : 25-JAN-2023 13:15
Client ID: HS23010986-07
Sample Info: HS23010986-07;HS23010986-07;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012517.D Page 2

Date : 25-JAN-2023 13:15

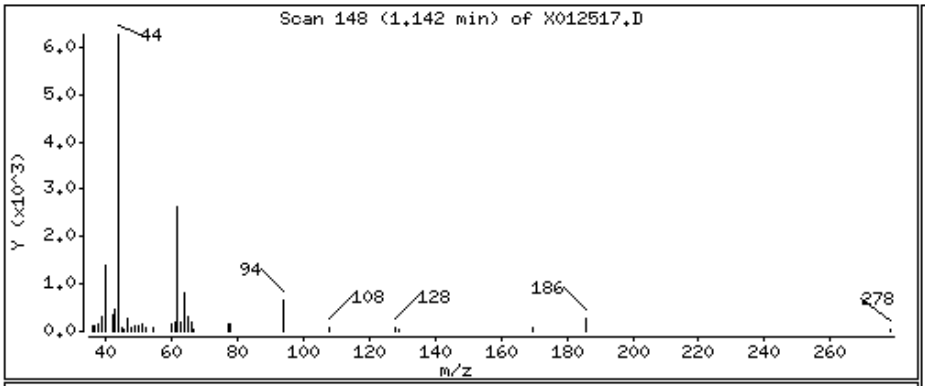
Client ID: HS23010986-07 Instrument: voa6.i

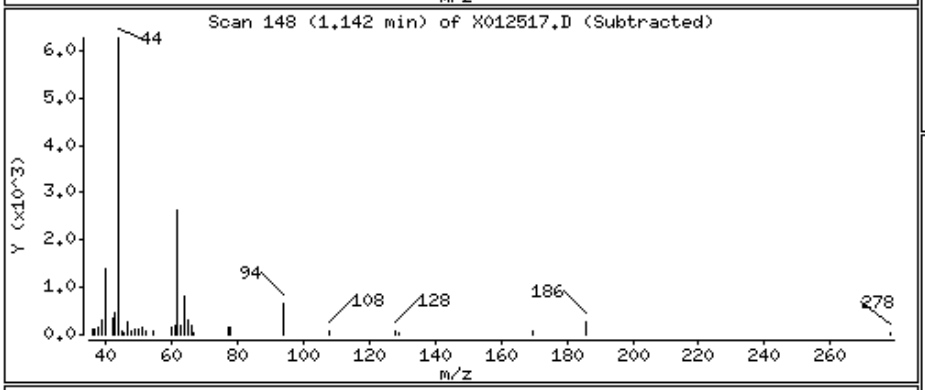
Sample Info: HS23010986-07;HS23010986-07;;;

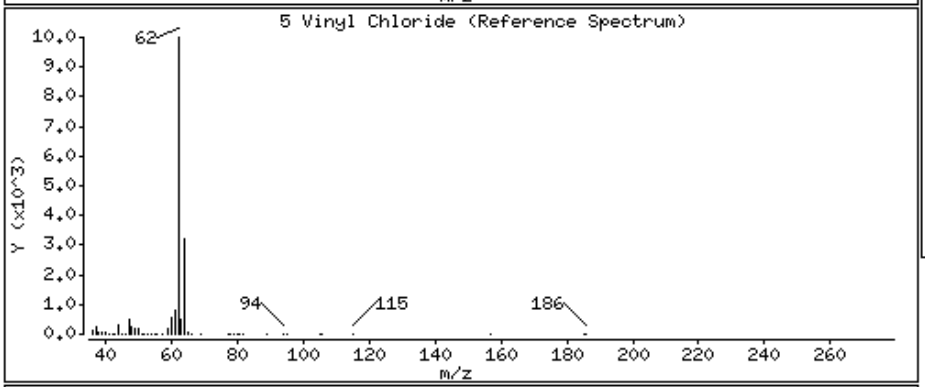
Purge Volume: 5.0 Operator: FT

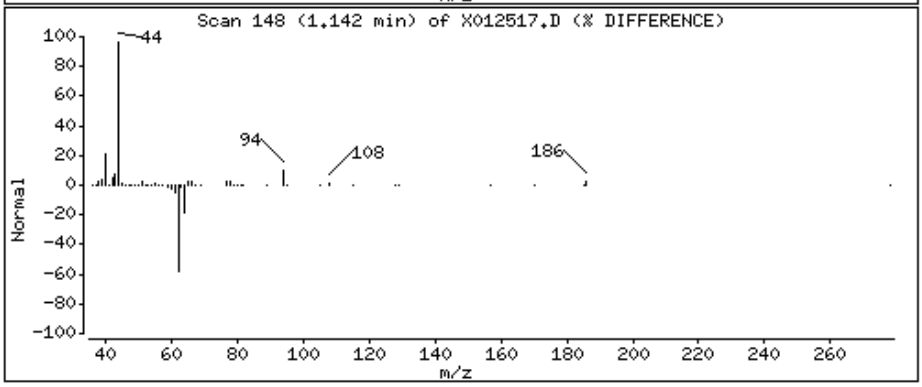
Column phase: DB624 Column diameter: 0.18

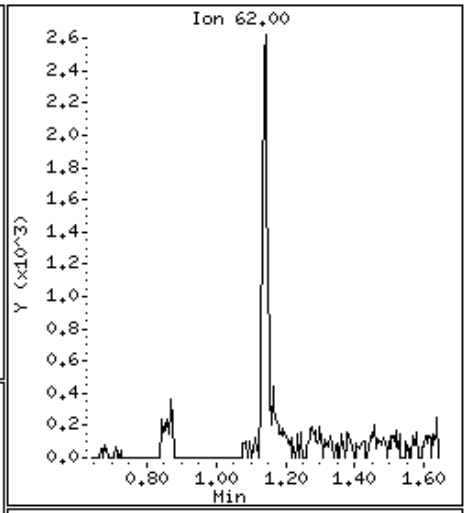
5 Vinyl Chloride Concentration: 475.97 ug/l

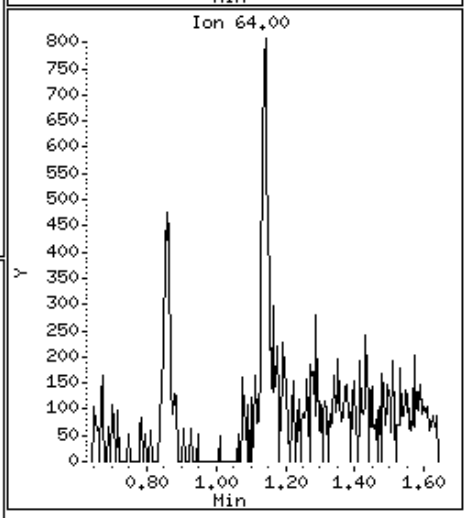












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012517.D Page 3

Date : 25-JAN-2023 13:15

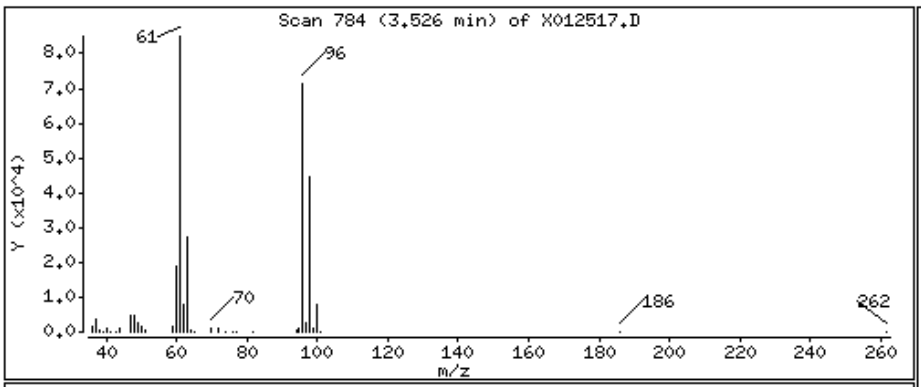
Client ID: HS23010986-07 Instrument: voa6.i

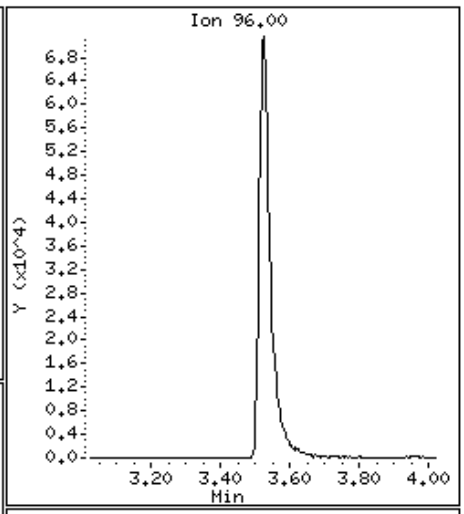
Sample Info: HS23010986-07;HS23010986-07;;;

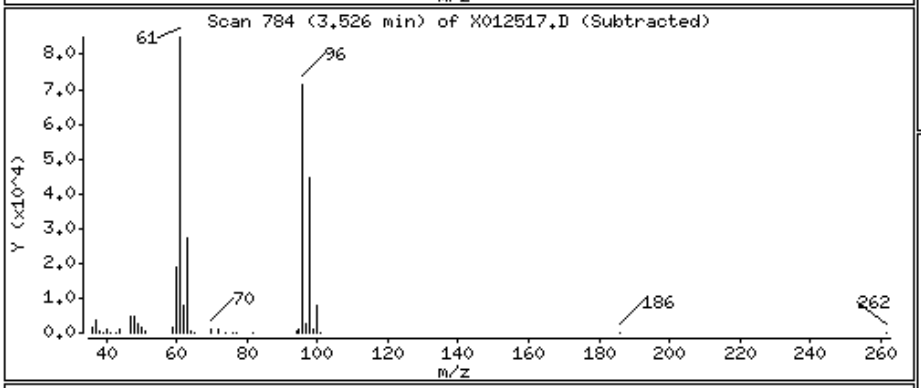
Purge Volume: 5.0 Operator: FT

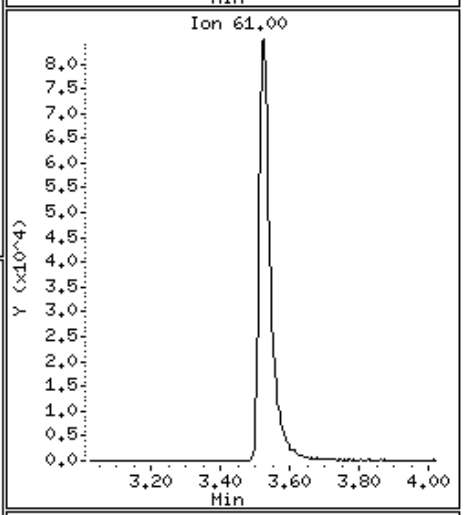
Column phase: DB624 Column diameter: 0.18

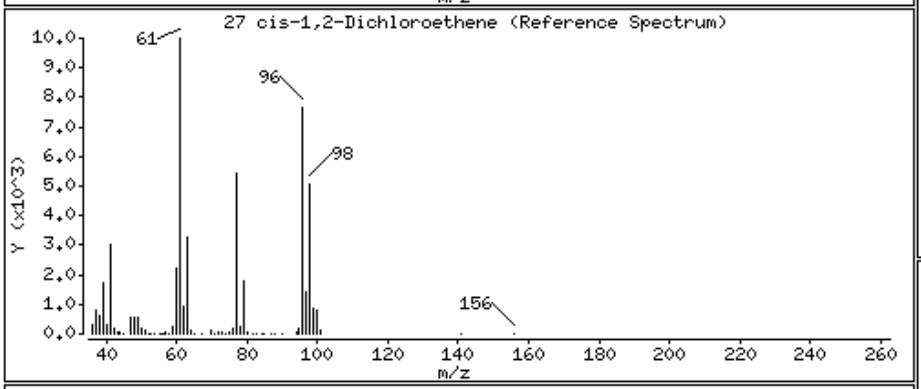
27 cis-1,2-Dichloroethene Concentration: 24776.76 ug/l

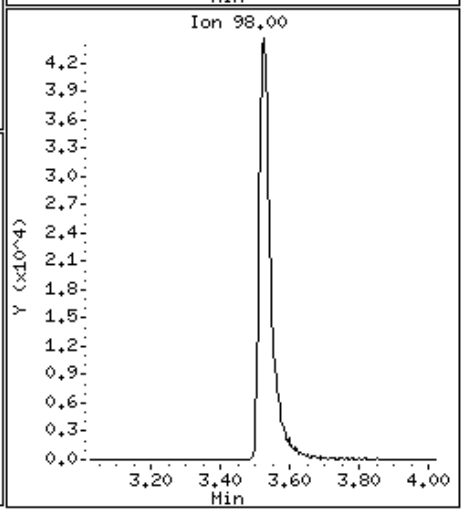


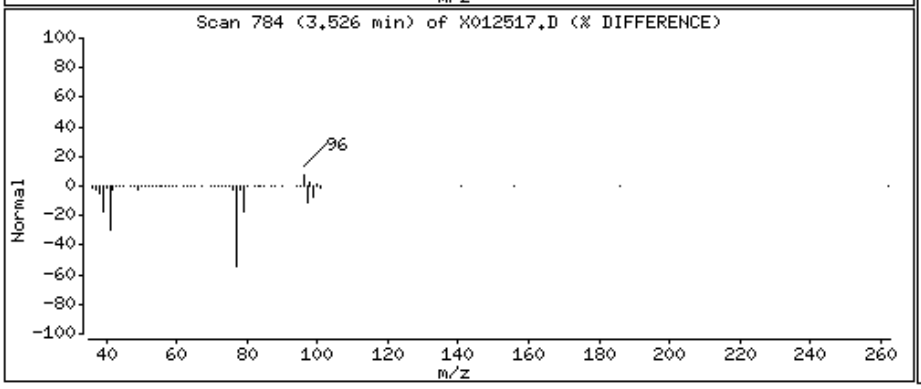












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012517.D Page 4

Date : 25-JAN-2023 13:15

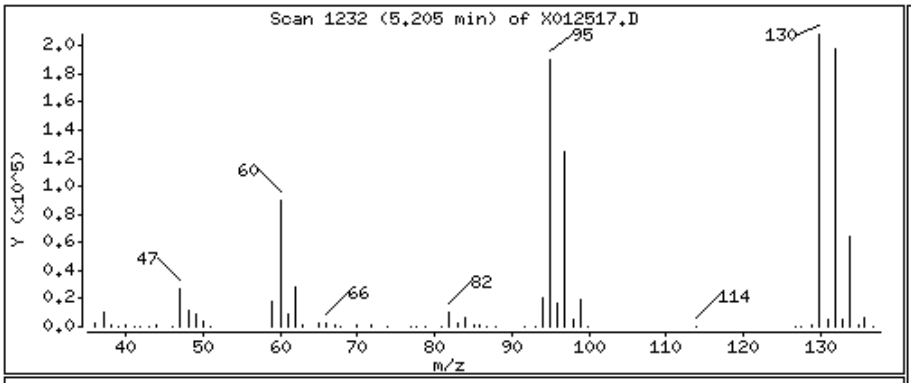
Client ID: HS23010986-07 Instrument: voa6.i

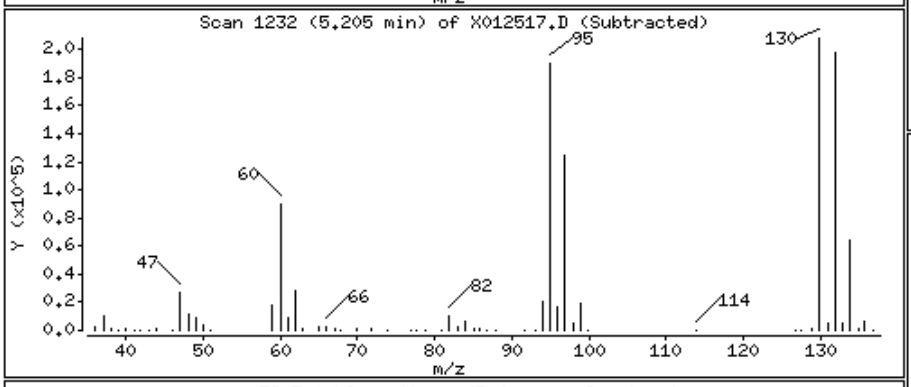
Sample Info: HS23010986-07;HS23010986-07;;;

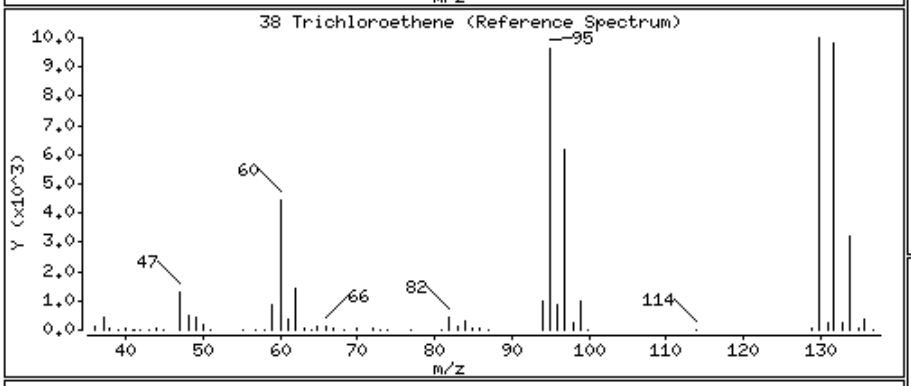
Purge Volume: 5.0 Operator: FT

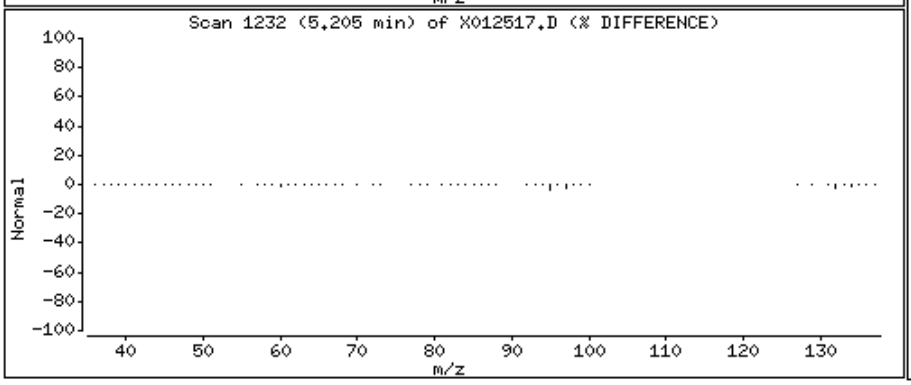
Column phase: DB624 Column diameter: 0.18

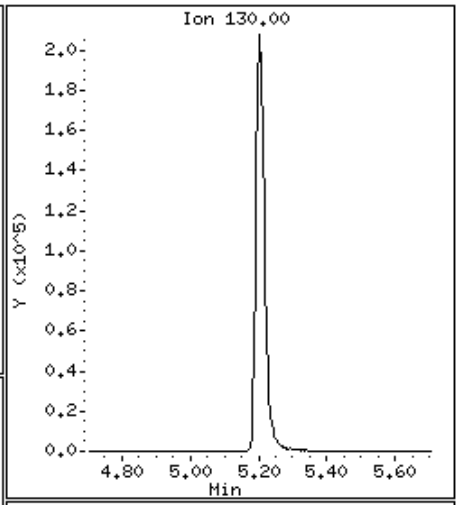
38 Trichloroethene Concentration: 62886.18 ug/l

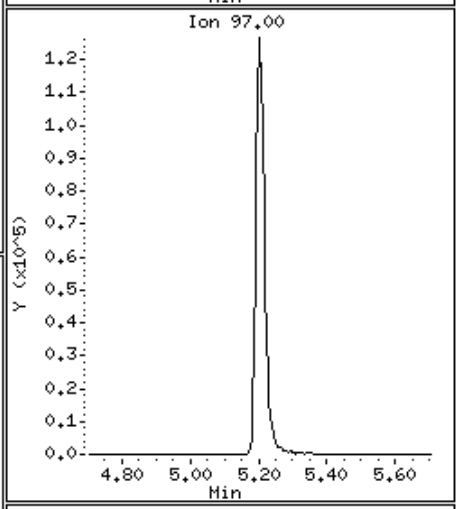


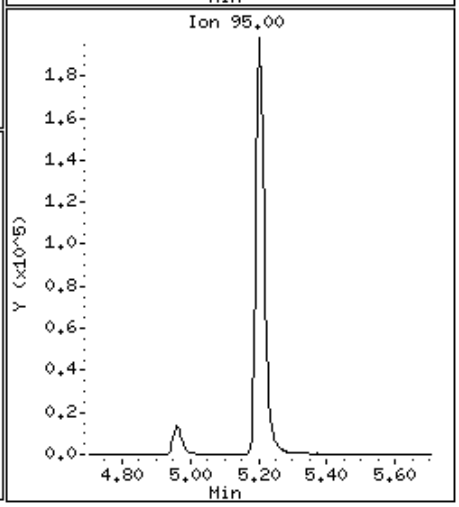












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012517.D
Inj Date : 25-JAN-2023 13:15
InstruID : voa6.i
LabSampID : HS23010986-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D Page 1
Report Date: 03-Feb-2023 10:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 25-JAN-2023 15:00
Operator : FT Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\8260W.m
Meth Date : 03-Feb-2023 10:54 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.174	(1.000)	525517	50.0000	
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	156191	50.0000	42.55
3 Chloromethane	50	1.074	1.074	(0.257)	205461	50.0000	43.51
4 Propionitrile	54	3.645	3.645	(0.873)	270829	500.000	505.07
5 Vinyl Chloride	62	1.137	1.137	(0.273)	217588	50.0000	47.39
6 Bromomethane	94	1.336	1.336	(0.320)	158291	50.0000	45.74
7 Chloroethane	64	1.400	1.400	(0.335)	140405	50.0000	43.94
8 Trichlorofluoromethane	101	1.553	1.553	(0.372)	337654	50.0000	52.55
9 Acrolein	56	1.441	1.441	(0.345)	31844	100.000	88.92
10 Acetone	43	1.966	1.966	(0.471)	129779	100.000	88.00
11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	188946	50.0000	47.37
12 Isobutyl Alcohol	43	4.669	4.669	(1.119)	651619	1000.00	1102.40
13 Acetonitrile	39	2.191	2.191	(0.525)	255778	500.000	534.77
14 Allyl Chloride	41	2.194	2.194	(0.526)	455184	50.0000	49.96
15 Iodomethane	142	2.022	2.022	(0.485)	477326	100.000	91.44
16 Acrylonitrile	53	2.528	2.528	(0.606)	144106	100.000	106.53
17 Methylene Chloride	84	2.299	2.299	(0.551)	245424	50.0000	44.86
18 Methyl tert-butyl ether	73	2.528	2.528	(0.606)	632732	50.0000	48.46
19 Carbon Disulfide	76	2.063	2.063	(0.494)	1027017	100.000	98.41
20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	218048	50.0000	48.84

21 Vinyl Acetate	43	2.993	2.993 (0.717)	1168425	100.000	101.95
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	371416	50.0000	47.41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.767	1.767	(0.423)	82584	50.0000	46.21(M)
	24 2-Butanone	43	3.570	3.570	(0.855)	156320	100.000	99.94
	25 Methacrylonitrile	41	3.814	3.814	(0.914)	191622	50.0000	51.49(a)
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	331850	50.0000	49.89
	27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.844)	249841	50.0000	45.99
	28 Chloroform	83	3.900	3.900	(0.934)	427491	50.0000	48.68
	29 Bromochloromethane	128	3.788	3.788	(0.907)	133341	50.0000	44.83
$	30 Dibromofluoromethane	113	4.091	4.091	(0.980)	238645	50.0000	47.28
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	379778	50.0000	54.51
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	323614	50.0000	58.17
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	339716	50.0000	52.91
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	321188	50.0000	54.06
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	277434	50.0000	52.07
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	783584	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	948708	50.0000	50.70
	38 Trichloroethene	130	5.201	5.201	(1.048)	281442	50.0000	53.02
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	345955	50.0000	49.26
	40 Methyl Methacrylate	41	5.602	5.602	(1.342)	197004	50.0000	54.97
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	222087	100.000	111.16
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	239880	50.0000	48.19
	43 2-Nitropropane	43	5.966	5.966	(1.429)	70843	50.0000	53.38
	44 Dibromomethane	93	5.549	5.549	(1.119)	161557	50.0000	47.75
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	426745	100.000	104.90
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	413082	50.0000	50.08
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	761044	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	908604	50.0000	48.31
	49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	200079	50.0000	54.22
	50 Toluene	91	6.445	6.445	(0.841)	1071178	50.0000	50.92
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	357102	50.0000	52.17
	52 2-Hexanone	43	7.083	7.083	(0.924)	296476	100.000	107.12
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	201667	50.0000	47.78
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	404206	50.0000	48.66
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	298385	50.0000	48.98
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	241757	50.0000	55.54
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	265533	50.0000	50.32
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	235733	50.0000	62.25
	59 Chlorobenzene	112	7.694	7.694	(1.003)	733713	50.0000	49.17
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	280573	50.0000	50.53
	61 Ethylbenzene	106	7.799	7.799	(1.017)	379869	50.0000	54.04
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	969089	100.000	106.96
	63 o-Xylene	106	8.241	8.241	(1.075)	459925	50.0000	51.43
	64 Styrene	104	8.256	8.256	(1.077)	796355	50.0000	53.13
	66 Bromoform	173	8.410	8.410	(1.097)	209153	50.0000	49.56
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1206352	50.0000	59.04
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	326084	50.0000	46.10
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	358449	50.0000	50.99
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	443732	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	360102	50.0000	72.93
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	88679	50.0000	53.97
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1417870	50.0000	57.68
	74 Bromobenzene	156	8.803	8.803	(0.911)	354733	50.0000	48.72
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1037753	50.0000	57.15

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	854846	50.0000	53.00
77	4-Chlorotoluene	91	9.069	9.069 (0.939)	1005978	50.0000	54.71

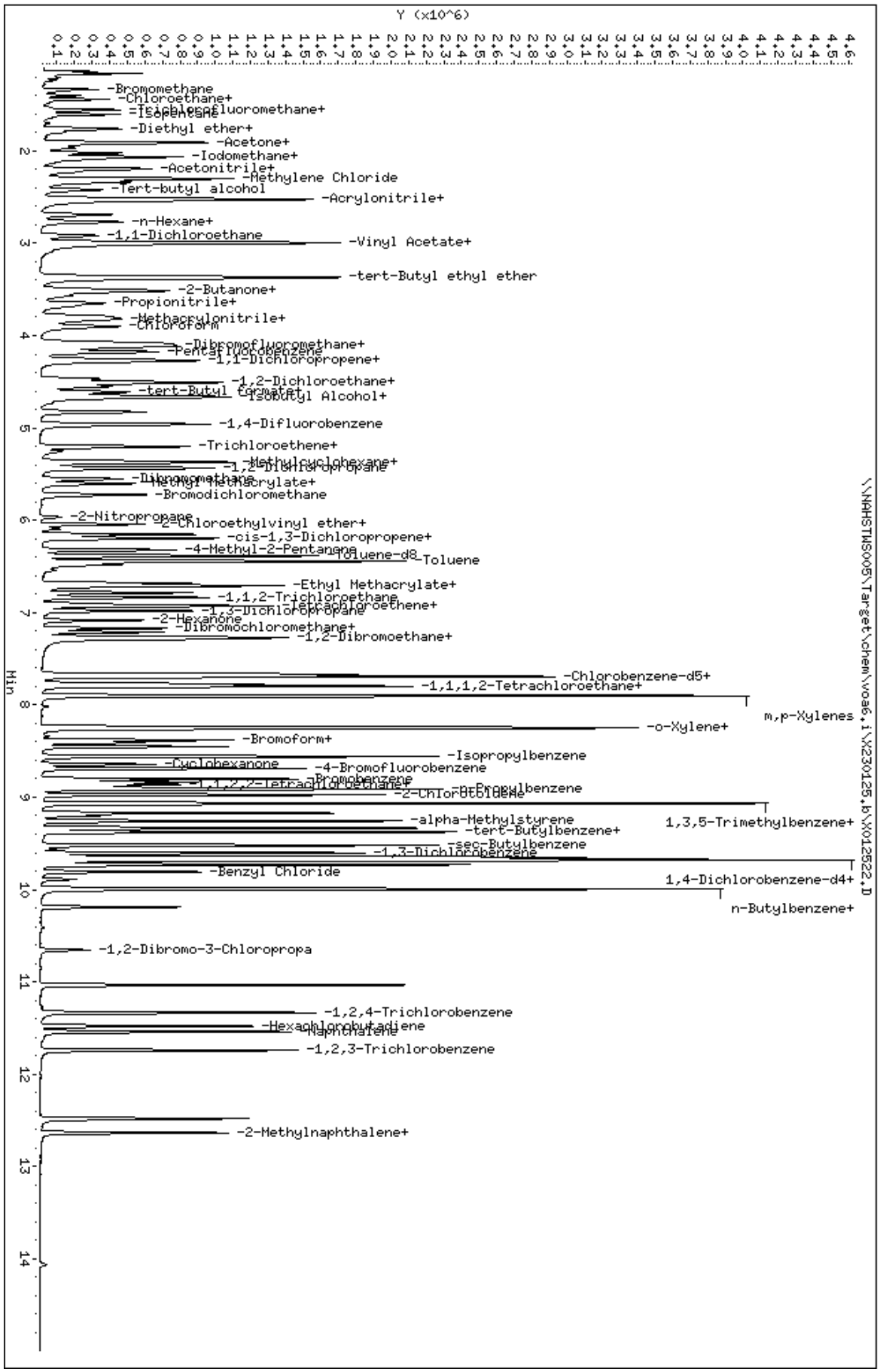
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	876537	50.0000	58.97
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1046266	50.0000	54.76
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1237087	50.0000	62.55
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1095465	50.0000	61.81
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	630434	50.0000	52.17
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	658929	50.0000	49.97
86	Benzyl Chloride	91	9.808	9.808	(1.279)	524192	50.0000	44.33
87	n-Butylbenzene	91	9.992	9.992	(1.034)	966372	50.0000	56.35
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	625563	50.0000	50.26
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	57255	50.0000	50.63
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	442748	50.0000	56.37
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	200047	50.0000	57.37
92	Naphthalene	128	11.540	11.540	(1.194)	969360	50.0000	54.24
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	403182	50.0000	53.60
146	Methyl acetate	43	2.224	2.224	(0.533)	122147	50.0000	51.65
138	Freon TF	101	1.910	1.910	(0.458)	200241	50.0000	51.90
141	Cyclohexane	56	4.118	4.118	(0.987)	312817	50.0000	58.82
142	Tetrahydrofuran	42	3.836	3.836	(0.919)	62570	100.000	95.64
147	Methylcyclohexane	55	5.377	5.377	(1.084)	578316	50.0000	60.29
135	1,4-Dioxane	88	5.598	5.598	(1.341)	52032	1000.00	1083.14
132	n-Butanol	56	5.253	5.253	(1.259)	68180	1000.00	1013.18
131	Methyl Acrylate	55	3.679	3.679	(0.881)	228607	50.0000	64.07
133	Ethyl Acrylate	55	5.377	5.377	(1.288)	578316	50.0000	55.93
136	n-Hexane	57	2.768	2.768	(0.663)	231122	50.0000	61.08
139	Diethyl ether	59	1.752	1.752	(0.420)	150266	50.0000	42.79
148	Tert-butyl alcohol	59	2.423	2.423	(0.581)	400450	1000.00	1100.48
149	Isopropyl alcohol	45	2.089	2.089	(0.501)	215815	1000.00	1135.63
156	Diisopropyl ether	45	2.997	2.997	(0.718)	678230	50.0000	49.75
160	2-Methylnaphthalene	142	12.634	12.634	(1.308)	440976	50.0000	51.22
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1107096	50.0000	51.81
167	Ethanol	45	1.696	1.696	(0.406)	36519	1000.00	1066.95
172	tert-Butyl formate	59	4.612	4.612	(1.105)	313235	100.000	112.32
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	374018	1000.00	1038.71
174	tert-Amyl methyl ether	73	4.661	4.661	(1.117)	741947	50.0000	48.97
175	tert-Butyl ethyl ether	59	3.372	3.372	(0.808)	712689	50.0000	49.19
176	tert-Amyl alcohol	59	4.612	4.612	(1.105)	313235	1000.00	1109.82
151	4-Methyl-2-pentanol	45	6.708	6.708	(1.352)	803207	1000.00	1083.00
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	440976	50.0000	(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	166071	50.0000	46.04
152	Amyl alcohol	42	6.903	6.903	(0.900)	81207	1000.00	1079.06
158	Dichlorofluoromethane	67	1.523	1.523	(0.365)	30377	50.0000	44.64
159	Propylene oxide	43	1.752	1.752	(0.420)	31347	100.000	94.85
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	84936	1000.00	1128.82
162	Butyl acrylate	55	8.249	8.249	(1.076)	527701	50.0000	53.08
182	Epichlorohydrin	57	6.093	6.093	(1.228)	76000	200.000	216.36
M 94	1,2-Dichloroethylene (total)	96				467889	100.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	494264	50.0000	50.27
130	Ethyl Acetate	43	3.649	3.649	(0.874)	225131	50.0000	54.90
134	Cyclohexanone	55	8.642	8.642	(0.894)	204665	1000.00	1105.71
185	Isoprene	39	1.767	1.767	(0.423)	72615	50.0000	51.86
186	Isopentane	42	1.606	1.606	(0.385)	127688	50.0000	(a)
188	Isopropyl acetate	43	4.669	4.669	(0.941)	653036	50.0000	53.64

187 n-Amyl acetate	43	8.451	8.451 (1.102)	448604	50.0000	50.55
189 n-Butyl acetate	43	7.210	7.210 (0.940)	366571	50.0000	56.07

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.663)	231122	1000.00	1196.55
194 Acetaldehyde	44	1.209	1.209	(0.290)	69519	200.000	209.86
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	512676	50.0000	50.66
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	509010	50.0000	49.41
168 1-Propanol	59	2.993	2.993	(0.717)	78026	1000.00	908.52

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230125,b\X012522,D
Date : 25-JAN-2023 15:00
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: FT
Column diameter: 0.18

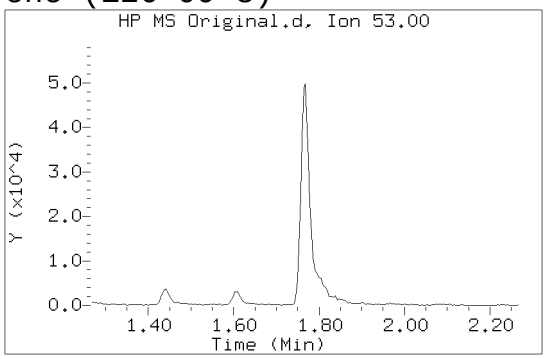
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230125.b\X012522.D
Inj Date : 25-JAN-2023 15:00
InstruID : voa6.i
LabSampID : CCV-END

Chloroprene (126-99-8)

Reason Code:

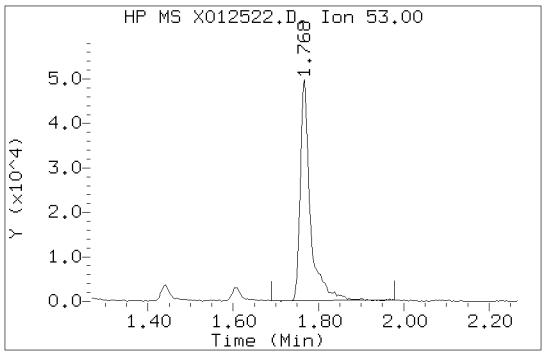
BEFORE

MASS
53
AREA
0
HEIGHT
0
25-Jan-2023
15:16
ALSHS
Server



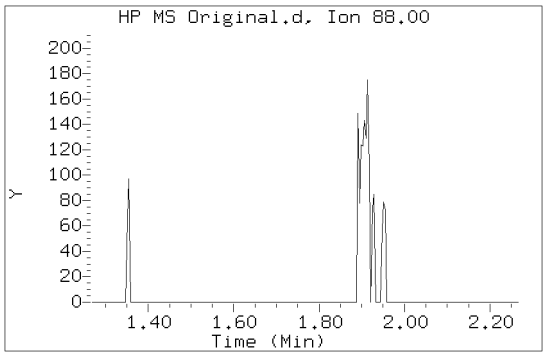
AFTER

MASS
53
AREA
82584
HEIGHT
49606
03-Feb-2023
10:54
ALSHS
Ser



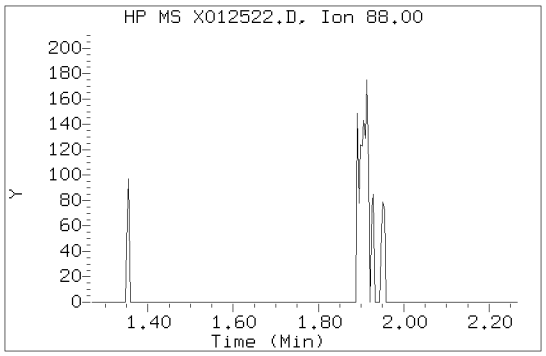
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Jan-2023
15:16
ALSHS
Server



AFTER

MASS
88
AREA
0
HEIGHT
0
03-Feb-2023
10:54
ALSHS
Ser



HS23010986-GCSEMI-RSK-175

ALS WO# HS23010986

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Form 1

Organic Analysis Data Sheet

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

HS23010986-01		Collected	Received	Matrix	Basis
16WW41-230119		01/19/23 09:00	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 11:13	FID-4_426956	013
Ethene	mg/L	0.0320		0.000234	0.00100	0.00100	1	01/27/23 11:13	FID-4_426956	013
Methane	mg/L	0.0122		0.000107	0.000500	0.000500	1	01/27/23 11:13	FID-4_426956	013

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

HS23010986-04		Collected	Received	Matrix	Basis
16WW55-230119		01/19/23 12:05	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 11:29	FID-4_426956	014
Ethene	mg/L	0.0206		0.000234	0.00100	0.00100	1	01/27/23 11:29	FID-4_426956	014
Methane	mg/L	1.10		0.0107	0.0500	0.0500	100	01/27/23 13:37	FID-4_426956	027

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

HS23010986-05	Collected	Received	Matrix	Basis
16WW35-230119	01/19/23 12:55	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 11:37	FID-4_426956	015
Ethene	mg/L	0.00775		0.000234	0.00100	0.00100	1	01/27/23 11:37	FID-4_426956	015
Methane	mg/L	0.0696		0.000535	0.00250	0.00250	5	01/27/23 13:45	FID-4_426956	028

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

HS23010986-06		Collected	Received	Matrix	Basis
16WW16-230119		01/19/23 14:30	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00680		0.000144	0.00100	0.00100	1	01/27/23 12:04	FID-4_426956	018
Ethene	mg/L	0.0120		0.000234	0.00100	0.00100	1	01/27/23 12:04	FID-4_426956	018
Methane	mg/L	1.31		0.0107	0.0500	0.0500	100	01/27/23 13:53	FID-4_426956	029

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

HS23010986-07	Collected	Received	Matrix	Basis
16WW16-230119-FD	01/19/23 14:30	01/20/23 10:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00671		0.000144	0.00100	0.00100	1	01/27/23 12:13	FID-4_426956	019
Ethene	mg/L	0.0112		0.000234	0.00100	0.00100	1	01/27/23 12:13	FID-4_426956	019
Methane	mg/L	1.33		0.0107	0.0500	0.0500	100	01/27/23 14:03	FID-4_426956	030

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

MBLK-230127

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

MBLK-230127

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	01/27/23 09:29	FID-4_426956	002
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	01/27/23 09:29	FID-4_426956	002
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	01/27/23 09:29	FID-4_426956	002

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

		HS23010982-05		HS23010982-05MS				HS23010982-05MSD						
Sample Matrix	Aqueous	**Run Date**	01/27/23	01/27/23				01/27/23						
Units	ug/L	**Run Time**	10:22	10:31				10:40						
		Data File	008.D	009.D				010.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0	45.78	18.04	254	*	41.83	18.04	232	*	30	9.00	
Ethene	75-125	1	470.1	450.6	16.80	-116	*	450.4	16.80	-117	*	30	0	
Methane	75-125	1	413.4	394.3	9.647	-198	*	391.3	9.647	-229	*	30	0.800	

16WW35-230119		HS23010986-05		HS23010986-05MS				HS23010986-05MSD						
Sample Matrix	Aqueous	**Run Date**	01/27/23	01/27/23				01/27/23						
Units	ug/L	**Run Time**	11:37	11:47				11:56						
		Data File	015.D	016.D				017.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0	28.71	18.04	159	*	27.45	18.04	152	*	30	4.50	
Ethene	75-125	1	7.751	28.21	16.80	122		28.76	16.80	125	*	30	1.90	
Methane	75-125	1	64.70	60.97	9.647	-39	*	60.43	9.647	-44	*	30	0.900	

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

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Form 3B

Laboratory Control Sample Recovery

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

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Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

FID-4_426956		QC ID	LCS-230127			
QC Matrix Aqueous	Units	Run Date	01/27/23			
	mg/L	Run Time	09:37			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
Ethane	75-125	0.01804	0.0203	112		
Ethene	75-125	0.0168	0.0194	116		
Methane	75-125	0.009647	0.00914	95		

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

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Form 4

Method Blank Summary

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230127	002.D	01/27/23 09:29	FID-4_426956
LCS-230127	LCS	LCS-230127	003.D	01/27/23 09:37	FID-4_426956
BatchQC	MS	HS23010982-05MS	009.D	01/27/23 10:31	FID-4_426956
BatchQC	MSD	HS23010982-05MSD	010.D	01/27/23 10:40	FID-4_426956
16WW41-230119	SAMP	HS23010986-01	013.D	01/27/23 11:13	FID-4_426956
16WW55-230119	SAMP	HS23010986-04	014.D	01/27/23 11:29	FID-4_426956
16WW35-230119	SAMP	HS23010986-05	015.D	01/27/23 11:37	FID-4_426956
16WW35-230119	MS	HS23010986-05MS	016.D	01/27/23 11:47	FID-4_426956
16WW35-230119	MSD	HS23010986-05MSD	017.D	01/27/23 11:56	FID-4_426956
16WW16-230119	SAMP	HS23010986-06	018.D	01/27/23 12:04	FID-4_426956
16WW16-230119-FD	SAMP	HS23010986-07	019.D	01/27/23 12:13	FID-4_426956
16WW55-230119	SAMP	HS23010986-04	027.D	01/27/23 13:37	FID-4_426956
16WW35-230119	SAMP	HS23010986-05	028.D	01/27/23 13:45	FID-4_426956
16WW16-230119	SAMP	HS23010986-06	029.D	01/27/23 13:53	FID-4_426956
16WW16-230119-FD	SAMP	HS23010986-07	030.D	01/27/23 14:03	FID-4_426956

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Form 6

Initial Calibration Data

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Phone (281) 530-5656 Fax (281) 530-5887
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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID FID-4_322102

Semi-Volatiles by RSK-175

ICAL Start Date 24-JAN-2017 0906
ICAL End Date 24-JAN-2017 1113

Calibration Files

Calibration File Names

Level 1 ..FID-4.i\170124.b\001.D
Level 2 ..FID-4.i\170124.b\002.D
Level 3 ..FID-4.i\170124.b\003.D
Level 4 ..FID-4.i\170124.b\004.D
Level 5 ..FID-4.i\170124.b\005.D
Level 6 ..FID-4.i\170124.b\006.D
Level 7 ..FID-4.i\170124.b\007.D

Compound	Level 1 10.00 Level 7 1000.0	Level 2 25.00	Level 3 50.00	Level 4 100.00	Level 5 250.00	Level 6 500.00	Curve	b	m1	m2	%RSD or R^2	Q
Methane	969 1082	978	1020	881	961	931	AVRG		974		6.55041	
Ethene	536 829	567	565	516	665	426	AVRG		586		21.93197	
Ethane	602 999	670	659	597	809	818	AVRG		736		19.88517	
Propane	500 96509	1279	2602	4785	18294	38286	QUAD	0.97987	0.00153	-4.583e-00	0.99914	
N-Butane	438 114164	936	2034	3864	18446	42817	QUAD	2.46870	0.00183	-5.537e-00	0.99808	
Pentane	115 488	3945	2080	950	501	412	AVRG		1213		112	*

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

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Form 6I

Initial Calibration Verification (ICV)

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
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Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23010986

RunID FID-4_322102

Semi-Volatiles by RSK-175

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
Methane	9.647	9.597	99.49	75-125	
Ethene	16.800	19.090	113.63	75-125	
Ethane	18.043	19.657	108.95	75-125	
Propane	26.463	27.238	102.93	75-125	
N-Butane	34.955	36.010	103.02	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 0918
Lab File ID 001.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	991	991	0.010	-1.66121	20.0	Averaged	
Ethene	586	698	698	0.010	-19.16843	20.0	Averaged	
Ethane	719	858	858	0.010	-19.31363	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 1050
Lab File ID 011.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	941	941	0.010	3.44205	20.0	Averaged	
Ethene	586	629	629	0.010	-7.41572	20.0	Averaged	
Ethane	719	779	779	0.010	-8.33668	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 1254
Lab File ID 022.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	909	909	0.010	6.72728	20.0	Averaged	
Ethene	586	666	666	0.010	-13.68721	20.0	Averaged	
Ethane	719	771	771	0.010	-7.18122	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23010986

RunID FID-4_426956

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 27-JAN-2023 1413
Lab File ID 031.D ICAL Date(s) 24-JAN-2017 24-JAN-2017
Analysis Type WATER ICAL Times 0906 1113
Lab Sample ID RSK-CCV Quant Type ESTD

Compound	$\overline{RRF}$ / $\overline{RRF}$ / Amount	RF250	CCV RRF250	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	889	889	0.010	8.81111	20.0	Averaged	
Ethene	586	670	670	0.010	-14.41669	20.0	Averaged	
Ethane	719	783	783	0.010	-8.84509	20.0	Averaged	

right solutions.
right partner.

Analysis Run Log

Semi-Volatiles by RSK-175

Workorder

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FID04 -Logbook

Batch: 26730 **Analyst:** Nosa Izekor

Date: 01-24-2017 **Reviewer:**

Method: RSK 175 ICAL **Laboratory:** Houston

Comments: Target Sequence 170124

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	ICAL1	CALIB_1	01-24-2017 09:06 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	NA
2	ICAL2	CALIB_2	01-24-2017 09:30 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	NA
3	ICAL3	CALIB_3	01-24-2017 09:59 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	NA
4	ICAL4	CALIB_4	01-24-2017 10:15 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	NA
5	ICAL5	CALIB_5	01-24-2017 10:39 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	NA
6	ICAL6	CALIB_6	01-24-2017 10:57 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	NA
7	ICAL7	CALIB_7	01-24-2017 11:13 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	NA
8	ICV	METHSPIKI	01-24-2017 12:05 pm	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	NA
9	LCS-170124	LCS	01-24-2017 12:24 pm	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	NA
10	LCSD-170124	LCSD	01-24-2017 12:40 pm	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	NA
11	MBLK-170124	MBLK	01-24-2017 12:57 pm	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	NA
12	HS17010778-01	SAMP	01-24-2017 01:14 pm	1.00	0.00 mL	0.00 mL	012.D	Liquid	Y	NA
13	HS17010779-01	SAMP	01-24-2017 01:31 pm	1.00	0.00 mL	0.00 mL	013.D	Liquid	Y	NA
14	HS17010779-01DUP	SAMP	01-24-2017 01:47 pm	1.00	0.00 mL	0.00 mL	014.D	Liquid	Y	NA
15	CCV	CCV	01-24-2017 02:01 pm	1.00	0.00 mL	0.00 mL	015.D	Liquid	Y	NA

Chemical	Value
ICAL STD ID	30010700217
ICV STD ID	30010700610

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23010986

Semi-Volatiles by RSK-175

RUNID
FID-4_426956

Run ID FID-4_426956 **Start Date** 01/27/23 **EndDate** 01/27/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
RSK-CCV	CCV	RSK-CCV	001.D	01/27/23 09:18	1
MBLK-230127	MBLK	MBLK-230127	002.D	01/27/23 09:29	1
LCS-230127	LCS	LCS-230127	003.D	01/27/23 09:37	1
BatchQC	MS	HS23010982-05MS	009.D	01/27/23 10:31	1
BatchQC	MSD	HS23010982-05MSD	010.D	01/27/23 10:40	1
RSK-CCV	CCV	RSK-CCV	011.D	01/27/23 10:50	1
16WW41-230119	SAMP	HS23010986-01	013.D	01/27/23 11:13	1
16WW55-230119	SAMP	HS23010986-04	014.D	01/27/23 11:29	1
16WW35-230119	SAMP	HS23010986-05	015.D	01/27/23 11:37	1
16WW35-230119	MS	HS23010986-05MS	016.D	01/27/23 11:47	1
16WW35-230119	MSD	HS23010986-05MSD	017.D	01/27/23 11:56	1
16WW16-230119	SAMP	HS23010986-06	018.D	01/27/23 12:04	1
16WW16-230119-FD	SAMP	HS23010986-07	019.D	01/27/23 12:13	1
RSK-CCV	CCV	RSK-CCV	022.D	01/27/23 12:54	1
16WW55-230119	SAMP	HS23010986-04	027.D	01/27/23 13:37	100
16WW35-230119	SAMP	HS23010986-05	028.D	01/27/23 13:45	5
16WW16-230119	SAMP	HS23010986-06	029.D	01/27/23 13:53	100
16WW16-230119-FD	SAMP	HS23010986-07	030.D	01/27/23 14:03	100
RSK-CCV	CCV	RSK-CCV	031.D	01/27/23 14:13	1

right solutions.
right partner.

Raw Data FID-4 322102

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

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ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	438	1.39800	3.271

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D

Date : 24-JAN-2017 09:06

Client ID: ICAL1

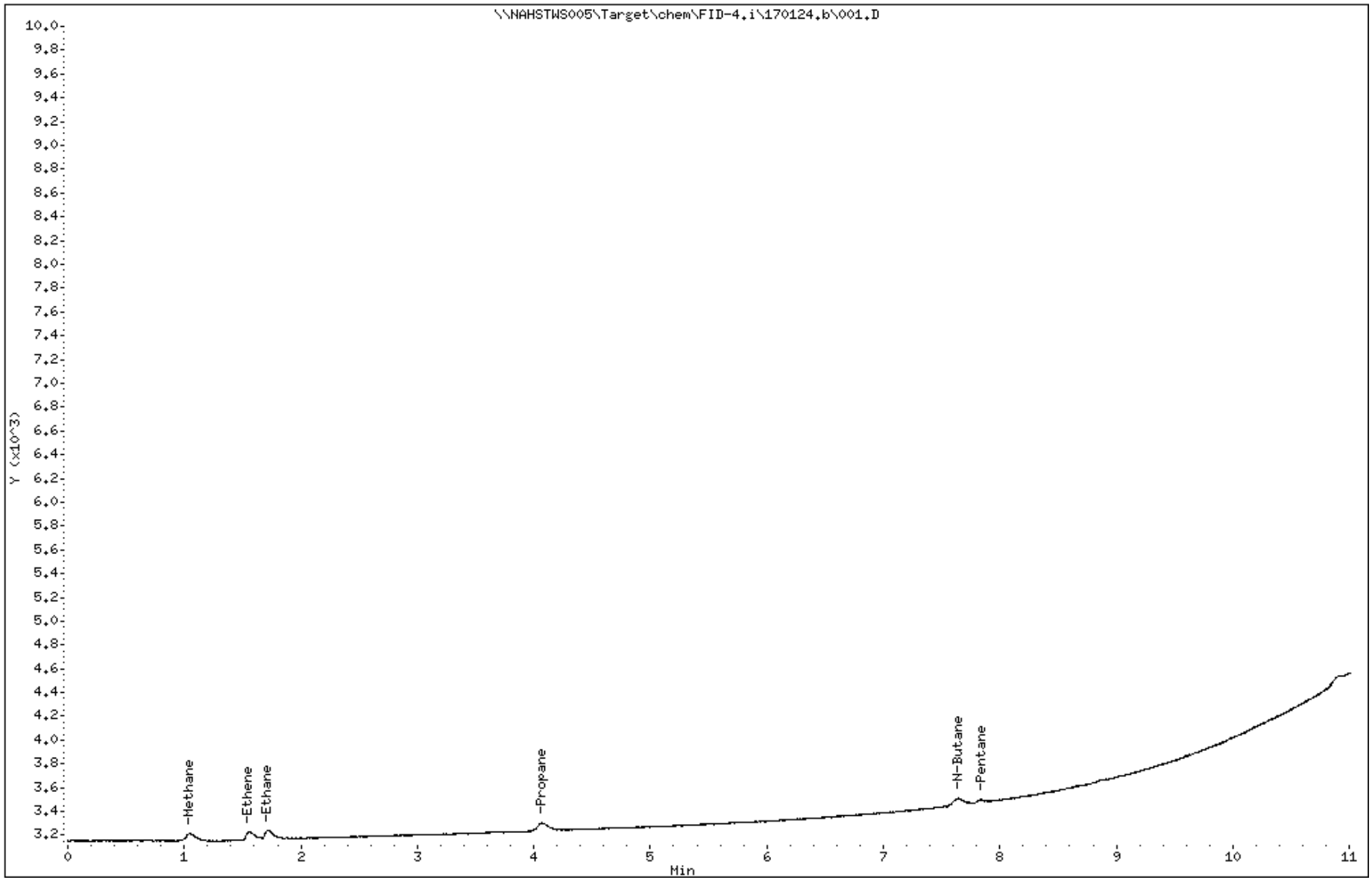
Instrument: FID-4.i

Sample Info: ICAL1;ICAL1;;;

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Inj Date : 24-JAN-2017 09:06
InstruID : FID-4.i
LabSampID : ICAL1

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	944	0.96500	0.968
2 Ethene	1.560	1.560	0.000	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.123	0.000	1279	2.64600	2.927
5 N-Butane	7.716	7.716	0.000	936	3.49600	4.180

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D

Date : 24-JAN-2017 09:30

Client ID: ICAL2

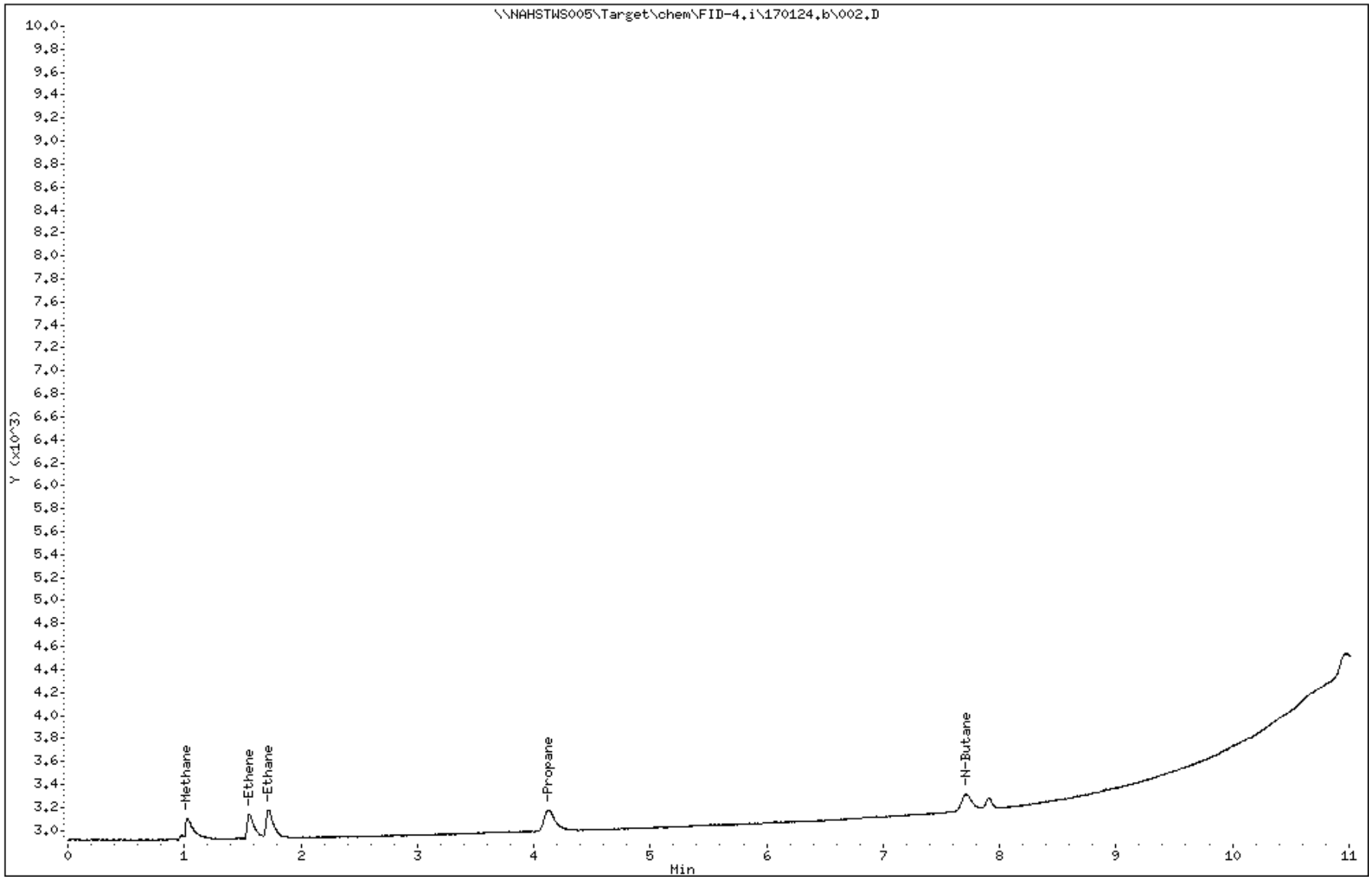
Instrument: FID-4.i

Sample Info: ICAL2;ICAL2;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Inj Date : 24-JAN-2017 09:30
InstruID : FID-4.i
LabSampID : ICAL2

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	1967	1.92900	2.018
2 Ethene	1.570	1.570	0.000	1904	3.37000	3.247
3 Ethane	1.736	1.736	0.000	2378	3.60900	3.229
4 Propane	4.123	4.123	0.000	2602	5.29300	4.926
5 N-Butane	7.703	7.703	0.000	2034	6.99100	6.176

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D

Date : 24-JAN-2017 09:59

Client ID: ICAL3

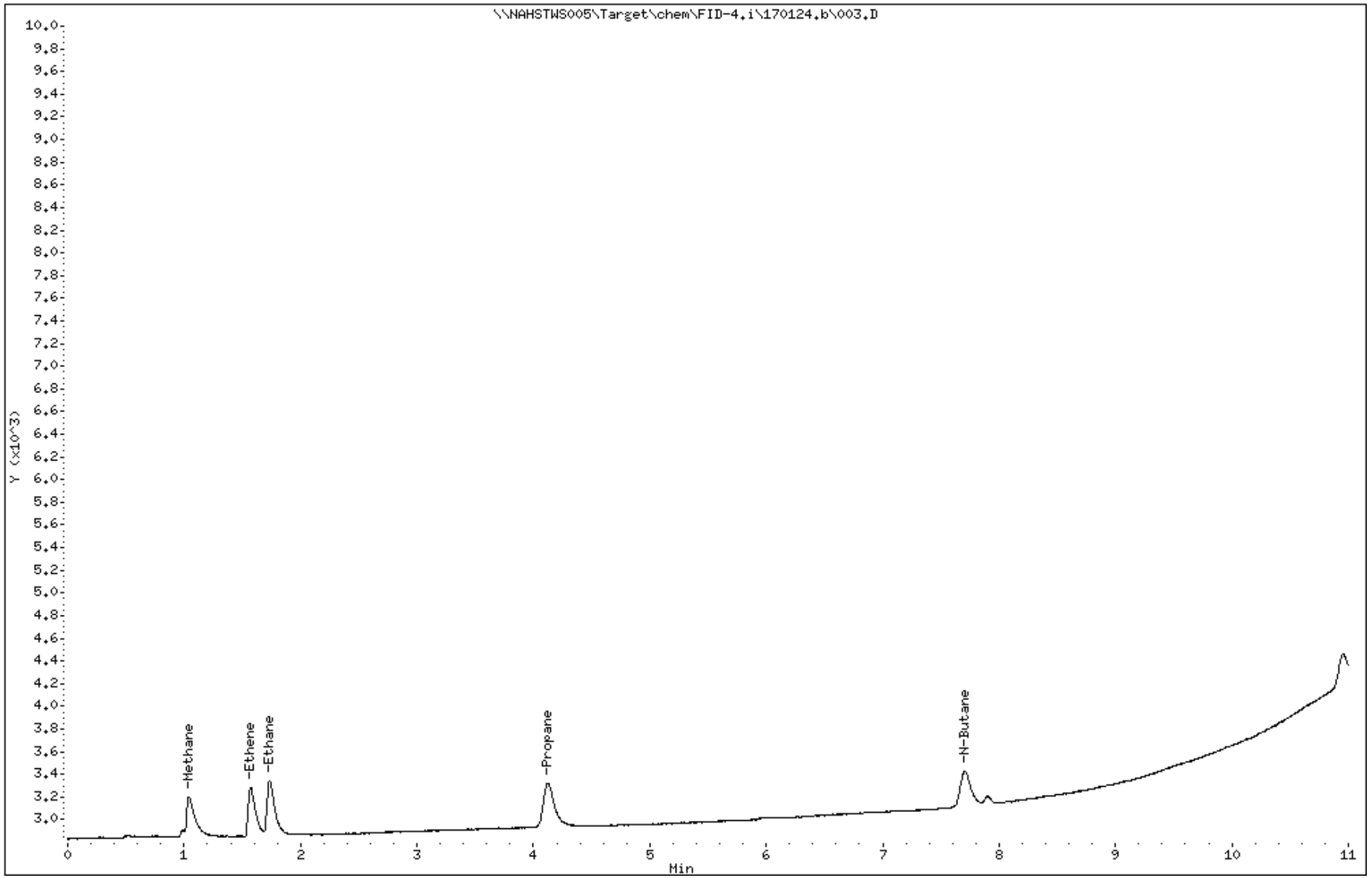
Instrument: FID-4.i

Sample Info: ICAL3;ICAL3;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Inj Date : 24-JAN-2017 09:59
InstruID : FID-4.i
LabSampID : ICAL3

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

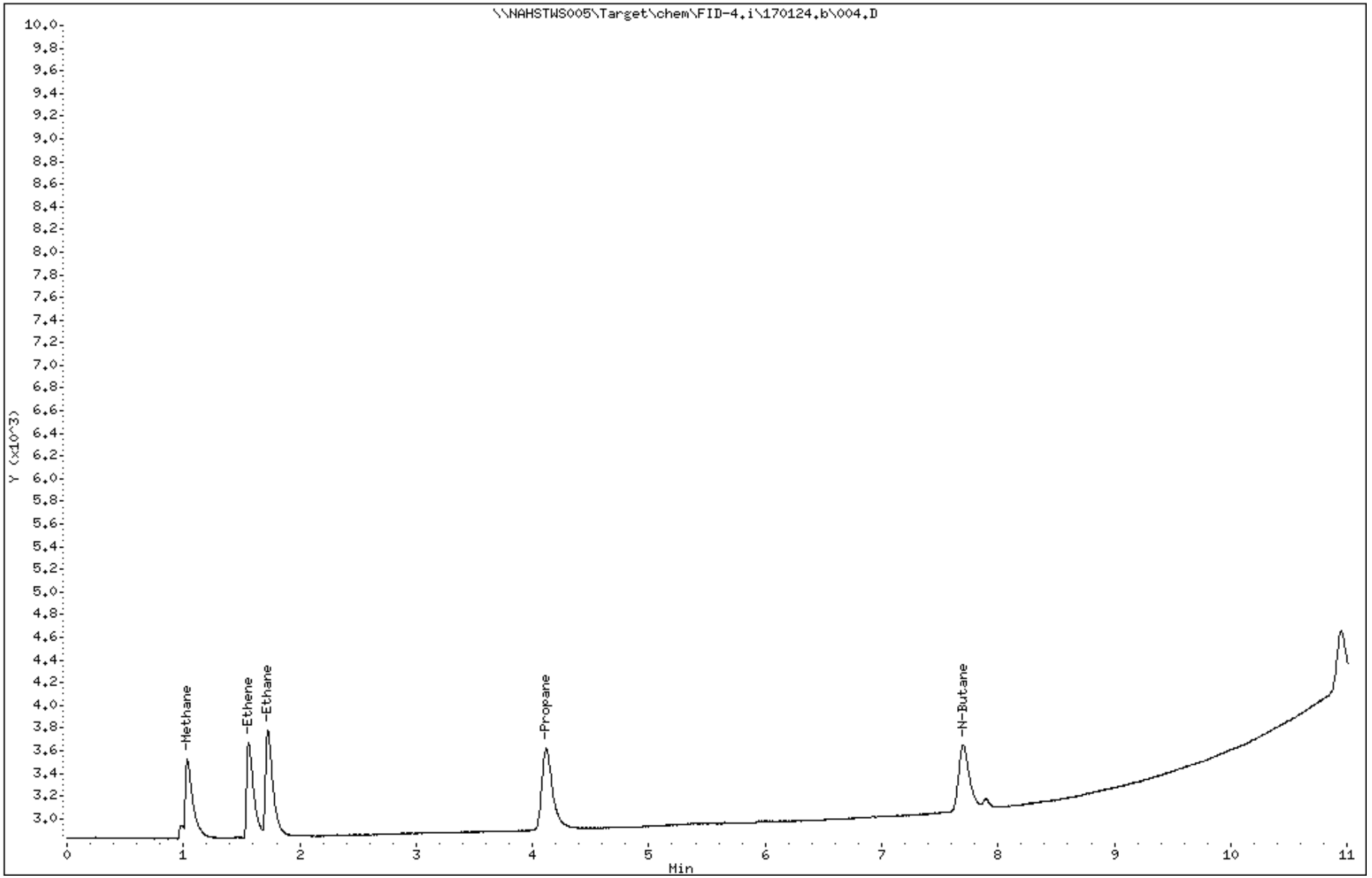
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



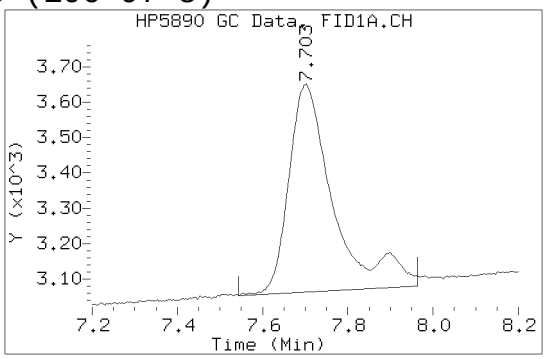
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

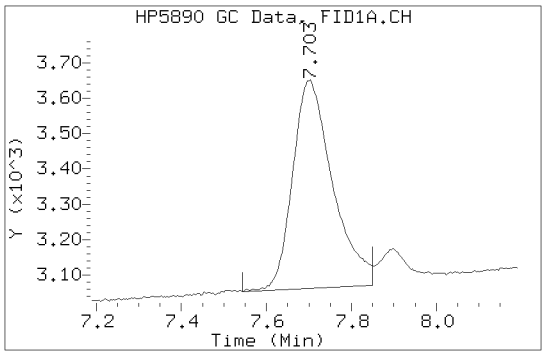
BEFORE

MASS
100
AREA
4292
HEIGHT
591
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
3864
HEIGHT
591
28-Sep-2022
10:02
linh
pham



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	9268	9.64700	9.511
2 Ethene	1.570	1.570	0.000	11210	16.8500	19.121
3 Ethane	1.733	1.733	0.000	14588	18.0430	19.811
4 Propane	4.120	4.120	0.000	18294	26.4630	27.415
5 N-Butane	7.700	7.700	0.000	18446	34.9550	34.419(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D

Date : 24-JAN-2017 10:39

Client ID: ICAL5

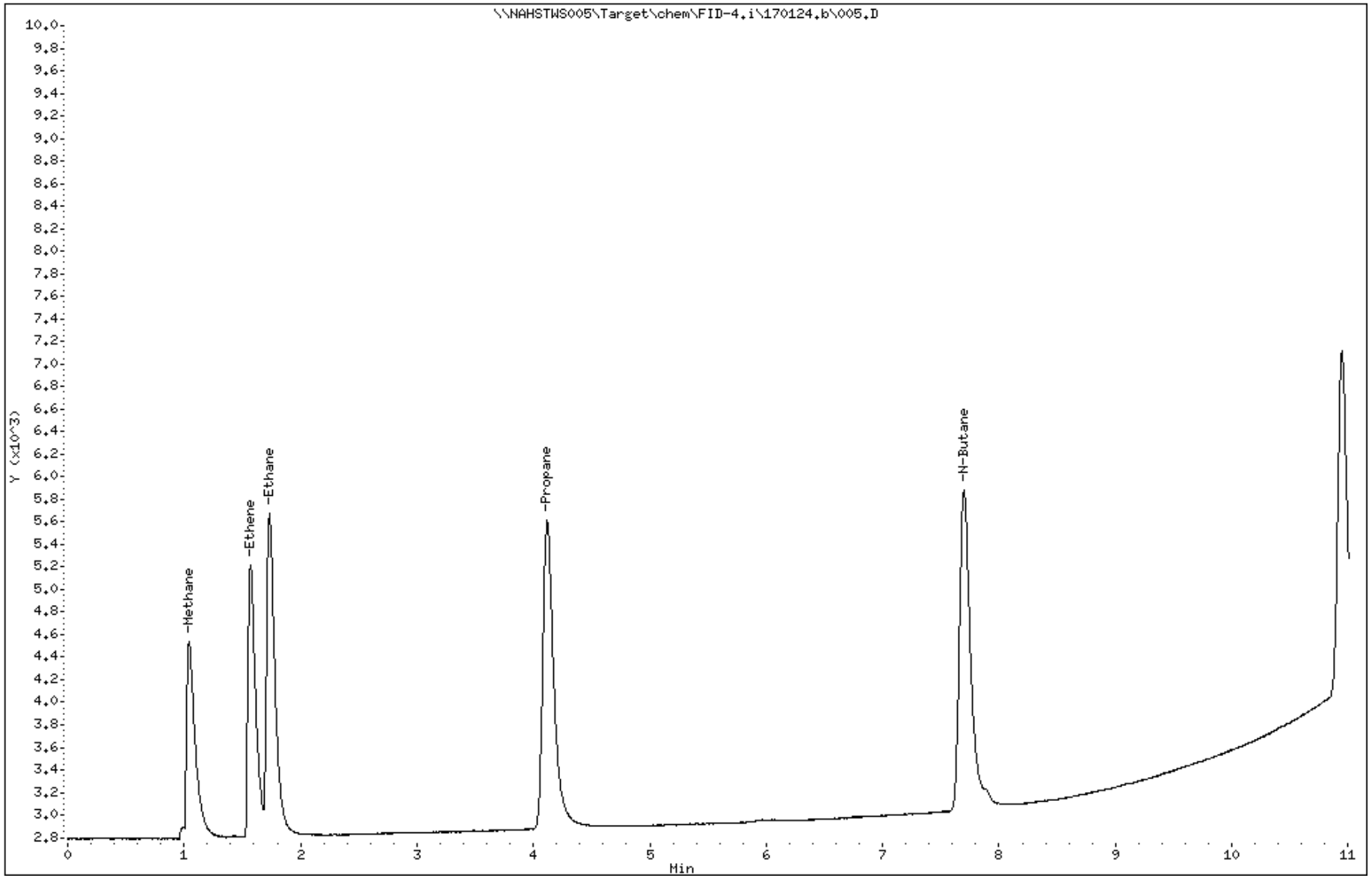
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



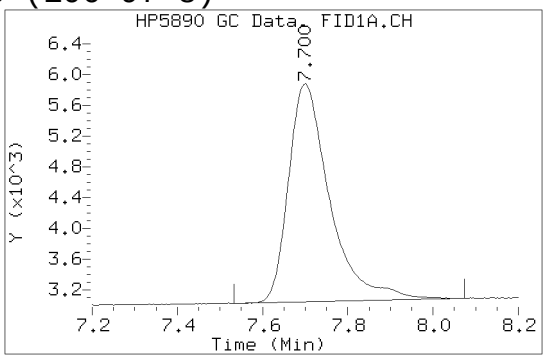
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

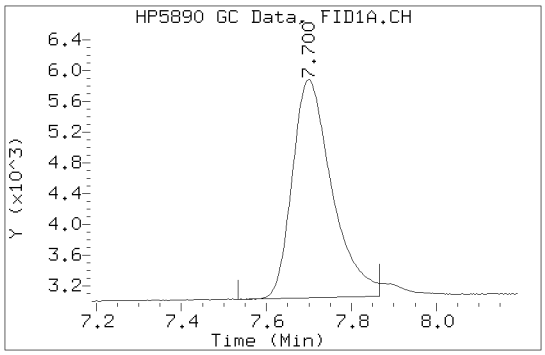
BEFORE

MASS
100
AREA
19142
HEIGHT
2839
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
18446
HEIGHT
2838
28-Sep-2022
10:02
linh
pham



Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

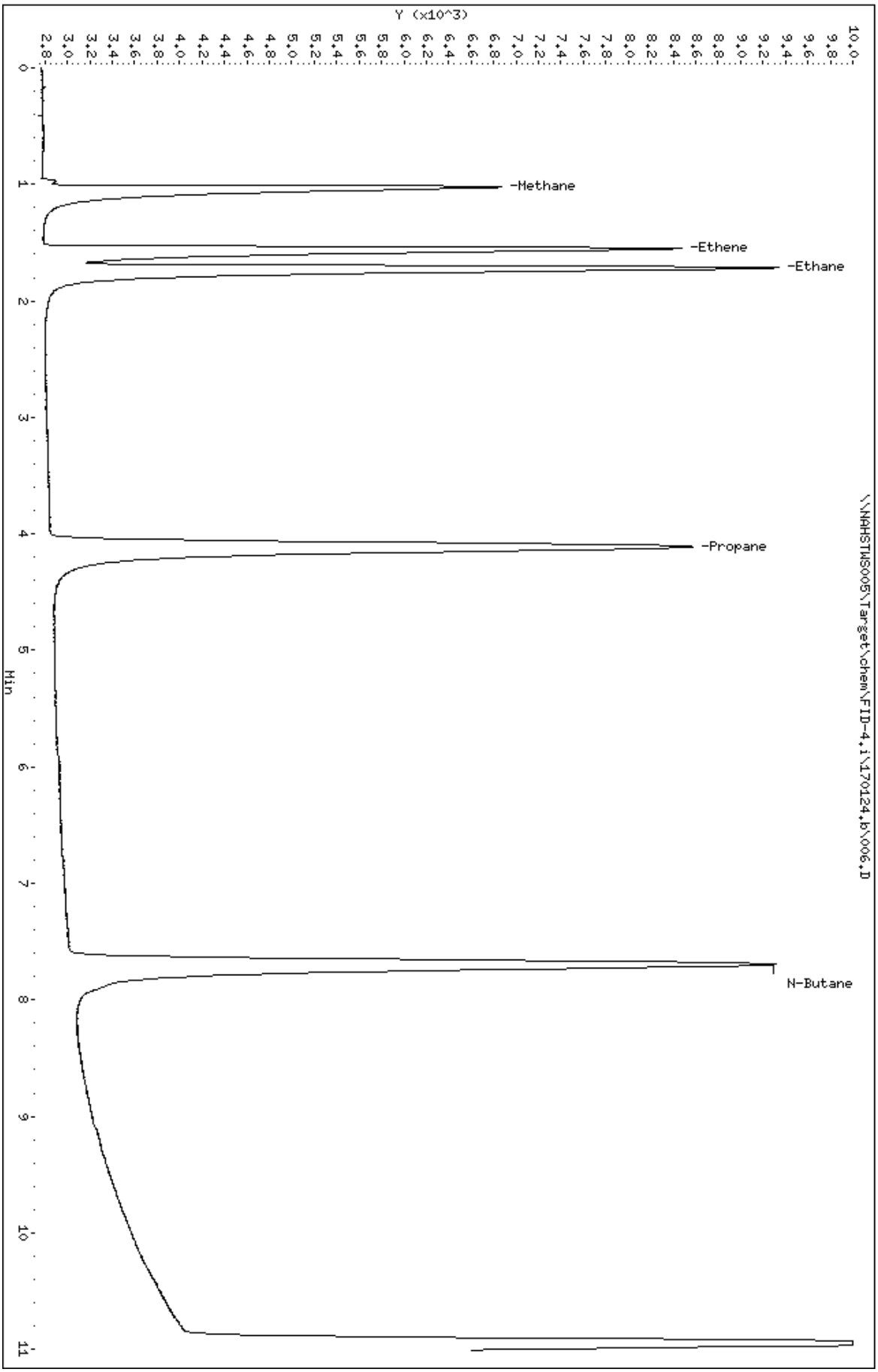
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	17957	19.2940	18.429
2 Ethene	1.550	1.550	0.000	22910	53.8200	39.078
3 Ethane	1.716	1.716	0.000	29505	36.0860	40.070
4 Propane	4.110	4.110	0.000	38286	52.9260	52.796
5 N-Butane	7.696	7.696	0.000	42817	69.9110	70.855

Data File: \\NAHSTWS005\Target\chem\FID-4,i\170124,b\006,D
Date : 24-JAN-2017 10:57
Client ID: ICAL6
Sample Info: ICAL6;ICAL6;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

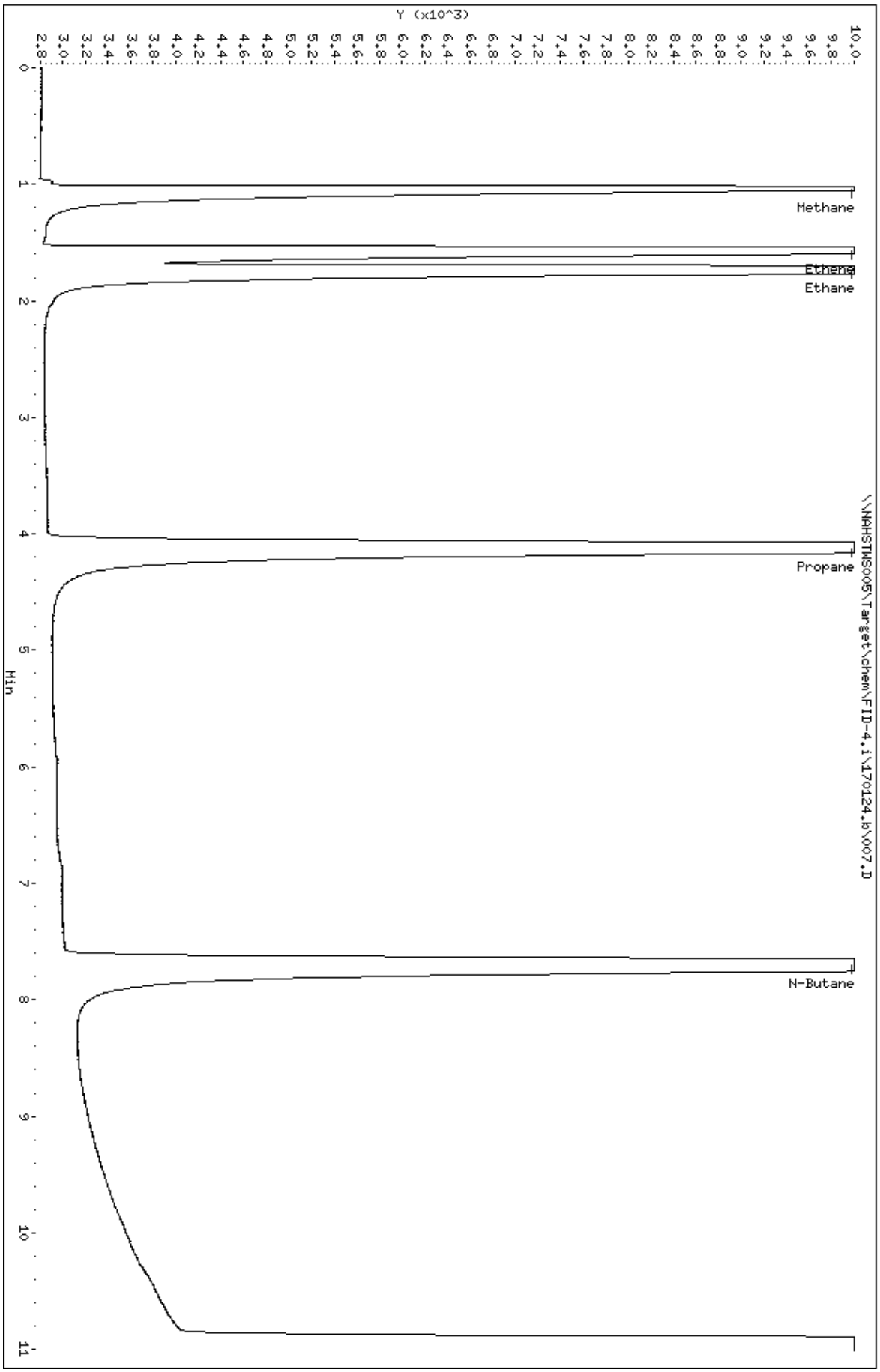
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Date : 24-JAN-2017 11:13
Client ID: ICAL7
Sample Info: ICAL7;ICAL7;;;
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: MA
Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Inj Date : 24-JAN-2017 11:13
InstruID : FID-4.i
LabSampID : ICAL7

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

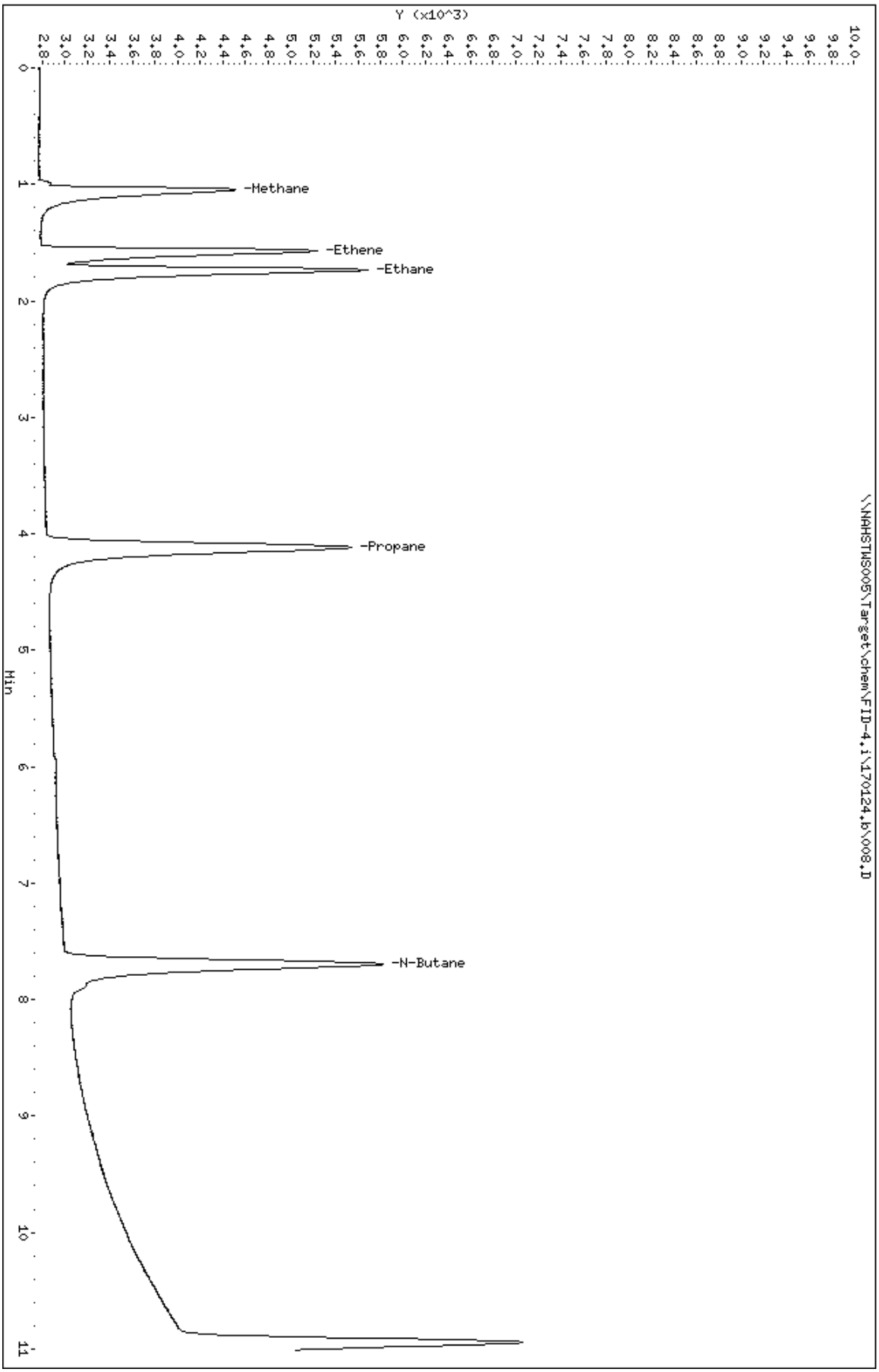
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

Data File: \\NAHSTWS005\Target\chem\FID-4,i\170124,b\008,D
Date : 24-JAN-2017 12:05
Client ID: ICV
Sample Info: ICV;ICV;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Inj Date : 24-JAN-2017 12:05
InstruID : FID-4.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

right solutions.
right partner.

Raw Data FID-4 426956

Semi-Volatiles by RSK-175

Workorder

HS23010986

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D Page 1
Report Date: 16-Feb-2023 13:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 09:18
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 16-Feb-2023 13:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	9562	9.64700	9.807
2 Ethene	0.653	0.653	0.000	11762	16.8500	20.079
3 Ethane	0.723	0.723	0.000	15489	18.0430	21.527(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D

Date : 27-JAN-2023 09:18

Client ID: RSK-CCV

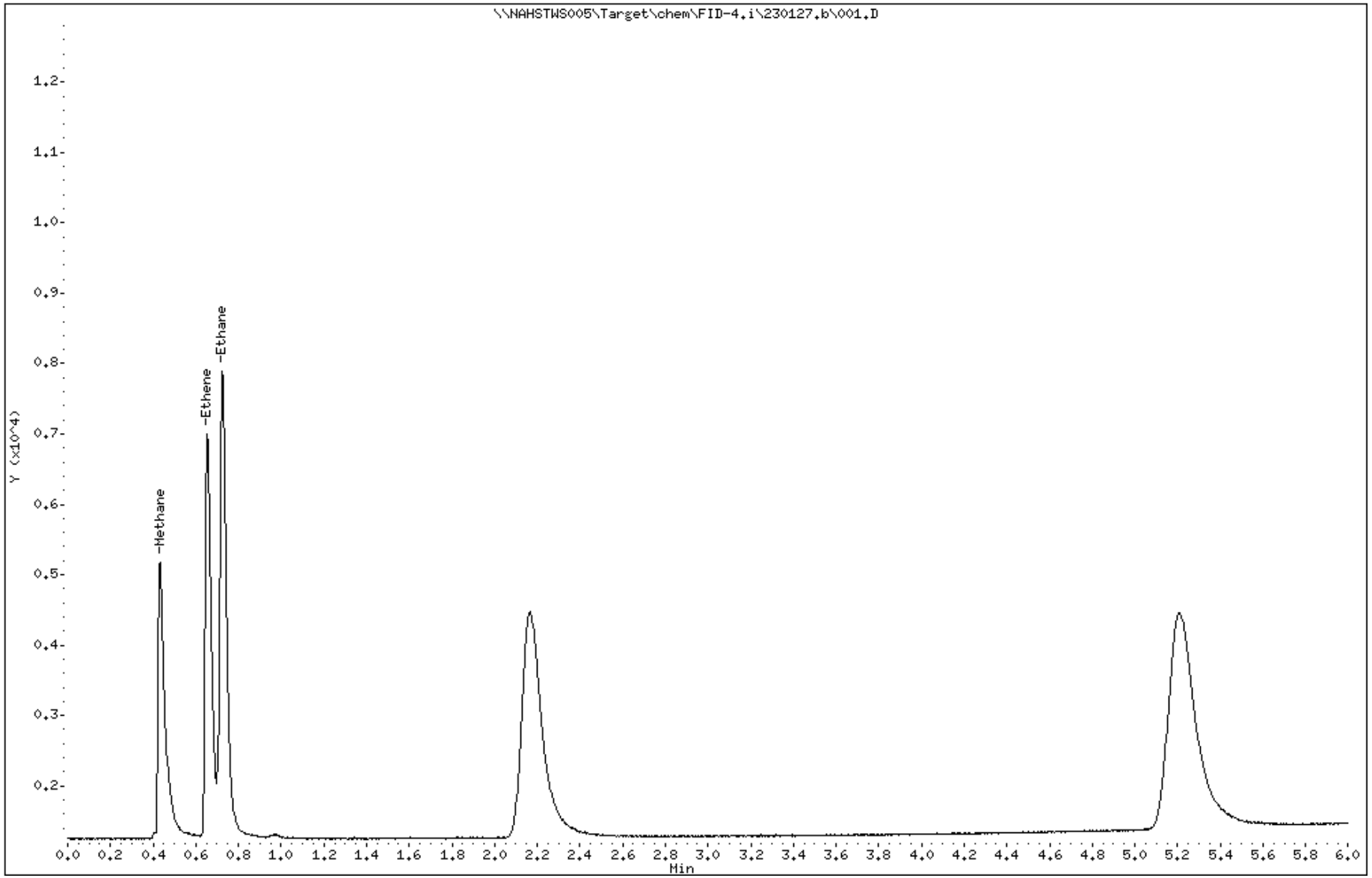
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



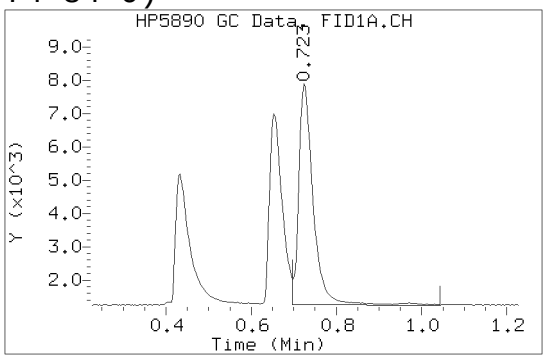
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\001.D
Inj Date : 27-JAN-2023 09:18
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

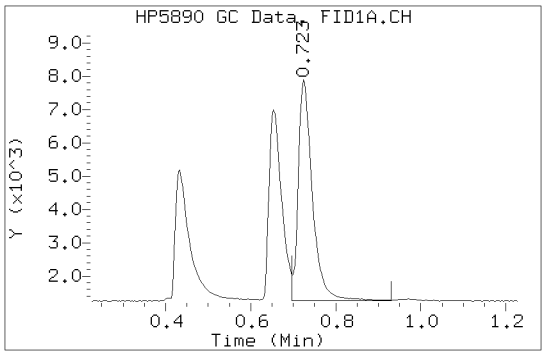
BEFORE

MASS
44
AREA
15617
HEIGHT
6635
27-Jan-2023
09:25
ALSHS
Server



AFTER

MASS
44
AREA
15489
HEIGHT
6634
16-Feb-2023
13:00
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D Page 1
Report Date: 27-Jan-2023 10:13

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D
Lab Smp Id: MBLK-230127 Client Smp ID: MBLK-230127
Inj Date : 27-JAN-2023 09:29
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230127;MBLK-230127;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 09:28 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D

Date : 27-JAN-2023 09:29

Client ID: MBLK-230127

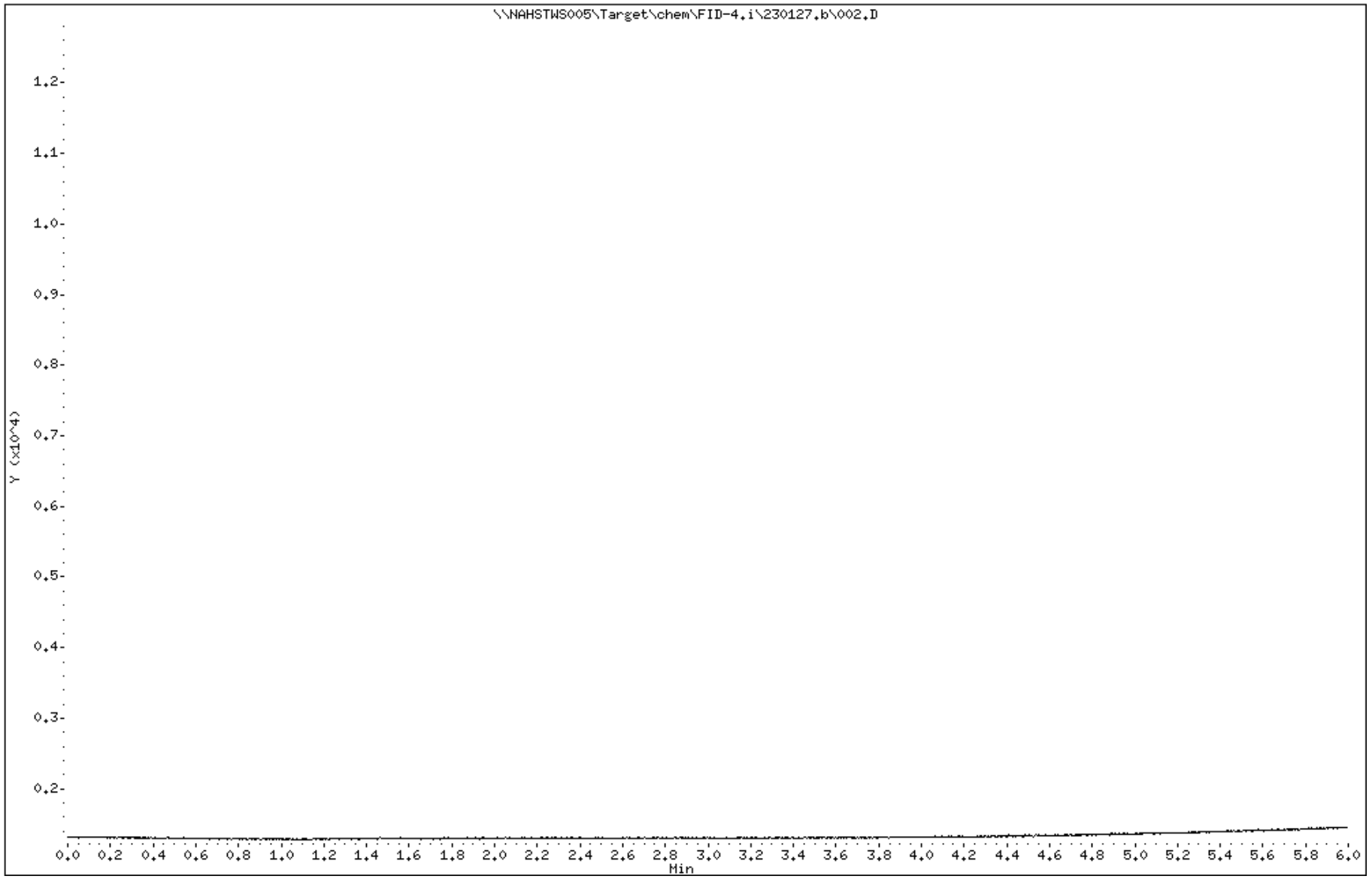
Instrument: FID-4.i

Sample Info: MBLK-230127;MBLK-230127;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\002.D
Inj Date : 27-JAN-2023 09:29
InstruID : FID-4.i
LabSampID : MBLK-230127

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D Page 1
Report Date: 31-Jan-2023 14:19

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D
Lab Smp Id: LCS-230127
Inj Date : 27-JAN-2023 09:37
Operator : JA Inst ID: FID-4.i
Smp Info : LCS-230127;LCS-230127;3;;LCS
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.430	0.433	-0.003	8916	9.14469	9.144
2 Ethene	0.650	0.653	-0.003	11388	19.4414	19.441
3 Ethane	0.723	0.723	0.000	14576	20.2588	20.258(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D

Date : 27-JAN-2023 09:37

Client ID:

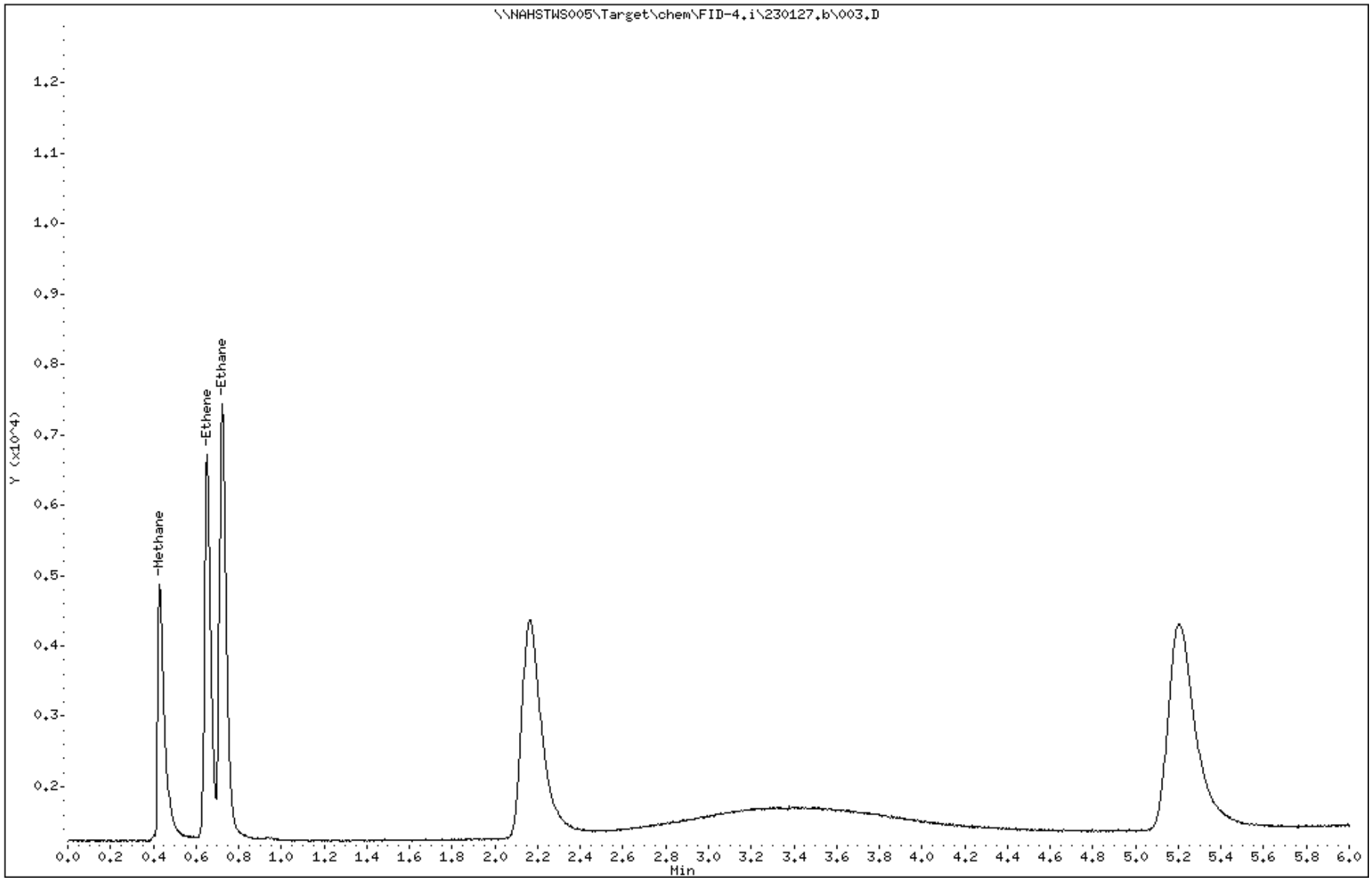
Instrument: FID-4.i

Sample Info: LCS-230127;LCS-230127;3;;LCS

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



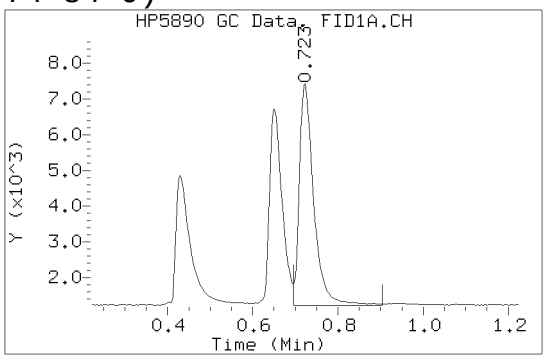
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\003.D
Inj Date : 27-JAN-2023 09:37
InstruID : FID-4.i
LabSampID : LCS-230127

Ethane (74-84-0)

Reason Code:

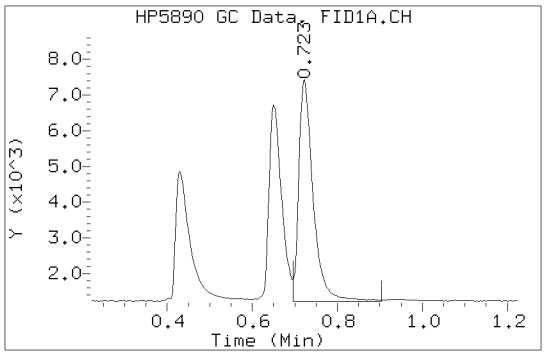
BEFORE

MASS
44
AREA
14576
HEIGHT
6200
31-Jan-2023
14:19
purvi
lad



AFTER

MASS
44
AREA
14576
HEIGHT
6200
31-Jan-2023
14:19
purvi
lad



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\009.D Page 1
Report Date: 27-Jan-2023 10:45

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\009.D
Lab Smp Id: HS23010982-05MS Client Smp ID: HS23010982-05MS
Inj Date : 27-JAN-2023 10:31
Operator : JA Inst ID: FID-4.i
Smp Info : HS23010982-05MS;HS23010982-05MS
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 09:28 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.420	0.433	-0.013	384433	394.293	394.293(AR)
2 Ethene	0.636	0.653	-0.017	263936	450.587	450.586(ARM)
3 Ethane	0.693	0.723	-0.030	32937	45.7783	45.778(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\009.D

Date : 27-JAN-2023 10:31

Client ID: HS23010982-05MS

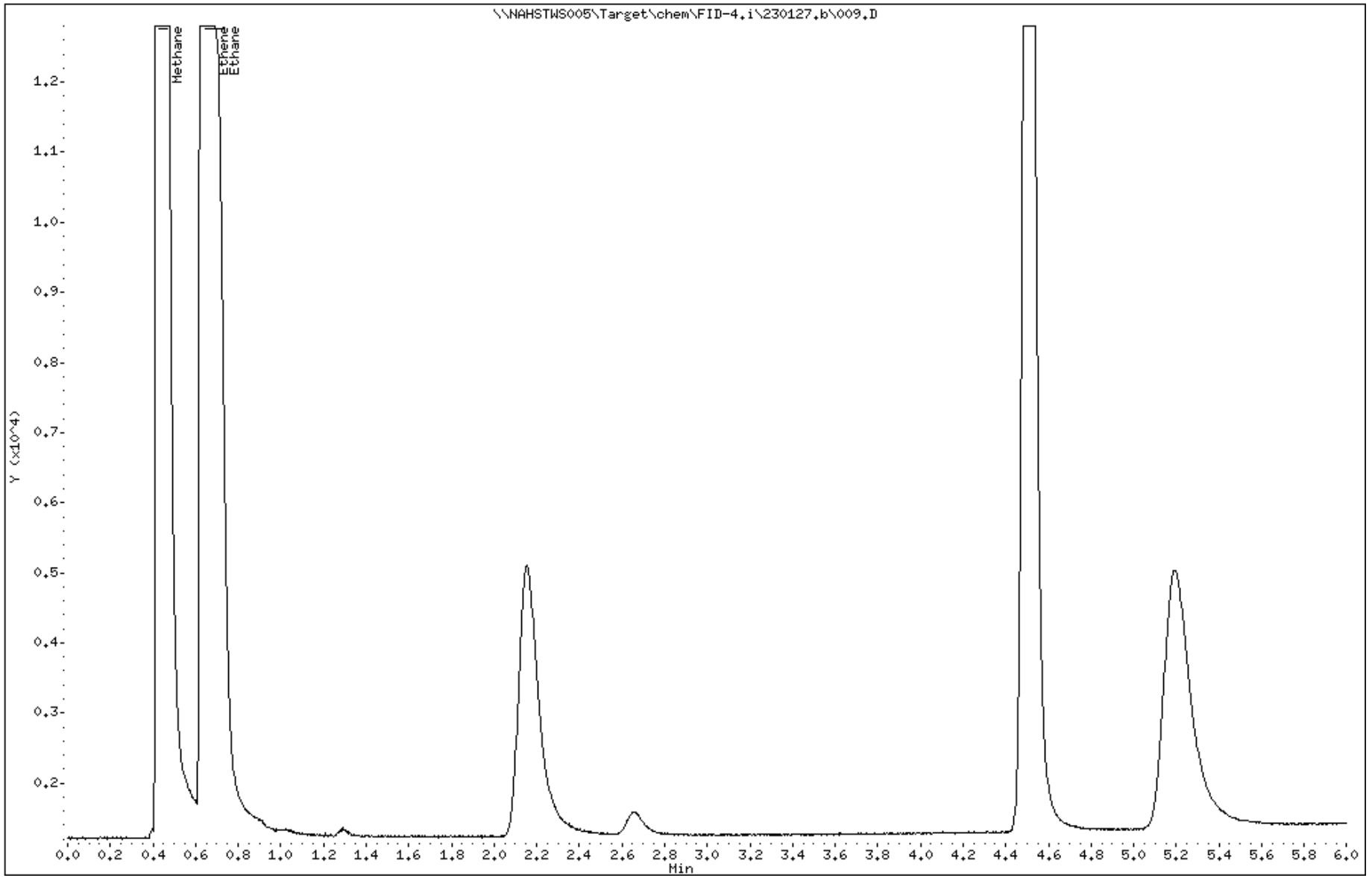
Instrument: FID-4.i

Sample Info: HS23010982-05MS;HS23010982-05MS

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



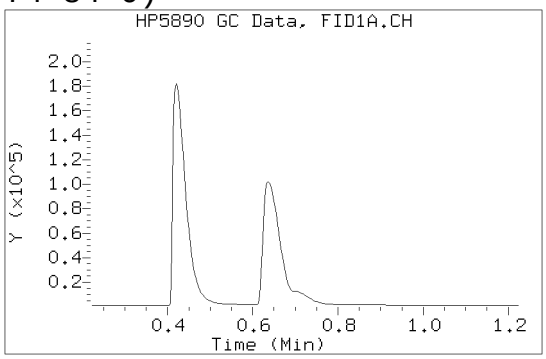
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\009.D
Inj Date : 27-JAN-2023 10:31
InstruID : FID-4.i
LabSampID : HS23010982-05MS

Ethane (74-84-0)

Reason Code:

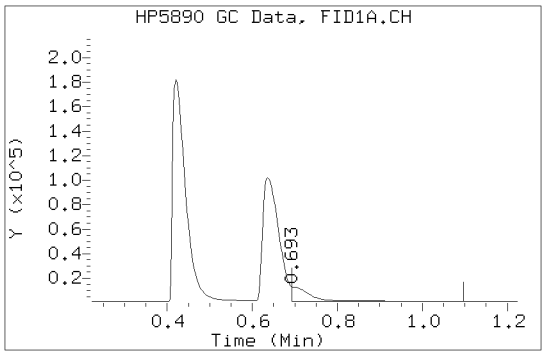
BEFORE

MASS
44
AREA
0
HEIGHT
0
27-Jan-2023
10:44
purvi
lad



AFTER

MASS
44
AREA
32937
HEIGHT
11543
27-Jan-2023
10:45
purvi
lad

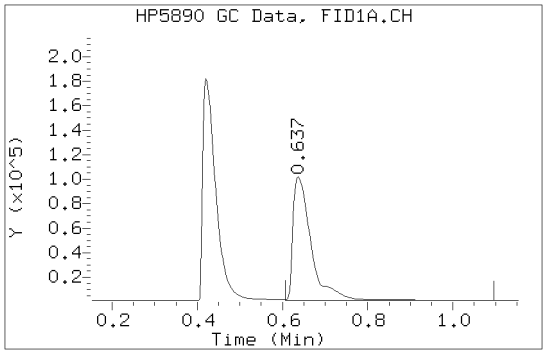


Ethene (74-85-1)

Reason Code:

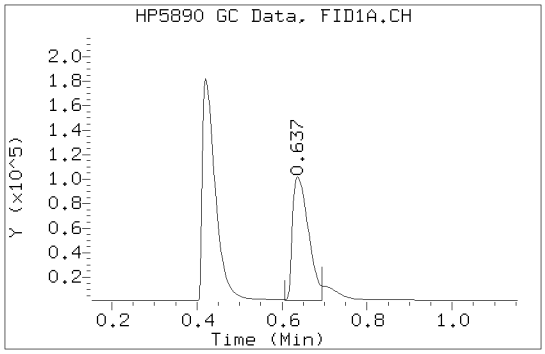
BEFORE

MASS
100
AREA
294544
HEIGHT
100672
27-Jan-2023
10:44
purvi
lad



AFTER

MASS
100
AREA
263936
HEIGHT
100671
27-Jan-2023
10:45
purvi
lad



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D Page 1
Report Date: 27-Jan-2023 10:59

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D
Lab Smp Id: HS23010982-05MSD Client Smp ID: HS23010982-05MSD
Inj Date : 27-JAN-2023 10:40
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010982-05MSD;HS23010982-05MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 09:28 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.420	0.433	-0.013	381530	391.316	391.315(AR)
2 Ethene	0.636	0.653	-0.017	263825	450.397	450.397(ARM)
3 Ethane	0.696	0.723	-0.027	30095	41.8283	41.828(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D

Date : 27-JAN-2023 10:40

Client ID: HS23010982-05MSD

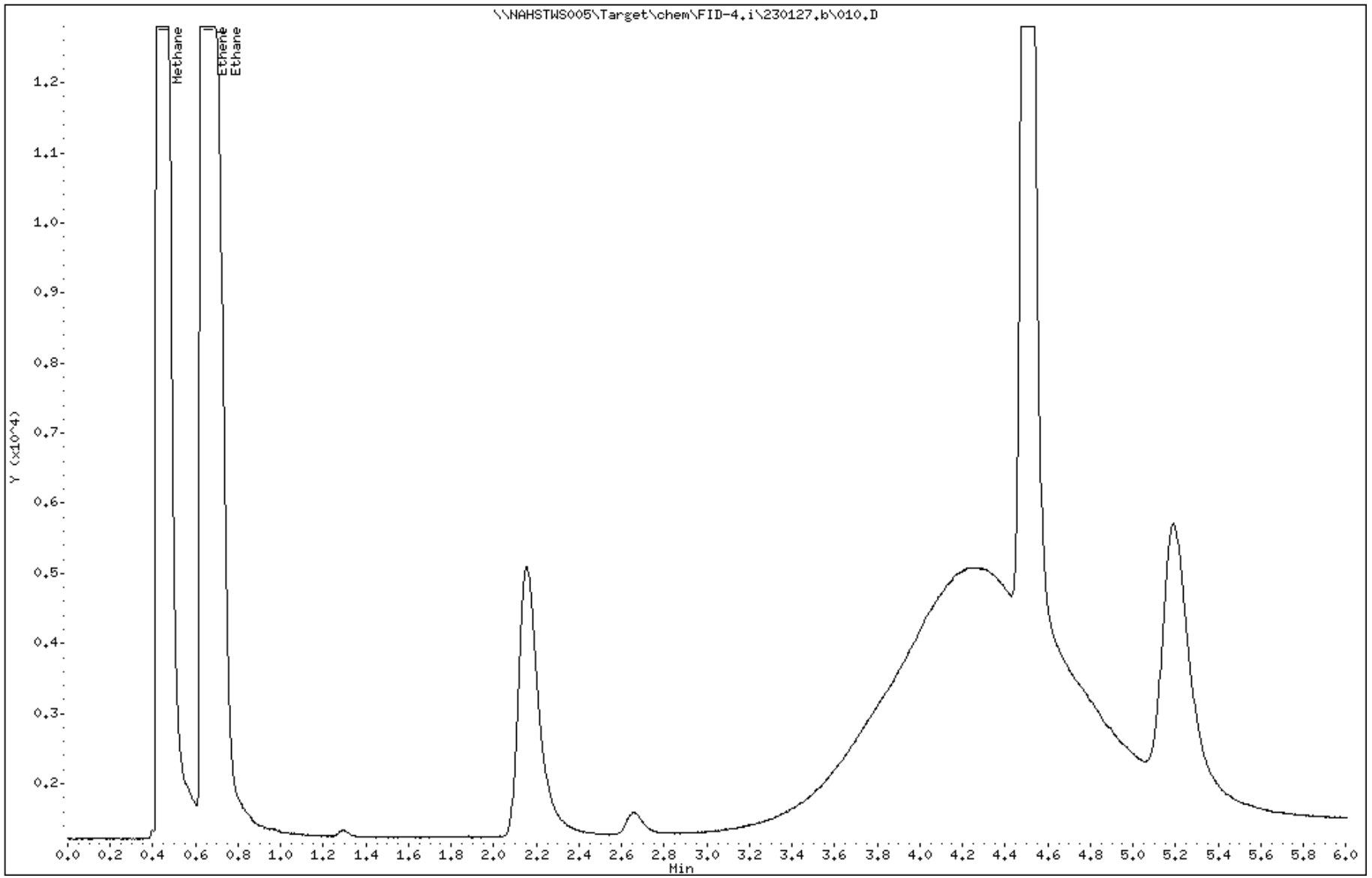
Instrument: FID-4.i

Sample Info: HS23010982-05MSD;HS23010982-05MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



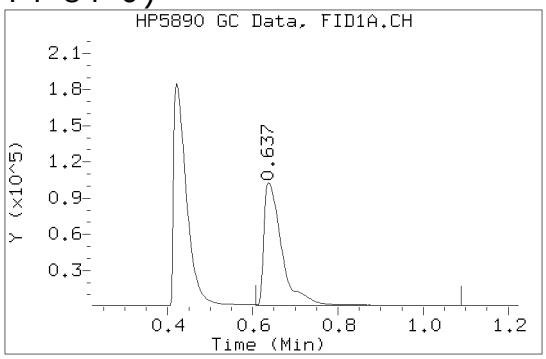
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\010.D
Inj Date : 27-JAN-2023 10:40
InstruID : FID-4.i
LabSampID : HS23010982-05MSD

Ethane (74-84-0)

Reason Code:

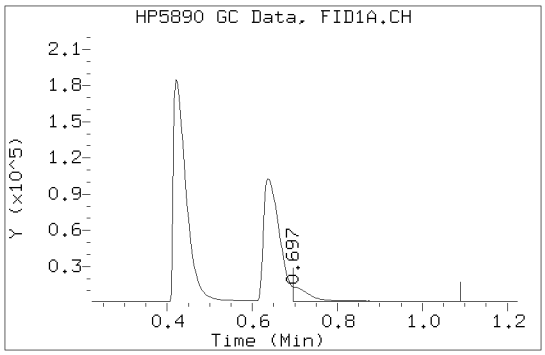
BEFORE

MASS
44
AREA
291637
HEIGHT
101439
27-Jan-2023
10:56
ALSHS
Server



AFTER

MASS
44
AREA
30095
HEIGHT
11340
27-Jan-2023
10:59
ALSHS
Ser

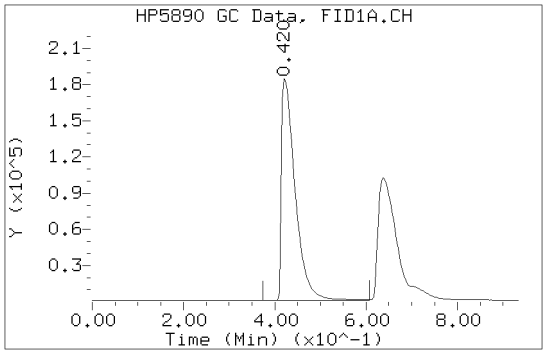


Ethene (74-85-1)

Reason Code:

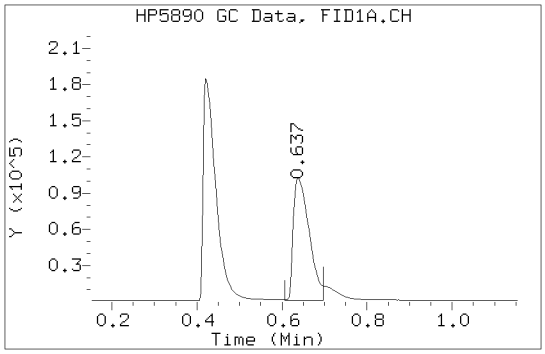
BEFORE

MASS
100
AREA
141968
HEIGHT
3699
27-Jan-2023
10:56
ALSHS
Server



AFTER

MASS
100
AREA
263825
HEIGHT
101438
27-Jan-2023
10:59
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D Page 1
Report Date: 16-Feb-2023 12:53

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 10:50
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 16-Feb-2023 12:53 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	9082	9.64700	9.314
2 Ethene	0.653	0.653	0.000	10602	16.8500	18.099
3 Ethane	0.726	0.726	0.000	14064	18.0430	19.547

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D

Date : 27-JAN-2023 10:50

Client ID: RSK-CCV

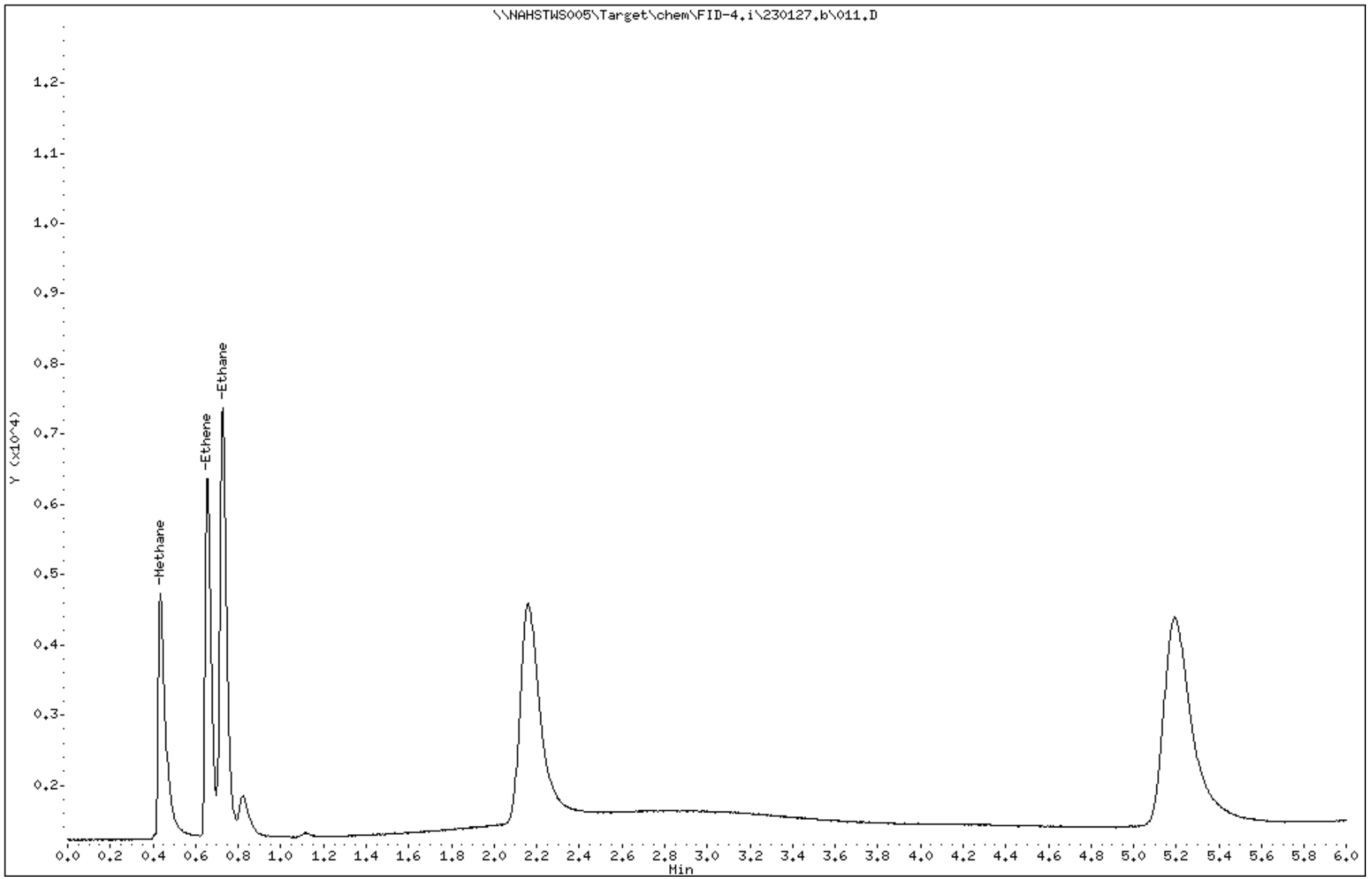
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\011.D
Inj Date : 27-JAN-2023 10:50
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\013.D
Lab Smp Id: HS23010986-01 Client Smp ID: HS23010986-01
Inj Date : 27-JAN-2023 11:13
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-01;HS23010986-01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 10:59 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.426	0.433	-0.007	11894	12.1991	12.199(M)
2 Ethene	0.640	0.653	-0.013	18724	31.9653	31.965(M)
3 Ethane	0.756	0.726	0.030	574	0.79779	0.797(aM)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\013.D

Date : 27-JAN-2023 11:13

Client ID: HS23010986-01

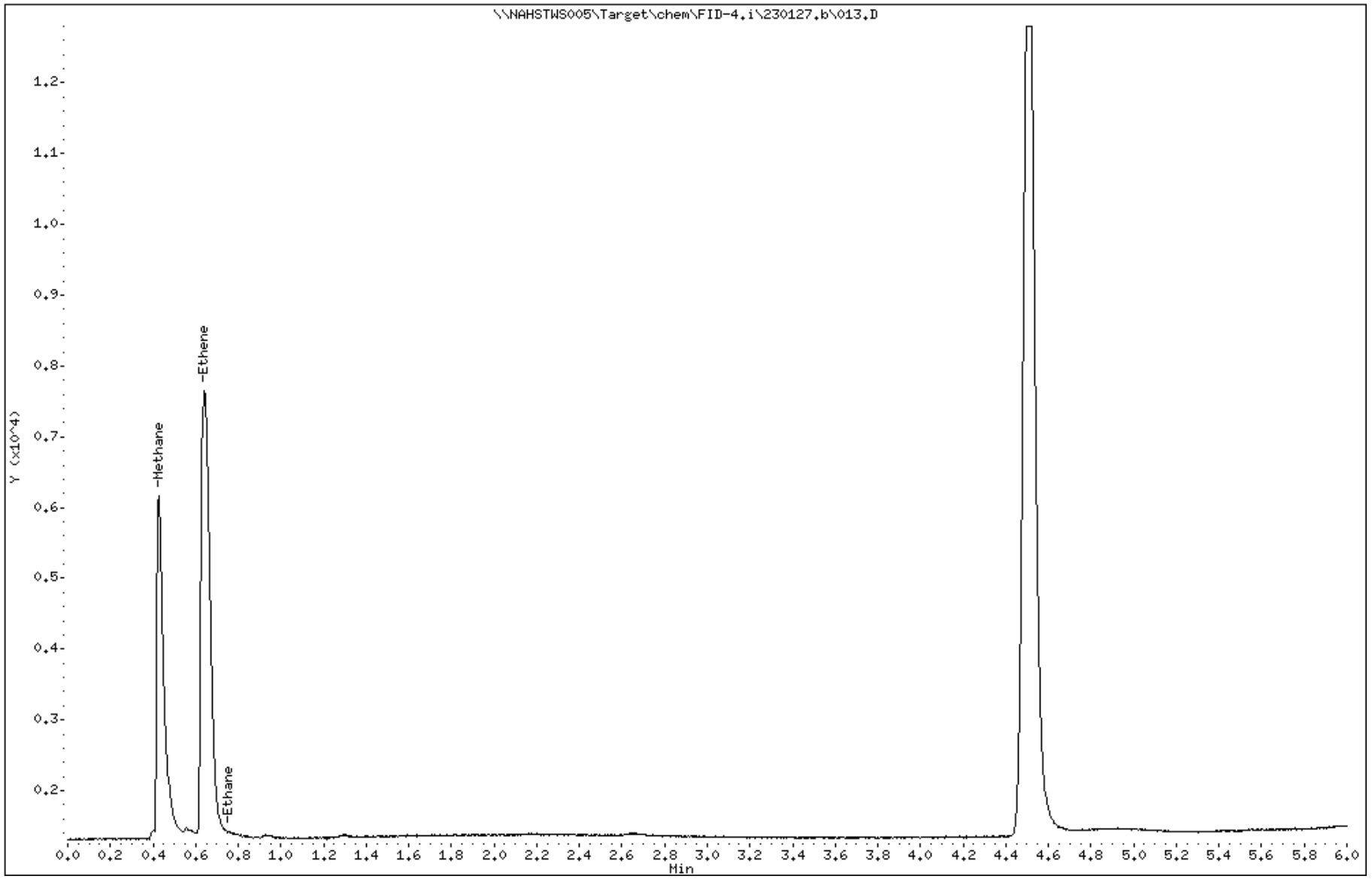
Instrument: FID-4.i

Sample Info: HS23010986-01;HS23010986-01

Operator: PL

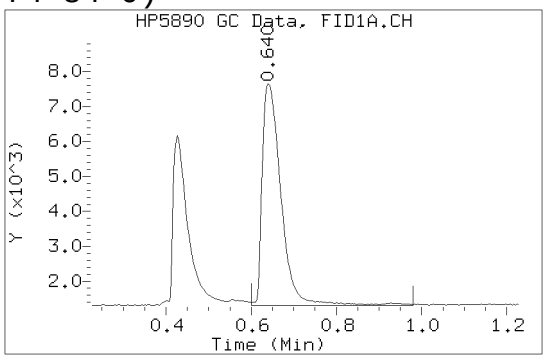
Column phase: Rtx-PLOT

Column diameter: 0.53



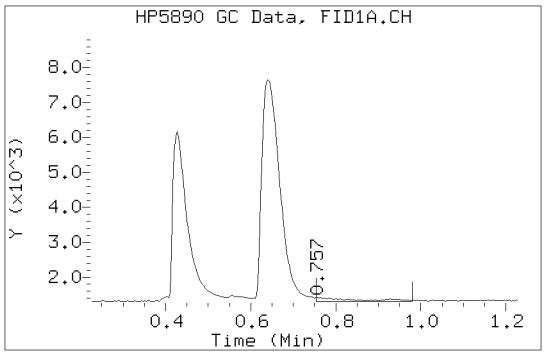
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\013.D
Inj Date : 27-JAN-2023 11:13
InstruID : FID-4.i
LabSampID : HS23010986-01

Ethane (74-84-0)



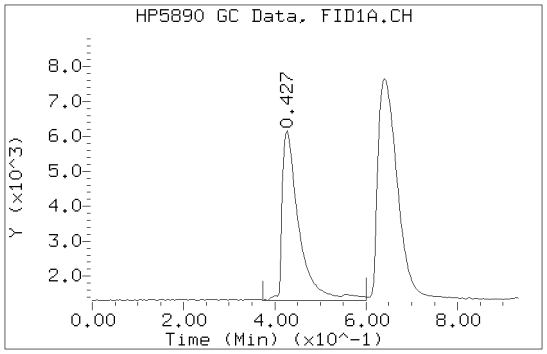
BEFORE
MASS
44
AREA
19343
HEIGHT
6338
27-Jan-2023
11:20
ALSHS
Server

Reason Code:



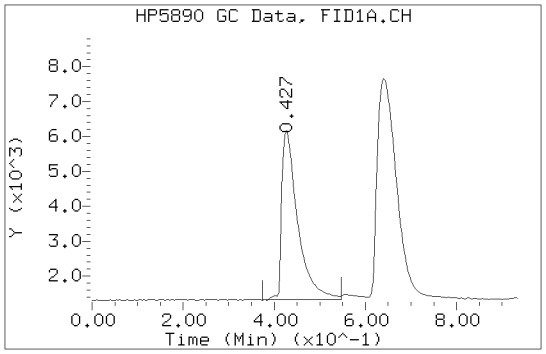
AFTER
MASS
44
AREA
574
HEIGHT
97
27-Jan-2023
11:28
ALSHS
Ser

Methane (74-82-8)



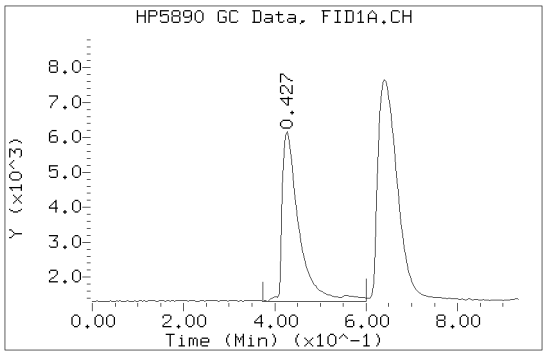
BEFORE
MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
11:20
ALSHS
Server

Reason Code:



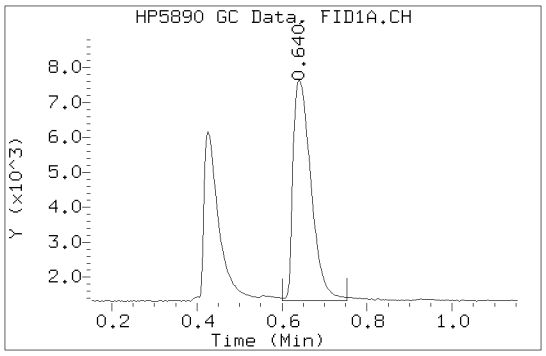
AFTER
MASS
100
AREA
11894
HEIGHT
4846
27-Jan-2023
11:28
ALSHS
Ser

Ethene (74-85-1)



BEFORE
MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
11:20
ALSHS
Server

Reason Code:



AFTER
MASS
100
AREA
18724
HEIGHT
6334
27-Jan-2023
11:28
ALSHS
Ser

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\014.D Page 1
Report Date: 31-Jan-2023 14:21

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\014.D
Lab Smp Id: HS23010986-04 Client Smp ID: HS23010986-04
Inj Date : 27-JAN-2023 11:29
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-04;HS23010986-04
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.420	0.433	-0.013	1074402	1101.96	1101.959(A)
2 Ethene	0.636	0.653	-0.017	12079	20.6211	20.621(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\014.D

Date : 27-JAN-2023 11:29

Client ID: HS23010986-04

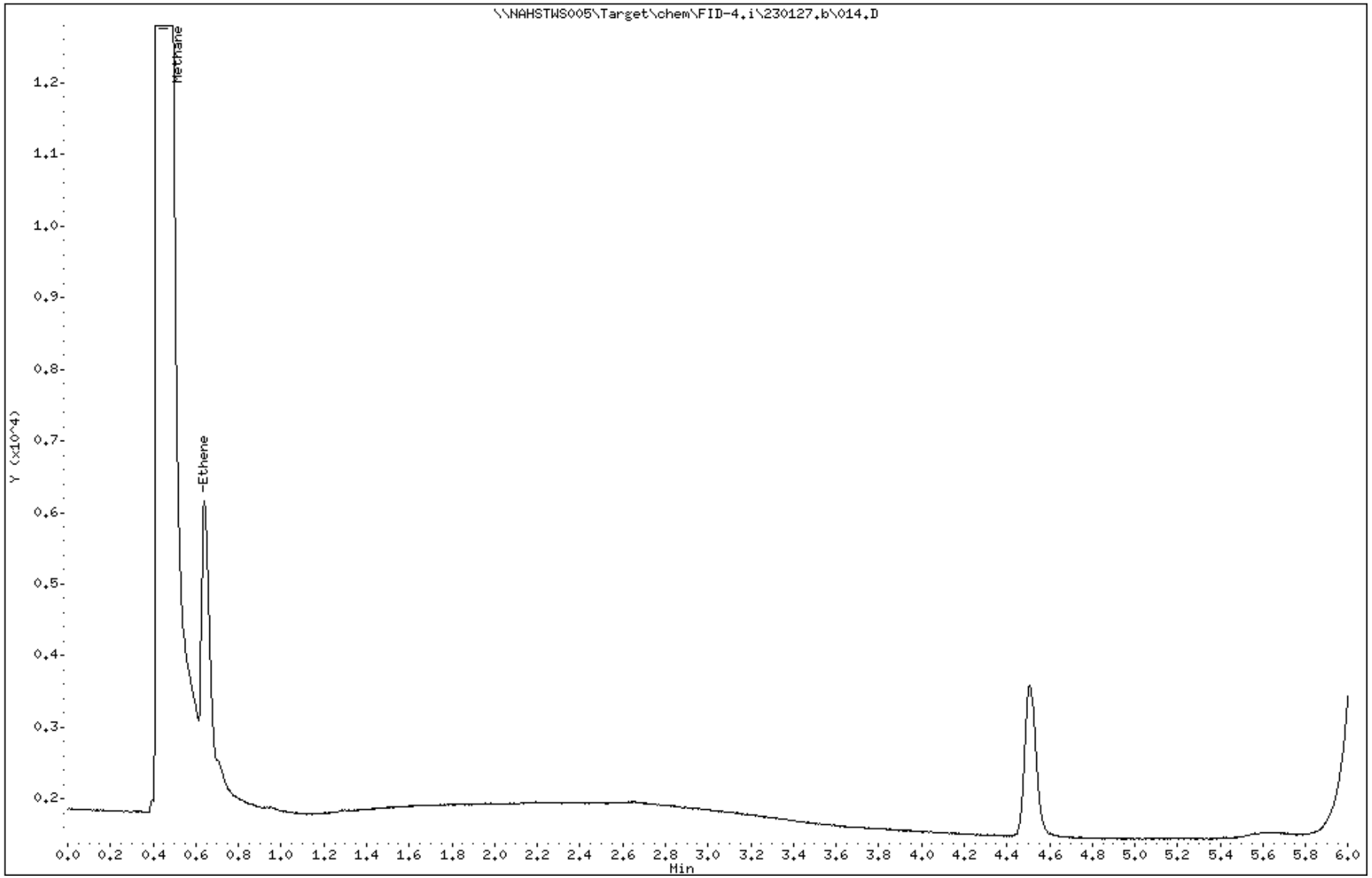
Instrument: FID-4.i

Sample Info: HS23010986-04;HS23010986-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



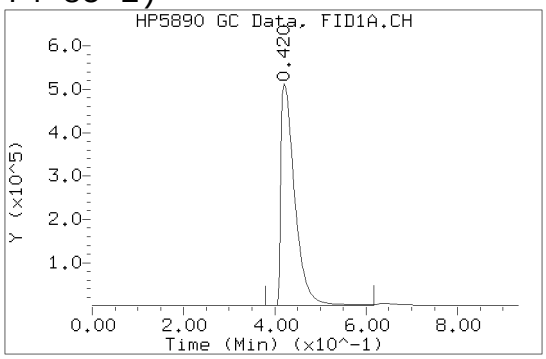
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\014.D
Inj Date : 27-JAN-2023 11:29
InstruID : FID-4.i
LabSampID : HS23010986-04

Ethene (74-85-1)

Reason Code:

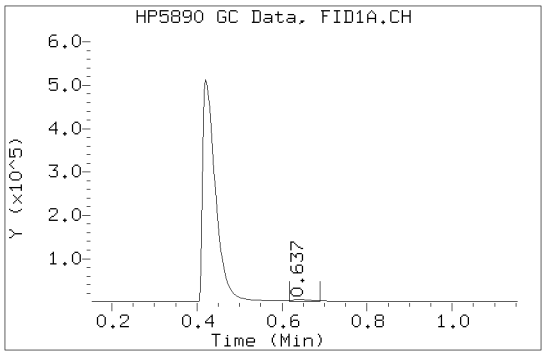
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
11:36
ALSHS
Server



AFTER

MASS
100
AREA
12079
HEIGHT
4354
31-Jan-2023
14:21
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\015.D Page 1
Report Date: 31-Jan-2023 14:22

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\015.D
Lab Smp Id: HS23010986-05 Client Smp ID: HS23010986-05
Inj Date : 27-JAN-2023 11:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-05;HS23010986-05
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.433	-0.003	63079	64.6969	64.696(A)
2 Ethene	0.650	0.653	-0.003	4540	7.75061	7.750(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\015.D

Date : 27-JAN-2023 11:37

Client ID: HS23010986-05

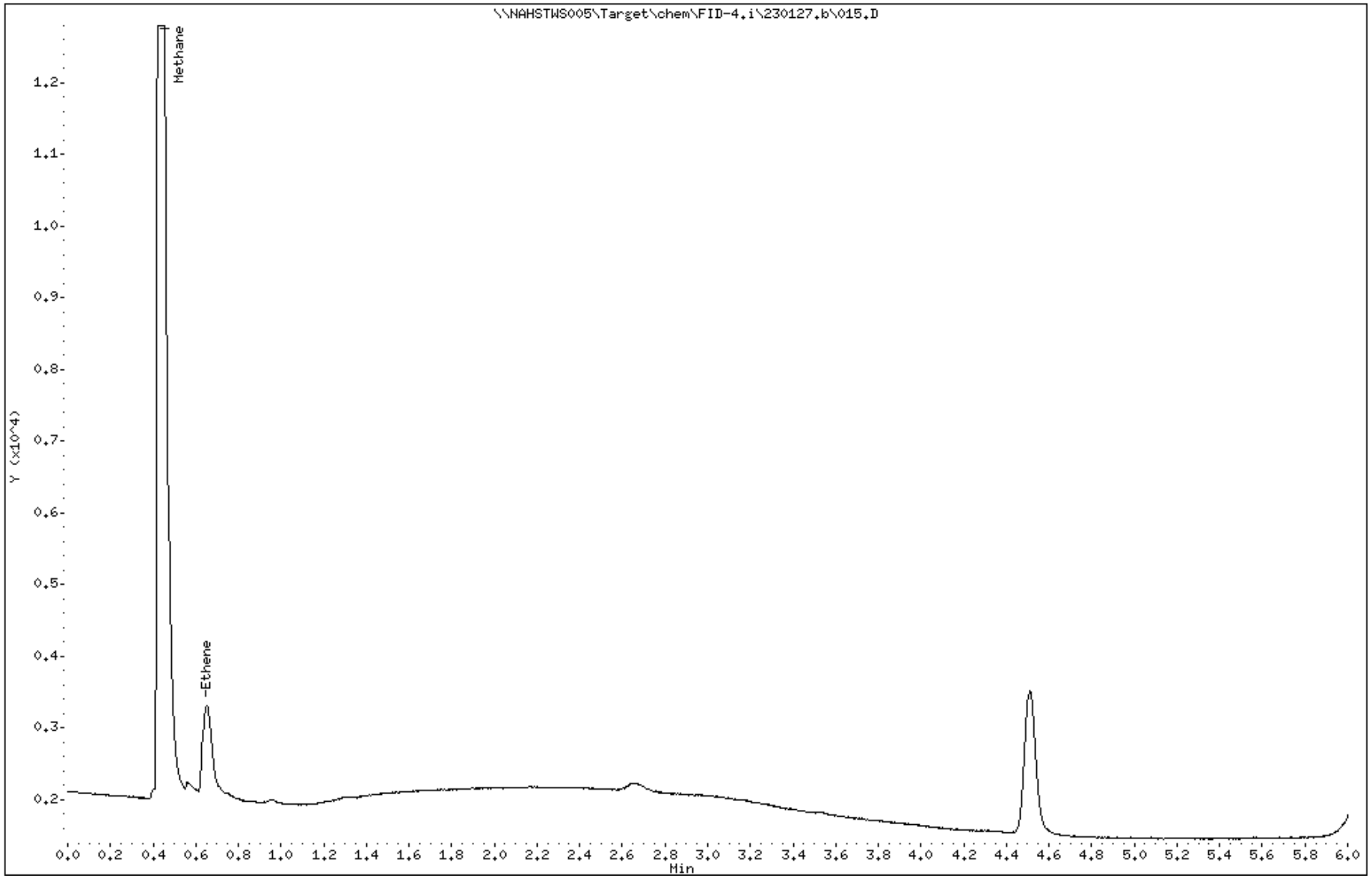
Instrument: FID-4.i

Sample Info: HS23010986-05;HS23010986-05

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



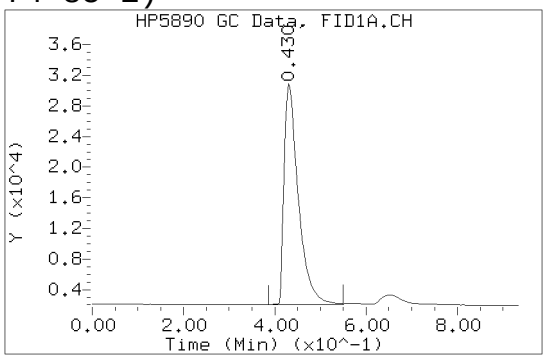
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\015.D
Inj Date : 27-JAN-2023 11:37
InstruID : FID-4.i
LabSampID : HS23010986-05

Ethene (74-85-1)

Reason Code:

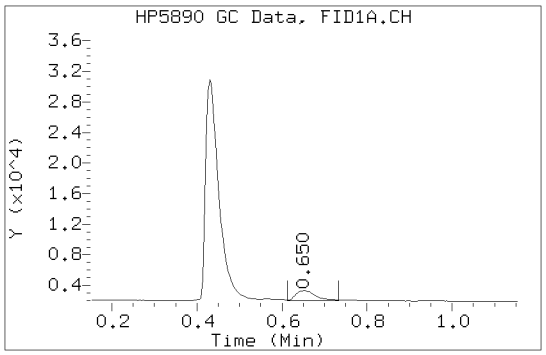
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
11:44
ALSHS
Server



AFTER

MASS
100
AREA
4540
HEIGHT
1342
31-Jan-2023
14:22
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D Page 1
Report Date: 16-Feb-2023 12:45

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D
Lab Smp Id: HS23010986-05MS Client Smp ID: HS23010986-05MS
Inj Date : 27-JAN-2023 11:47
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-05MS;HS23010986-05MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 16 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.433	-0.003	59449	60.9738	60.973(ARM)
2 Ethene	0.643	0.653	-0.010	16526	28.2129	28.212(R)
3 Ethane	0.716	0.726	-0.010	20660	28.7148	28.714(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D

Date : 27-JAN-2023 11:47

Client ID: HS23010986-05MS

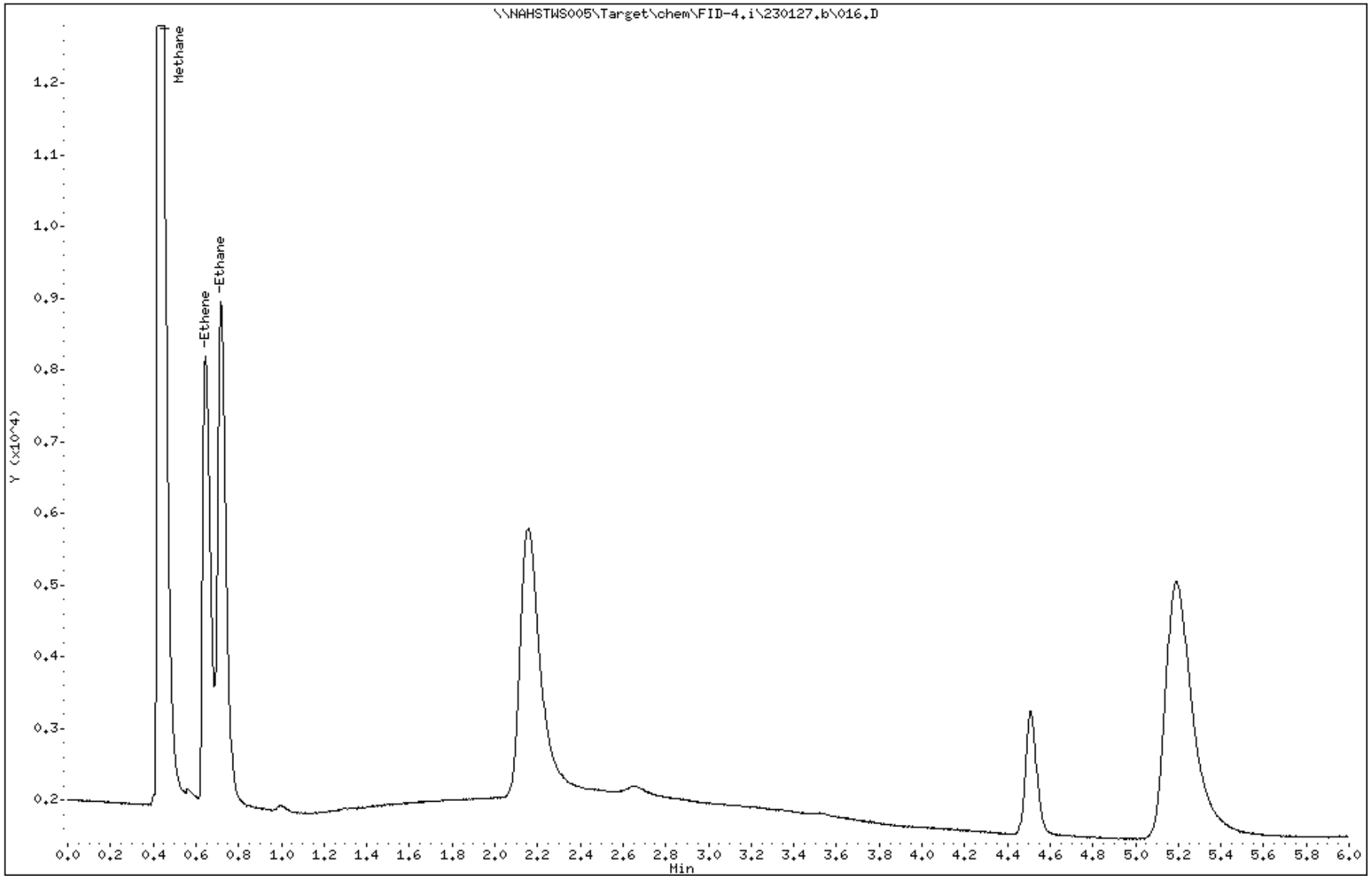
Instrument: FID-4.i

Sample Info: HS23010986-05MS;HS23010986-05MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



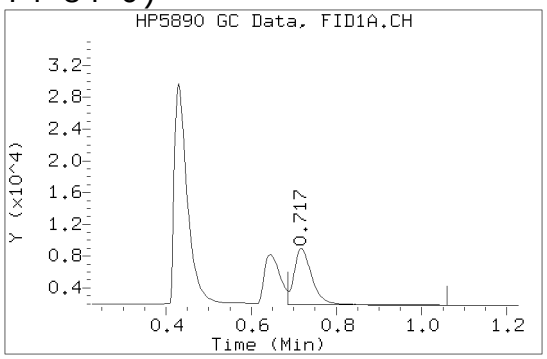
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\016.D
Inj Date : 27-JAN-2023 11:47
InstruID : FID-4.i
LabSampID : HS23010986-05MS

Ethane (74-84-0)

Reason Code:

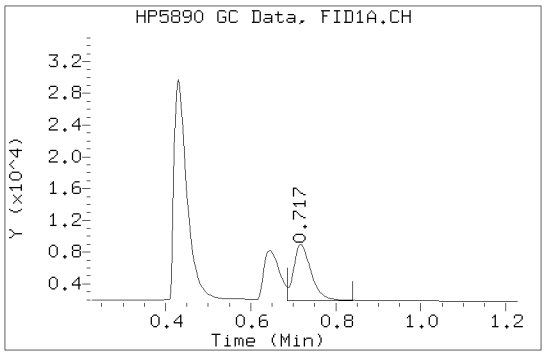
BEFORE

MASS
44
AREA
21048
HEIGHT
7084
27-Jan-2023
11:54
ALSHS
Server



AFTER

MASS
44
AREA
20660
HEIGHT
7082
16-Feb-2023
12:45
ALSHS
Ser

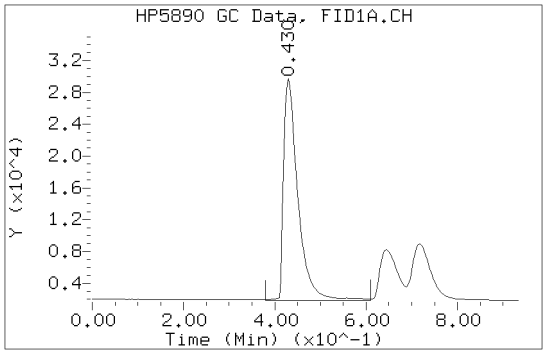


Methane (74-82-8)

Reason Code:

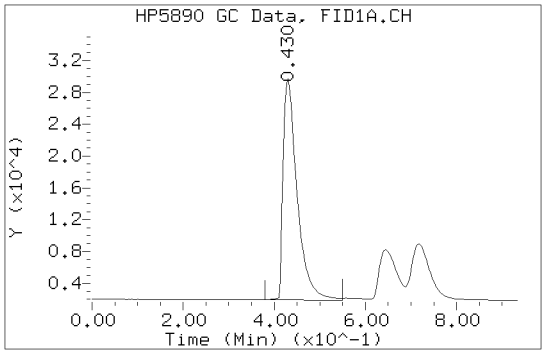
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
11:54
ALSHS
Server



AFTER

MASS
100
AREA
59449
HEIGHT
27801
16-Feb-2023
12:45
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\017.D Page 1
Report Date: 31-Jan-2023 14:23

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\017.D
Lab Smp Id: HS23010986-05MSD Client Smp ID: HS23010986-05MSD
Inj Date : 27-JAN-2023 11:56
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-05MSD;HS23010986-05MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.433	-0.010	58914	60.4251	60.425(ARM)
2 Ethene	0.636	0.653	-0.017	16846	28.7592	28.759(RM)
3 Ethane	0.710	0.723	-0.013	19748	27.4472	27.447(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\017.D

Date : 27-JAN-2023 11:56

Client ID: HS23010986-05MSD

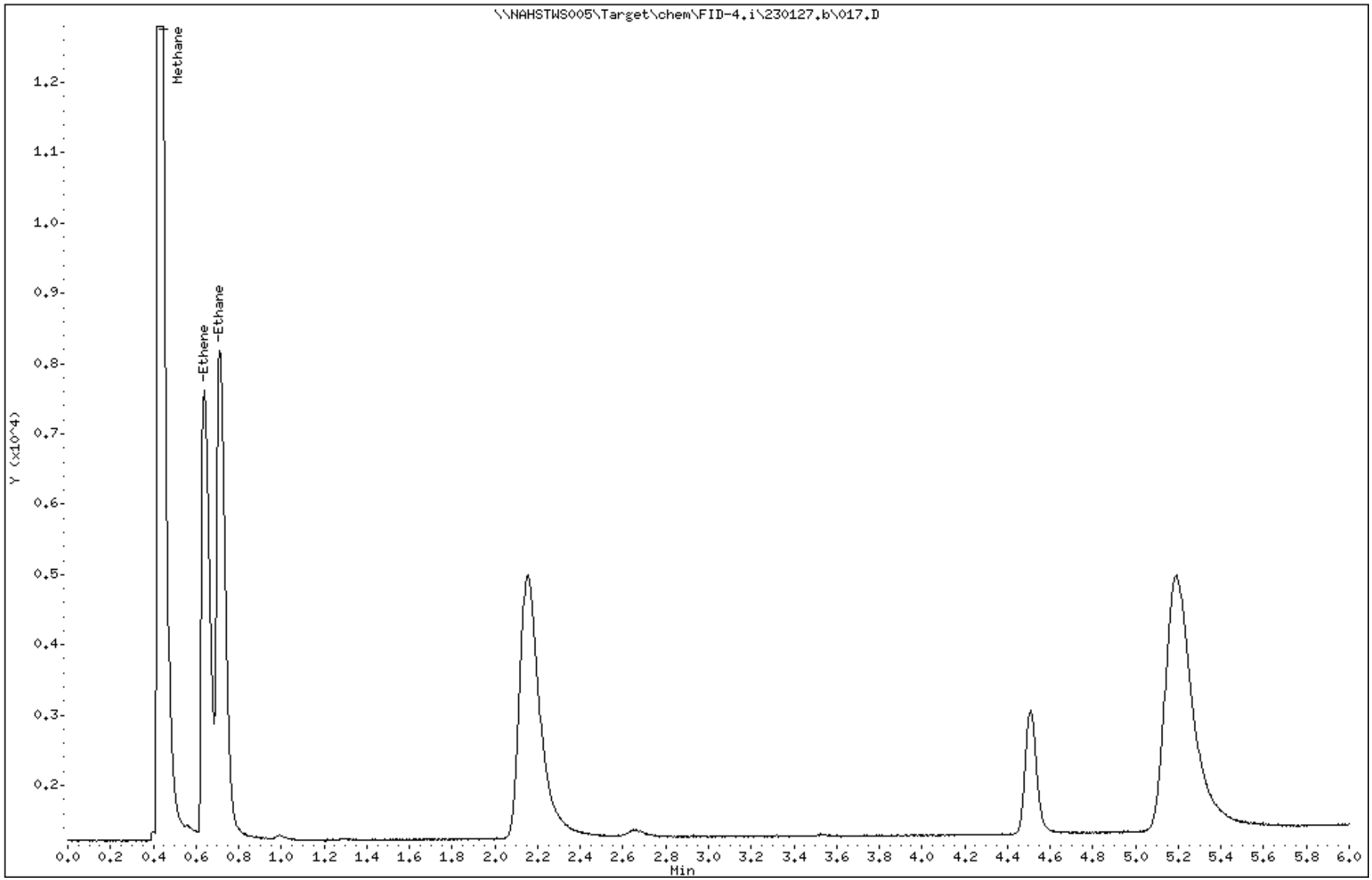
Instrument: FID-4.i

Sample Info: HS23010986-05MSD;HS23010986-05MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

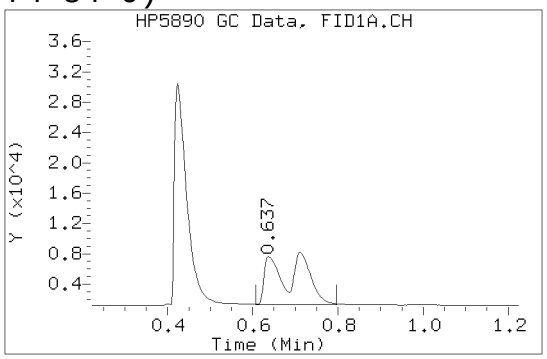


Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\017.D
Inj Date : 27-JAN-2023 11:56
InstruID : FID-4.i
LabSampID : HS23010986-05MSD

Ethane (74-84-0)

BEFORE

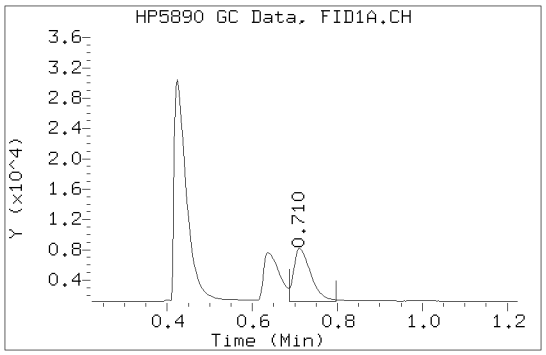
MASS
44
AREA
35378
HEIGHT
6340
27-Jan-2023
12:04
ALSHS
Server



AFTER

MASS
44
AREA
19748
HEIGHT
6987
31-Jan-2023
14:23
ALSHS
Ser

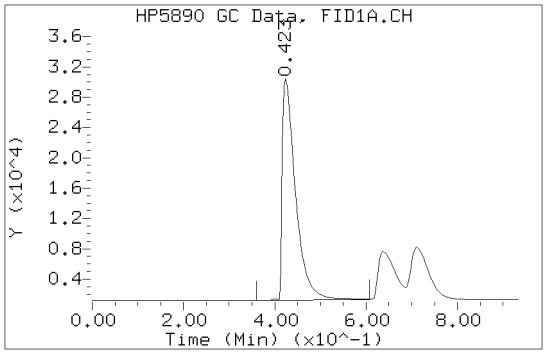
Reason Code:



Methane (74-82-8)

BEFORE

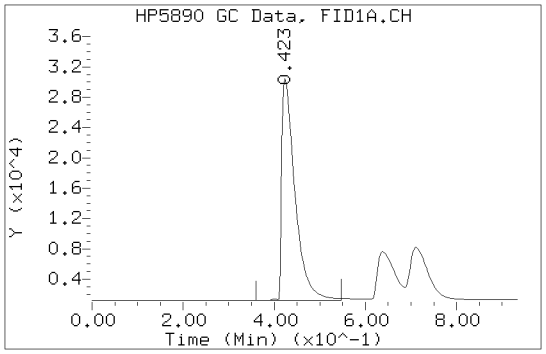
MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:04
ALSHS
Server



AFTER

MASS
100
AREA
58914
HEIGHT
29228
31-Jan-2023
14:23
ALSHS
Ser

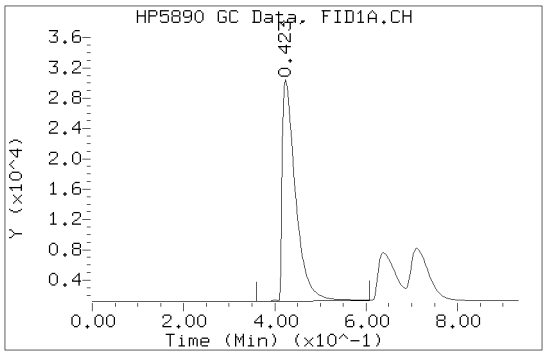
Reason Code:



Ethene (74-85-1)

BEFORE

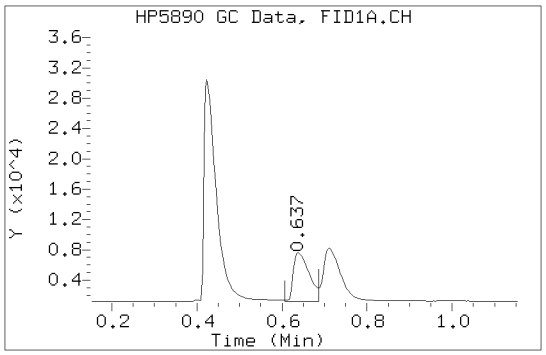
MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:04
ALSHS
Server



AFTER

MASS
100
AREA
16846
HEIGHT
6418
31-Jan-2023
14:23
ALSHS
Ser

Reason Code:



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\018.D
Lab Smp Id: HS23010986-06 Client Smp ID: HS23010986-06
Inj Date : 27-JAN-2023 12:04
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-06;HS23010986-06
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.433	0.000	1293726	1326.91	1326.908(AM)
2 Ethene	0.636	0.653	-0.017	7048	12.0322	12.032(M)
3 Ethane	0.720	0.723	-0.003	4896	6.80482	6.804(M)

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\018.D

Date : 27-JAN-2023 12:04

Client ID: HS23010986-06

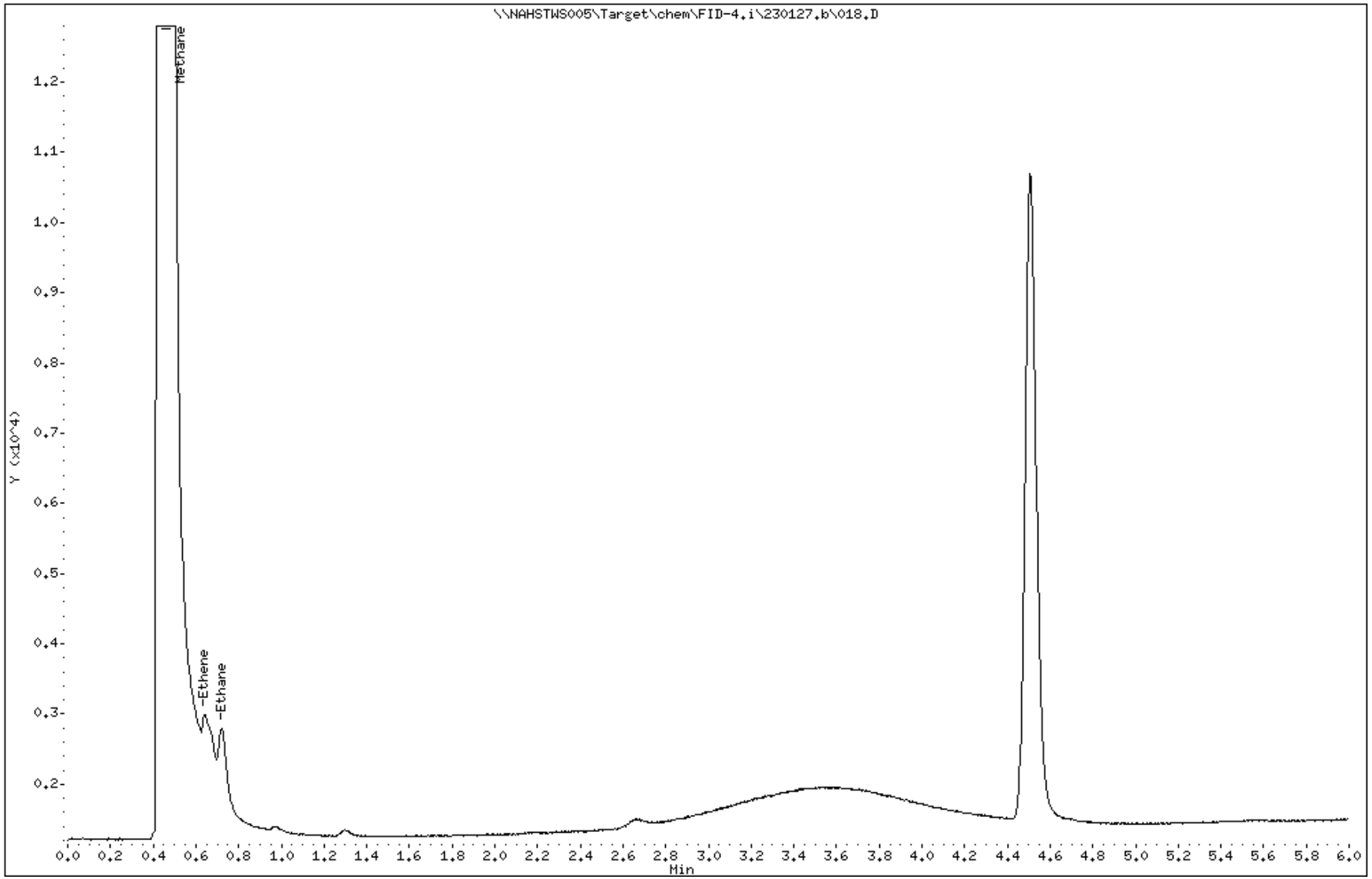
Instrument: FID-4.i

Sample Info: HS23010986-06;HS23010986-06

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



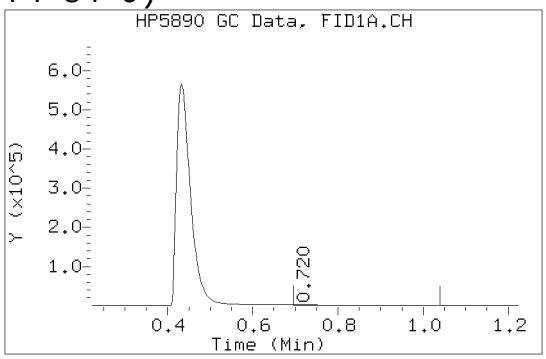
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\018.D
Inj Date : 27-JAN-2023 12:04
InstruID : FID-4.i
LabSampID : HS23010986-06

Ethane (74-84-0)

Reason Code:

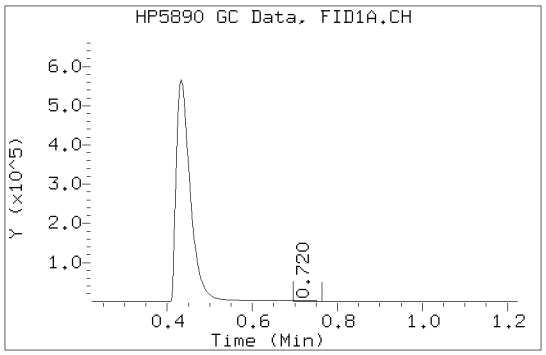
BEFORE

MASS
44
AREA
7383
HEIGHT
1545
27-Jan-2023
12:13
ALSHS
Server



AFTER

MASS
44
AREA
4896
HEIGHT
1569
31-Jan-2023
14:23
ALSHS
Ser

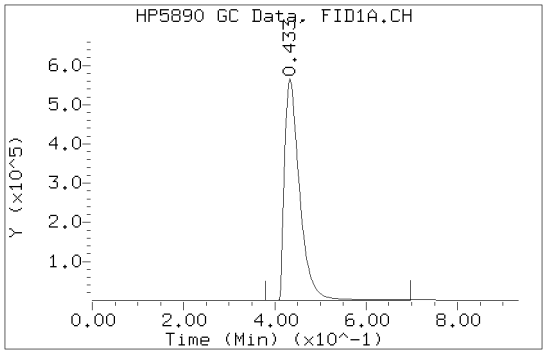


Methane (74-82-8)

Reason Code:

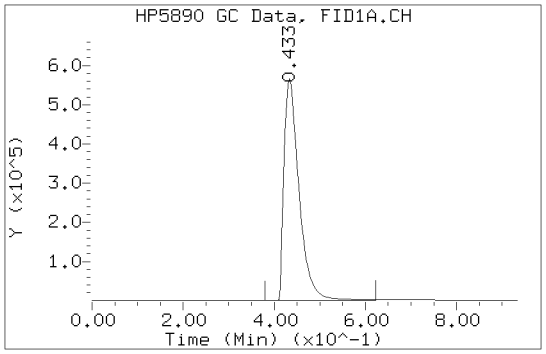
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:13
ALSHS
Server



AFTER

MASS
100
AREA
1293726
HEIGHT
565127
31-Jan-2023
14:23
ALSHS
Ser

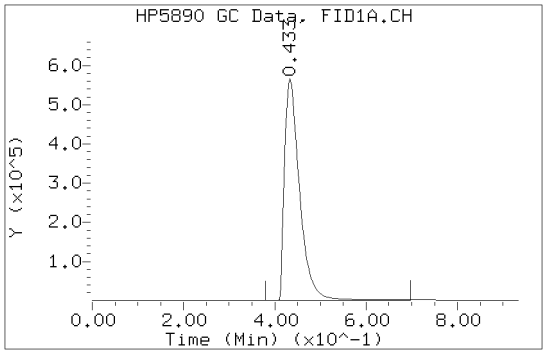


Ethene (74-85-1)

Reason Code:

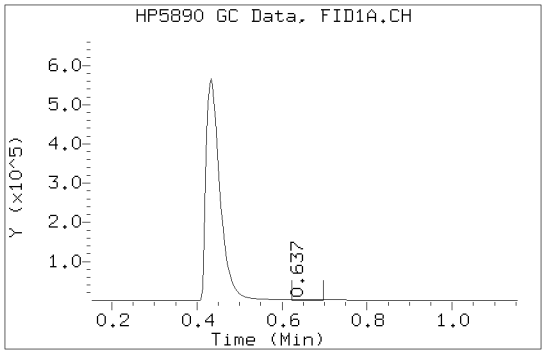
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:13
ALSHS
Server



AFTER

MASS
100
AREA
7048
HEIGHT
1773
31-Jan-2023
14:23
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\019.D
Lab Smp Id: HS23010986-07 Client Smp ID: HS23010986-07
Inj Date : 27-JAN-2023 12:13
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-07;HS23010986-07
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.433	-0.010	1381450	1416.88	1416.882(AM)
2 Ethene	0.640	0.653	-0.013	6566	11.2094	11.209(M)
3 Ethane	0.713	0.723	-0.010	4827	6.70892	6.708(M)

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\019.D

Date : 27-JAN-2023 12:13

Client ID: HS23010986-07

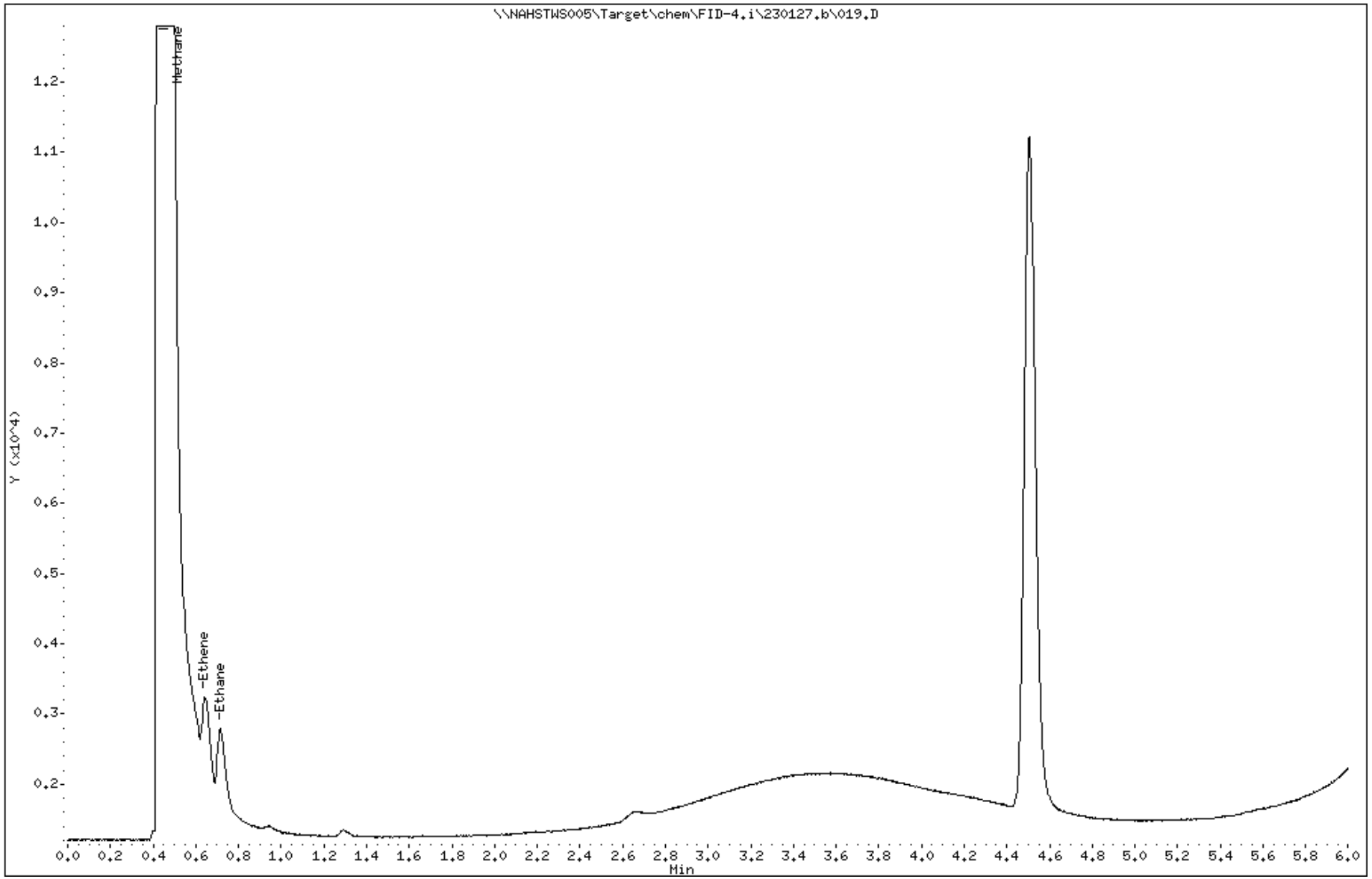
Instrument: FID-4.i

Sample Info: HS23010986-07;HS23010986-07

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



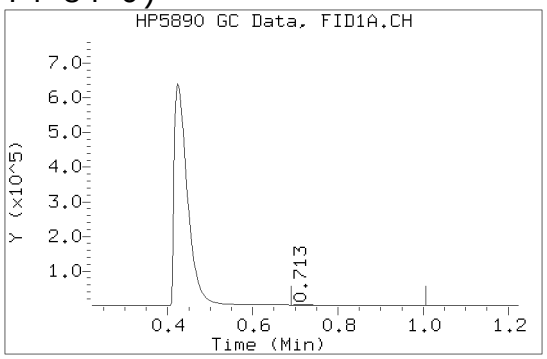
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\019.D
Inj Date : 27-JAN-2023 12:13
InstruID : FID-4.i
LabSampID : HS23010986-07

Ethane (74-84-0)

Reason Code:

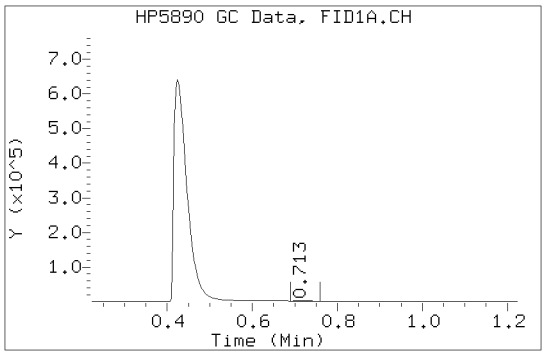
BEFORE

MASS
44
AREA
7190
HEIGHT
1538
27-Jan-2023
12:20
ALSHS
Server



AFTER

MASS
44
AREA
4827
HEIGHT
1575
31-Jan-2023
14:24
ALSHS
Ser

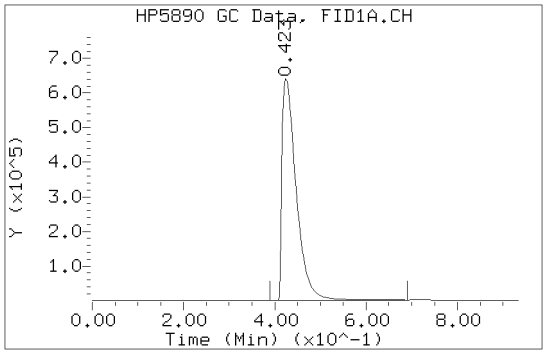


Methane (74-82-8)

Reason Code:

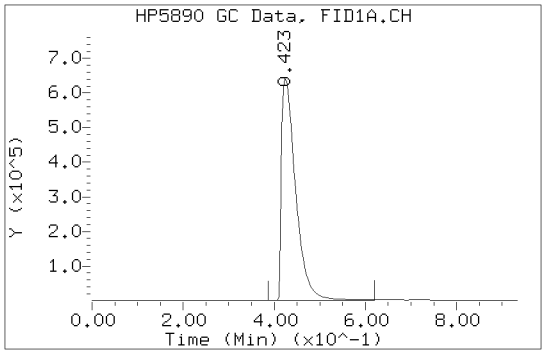
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:20
ALSHS
Server



AFTER

MASS
100
AREA
1381450
HEIGHT
639884
31-Jan-2023
14:24
ALSHS
Ser

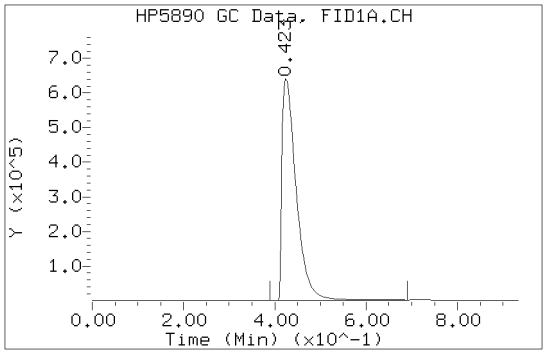


Ethene (74-85-1)

Reason Code:

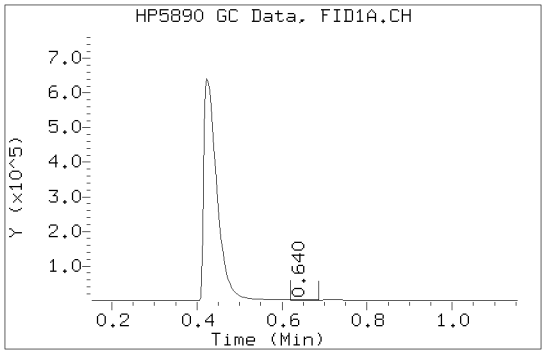
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
12:20
ALSHS
Server



AFTER

MASS
100
AREA
6566
HEIGHT
2039
31-Jan-2023
14:24
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 12:54
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:23 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.426	0.426	0.000	8773	9.64700	8.998
2 Ethene	0.646	0.646	0.000	11221	16.8500	19.156
3 Ethane	0.716	0.716	0.000	13914	18.0430	19.338

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\022.D

Date : 27-JAN-2023 12:54

Client ID: RSK-CCV

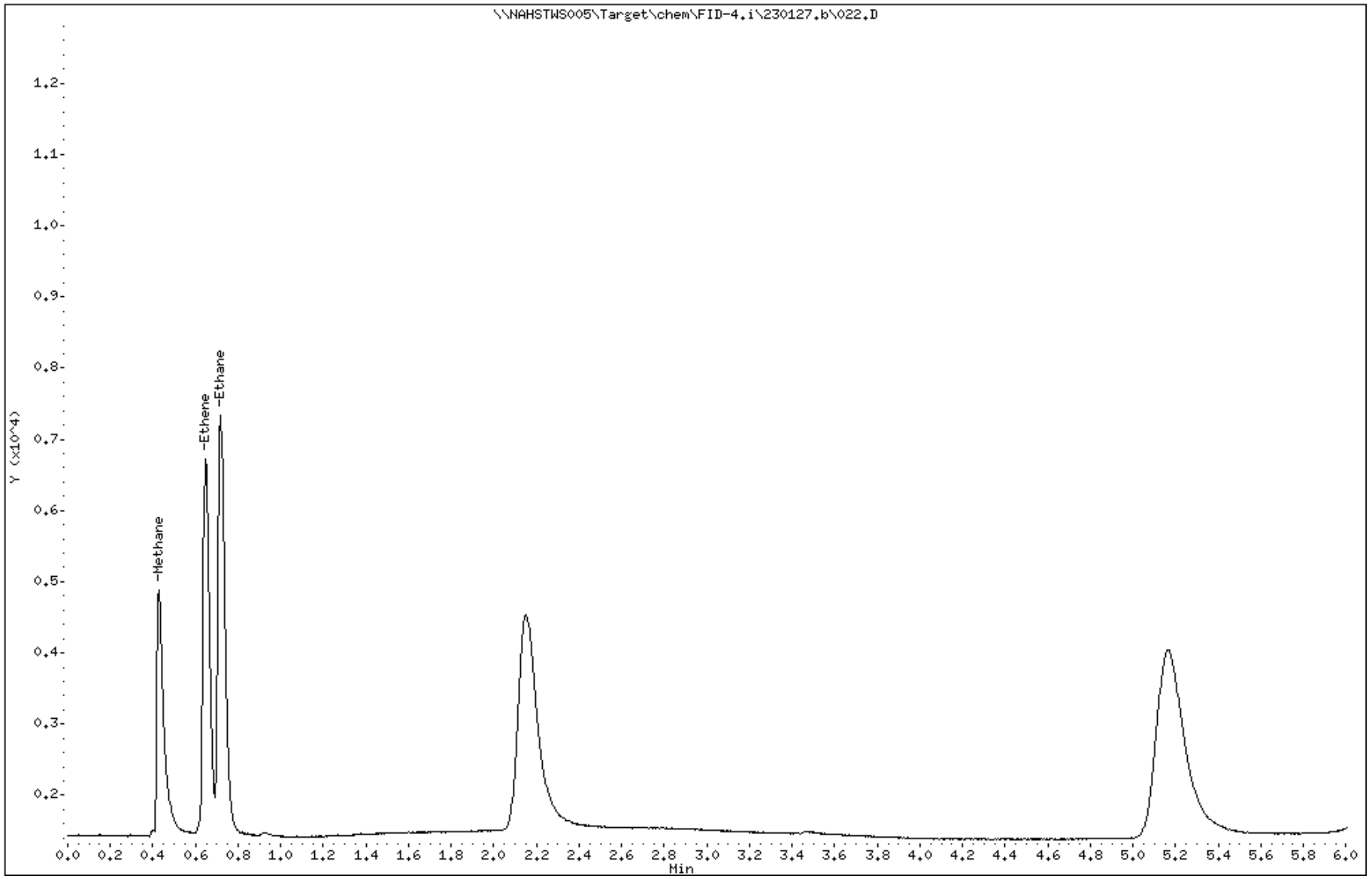
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\022.D
Inj Date : 27-JAN-2023 12:54
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\027.D
Lab Smp Id: HS23010986-04 Client Smp ID: HS23010986-04
Inj Date : 27-JAN-2023 13:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-04;HS23010986-04
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:23 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 27
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.426	0.024	10731	11.0062	1100.624(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\027.D

Date : 27-JAN-2023 13:37

Client ID: HS23010986-04

Instrument: FID-4.i

Sample Info: HS23010986-04;HS23010986-04

Operator: PL

Column phase: Rtx-PLOT

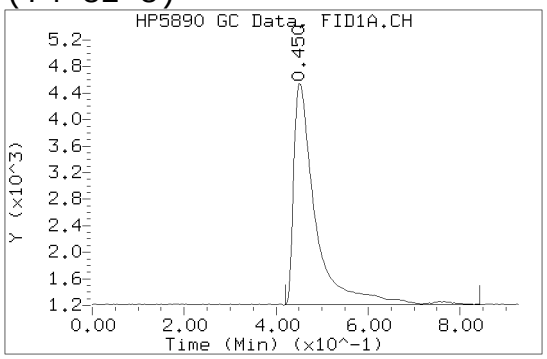
Column diameter: 0.53

Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\027.D
Inj Date : 27-JAN-2023 13:37
InstruID : FID-4.i
LabSampID : HS23010986-04

Methane (74-82-8)

BEFORE

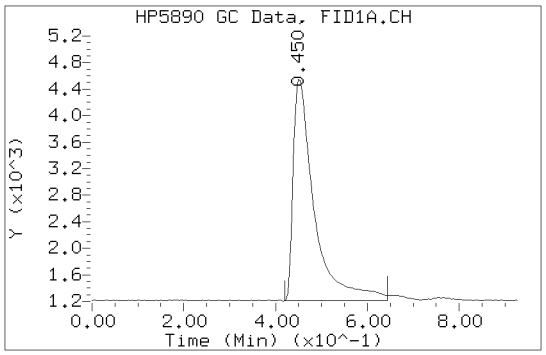
MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
13:48
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
10731
HEIGHT
3334
27-Jan-2023
14:24
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\028.D
Lab Smp Id: HS23010986-05 Client Smp ID: HS23010986-05
Inj Date : 27-JAN-2023 13:45
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-05;HS23010986-05
Misc Info : ;1;0;5
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 16-Feb-2023 13:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 28
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.433	0.003	13573	13.9211	69.605
2 Ethene	0.660	0.653	0.007	1443	2.46346	12.317(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\028.D

Date : 27-JAN-2023 13:45

Client ID: HS23010986-05

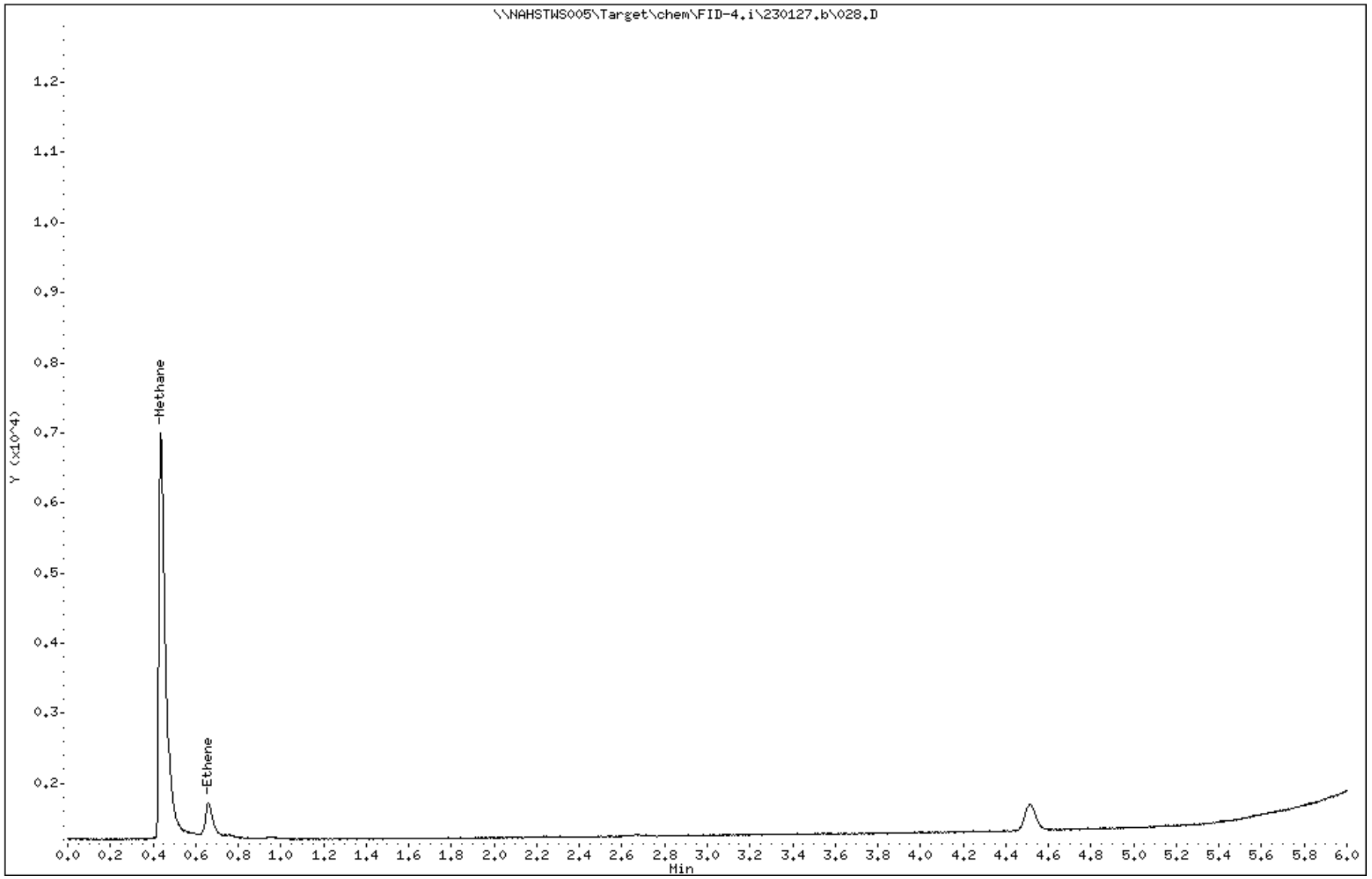
Instrument: FID-4.i

Sample Info: HS23010986-05;HS23010986-05

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



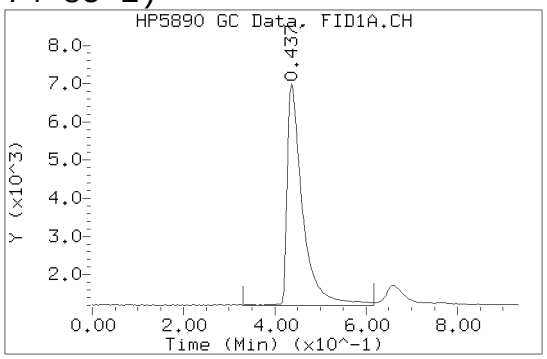
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\028.D
Inj Date : 27-JAN-2023 13:45
InstruID : FID-4.i
LabSampID : HS23010986-05

Ethene (74-85-1)

Reason Code:

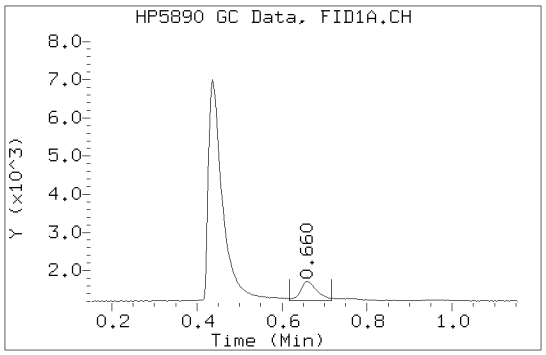
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
13:53
ALSHS
Server



AFTER

MASS
100
AREA
1443
HEIGHT
517
16-Feb-2023
13:03
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\029.D Page 1
Report Date: 27-Jan-2023 14:25

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\029.D
Lab Smp Id: HS23010986-06 Client Smp ID: HS23010986-06
Inj Date : 27-JAN-2023 13:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-06;HS23010986-06
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:23 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 29
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.450	0.426	0.024	12760	13.0873	1308.728(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\029.D

Date : 27-JAN-2023 13:53

Client ID: HS23010986-06

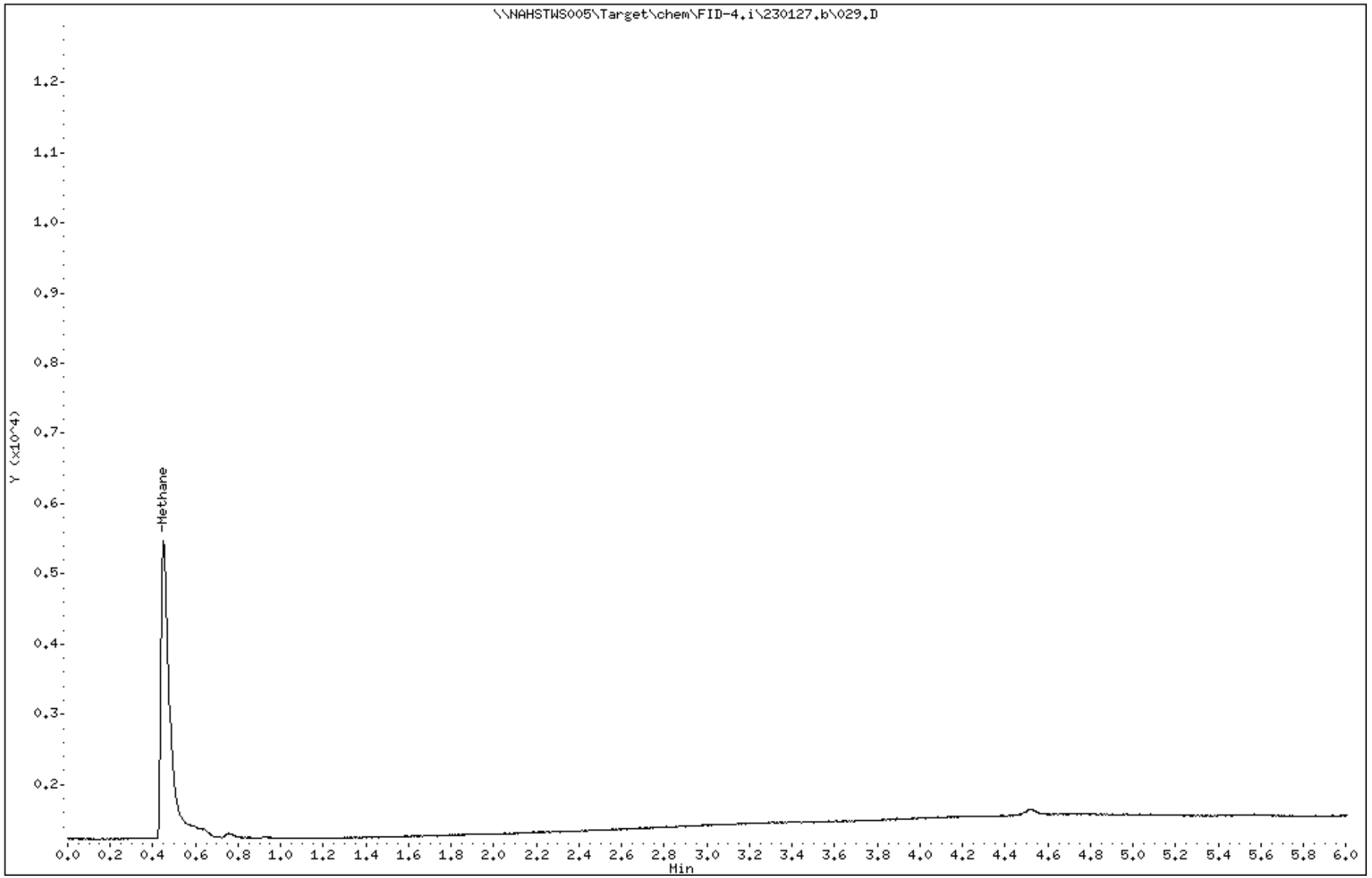
Instrument: FID-4.i

Sample Info: HS23010986-06;HS23010986-06

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



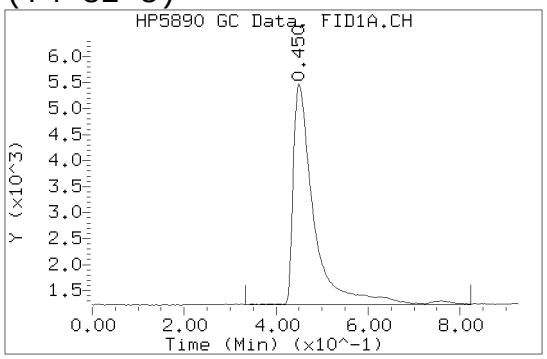
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\029.D
Inj Date : 27-JAN-2023 13:53
InstruID : FID-4.i
LabSampID : HS23010986-06

Methane (74-82-8)

Reason Code:

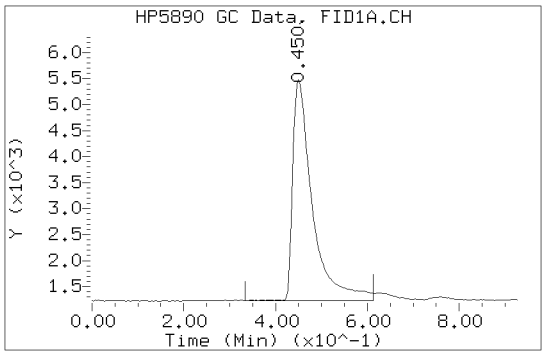
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
14:01
ALSHS
Server



AFTER

MASS
100
AREA
12760
HEIGHT
4249
27-Jan-2023
14:25
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\030.D Page 1
Report Date: 27-Jan-2023 14:25

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\030.D
Lab Smp Id: HS23010986-07 Client Smp ID: HS23010986-07
Inj Date : 27-JAN-2023 14:03
Operator : PL Inst ID: FID-4.i
Smp Info : HS23010986-07;HS23010986-07
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:23 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 30
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.450	0.426	0.024	13001	13.3345	1333.446(M)
3 Ethane	0.686	0.716	-0.030	1124	1.56222	156.221(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\030.D

Date : 27-JAN-2023 14:03

Client ID: HS23010986-07

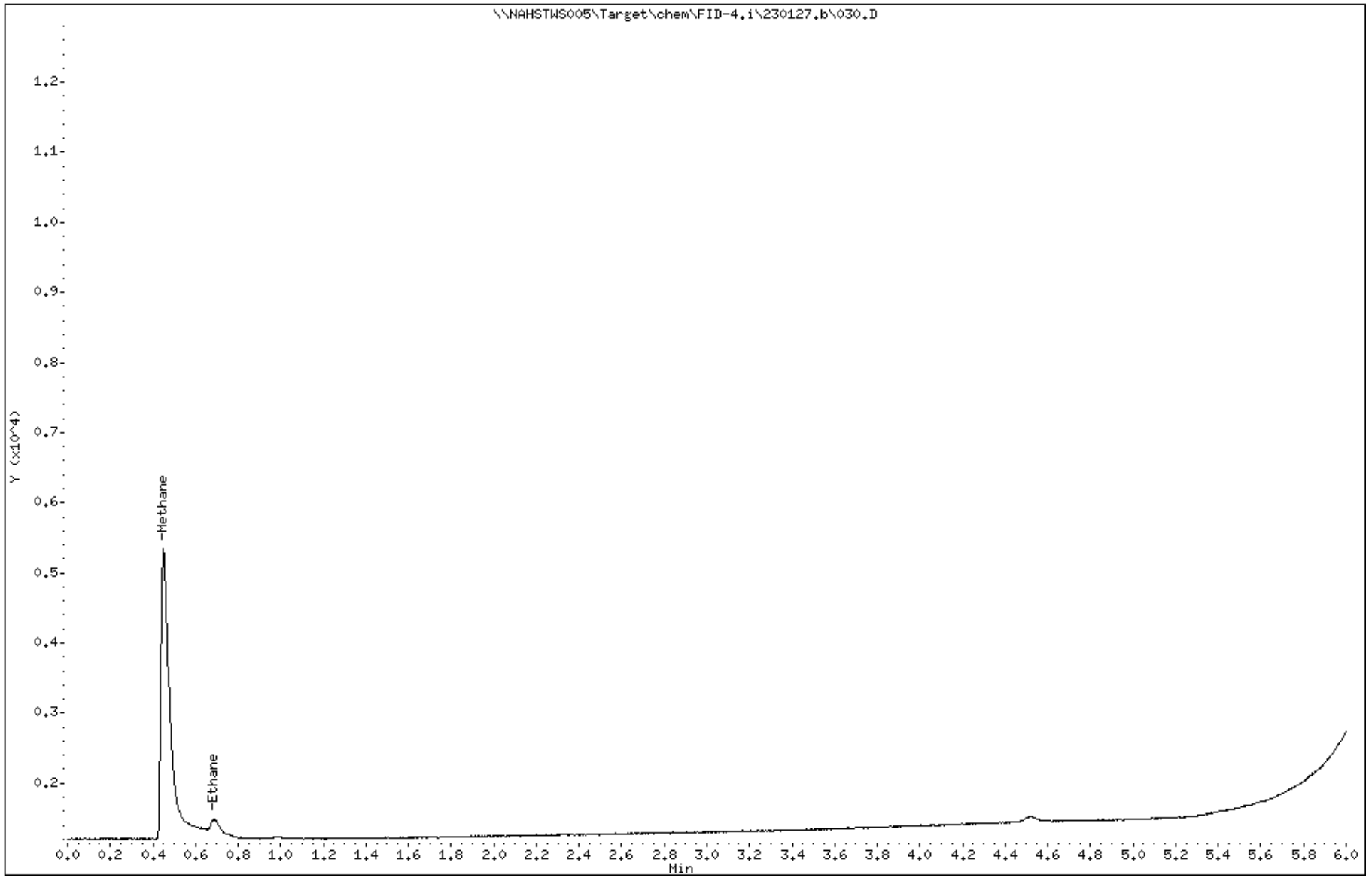
Instrument: FID-4.i

Sample Info: HS23010986-07;HS23010986-07

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



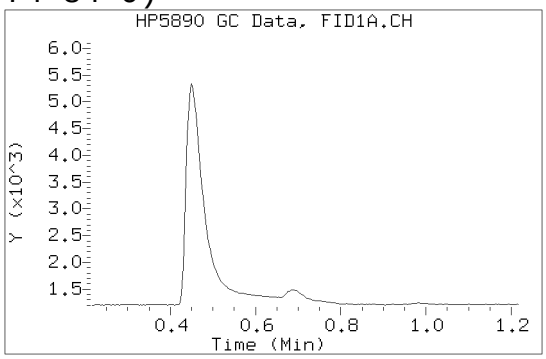
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\030.D
Inj Date : 27-JAN-2023 14:03
InstruID : FID-4.i
LabSampID : HS23010986-07

Ethane (74-84-0)

Reason Code:

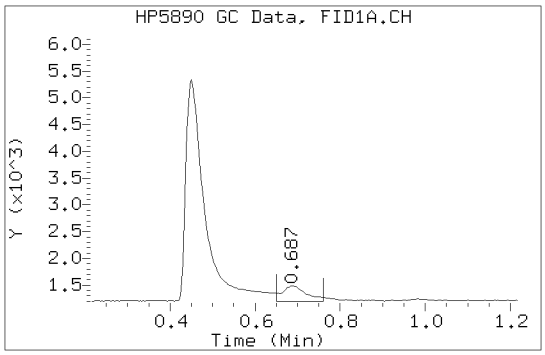
BEFORE

MASS
44
AREA
0
HEIGHT
0
27-Jan-2023
14:10
ALSHS
Server



AFTER

MASS
44
AREA
1124
HEIGHT
286
27-Jan-2023
14:25
ALSHS
Ser

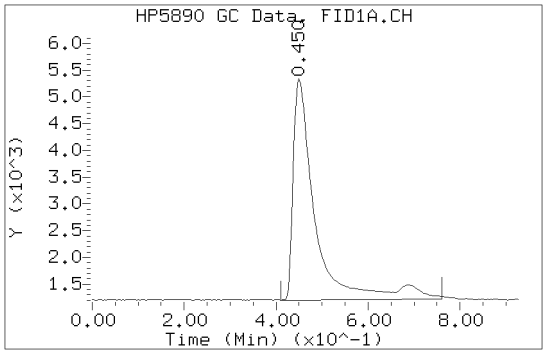


Methane (74-82-8)

Reason Code:

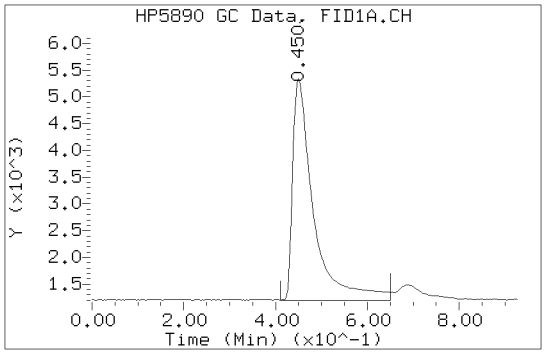
BEFORE

MASS
100
AREA
0
HEIGHT
0
27-Jan-2023
14:10
ALSHS
Server



AFTER

MASS
100
AREA
13001
HEIGHT
4138
27-Jan-2023
14:25
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D Page 1
Report Date: 31-Jan-2023 14:29

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 27-JAN-2023 14:13
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\RSKNI3.m
Meth Date : 27-Jan-2023 14:26 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7007

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	8577	9.64700	8.796
2 Ethene	0.653	0.653	0.000	11293	16.8500	19.279
3 Ethane	0.726	0.726	0.000	14130	18.0430	19.638(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D

Date : 27-JAN-2023 14:13

Client ID: RSK-CCV

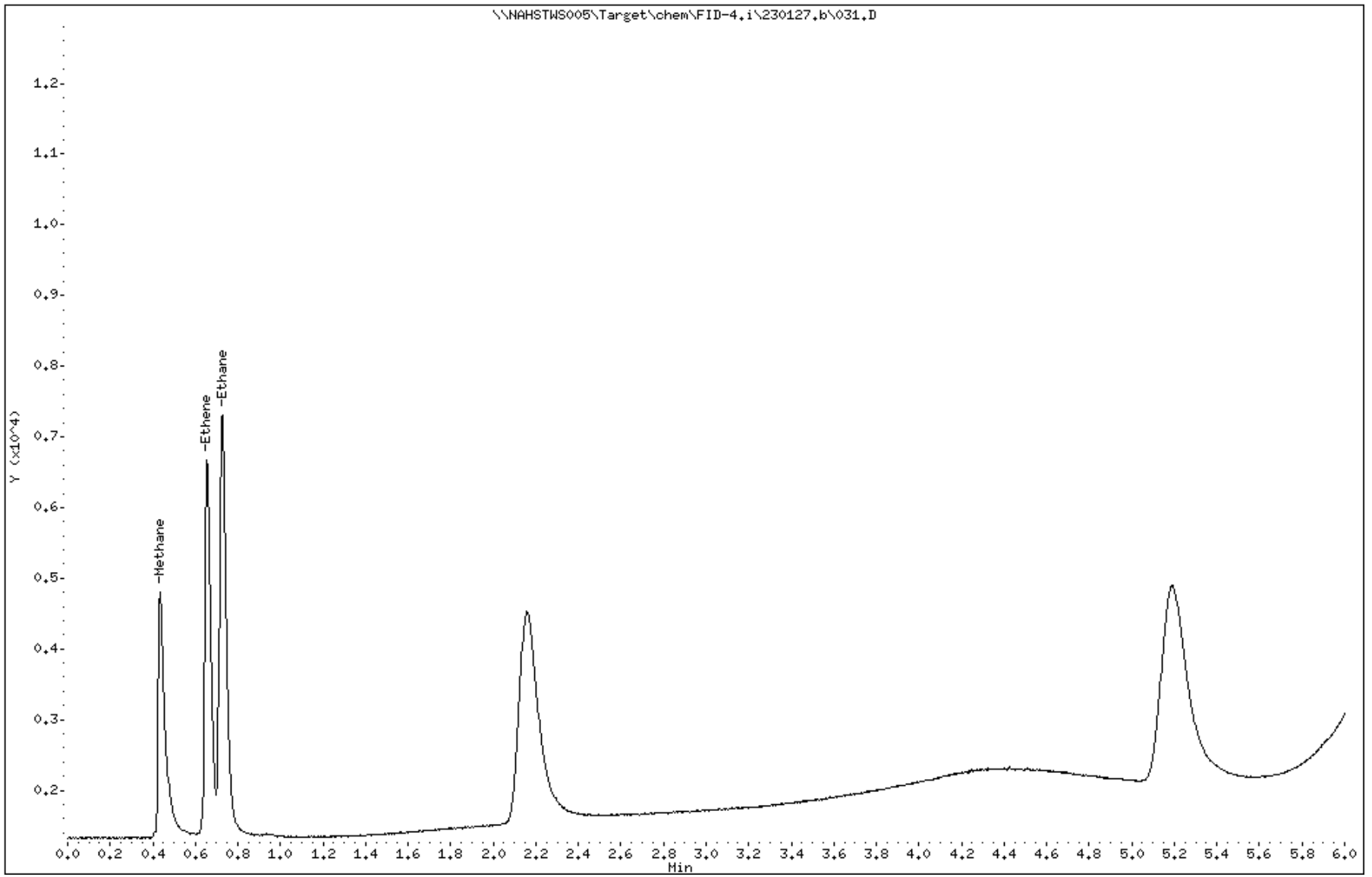
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



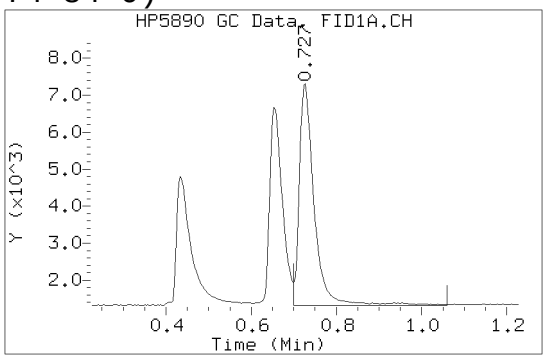
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230127.b\031.D
Inj Date : 27-JAN-2023 14:13
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

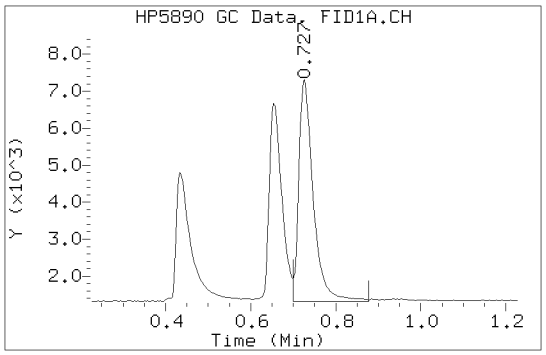
BEFORE

MASS
44
AREA
14464
HEIGHT
5986
27-Jan-2023
14:21
ALSHS
Server



AFTER

MASS
44
AREA
14130
HEIGHT
5986
31-Jan-2023
14:29
ALSHS
Ser



HS23010986 Wet Chemistry

ALS WO# HS23010986

C:\TOC-L\Data\2022_12_22_001_CAL.tlx

HS-23010986

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Standard	NPOC	CAL	3100606518	12_22_2022	1.000		
2	Unknown	NPOC	ICV	3100606203	12_22_2022	1.000	NPOC:10.45mg/L	
3	Unknown	NPOC	ICB		12_22_2022	1.000	NPOC:0.3762mg/	

	Status	Date / Time	Vial
1	Completed	12/22/2022 1:40:24	1, 2, 3, 4, 5,
2	Completed	12/22/2022 1:53:55	8
3	Completed	12/22/2022 2:06:25	1

TOC-Control L Report

2022_12_22_001_CAL.tlx

Instr.Information

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

Cal. Curve

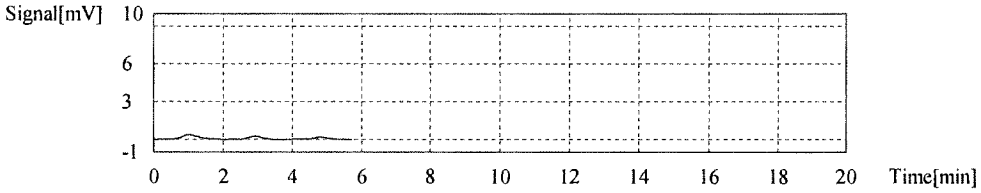
Sample Name:	CAL
Sample ID:	3100606518
Cal. Curve:	12_22_2022_CAL.2022_12_22_12_06_45.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.9953	50uL	1.000	*******		12/22/2022 12:15:19 PM
2	0.6996	50uL	1.000	*******		12/22/2022 12:17:28 PM
3	0.3943	50uL	1.000	*******		12/22/2022 12:19:35 PM

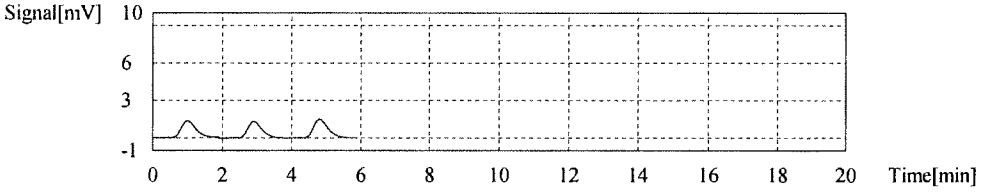
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.6964



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.828	50uL	1.000	*******		12/22/2022 12:27:39 PM
2	3.692	50uL	1.000	*******		12/22/2022 12:29:46 PM
3	4.395	50uL	1.000	*******		12/22/2022 12:32:03 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	3.972



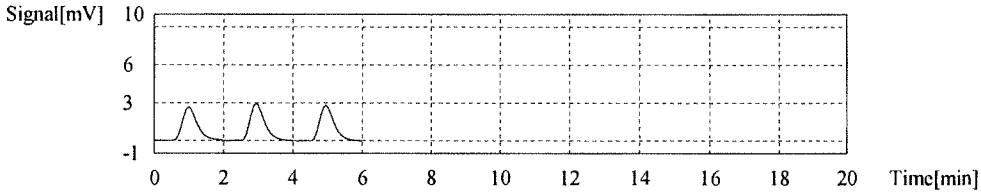
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.632	50uL	1.000	*******		12/22/2022 12:40:09 PM
2	8.569	50uL	1.000	*******		12/22/2022 12:42:24 PM
3	8.142	50uL	1.000	*******		12/22/2022 12:44:38 PM

TOC-Control L Report

2022_12_22_001_CAL.tlx

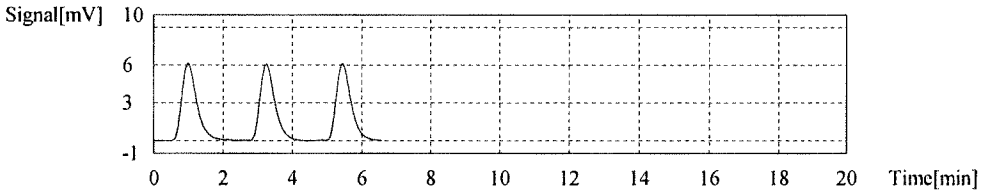
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 8.114



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	18.24	50uL	1.000	*******		12/22/2022 12:53:02 PM
2	18.17	50uL	1.000	*******		12/22/2022 12:55:30 PM
3	18.13	50uL	1.000	*******		12/22/2022 12:57:50 PM

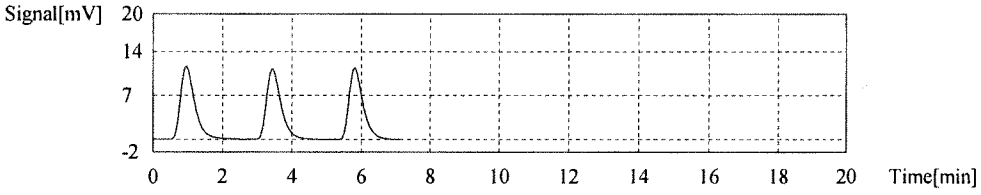
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 18.18



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	33.16	50uL	1.000	*******		12/22/2022 1:06:28 PM
2	32.94	50uL	1.000	*******		12/22/2022 1:09:05 PM
3	32.73	50uL	1.000	*******		12/22/2022 1:11:32 PM

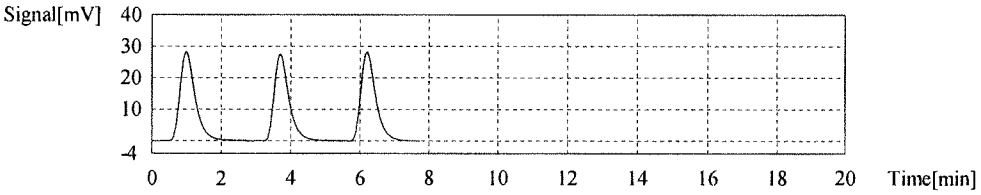
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 32.94



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	85.96	50uL	1.000	*******		12/22/2022 1:20:24 PM
2	82.23	50uL	1.000	*******		12/22/2022 1:23:09 PM
3	84.99	50uL	1.000	*******		12/22/2022 1:25:54 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 84.39



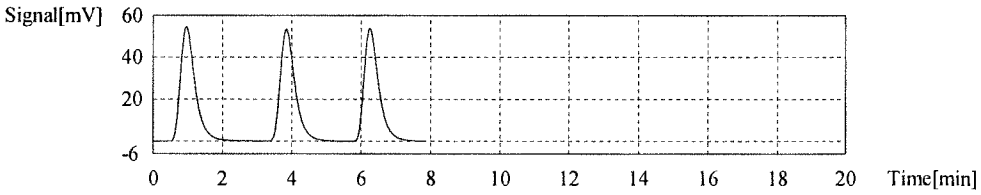
Conc: 50.00mg/L

TOC-Control L Report

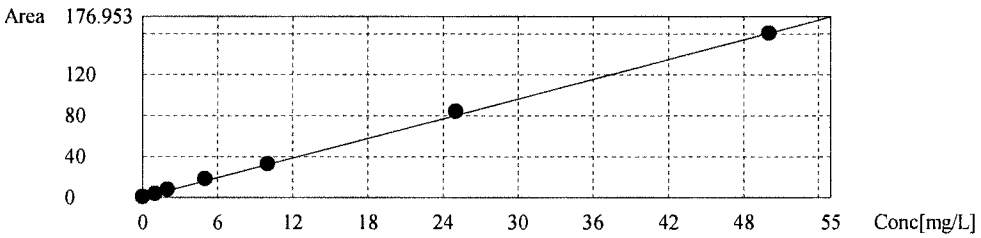
2022_12_22_001_CAL.tlx

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	162.0	50uL	1.000	*******		12/22/2022 1:34:55 PM
2	160.0	50uL	1.000	*******		12/22/2022 1:37:37 PM
3	160.6	50uL	1.000	*******		12/22/2022 1:40:24 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 160.9



Slope: 3.212
Intercept 0.000
r^2 0.9995
r 0.9998
RSE(%) N/A
Zero Shift Yes



Sample

Sample Name: ICV
Sample ID: 3100606203
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

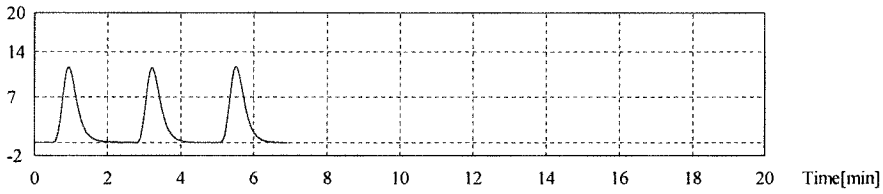
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.43	10.41mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 1:48:50 PM
2	33.28	10.36mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 1:51:22 PM
3	33.98	10.58mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 1:53:55 PM

Mean Area 33.56
Mean Conc. 10.45mg/L



Sample

TOC-Control L Report

2022_12_22_001_CAL.tlx

Sample Name: ICB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

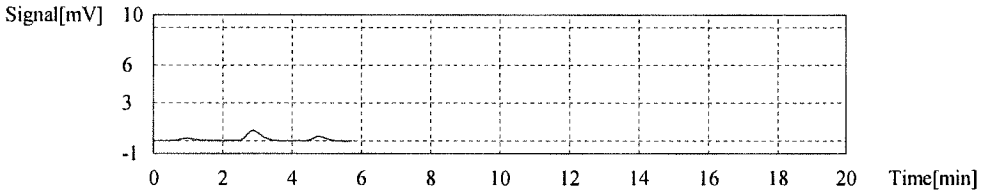
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3762mg/L

1. Det

Anal.: NPOC

No.	Area	Conc	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3846	0.1197mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 2:02:10 PM
2	2.321	0.7226mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 2:04:18 PM
3	0.9197	0.2863mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	12/22/2022 2:06:25 PM

Mean Area 1.208
Mean Conc. 0.3762mg/L



C:\TOC-L\Data\2023_01_30_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
1	Unknown	NPOC	CCV	321101806	12_22_2022_CAL.cal	1.000	NPOC:24.95mg/L
2	Unknown	NPOC	CCB		12_22_2022_CAL.cal	1.000	NPOC:0.2868mg/
3	Unknown	NPOC	MBLK-01302023		12_22_2022_CAL.cal	1.000	NPOC:0.1758mg/
4	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022_CAL.cal	1.000	NPOC:10.44mg/L
5	Unknown	NPOC	LCSD-01302023		12_22_2022_CAL.cal	1.000	NPOC:10.41mg/L
6	Unknown	NPOC	HS23011256-04		12_22_2022_CAL.cal	1.000	NPOC:90.54mg/L
7	Unknown	NPOC	HS23011192-04DF10		12_22_2022_CAL.cal	1.000	NPOC:35.25mg/L
8	Unknown	NPOC	HS23011210-01		12_22_2022_CAL.cal	1.000	NPOC:8.447mg/L
9	Unknown	NPOC	HS23011437-01		12_22_2022_CAL.cal	1.000	NPOC:0.9185mg/
10	Unknown	NPOC	HS23011437-02		12_22_2022_CAL.cal	1.000	NPOC:1.320mg/L
11	Unknown	NPOC	HS23011437-03		12_22_2022_CAL.cal	1.000	NPOC:4.003mg/L
12	Unknown	NPOC	HS23010982-03		12_22_2022_CAL.cal	1.000	NPOC:114.1mg/L
13	Unknown	NPOC	CCV	321101806	12_22_2022_CAL.cal	1.000	NPOC:26.52mg/L
14	Unknown	NPOC	CCB		12_22_2022_CAL.cal	1.000	NPOC:0.4401mg/
15	Unknown	NPOC	HS23010982-04		12_22_2022_CAL.cal	1.000	NPOC:8.996mg/L
16	Unknown	NPOC	HS23010982-05		12_22_2022_CAL.cal	1.000	NPOC:10.94mg/L
17	Unknown	NPOC	HS23010982-05MS		12_22_2022_CAL.cal	1.000	NPOC:22.11mg/L
18	Unknown	NPOC	HS23010982-06		12_22_2022_CAL.cal	1.000	NPOC:15.69mg/L
19	Unknown	NPOC	CCV	321101806	12_22_2022_CAL.cal	1.000	NPOC:26.02mg/L
20	Unknown	NPOC	CCB		12_22_2022_CAL.cal	1.000	NPOC:0.4919mg/
21	Unknown	NPOC	MBLK-01302023		12_22_2022_CAL.cal	1.000	NPOC:0.3309mg/
22	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022_CAL.cal	1.000	NPOC:10.43mg/L
23	Unknown	NPOC	LCSD-01302023		12_22_2022_CAL.cal	1.000	NPOC:10.36mg/L
24	Unknown	NPOC	HS23010986-01		12_22_2022_CAL.cal	1.000	NPOC:48.39mg/L
25	Unknown	NPOC	HS23010986-04		12_22_2022_CAL.cal	1.000	NPOC:5.565mg/L
26	Unknown	NPOC	HS23010986-05		12_22_2022_CAL.cal	1.000	NPOC:42.78mg/L
27	Unknown	NPOC	HS23010986-05MS		12_22_2022_CAL.cal	1.000	NPOC:53.03mg/L
28	Unknown	NPOC	HS23010986-06		12_22_2022_CAL.cal	1.000	NPOC:5.174mg/L
29	Unknown	NPOC	HS23010986-07		12_22_2022_CAL.cal	1.000	NPOC:5.053mg/L
30	Unknown	NPOC	HS23010991-01		12_22_2022_CAL.cal	1.000	NPOC:17.31mg/L
31	Unknown	NPOC	CCV	321101806	12_22_2022_CAL.cal	1.000	NPOC:25.67mg/L
32	Unknown	NPOC	CCB		12_22_2022_CAL.cal	1.000	NPOC:0.6257mg/
33	Unknown	NPOC	HS23011352-01		12_22_2022_CAL.cal	1.000	NPOC:8.713mg/L
34	Unknown	NPOC	HS23011389-01		12_22_2022_CAL.cal	1.000	NPOC:3.734mg/L
35	Unknown	NPOC	HS23011389-02		12_22_2022_CAL.cal	1.000	NPOC:2.577mg/L
36	Unknown	NPOC	HS23011389-03		12_22_2022_CAL.cal	1.000	NPOC:1.459mg/L
37	Unknown	NPOC	CCV	321101806	12_22_2022_CAL.cal	1.000	NPOC:25.21mg/L
38	Unknown	NPOC	CCB		12_22_2022_CAL.cal	1.000	NPOC:0.3784mg/

C:\TOC-L\Data\2023_01_30_001.tlx

	Notes	Status	Date / Time	Vial
1		Completed	1/30/2023 3:12:35	1
2		Completed	1/30/2023 3:24:52	2
3		Completed	1/30/2023 3:37:09	3
4		Completed	1/30/2023 3:51:12	4
5		Completed	1/30/2023 4:05:00	5
6		Completed	1/30/2023 4:20:12	6
7		Completed	1/30/2023 4:34:41	7
8		Completed	1/30/2023 4:48:36	8
9		Completed	1/30/2023 5:01:06	9
10		Completed	1/30/2023 5:13:49	10
11		Completed	1/30/2023 5:27:10	11
12		Completed	1/30/2023 5:42:28	12
13		Completed	1/30/2023 5:57:09	1
14		Completed	1/30/2023 6:09:26	2
15		Completed	1/30/2023 6:23:28	13
16		Completed	1/30/2023 6:37:51	14
17		Completed	1/30/2023 6:52:25	15
18		Completed	1/30/2023 7:06:52	16
19		Completed	1/30/2023 7:21:39	1
20		Completed	1/30/2023 7:33:56	2
21		Completed	1/30/2023 7:46:13	3
22		Completed	1/30/2023 8:00:13	4
23		Completed	1/30/2023 8:13:54	5
24		Completed	1/30/2023 8:28:50	17
25		Completed	1/30/2023 8:42:25	18
26		Completed	1/30/2023 8:57:27	19
27		Completed	1/30/2023 9:12:24	20
28		Completed	1/30/2023 9:26:03	21
29		Completed	1/30/2023 9:39:30	22
30		Completed	1/30/2023 9:53:58	23
31		Completed	1/30/2023 10:08:34	24
32		Completed	1/30/2023 10:20:54	25
33		Completed	1/30/2023 10:34:54	26
34		Completed	1/30/2023 10:48:25	27
35		Completed	1/30/2023 11:01:27	28
36		Completed	1/30/2023 11:14:02	29
37		Completed	1/30/2023 11:29:11	24
38		Completed	1/30/2023 11:41:46	25

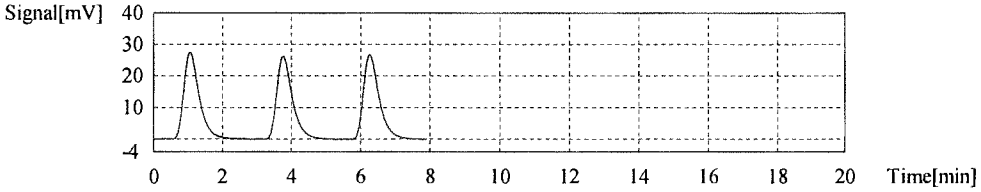
TOC-Control L Report

2023_01_30_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.33	26.88mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:51:28 PM
2	83.61	26.03mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:54:14 PM
3	85.62	26.66mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 5:57:09 PM

Mean Area 85.19
Mean Conc. 26.52mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

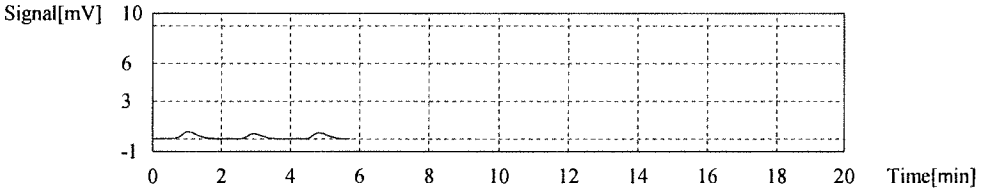
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4401mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.613	0.5022mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:05:12 PM
2	1.172	0.3649mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:07:19 PM
3	1.456	0.4533mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 6:09:26 PM

Mean Area 1.414
Mean Conc. 0.4401mg/L



Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.02mg/L

TOC-Control L Report

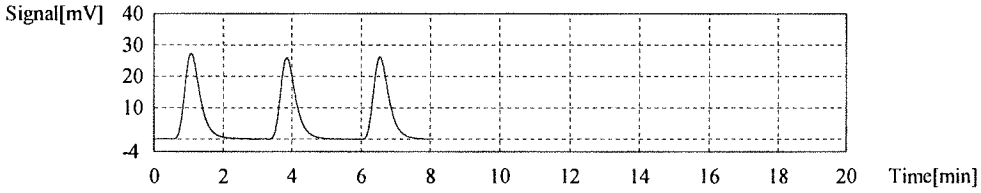
2023_01_30_001.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil. F.	Ex.	Cal. Curve	Date / Time
1	86.27	26.86mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:15:55 PM
2	81.72	25.44mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:18:52 PM
3	82.69	25.74mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:21:39 PM

Mean Area 83.56
Mean Conc. 26.02mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

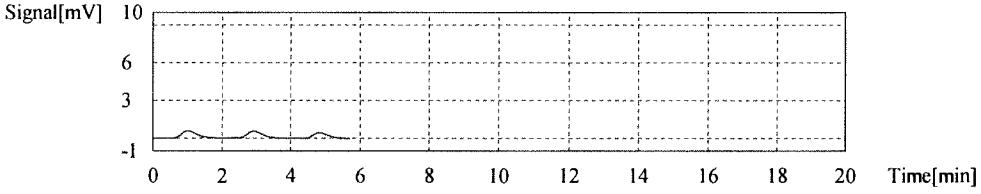
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4919mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil. F.	Ex.	Cal. Curve	Date / Time
1	1.793	0.5582mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:29:42 PM
2	1.651	0.5140mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:31:49 PM
3	1.296	0.4035mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:33:56 PM

Mean Area 1.580
Mean Conc. 0.4919mg/L



Sample

Sample Name: MBLK-01302023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

2023_01_30_001.tlx

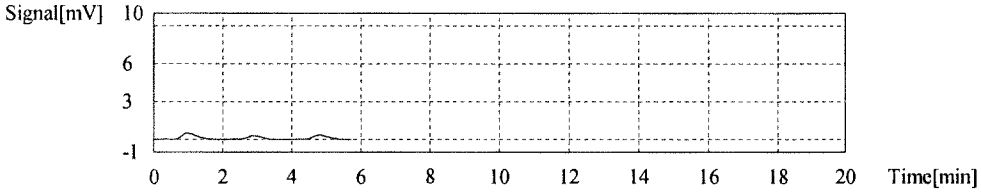
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3309mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.448	0.4508mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:41:59 PM
2	0.7615	0.2371mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:44:06 PM
3	0.9792	0.3049mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:46:13 PM

Mean Area 1.063
Mean Conc. 0.3309mg/L



Sample

Sample Name: LCS-01302023
Sample ID: 3100606203
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

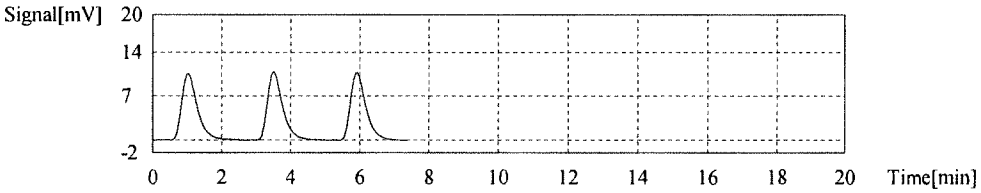
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.21	10.34mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:54:52 PM
2	33.45	10.41mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 7:57:31 PM
3	33.82	10.53mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:00:13 PM

Mean Area 33.49
Mean Conc. 10.43mg/L



Sample

TOC-Control L Report

2023_01_30_001.tlx

Sample Name: LCSD-01302023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

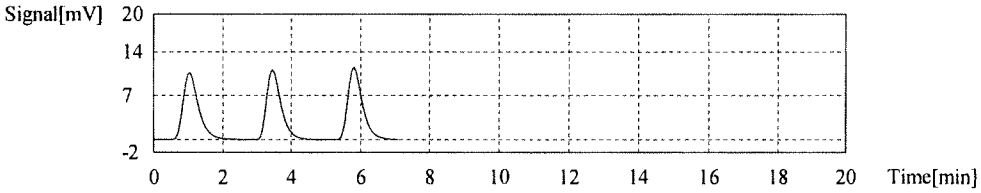
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.36mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.84	10.22mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:08:48 PM
2	32.86	10.23mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:11:24 PM
3	34.16	10.64mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:13:54 PM

Mean Area 33.29
Mean Conc. 10.36mg/L



Sample

Sample Name: HS23010986-01
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

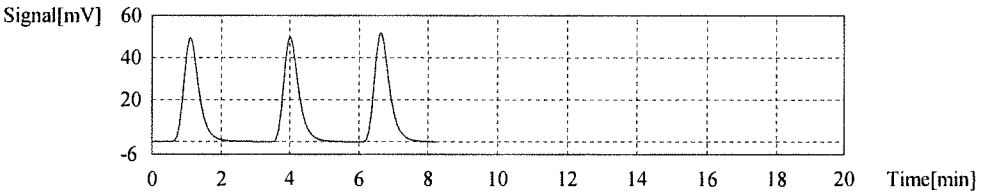
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:48.39mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	152.8	47.57mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:23:04 PM
2	153.3	47.73mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:25:57 PM
3	160.2	49.88mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:28:50 PM

Mean Area 155.4
Mean Conc. 48.39mg/L



TOC-Control L Report

Sample

Sample Name: HS23010986-04
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

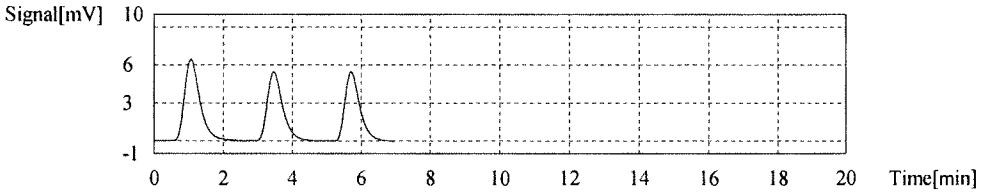
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.565mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.98	6.221mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:37:22 PM
2	16.90	5.262mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:39:54 PM
3	16.74	5.212mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:42:25 PM

Mean Area 17.87
Mean Conc. 5.565mg/L



Sample

Sample Name: HS23010986-05
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

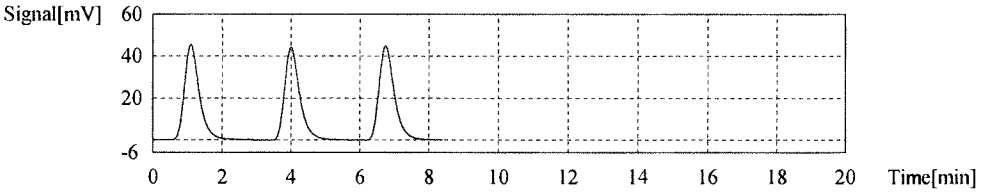
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:42.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	136.9	42.62mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:51:29 PM
2	136.0	42.34mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:54:29 PM
3	139.3	43.37mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 8:57:27 PM

Mean Area 137.4
Mean Conc. 42.78mg/L



TOC-Control L Report

2023_01_30_001.tlx

Sample

Sample Name: HS23010986-05MS
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

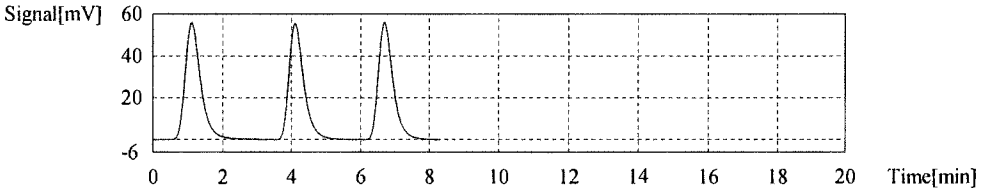
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:53.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.1	54.20mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:06:39 PM
2	167.8	52.24mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:09:31 PM
3	169.1	52.65mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:12:24 PM

Mean Area 170.3
Mean Conc. 53.03mg/L



Sample

Sample Name: HS23010986-06
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

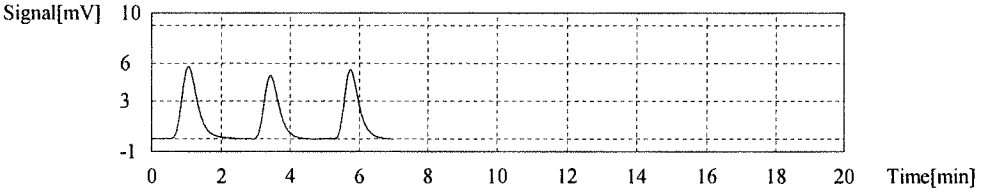
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.174mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.85	5.557mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:20:56 PM
2	15.62	4.863mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:23:32 PM
3	16.39	5.103mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:26:03 PM

Mean Area 16.62
Mean Conc. 5.174mg/L



TOC-Control L Report

Sample

Sample Name: HS23010986-07
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

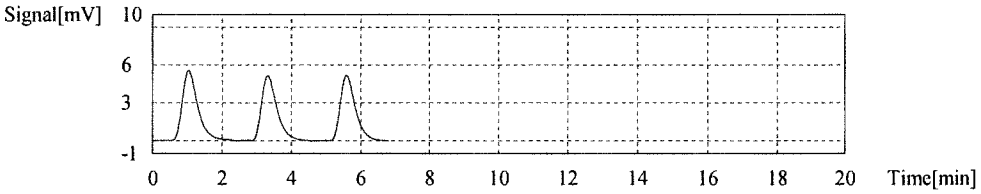
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.053mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.00	5.293mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:34:30 PM
2	15.82	4.925mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:37:01 PM
3	15.87	4.941mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 9:39:30 PM

Mean Area 16.23
Mean Conc. 5.053mg/L



Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.67mg/L

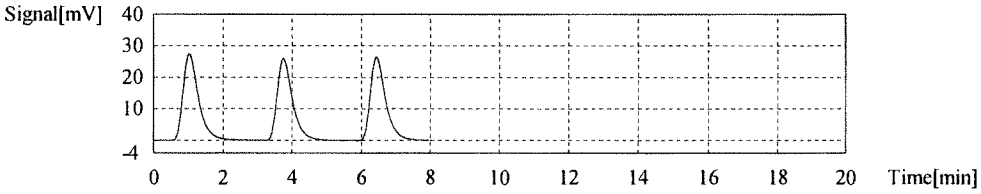
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.60	26.34mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 10:02:50 PM
2	80.98	25.21mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 10:05:47 PM
3	81.77	25.46mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 10:08:34 PM

TOC-Control L Report

Mean Area 82.45
Mean Conc. 25.67mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

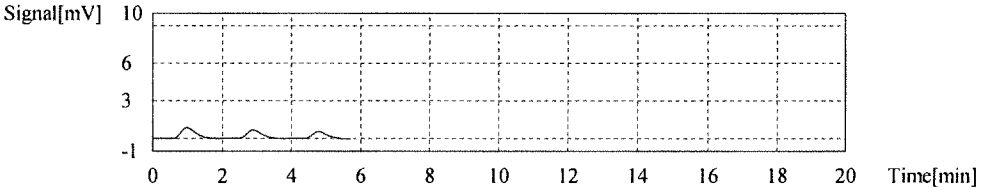
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6257mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil	Ex.	Cal. Curve	Date / Time
1	2.510	0.7815mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 10:16:38 PM
2	1.863	0.5800mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 10:18:46 PM
3	1.656	0.5156mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 10:20:54 PM

Mean Area 2.010
Mean Conc. 0.6257mg/L



Sample

Sample Name: CCV
Sample ID: 321101806
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.21mg/L

1. Det

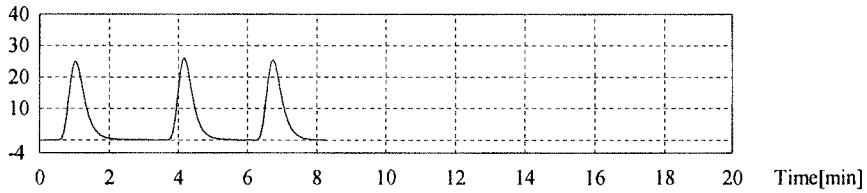
Anal.: NPOC

TOC-Control L Report

2023_01_30_001.tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.85	25.17mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 11:23:32 PM
2	80.54	25.08mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 11:26:22 PM
3	81.54	25.39mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 11:29:11 PM

Mean Area 80.98
Mean Conc. 25.21mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

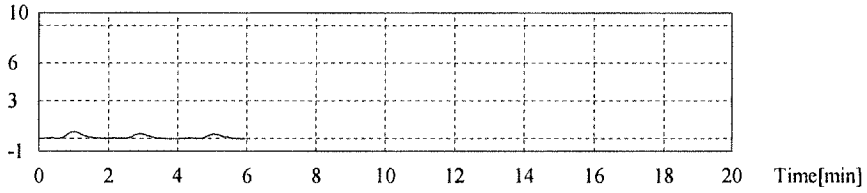
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3784mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.592	0.4957mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 11:37:15 PM
2	1.092	0.3400mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 11:39:38 PM
3	0.9624	0.2996mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	1/30/2023 11:41:46 PM

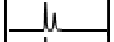
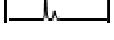
Mean Area 1.215
Mean Conc. 0.3784mg/L



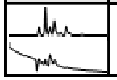
HS23010986 9056_W IC

ALS WO# HS23010986

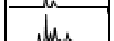
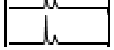
Sequence: 012623
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratic	BA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratic	BA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratic	BA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratic	BA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratic	BA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratic	BA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	BA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	9056-W-SH	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS		Unknown	G2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23011253-02		Unknown	RE7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23011253-02MS		Unknown	RE8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23011253-02MSD		Unknown	GA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	G3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-01DF100		Unknown	GC7	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-04DF20		Unknown	GC8	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-05DF100		Unknown	GD1	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-06		Unknown	GD2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-07		Unknown	GD3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-06DF10		Unknown	BE5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-07DF10		Unknown	BE6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 012623
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 012623
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	1/23/2023 2:36:57 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/23/2023 2:42:45 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/23/2023 2:48:34 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/23/2023 2:54:22 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/23/2023 3:00:10 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/23/2023 3:05:59 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/23/2023 3:11:47 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/23/2023 3:17:35 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/26/2023 2:51:52 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 2:57:39 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/26/2023 3:43:57 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/26/2023 3:49:44 PM -06:00
Anions Processing Method ISO		HS23011253-02	5.0	Finished	1/26/2023 3:55:32 PM -06:00
Anions Processing Method ISO		HS23011253-02MS	5.0	Finished	1/26/2023 4:01:19 PM -06:00
Anions Processing Method ISO		HS23011253-02MSD	5.0	Finished	1/26/2023 4:07:17 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/26/2023 4:24:39 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 4:36:13 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/26/2023 5:51:23 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 6:02:57 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/26/2023 7:24:13 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 7:35:46 PM -06:00
Anions Processing Method ISO		HS23010986-01DF100	5.0	Finished	1/26/2023 7:47:20 PM -06:00
Anions Processing Method ISO		HS23010986-04DF20	5.0	Finished	1/26/2023 7:53:07 PM -06:00
Anions Processing Method ISO		HS23010986-05DF100	5.0	Finished	1/26/2023 7:58:54 PM -06:00
Anions Processing Method ISO		HS23010986-06	5.0	Finished	1/26/2023 8:04:41 PM -06:00
Anions Processing Method ISO		HS23010986-07	5.0	Finished	1/26/2023 8:10:27 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/26/2023 9:14:02 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/26/2023 9:19:49 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/27/2023 4:21:52 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/27/2023 4:27:39 AM -06:00
Anions Processing Method ISO		HS23010986-06DF10	5.0	Finished	1/27/2023 7:15:15 AM -06:00
Anions Processing Method ISO		HS23010986-07DF10	5.0	Finished	1/27/2023 7:21:02 AM -06:00

Sequence: 012623
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		CCV1	5.0	Finished	1/27/2023 7:32:36 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/27/2023 7:38:22 AM -06:00

Sequence: 012623
Injection #6: STD6

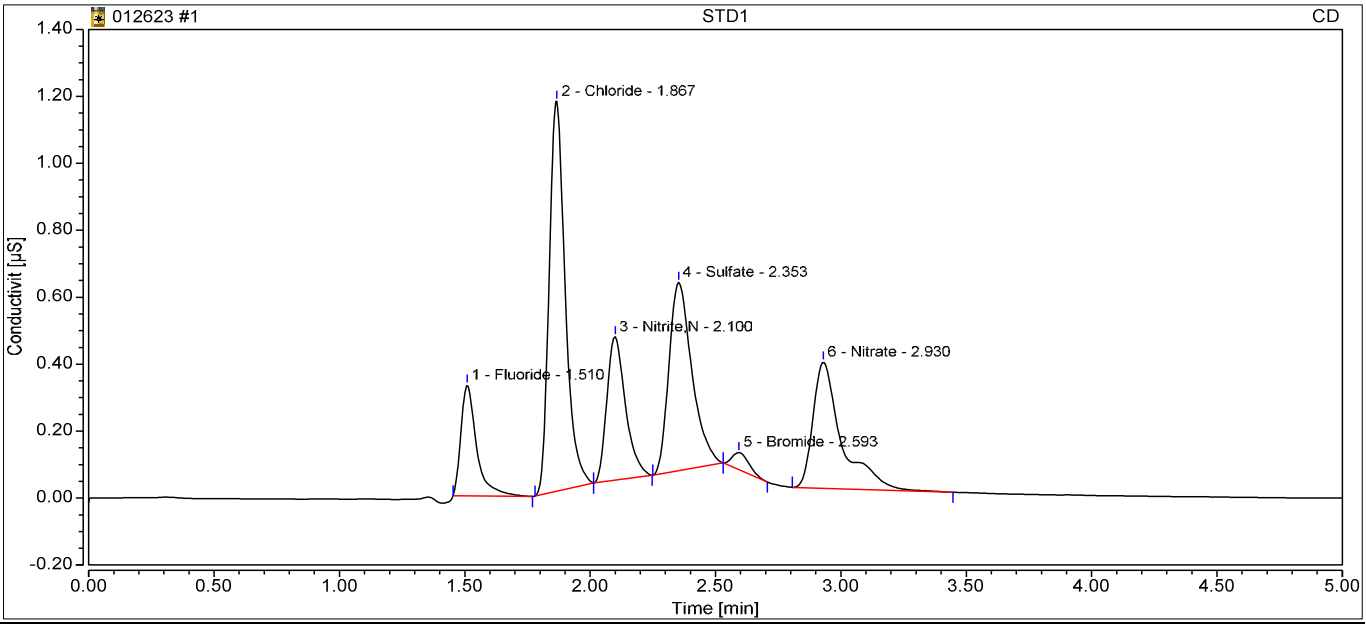
Calibration

Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***18.2600***	***0.99823***	***0.0003***	***0.2594***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	3.9326	0.99992	-0.0034	0.1716	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	6.5665	0.99976	0.0001	0.3625	-0.0059
4	Sulfate	Lin, WithOffset, 1/A	Area	6	7.0089	0.99974	0.0018	0.1125	0.0000
5	Bromide	Lin, WithOffset, 1/A	Area	6	21.3247	0.99813	-0.0031	0.0579	0.0000
6	Nitrate	Lin, WithOffset, 1/A	Area	6	8.6115	0.99956	0.0097	0.3471	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	5	14.8871	0.99687	-0.0004	0.0060	-0.0001
8	Phosphate	Lin, WithOffset, 1/A	Area	2	n.a.	1.00000	-0.4901	0.1278	0.0000
Maximum					**21.3247**	1.00000			
Minimum					3.9326	**0.99687**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**BA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:36**	*Sample Weight:*	**1.0000**

Run Time:



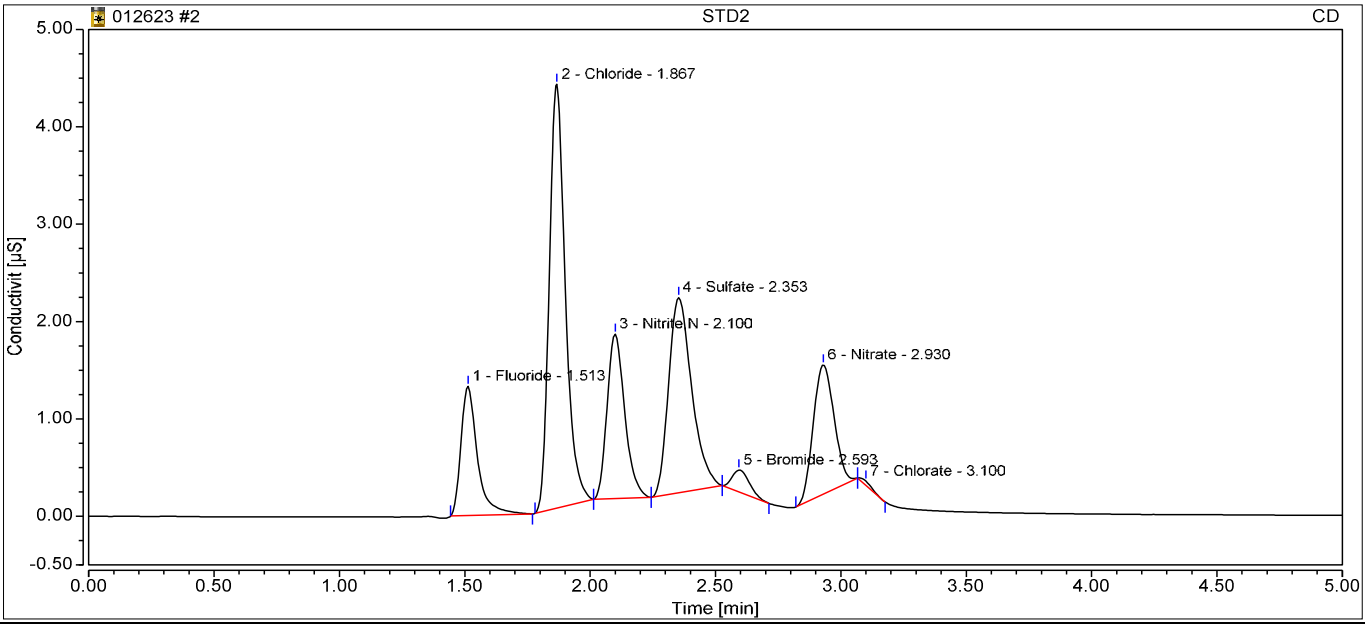
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.024	0.0916	0.0916	1.0000
2	1.87	Chloride	BMB	0.087	0.5248	0.5248	1.0000
3	2.10	Nitrite,N	BMB	0.037	0.1020	0.1020	1.0000
4	2.35	Sulfate	BMB	0.060	0.5165	0.5165	1.0000
5	2.59	Bromide	BMB	0.004	0.1232	0.1232	1.0000
6	2.93	Nitrate	BMB	0.050	0.1161	0.1161	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.262**		**1.47**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**BA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:42**	*Sample Weight:*	**1.0000**

Run Time:



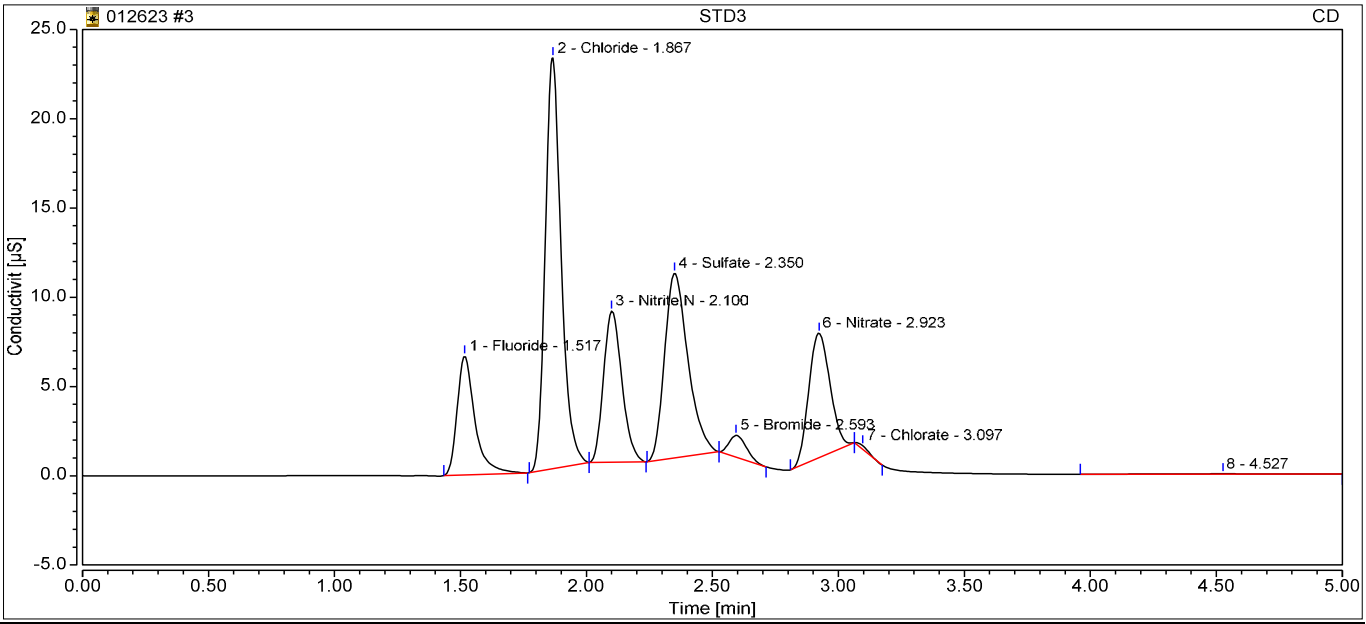
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.101	0.3891	0.3891	1.0000
2	1.87	Chloride	BMB	0.323	1.9022	1.9022	1.0000
3	2.10	Nitrite,N	BMB	0.138	0.3825	0.3825	1.0000
4	2.35	Sulfate	BMB	0.215	1.8922	1.8922	1.0000
5	2.59	Bromide	BMB	0.018	0.3682	0.3682	1.0000
6	2.93	Nitrate	BMB	0.128	0.3409	0.3409	1.0000
7	3.10	Chlorate	BMB	0.002	0.4193	0.4193	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.925**		**5.69**	

3 STD3

Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**BA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:48**	*Sample Weight:*	**1.0000**

Run Time:



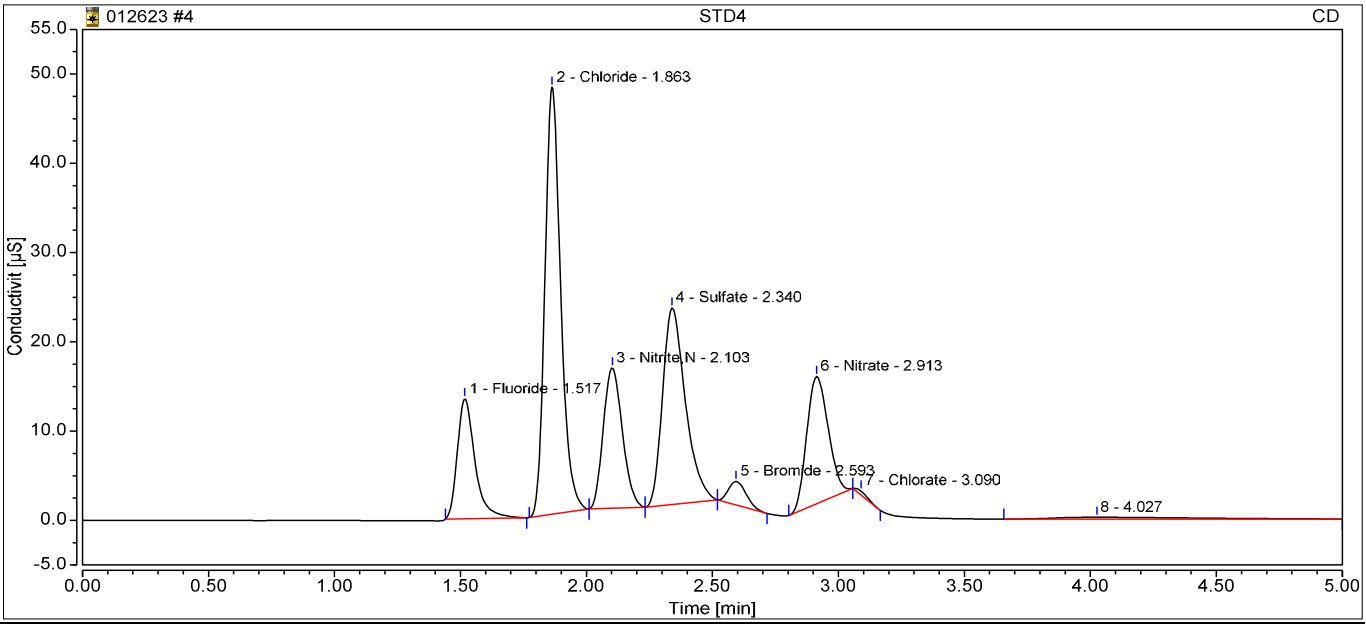
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.545	2.1003	2.1003	1.0000
2	1.87	Chloride	BMB	1.685	9.8413	9.8413	1.0000
3	2.10	Nitrite,N	BMB	0.715	2.0394	2.0394	1.0000
4	2.35	Sulfate	BMB	1.114	9.8924	9.8924	1.0000
5	2.59	Bromide	BMB	0.099	1.7671	1.7671	1.0000
6	2.92	Nitrate	BMB	0.683	1.9402	1.9402	1.0000
7	3.10	Chlorate	BMB	0.010	1.7695	1.7695	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.851**		**29.35**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**BA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:54**	*Sample Weight:*	**1.0000**

Run Time:

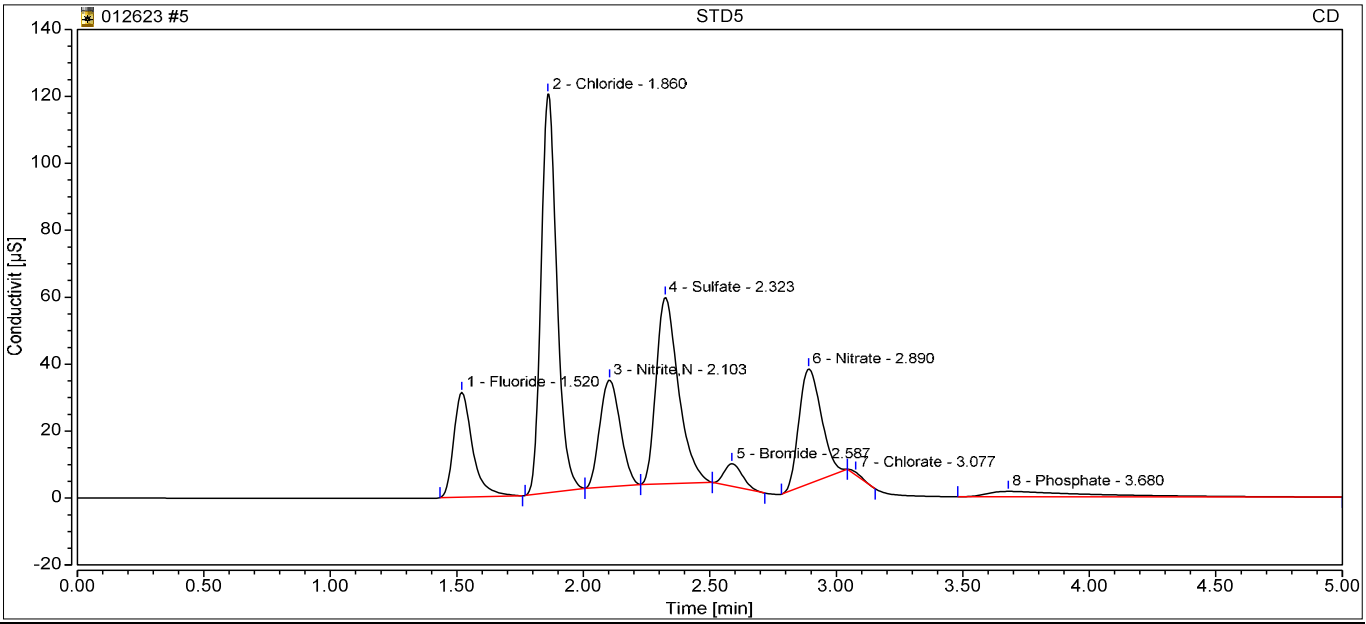


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.096	4.2257	4.2257	1.0000
2	1.86	Chloride	BMB	3.473	20.2647	20.2647	1.0000
3	2.10	Nitrite,N	BMB	1.379	4.0759	4.0759	1.0000
4	2.34	Sulfate	BMB	2.316	20.5697	20.5697	1.0000
5	2.59	Bromide	BMB	0.216	3.7890	3.7890	1.0000
6	2.91	Nitrate	BMB	1.408	4.0269	4.0269	1.0000
7	3.09	Chlorate	BMB	0.023	4.3199	4.3199	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.911**		**61.27**	

5 STD5			
Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**BA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:00**	*Sample Weight:*	**1.0000**

Run Time:

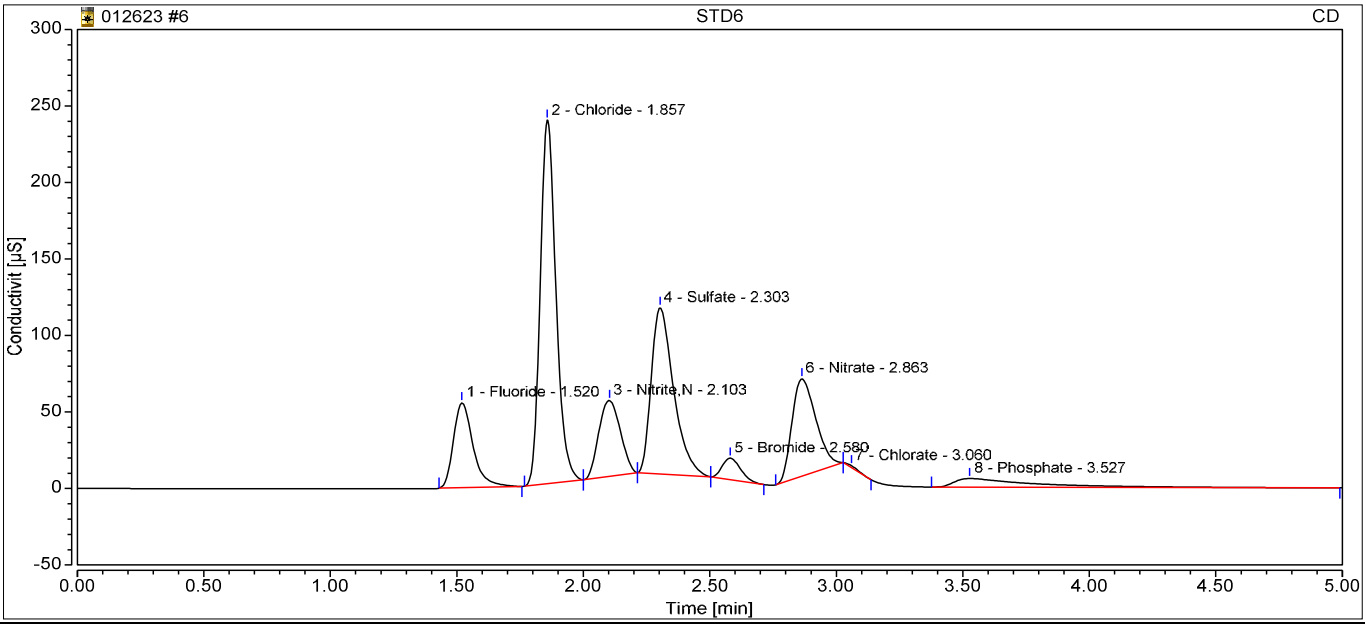


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.698	10.4020	10.4020	1.0000
2	1.86	Chloride	BMB	8.612	50.2171	50.2171	1.0000
3	2.10	Nitrite,N	BMB	2.980	9.7904	9.7904	1.0000
4	2.32	Sulfate	BMB	5.704	50.6918	50.6918	1.0000
5	2.59	Bromide	BMB	0.569	9.8884	9.8884	1.0000
6	2.89	Nitrate	BMB	3.525	10.1264	10.1264	1.0000
7	3.08	Chlorate	BMB	0.047	9.8667	9.8667	1.0000
8	3.68	Phosphate	BMB	0.787	10.0000	10.0000	1.0000
Total:			**0.000**	**24.922**		**160.98**	

6 STD6			
Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**BA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:05**	*Sample Weight:*	**1.0000**

Run Time:



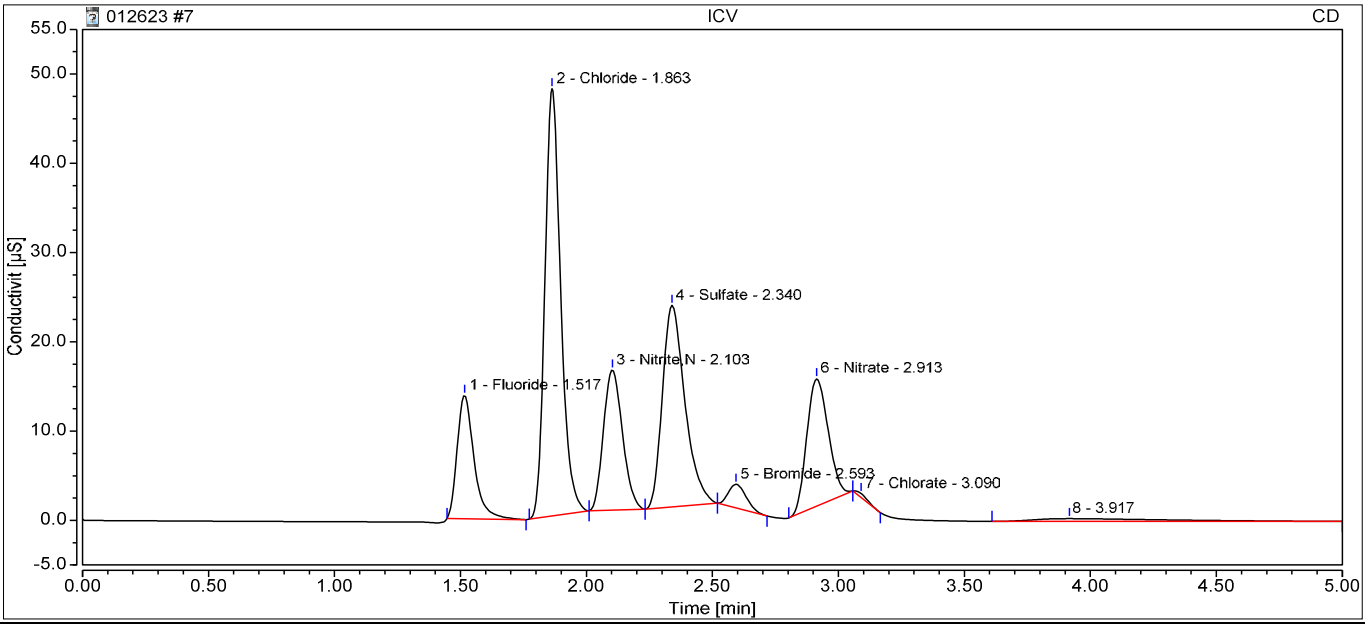
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	5.004	19.2913	19.2913	1.0000
2	1.86	Chloride	BMB	17.110	99.7497	99.7497	1.0000
3	2.10	Nitrite,N	BMB	4.894	20.1587	20.1587	1.0000
4	2.30	Sulfate	BMB	11.131	98.9373	98.9373	1.0000
5	2.58	Bromide	BMB	1.187	20.5641	20.5641	1.0000
6	2.86	Nitrate	BMB	6.935	19.9496	19.9496	1.0000
7	3.06	Chlorate	BMB	0.069	20.0446	20.0446	1.0000
8	3.53	Phosphate	BMB	2.065	20.0000	20.0000	1.0000
Total:			**0.000**	**48.395**		**318.70**	

7 ICV

Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**BA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:11**	*Sample Weight:*	**1.0000**

Run Time:



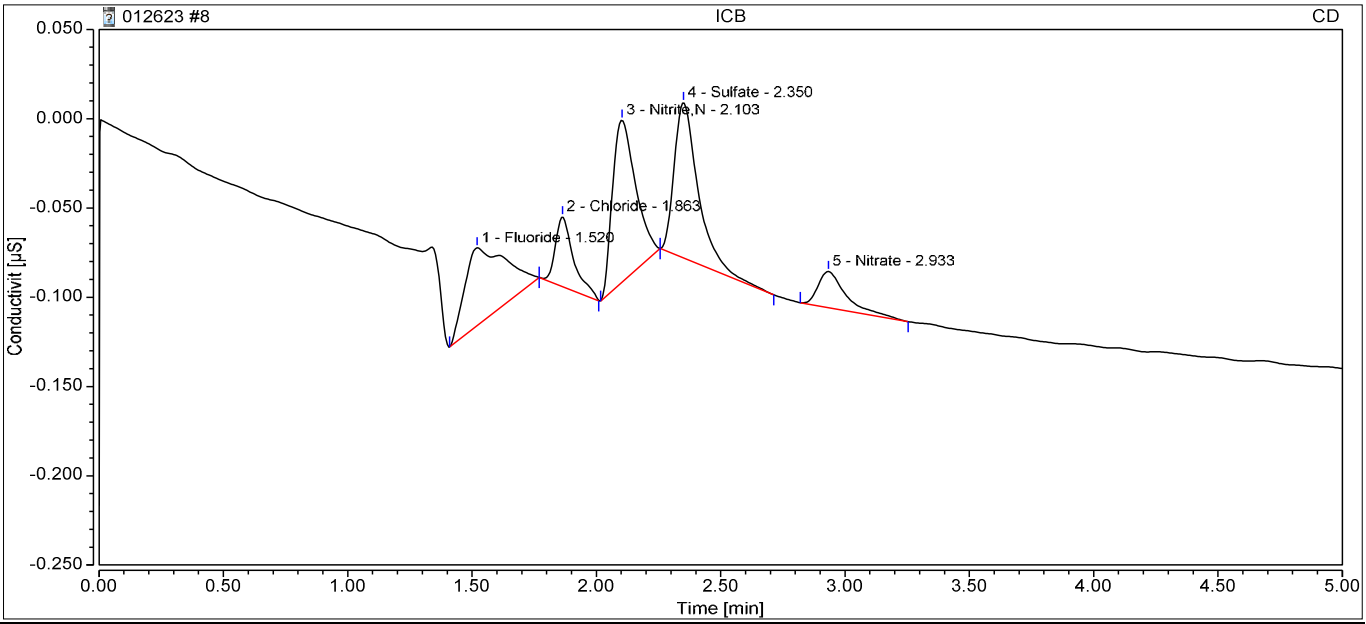
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.076	4.1460	4.1460	1.0000
2	1.86	Chloride	BMB	3.476	20.2807	20.2807	1.0000
3	2.10	Nitrite,N	BMB	1.374	4.0608	4.0608	1.0000
4	2.34	Sulfate	BMB	2.342	20.8027	20.8027	1.0000
5	2.59	Bromide	BMB	0.218	3.8222	3.8222	1.0000
6	2.91	Nitrate	BMB	1.407	4.0267	4.0267	1.0000
7	3.09	Chlorate	BMB	0.023	4.2714	4.2714	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.916**		**61.41**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**BA8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:17**	*Sample Weight:*	**1.0000**

Run Time:



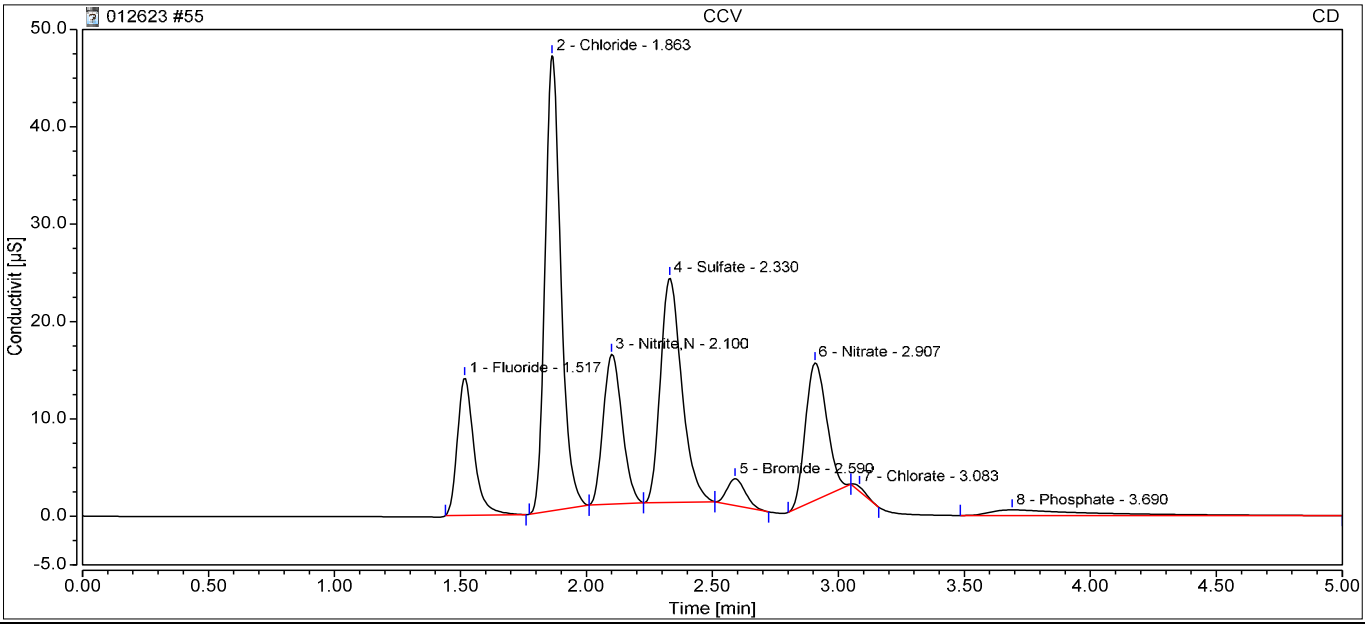
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.008	0.0297	0.0297	1.0000
2	1.86	Chloride	BMB	0.003	0.0390	0.0390	1.0000
3	2.10	Nitrite,N	BMB	0.010	0.0268	0.0268	1.0000
4	2.35	Sulfate	BMB	0.010	0.0714	0.0714	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
5	2.93	Nitrate	BMB	0.003	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.034**		**0.17**	

55 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 14:51**	*Sample Weight:*	**1.0000**

Run Time:



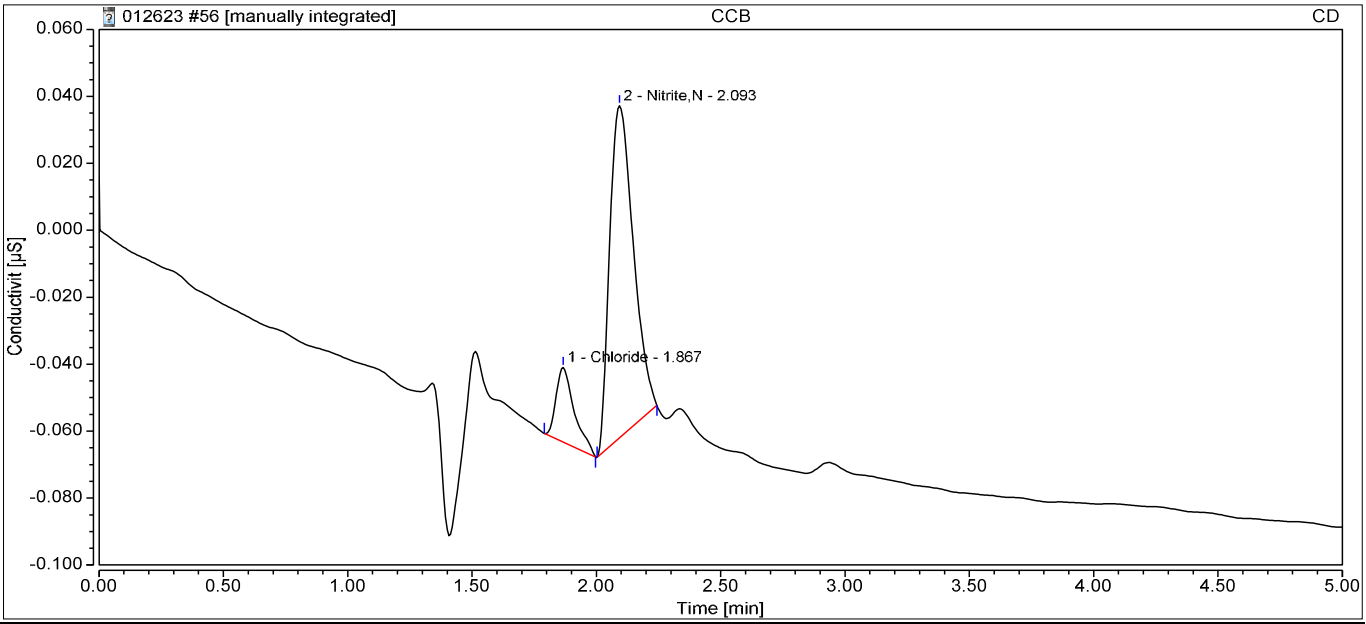
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.081	4.1650	4.1650	1.0000
2	1.86	Chloride	BMB	3.391	19.7874	19.7874	1.0000
3	2.10	Nitrite,N	BMB	1.335	3.9359	3.9359	1.0000
4	2.33	Sulfate	BMB	2.258	20.0618	20.0618	1.0000
5	2.59	Bromide	BMB	0.231	4.0448	4.0448	1.0000
6	2.91	Nitrate	BMB	1.384	3.9600	3.9600	1.0000
7	3.08	Chlorate	BMB	0.024	4.3901	4.3901	1.0000
8	3.69	Phosphate	BMB	0.273	5.9698	5.9698	1.0000
Total:			**0.000**	**9.977**		**66.31**	

56 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 14:57**	*Sample Weight:*	**1.0000**

Run Time:



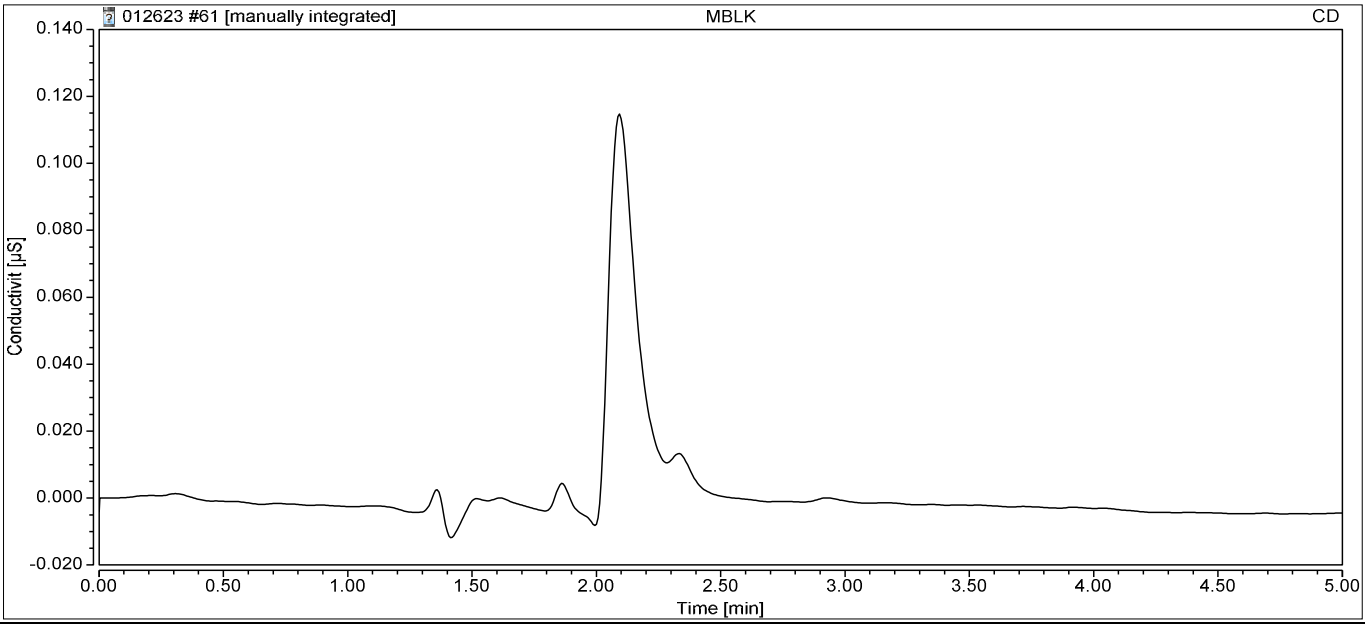
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.002	0.0308	0.0308	1.0000
2	2.09	Nitrite,N	BMB*	0.011	0.0299	0.0299	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.013**		**0.06**	

61 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 15:43**	*Sample Weight:*	**1.0000**

Run Time:



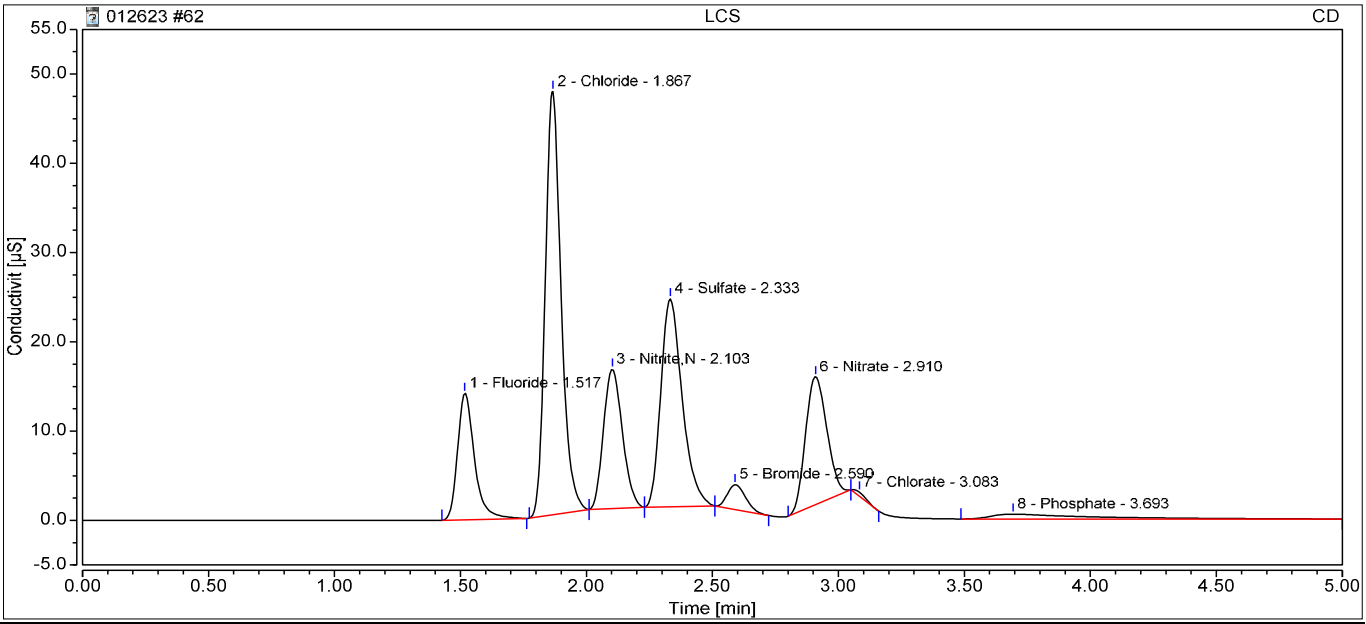
Integration Results

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

62 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**G2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 15:49**	*Sample Weight:*	**1.0000**

Run Time:



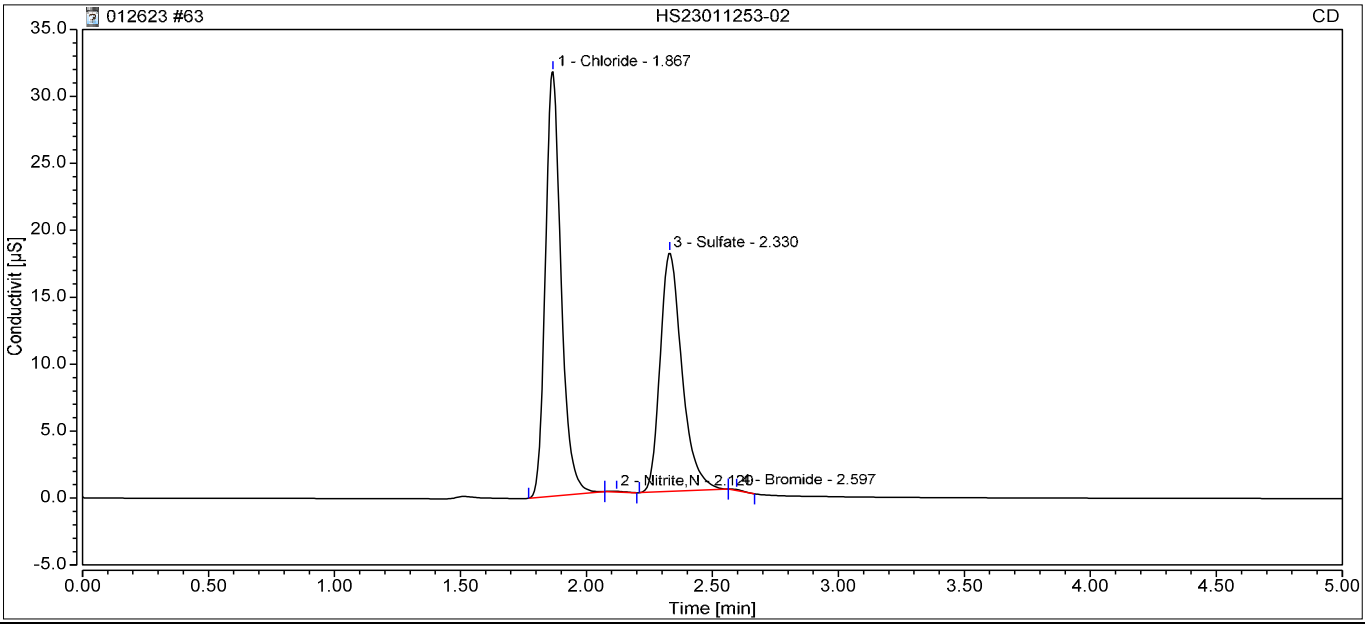
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.106	4.2612	4.2612	1.0000
2	1.87	Chloride	BMB	3.451	20.1322	20.1322	1.0000
3	2.10	Nitrite,N	BMB	1.356	4.0034	4.0034	1.0000
4	2.33	Sulfate	BMB	2.291	20.3473	20.3473	1.0000
5	2.59	Bromide	BMB	0.235	4.1068	4.1068	1.0000
6	2.91	Nitrate	BMB	1.407	4.0242	4.0242	1.0000
7	3.08	Chlorate	BMB	0.024	4.5351	4.5351	1.0000
8	3.69	Phosphate	BMB	0.254	5.8281	5.8281	1.0000
Total:			**0.000**	**10.123**		**67.24**	

63 HS23011253-02

Sample Name:	**HS23011253-02**	*Injection Volume:*	**5.00**
Vial Number:	**RE7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 15:55**	*Sample Weight:*	**1.0000**

Run Time:



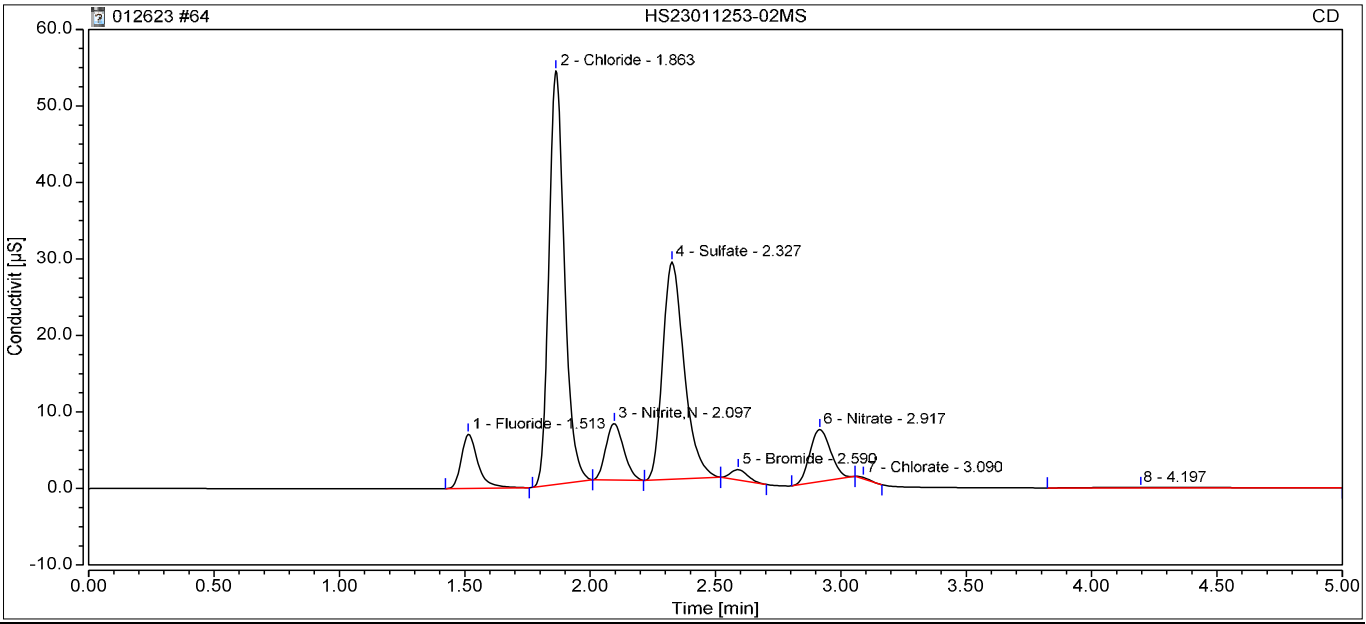
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	2.290	13.3675	13.3675	1.0000
2	2.12	Nitrite,N	BMB	0.003	0.0082	0.0082	1.0000
3	2.33	Sulfate	BMB	1.794	15.9348	15.9348	1.0000
4	2.60	Bromide	BMB	0.004	0.1200	0.1200	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.091**		**29.43**	

64 HS23011253-02MS

Sample Name:	**HS23011253-02MS**	*Injection Volume:*	**5.00**
Vial Number:	**RE8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:01**	*Sample Weight:*	**1.0000**

Run Time:



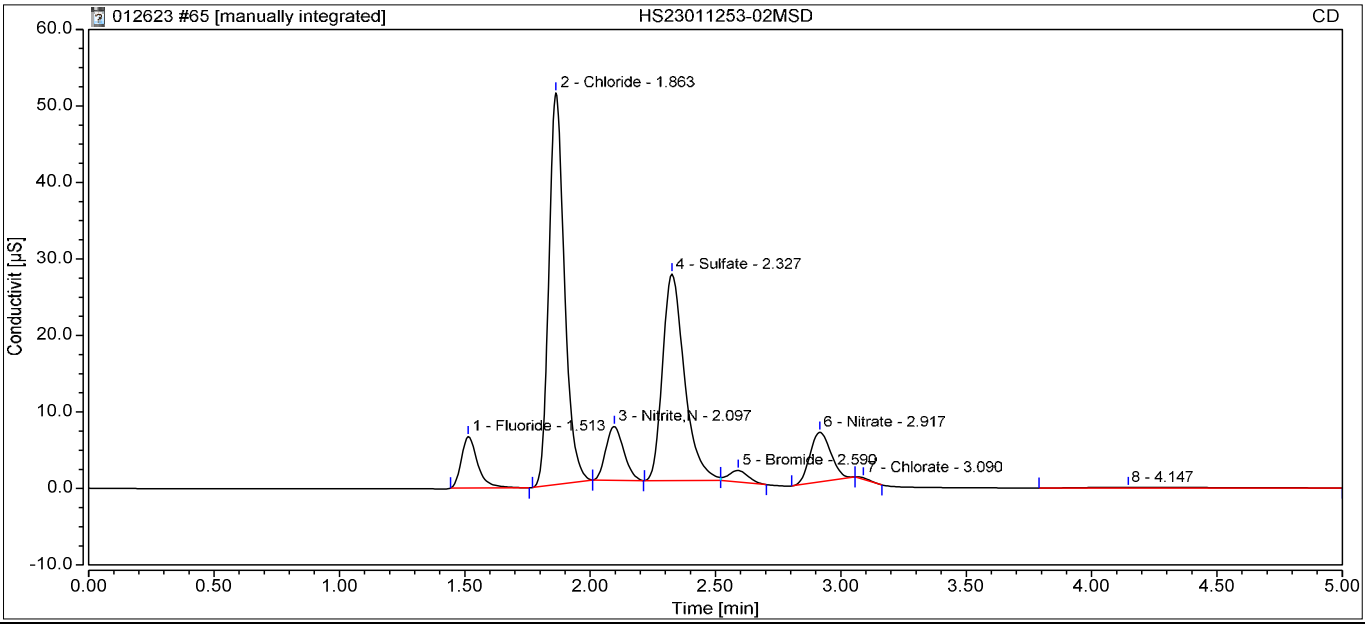
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.547	2.1077	2.1077	1.0000
2	1.86	Chloride	BMB	3.884	22.6602	22.6602	1.0000
3	2.10	Nitrite,N	BMB	0.611	1.7340	1.7340	1.0000
4	2.33	Sulfate	BMB	2.831	25.1498	25.1498	1.0000
5	2.59	Bromide	BMB	0.106	1.8922	1.8922	1.0000
6	2.92	Nitrate	BMB	0.655	1.8597	1.8597	1.0000
7	3.09	Chlorate	BMB	0.010	1.8060	1.8060	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.644**		**57.21**	

65 HS23011253-02MSD

Sample Name:	**HS23011253-02MSD**	*Injection Volume:*	**5.00**
Vial Number:	**GA1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:07**	*Sample Weight:*	**1.0000**

Run Time:



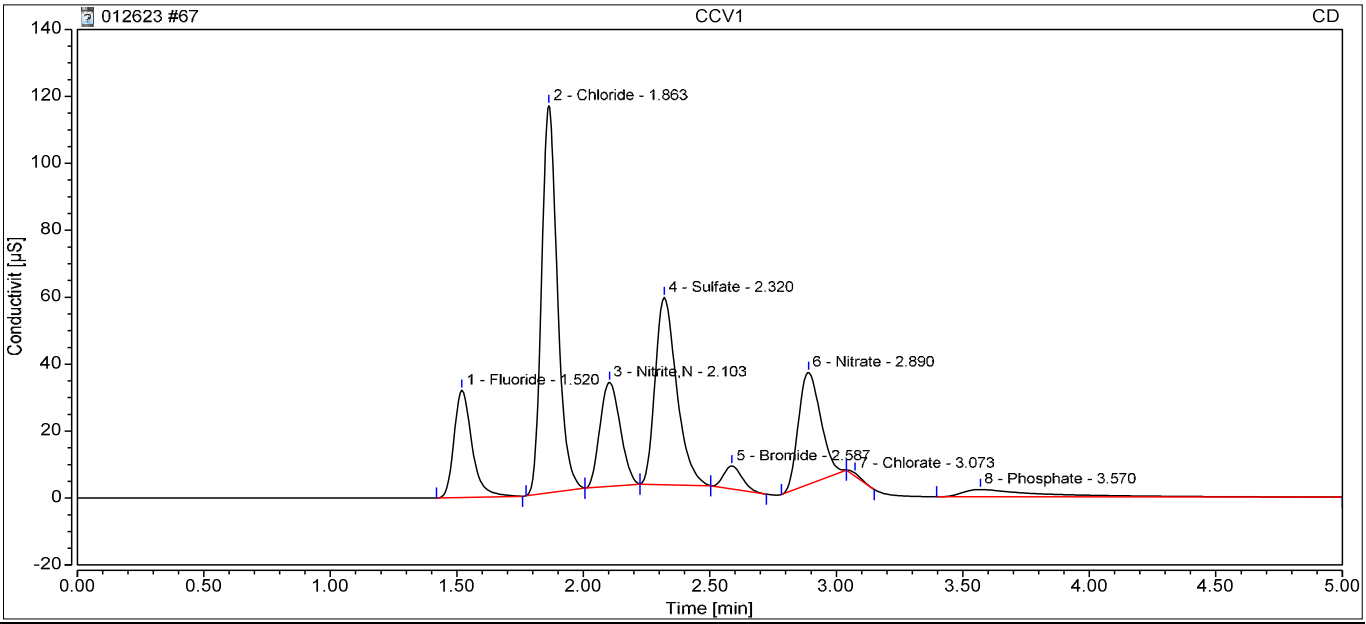
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.506	1.9484	1.9484	1.0000
2	1.86	Chloride	BMB	3.695	21.5588	21.5588	1.0000
3	2.10	Nitrite,N	BMB	0.582	1.6495	1.6495	1.0000
4	2.33	Sulfate	BM *	2.744	24.3798	24.3798	1.0000
5	2.59	Bromide	MB*	0.137	2.4153	2.4153	1.0000
6	2.92	Nitrate	BMB	0.625	1.7724	1.7724	1.0000
7	3.09	Chlorate	BMB	0.010	1.7259	1.7259	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.298**		**55.45**	

67 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:24**	*Sample Weight:*	**1.0000**

Run Time:



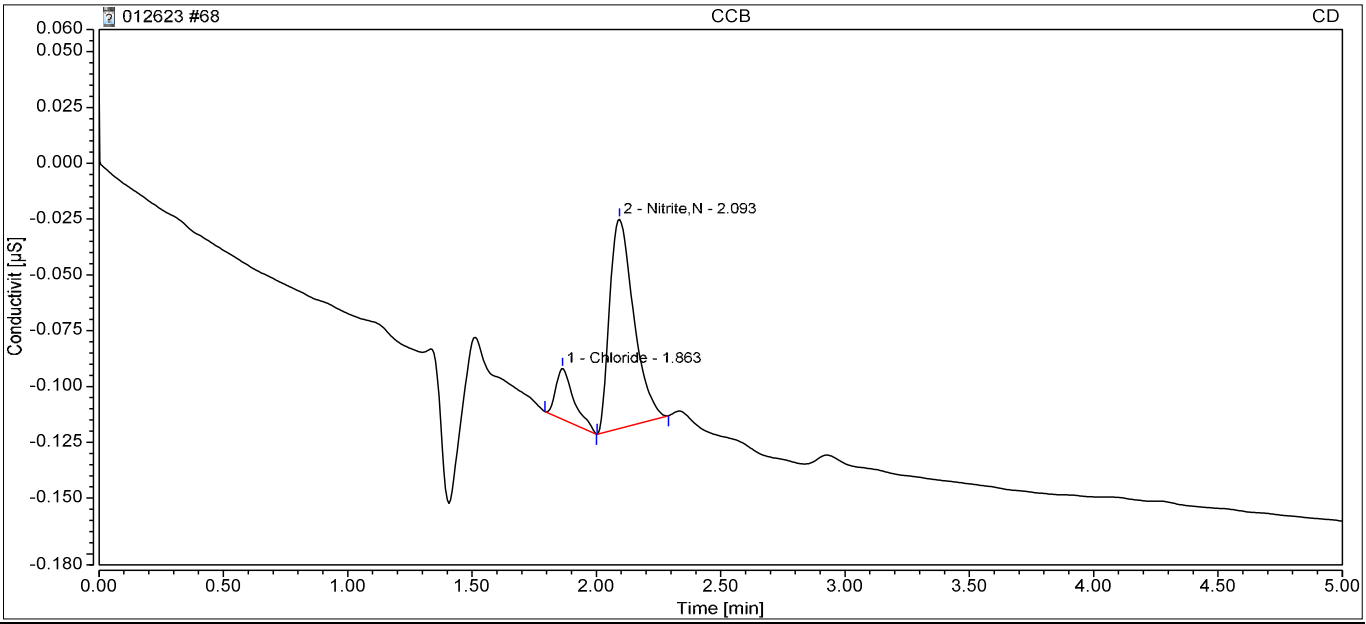
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.640	10.1792	10.1792	1.0000
2	1.86	Chloride	BMB	8.409	49.0312	49.0312	1.0000
3	2.10	Nitrite,N	BMB	2.886	9.4126	9.4126	1.0000
4	2.32	Sulfate	BMB	5.520	49.0616	49.0616	1.0000
5	2.59	Bromide	BMB	0.583	10.1235	10.1235	1.0000
6	2.89	Nitrate	BMB	3.420	9.8237	9.8237	1.0000
7	3.07	Chlorate	BMB	0.044	9.2707	9.2707	1.0000
8	3.57	Phosphate	BMB	0.818	10.2352	10.2352	1.0000
Total:			**0.000**	**24.320**		**157.14**	

68 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 16:36**	*Sample Weight:*	**1.0000**

Run Time:



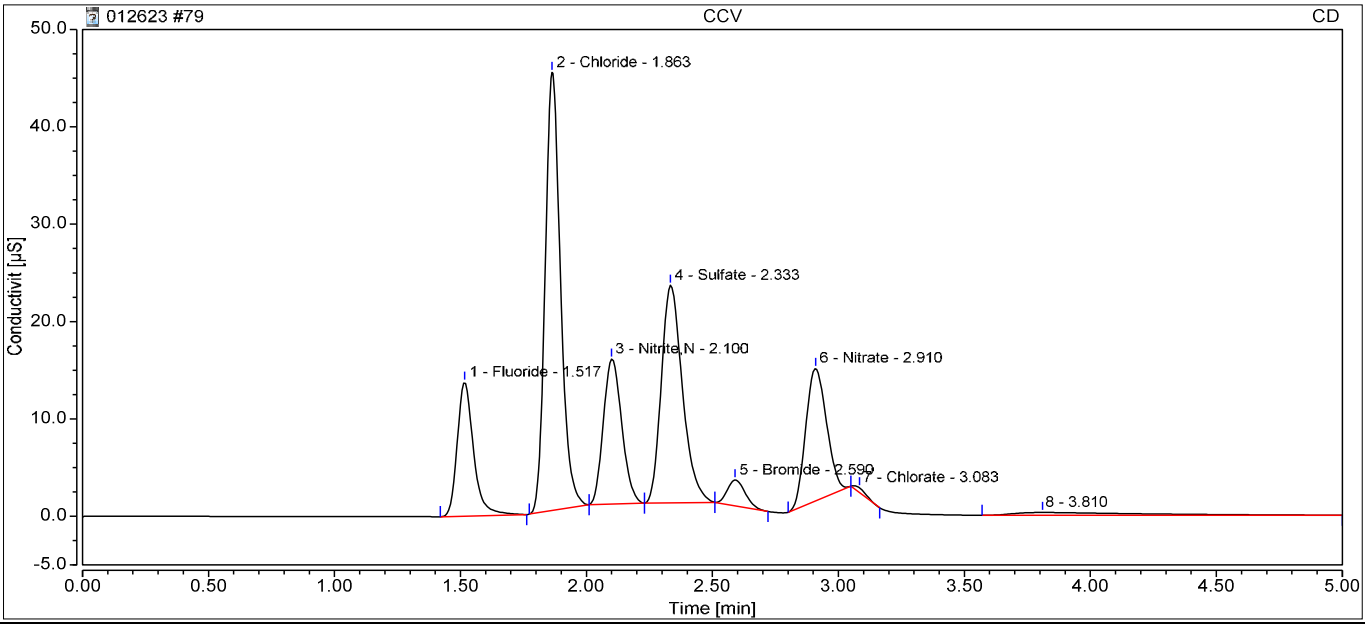
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.86	Chloride	BMB	0.002	0.0311	0.0311	1.0000
2	2.09	Nitrite,N	BMB	0.011	0.0290	0.0290	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.013**		**0.06**	

79 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 17:51**	*Sample Weight:*	**1.0000**

Run Time:



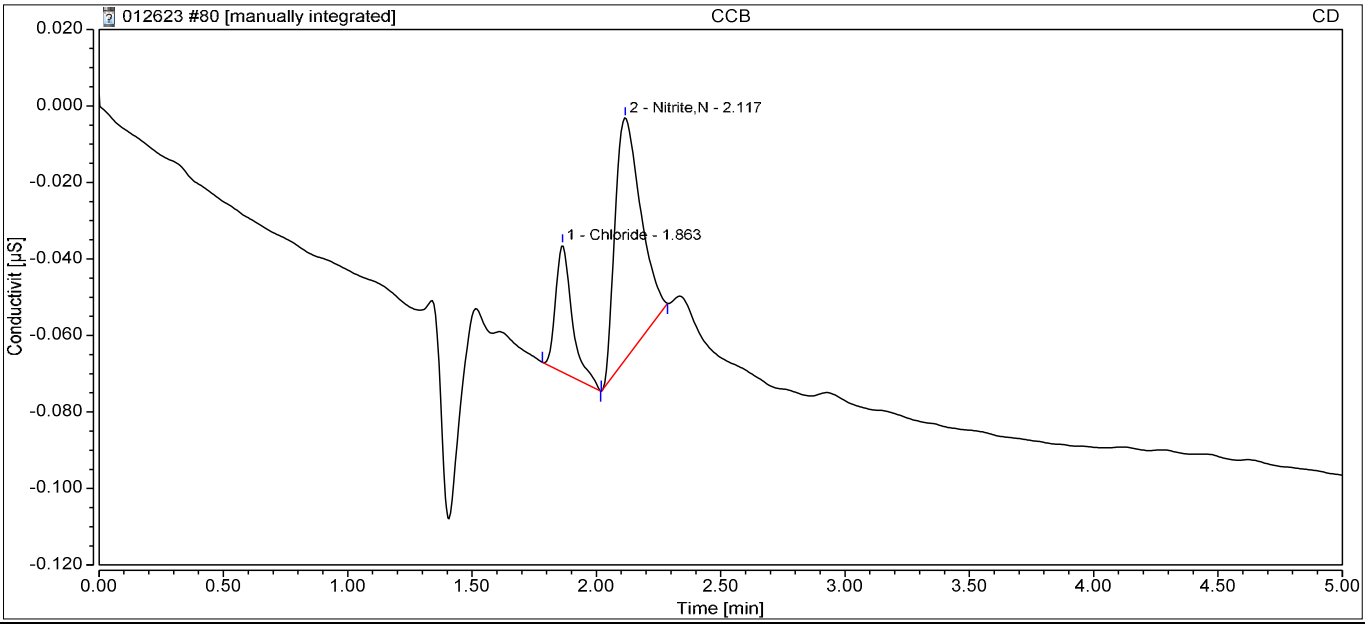
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.035	3.9878	3.9878	1.0000
2	1.86	Chloride	BMB	3.175	18.5255	18.5255	1.0000
3	2.10	Nitrite,N	BMB	1.264	3.7114	3.7114	1.0000
4	2.33	Sulfate	BMB	2.171	19.2805	19.2805	1.0000
5	2.59	Bromide	BMB	0.219	3.8421	3.8421	1.0000
6	2.91	Nitrate	BMB	1.302	3.7234	3.7234	1.0000
7	3.08	Chlorate	BMB	0.025	4.7458	4.7458	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.190**		**57.82**	

80 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 18:02**	*Sample Weight:*	**1.0000**

Run Time:

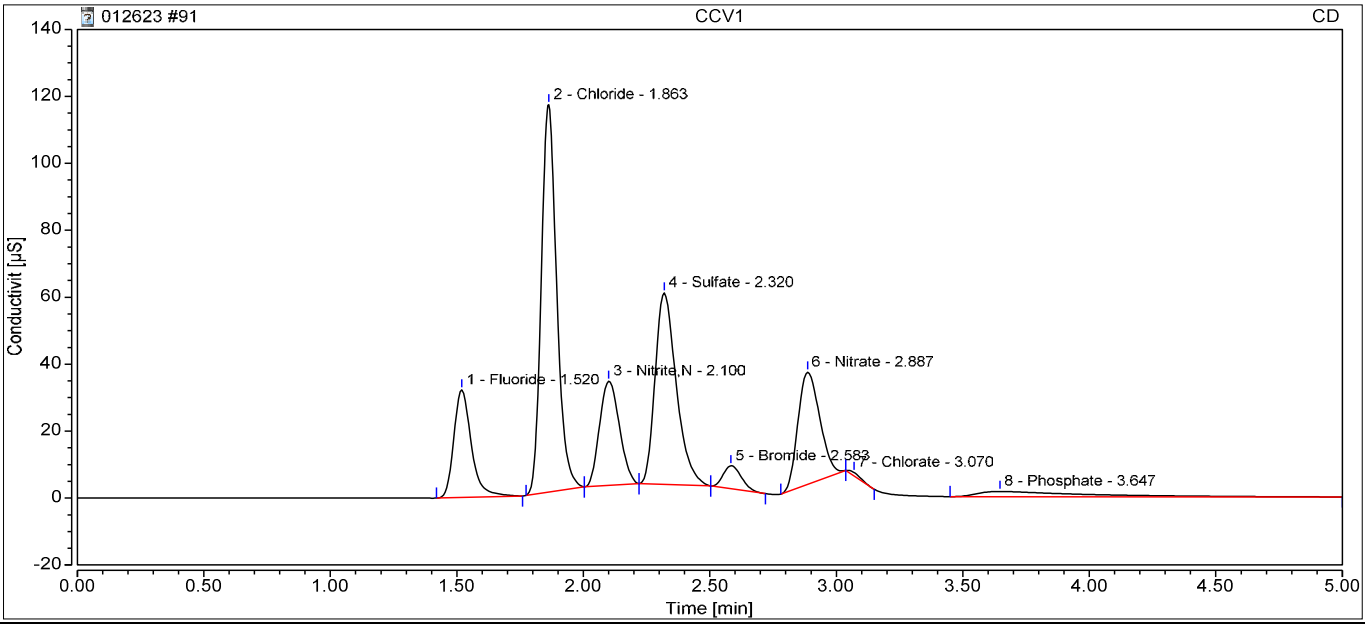


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.86	Chloride	BMB	0.003	0.0348	0.0348	1.0000
2	2.12	Nitrite,N	BMB*	0.008	0.0206	0.0206	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.06**	

91 CCV1			
Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**G3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 19:24**	*Sample Weight:*	**1.0000**

Run Time:



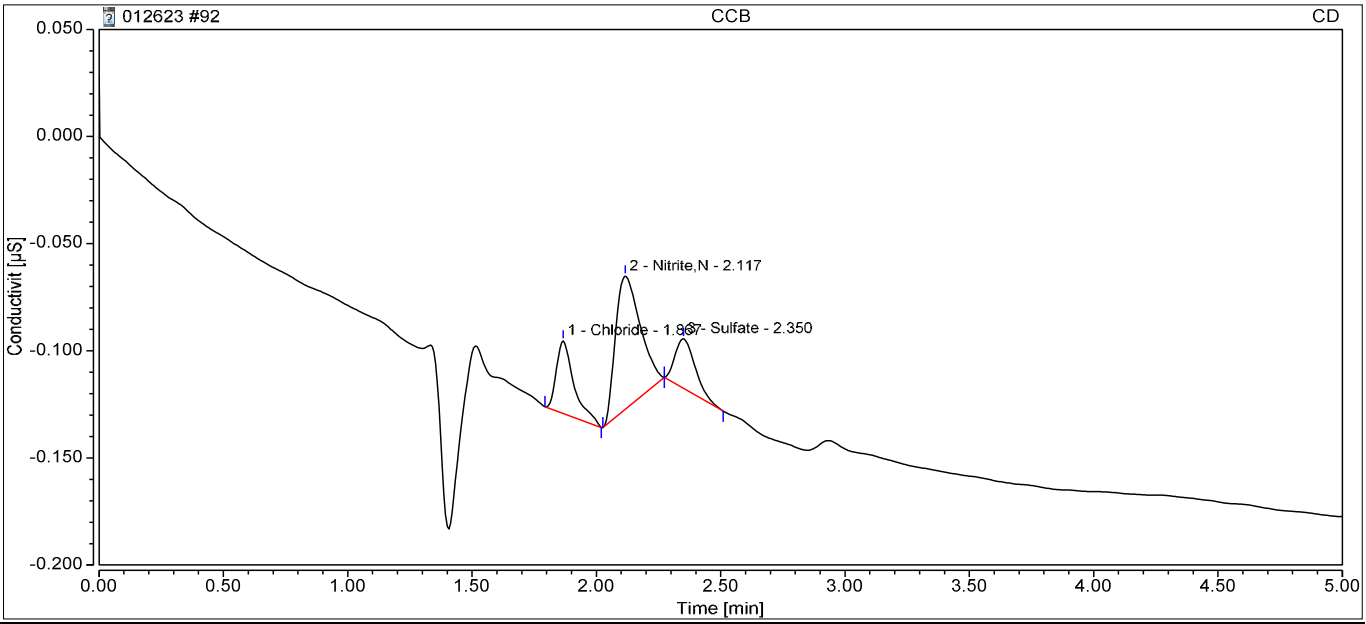
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.587	9.9744	9.9744	1.0000
2	1.86	Chloride	BMB	8.175	47.6679	47.6679	1.0000
3	2.10	Nitrite,N	BMB	2.836	9.2149	9.2149	1.0000
4	2.32	Sulfate	BMB	5.567	49.4791	49.4791	1.0000
5	2.58	Bromide	BMB	0.578	10.0397	10.0397	1.0000
6	2.89	Nitrate	BMB	3.347	9.6130	9.6130	1.0000
7	3.07	Chlorate	BMB	0.056	12.8035	12.8035	1.0000
8	3.65	Phosphate	BMB	0.763	9.8072	9.8072	1.0000
Total:			**0.000**	**23.909**		**158.60**	

92 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 19:35**	*Sample Weight:*	**1.0000**

Run Time:

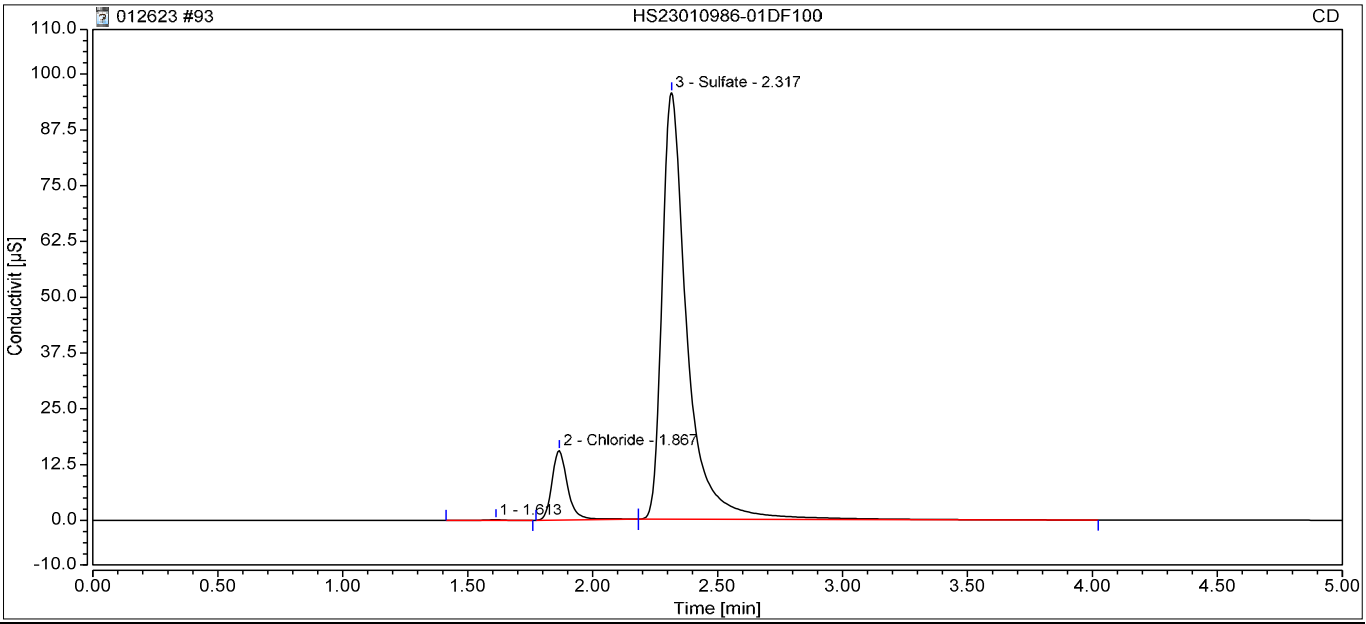


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.003	0.0360	0.0360	1.0000
2	2.12	Nitrite,N	BMB	0.007	0.0194	0.0194	1.0000
3	2.35	Sulfate	BMB	0.002	0.0039	0.0039	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.012**		**0.06**	

93 HS23010986-01DF100			
Sample Name:	**HS23010986-01DF100**	*Injection Volume:*	**5.00**
Vial Number:	**GC7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**100.0000**
Recording Time:	**01/26/2023 19:47**	*Sample Weight:*	**1.0000**

Run Time:



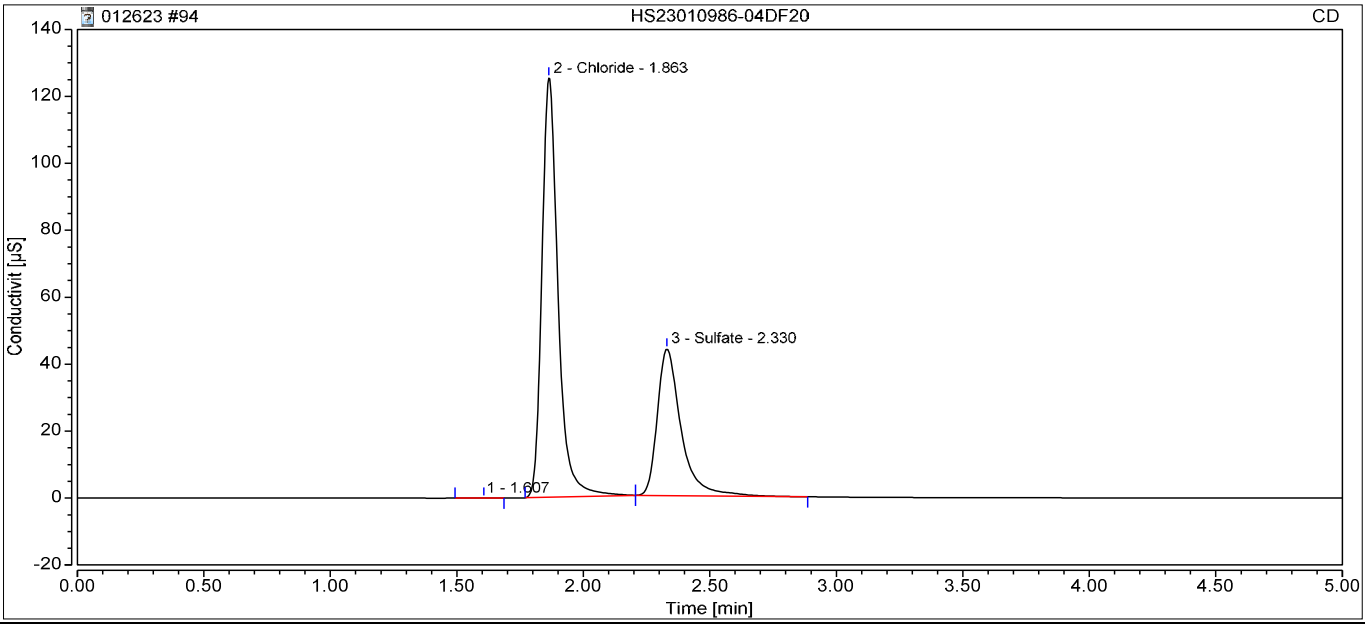
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	100.0000
2	1.87	Chloride	BMB	1.136	6.6410	664.1048	100.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	100.0000
3	2.32	Sulfate	BMB	11.111	98.7623	9876.2328	100.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	100.0000
Total:			**0.000**	**12.247**		**10540.34**	

94 HS23010986-04DF20

Sample Name:	**HS23010986-04DF20**	*Injection Volume:*	**5.00**
Vial Number:	**GC8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**20.0000**
Recording Time:	**01/26/2023 19:53**	*Sample Weight:*	**1.0000**

Run Time:



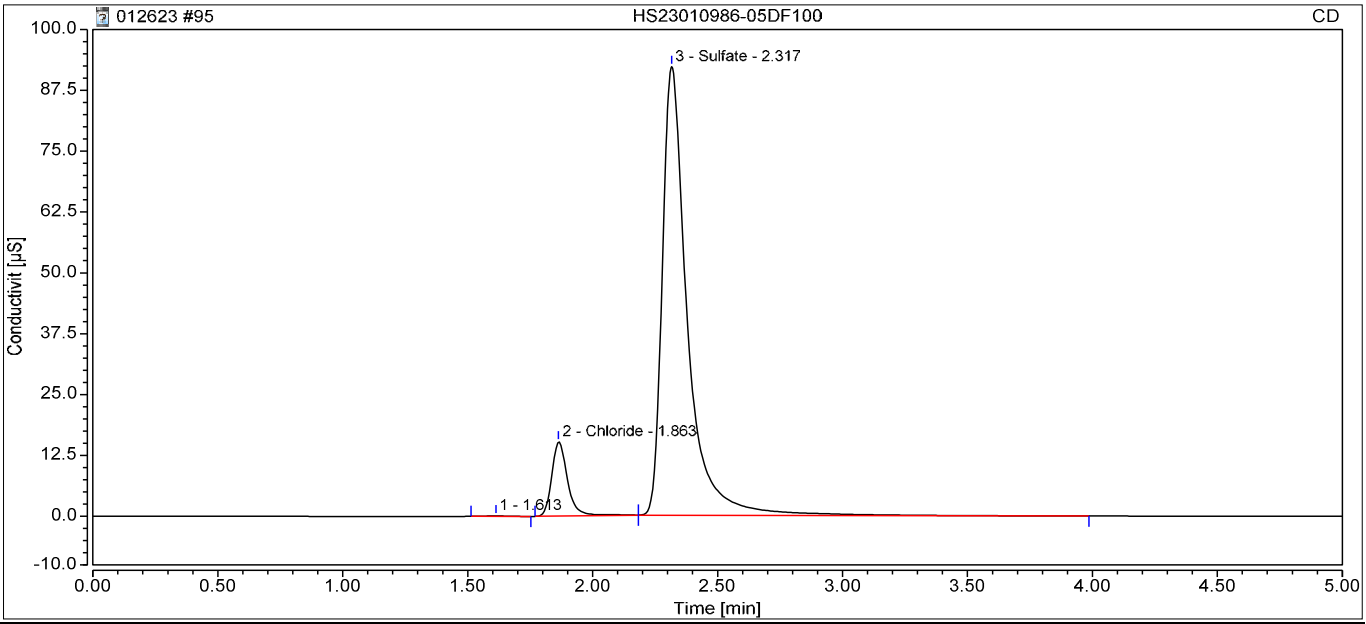
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	20.0000
2	1.86	Chloride	BMB	9.274	54.0779	1081.5573	20.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	20.0000
3	2.33	Sulfate	BMB	4.761	42.3120	846.2404	20.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	20.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	20.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	20.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	20.0000
Total:			**0.000**	**14.036**		**1927.80**	

95 HS23010986-05DF100

Sample Name:	**HS23010986-05DF100**	*Injection Volume:*	**5.00**
Vial Number:	**GD1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**100.0000**
Recording Time:	**01/26/2023 19:58**	*Sample Weight:*	**1.0000**

Run Time:

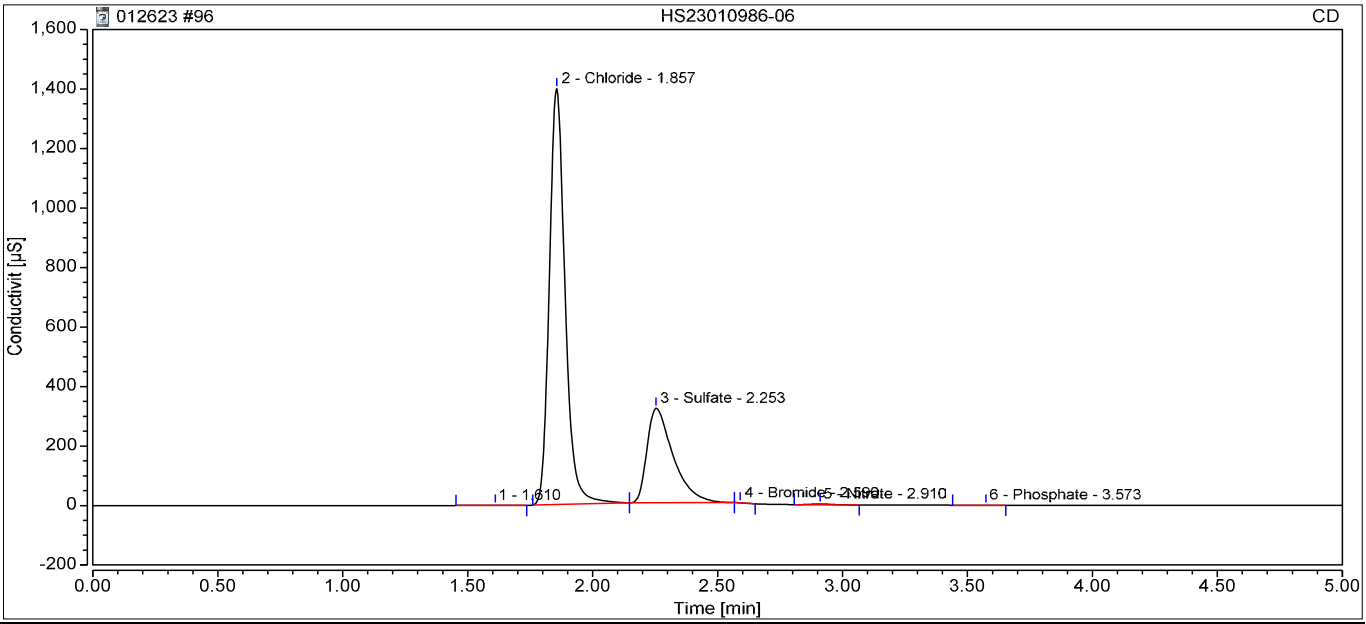


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	100.0000
2	1.86	Chloride	BMB	1.118	6.5371	653.7121	100.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	100.0000
3	2.32	Sulfate	BMB	10.735	95.4164	9541.6376	100.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	100.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	100.0000
Total:			**0.000**	**11.853**		**10195.35**	

96	*HS23010986-06*		
Sample Name:	**HS23010986-06**	*Injection Volume:*	**5.00**
Vial Number:	**GD2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 20:04**	*Sample Weight:*	**1.0000**

Run Time:



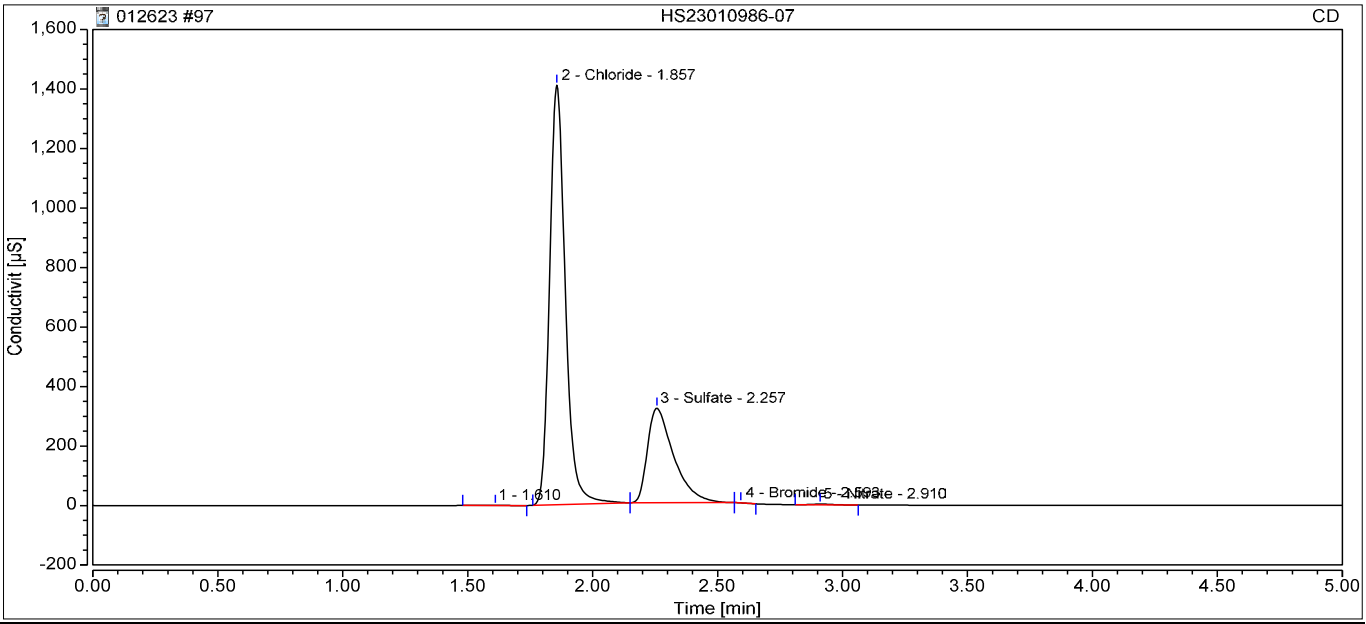
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
2	1.86	Chloride	BMB	102.195	595.6884	595.6884	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
3	2.25	Sulfate	BMB	38.440	341.7220	341.7220	1.0000
4	2.59	Bromide	BMB	0.015	0.3145	0.3145	1.0000
5	2.91	Nitrate	BMB	0.234	0.6451	0.6451	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
6	3.57	Phosphate	BMB	0.003	3.8556	3.8556	1.0000
Total:			**0.000**	**140.887**		**942.23**	

97 HS23010986-07

Sample Name:	**HS23010986-07**	*Injection Volume:*	**5.00**
Vial Number:	**GD3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 20:10**	*Sample Weight:*	**1.0000**

Run Time:



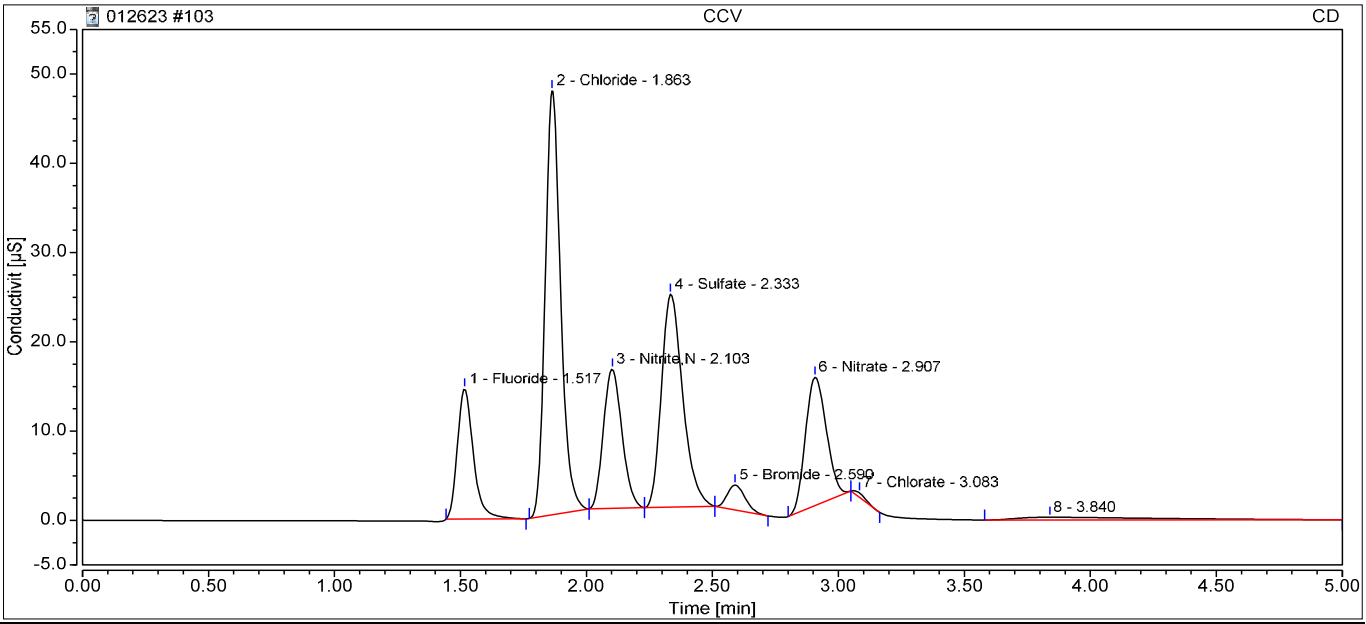
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
2	1.86	Chloride	BMB	103.005	600.4081	600.4081	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
3	2.26	Sulfate	BMB	38.560	342.7871	342.7871	1.0000
4	2.59	Bromide	BMB	0.017	0.3488	0.3488	1.0000
5	2.91	Nitrate	BMB	0.232	0.6409	0.6409	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**141.814**		**944.18**	

103 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 21:14**	*Sample Weight:*	**1.0000**

Run Time:



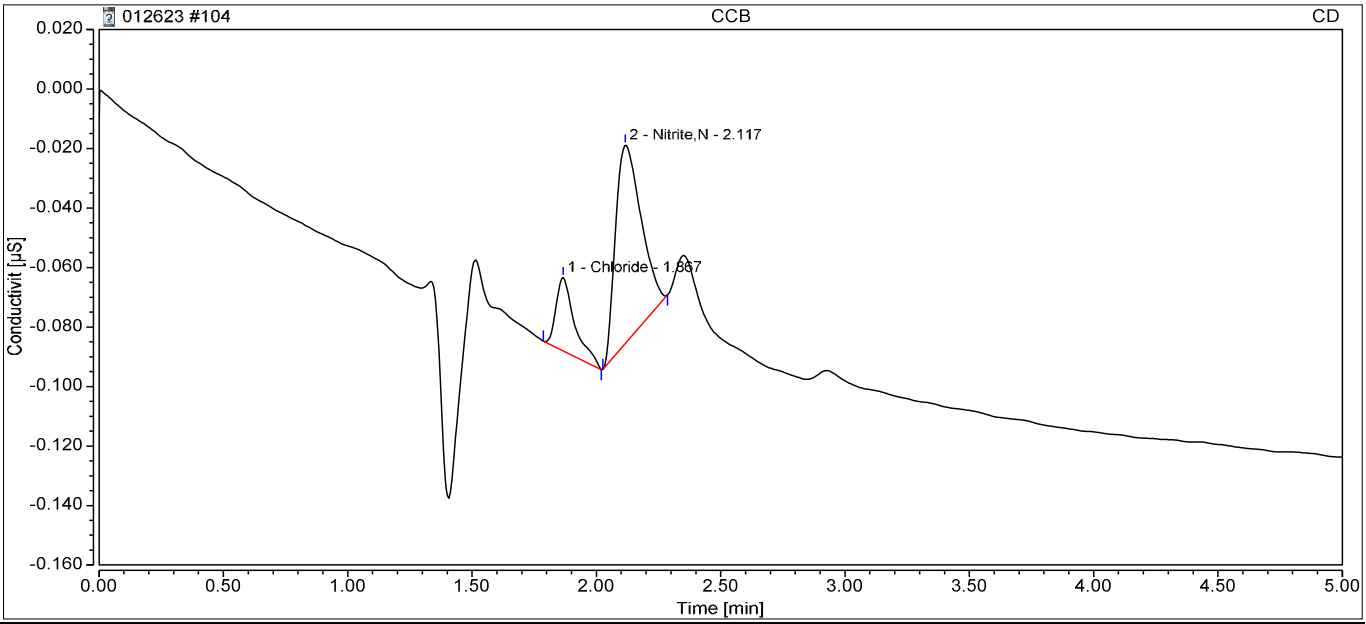
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.079	4.1601	4.1601	1.0000
2	1.86	Chloride	BMB	3.367	19.6439	19.6439	1.0000
3	2.10	Nitrite,N	BMB	1.332	3.9266	3.9266	1.0000
4	2.33	Sulfate	BMB	2.344	20.8189	20.8189	1.0000
5	2.59	Bromide	BMB	0.229	4.0118	4.0118	1.0000
6	2.91	Nitrate	BMB	1.383	3.9576	3.9576	1.0000
7	3.08	Chlorate	BMB	0.024	4.5016	4.5016	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.758**		**61.02**	

104 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/26/2023 21:19**	*Sample Weight:*	**1.0000**

Run Time:



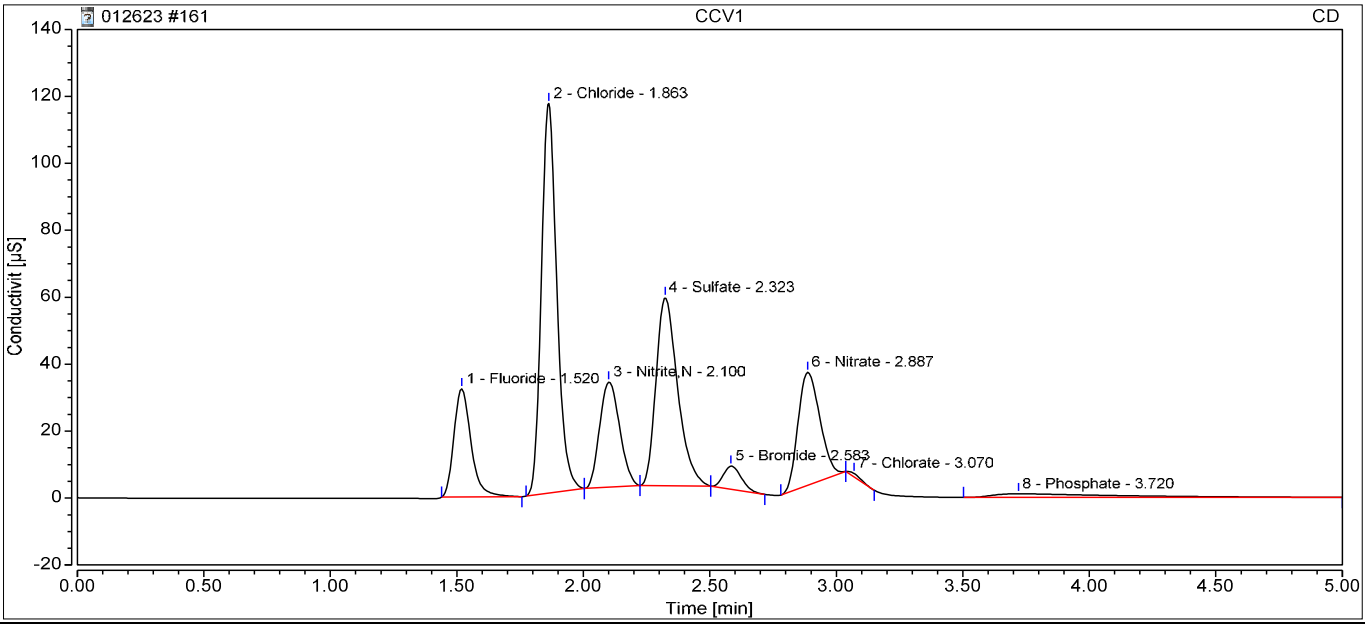
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.002	0.0322	0.0322	1.0000
2	2.12	Nitrite,N	BMB	0.008	0.0216	0.0216	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.05**	

161 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 04:21**	*Sample Weight:*	**1.0000**

Run Time:



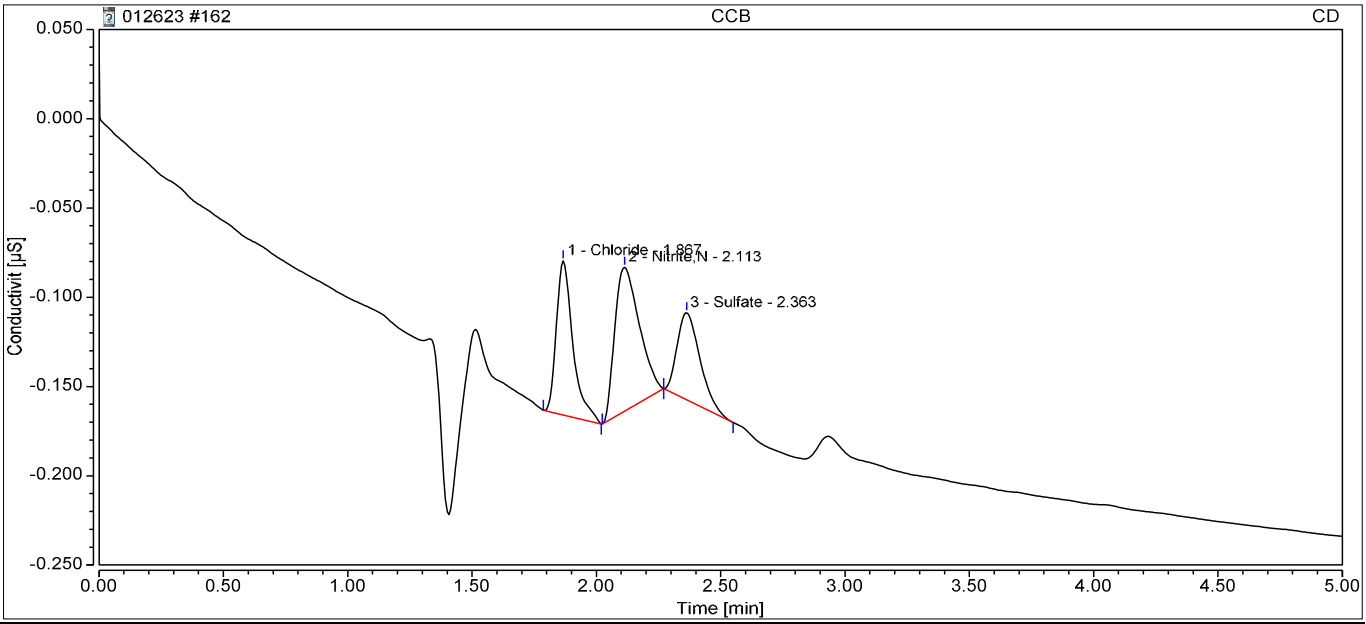
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.549	9.8254	9.8254	1.0000
2	1.86	Chloride	BMB	8.235	48.0198	48.0198	1.0000
3	2.10	Nitrite,N	BMB	2.881	9.3939	9.3939	1.0000
4	2.32	Sulfate	BMB	5.565	49.4608	49.4608	1.0000
5	2.58	Bromide	BMB	0.570	9.8999	9.8999	1.0000
6	2.89	Nitrate	BMB	3.373	9.6902	9.6902	1.0000
7	3.07	Chlorate	BMB	0.056	12.8201	12.8201	1.0000
8	3.72	Phosphate	BMB	0.650	8.9239	8.9239	1.0000
Total:			**0.000**	**23.879**		**158.03**	

162 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 04:27**	*Sample Weight:*	**1.0000**

Run Time:



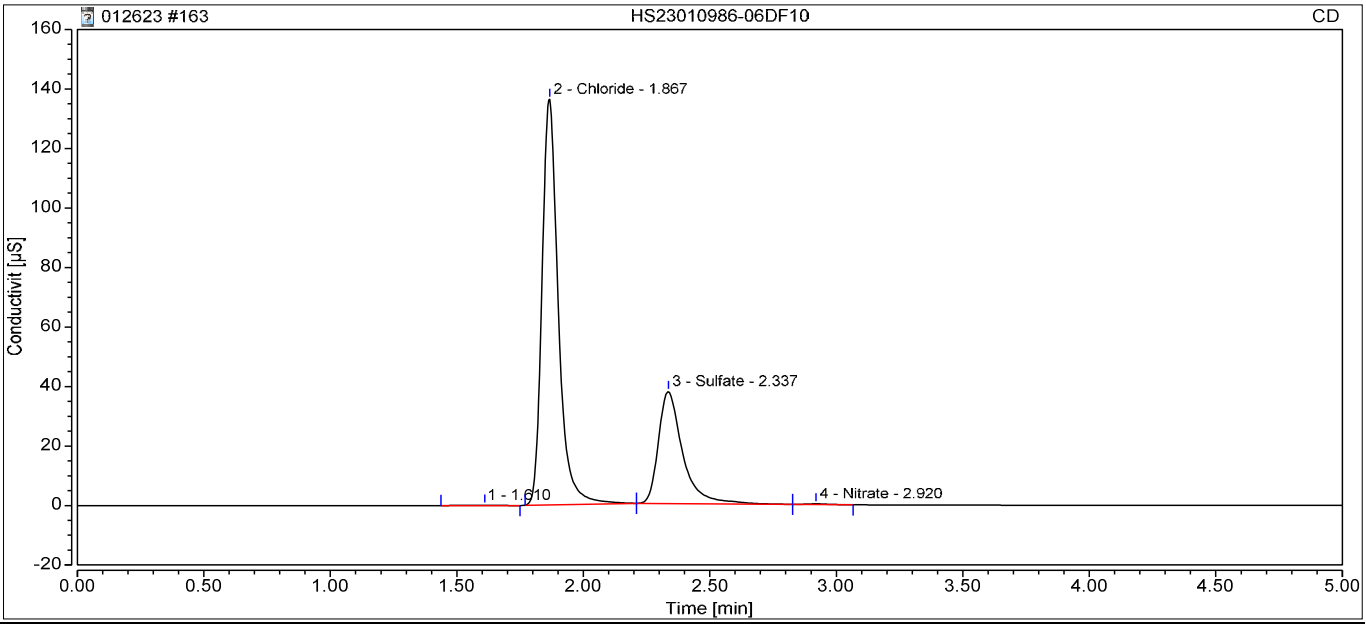
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.87	Chloride	BMB	0.007	0.0586	0.0586	1.0000
2	2.11	Nitrite,N	BMB	0.009	0.0251	0.0251	1.0000
3	2.36	Sulfate	BMB	0.005	0.0310	0.0310	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.021**		**0.11**	

163 HS23010986-06DF10

Sample Name:	**HS23010986-06DF10**	*Injection Volume:*	**5.00**
Vial Number:	**BE5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**01/27/2023 07:15**	*Sample Weight:*	**1.0000**

Run Time:



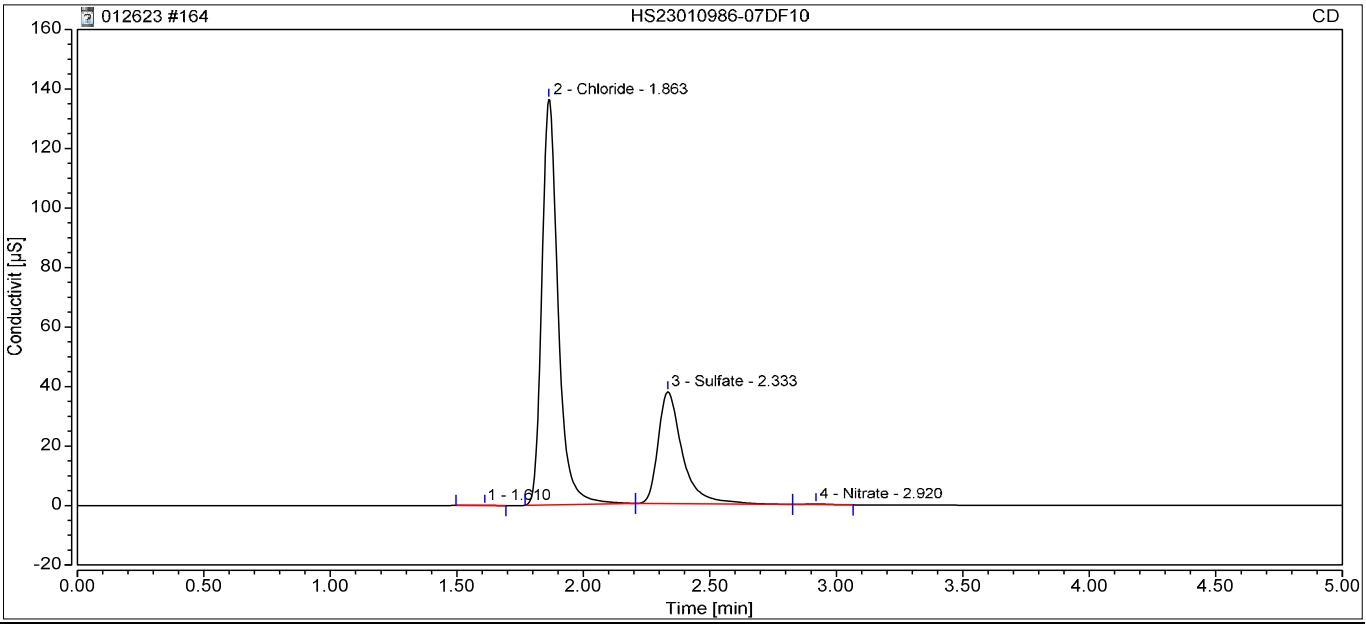
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
2	1.87	Chloride	BMB	10.158	59.2272	592.2718	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
3	2.34	Sulfate	BMB	4.172	37.0773	370.7729	10.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	10.0000
4	2.92	Nitrate	BMB	0.021	0.0324	0.3242	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**14.351**		**963.37**	

164 HS23010986-07DF10

Sample Name:	**HS23010986-07DF10**	*Injection Volume:*	**5.00**
Vial Number:	**BE6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**01/27/2023 07:21**	*Sample Weight:*	**1.0000**

Run Time:



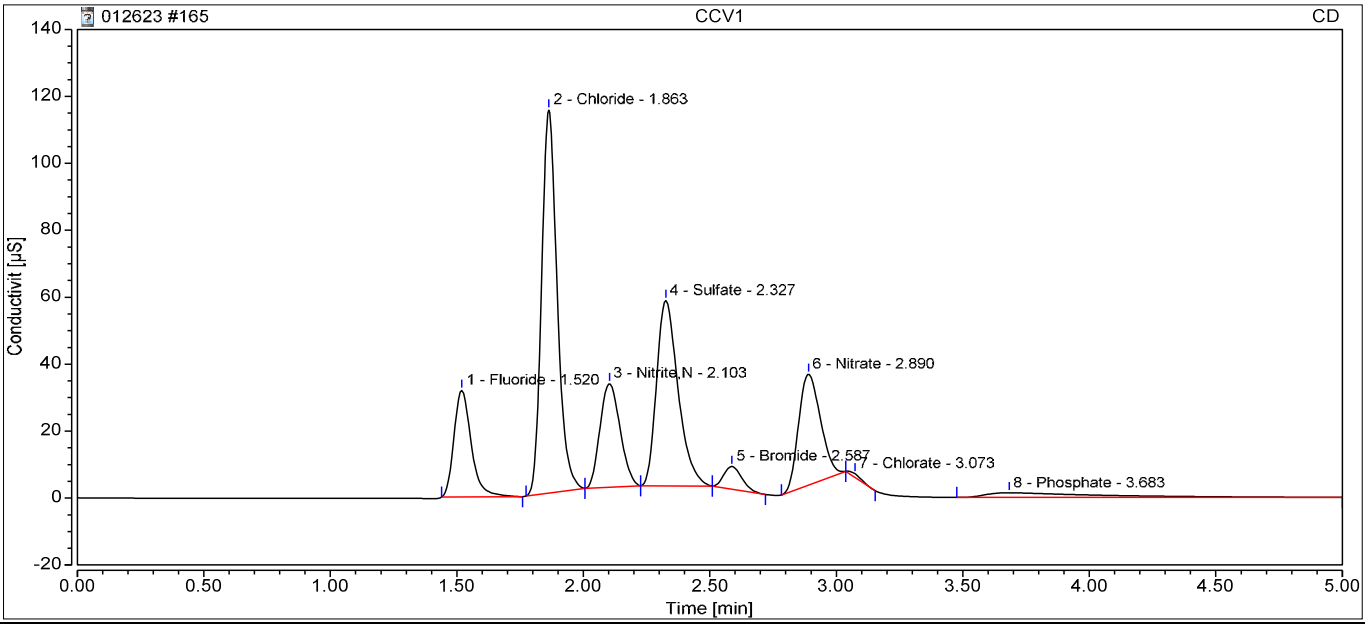
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
2	1.86	Chloride	BMB	10.157	59.2247	592.2473	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
3	2.33	Sulfate	BMB	4.181	37.1509	371.5087	10.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	10.0000
4	2.92	Nitrate	BMB	0.021	0.0324	0.3243	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**14.359**		**964.08**	

165 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 07:32**	*Sample Weight:*	**1.0000**

Run Time:



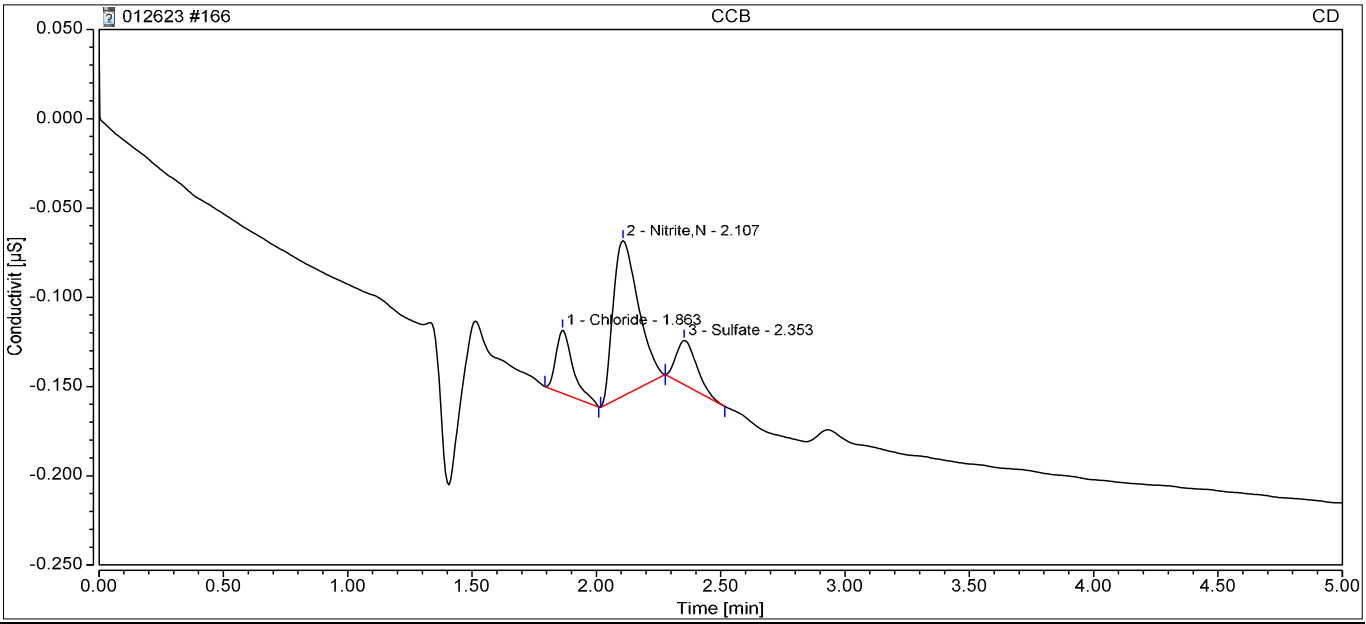
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.533	9.7648	9.7648	1.0000
2	1.86	Chloride	BMB	8.168	47.6301	47.6301	1.0000
3	2.10	Nitrite,N	BMB	2.849	9.2643	9.2643	1.0000
4	2.33	Sulfate	BMB	5.470	48.6098	48.6098	1.0000
5	2.59	Bromide	BMB	0.562	9.7536	9.7536	1.0000
6	2.89	Nitrate	BMB	3.319	9.5343	9.5343	1.0000
7	3.07	Chlorate	BMB	0.058	13.5218	13.5218	1.0000
8	3.68	Phosphate	BMB	0.751	9.7175	9.7175	1.0000
Total:			**0.000**	**23.709**		**157.80**	

166 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/27/2023 07:38**	*Sample Weight:*	**1.0000**

Run Time:



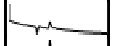
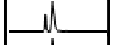
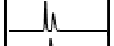
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.86	Chloride	BMB	0.003	0.0363	0.0363	1.0000
2	2.11	Nitrite,N	BMB	0.010	0.0279	0.0279	1.0000
3	2.35	Sulfate	BMB	0.002	0.0060	0.0060	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.015**		**0.07**	

HS23010986 9056_W_Nitrate Nitrite IC

ALS WO# HS23010986

Sequence: 013023
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratic	BA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratic	BA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratic	BA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratic	BA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratic	BA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratic	BA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	BA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	9056-W-N02/NO3	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS	9056-W-N02/NO3	Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-05DF5		Unknown	GC8	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-05MSDF5		Unknown	GD1	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010982-05MSDDF		Unknown	GD2	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-01DF5		Unknown	GD3	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-04DF5		Unknown	GD4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-05DF5		Unknown	GD5	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-05MSDF5		Unknown	GD6	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-05MSDDF		Unknown	GD7	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-06DF5		Unknown	GD8	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23010986-07DF5	9056-W-N02/NO3	Unknown	GE1	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 013023
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	1/23/2023 2:36:57 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/23/2023 2:42:45 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/23/2023 2:48:34 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/23/2023 2:54:22 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/23/2023 3:00:10 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/23/2023 3:05:59 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/23/2023 3:11:47 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/23/2023 3:17:35 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/30/2023 9:45:27 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/30/2023 9:51:13 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/30/2023 10:25:48 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/30/2023 10:54:49 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/30/2023 11:41:05 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/30/2023 11:46:51 PM -06:00
Anions Processing Method ISO		HS23010982-05DF5	5.0	Finished	1/31/2023 12:09:53 AM -06:00
Anions Processing Method ISO		HS23010982-05MSDF5	5.0	Finished	1/31/2023 12:15:38 AM -06:00
Anions Processing Method ISO		HS23010982-05MSDDF	5.0	Finished	1/31/2023 12:21:22 AM -06:00
Anions Processing Method ISO		HS23010986-01DF5	5.0	Finished	1/31/2023 12:27:06 AM -06:00
Anions Processing Method ISO		HS23010986-04DF5	5.0	Finished	1/31/2023 12:32:50 AM -06:00
Anions Processing Method ISO		HS23010986-05DF5	5.0	Finished	1/31/2023 12:38:34 AM -06:00
Anions Processing Method ISO		HS23010986-05MSDF5	5.0	Finished	1/31/2023 12:44:28 AM -06:00
Anions Processing Method ISO		HS23010986-05MSDDF	5.0	Finished	1/31/2023 12:50:23 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/31/2023 1:14:00 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/31/2023 1:19:55 AM -06:00
Anions Processing Method ISO		HS23010986-06DF5	5.0	Finished	1/31/2023 1:31:45 AM -06:00
Anions Processing Method ISO		HS23010986-07DF5	5.0	Finished	1/31/2023 1:37:29 AM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/31/2023 2:41:41 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/31/2023 2:53:29 AM -06:00

Sequence: 012623
Injection #6: STD6

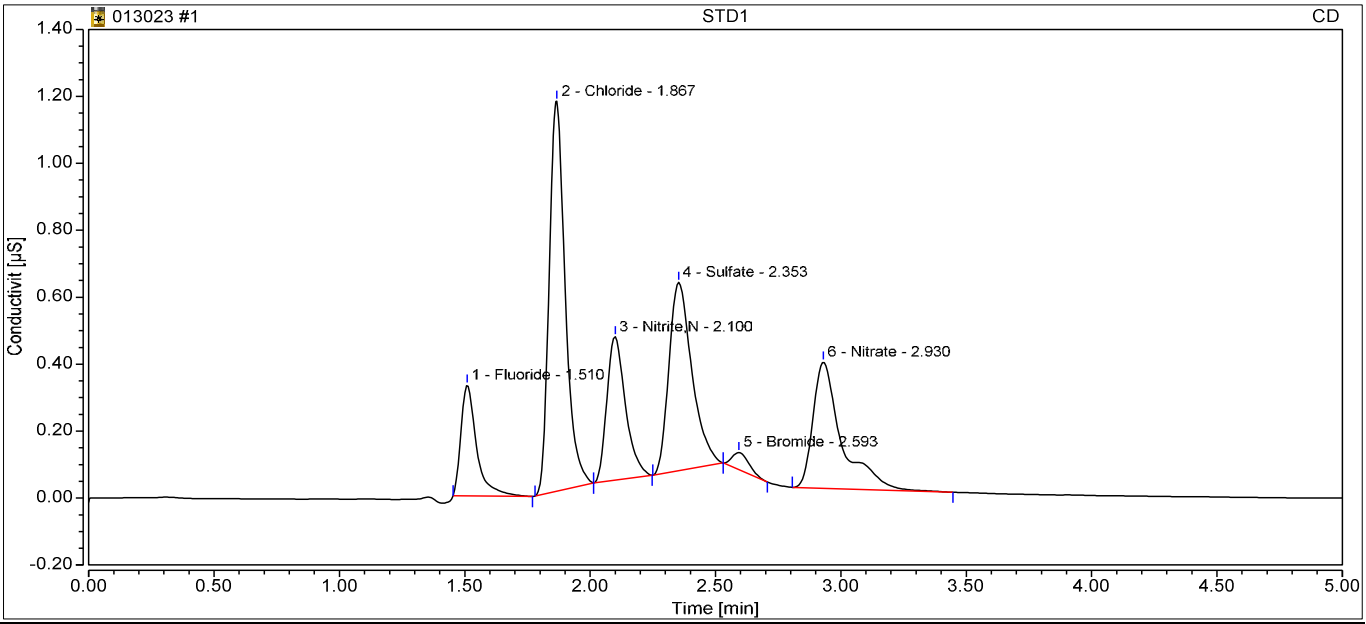
Calibration

Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***18.2600***	***0.99823***	***0.0003***	***0.2594***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	3.9326	0.99992	-0.0034	0.1716	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	6.5665	0.99976	0.0001	0.3625	-0.0059
4	Sulfate	Lin, WithOffset, 1/A	Area	6	7.0089	0.99974	0.0018	0.1125	0.0000
5	Bromide	Lin, WithOffset, 1/A	Area	6	21.3247	0.99813	-0.0031	0.0579	0.0000
6	Nitrate	Lin, WithOffset, 1/A	Area	6	8.6115	0.99956	0.0097	0.3471	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	5	14.8871	0.99687	-0.0004	0.0060	-0.0001
8	Phosphate	Lin, WithOffset, 1/A	Area	2	n.a.	1.00000	-0.4901	0.1278	0.0000
Maximum					**21.3247**	1.00000			
Minimum					3.9326	**0.99687**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**BA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:36**	*Sample Weight:*	**1.0000**

Run Time:



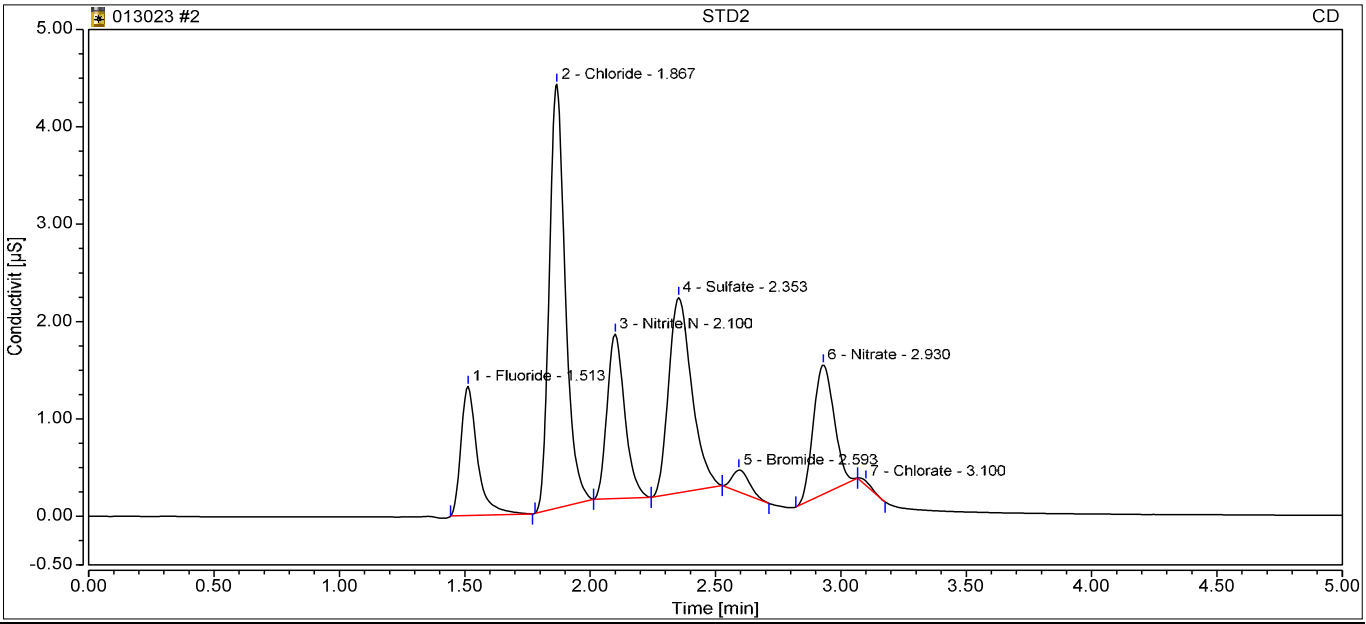
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.024	0.0916	0.0916	1.0000
2	1.87	Chloride	BMB	0.087	0.5248	0.5248	1.0000
3	2.10	Nitrite,N	BMB	0.037	0.1020	0.1020	1.0000
4	2.35	Sulfate	BMB	0.060	0.5165	0.5165	1.0000
5	2.59	Bromide	BMB	0.004	0.1232	0.1232	1.0000
6	2.93	Nitrate	BMB	0.050	0.1161	0.1161	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.262**		**1.47**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**BA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:42**	*Sample Weight:*	**1.0000**

Run Time:



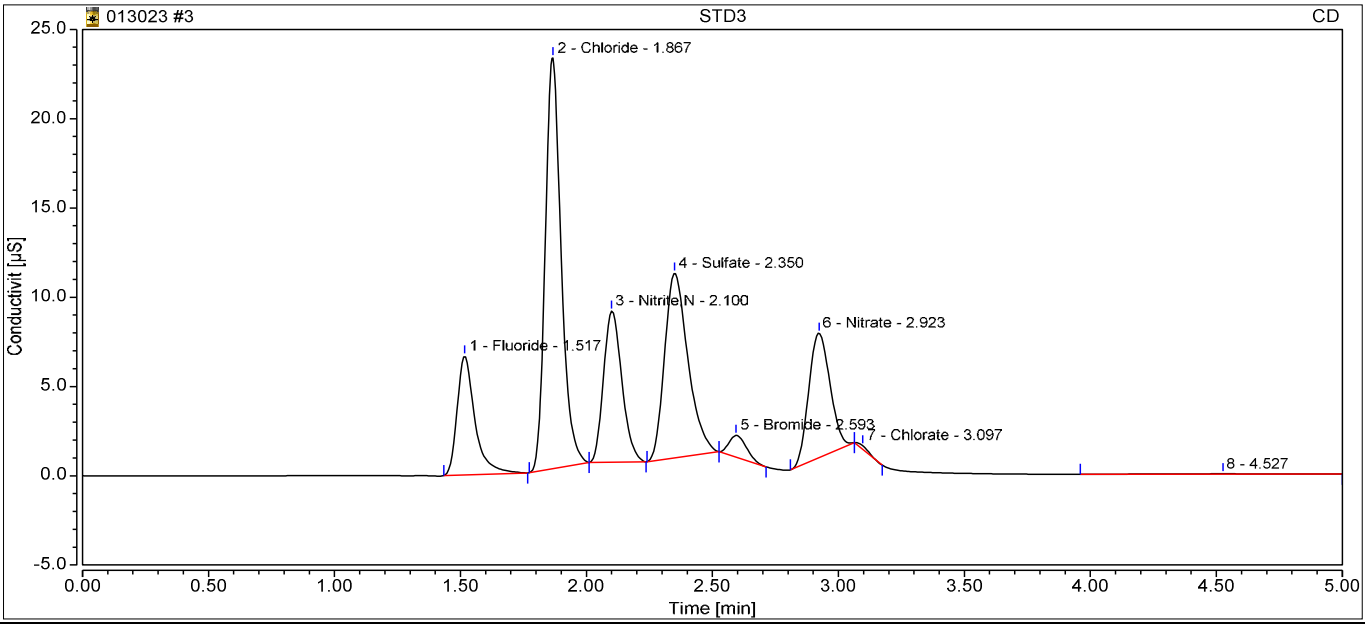
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.101	0.3891	0.3891	1.0000
2	1.87	Chloride	BMB	0.323	1.9022	1.9022	1.0000
3	2.10	Nitrite,N	BMB	0.138	0.3825	0.3825	1.0000
4	2.35	Sulfate	BMB	0.215	1.8922	1.8922	1.0000
5	2.59	Bromide	BMB	0.018	0.3682	0.3682	1.0000
6	2.93	Nitrate	BMB	0.128	0.3409	0.3409	1.0000
7	3.10	Chlorate	BMB	0.002	0.4193	0.4193	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.925**		**5.69**	

3 STD3

Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**BA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:48**	*Sample Weight:*	**1.0000**

Run Time:



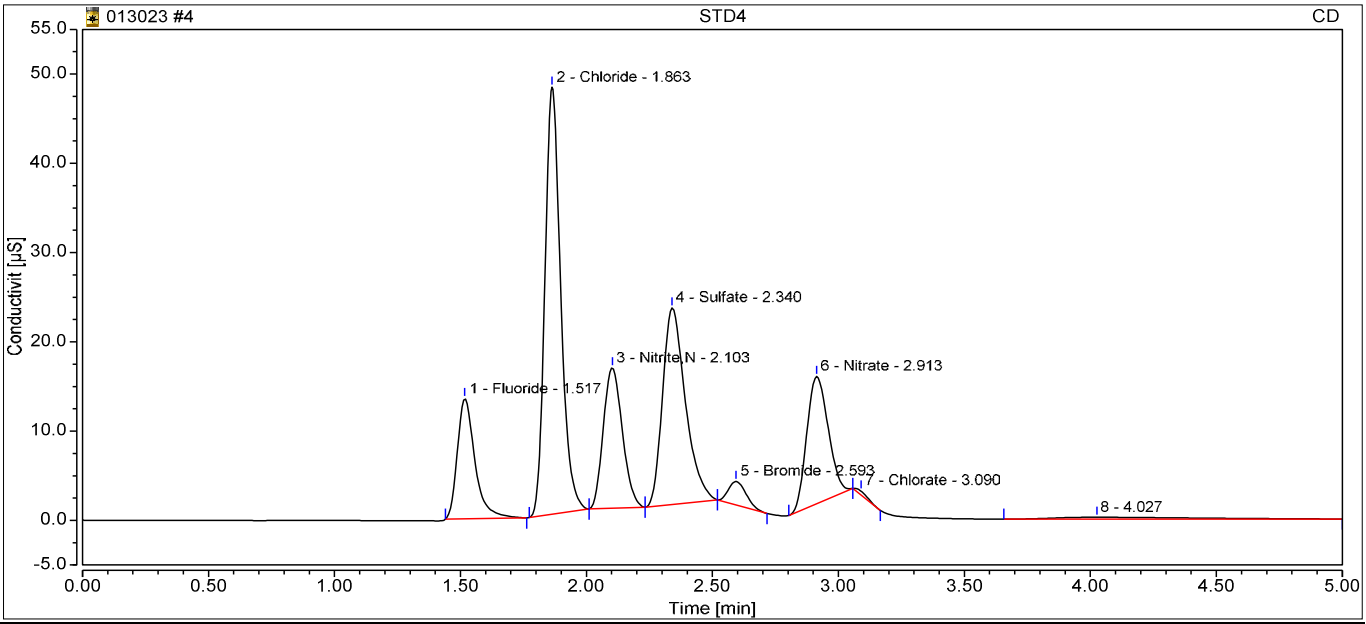
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.545	2.1003	2.1003	1.0000
2	1.87	Chloride	BMB	1.685	9.8413	9.8413	1.0000
3	2.10	Nitrite,N	BMB	0.715	2.0394	2.0394	1.0000
4	2.35	Sulfate	BMB	1.114	9.8924	9.8924	1.0000
5	2.59	Bromide	BMB	0.099	1.7671	1.7671	1.0000
6	2.92	Nitrate	BMB	0.683	1.9402	1.9402	1.0000
7	3.10	Chlorate	BMB	0.010	1.7695	1.7695	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.851**		**29.35**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**BA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 14:54**	*Sample Weight:*	**1.0000**

Run Time:

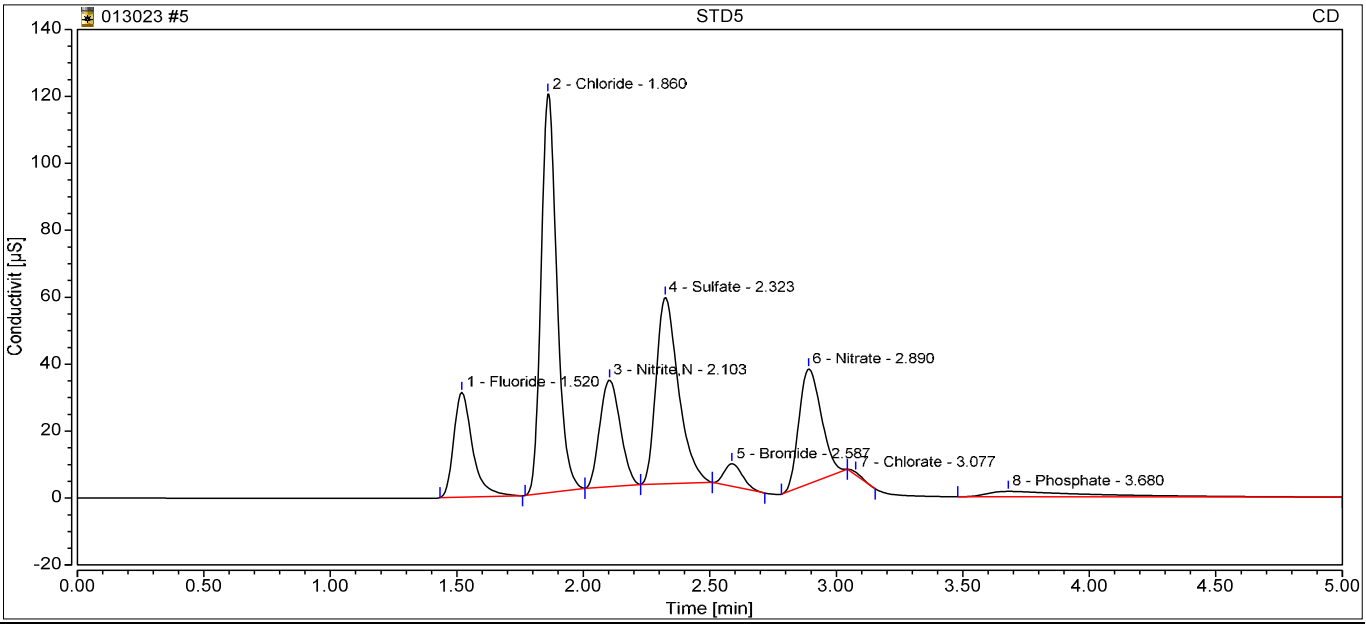


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.096	4.2257	4.2257	1.0000
2	1.86	Chloride	BMB	3.473	20.2647	20.2647	1.0000
3	2.10	Nitrite,N	BMB	1.379	4.0759	4.0759	1.0000
4	2.34	Sulfate	BMB	2.316	20.5697	20.5697	1.0000
5	2.59	Bromide	BMB	0.216	3.7890	3.7890	1.0000
6	2.91	Nitrate	BMB	1.408	4.0269	4.0269	1.0000
7	3.09	Chlorate	BMB	0.023	4.3199	4.3199	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.911**		**61.27**	

5 STD5			
Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**BA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:00**	*Sample Weight:*	**1.0000**

Run Time:

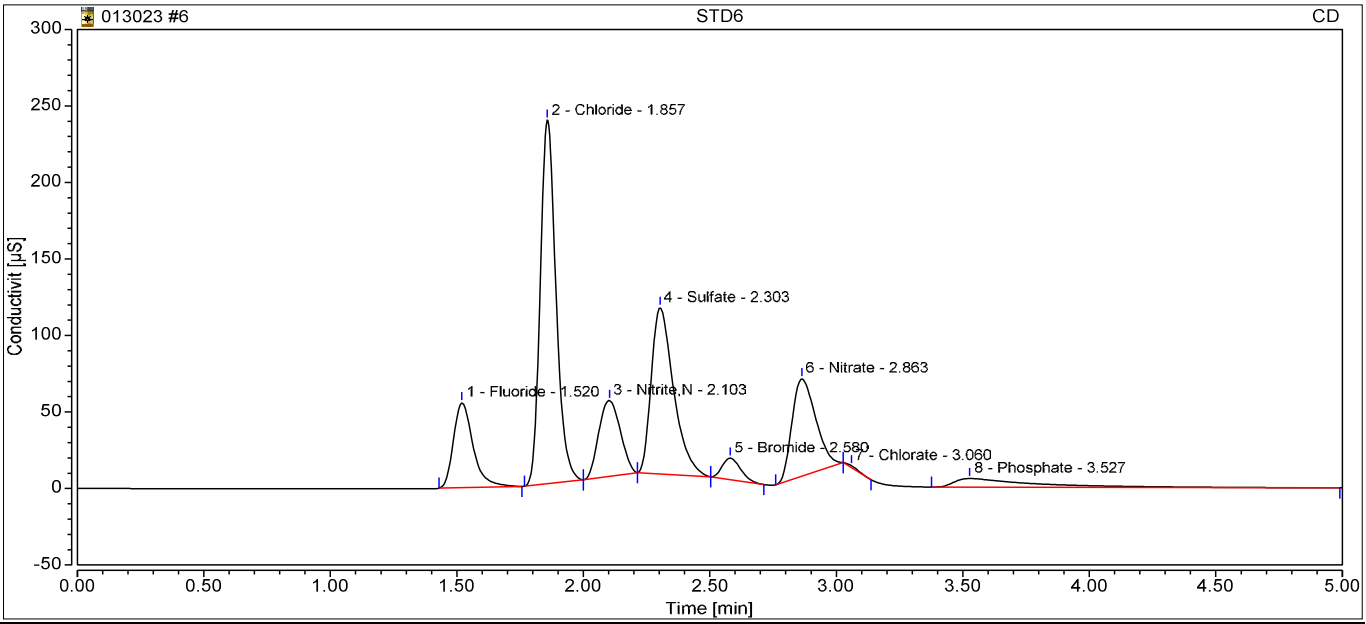


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.698	10.4020	10.4020	1.0000
2	1.86	Chloride	BMB	8.612	50.2171	50.2171	1.0000
3	2.10	Nitrite,N	BMB	2.980	9.7904	9.7904	1.0000
4	2.32	Sulfate	BMB	5.704	50.6918	50.6918	1.0000
5	2.59	Bromide	BMB	0.569	9.8884	9.8884	1.0000
6	2.89	Nitrate	BMB	3.525	10.1264	10.1264	1.0000
7	3.08	Chlorate	BMB	0.047	9.8667	9.8667	1.0000
8	3.68	Phosphate	BMB	0.787	10.0000	10.0000	1.0000
Total:			**0.000**	**24.922**		**160.98**	

6 STD6			
Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**BA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:05**	*Sample Weight:*	**1.0000**

Run Time:



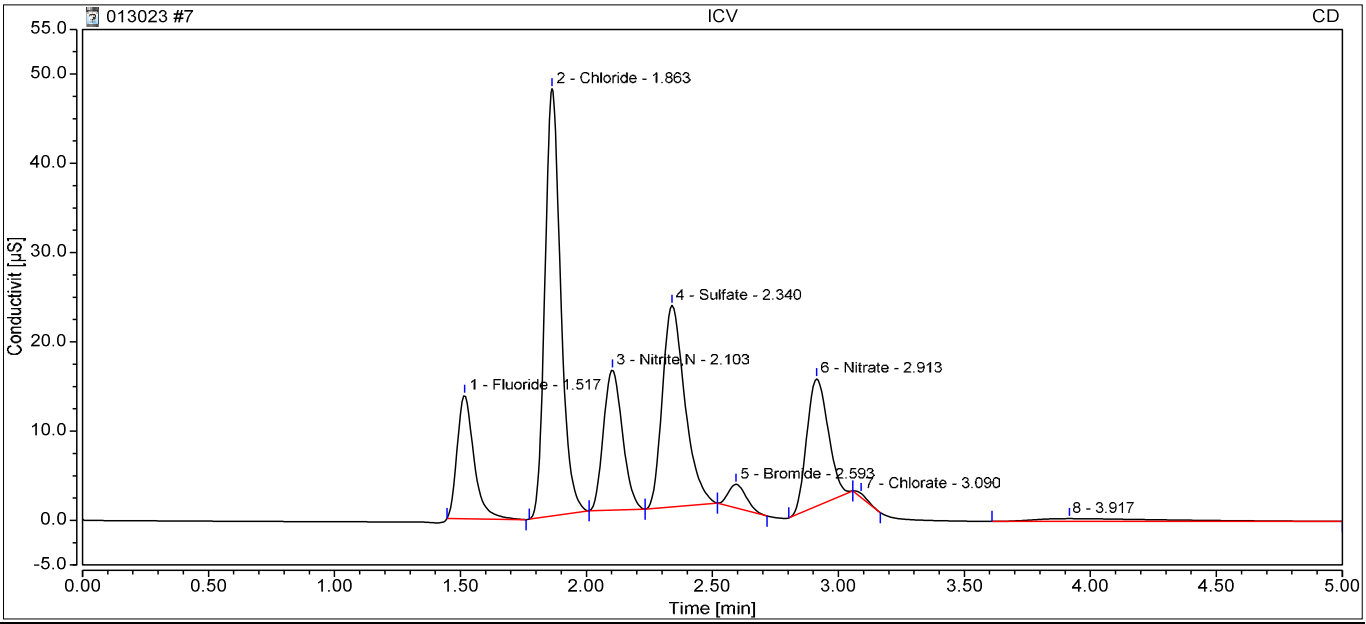
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	5.004	19.2913	19.2913	1.0000
2	1.86	Chloride	BMB	17.110	99.7497	99.7497	1.0000
3	2.10	Nitrite,N	BMB	4.894	20.1587	20.1587	1.0000
4	2.30	Sulfate	BMB	11.131	98.9373	98.9373	1.0000
5	2.58	Bromide	BMB	1.187	20.5641	20.5641	1.0000
6	2.86	Nitrate	BMB	6.935	19.9496	19.9496	1.0000
7	3.06	Chlorate	BMB	0.069	20.0446	20.0446	1.0000
8	3.53	Phosphate	BMB	2.065	20.0000	20.0000	1.0000
Total:			**0.000**	**48.395**		**318.70**	

7 ICV

Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**BA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:11**	*Sample Weight:*	**1.0000**

Run Time:



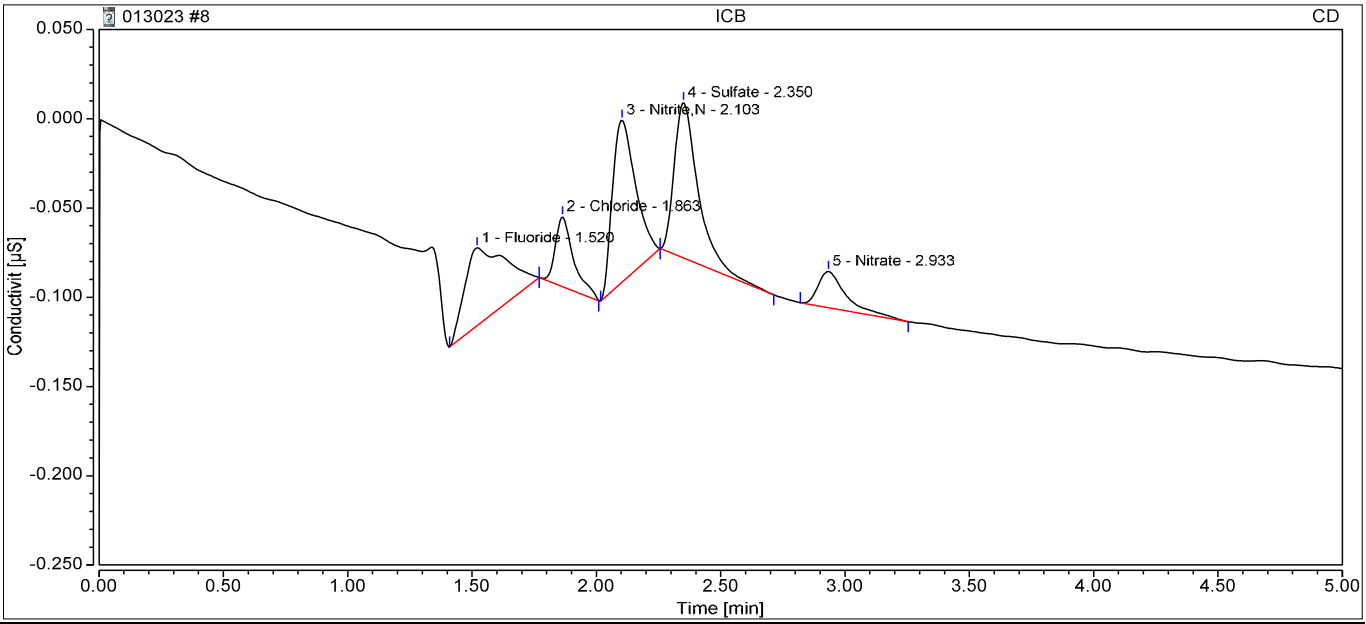
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.076	4.1460	4.1460	1.0000
2	1.86	Chloride	BMB	3.476	20.2807	20.2807	1.0000
3	2.10	Nitrite,N	BMB	1.374	4.0608	4.0608	1.0000
4	2.34	Sulfate	BMB	2.342	20.8027	20.8027	1.0000
5	2.59	Bromide	BMB	0.218	3.8222	3.8222	1.0000
6	2.91	Nitrate	BMB	1.407	4.0267	4.0267	1.0000
7	3.09	Chlorate	BMB	0.023	4.2714	4.2714	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.916**		**61.41**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**BA8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/23/2023 15:17**	*Sample Weight:*	**1.0000**

Run Time:



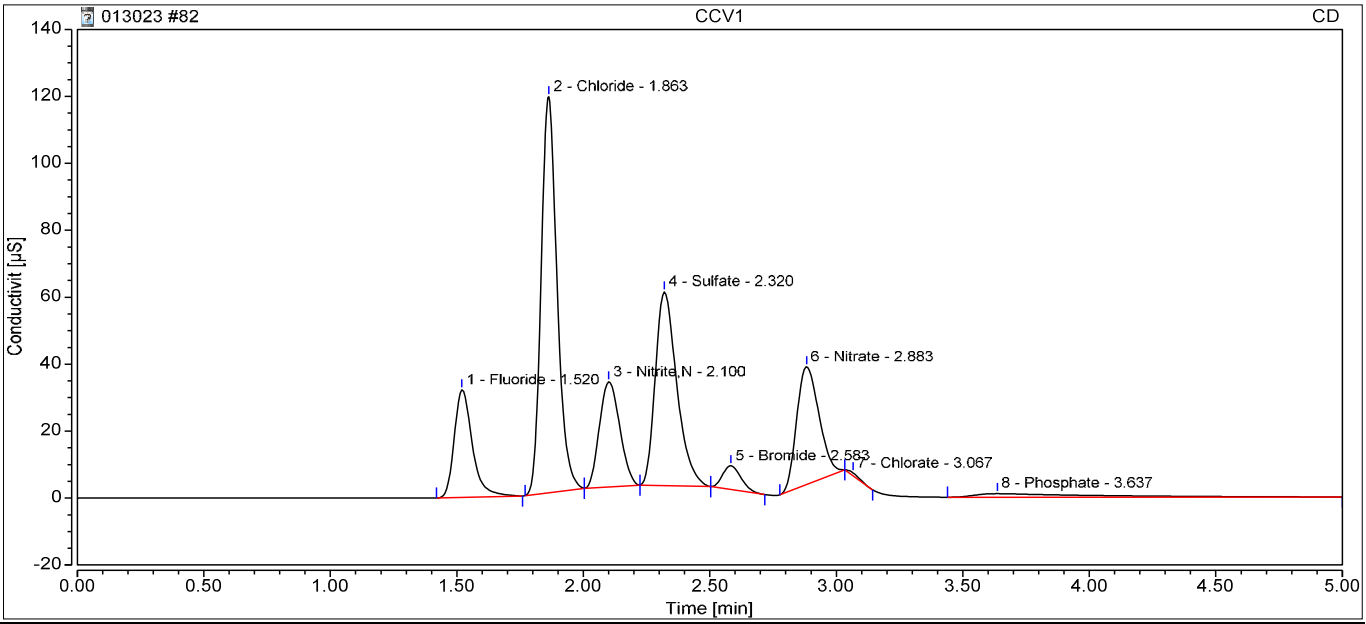
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.008	0.0297	0.0297	1.0000
2	1.86	Chloride	BMB	0.003	0.0390	0.0390	1.0000
3	2.10	Nitrite,N	BMB	0.010	0.0268	0.0268	1.0000
4	2.35	Sulfate	BMB	0.010	0.0714	0.0714	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
5	2.93	Nitrate	BMB	0.003	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.034**		**0.17**	

82 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 21:45**	*Sample Weight:*	**1.0000**

Run Time:



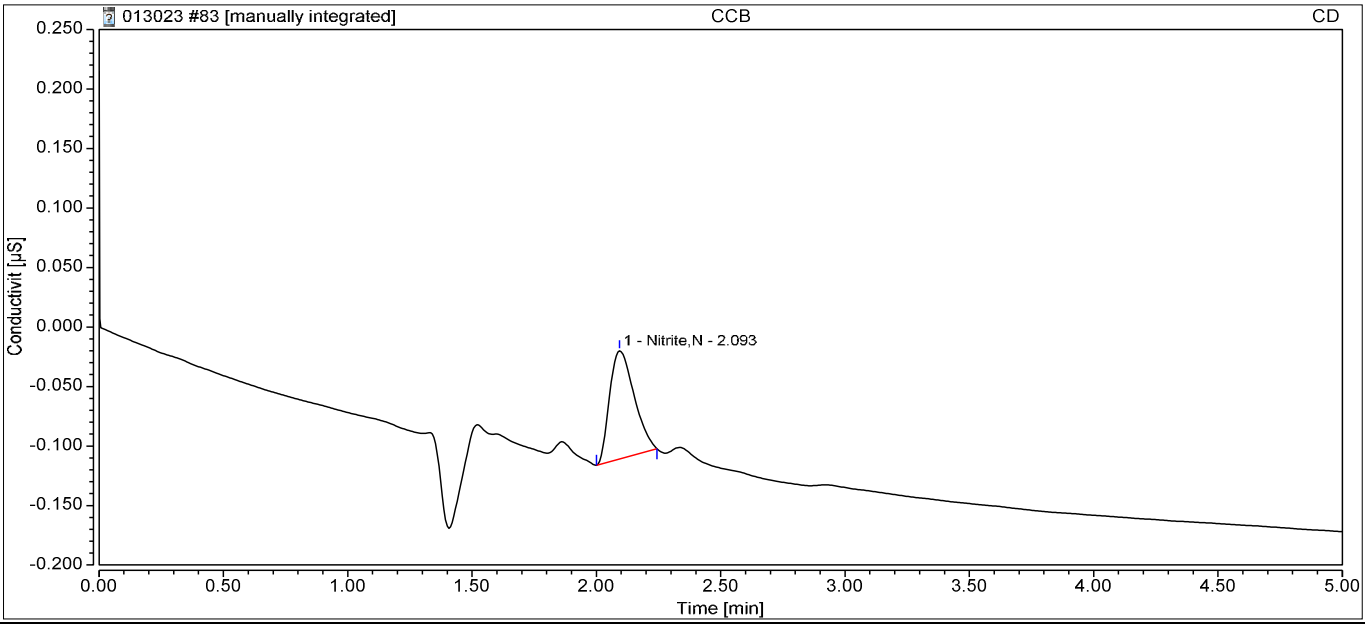
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.671	10.2974	10.2974	1.0000
2	1.86	Chloride	BMB	8.631	50.3286	50.3286	1.0000
3	2.10	Nitrite,N	BMB	2.922	9.5576	9.5576	1.0000
4	2.32	Sulfate	BMB	5.720	50.8325	50.8325	1.0000
5	2.58	Bromide	BMB	0.601	10.4397	10.4397	1.0000
6	2.88	Nitrate	BMB	3.595	10.3296	10.3296	1.0000
7	3.07	Chlorate	BMB	0.045	9.3293	9.3293	1.0000
8	3.64	Phosphate	BMB	0.578	8.3610	8.3610	1.0000
Total:			**0.000**	**24.763**		**159.48**	

83 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 21:51**	*Sample Weight:*	**1.0000**

Run Time:



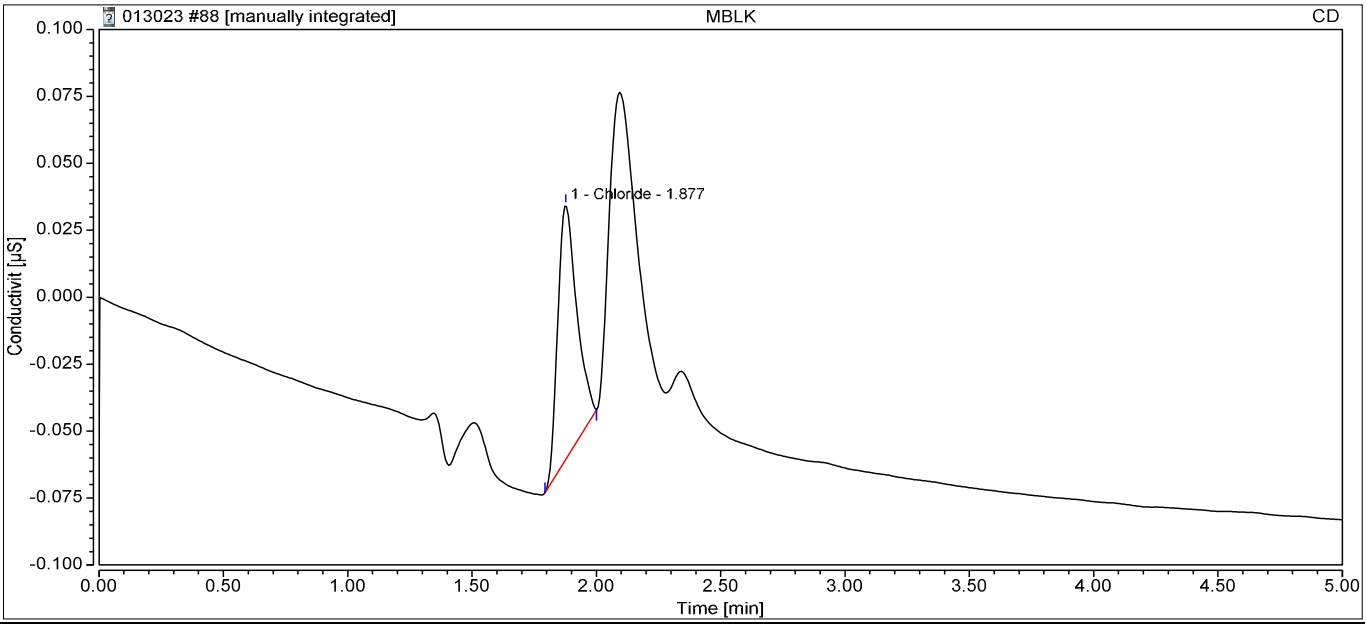
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.09	Nitrite,N	BMB*	0.010	0.0283	0.0283	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.03**	

88 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 22:25**	*Sample Weight:*	**1.0000**

Run Time:



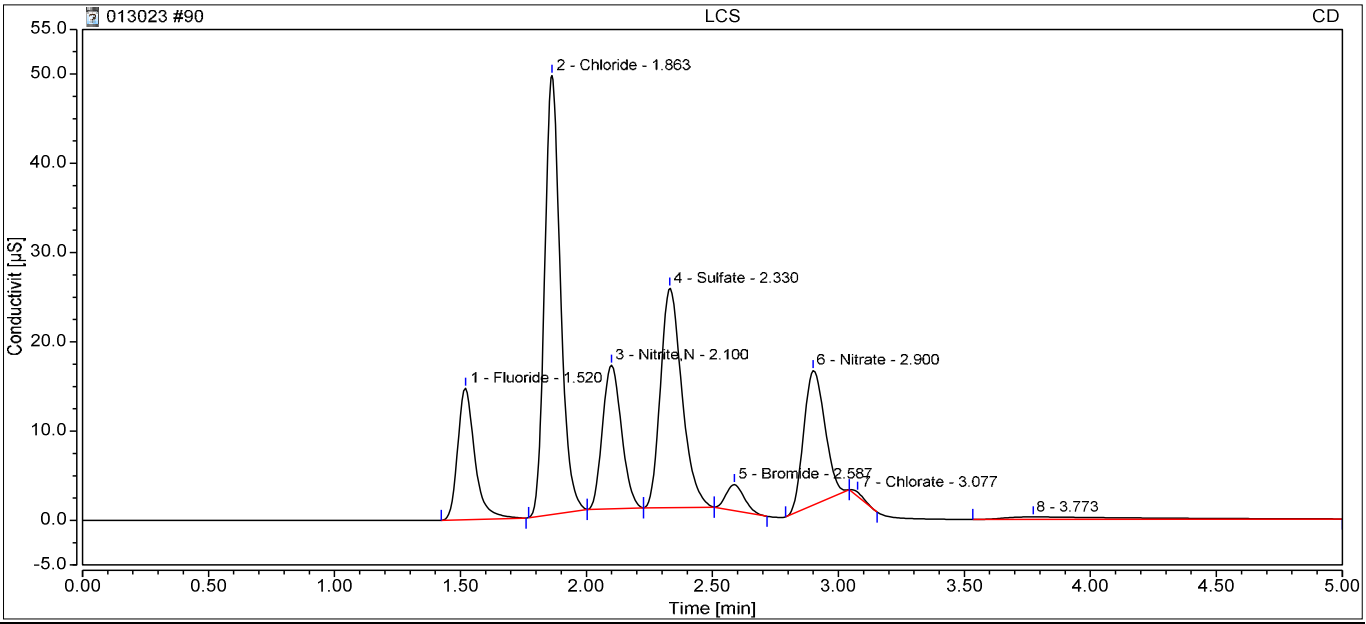
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.88	Chloride	BMB	0.008	0.0688	0.0688	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.008**		**0.07**	

90 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**R2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 22:54**	*Sample Weight:*	**1.0000**

Run Time:

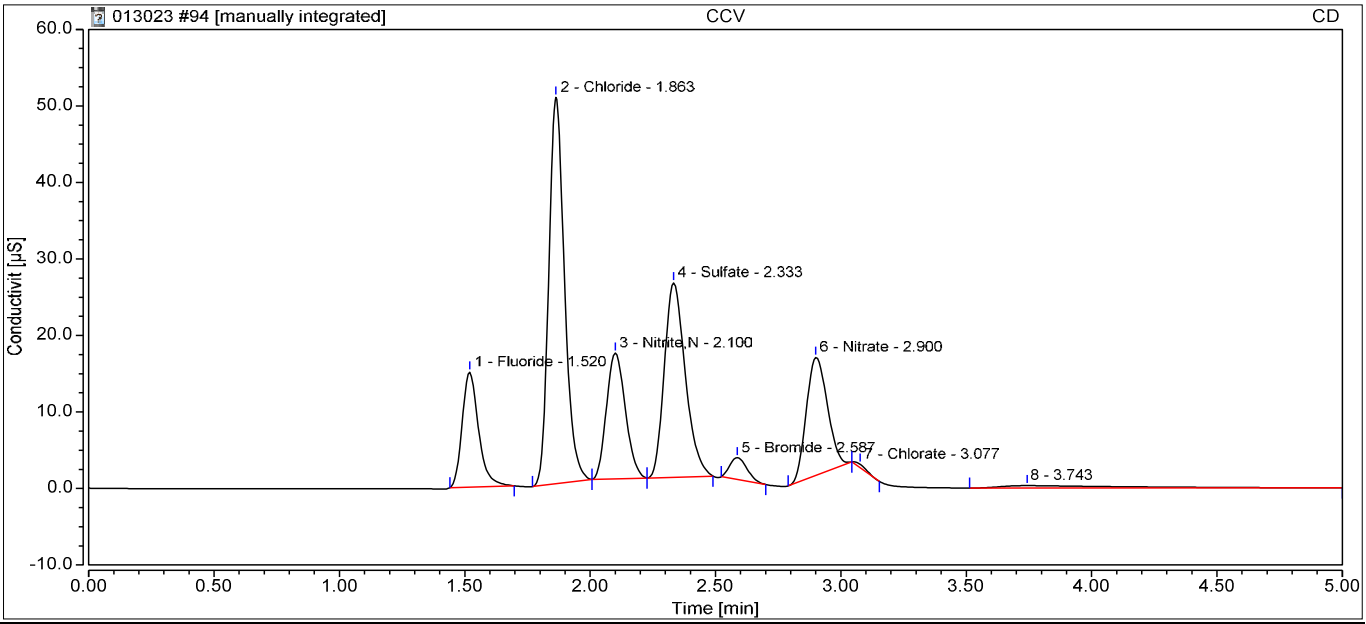


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.161	4.4736	4.4736	1.0000
2	1.86	Chloride	BMB	3.568	20.8160	20.8160	1.0000
3	2.10	Nitrite,N	BMB	1.403	4.1521	4.1521	1.0000
4	2.33	Sulfate	BMB	2.423	21.5263	21.5263	1.0000
5	2.59	Bromide	BMB	0.243	4.2510	4.2510	1.0000
6	2.90	Nitrate	BMB	1.469	4.2041	4.2041	1.0000
7	3.08	Chlorate	BMB	0.023	4.3833	4.3833	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**10.290**		**63.81**	

94 CCV			
Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 23:41**	*Sample Weight:*	**1.0000**

Run Time:



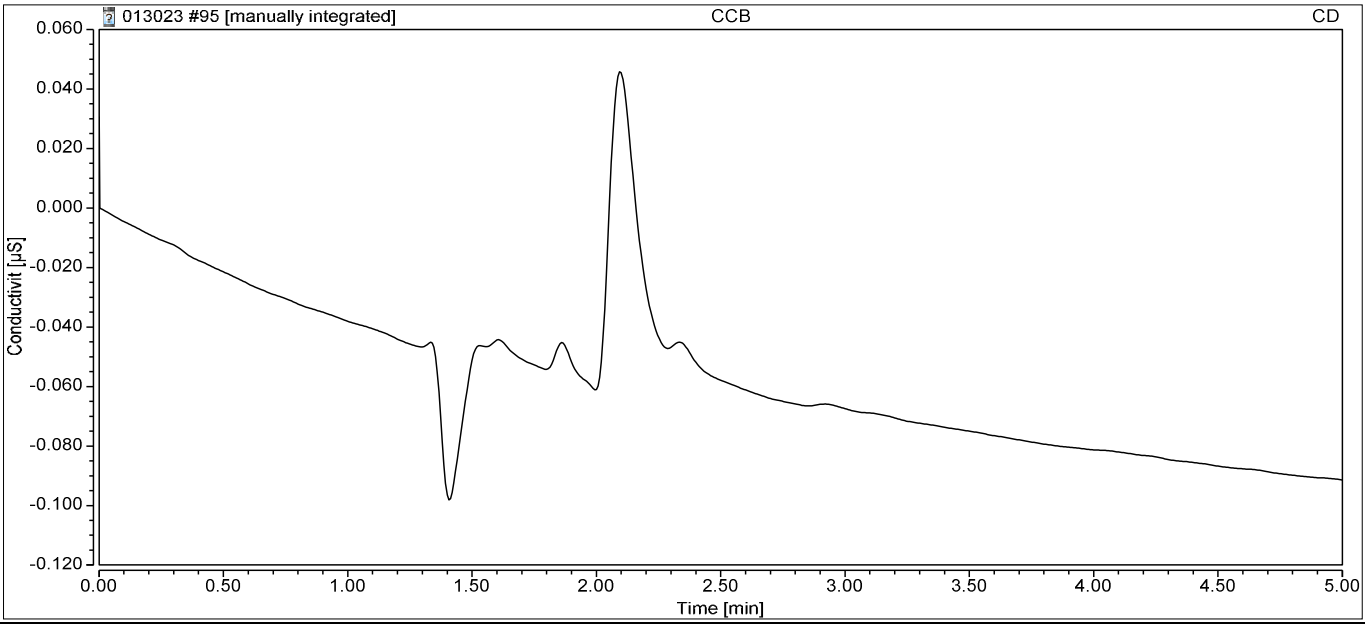
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB*	1.139	4.3897	4.3897	1.0000
2	1.86	Chloride	BMB	3.666	21.3877	21.3877	1.0000
3	2.10	Nitrite,N	BMb*	1.434	4.2535	4.2535	1.0000
4	2.33	Sulfate	bMB*	2.464	21.8916	21.8916	1.0000
5	2.59	Bromide	BMB*	0.228	3.9942	3.9942	1.0000
6	2.90	Nitrate	BMB	1.506	4.3115	4.3115	1.0000
7	3.08	Chlorate	BMB	0.024	4.4797	4.4797	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**10.462**		**64.71**	

95 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/30/2023 23:46**	*Sample Weight:*	**1.0000**

Run Time:



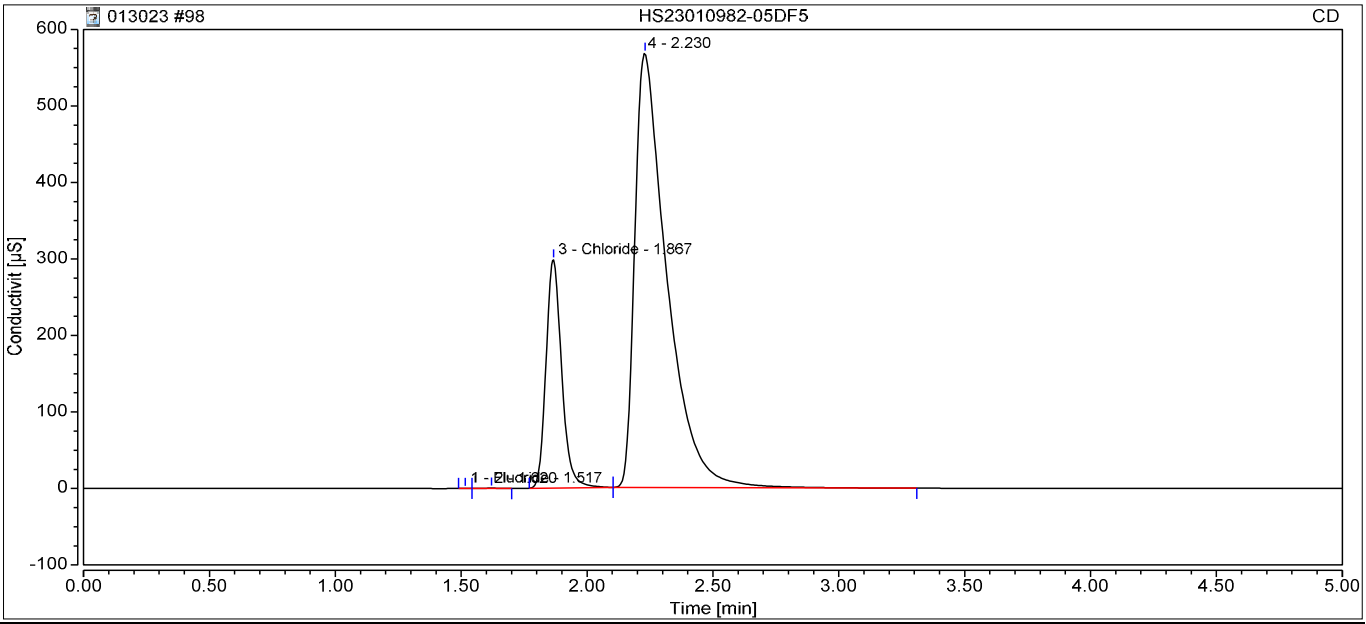
Integration Results

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

98 HS23010982-05DF5

Sample Name:	**HS23010982-05DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GC8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:09**	*Sample Weight:*	**1.0000**

Run Time:



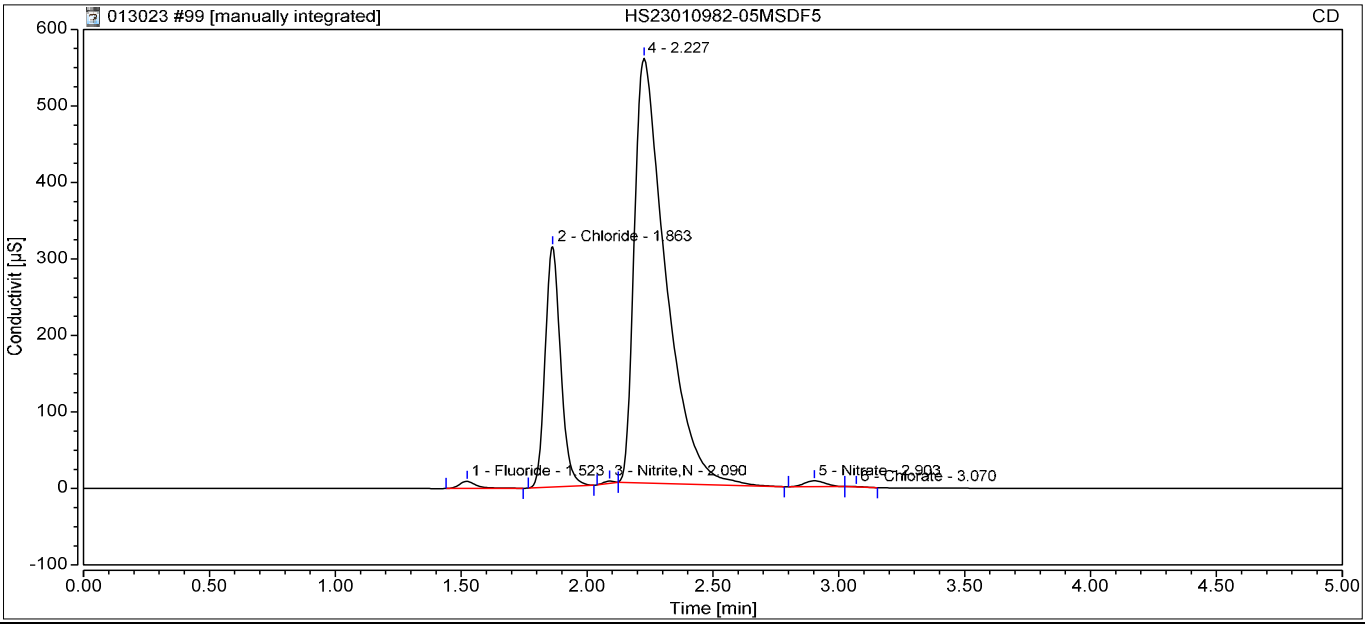
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.003	0.0086	0.0429	5.0000
3	1.87	Chloride	BMB	21.500	125.3397	626.6986	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**21.503**		**626.74**	

99 HS23010982-05MSDF5

Sample Name:	**HS23010982-05MSDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:15**	*Sample Weight:*	**1.0000**

Run Time:



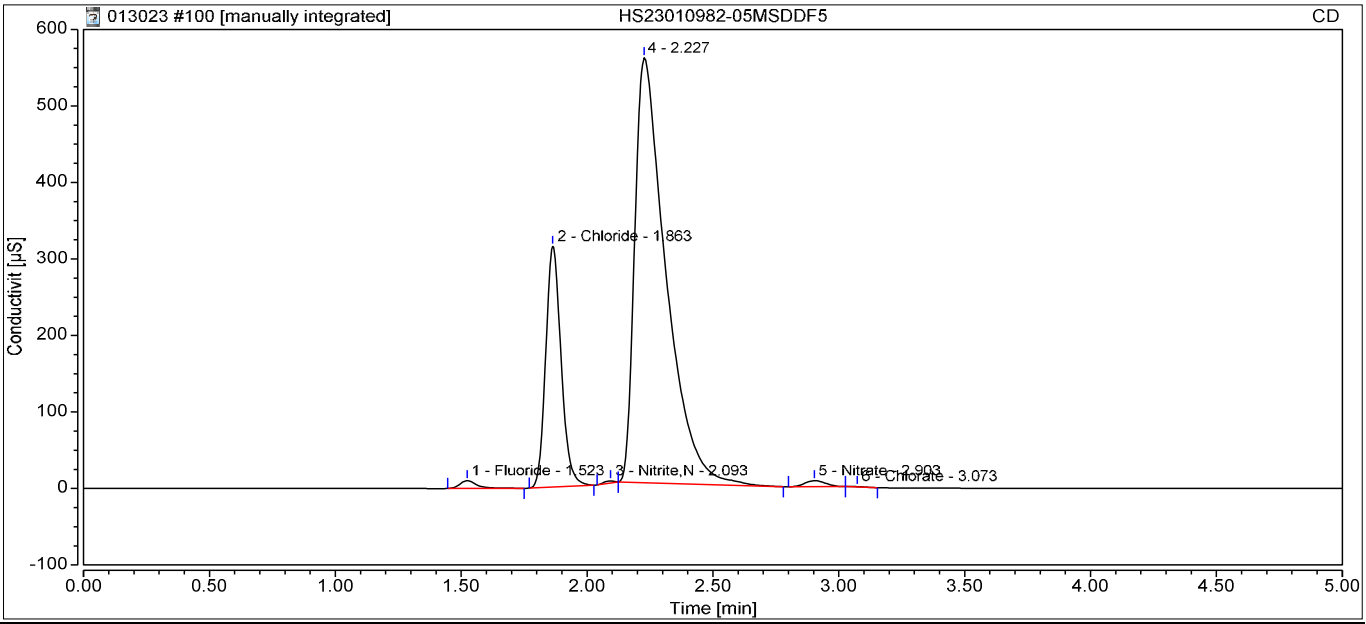
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.722	2.7814	13.9072	5.0000
2	1.86	Chloride	BMB	22.388	130.5124	652.5622	5.0000
3	2.09	Nitrite,N	BMB*	0.127	0.3515	1.7575	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
5	2.90	Nitrate	BMB	0.735	2.0900	10.4498	5.0000
6	3.07	Chlorate	BMB	0.028	5.3295	26.6475	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**24.000**		**705.32**	

100 HS23010982-05MSDDF5

Sample Name:	**HS23010982-05MSDDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:21**	*Sample Weight:*	**1.0000**

Run Time:



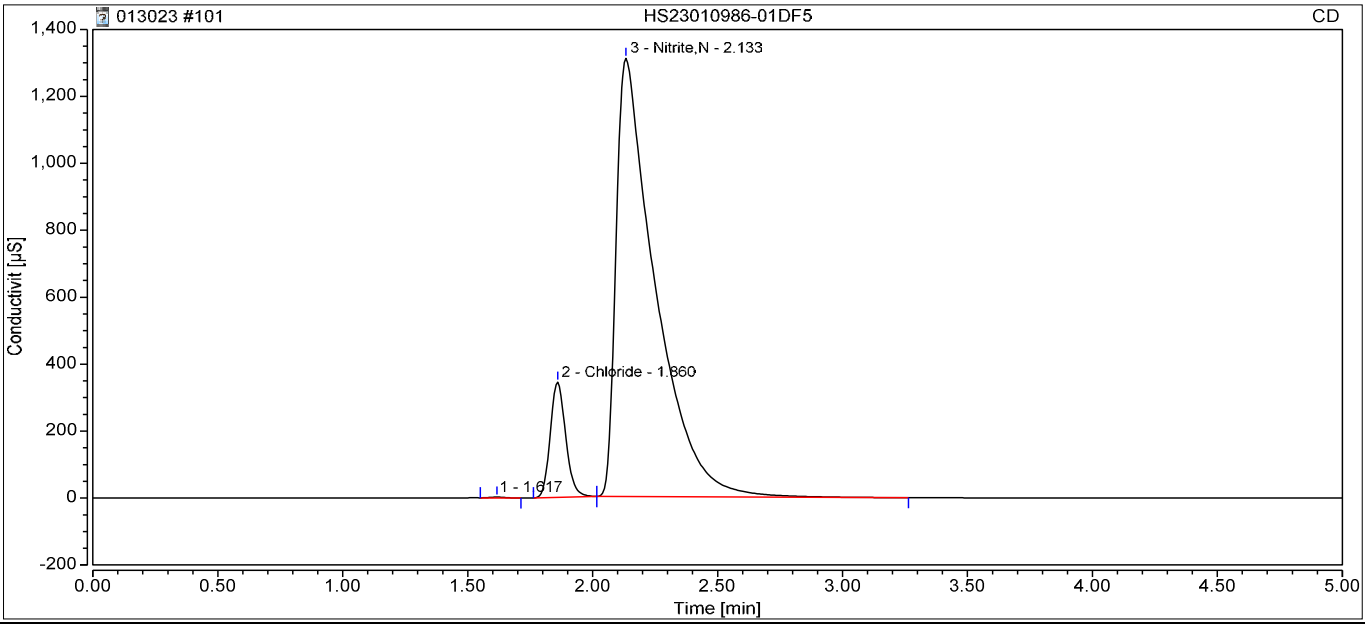
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.776	2.9917	14.9587	5.0000
2	1.86	Chloride	BMB	22.315	130.0866	650.4330	5.0000
3	2.09	Nitrite,N	BMB*	0.138	0.3835	1.9173	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
5	2.90	Nitrate	BMB	0.740	2.1035	10.5174	5.0000
6	3.07	Chlorate	BMB	0.027	5.1921	25.9606	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**23.997**		**703.79**	

101 HS23010986-01DF5

Sample Name:	**HS23010986-01DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:27**	*Sample Weight:*	**1.0000**

Run Time:



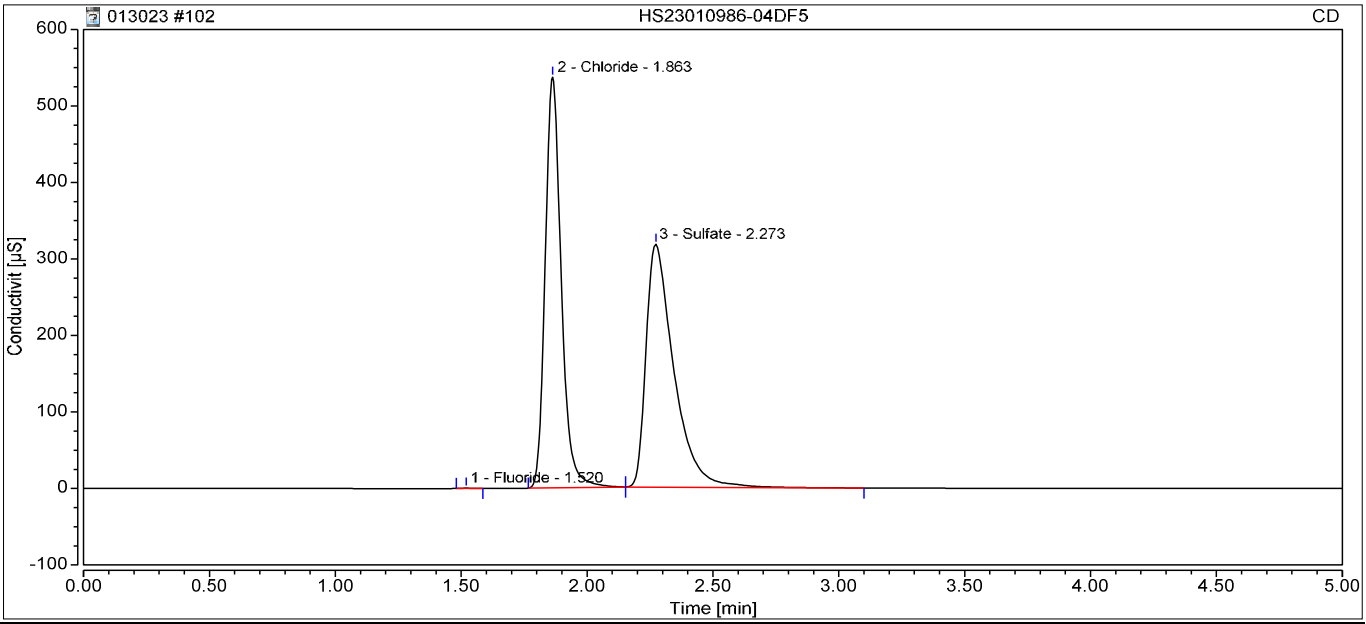
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.86	Chloride	BMB	24.730	144.1661	720.8304	5.0000
3	2.13	Nitrite,N	BMB	237.718	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**262.448**		**720.83**	

102 HS23010986-04DF5

Sample Name:	**HS23010986-04DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:32**	*Sample Weight:*	**1.0000**

Run Time:



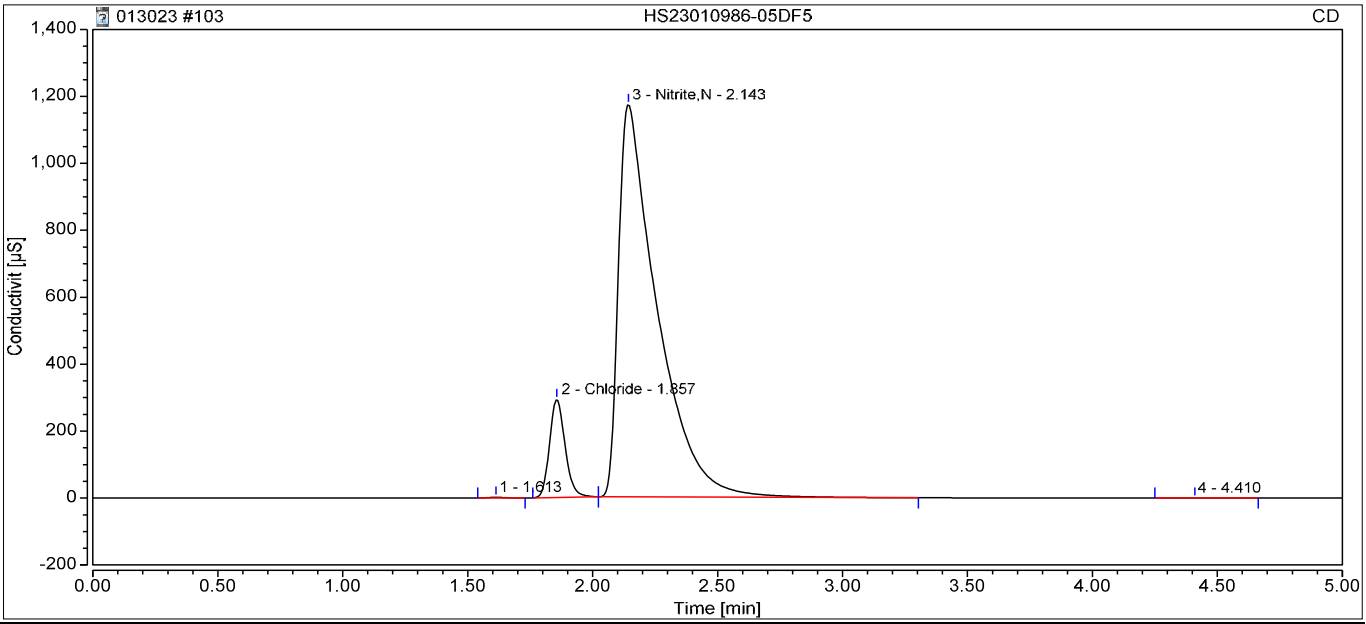
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.016	0.0615	0.3077	5.0000
2	1.86	Chloride	BMB	39.604	230.8608	1154.3038	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
3	2.27	Sulfate	BMB	40.560	360.5677	1802.8384	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**80.180**		**2957.45**	

103 HS23010986-05DF5

Sample Name:	**HS23010986-05DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:38**	*Sample Weight:*	**1.0000**

Run Time:



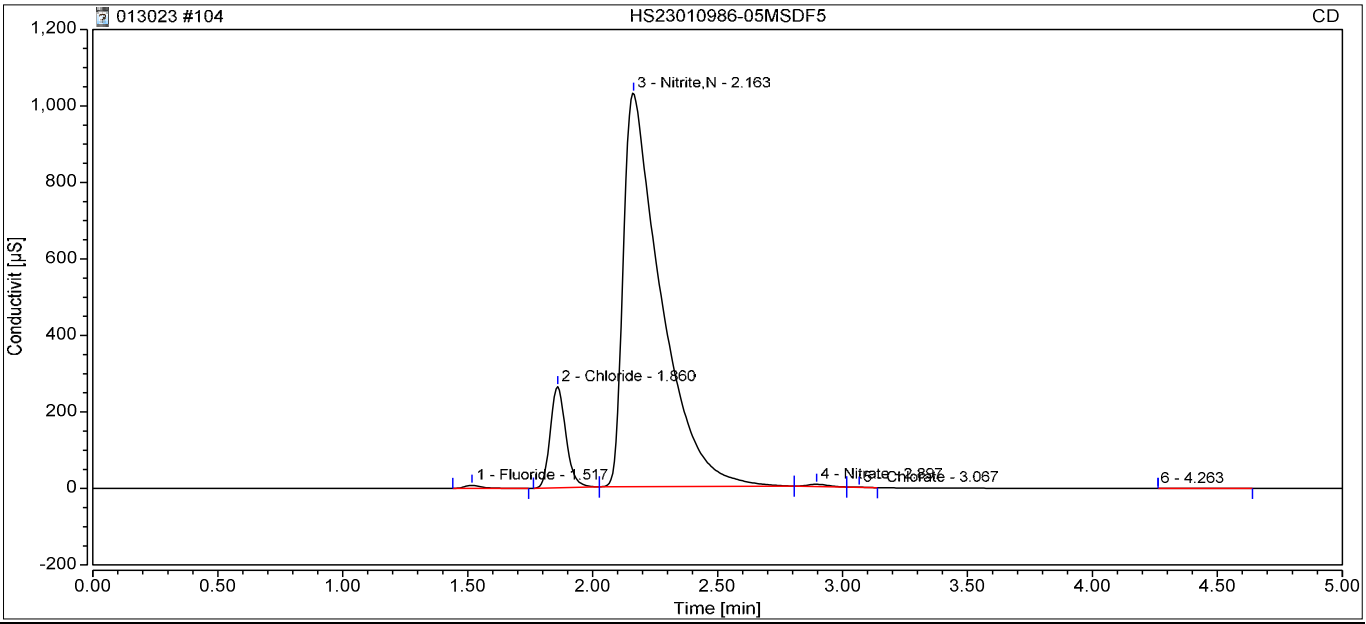
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.86	Chloride	BMB	21.174	123.4357	617.1783	5.0000
3	2.14	Nitrite,N	BMB	209.567	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**230.741**		**617.18**	

104 HS23010986-05MSDF5

Sample Name:	**HS23010986-05MSDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:44**	*Sample Weight:*	**1.0000**

Run Time:



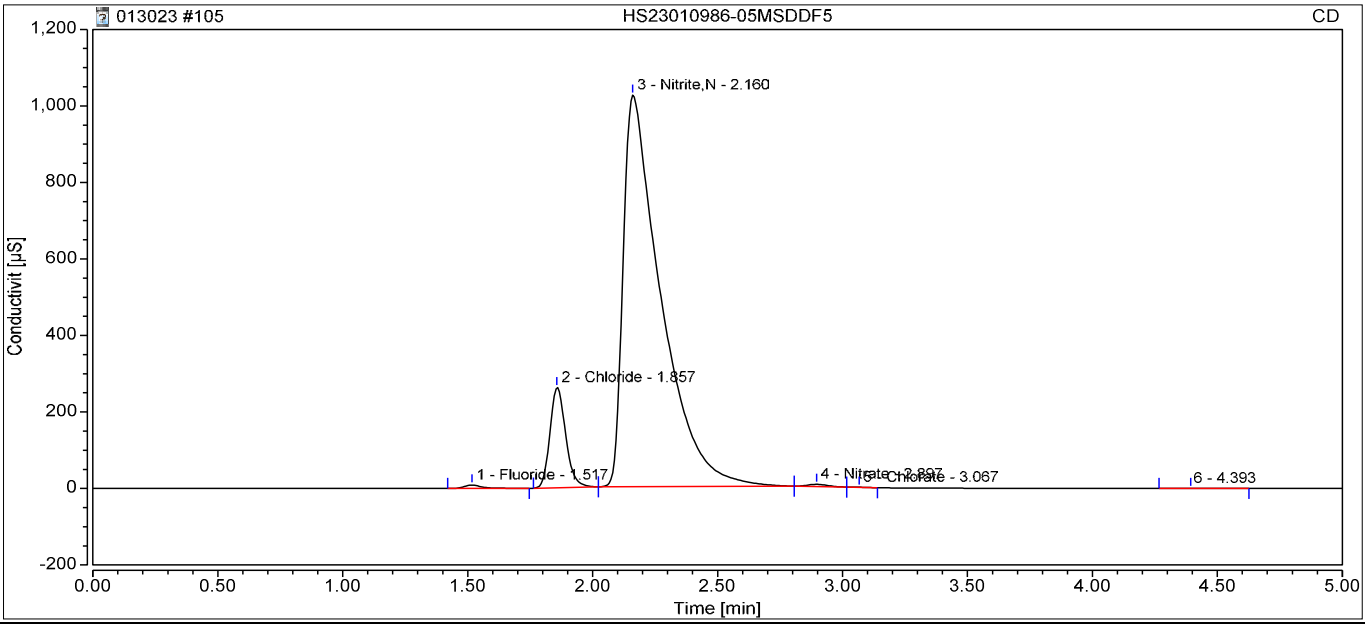
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.662	2.5511	12.7555	5.0000
2	1.86	Chloride	BMB	19.307	112.5537	562.7687	5.0000
3	2.16	Nitrite,N	BMB	179.776	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
4	2.90	Nitrate	BMB	0.538	1.5214	7.6069	5.0000
5	3.07	Chlorate	BMB	0.017	3.0206	15.1031	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**200.299**		**598.23**	

105 HS23010986-05MSDDF5

Sample Name:	**HS23010986-05MSDDF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 00:50**	*Sample Weight:*	**1.0000**

Run Time:



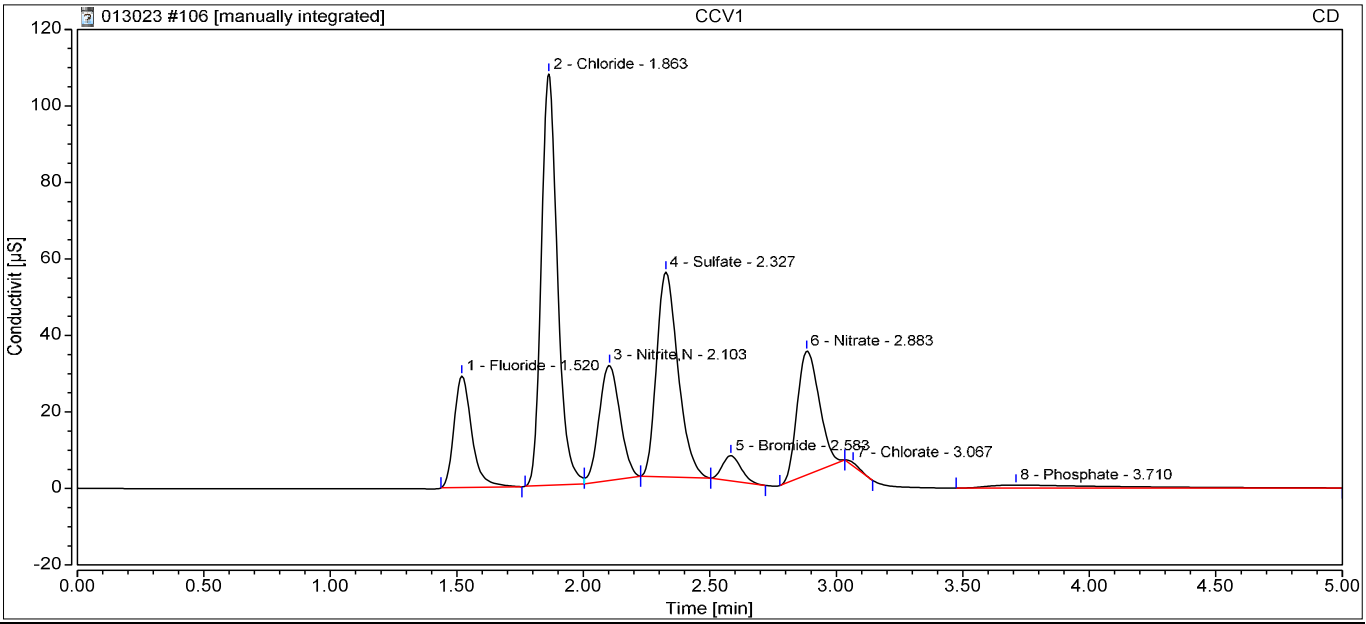
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.733	2.8268	14.1339	5.0000
2	1.86	Chloride	BMB	19.183	111.8298	559.1492	5.0000
3	2.16	Nitrite,N	BMB	178.632	n.a.	n.a.	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
4	2.90	Nitrate	BMB	0.537	1.5198	7.5990	5.0000
5	3.07	Chlorate	BMB	0.016	2.9785	14.8927	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**199.101**		**595.77**	

106 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 01:14**	*Sample Weight:*	**1.0000**

Run Time:



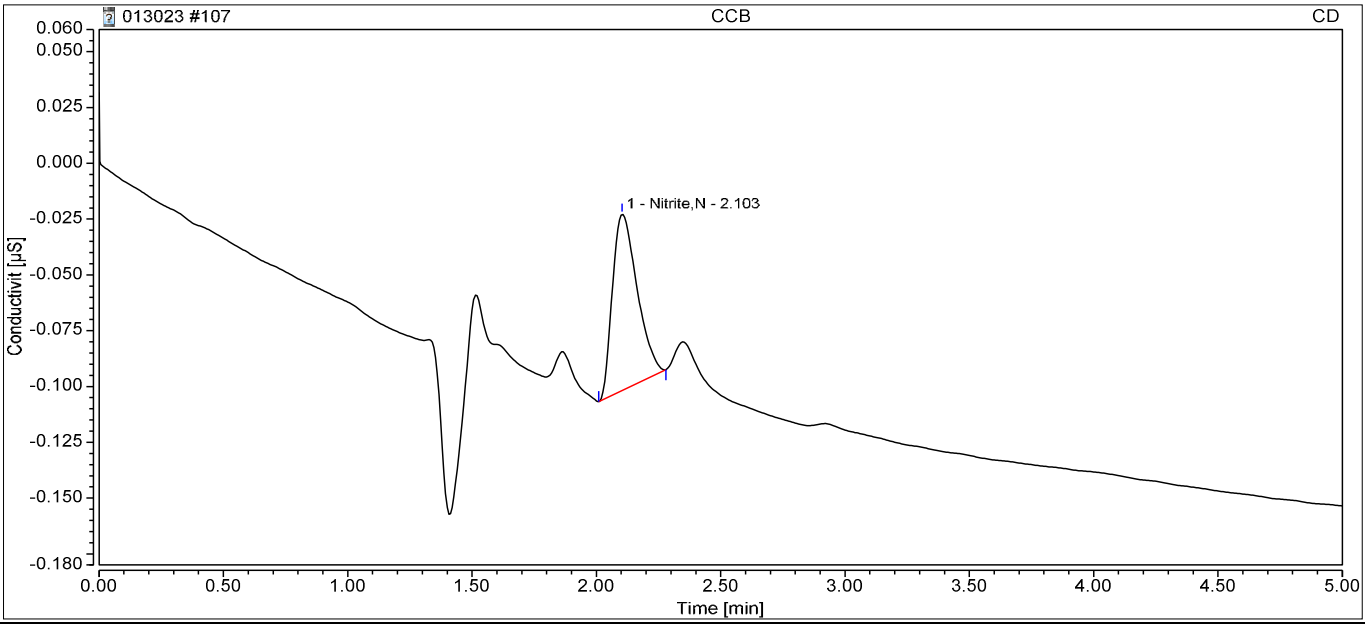
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	2.370	9.1378	9.1378	1.0000
2	1.86	Chloride	BM *	7.975	46.5017	46.5017	1.0000
3	2.10	Nitrite,N	MB*	2.870	9.3510	9.3510	1.0000
4	2.33	Sulfate	BMB	5.261	46.7529	46.7529	1.0000
5	2.58	Bromide	BMB	0.557	9.6697	9.6697	1.0000
6	2.88	Nitrate	BMB	3.273	9.4011	9.4011	1.0000
7	3.07	Chlorate	BMB	0.046	9.8252	9.8252	1.0000
8	3.71	Phosphate	BMB	0.461	7.4477	7.4477	1.0000
Total:			**0.000**	**22.814**		**148.09**	

107 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 01:19**	*Sample Weight:*	**1.0000**

Run Time:



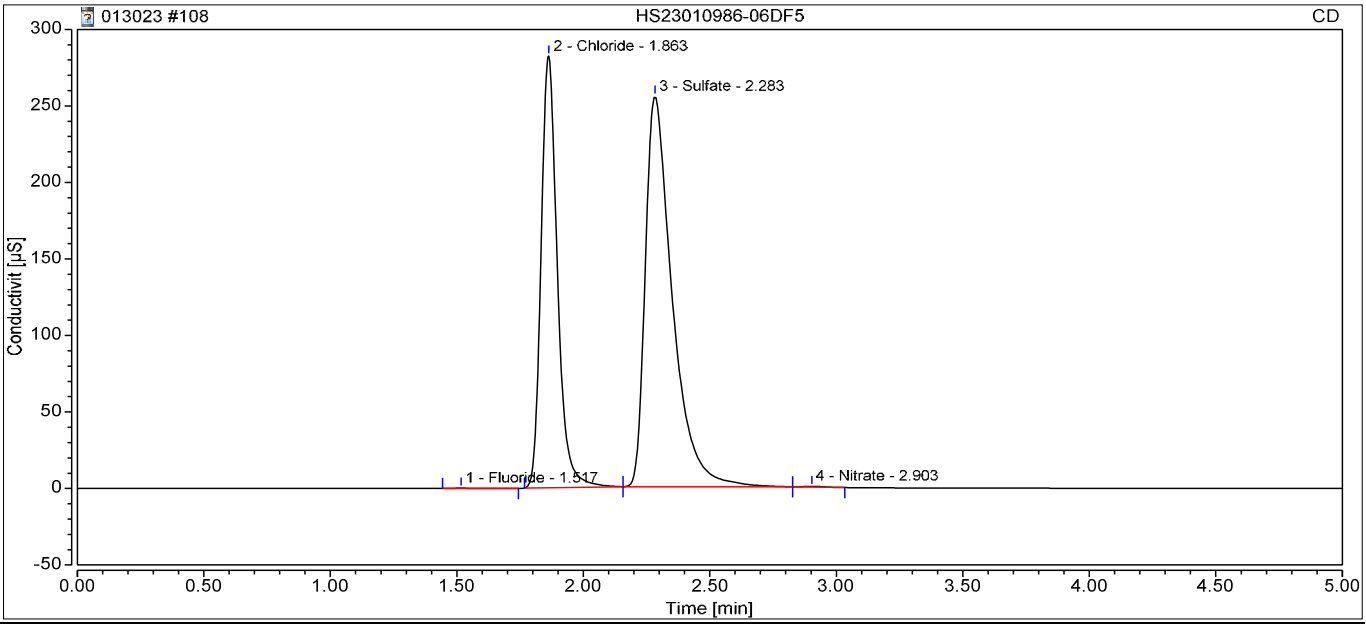
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.10	Nitrite,N	BMB	0.009	0.0248	0.0248	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.009**		**0.02**	

108 HS23010986-06DF5

Sample Name:	**HS23010986-06DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GD8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 01:31**	*Sample Weight:*	**1.0000**

Run Time:



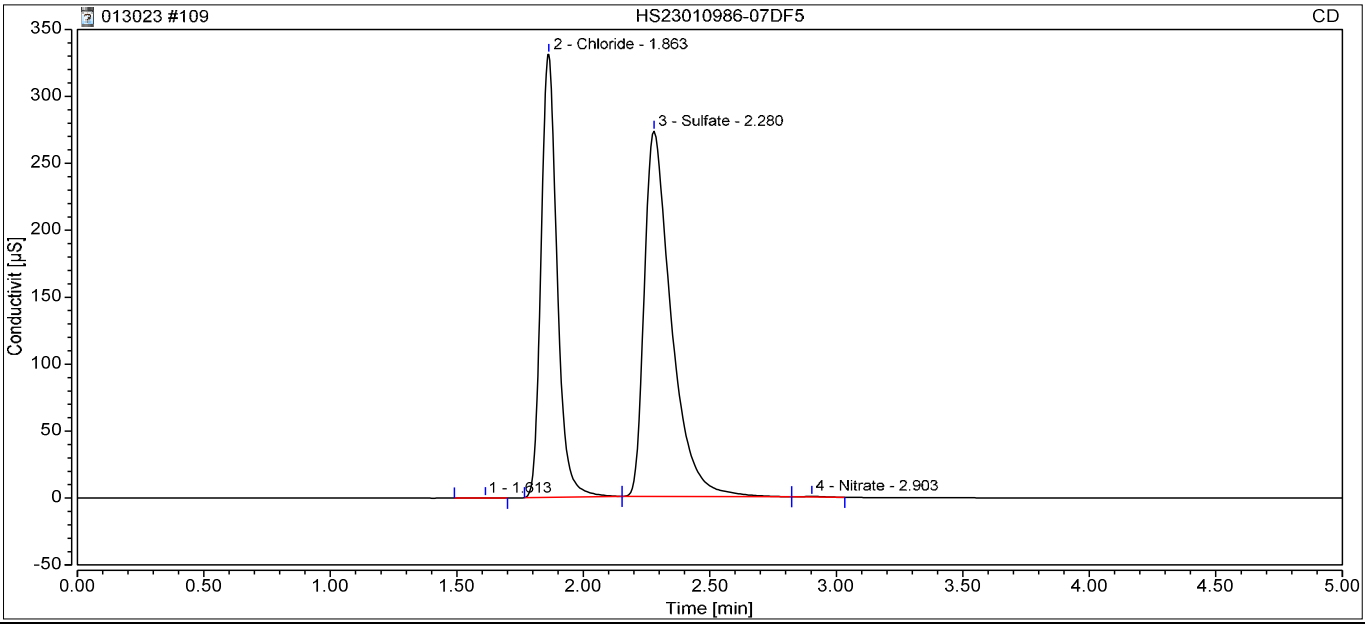
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	0.030	0.1142	0.5711	5.0000
2	1.86	Chloride	BMB	21.036	122.6309	613.1546	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
3	2.28	Sulfate	BMB	31.508	280.0944	1400.4722	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
4	2.90	Nitrate	BMB	0.039	0.0848	0.4239	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**52.613**		**2014.62**	

109 HS23010986-07DF5

Sample Name:	**HS23010986-07DF5**	*Injection Volume:*	**5.00**
Vial Number:	**GE1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**01/31/2023 01:37**	*Sample Weight:*	**1.0000**

Run Time:



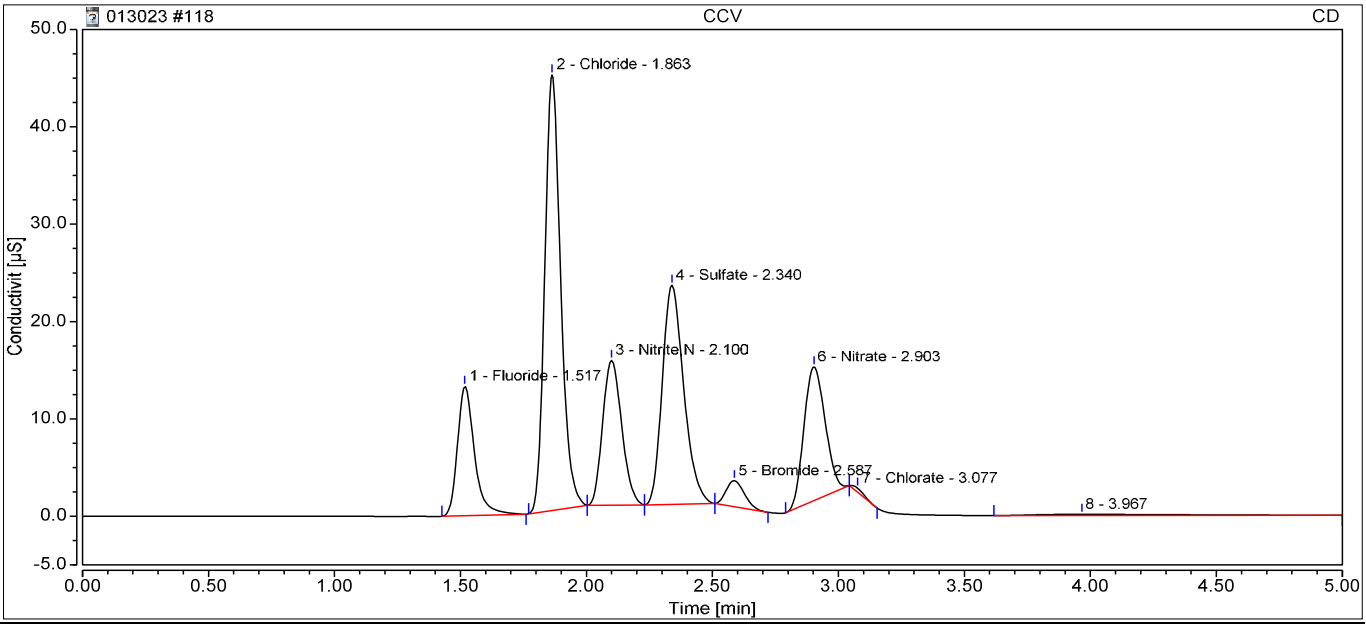
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.86	Chloride	BMB	24.439	142.4661	712.3305	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
3	2.28	Sulfate	BMB	33.717	299.7300	1498.6499	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
4	2.90	Nitrate	BMB	0.041	0.0899	0.4496	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**58.196**		**2211.43**	

118 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 02:41**	*Sample Weight:*	**1.0000**

Run Time:



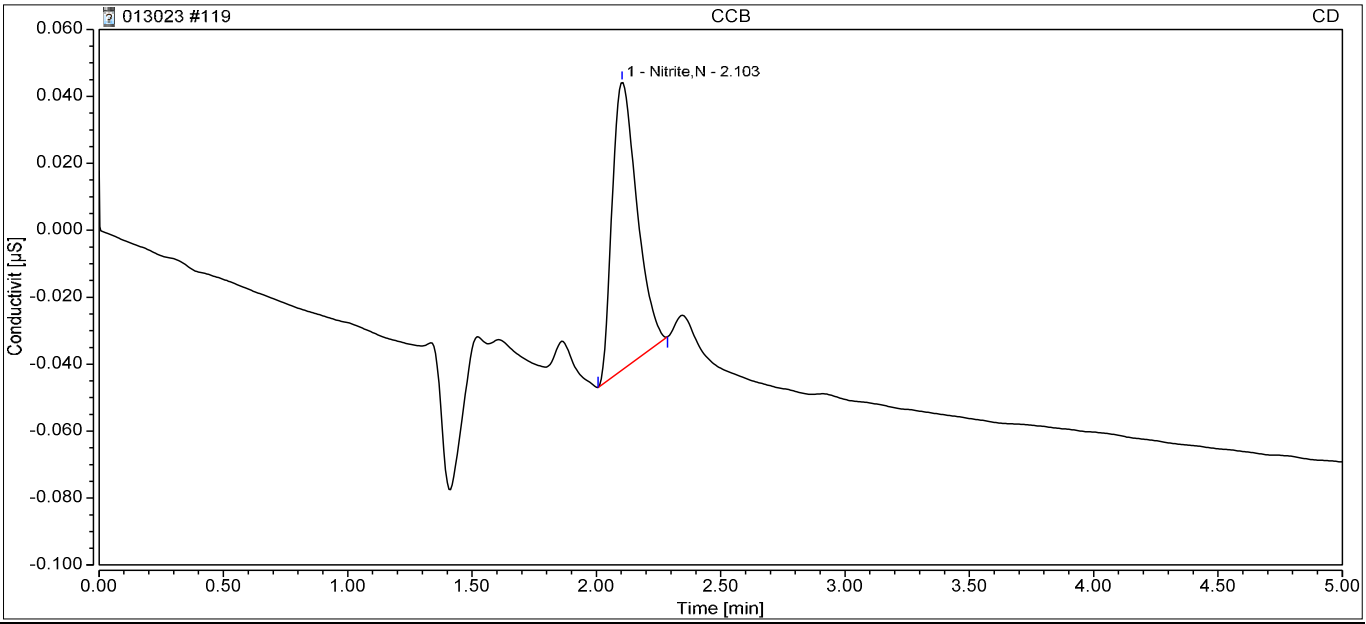
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.52	Fluoride	BMB	1.041	4.0112	4.0112	1.0000
2	1.86	Chloride	BMB	3.274	19.1033	19.1033	1.0000
3	2.10	Nitrite,N	BMB	1.301	3.8303	3.8303	1.0000
4	2.34	Sulfate	BMB	2.216	19.6883	19.6883	1.0000
5	2.59	Bromide	BMB	0.225	3.9340	3.9340	1.0000
6	2.90	Nitrate	BMB	1.343	3.8419	3.8419	1.0000
7	3.08	Chlorate	BMB	0.022	4.0119	4.0119	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.422**		**58.42**	

119 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**01/31/2023 02:53**	*Sample Weight:*	**1.0000**

Run Time:



Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.10	Nitrite,N	BMB	0.010	0.0273	0.0273	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.03**	

HS23010986 Eurofin Lab J113148-1 Std_Tal_L4 Final Report

ALS WO# HS23010986

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dane Wacasey
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston TX 77099

Generated 1/26/2023 6:33 AM

JOB DESCRIPTION

HS23010986

JOB NUMBER

410-113148-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

myEOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
1/26/2023 6:33 AM

Authorized for release by
Kelly Bauer, Project Manager
Kelly.Bauer@et.eurofinsus.com
717 556-7262

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: ALS Group USA, Corp
Job ID: 410-113148-1
Project/Site: HS23010986

Qualifiers

GC VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-113148-1

Receipt
The samples were received on 1/24/2023 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC VOA
Method RSK_175_CO2_D5: The continuing calibration verification (CCV) associated with batch 410-338435 recovered outside the 15% difference limit for Carbon dioxide. The CCV was confirmed 2 times and were within the control limits ; therefore, the data has been reported. The following items are affected: HS23010986-07 (410-113148-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Client Sample ID: HS23010986-01 — Lab Sample ID: 410-113148-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000	M	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-04 — Lab Sample ID: 410-113148-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	89000		12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-05 — Lab Sample ID: 410-113148-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	130000	J1	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-06 — Lab Sample ID: 410-113148-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	97000		12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: HS23010986-07 — Lab Sample ID: 410-113148-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	92000	Q cn	12000		2600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Job ID: 410-113148-1
Project/Site: HS23010986

Client Sample ID: HS23010986-01
Lab Sample ID: 410-113148-1
Date Collected: 01/19/23 09:00
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	170000	M	12000		2600	ug/L		01/25/23 09:00	1

Client Sample ID: HS23010986-04
Lab Sample ID: 410-113148-2
Date Collected: 01/19/23 12:05
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	89000		12000		2600	ug/L		01/25/23 09:08	1

Client Sample ID: HS23010986-05
Lab Sample ID: 410-113148-3
Date Collected: 01/19/23 12:55
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	130000	J1	12000		2600	ug/L		01/25/23 09:16	1

Client Sample ID: HS23010986-06
Lab Sample ID: 410-113148-4
Date Collected: 01/19/23 14:30
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	97000		12000		2600	ug/L		01/25/23 09:38	1

Client Sample ID: HS23010986-07
Lab Sample ID: 410-113148-5
Date Collected: 01/19/23 14:30
Matrix: Water
Date Received: 01/24/23 10:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	92000	Q cn	12000		2600	ug/L		01/25/23 09:59	1

Default Detection Limits

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Method: RSK-175 - Dissolved Gases (GC)

Prep: RSK-175

Analyte	LOQ	DL	Units
Carbon dioxide	12000	2600	ug/L

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-338469/1-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 338469

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	2600	U	12000		2600	ug/L		01/25/23 08:34	1

Lab Sample ID: LCS 410-338469/2-A
Matrix: Water
Analysis Batch: 338435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 338469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide			35800	32400		ug/L		90	80 - 122		

Lab Sample ID: 410-113148-3 MS
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010986-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide	130000	J1	35800	171000	M J1	ug/L		128	80 - 122		

Lab Sample ID: 410-113148-3 MSD
Matrix: Water
Analysis Batch: 338435

Client Sample ID: HS23010986-05
Prep Type: Total/NA
Prep Batch: 338469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	130000	J1	35800	134000	J1	ug/L		24	80 - 122	24	30

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

GC VOA

Analysis Batch: 338435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113148-1	HS23010986-01	Total/NA	Water	RSK-175	338469
410-113148-2	HS23010986-04	Total/NA	Water	RSK-175	338469
410-113148-3	HS23010986-05	Total/NA	Water	RSK-175	338469
410-113148-4	HS23010986-06	Total/NA	Water	RSK-175	338469
410-113148-5	HS23010986-07	Total/NA	Water	RSK-175	338469
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	338469
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	338469
410-113148-3 MS	HS23010986-05	Total/NA	Water	RSK-175	338469
410-113148-3 MSD	HS23010986-05	Total/NA	Water	RSK-175	338469

Prep Batch: 338469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-113148-1	HS23010986-01	Total/NA	Water	RSK-175	
410-113148-2	HS23010986-04	Total/NA	Water	RSK-175	
410-113148-3	HS23010986-05	Total/NA	Water	RSK-175	
410-113148-4	HS23010986-06	Total/NA	Water	RSK-175	
410-113148-5	HS23010986-07	Total/NA	Water	RSK-175	
MB 410-338469/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-338469/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-113148-3 MS	HS23010986-05	Total/NA	Water	RSK-175	
410-113148-3 MSD	HS23010986-05	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Client Sample ID: HS23010986-01 — Lab Sample ID: 410-113148-1

Date Collected: 01/19/23 09:00 — **Matrix: Water**
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:00

Client Sample ID: HS23010986-04 — Lab Sample ID: 410-113148-2

Date Collected: 01/19/23 12:05 — **Matrix: Water**
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:08

Client Sample ID: HS23010986-05 — Lab Sample ID: 410-113148-3

Date Collected: 01/19/23 12:55 — **Matrix: Water**
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:16

Client Sample ID: HS23010986-06 — Lab Sample ID: 410-113148-4

Date Collected: 01/19/23 14:30 — **Matrix: Water**
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:38

Client Sample ID: HS23010986-07 — Lab Sample ID: 410-113148-5

Date Collected: 01/19/23 14:30 — **Matrix: Water**
Date Received: 01/24/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			338469	WN7O	ELLE	01/25/23 08:22
Total/NA	Analysis	RSK-175		1	338435	WN7O	ELLE	01/25/23 09:59

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Job ID: 410-113148-1
Project/Site: HS23010986

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	ELLE
RSK-175	Dissolved Gases Prep	RSK	ELLE

Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique , RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS23010986

Job ID: 410-113148-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-113148-1	HS23010986-01	Water	01/19/23 09:00	01/24/23 10:20
410-113148-2	HS23010986-04	Water	01/19/23 12:05	01/24/23 10:20
410-113148-3	HS23010986-05	Water	01/19/23 12:55	01/24/23 10:20
410-113148-4	HS23010986-06	Water	01/19/23 14:30	01/24/23 10:20
410-113148-5	HS23010986-07	Water	01/19/23 14:30	01/24/23 10:20

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-113148-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 331616

Lab Sample ID: IC 410-331616/6 Client Sample ID:

Date Analyzed: 12/30/22 17:05 Lab File ID: 312022_12_30B.0006.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.94	Peak assignment corrected	WN7O	12/30/22 17:19

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-113148-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 338435

Lab Sample ID: 410-113148-1 Client Sample ID: HS23010986-01

Date Analyzed: 01/25/23 09:00 Lab File ID: 312023_01_25BB.0008.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak assignment corrected	WN7O	01/25/23 09:39

Lab Sample ID: 410-113148-3 MS Client Sample ID: HS23010986-05 MS

Date Analyzed: 01/25/23 09:23 Lab File ID: 312023_01_25BB.0011.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak assignment corrected	WN7O	01/25/23 09:39

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-113148-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
EPH_CO2ICV_00002	09/29/23	09/29/22	DI Water, Lot In House	1 mL	EPH_CO2XX_00002	0.0018 g	Carbon dioxide	547000 ppb
.EPH_CO2XX_00002	09/29/23		Air Products, Lot A214157		(Purchased Reagent)		Carbon dioxide	30.3889 %
EPH_CO2MS_00004	07/16/23	07/18/22	DI Water, Lot In House	1 g	EPH_CO2CRV_00002	0.0018 g	Carbon dioxide	1791000 ppb
.EPH_CO2CRV_00002	07/16/23		Praxair, Lot 4-11-18		(Purchased Reagent)		Carbon dioxide	99.5 %

Method RSK-175 CO2 DOD

Dissolved Gases (GC) by Method RSK_175_CO2 DOD

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113148-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_01_25BB.0007.d

Lab ID: LCS 410-338469/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon dioxide	35800	32400	90	80-122	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113148-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_01_25BB.0011.d

Lab ID: 410-113148-3 MS Client ID: HS23010986-05 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Carbon dioxide	35800	130000	171000	128	80-122	M J1

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113148-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_01_25BB.0012.d

Lab ID: 410-113148-3 MSD Client ID: HS23010986-05 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon dioxide	35800	134000	24	24	30	80-122	J1

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-113148-1

SDG No.:

Lab File ID: 312023_01_25BB.0006.d Lab Sample ID: MB 410-338469/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 01/25/2023 08:34

GC Column: HP Plot ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-338469/2-A	312023_01_25BB.0007.d	01/25/2023 08:42
HS23010986-01	410-113148-1	312023_01_25BB.0008.d	01/25/2023 09:00
HS23010986-04	410-113148-2	312023_01_25BB.0009.d	01/25/2023 09:08
HS23010986-05	410-113148-3	312023_01_25BB.0010.d	01/25/2023 09:16
HS23010986-05 MS	410-113148-3 MS	312023_01_25BB.0011.d	01/25/2023 09:23
HS23010986-05 MSD	410-113148-3 MSD	312023_01_25BB.0012.d	01/25/2023 09:31
HS23010986-06	410-113148-4	312023_01_25BB.0013.d	01/25/2023 09:38
HS23010986-07	410-113148-5	312023_01_25BB.0015.d	01/25/2023 09:59

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-113148-1

SDG No.:

Client Sample ID: HS23010986-01
Lab Sample ID: 410-113148-1

Matrix: Water
Lab File ID: 312023_01_25BB.0008.d

Analysis Method: RSK-175
Date Collected: 01/19/2023 09:00

Sample wt/vol: 5(mL)
Date Analyzed: 01/25/2023 09:00

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 338435
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	170000	M	12000	2600

Report Date: 25-Jan-2023 10:15:58

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0008.d				
Lims ID:	410-113148-A-1-A				
Client ID:	HS23010986-01				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 09:00:00	ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-008				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:15:57	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				
First Level Reviewer: WN7O		Date:	25-Jan-2023 09:39:16		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.008	2.048	-0.040	679891281H	171668	a

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
a - User Assigned ID

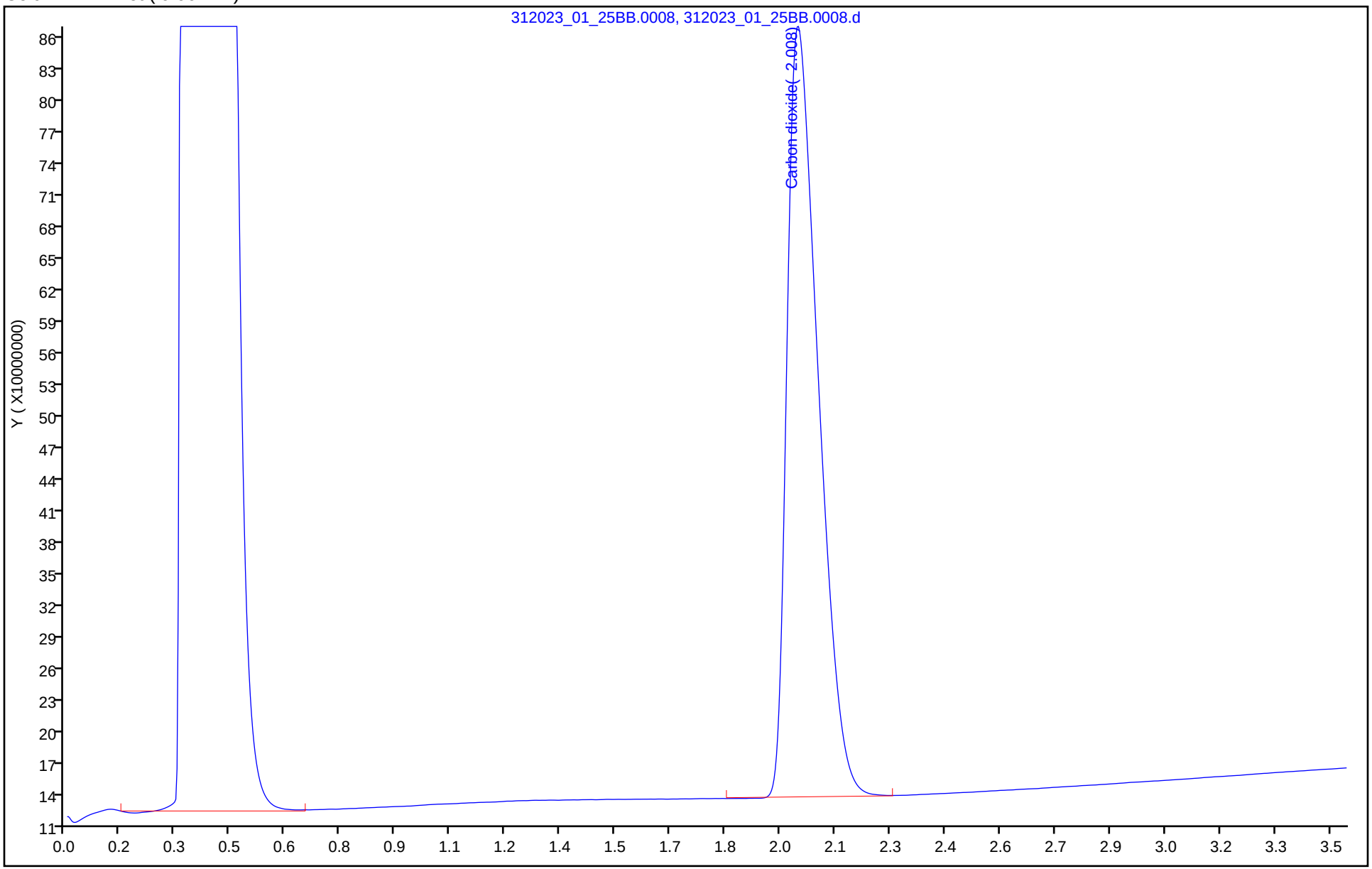
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 10:15:58 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0008.d				
Injection Date:	25-Jan-2023 09:00:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113148-A-1-A	Lab Sample ID:	410-113148-1	Worklist Smp#:	8
Client ID:	HS23010986-01				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 25-Jan-2023 10:15:58

Chrom Revision: 2.3 17-Jan-2023 20:47:52 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

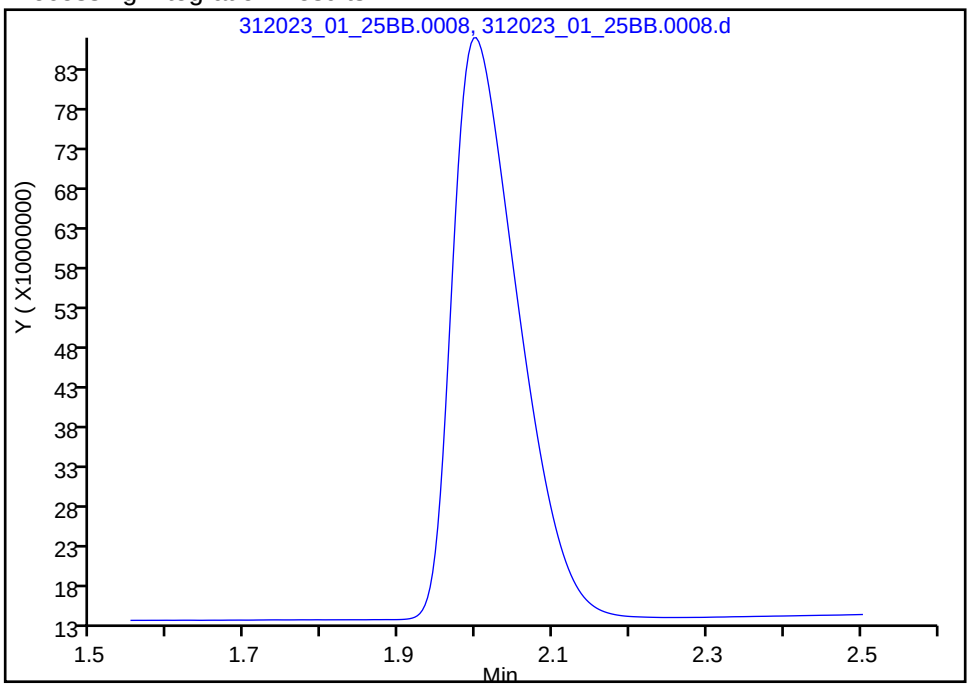
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0008.d		
Injection Date:	25-Jan-2023 09:00:00	Instrument ID:	19506-B
Lims ID:	410-113148-A-1-A	Lab Sample ID:	410-113148-1
Client ID:	HS23010986-01		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

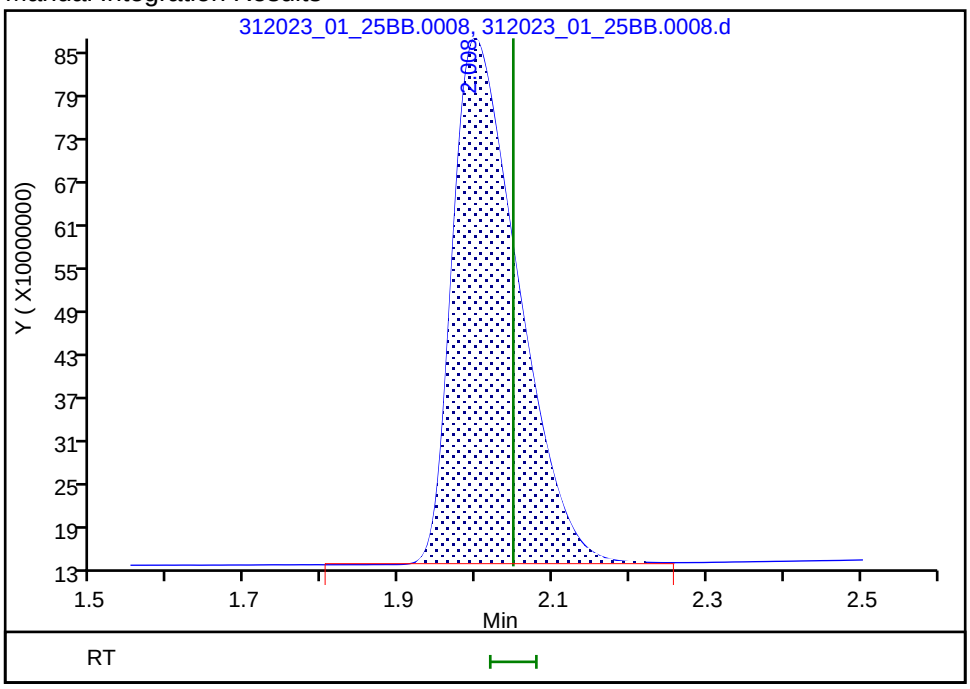
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 679891281
Amount: 171668
Amount Units: ug/l



Reviewer: WN7O, 25-Jan-2023 09:39:07
Audit Action: Assigned Compound ID
Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-113148-1

SDG No.:

Client Sample ID: HS23010986-04
Lab Sample ID: 410-113148-2

Matrix: Water
Lab File ID: 312023_01_25BB.0009.d

Analysis Method: RSK-175
Date Collected: 01/19/2023 12:05

Sample wt/vol: 5(mL)
Date Analyzed: 01/25/2023 09:08

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 338435
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	89000		12000	2600

Report Date: 25-Jan-2023 10:15:59

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0009.d				
Lims ID:	410-113148-A-2-A				
Client ID:	HS23010986-04				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 09:08:00	ALS Bottle#:	0	Worklist Smp#:	9
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-009				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:15:57	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.033	2.048	-0.015	350817435	88579	H

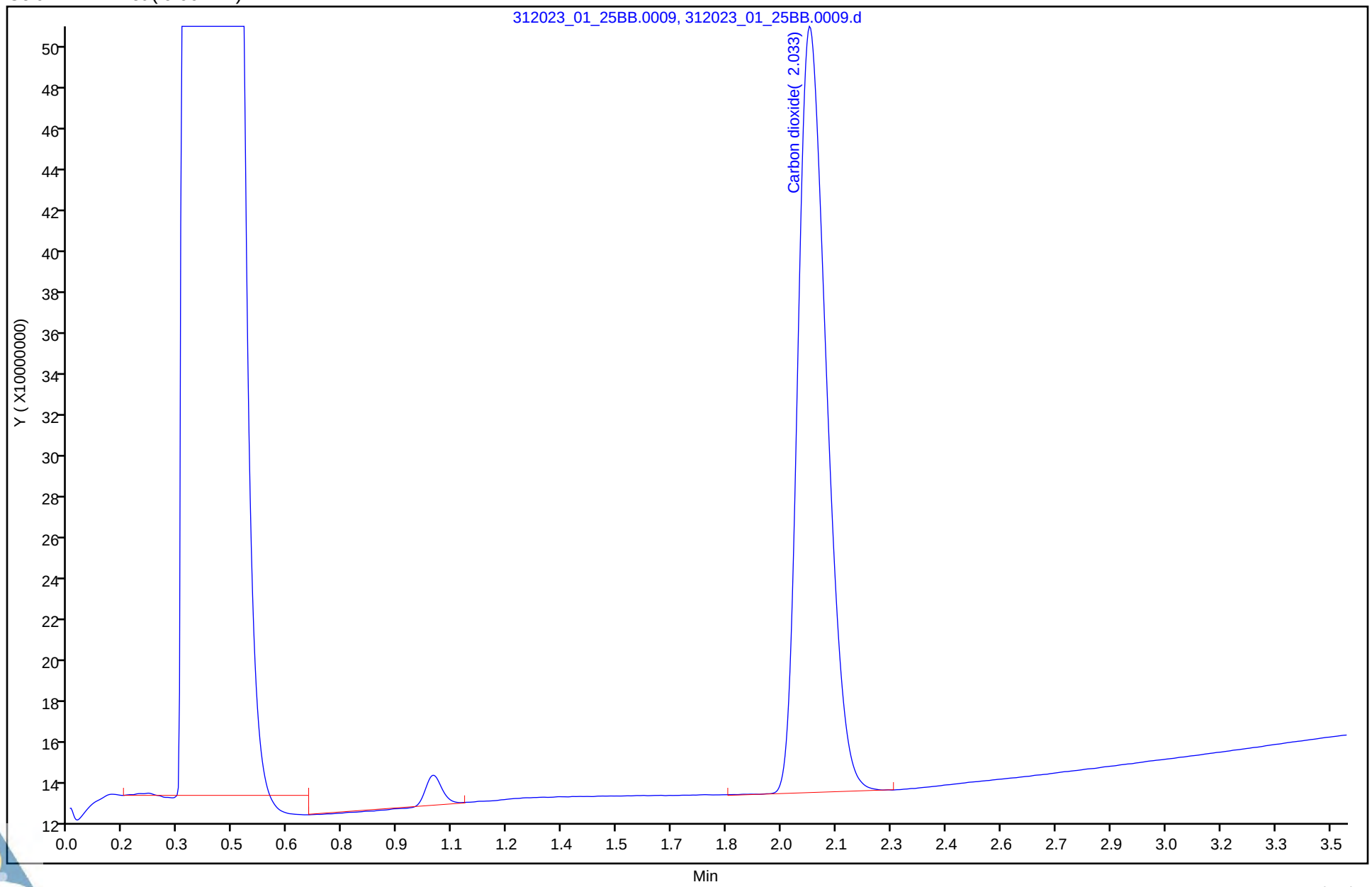
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 10:15:59 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0009.d				
Injection Date:	25-Jan-2023 09:08:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113148-A-2-A	Lab Sample ID:	410-113148-2	Worklist Smp#:	9
Client ID:	HS23010986-04				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-113148-1

SDG No.:

Client Sample ID: HS23010986-05
Lab Sample ID: 410-113148-3

Matrix: Water
Lab File ID: 312023_01_25BB.0010.d

Analysis Method: RSK-175
Date Collected: 01/19/2023 12:55

Sample wt/vol: 5(mL)
Date Analyzed: 01/25/2023 09:16

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 338435
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	130000	J1	12000	2600

Report Date: 25-Jan-2023 10:15:59

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0010.d				
Lims ID:	410-113148-A-3-A				
Client ID:	HS23010986-05				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 09:16:00	ALS Bottle#:	0	Worklist Smp#:	10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-010				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:15:57	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

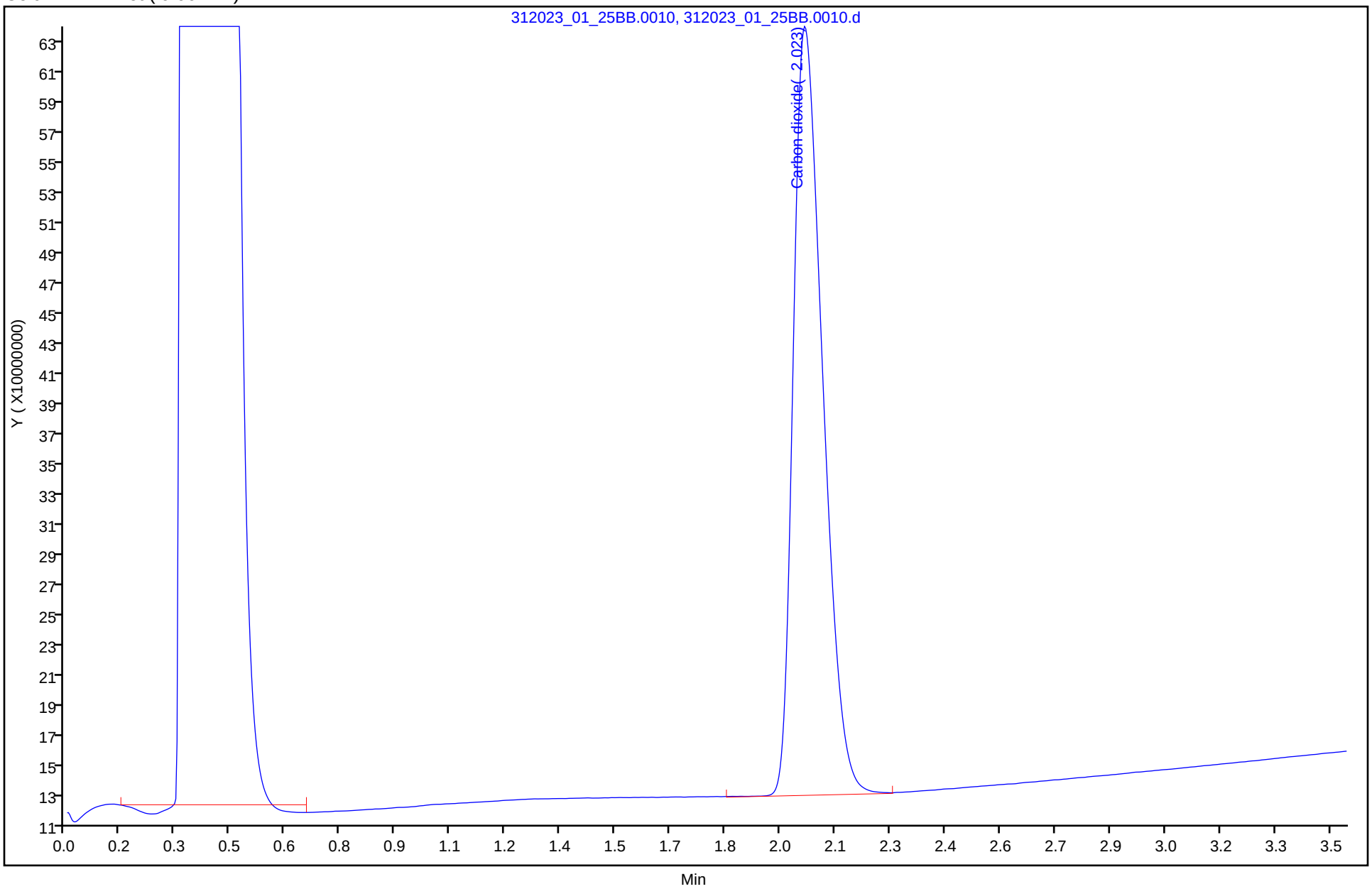
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.023	2.048	-0.025	495323057	125066	H

Report Date: 25-Jan-2023 10:15:59 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0010.d				
Injection Date:	25-Jan-2023 09:16:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113148-A-3-A	Lab Sample ID:	410-113148-3	Worklist Smp#:	10
Client ID:	HS23010986-05				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-113148-1

SDG No.:

Client Sample ID: HS23010986-06
Lab Sample ID: 410-113148-4

Matrix: Water
Lab File ID: 312023_01_25BB.0013.d

Analysis Method: RSK-175
Date Collected: 01/19/2023 14:30

Sample wt/vol: 5(mL)
Date Analyzed: 01/25/2023 09:38

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 338435
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	97000		12000	2600

Report Date: 25-Jan-2023 10:16:00

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0013.d				
Lims ID:	410-113148-A-4-A				
Client ID:	HS23010986-06				
Sample Type:	Client				
Inject. Date:	25-Jan-2023 09:38:00	ALS Bottle#:	0	Worklist Smp#:	13
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0075742-013				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	25-Jan-2023 10:15:57	Calib Date:	30-Dec-2022 17:05:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20221230-74294.b\312022_12_30B.0006.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1627				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.029	2.048	-0.019	385744708	97398	H

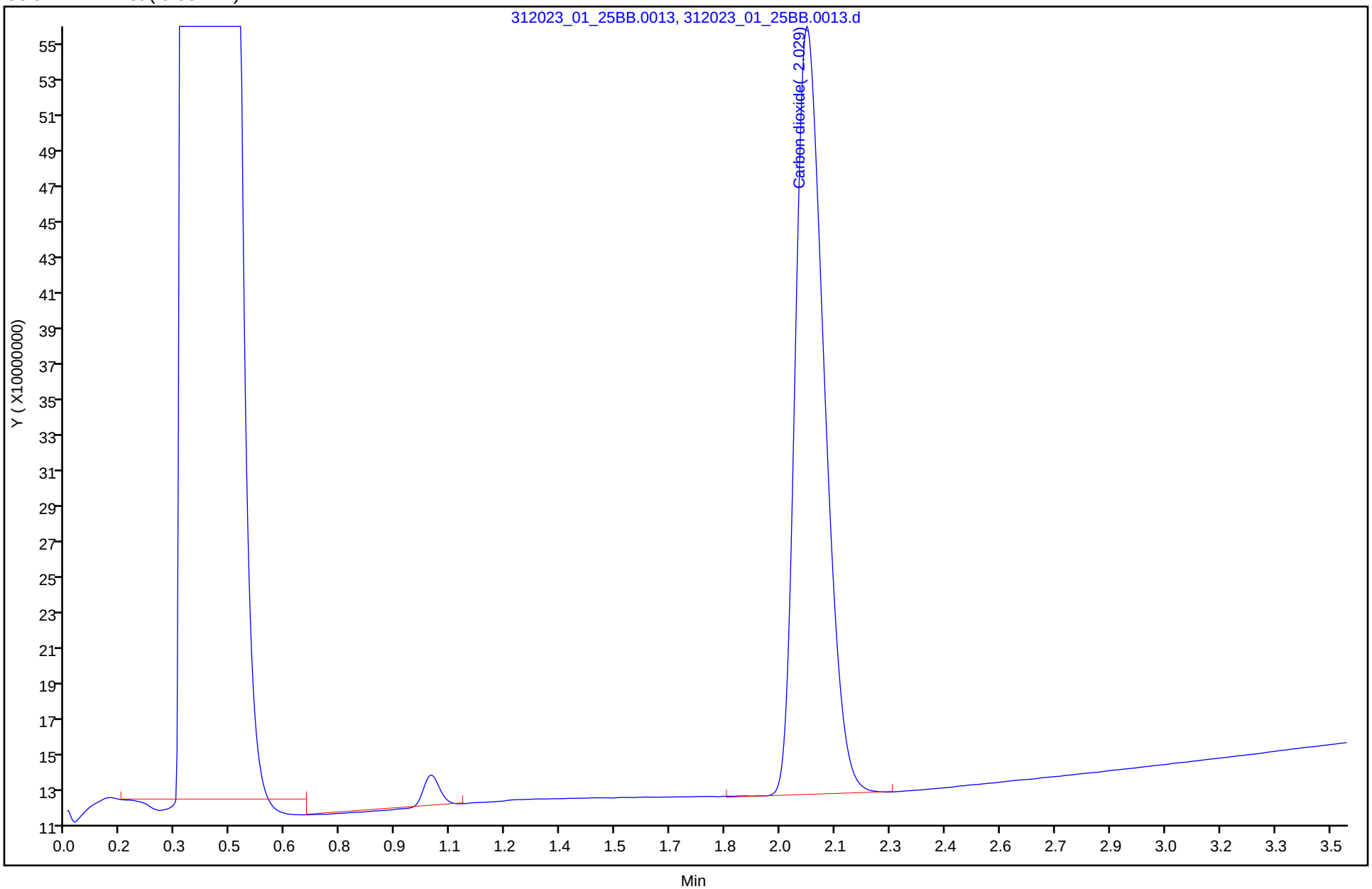
Chrom Revision: 2.3 17-Jan-2023 20:47:52

Report Date: 25-Jan-2023 10:16:00 Chrom Revision: 2.3 17-Jan-2023 20:47:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230125-75742.b\312023_01_25BB.0013.d				
Injection Date:	25-Jan-2023 09:38:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-113148-A-4-A	Lab Sample ID:	410-113148-4	Worklist Smp#:	13
Client ID:	HS23010986-06				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-113148-1

SDG No.:

Client Sample ID: HS23010986-07
Lab Sample ID: 410-113148-5

Matrix: Water
Lab File ID: 312023_01_25BB.0015.d

Analysis Method: RSK-175
Date Collected: 01/19/2023 14:30

Sample wt/vol: 5(mL)
Date Analyzed: 01/25/2023 09:59

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 338435
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	92000	Q cn	12000	2600