LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 18

2024

Bate Stamp Numbers
01244018 – 01245995

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2024

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

VOLUME 18

2024

A.	Title:	Report (Cont'd) – Appendix C, File 3 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:	01244018–01245995

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020307.D
Inj Date : 03-FEB-2023 12:26
InstruID : voa6.i
LabSampID : VBLKW-230203

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020308.D Page 1
Report Date: 13-Feb-2023 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020308.D
Lab Smp Id: HS23011294-02 Client Smp ID: HS23011294-02
Inj Date : 03-FEB-2023 12:47
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-02;HS23011294-02;;;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 13-Feb-2023 14:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

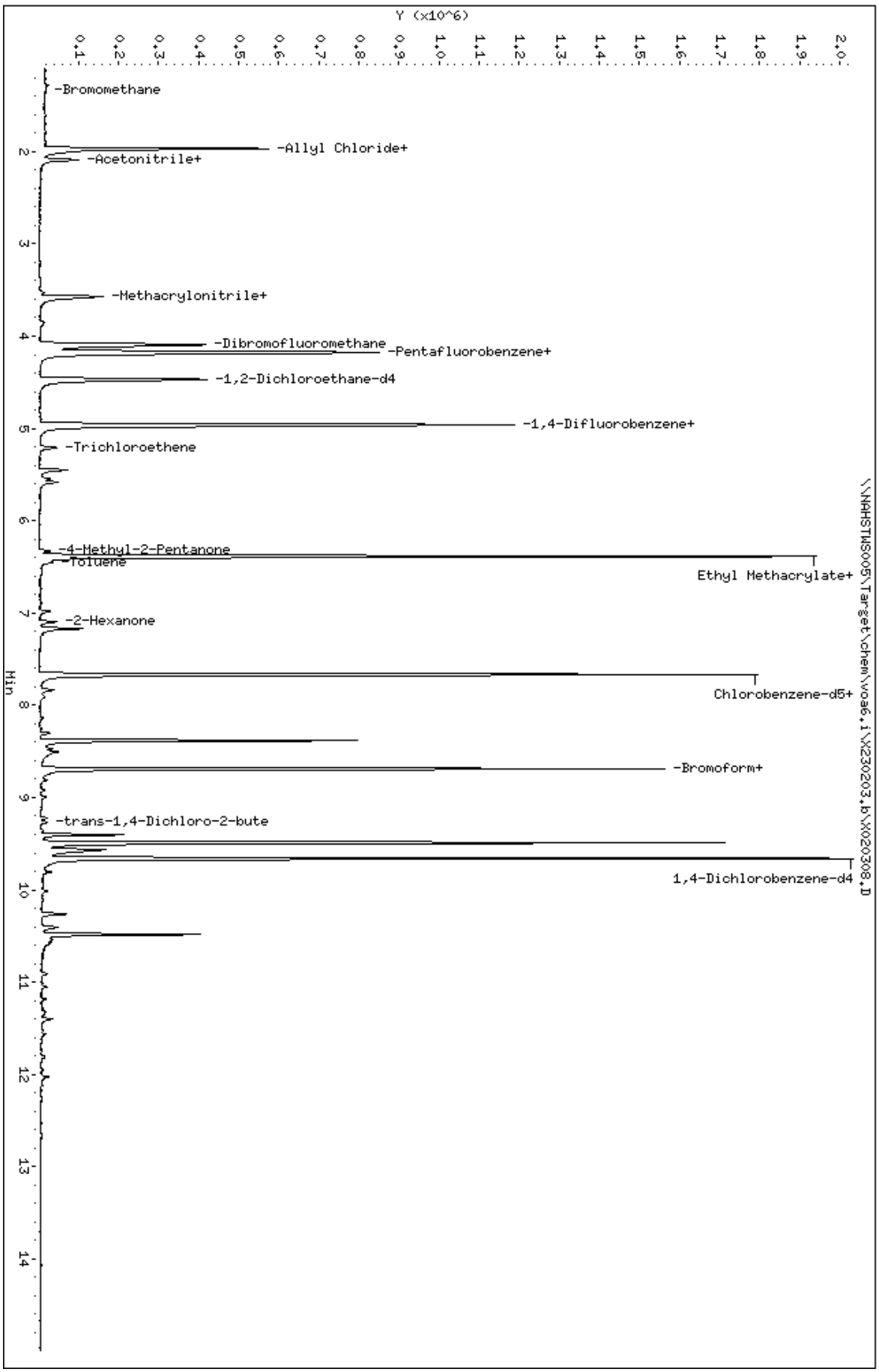
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	706253	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	305018	44.9618	44.96
$ 35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.069)	343640	48.0208	48.02
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	999593	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	888405	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1143805	52.1022	52.10
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	427510	52.0961	52.09
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	476728	50.0000	
27 cis-1,2-Dichloroethene	96	3.533	3.521	(0.846)	6616	0.90622	0.90(a)
38 Trichloroethene	130	5.208	5.205	(1.050)	15048	2.22264	2.22(a)

QC Flag Legend

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



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Sample Info: HS23011294-02;HS23011294-02;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020308.D Page 2

Date : 03-FEB-2023 12:47

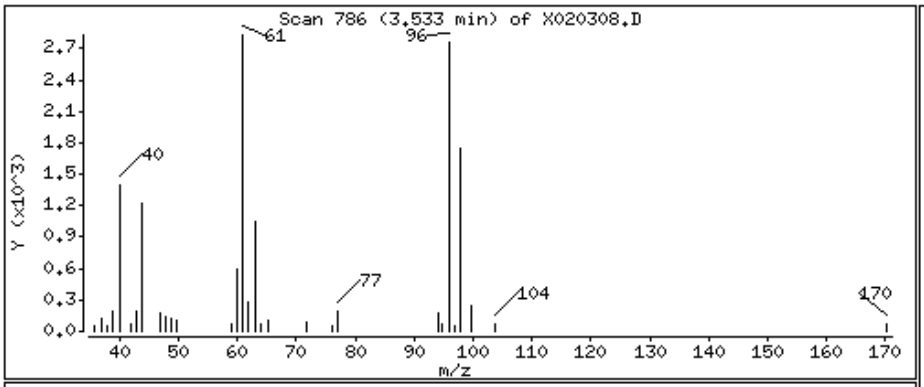
Client ID: HS23011294-02 Instrument: voa6.i

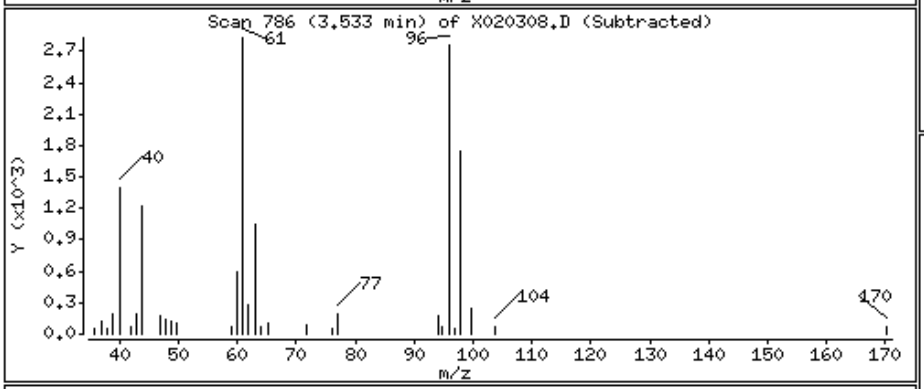
Sample Info: HS23011294-02;HS23011294-02;;;

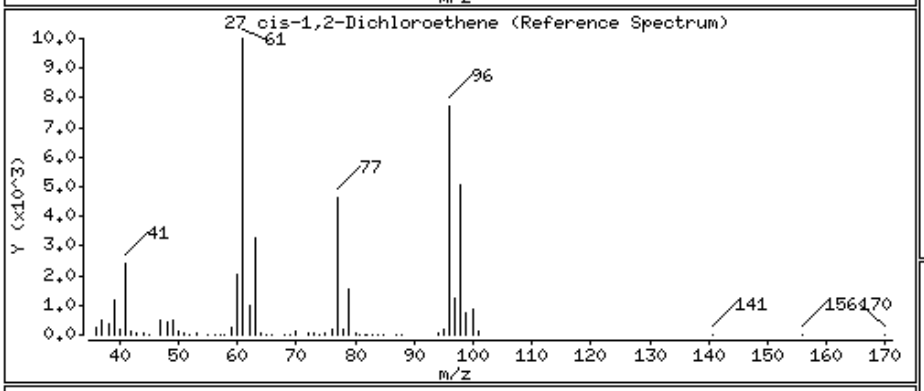
Purge Volume: 5.0 Operator: PC

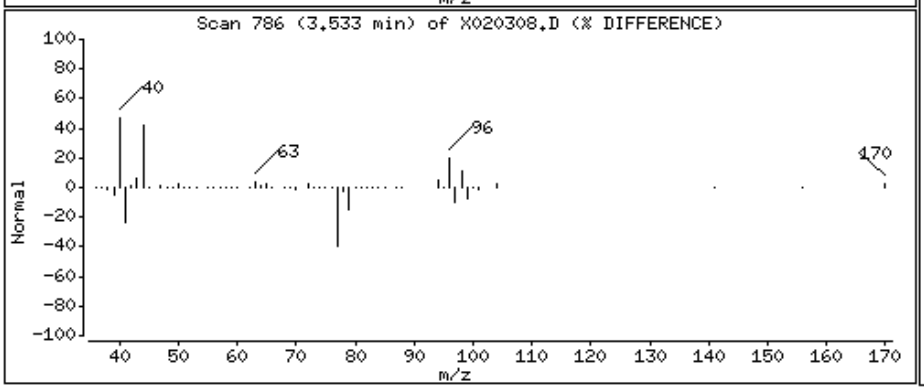
Column phase: DB624 Column diameter: 0.18

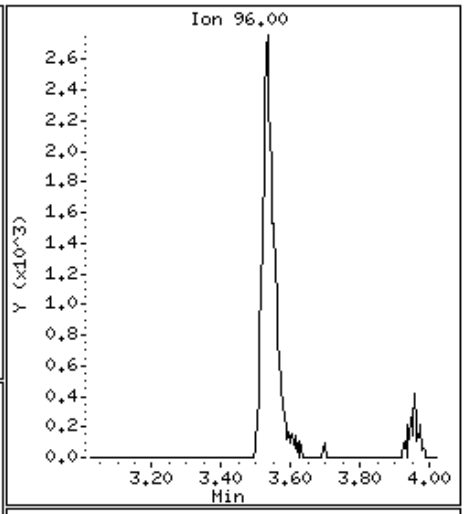
27 cis-1,2-Dichloroethene Concentration: 0.90 ug/l

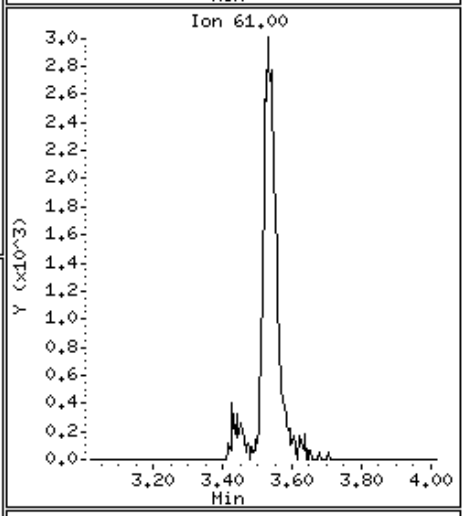


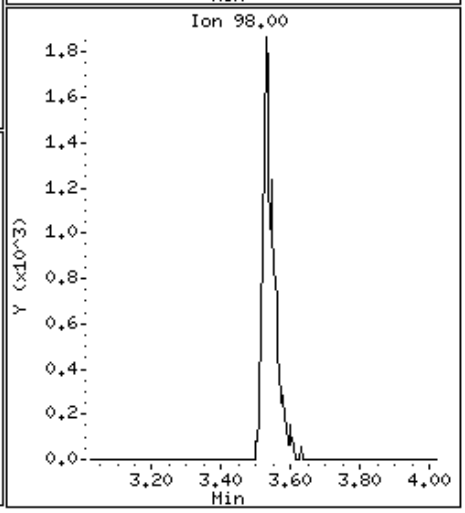












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020308.D Page 3

Date : 03-FEB-2023 12:47

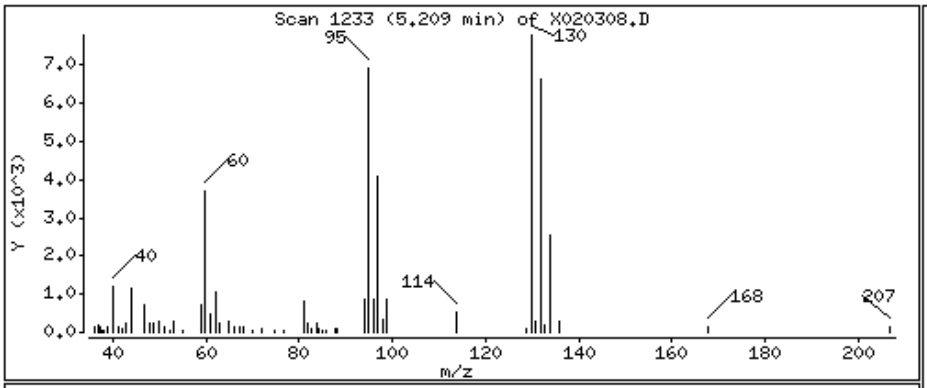
Client ID: HS23011294-02 Instrument: voa6.i

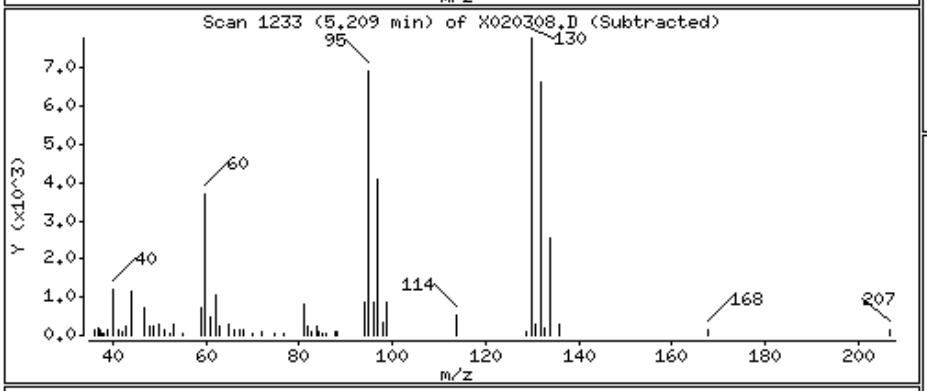
Sample Info: HS23011294-02;HS23011294-02;;;

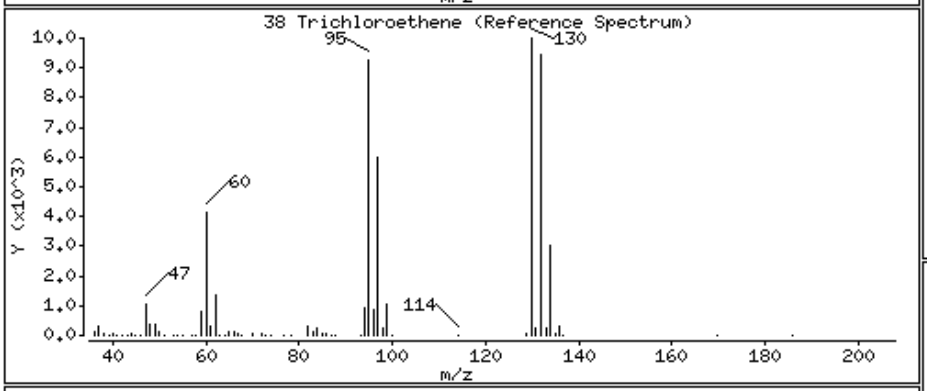
Purge Volume: 5.0 Operator: PC

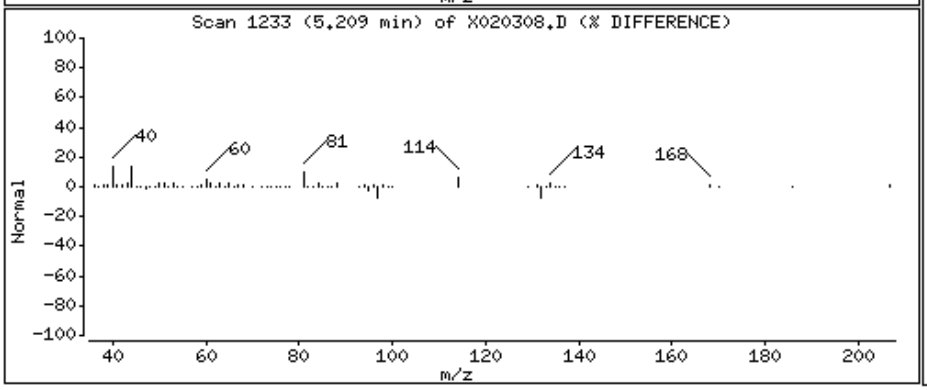
Column phase: DB624 Column diameter: 0.18

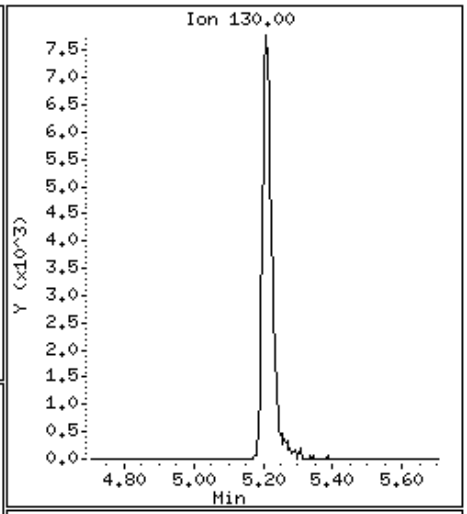
38 Trichloroethene Concentration: 2.22 ug/l

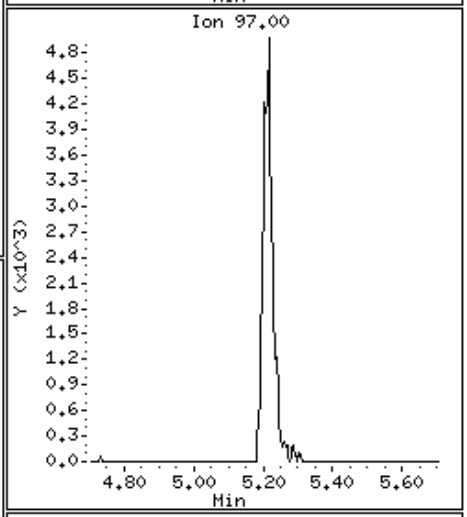


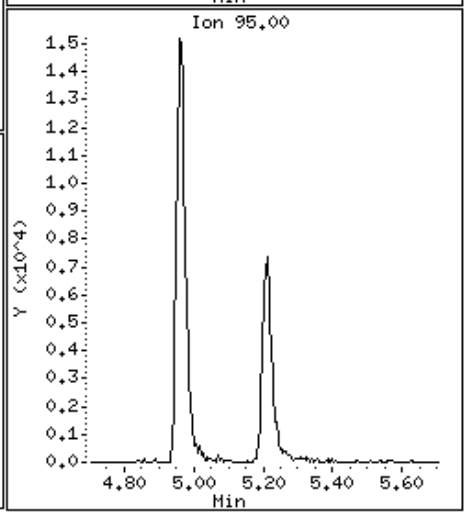












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InstruID : voa6.i
LabSampID : HS23011294-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020312.D Page 1
Report Date: 13-Feb-2023 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020312.D
Lab Smp Id: HS23011294-09 Client Smp ID: HS23011294-09
Inj Date : 03-FEB-2023 14:21
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-09;HS23011294-09;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 12
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

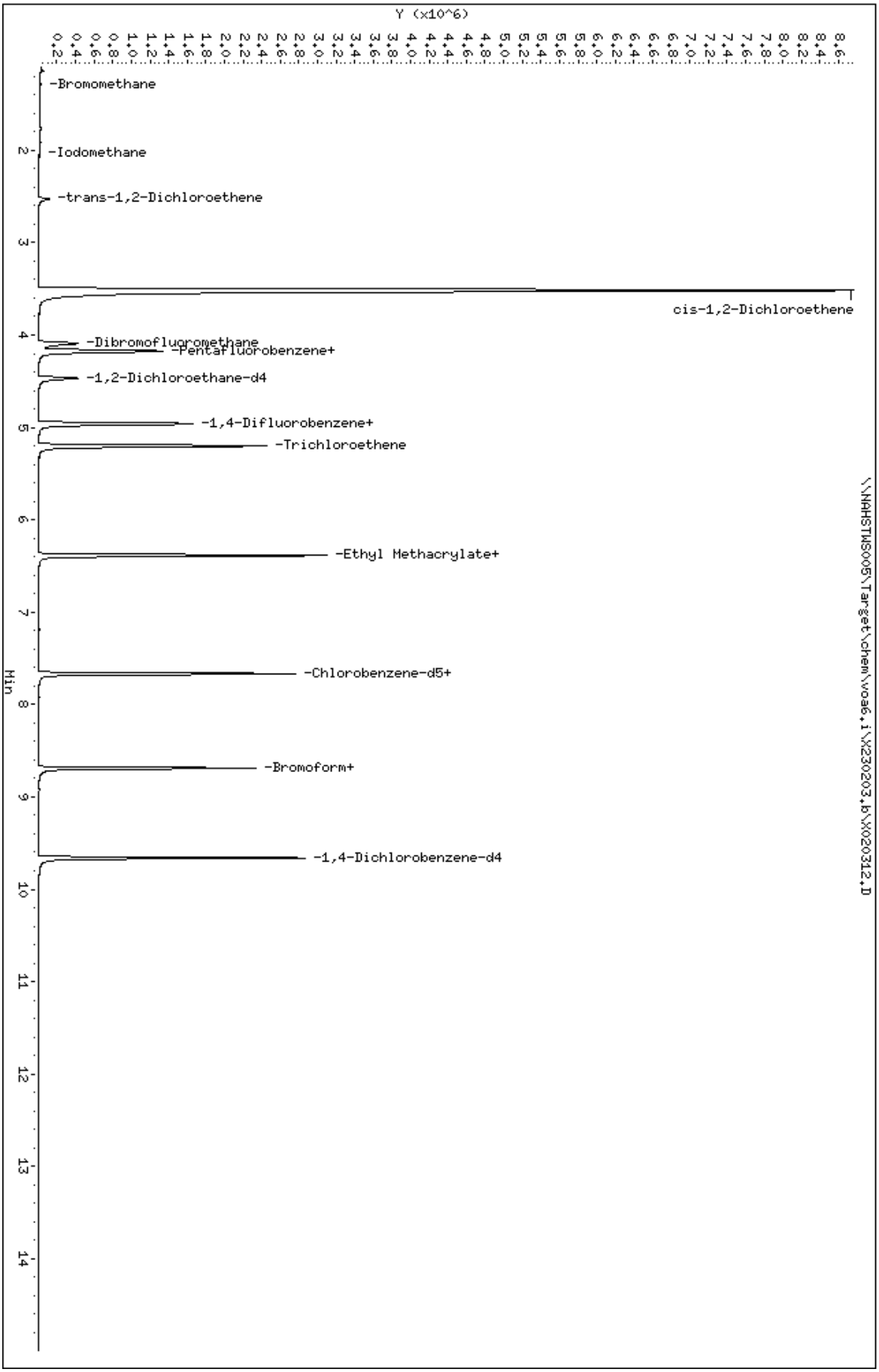
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

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)	1117137	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	316529	29.4403	29.44(R)
$ 35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.070)	354314	31.3962	31.39(R)
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1389435	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	1395721	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1843989	53.4656	53.46
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	659163	51.1298	51.12
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	719378	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.274)	28567	2.92730	2.92(a)
27 cis-1,2-Dichloroethene	96	3.518	3.521	(0.843)	4939987	427.777	427.77(A)
38 Trichloroethene	130	5.201	5.205	(1.048)	838813	89.1336	89.13
20 trans-1,2-Dichloroethene	96	2.525	2.524	(0.605)	54947	5.79057	5.79

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.

R - Spike/Surrogate failed recovery limits.



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Date : 03-FEB-2023 14:21
Client ID: HS230112294-09
Sample Info: HS230112294-09;HS230112294-09;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020312.D Page 2

Date : 03-FEB-2023 14:21

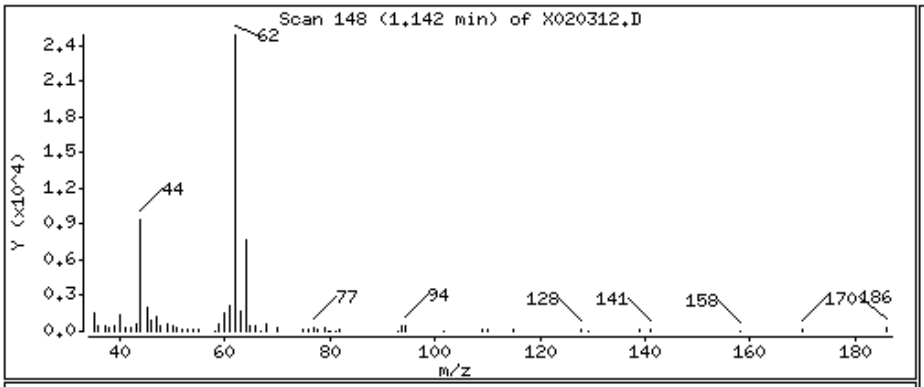
Client ID: HS23011294-09 Instrument: voa6.i

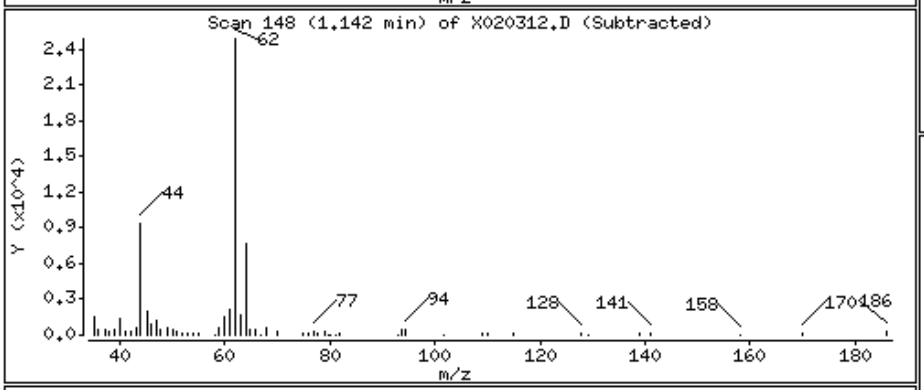
Sample Info: HS23011294-09;HS23011294-09;;;

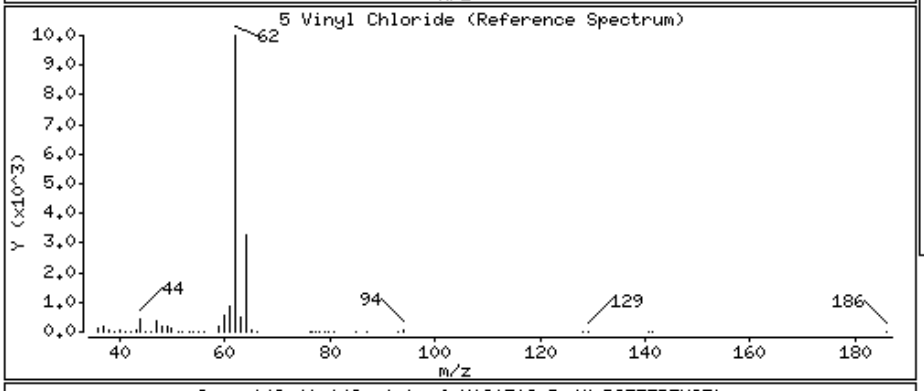
Purge Volume: 5.0 Operator: PC

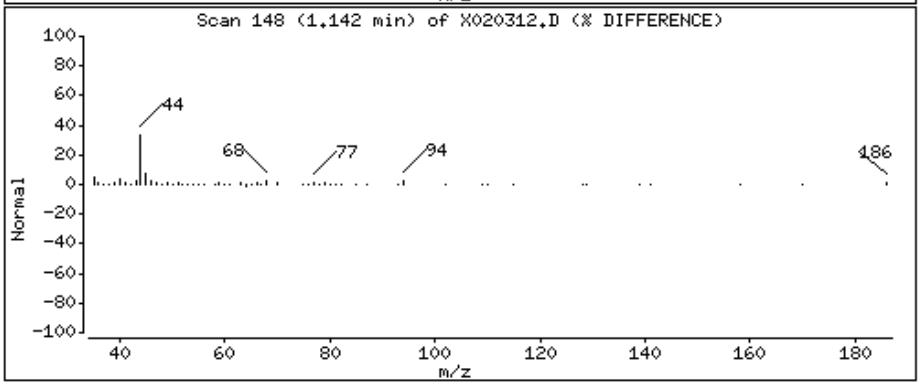
Column phase: DB624 Column diameter: 0.18

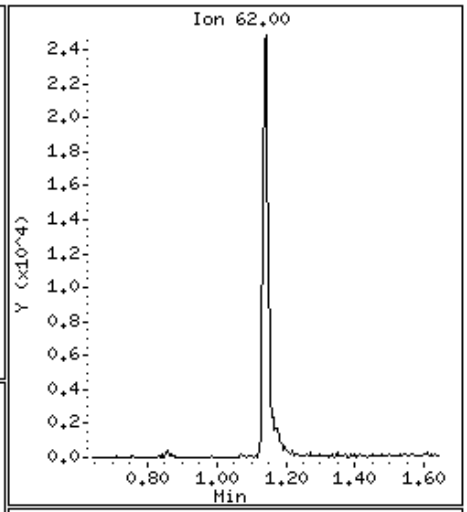
5 Vinyl Chloride Concentration: 2.92 ug/l

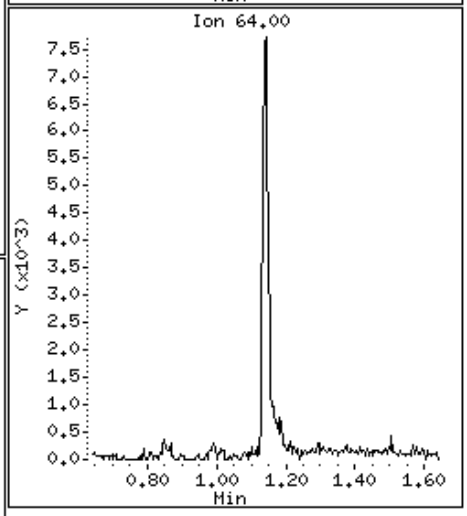












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Date : 03-FEB-2023 14:21

Client ID: HS23011294-09

Instrument: voa6.i

Sample Info: HS23011294-09;HS23011294-09;;;

Purge Volume: 5.0

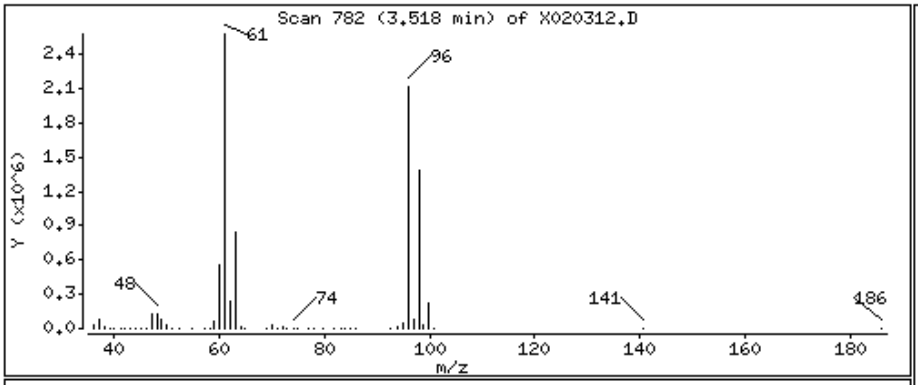
Operator: PC

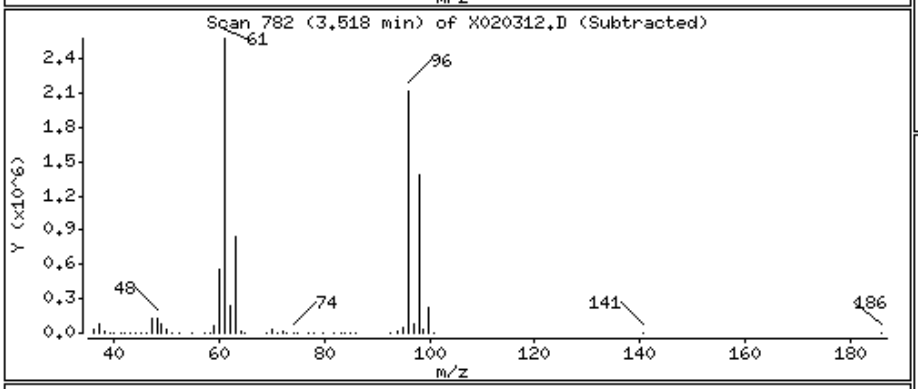
Column phase: DB624

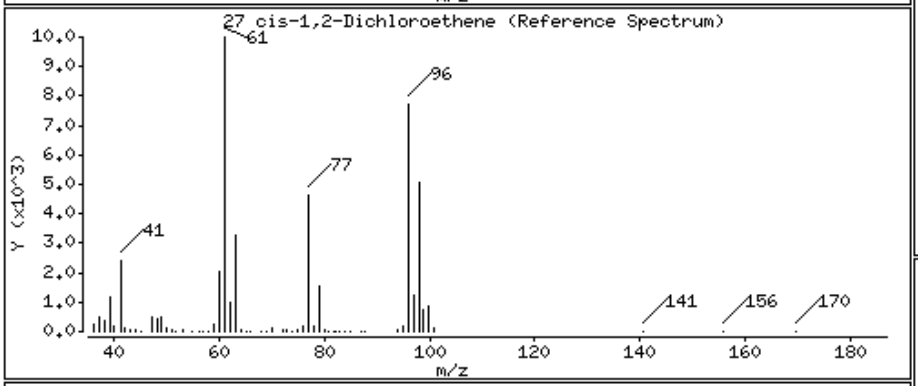
Column diameter: 0.18

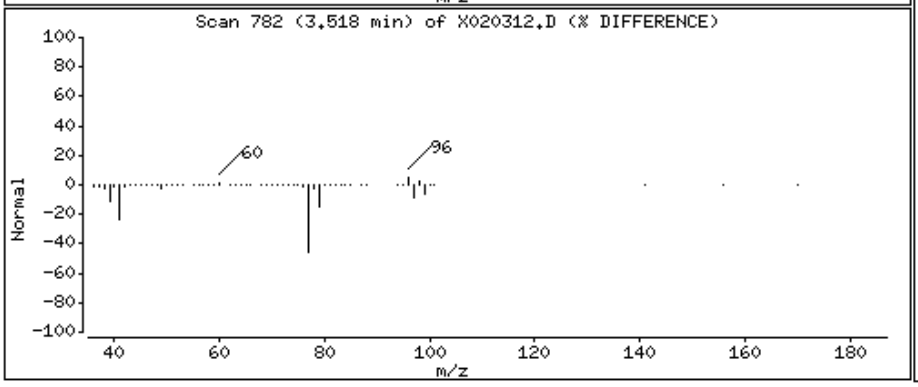
27 cis-1,2-Dichloroethene

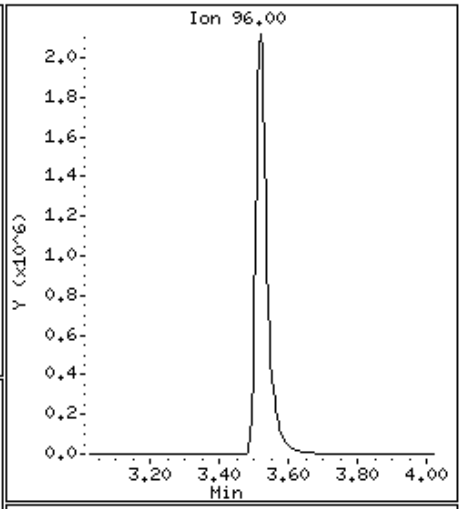
Concentration: 427.77 ug/l

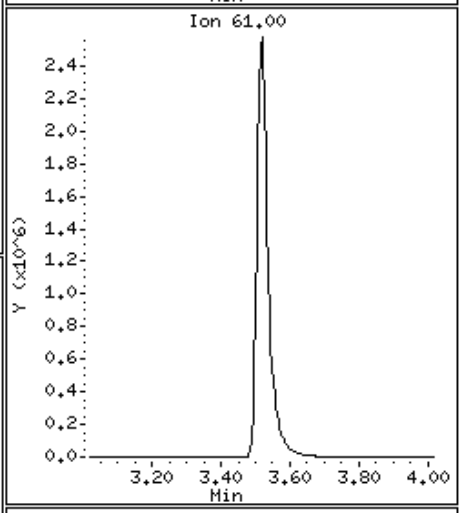


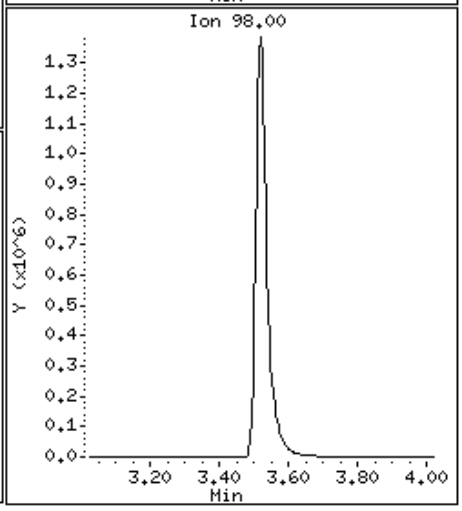












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Date : 03-FEB-2023 14:21

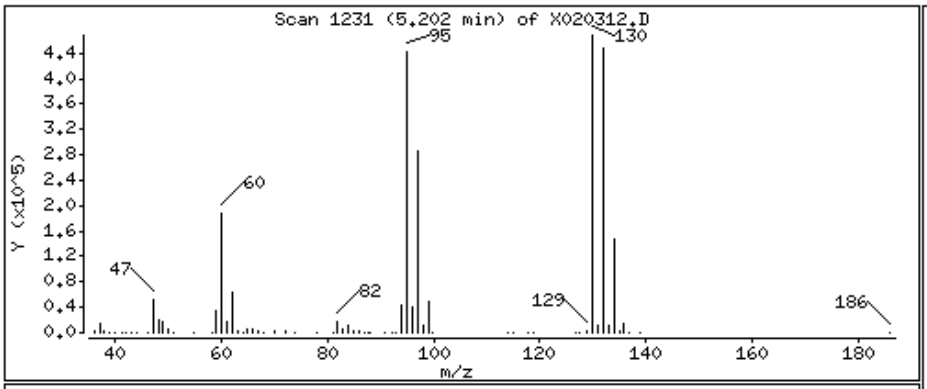
Client ID: HS23011294-09 Instrument: voa6.i

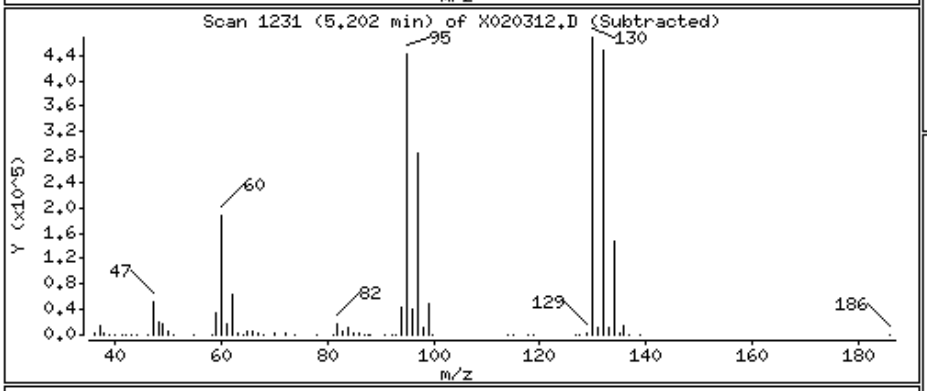
Sample Info: HS23011294-09;HS23011294-09;;;

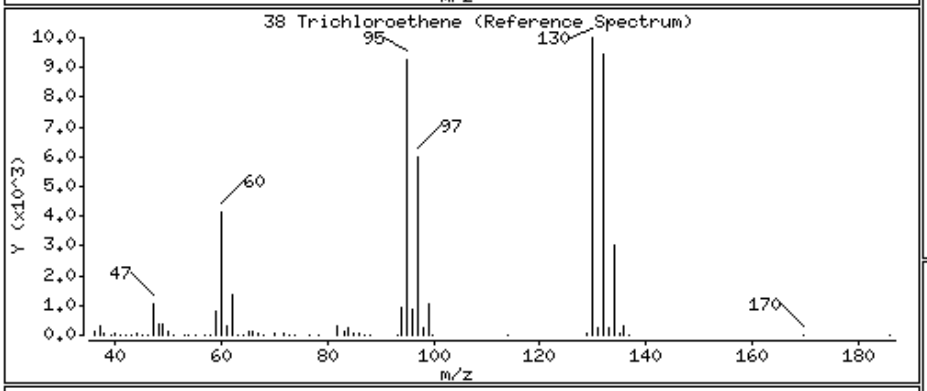
Purge Volume: 5.0 Operator: PC

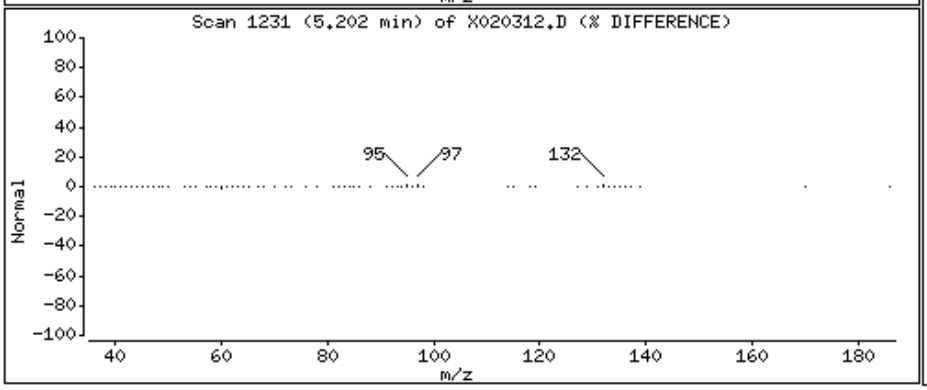
Column phase: DB624 Column diameter: 0.18

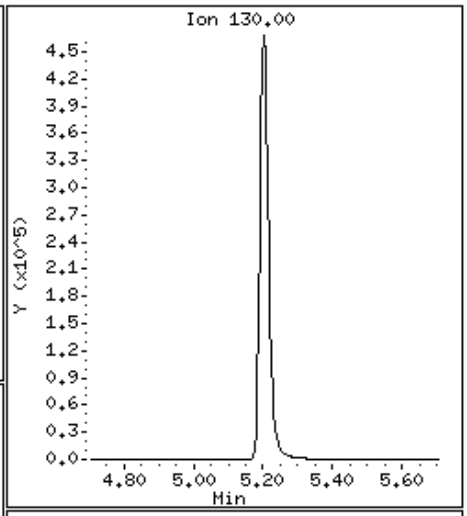
38 Trichloroethene Concentration: 89.13 ug/l

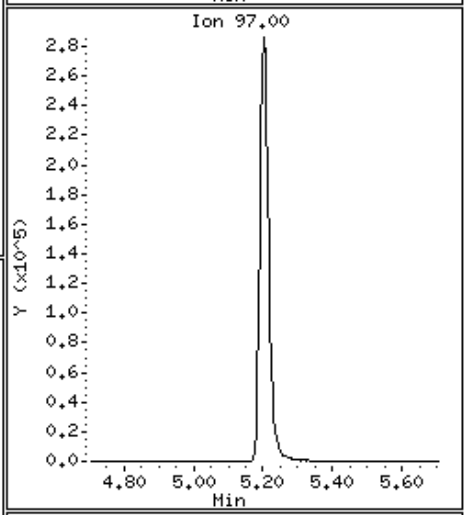


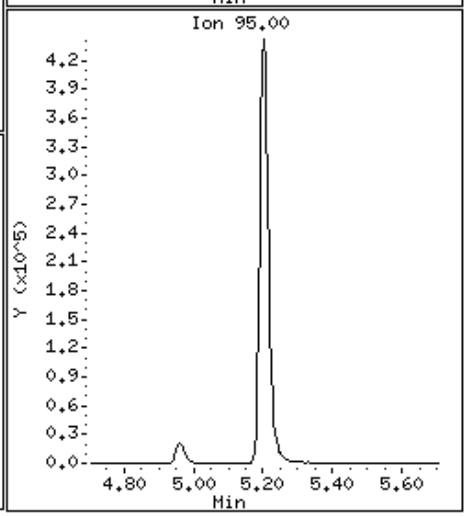












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020312.D Page 5

Date : 03-FEB-2023 14:21

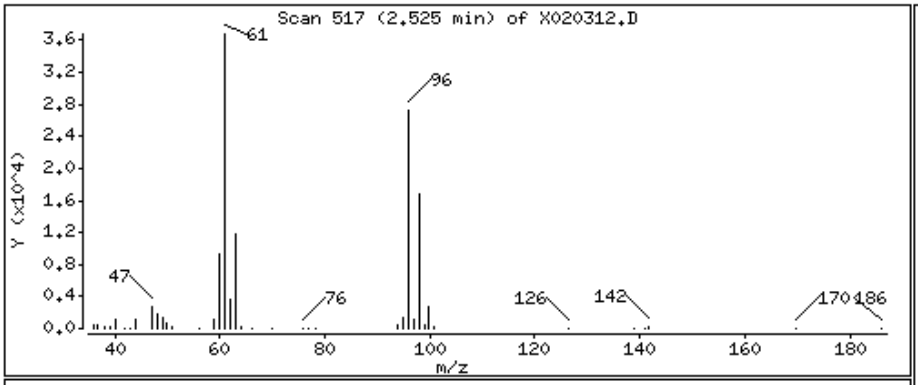
Client ID: HS23011294-09 Instrument: voa6.i

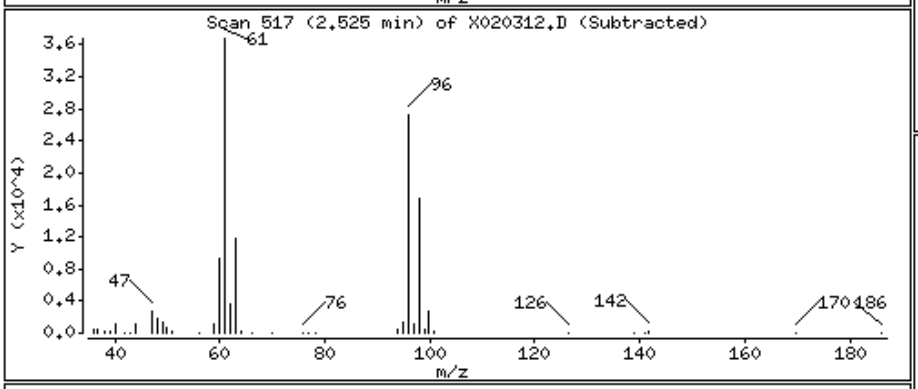
Sample Info: HS23011294-09;HS23011294-09;;;

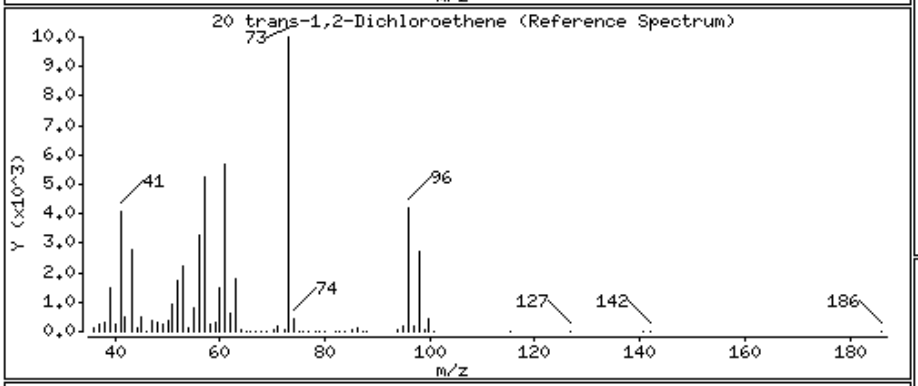
Purge Volume: 5.0 Operator: PC

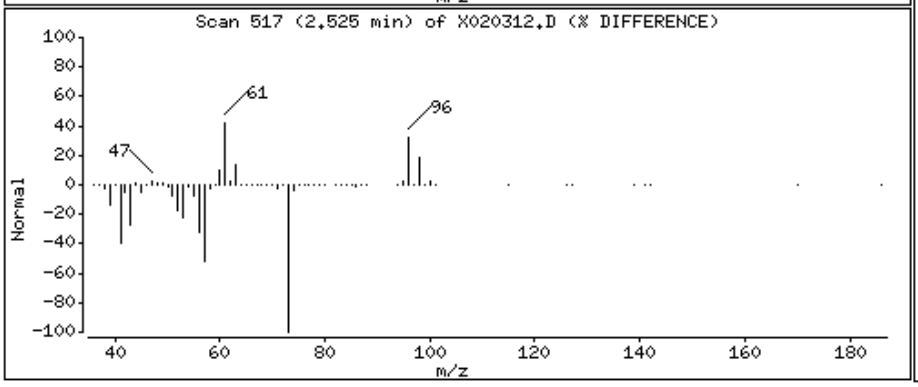
Column phase: DB624 Column diameter: 0.18

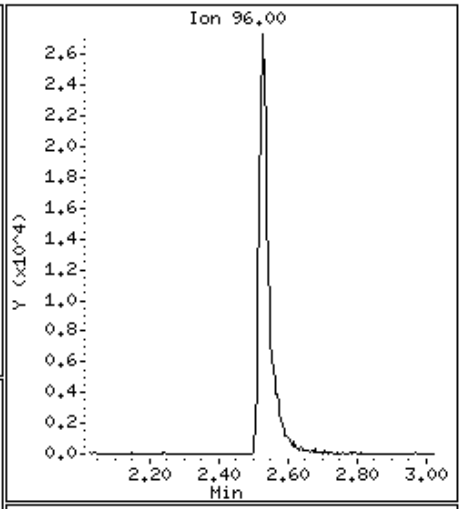
20 trans-1,2-Dichloroethene Concentration: 5.79 ug/l

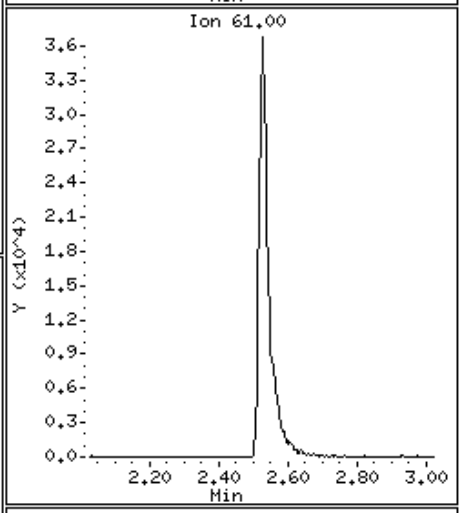


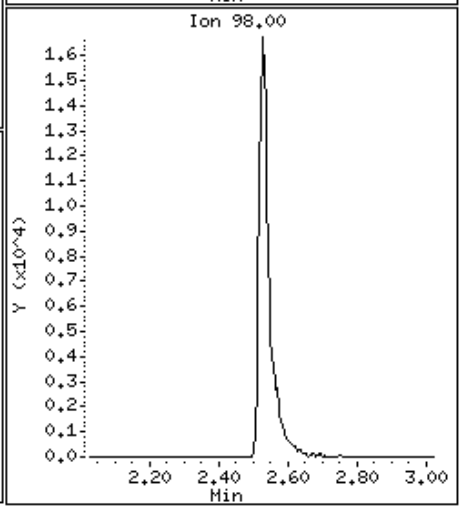












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020312.D
Inj Date : 03-FEB-2023 14:21
InstruID : voa6.i
LabSampID : HS23011294-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D Page 1
Report Date: 13-Feb-2023 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D
Lab Smp Id: HS23011294-01 Client Smp ID: HS23011294-01
Inj Date : 03-FEB-2023 14:42
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-01;HS23011294-01;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 13
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

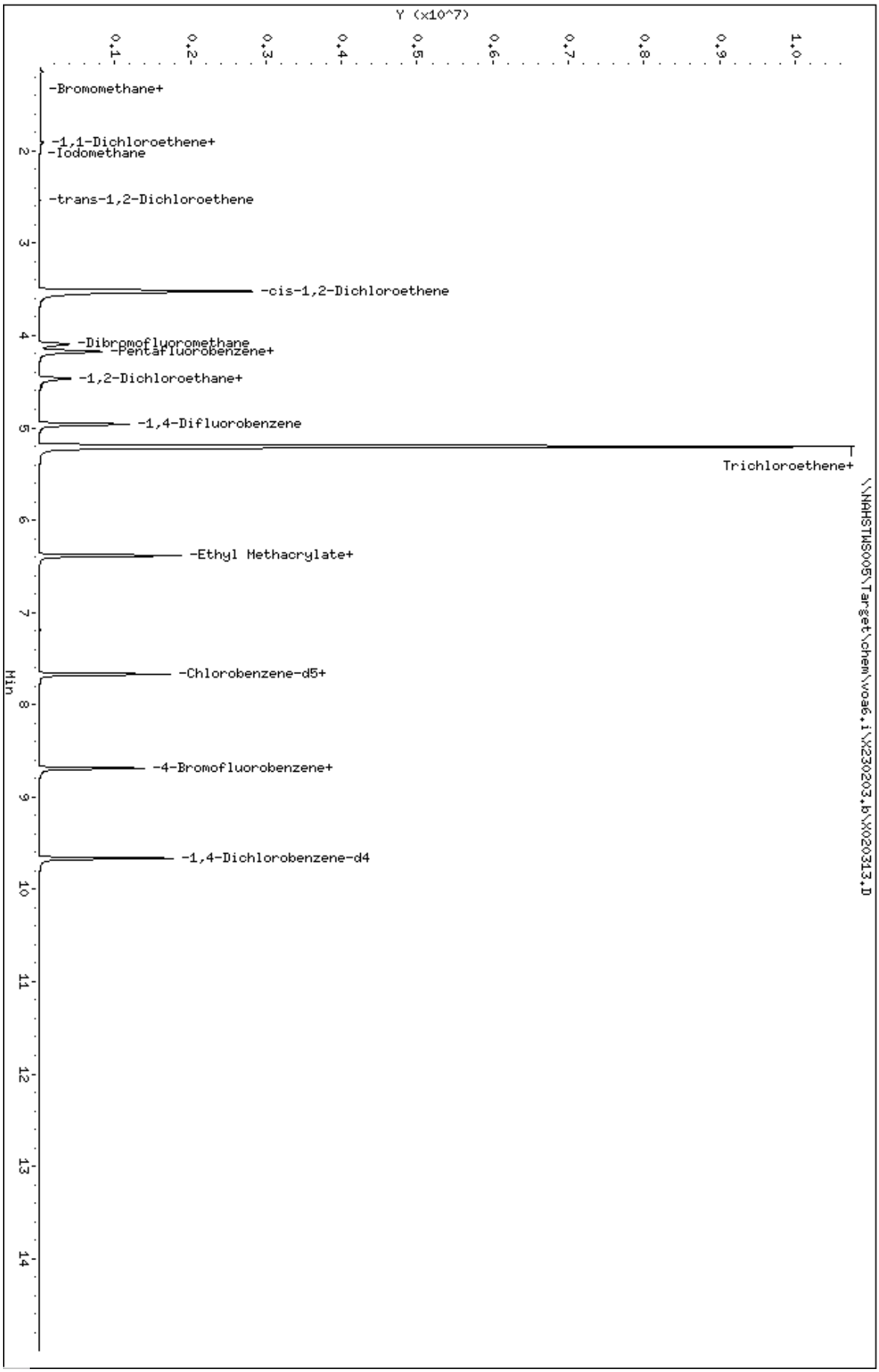
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

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)	699239	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	299536	44.5952	44.59
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	341127	48.1470	48.14
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	995830	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	878660	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1137083	52.3704	52.37
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	415466	51.1910	51.19
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	455801	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	28695	4.69775	4.69(a)
11 1,1-Dichloroethene	96	1.909	1.909	(0.458)	13986	2.63543	2.63(a)
27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.844)	1603363	221.822	221.82(A)
33 1,2-Dichloroethane	62	4.560	4.552	(0.919)	22938	2.81131	2.81(a)
38 Trichloroethene	130	5.201	5.205	(1.048)	3595072	533.012	533.01(A)
20 trans-1,2-Dichloroethene	96	2.532	2.524	(0.607)	3658	0.61589	0.61(a)

QC Flag Legend

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

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D
Date : 03-FEB-2023 14:42
Client ID: HS230411294-01
Sample Info: HS230411294-01;HS230411294-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D

Date : 03-FEB-2023 14:42

Client ID: HS23011294-01

Instrument: voa6.i

Sample Info: HS23011294-01;HS23011294-01;;;

Purge Volume: 5.0

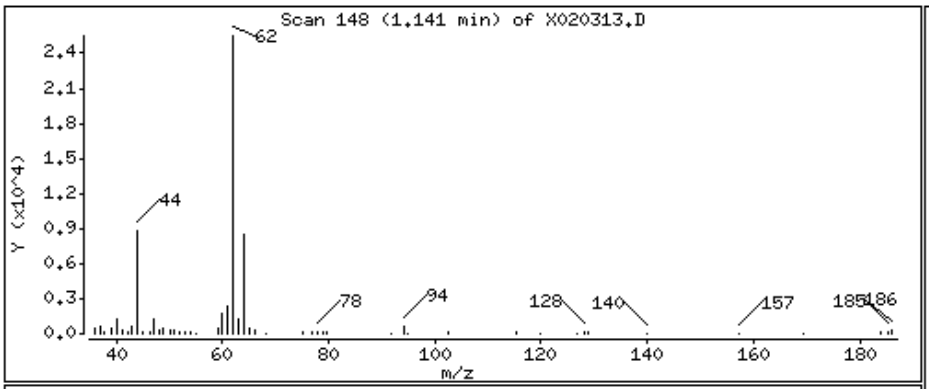
Operator: PC

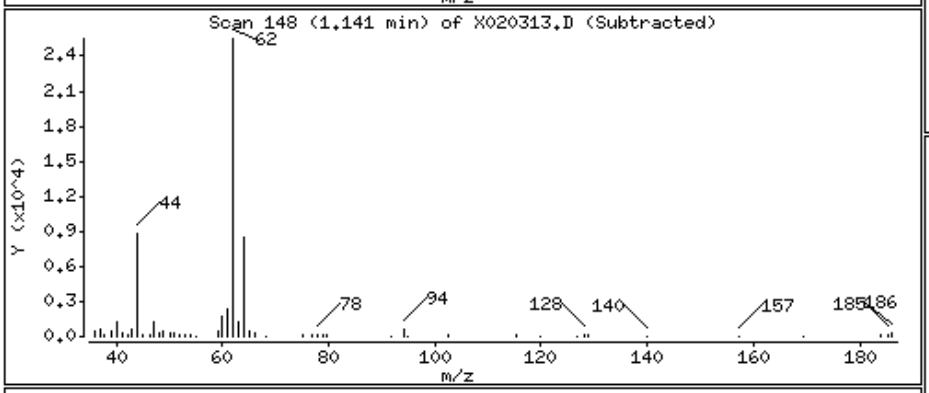
Column phase: DB624

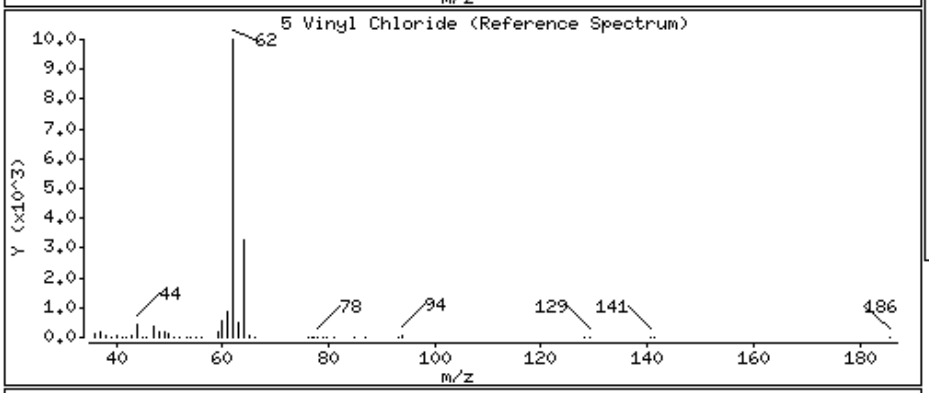
Column diameter: 0.18

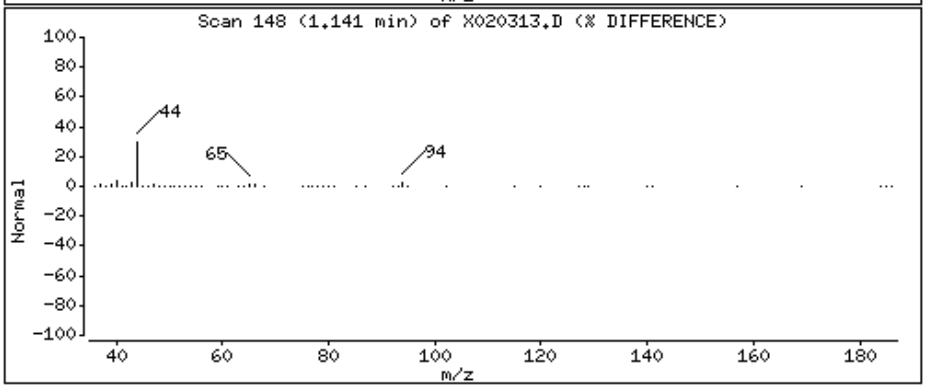
5 Vinyl Chloride

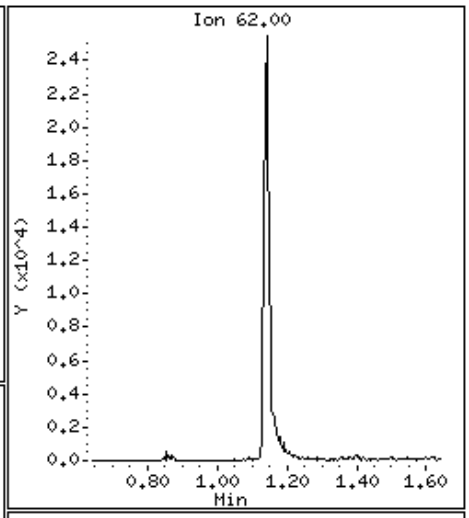
Concentration: 4.69 ug/l

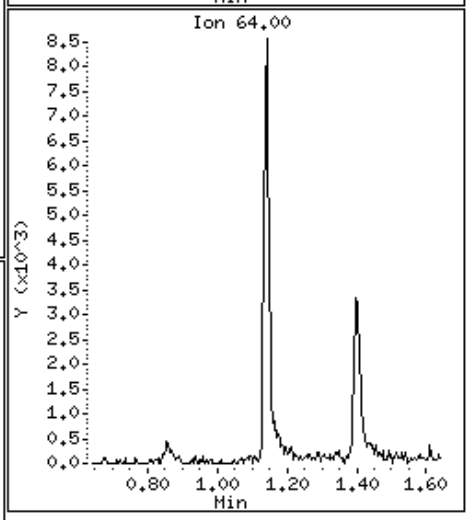












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D Page 3

Date : 03-FEB-2023 14:42

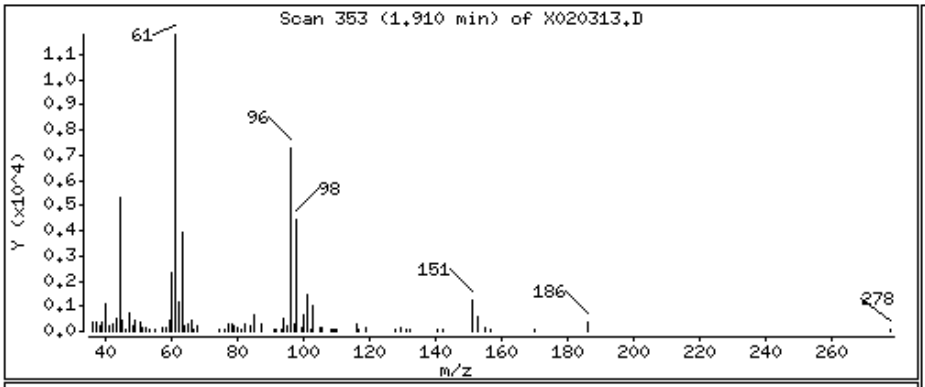
Client ID: HS23011294-01 Instrument: voa6.i

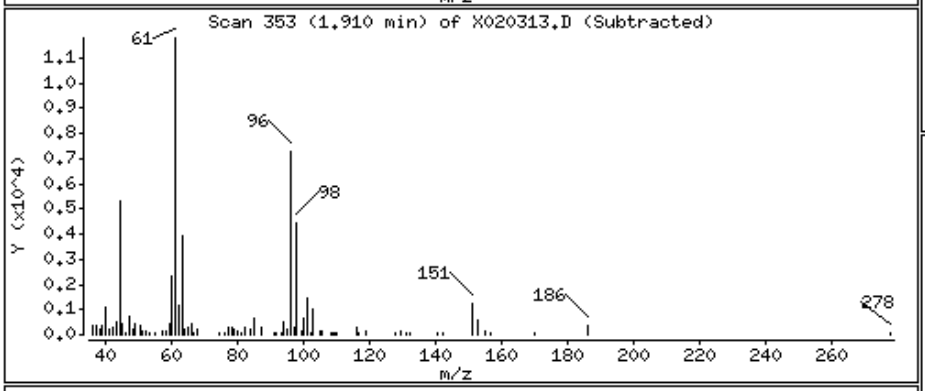
Sample Info: HS23011294-01;HS23011294-01;;;

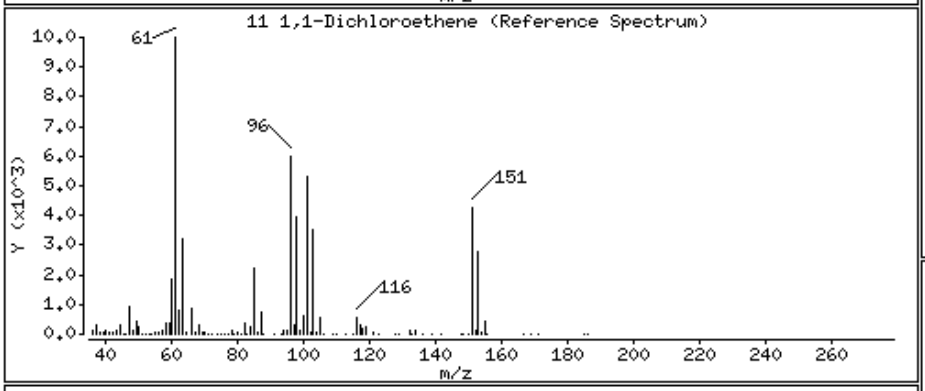
Purge Volume: 5.0 Operator: PC

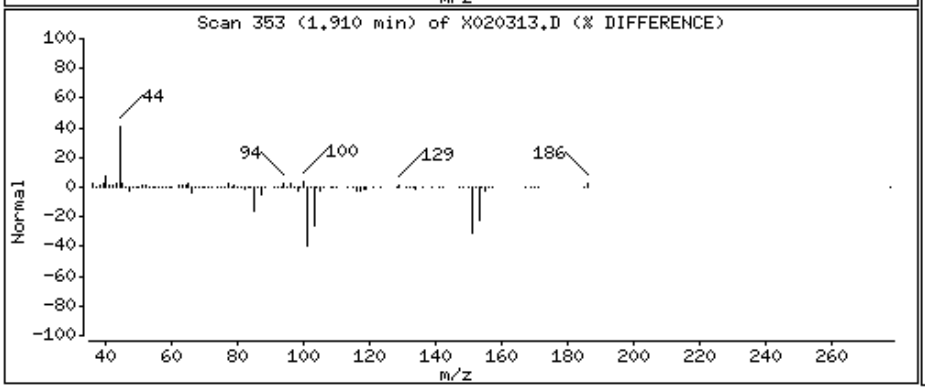
Column phase: DB624 Column diameter: 0.18

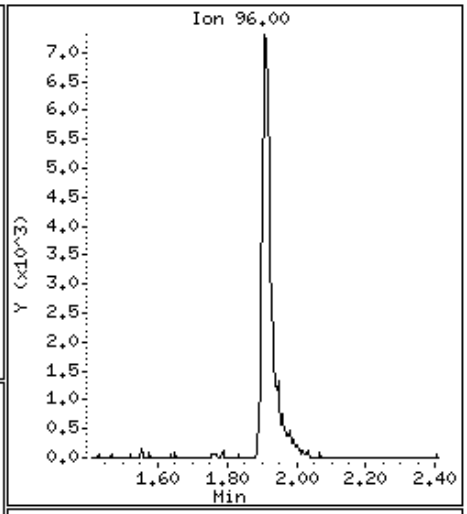
11 1,1-Dichloroethene Concentration: 2.63 ug/l

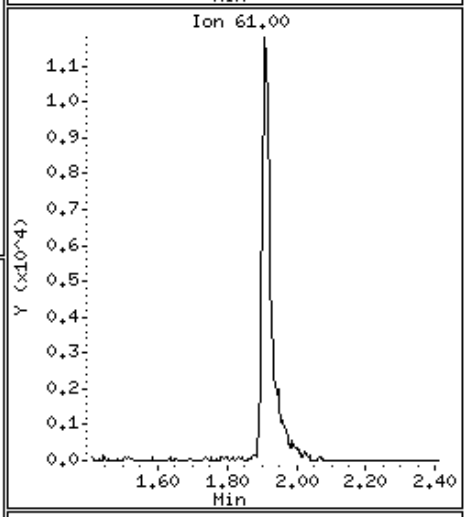


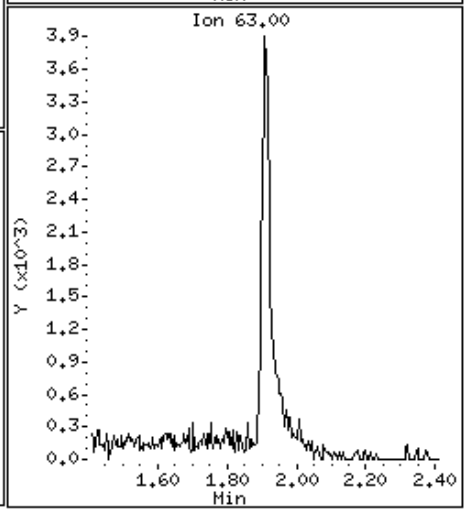












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D Page 4

Date : 03-FEB-2023 14:42

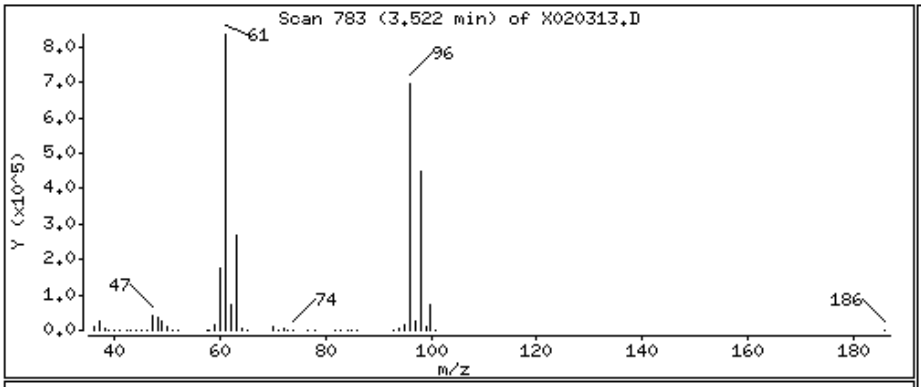
Client ID: HS23011294-01 Instrument: voa6.i

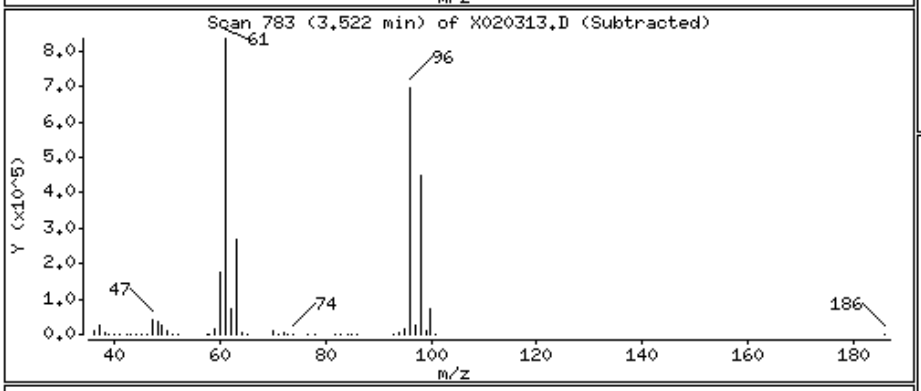
Sample Info: HS23011294-01;HS23011294-01;;;

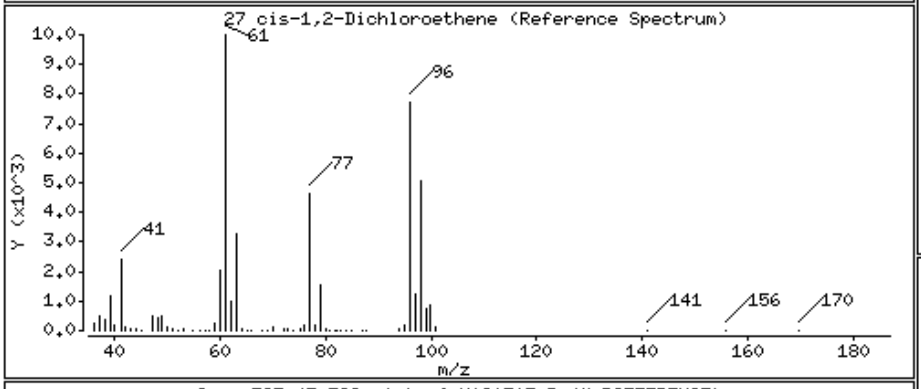
Purge Volume: 5.0 Operator: PC

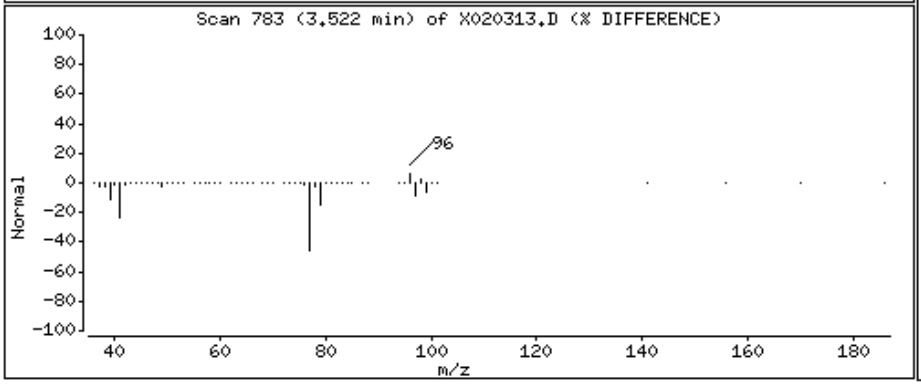
Column phase: DB624 Column diameter: 0.18

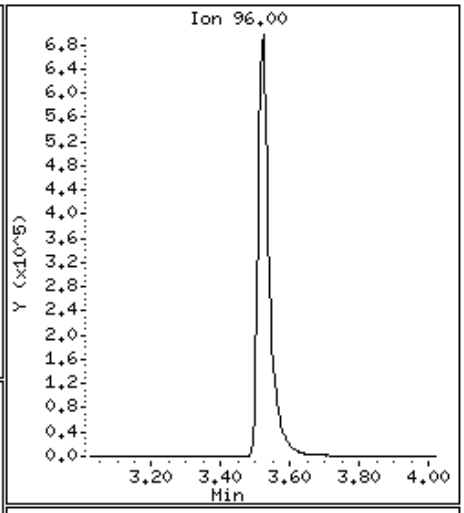
27 cis-1,2-Dichloroethene Concentration: 221.82 ug/l

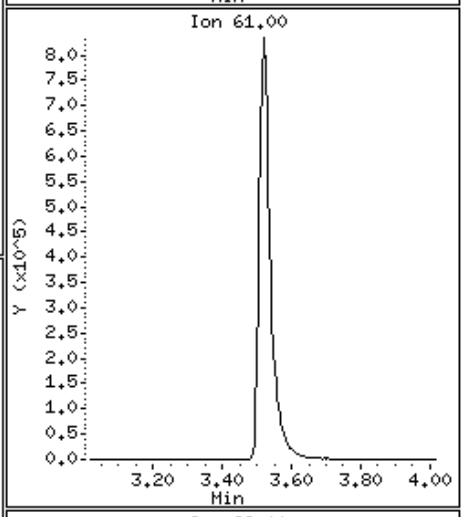


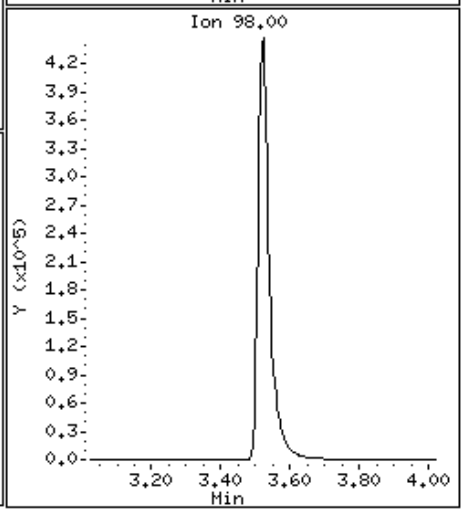












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D Page 5

Date : 03-FEB-2023 14:42

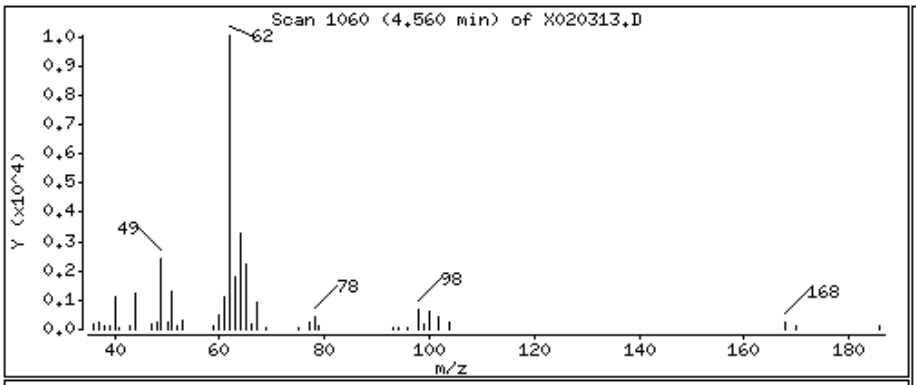
Client ID: HS23011294-01 Instrument: voa6.i

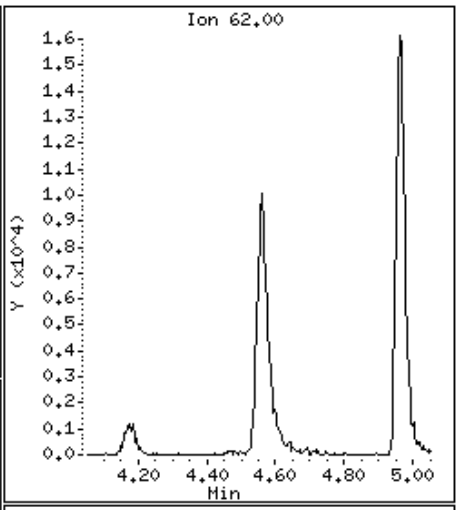
Sample Info: HS23011294-01;HS23011294-01;;;

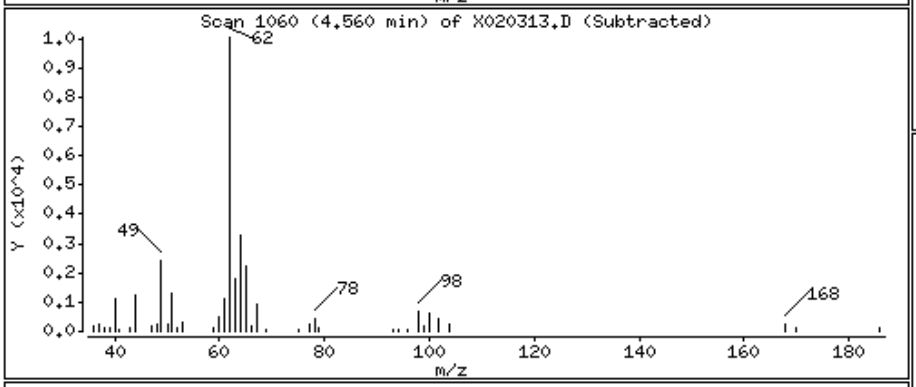
Purge Volume: 5.0 Operator: PC

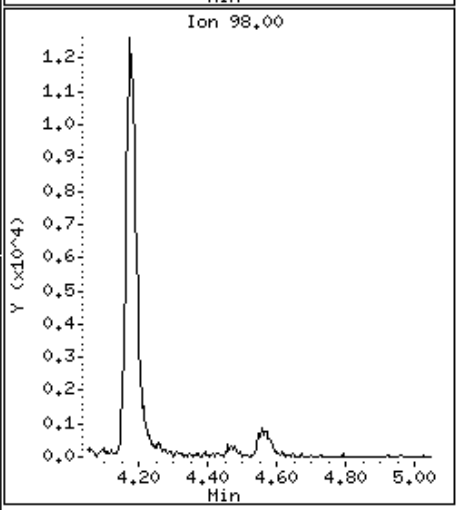
Column phase: DB624 Column diameter: 0.18

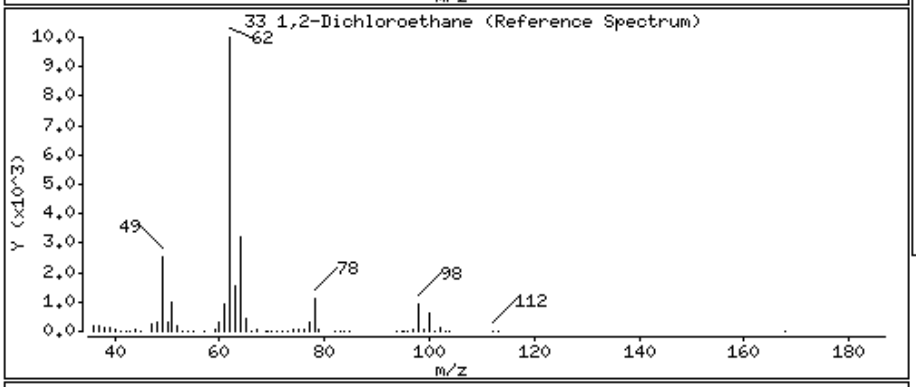
33 1,2-Dichloroethane Concentration: 2.81 ug/l

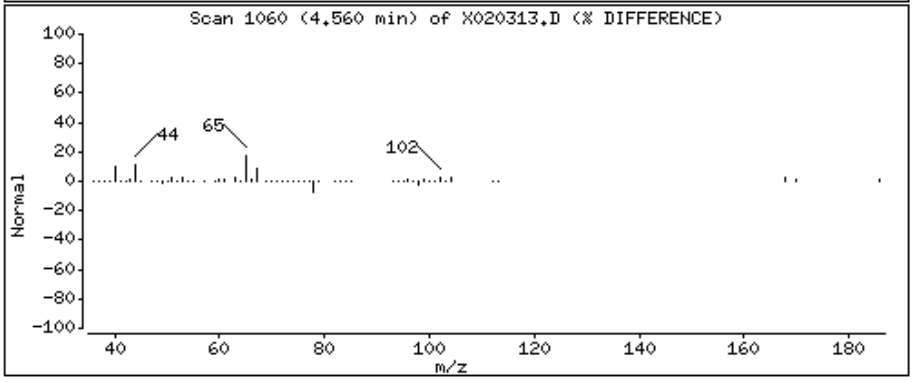












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D

Date : 03-FEB-2023 14:42

Client ID: HS23011294-01

Instrument: voa6.i

Sample Info: HS23011294-01;HS23011294-01;;;

Purge Volume: 5.0

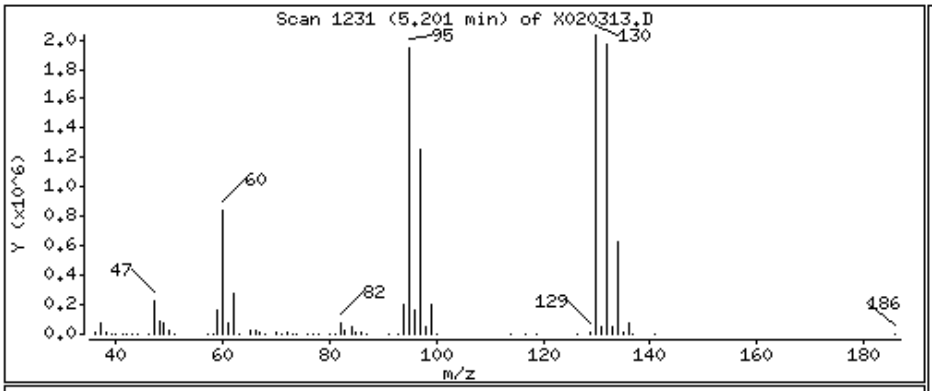
Operator: PC

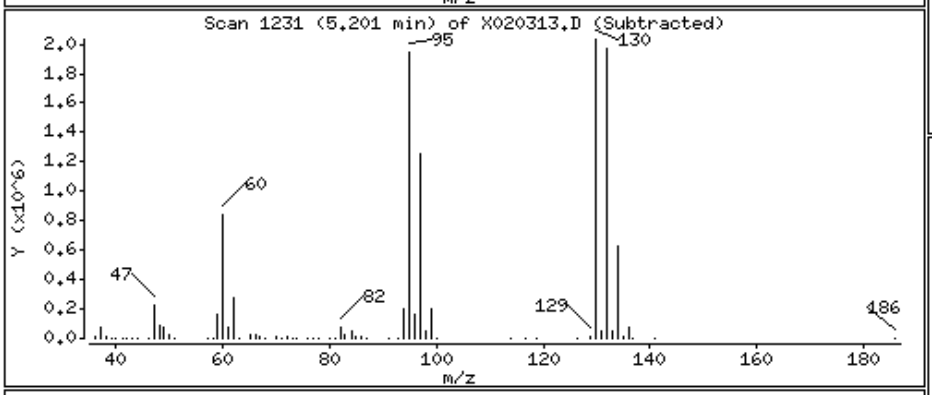
Column phase: DB624

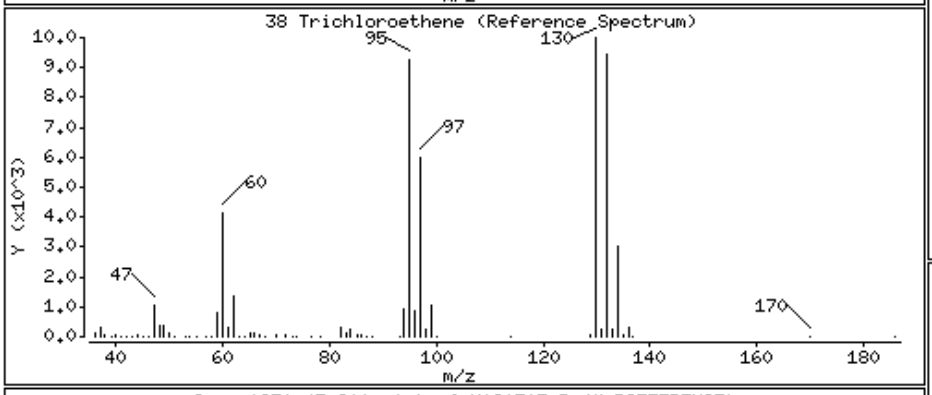
Column diameter: 0.18

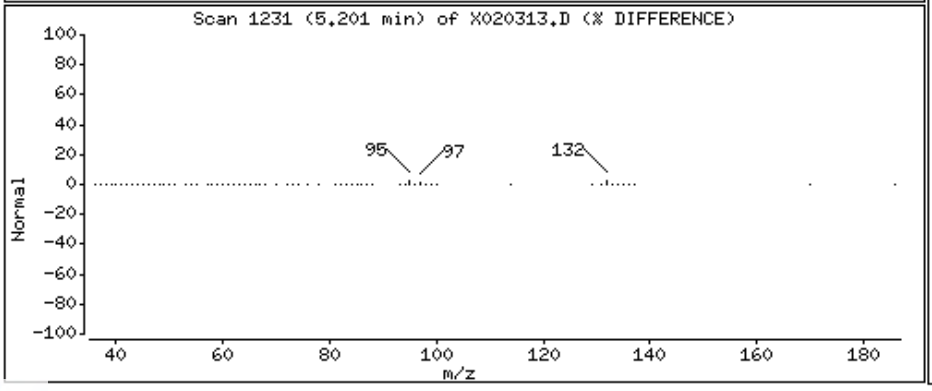
38 Trichloroethene

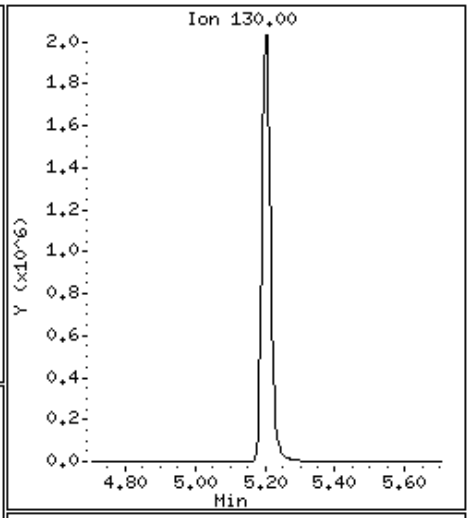
Concentration: 533.01 ug/l

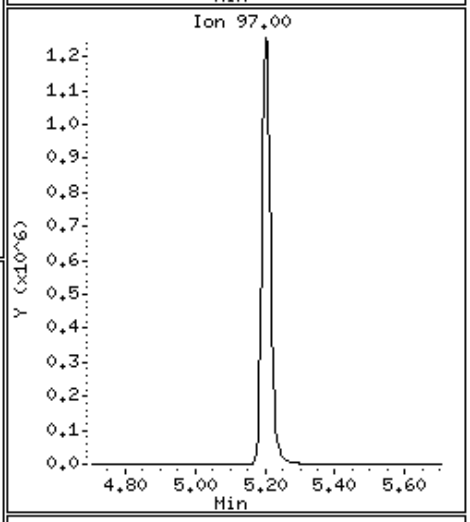


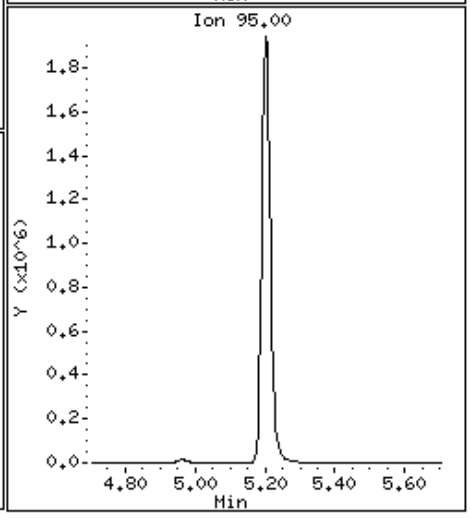












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020313.D Page 7

Date : 03-FEB-2023 14:42

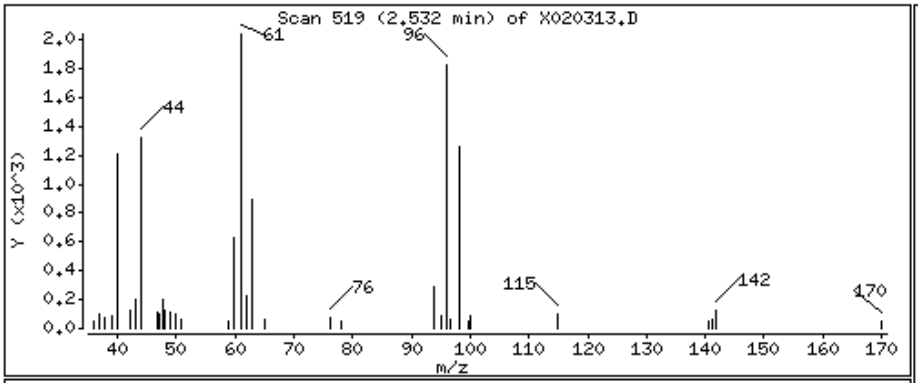
Client ID: HS23011294-01 Instrument: voa6.i

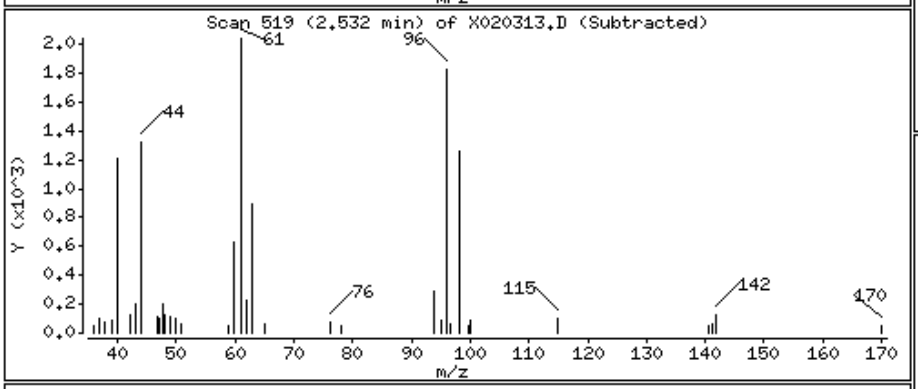
Sample Info: HS23011294-01;HS23011294-01;;;

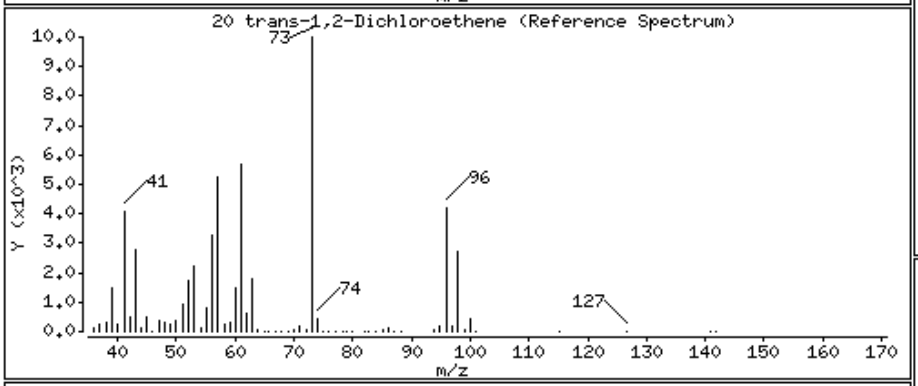
Purge Volume: 5.0 Operator: PC

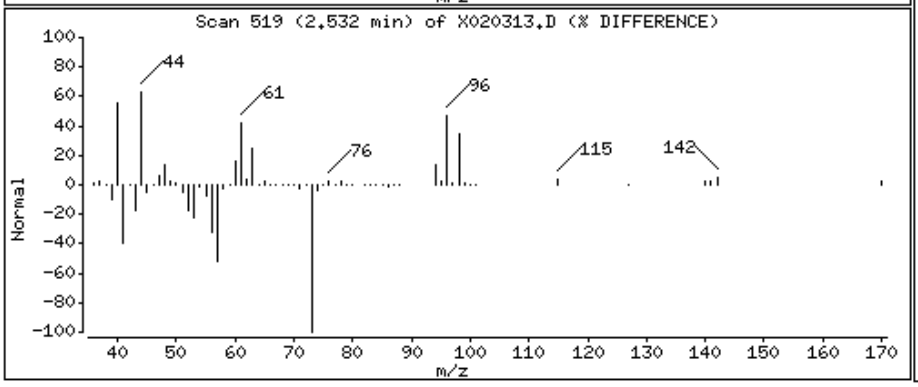
Column phase: DB624 Column diameter: 0.18

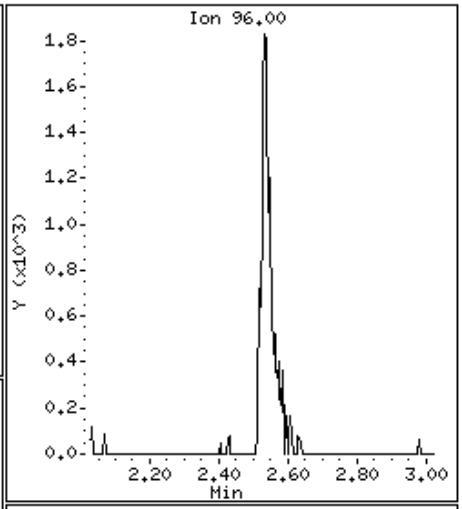
20 trans-1,2-Dichloroethene Concentration: 0.61 ug/l

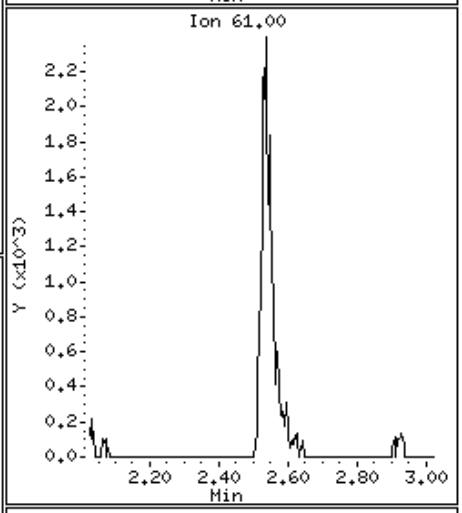


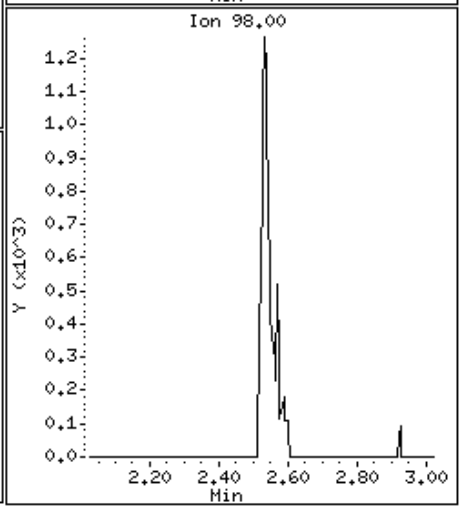












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Inj Date : 03-FEB-2023 14:42
InstruID : voa6.i
LabSampID : HS23011294-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020314.D Page 1
Report Date: 13-Feb-2023 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020314.D
Lab Smp Id: HS23011294-03 Client Smp ID: HS23011294-03
Inj Date : 03-FEB-2023 15:04
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-03;HS23011294-03;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 14
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

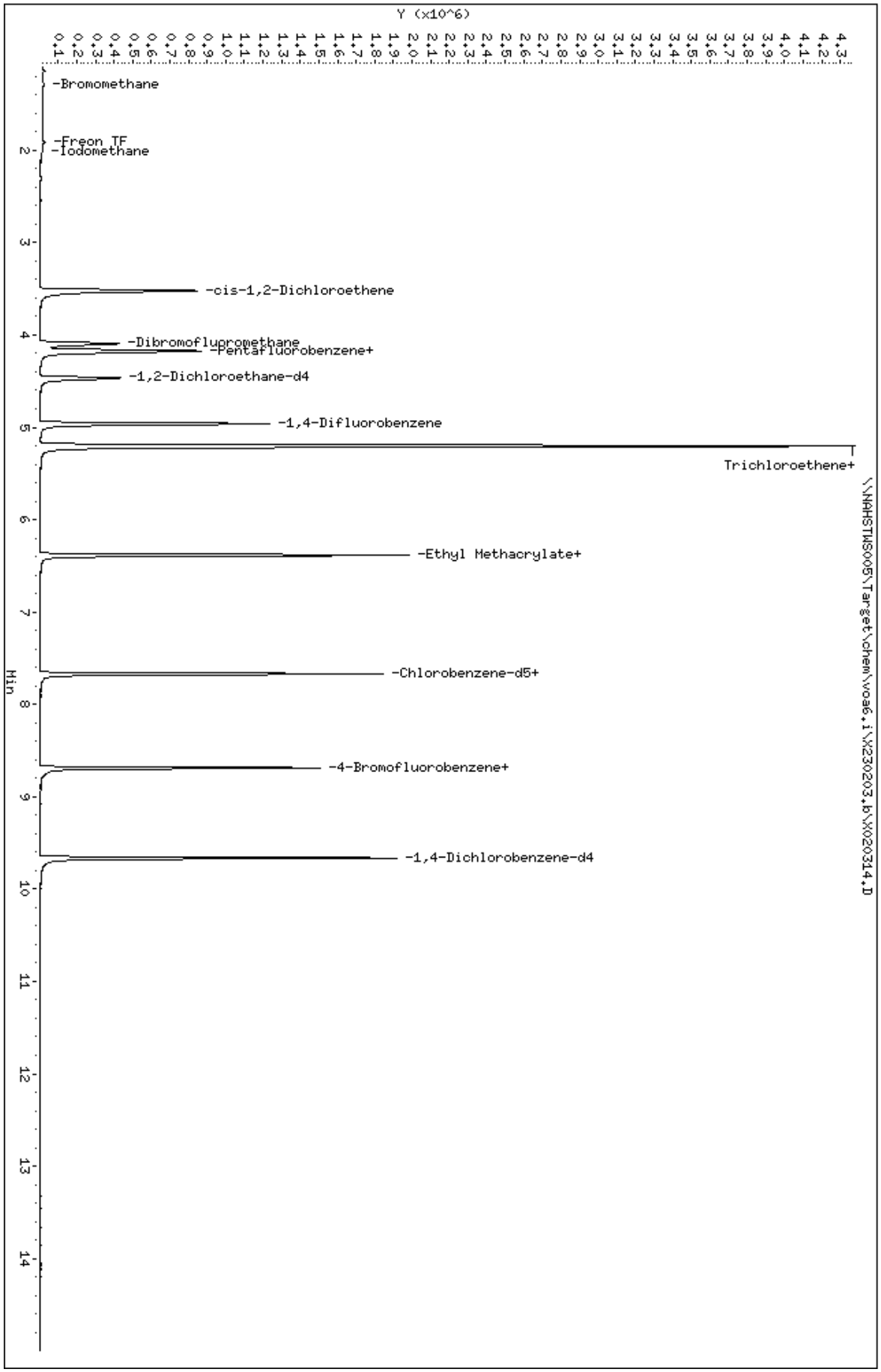
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.178	4.174	(1.000)	723834	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	310684	44.6836	44.68
$ 35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.069)	349958	47.7176	47.71
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1026038	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	907546	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1176775	52.4734	52.47
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	436242	52.0390	52.03
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	488819	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	11182	1.76844	176.84(a)
27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	473720	63.3113	6331.13
38 Trichloroethene	130	5.201	5.205	(1.048)	1473812	212.077	21207.67(A)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020314.D
Date : 03-FEB-2023 15:04
Client ID: HS230411294-03
Sample Info: HS230411294-03;HS230411294-03;;;
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\X230203.b\X020314.D Page 2

Date : 03-FEB-2023 15:04

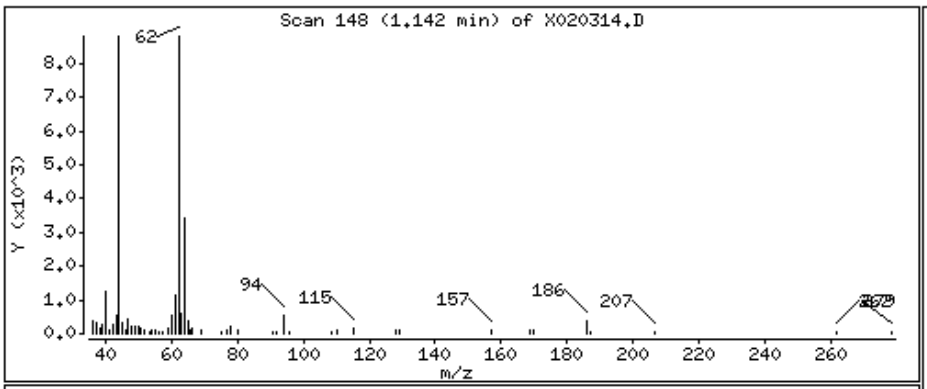
Client ID: HS23011294-03 Instrument: voa6.i

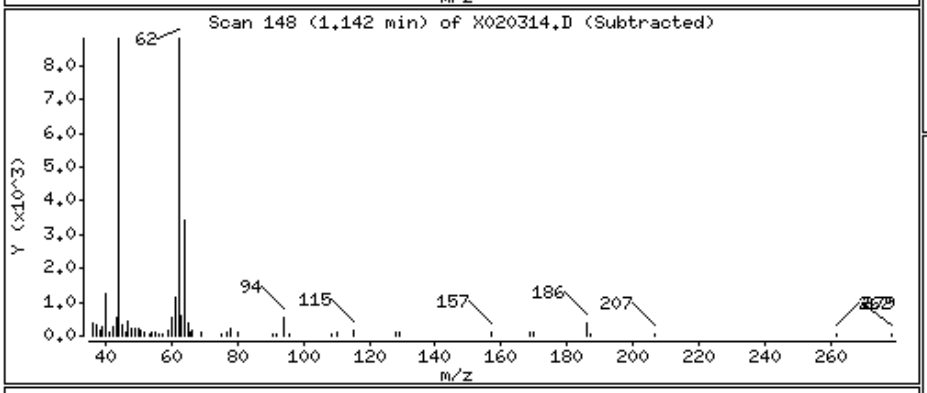
Sample Info: HS23011294-03;HS23011294-03;;;

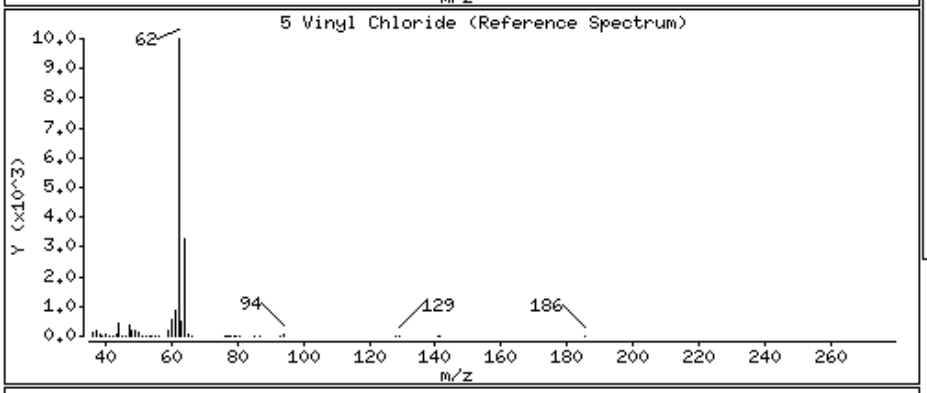
Purge Volume: 5.0 Operator: PC

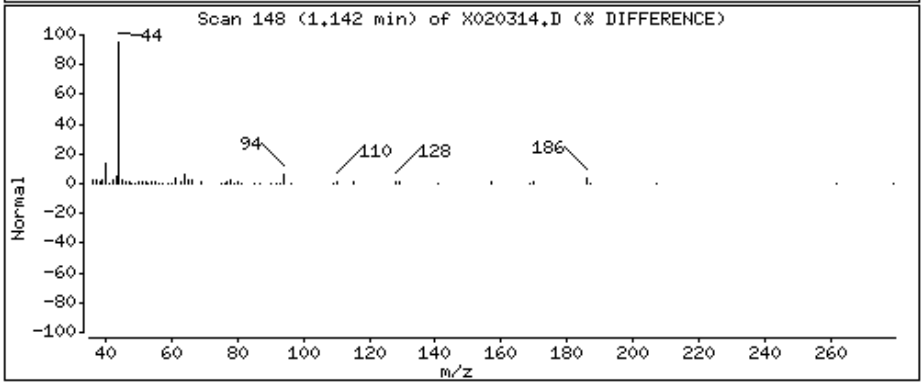
Column phase: DB624 Column diameter: 0.18

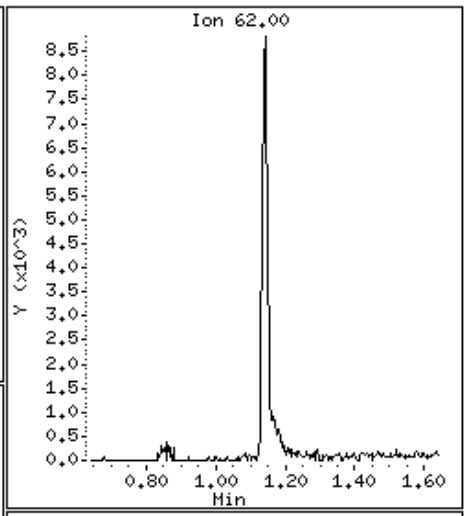
5 Vinyl Chloride Concentration: 176.84 ug/l

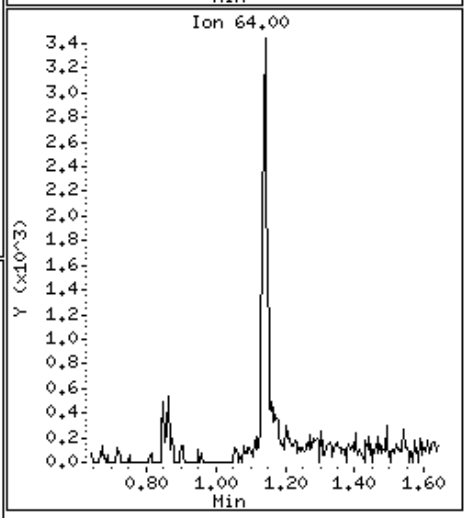












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Date : 03-FEB-2023 15:04

Client ID: HS23011294-03

Instrument: voa6.i

Sample Info: HS23011294-03;HS23011294-03;;;

Purge Volume: 5.0

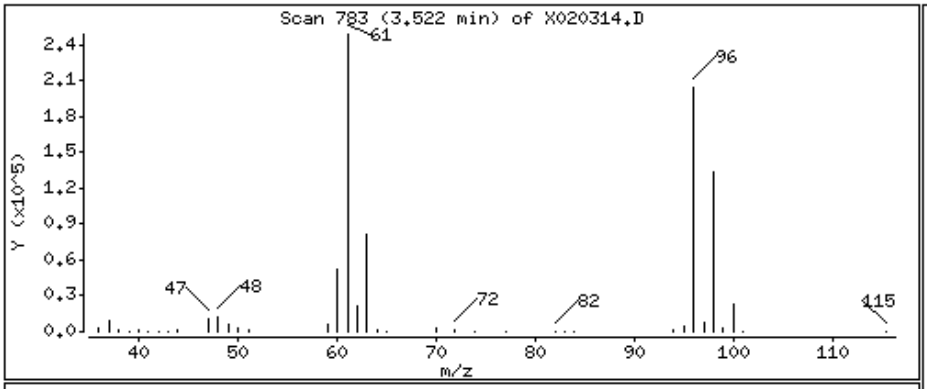
Operator: PC

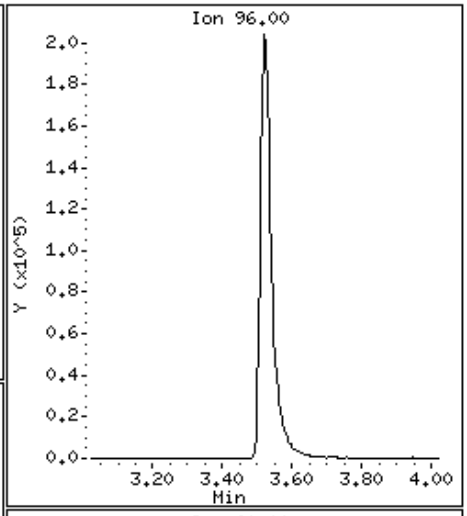
Column phase: DB624

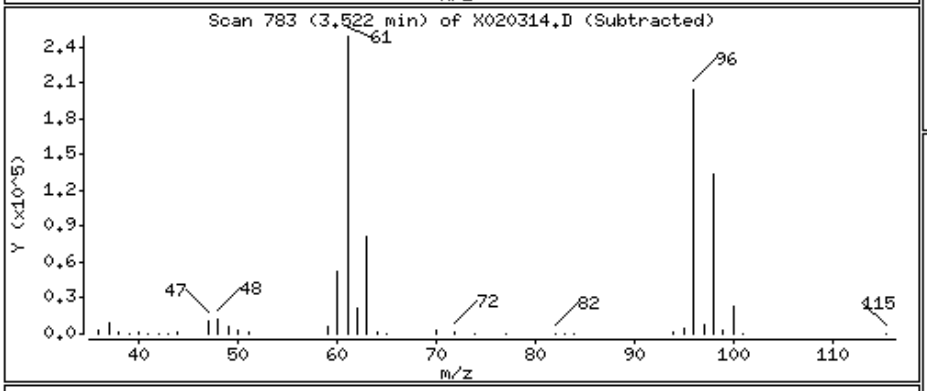
Column diameter: 0.18

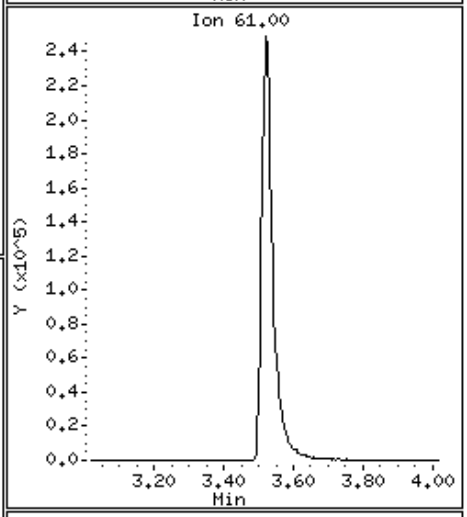
27 cis-1,2-Dichloroethene

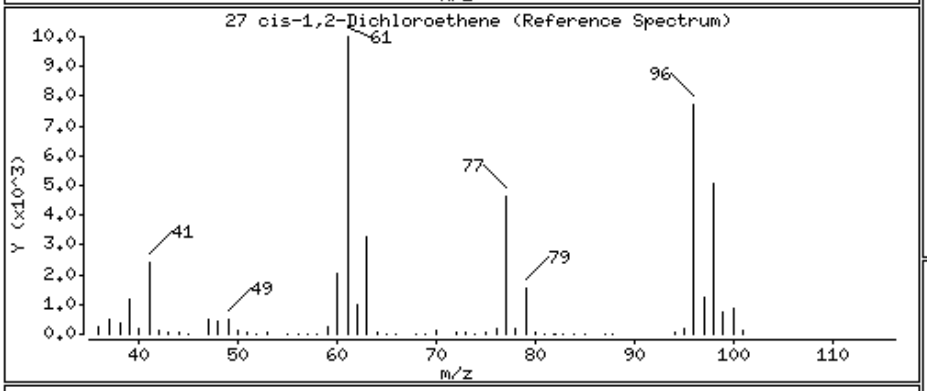
Concentration: 6331.13 ug/l

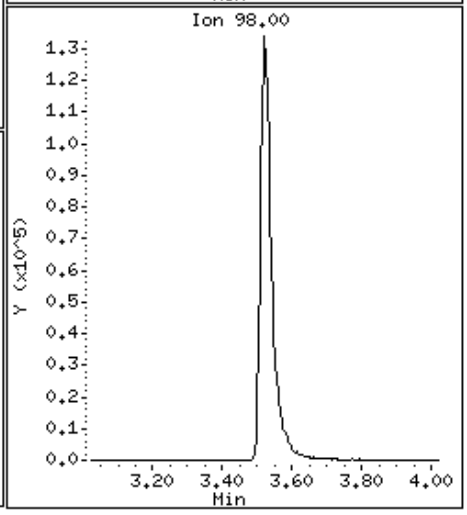


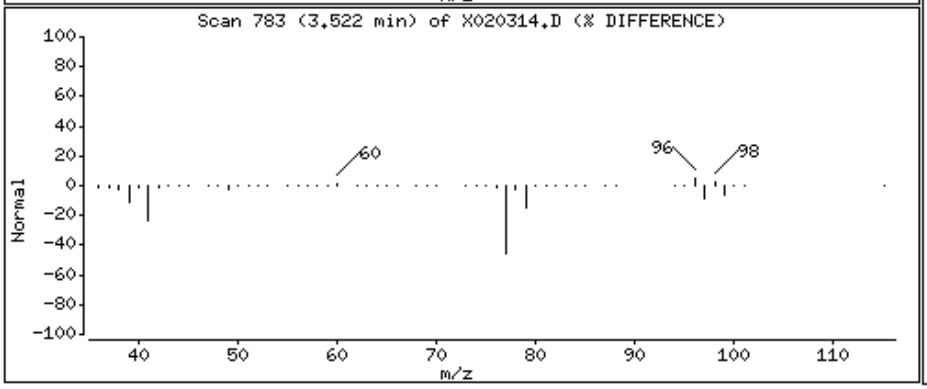












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020314.D Page 4

Date : 03-FEB-2023 15:04

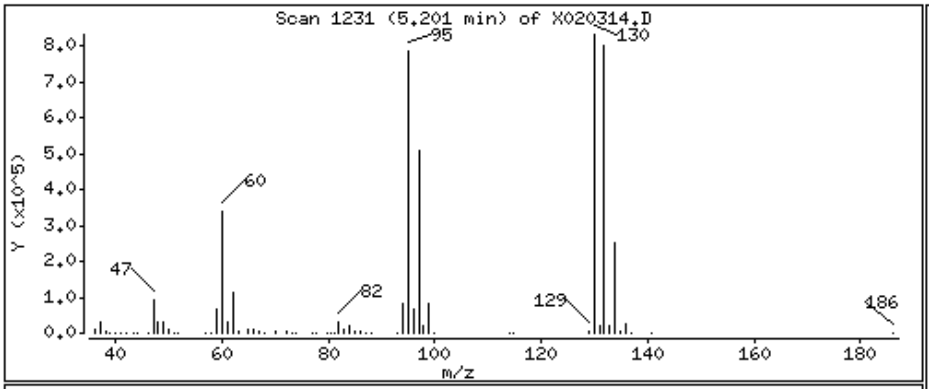
Client ID: HS23011294-03 Instrument: voa6.i

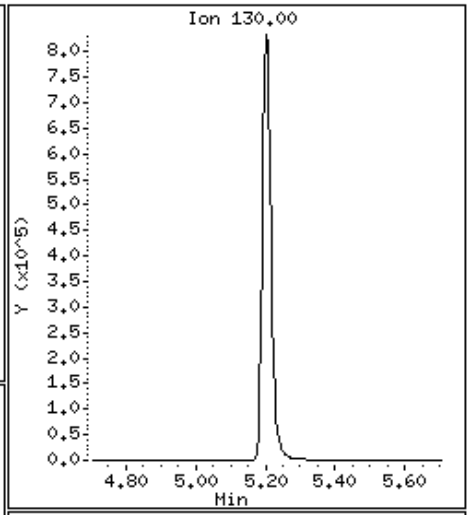
Sample Info: HS23011294-03;HS23011294-03;;;

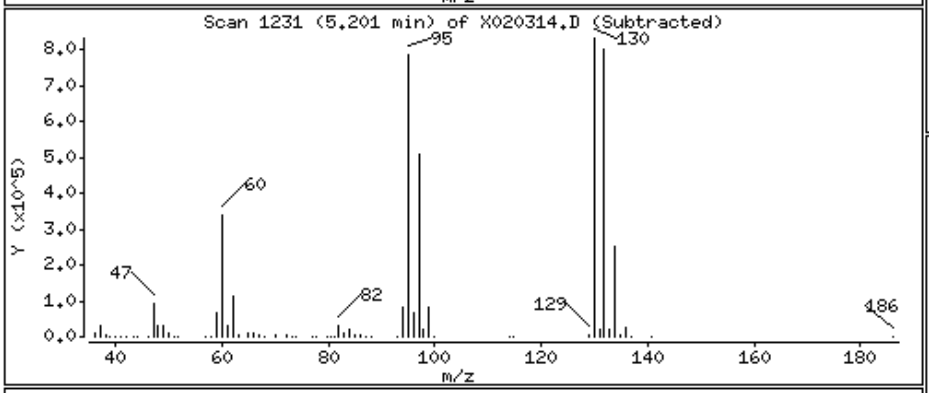
Purge Volume: 5.0 Operator: PC

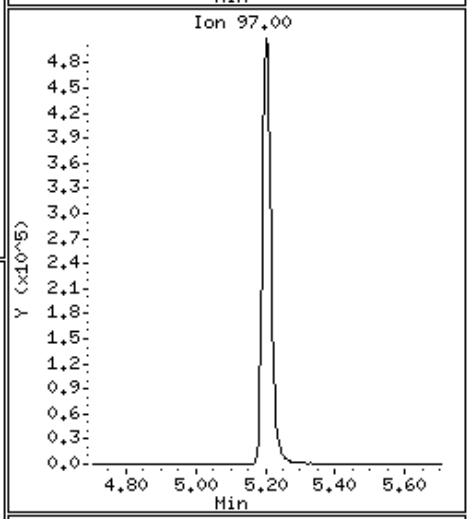
Column phase: DB624 Column diameter: 0.18

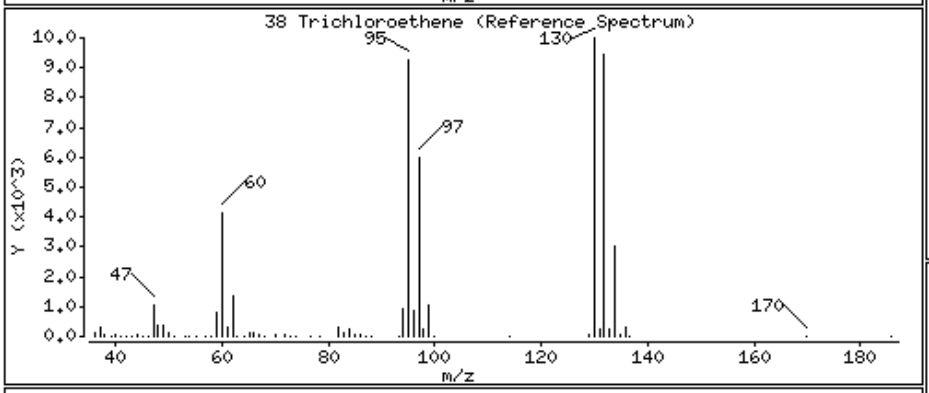
38 Trichloroethene Concentration: 21207.67 ug/l

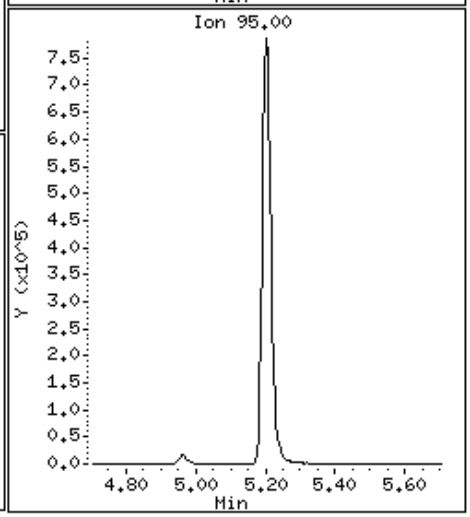


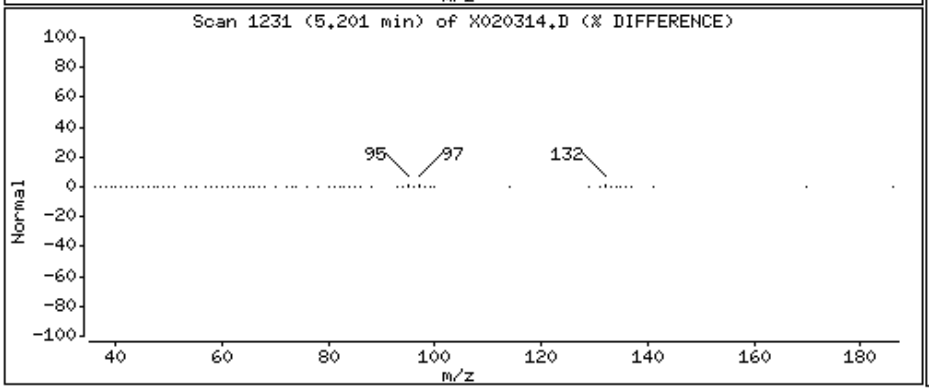












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Inj Date : 03-FEB-2023 15:04
InstruID : voa6.i
LabSampID : HS23011294-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020315.D Page 1
Report Date: 14-Feb-2023 12:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020315.D
Lab Smp Id: HS23011233-07MS Client Smp ID: HS23011233-07MS
Inj Date : 03-FEB-2023 15:25
Operator : PC Inst ID: voa6.i
Smp Info : HS2301233-07MS;HS23011233-07MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:09 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 15 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.174	4.178	(1.000)	718397	50.0000	
135	1,4-Dioxane	88	5.595	5.595	(1.340)	25559	389.210	389.20(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	70633	14.3258	14.32
25	Methacrylonitrile	41	3.821	3.818	(0.916)	87156	17.1336	17.13
12	Isobutyl Alcohol	43	4.669	4.672	(1.119)	309839	383.446	383.44
13	Acetonitrile	39	2.195	2.195	(0.526)	126379	193.290	193.28
14	Allyl Chloride	41	2.195	2.195	(0.526)	238218	19.1299	19.12
4	Propionitrile	54	3.649	3.645	(0.874)	131140	178.903	178.90(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	39664	19.9953	19.99
194	Acetaldehyde	44	1.209	1.209	(0.290)	86143	188.049	188.04
130	Ethyl Acetate	43	3.653	3.649	(0.875)	101199	18.0526	18.05
40	Methyl Methacrylate	41	5.606	5.602	(1.343)	89919	18.3567	18.35
49	Ethyl Methacrylate	69	6.708	6.708	(1.351)	84653	17.6467	17.64
142	Tetrahydrofuran	42	3.840	3.840	(0.920)	31004	32.6482	32.64
145	alpha-Methylstyrene	118	9.332	9.257	(0.966)	6238	0.56215	0.56(a)
156	Diisopropyl ether	45	2.997	2.993	(0.718)	345607	18.5453	18.54
200	Dimethyl Disulfide	94	6.194	6.194	(0.808)	253526	20.3857	20.38
182	Epichlorohydrin	57	6.101	6.093	(1.229)	25326	57.3188	57.31
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	503368	20.8722	20.87
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	55013	11.2557	11.25

3 Chloromethane	50	1.074	1.074 (0.257)	99707	16.8732	16.87
5 Vinyl Chloride	62	1.141	1.141 (0.274)	99669	15.8820	15.88

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020315.D Page 2
Report Date: 14-Feb-2023 12:16

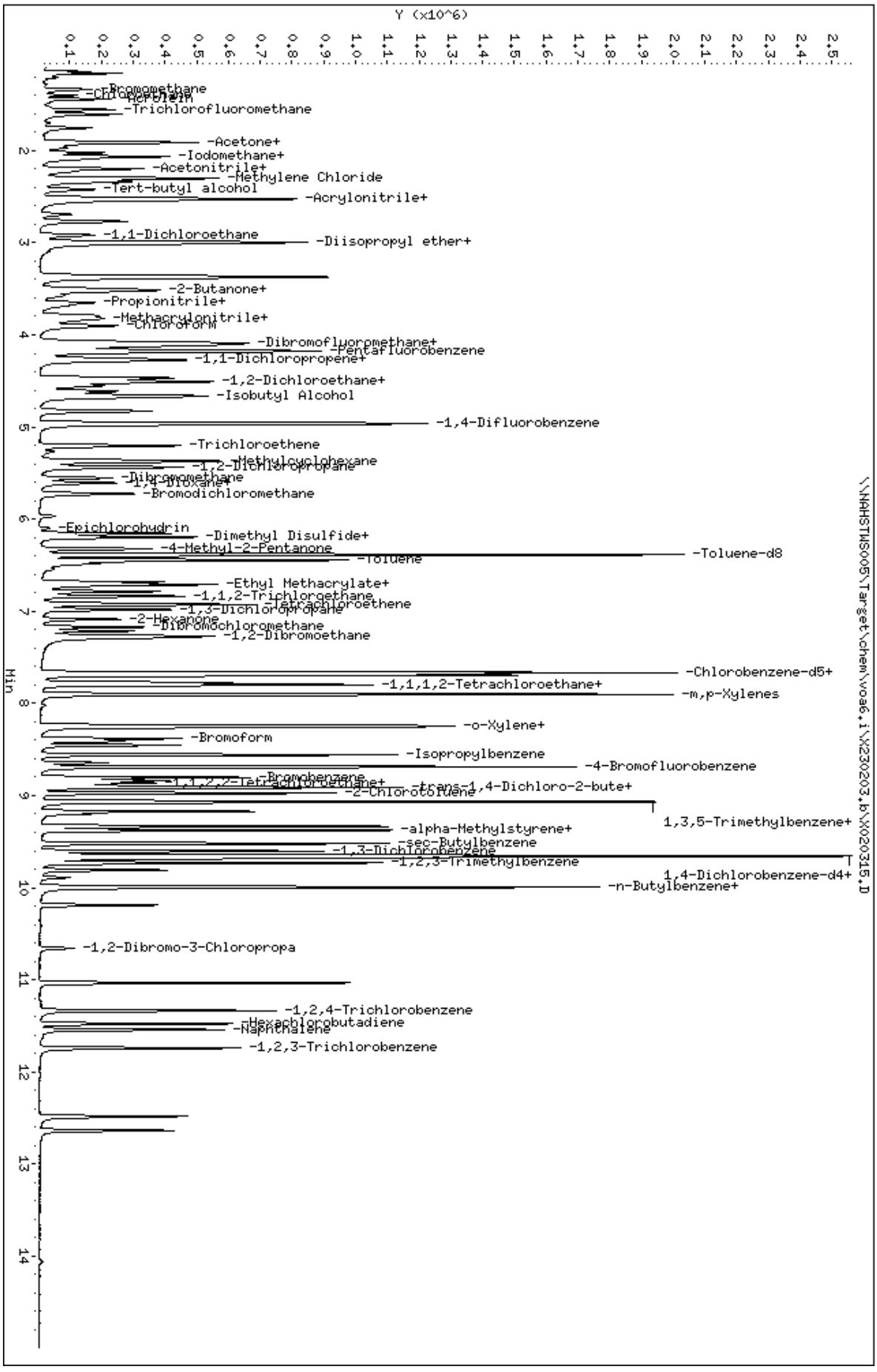
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	74268	16.8588	16.85
	7 Chloroethane	64	1.400	1.400	(0.335)	67120	15.3663	15.36
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	170186	19.3789	19.37
	9 Acrolein	56	1.441	1.441	(0.345)	17490	37.4158	37.41
	10 Acetone	43	1.970	1.970	(0.472)	52439	25.9892	25.98
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	92057	16.8840	16.88
	15 Iodomethane	142	2.022	2.022	(0.485)	205498	31.7876	31.78
	16 Acrylonitrile	53	2.532	2.528	(0.607)	71114	38.4565	38.45
	17 Methylene Chloride	84	2.300	2.300	(0.551)	123003	16.4469	16.44
	18 Methyl tert-butyl ether	73	2.532	2.528	(0.607)	358924	20.1117	20.11
	19 Carbon Disulfide	76	2.067	2.063	(0.495)	535972	37.5719	37.57
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	115705	18.9614	18.96
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	530721	33.8766	33.87
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	194466	18.1586	18.15
	24 2-Butanone	43	3.574	3.570	(0.856)	68216	33.9644	33.96
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	185423	20.3922	20.39
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	133305	17.9507	17.95
	28 Chloroform	83	3.900	3.900	(0.934)	225122	18.7552	18.75
	29 Bromochloromethane	128	3.792	3.788	(0.908)	66561	16.3701	16.37
$	30 Dibromofluoromethane	113	4.091	4.095	(0.980)	304040	44.0566	44.05
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	200015	21.0024	21.00
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	171721	23.7438	23.74
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	165767	19.8606	19.86
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	174925	22.6499	22.64
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	350895	48.2046	48.20
*	36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1018697	50.0000	
	37 Benzene	78	4.507	4.508	(0.908)	489887	20.1382	20.13
	38 Trichloroethene	130	5.205	5.205	(1.048)	150934	21.8754	21.87
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	170865	18.7158	18.71
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	121713	18.8092	18.80
	44 Dibromomethane	93	5.553	5.550	(1.119)	78791	17.9140	17.91
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	202525	41.2349	41.23
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	208228	19.4210	19.42
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	918895	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1177654	51.8641	51.86
	50 Toluene	91	6.446	6.442	(0.841)	546017	21.4980	21.49
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	175260	19.6969	19.69
	52 2-Hexanone	43	7.087	7.083	(0.924)	134100	40.1302	40.13
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	97172	19.0706	19.07
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	199374	19.8791	19.87
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	145785	19.8237	19.82
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	126621	24.0951	24.09
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	129417	20.3143	20.31
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	131652	26.7421	26.74
	59 Chlorobenzene	112	7.694	7.690	(1.003)	364269	20.2203	20.22
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	135380	20.1931	20.19
	61 Ethylbenzene	106	7.799	7.799	(1.017)	192484	22.6825	22.68
	62 m,p-Xylenes	106	7.904	7.900	(1.031)	488016	44.6106	44.61
	63 o-Xylene	106	8.241	8.241	(1.075)	232425	21.5265	21.52
	64 Styrene	104	8.260	8.256	(1.077)	283065	15.6412	15.64
	66 Bromoform	173	8.410	8.410	(1.097)	96452	18.9315	18.93
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	607488	24.6271	24.62

	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	156328	19.5845	19.58
$	69 4-Bromofluorobenzene	95	8.687	8.687 (1.133)	444525	52.3718	52.37

	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)	500812	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	124086	22.2672	22.26(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	712983	25.7018	25.70
	74 Bromobenzene	156	8.803	8.803	(0.911)	174669	21.2581	21.25
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	512846	25.0256	25.02
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	431363	23.6965	23.69
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	496988	23.9490	23.94
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	439423	26.1956	26.19
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	509432	23.6257	23.62
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	618997	27.7336	27.73
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	537972	26.8982	26.89
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	304586	22.3342	22.33
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	316738	21.2836	21.28
	87 n-Butylbenzene	91	9.995	9.992	(1.035)	471593	25.3730	25.37
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	297980	21.2157	21.21
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	25377	19.9409	19.94
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.173)	208218	23.4908	23.49
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	102124	26.1208	26.12
	92 Naphthalene	128	11.544	11.540	(1.195)	430321	21.3375	21.33
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	188667	22.2243	22.22
M	94 1,2-Dichloroethylene (total)	96				249010	36.9121	36.91
M	95 Xylenes (total)	106				720441	66.1371	66.13
	141 Cyclohexane	56	4.118	4.118	(0.987)	191455	27.0334	27.03
	138 Freon TF	101	1.910	1.910	(0.458)	106987	20.2877	20.28
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	295187	23.6724	23.67
	146 Methyl Acetate	43	2.228	2.228	(0.534)	58422	18.0726	18.07
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	203158	408.406	408.40
	149 Isopropyl Alcohol	45	2.090	2.086	(0.501)	111099	427.653	427.65

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 03-FEB-2023 15:25
InstruID : voa6.i
LabSampID : HS23011233-07MS

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

Reason Code:

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13-Feb-2023
14:07
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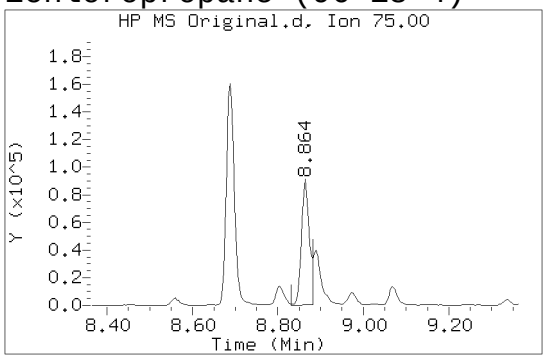

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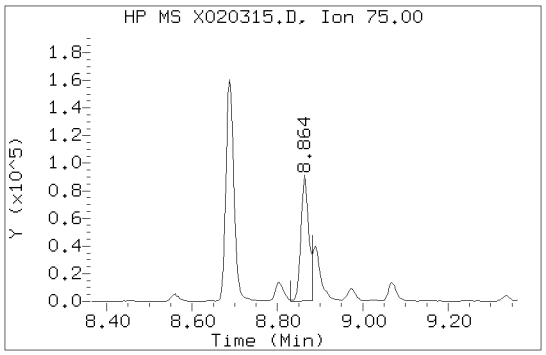

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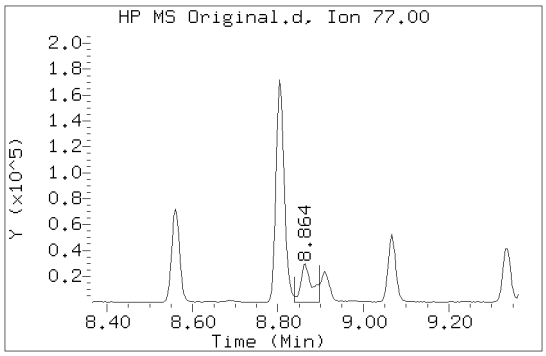

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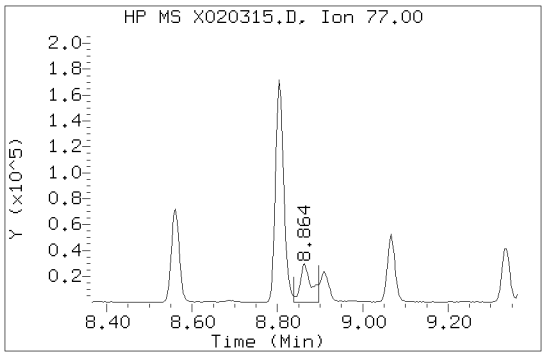

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Report Date: 13-Feb-2023 14:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020316.D
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Inj Date : 03-FEB-2023 15:46
Operator : PC Inst ID: voa6.i
Smp Info : HS23011233-07MSD;HS23011233-07MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 13-Feb-2023 14:07 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 15 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.174	(1.000)	713045	50.0000	
135 1,4-Dioxane	88	5.602	5.594	(1.342)	26292	403.377	403.37(a)
140 1,3-Butadiene	54	1.160	1.163	(0.278)	67578	13.8090	13.80
25 Methacrylonitrile	41	3.818	3.814	(0.915)	86253	17.0833	17.08
12 Isobutyl Alcohol	43	4.672	4.668	(1.119)	307095	382.903	382.90
13 Acetonitrile	39	2.195	2.194	(0.526)	121567	187.326	187.32
14 Allyl Chloride	41	2.195	2.194	(0.526)	234086	18.9392	18.93
4 Propionitrile	54	3.649	3.645	(0.874)	127111	174.708	174.70(a)
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	39509	20.1064	20.10
130 Ethyl Acetate	43	3.653	3.649	(0.875)	106812	19.1969	19.19
40 Methyl Methacrylate	41	5.606	5.602	(1.343)	89132	18.3326	18.33
49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	85081	17.8932	17.89
142 Tetrahydrofuran	42	3.840	3.840	(0.920)	31055	32.9763	32.97
145 alpha-Methylstyrene	118	9.332	9.257	(0.966)	6266	0.57217	0.57(a)
156 Diisopropyl ether	45	2.993	2.993	(0.717)	341562	18.4658	18.46
200 Dimethyl Disulfide	94	6.198	6.194	(0.808)	248220	20.1488	20.14
182 Epichlorohydrin	57	6.097	6.093	(1.229)	24904	56.8835	56.88
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	485330	20.3913	20.39
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	51181	10.5748	10.57
3 Chloromethane	50	1.074	1.077	(0.257)	94328	16.1863	16.18

5 Vinyl Chloride	62	1.141	1.141 (0.274)	94546	15.1787	15.17
6 Bromomethane	94	1.336	1.340 (0.320)	67717	15.6306	15.63

	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)	64974	14.9866	14.98
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	162207	18.6089	18.60
	9 Acrolein	56	1.441	1.441	(0.345)	17037	36.7727	36.77
	10 Acetone	43	1.970	1.969	(0.472)	51793	25.8615	25.86
	11 1,1-Dichloroethene	96	1.910	1.909	(0.458)	87536	16.1753	16.17
	15 Iodomethane	142	2.022	2.026	(0.485)	214026	33.1745	33.17
	16 Acrylonitrile	53	2.532	2.528	(0.607)	69394	37.8080	37.80
	17 Methylene Chloride	84	2.300	2.299	(0.551)	116996	15.7611	15.76
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.606)	352129	19.8790	19.87
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	505439	35.6975	35.69
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	108469	17.9090	17.90
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	521813	33.5580	33.55
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	184616	17.3682	17.36
	24 2-Butanone	43	3.578	3.570	(0.857)	67524	33.8804	33.88
	26 2,2-Dichloropropane	77	3.503	3.506	(0.839)	177532	19.6710	19.67
	27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.844)	128830	17.4783	17.47
	28 Chloroform	83	3.904	3.900	(0.935)	215236	18.0662	18.06
	29 Bromochloromethane	128	3.792	3.791	(0.908)	64883	16.0772	16.07
$	30 Dibromofluoromethane	113	4.091	4.095	(0.980)	299976	43.7930	43.79
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	191007	20.2071	20.20
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	165681	23.1119	23.11
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	168714	20.3930	20.39
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	165013	21.5560	21.55
$	35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.070)	346873	48.0109	48.01
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1009740	50.0000	
	37 Benzene	78	4.508	4.507	(0.909)	471877	19.5699	19.56
	38 Trichloroethene	130	5.205	5.205	(1.049)	143000	20.9094	20.90
	39 Bromodichloromethane	83	5.722	5.726	(1.153)	167143	18.4705	18.47
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	117711	18.3521	18.35
	44 Dibromomethane	93	5.550	5.549	(1.119)	78533	18.0137	18.01
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	200376	41.1851	41.18
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	201090	18.9216	18.92
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	910244	50.0000	
$	48 Toluene-d8	98	6.386	6.385	(0.833)	1170568	52.0420	52.04
	50 Toluene	91	6.446	6.445	(0.841)	521221	20.7167	20.71
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	171000	19.3886	19.38
	52 2-Hexanone	43	7.087	7.083	(0.924)	132740	40.1008	40.10
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	96868	19.1916	19.19
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	195246	19.6525	19.65
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	140121	19.2346	19.23
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	121685	23.3759	23.37
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	125459	19.8802	19.88
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	123378	25.2837	25.28
	59 Chlorobenzene	112	7.694	7.694	(1.003)	358696	20.1001	20.10
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	134240	20.2134	20.21
	61 Ethylbenzene	106	7.799	7.799	(1.017)	185956	22.1215	22.12
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	465384	42.9461	42.94
	63 o-Xylene	106	8.241	8.241	(1.075)	221177	20.6794	20.67
	64 Styrene	104	8.260	8.256	(1.077)	274910	15.3350	15.33
	66 Bromoform	173	8.410	8.410	(1.097)	95371	18.8973	18.89
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	582273	23.8292	23.82
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	155062	19.6837	19.68

$	69	4-Bromofluorobenzene	95	8.687	8.687 (1.133)	443413	52.7368	52.73
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662 (1.000)	494253	50.0000	

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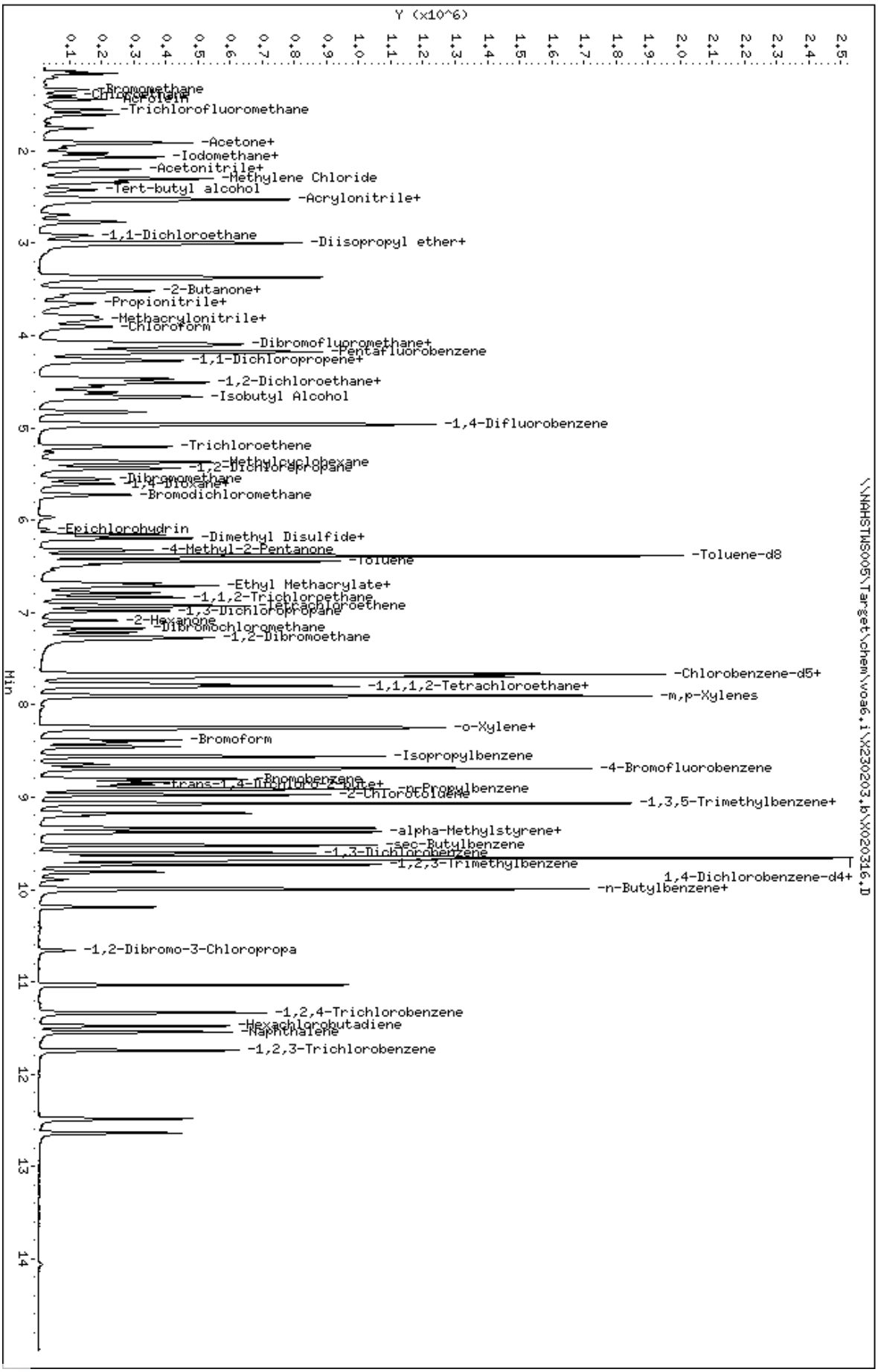
Report Date: 13-Feb-2023 14:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	114582	20.8346	20.83(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	685005	25.0209	25.02
	74 Bromobenzene	156	8.803	8.803	(0.911)	167530	20.6599	20.65
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	494039	24.4278	24.42
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	416948	23.2086	23.20
	77 4-Chlorotoluene	91	9.070	9.069	(0.939)	471912	23.0424	23.04
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	421569	25.4647	25.46
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	493894	23.2091	23.20
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	595167	27.0198	27.01
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	521107	26.4007	26.40
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	296518	22.0311	22.03
	84 1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	309744	21.0899	21.08
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	457251	24.9590	24.95
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	288437	20.8087	20.80
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	25088	19.9753	19.97
	90 1,2,4-Trichlorobenzene	180	11.338	11.337	(1.173)	207212	23.6875	23.68
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	100265	25.9862	25.98
	92 Naphthalene	128	11.544	11.540	(1.195)	429781	21.5935	21.59
	93 1,2,3-Trichlorobenzene	180	11.742	11.738	(1.215)	187445	22.3733	22.37
M	94 1,2-Dichloroethylene (total)	96				237299	35.3873	35.38
M	95 Xylenes (total)	106				686561	63.6255	63.62
	141 Cyclohexane	56	4.118	4.117	(0.987)	183236	26.1122	26.11
	138 Freon TF	101	1.910	1.913	(0.458)	100864	19.2702	19.27
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	282996	22.8960	22.89
	146 Methyl Acetate	43	2.228	2.228	(0.534)	56769	17.6931	17.69
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	202143	409.416	409.41
	149 Isopropyl Alcohol	45	2.090	2.089	(0.501)	110425	428.249	428.24

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
Column diameter: 0.18

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Inj Date : 03-FEB-2023 15:46
InstruID : voa6.i
LabSampID : HS23011233-07MSD

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

Reason Code:

BEFORE

MASS
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HEIGHT
86453
09-Feb-2023
17:24
Kori
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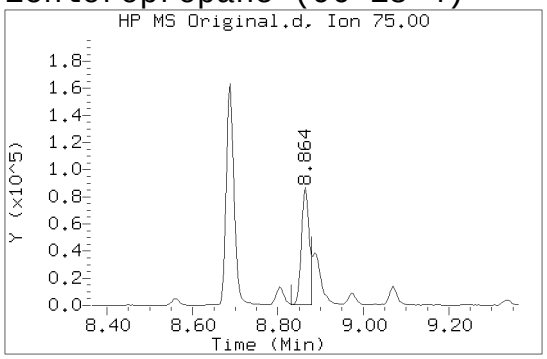

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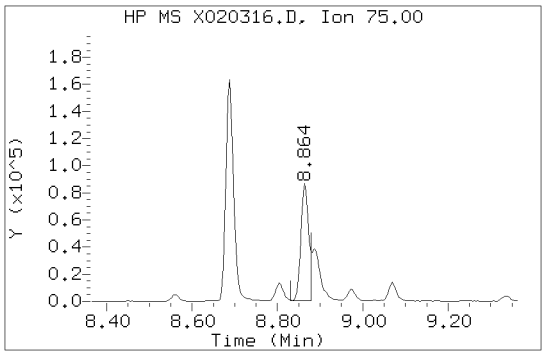

BEFORE

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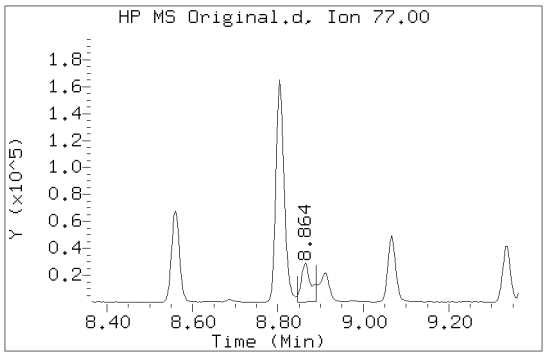

AFTER

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13-Feb-2023
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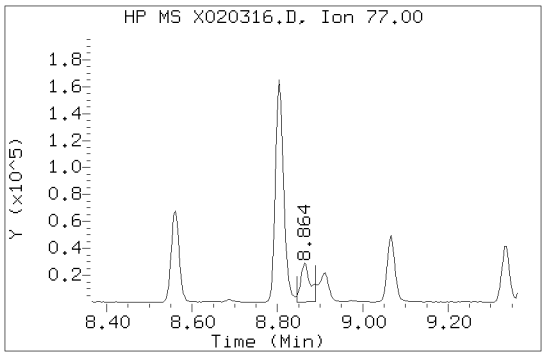


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020317.D Page 1
Report Date: 13-Feb-2023 14:08

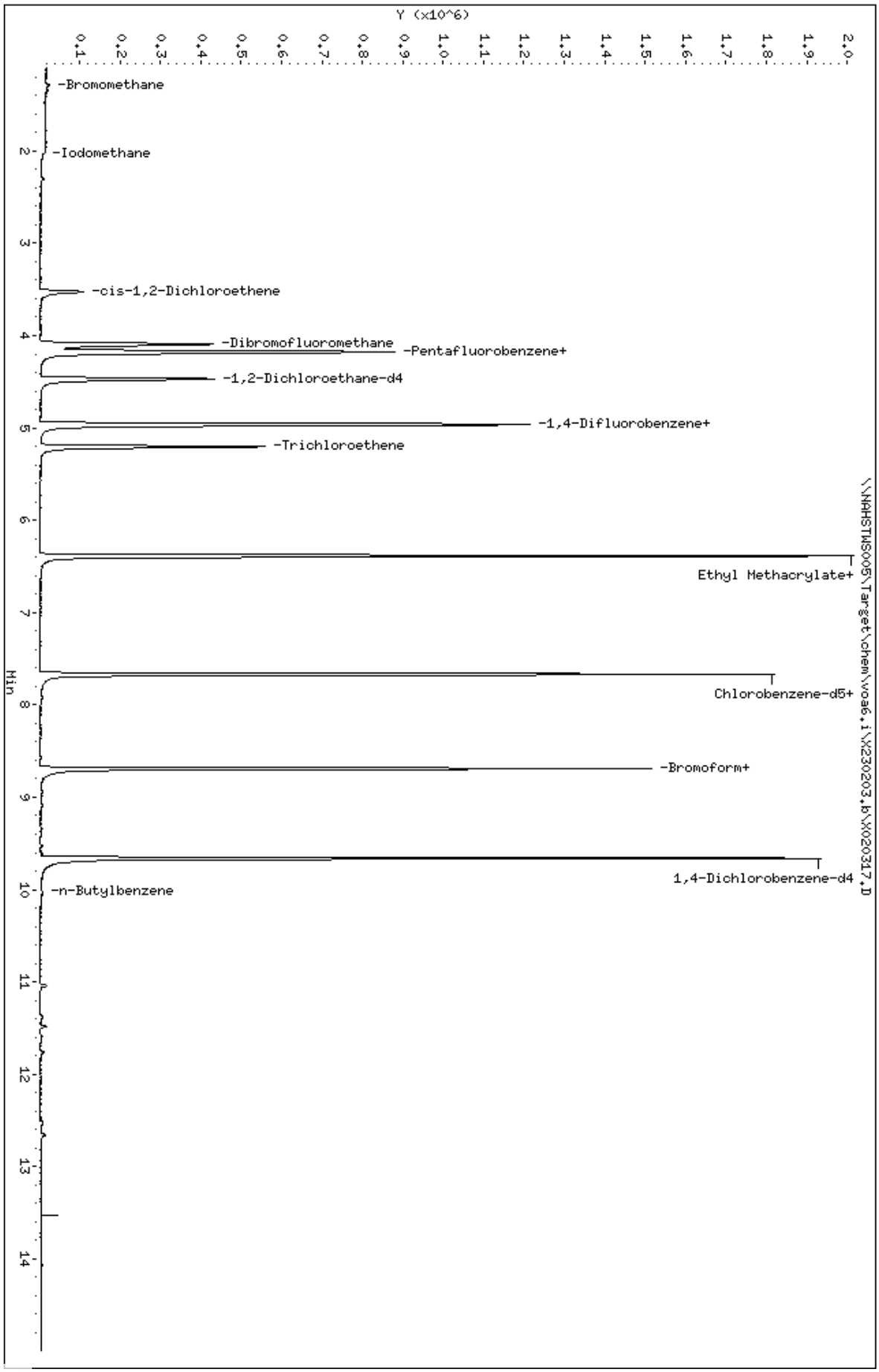
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020317.D
Lab Smp Id: HS23011294-03 Client Smp ID: HS23011294-03
Inj Date : 03-FEB-2023 16:07
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-03;HS23011294-03;;;
Misc Info : V6;WATER;0;1000;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:07 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: 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	4.178	4.174	(1.000)	720869	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	314556	45.4293	45.42
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	352837	48.3046	48.30
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1029146	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	916785	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1179756	52.0762	52.07
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	443029	52.3157	52.31
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	484120	50.0000	
27 cis-1,2-Dichloroethene	96	3.525	3.521	(0.844)	64045	8.59463	8594.63
38 Trichloroethene	130	5.205	5.205	(1.049)	193354	27.7390	27738.98



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Date : 03-FEB-2023 16:07
Client ID: HS23011294-03
Sample Info: HS23011294-03;HS23011294-03;;;
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\X230203.b\X020317.D Page 2

Date : 03-FEB-2023 16:07

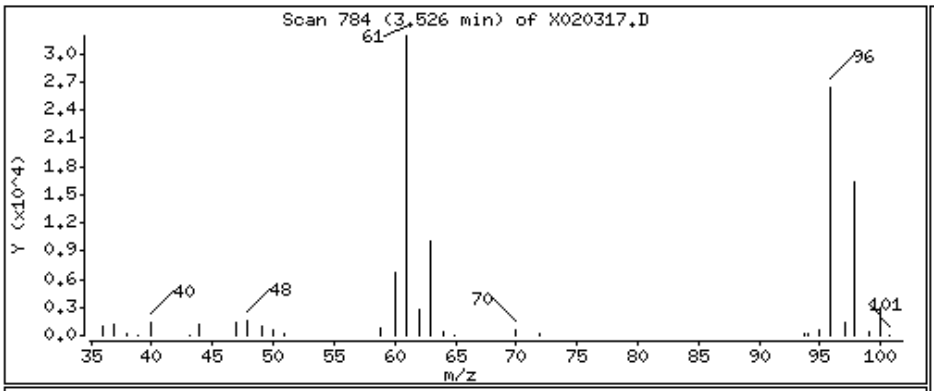
Client ID: HS23011294-03 Instrument: voa6.i

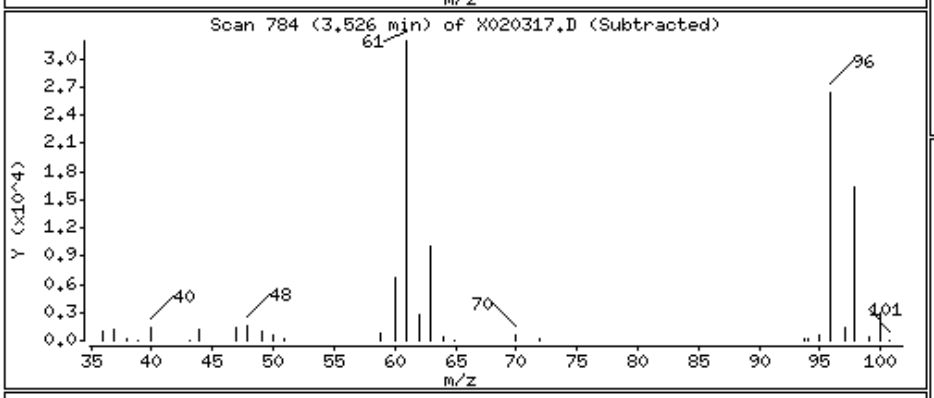
Sample Info: HS23011294-03;HS23011294-03;;;

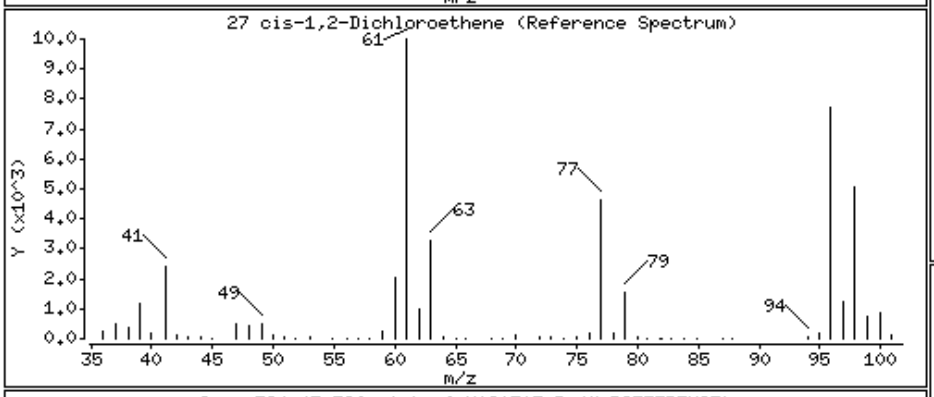
Purge Volume: 5.0 Operator: PC

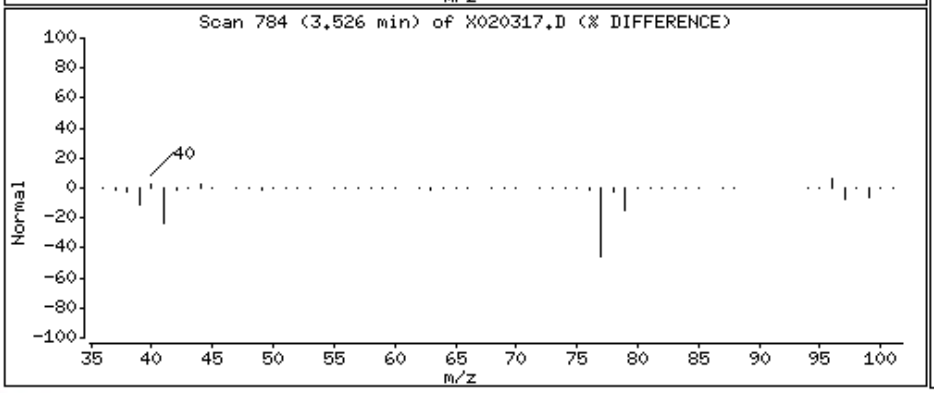
Column phase: DB624 Column diameter: 0.18

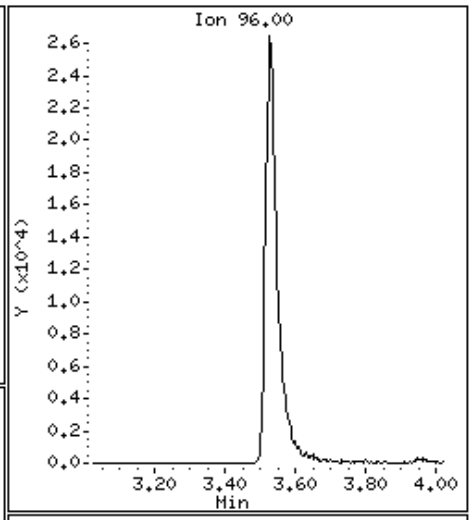
27 cis-1,2-Dichloroethene Concentration: 8594.63 ug/l

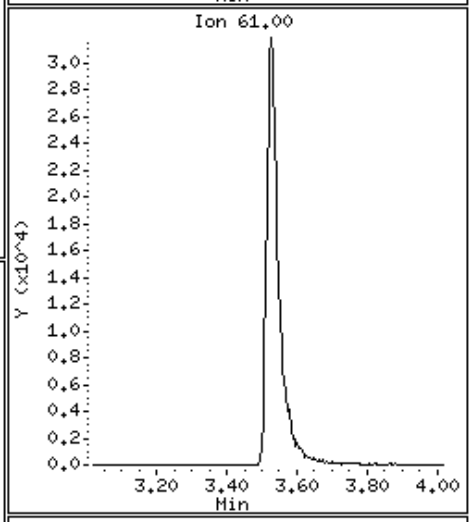


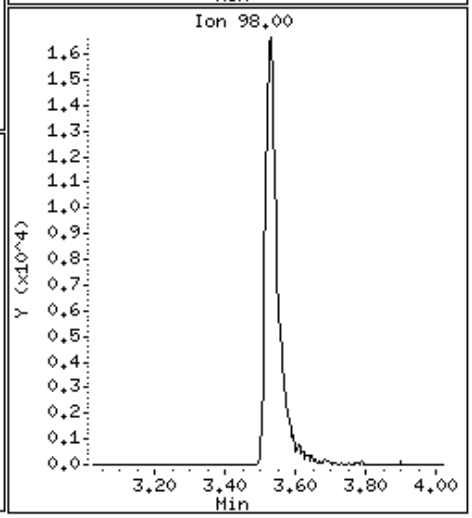












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020317.D Page 3

Date : 03-FEB-2023 16:07

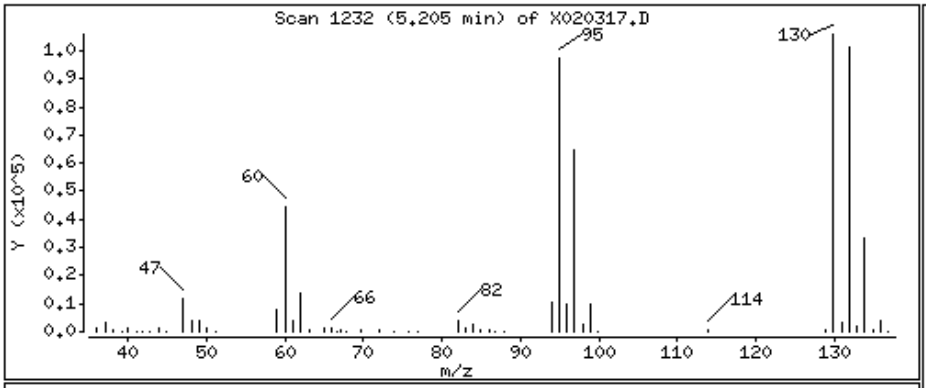
Client ID: HS23011294-03 Instrument: voa6.i

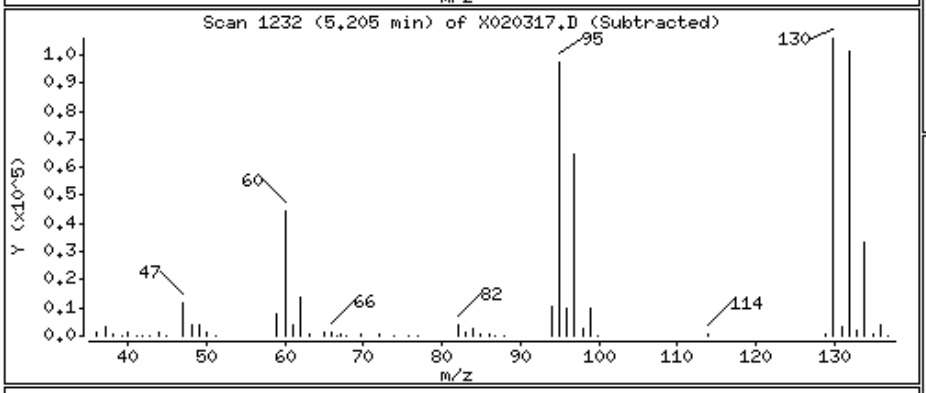
Sample Info: HS23011294-03;HS23011294-03;;;

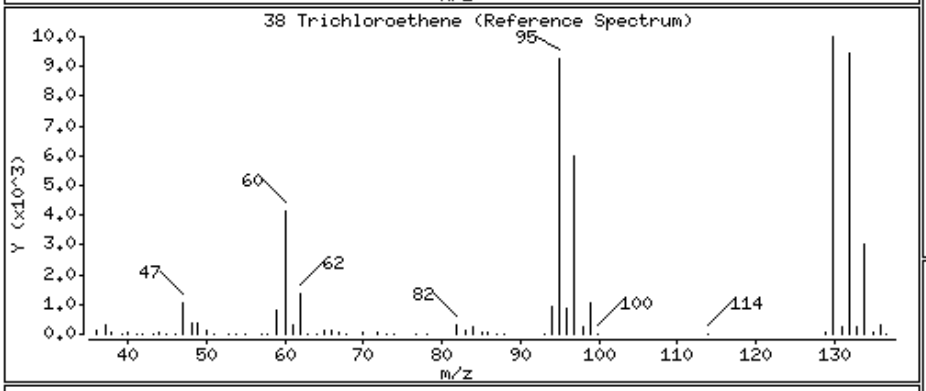
Purge Volume: 5.0 Operator: PC

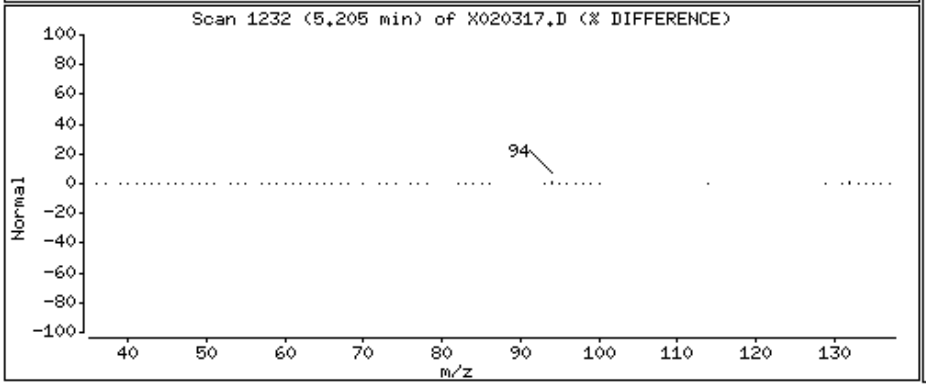
Column phase: DB624 Column diameter: 0.18

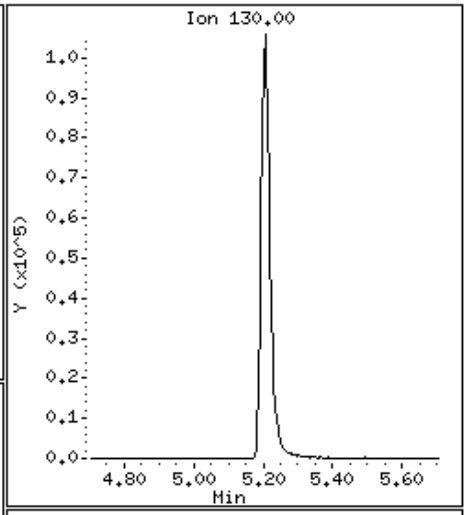
38 Trichloroethene Concentration: 27738.98 ug/l

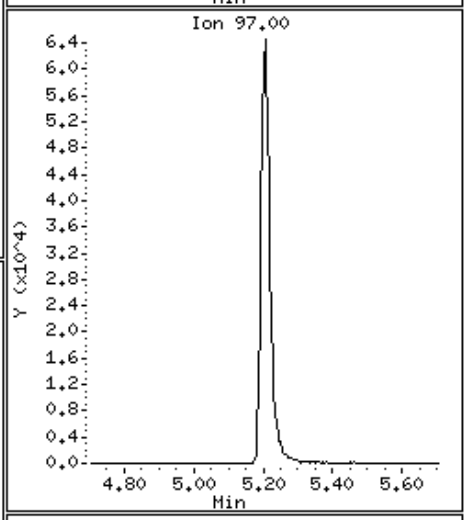


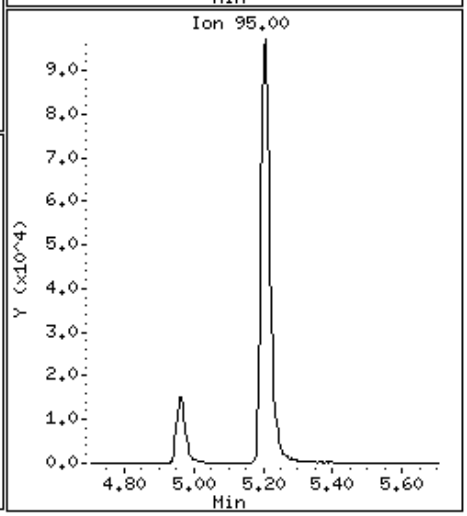












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InstruID : voa6.i
LabSampID : HS23011294-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020330.D Page 1
Report Date: 13-Feb-2023 14:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020330.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 03-FEB-2023 20:40
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:08 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 29 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)	581666	50.0000	
135 1,4-Dioxane	88	5.595	5.595	(1.340)	59670	1000.00	1122.24
140 1,3-Butadiene	54	1.160	1.160	(0.278)	204527	50.0000	51.23
25 Methacrylonitrile	41	3.818	3.818	(0.915)	211763	50.0000	51.41
12 Isobutyl Alcohol	43	4.672	4.672	(1.119)	693563	1000.00	1060.09
13 Acetonitrile	39	2.195	2.195	(0.526)	254511	500.000	480.76
14 Allyl Chloride	41	2.195	2.195	(0.526)	509763	50.0000	50.55
4 Propionitrile	54	3.645	3.645	(0.873)	308411	500.000	519.64
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	94644	50.0000	54.08
194 Acetaldehyde	44	1.209	1.209	(0.290)	91864	200.000	255.06
130 Ethyl Acetate	43	3.649	3.649	(0.874)	248022	50.0000	54.64
40 Methyl Methacrylate	41	5.602	5.602	(1.342)	221294	50.0000	55.79
49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	238539	50.0000	58.25
142 Tetrahydrofuran	42	3.840	3.840	(0.920)	70204	100.000	96.99
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	534707	50.0000	54.19
156 Diisopropyl ether	45	2.993	2.993	(0.717)	723244	50.0000	47.93
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	553505	50.0000	50.44
182 Epichlorohydrin	57	6.093	6.093	(1.228)	80372	200.000	206.31
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1059729	50.0000	49.42
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	467366	50.0000	114.37

3 Chloromethane	50	1.074	1.074 (0.257)	265507	50.0000	50.43
5 Vinyl Chloride	62	1.141	1.141 (0.274)	245333	50.0000	48.28

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020330.D Page 2
Report Date: 13-Feb-2023 14:08

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	165989	50.0000	43.43
	7 Chloroethane	64	1.400	1.400	(0.335)	152596	50.0000	43.14
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	350909	50.0000	49.35
	9 Acrolein	56	1.441	1.441	(0.345)	33218	100.000	83.96
	10 Acetone	43	1.970	1.970	(0.472)	133594	100.000	81.84
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	194356	50.0000	44.02
	15 Iodomethane	142	2.022	2.022	(0.485)	523973	100.000	90.74
	16 Acrylonitrile	53	2.528	2.528	(0.606)	160035	100.000	106.88
	17 Methylene Chloride	84	2.300	2.300	(0.551)	281157	50.0000	46.43
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.607)	695507	50.0000	48.13
	19 Carbon Disulfide	76	2.063	2.063	(0.494)	1088735	100.000	94.26
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	244587	50.0000	49.50
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	944337	100.000	74.44
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	423113	50.0000	48.79
	24 2-Butanone	43	3.570	3.570	(0.855)	178351	100.000	102.93
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	346891	50.0000	47.11
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	290040	50.0000	48.23
	28 Chloroform	83	3.900	3.900	(0.934)	486855	50.0000	50.09
	29 Bromochloromethane	128	3.788	3.788	(0.908)	153151	50.0000	46.52
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	248063	50.0000	44.39
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.977)	406381	50.0000	52.70
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	351763	50.0000	56.98
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	379915	50.0000	53.32
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	341340	50.0000	51.78
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	286585	50.0000	48.62
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	869515	50.0000	
	37 Benzene	78	4.508	4.508	(0.909)	1068345	50.0000	51.45
	38 Trichloroethene	130	5.205	5.205	(1.049)	336614	50.0000	57.15
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	392552	50.0000	50.37
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	290917	100.000	131.22
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	276991	50.0000	50.14
	44 Dibromomethane	93	5.550	5.550	(1.119)	181733	50.0000	48.40
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	492699	100.000	113.70
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	479037	50.0000	52.34
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	810676	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	953016	50.0000	47.57
	50 Toluene	91	6.446	6.446	(0.841)	1168117	50.0000	52.13
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.347)	408529	50.0000	53.79
	52 2-Hexanone	43	7.083	7.083	(0.924)	339469	100.000	115.14
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	230546	50.0000	51.28
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	468634	50.0000	52.96
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	340112	50.0000	52.42
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	251136	50.0000	54.16
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	302672	50.0000	53.85
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	228791	50.0000	54.44
	59 Chlorobenzene	112	7.690	7.690	(1.003)	811542	50.0000	51.06
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	312506	50.0000	52.83
	61 Ethylbenzene	106	7.799	7.799	(1.017)	406830	50.0000	54.34
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	1019777	100.000	105.66
	63 o-Xylene	106	8.241	8.241	(1.075)	500351	50.0000	52.52
	64 Styrene	104	8.256	8.256	(1.077)	873110	50.0000	54.68
	66 Bromoform	173	8.410	8.410	(1.097)	235936	50.0000	52.49

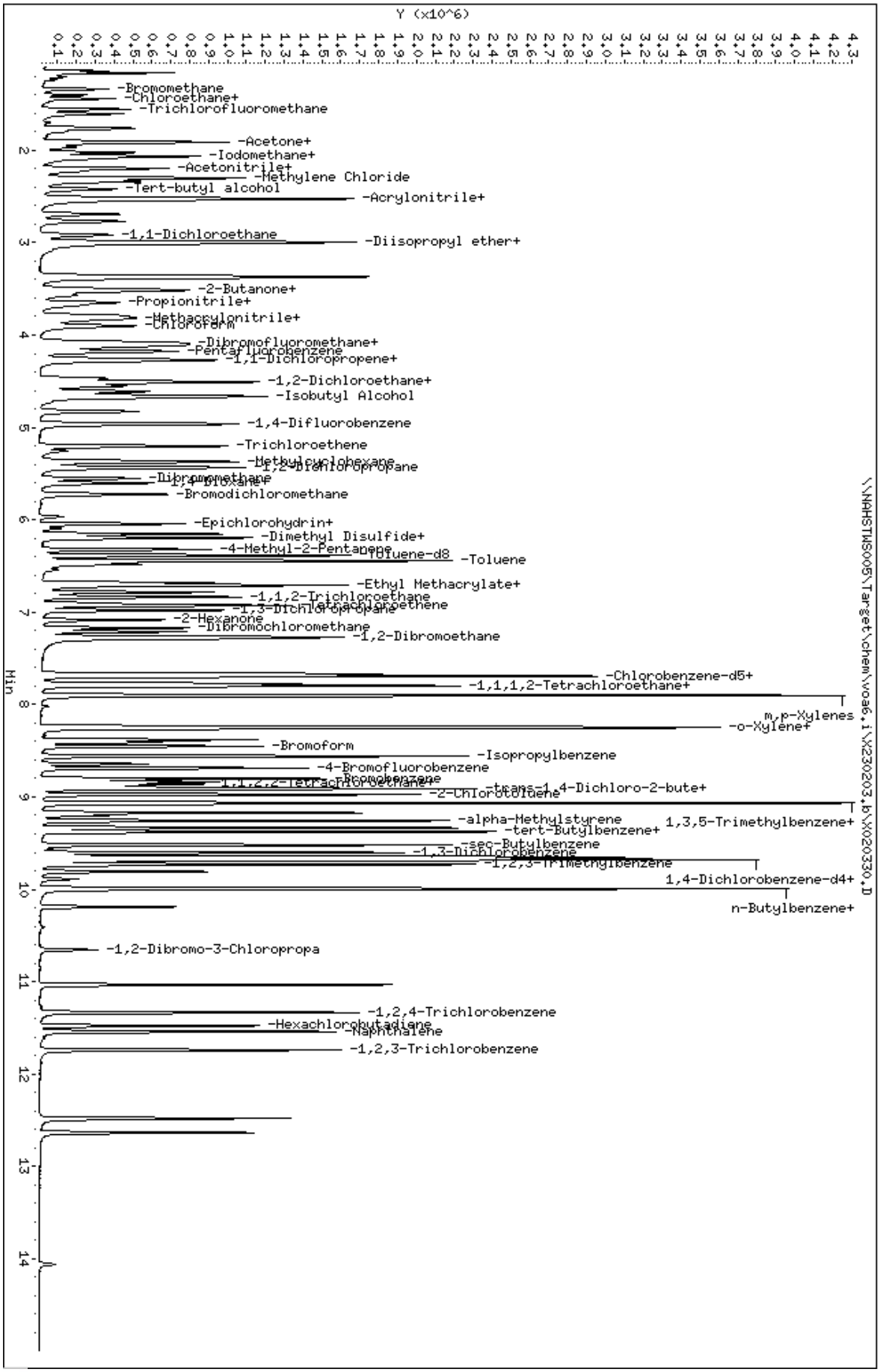
67 Isopropylbenzene	105	8.560	8.560 (1.116)	1229049	50.0000	56.47
68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	350324	50.0000	49.36

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020330.D Page 3
Report Date: 13-Feb-2023 14:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	370618	50.0000	49.49
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	445256	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	290064	50.0000	58.54(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1446979	50.0000	58.66
	74 Bromobenzene	156	8.803	8.803	(0.911)	393552	50.0000	53.87
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1078114	50.0000	59.17
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	926728	50.0000	57.26
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1075459	50.0000	58.29
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	886862	50.0000	59.46
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1096781	50.0000	57.21
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1215032	50.0000	61.23
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1080911	50.0000	60.78
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	681080	50.0000	56.17
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	705432	50.0000	53.31
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	937842	50.0000	54.55
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	678167	50.0000	54.30
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	64671	50.0000	56.98
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	486685	50.0000	61.75
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	199574	50.0000	57.05
	92 Naphthalene	128	11.540	11.540	(1.194)	1083445	50.0000	60.42
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	450403	50.0000	59.67
M	94 1,2-Dichloroethylene (total)	96				534627	100.000	(a)
	141 Cyclohexane	56	4.118	4.118	(0.987)	314962	50.0000	53.62
	138 Freon TF	101	1.910	1.910	(0.458)	200229	50.0000	46.89
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	587090	50.0000	55.15
	146 Methyl Acetate	43	2.228	2.228	(0.534)	139547	50.0000	53.31
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	457663	1000.00	1136.30
	149 Isopropyl Alcohol	45	2.086	2.086	(0.500)	247958	1000.00	1178.82

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\X230203.b\X020330.D
Date : 03-FEB-2023 20:40
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

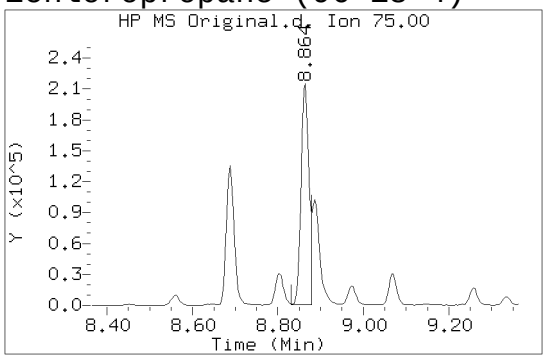
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020330.D
Inj Date : 03-FEB-2023 20:40
InstruID : voa6.i
LabSampID : CCV-END

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

Reason Code:

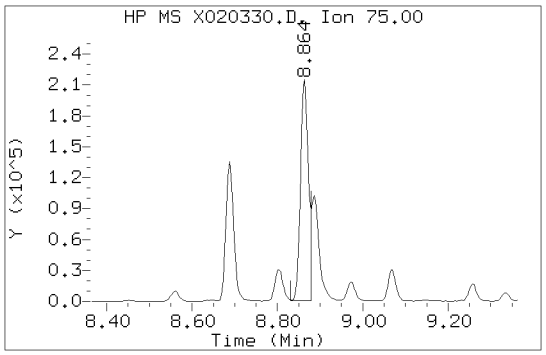
BEFORE

MASS
75
AREA
290064
HEIGHT
214725
09-Feb-2023
17:24
Kori
Bagsby



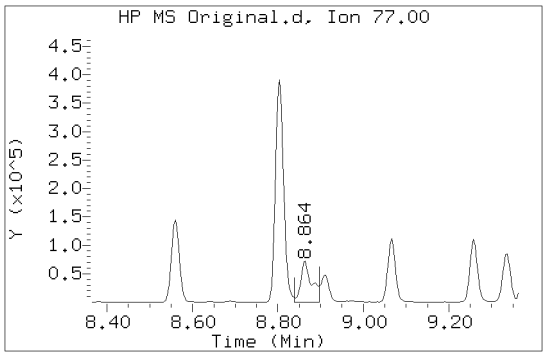
AFTER

MASS
75
AREA
290064
HEIGHT
214725
13-Feb-2023
14:07
Kori
Bags



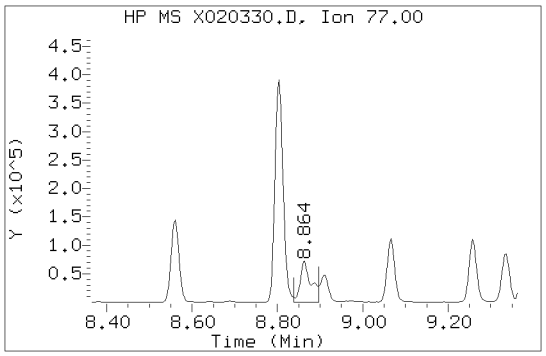
BEFORE

MASS
77
AREA
134920
HEIGHT
72172
09-Feb-2023
17:24
Kori
Bagsby



AFTER

MASS
77
AREA
134920
HEIGHT
72172
13-Feb-2023
14:07
Kori
Bags



HS23011294-GCSEMI-RSK-175

ALS WO# HS23011294

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Form 1

Organic Analysis Data Sheet

Semi-Volatiles by RSK-175

Workorder

HS23011294

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
HS23011294

Semi-Volatiles by RSK-175

HS23011294-01		Collected	Received	Matrix	Basis
16WW40-230121		01/21/23 07:40	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00296		0.000144	0.00100	0.00100	1	01/30/23 09:55	FID-4_427362	004
Ethene	mg/L	0.00534		0.000234	0.00100	0.00100	1	01/30/23 09:55	FID-4_427362	004
Methane	mg/L	0.909		0.00535	0.0250	0.0250	50	01/30/23 12:36	FID-4_427362	020

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011294

Semi-Volatiles by RSK-175

MBLK-230130

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

MBLK-230130

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	01/30/23 09:35	FID-4_427362	002
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	01/30/23 09:35	FID-4_427362	002
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	01/30/23 09:35	FID-4_427362	002

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Semi-Volatiles by RSK-175

Workorder

HS23011294

Client

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Project

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Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011294

		HS23011136-04		HS23011136-04MS				HS23011136-04MSD						
Sample Matrix	Aqueous	**Run Date**	01/30/23	01/30/23				01/30/23						
Units	ug/L	**Run Time**	11:20	11:28				11:37						
		Data File	012.D	013.D				014.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	31.59	18.04	175	*	29.48	18.04	163	*	30	6.90	
Ethene	75-125	1	0	47.29	16.80	282	*	41	16.80	244	*	30	14.3	
Methane	75-125	1	5190	4867	9.647	-	*	4812	9.647	-3910	*	30	1.10	

- %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

HS23011294

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
HS23011294

Semi-Volatiles by RSK-175

FID-4_427362			QC ID	LCS-230130			
QC Matrix	Aqueous	Units	Run Date	01/30/23			
		mg/L	Run Time	09:43			
Analyte		%R Limits	Spike Added	LCS Result	%R	Q	
Ethane		75-125	0.01804	0.0194	107		
Ethene		75-125	0.0168	0.0171	102		
Methane		75-125	0.009647	0.00938	97		

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

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Form 4

Method Blank Summary

Semi-Volatiles by RSK-175

Workorder

HS23011294

Client

Aptim Environmental & Infrastucture, Inc.

Project

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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011294

Semi-Volatiles by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230130	002.D	01/30/23 09:35	FID-4_427362
LCS-230130	LCS	LCS-230130	003.D	01/30/23 09:43	FID-4_427362
16WW40-230121	SAMP	HS23011294-01	004.D	01/30/23 09:55	FID-4_427362
BatchQC	MS	HS23011136-04MS	013.D	01/30/23 11:28	FID-4_427362
BatchQC	MSD	HS23011136-04MSD	014.D	01/30/23 11:37	FID-4_427362
16WW40-230121	SAMP	HS23011294-01	020.D	01/30/23 12:36	FID-4_427362

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Form 6

Initial Calibration Data

Semi-Volatiles by RSK-175

Workorder

HS23011294

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

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Initial Calibration Data

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

Workorder HS23011294

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

HS23011294

Client

Aptim Environmental & Infrastucture, Inc.

Project

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02/16/2023

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Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23011294

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

HS23011294

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 HS23011294

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 0925
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	927	927	0.010	4.90924	20.0	Averaged	
Ethene	586	623	623	0.010	-6.38230	20.0	Averaged	
Ethane	719	810	810	0.010	-12.60421	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011294

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 1112
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	882	882	0.010	9.57660	20.0	Averaged	
Ethene	586	604	604	0.010	-3.09964	20.0	Averaged	
Ethane	719	839	839	0.010	-16.59443	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011294

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 1255
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	952	952	0.010	2.40014	20.0	Averaged	
Ethene	586	575	575	0.010	1.90539	20.0	Averaged	
Ethane	719	765	765	0.010	-6.28765	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011294

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 1430
Lab File ID 033.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	900	900	0.010	7.73730	20.0	Averaged	
Ethene	586	615	615	0.010	-4.97400	20.0	Averaged	
Ethane	719	779	779	0.010	-8.33668	20.0	Averaged	

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Analysis Run Log

Semi-Volatiles by RSK-175

Workorder

HS23011294

Client

Aptim Environmental & Infrastucture, Inc.

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LHAAP 16 January 2023

02/16/2023

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Phone (281) 530-5656 Fax (281) 530-5887
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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
HS23011294

Semi-Volatiles by RSK-175

RUNID
FID-4_427362

Run ID FID-4_427362 **Start Date** 01/30/23 **EndDate** 01/30/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
RSK-CCV	CCV	RSK-CCV	001.D	01/30/23 09:25	1
MBLK-230130	MBLK	MBLK-230130	002.D	01/30/23 09:35	1
LCS-230130	LCS	LCS-230130	003.D	01/30/23 09:43	1
16WW40-230121	SAMP	HS23011294-01	004.D	01/30/23 09:55	1
RSK-CCV	CCV	RSK-CCV	011.D	01/30/23 11:12	1
BatchQC	MS	HS23011136-04MS	013.D	01/30/23 11:28	1
BatchQC	MSD	HS23011136-04MSD	014.D	01/30/23 11:37	1
16WW40-230121	SAMP	HS23011294-01	020.D	01/30/23 12:36	50
RSK-CCV	CCV	RSK-CCV	022.D	01/30/23 12:55	1
RSK-CCV	CCV	RSK-CCV	033.D	01/30/23 14:30	1

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Raw Data FID-4 322102

Semi-Volatiles by RSK-175

Workorder

HS23011294

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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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)	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

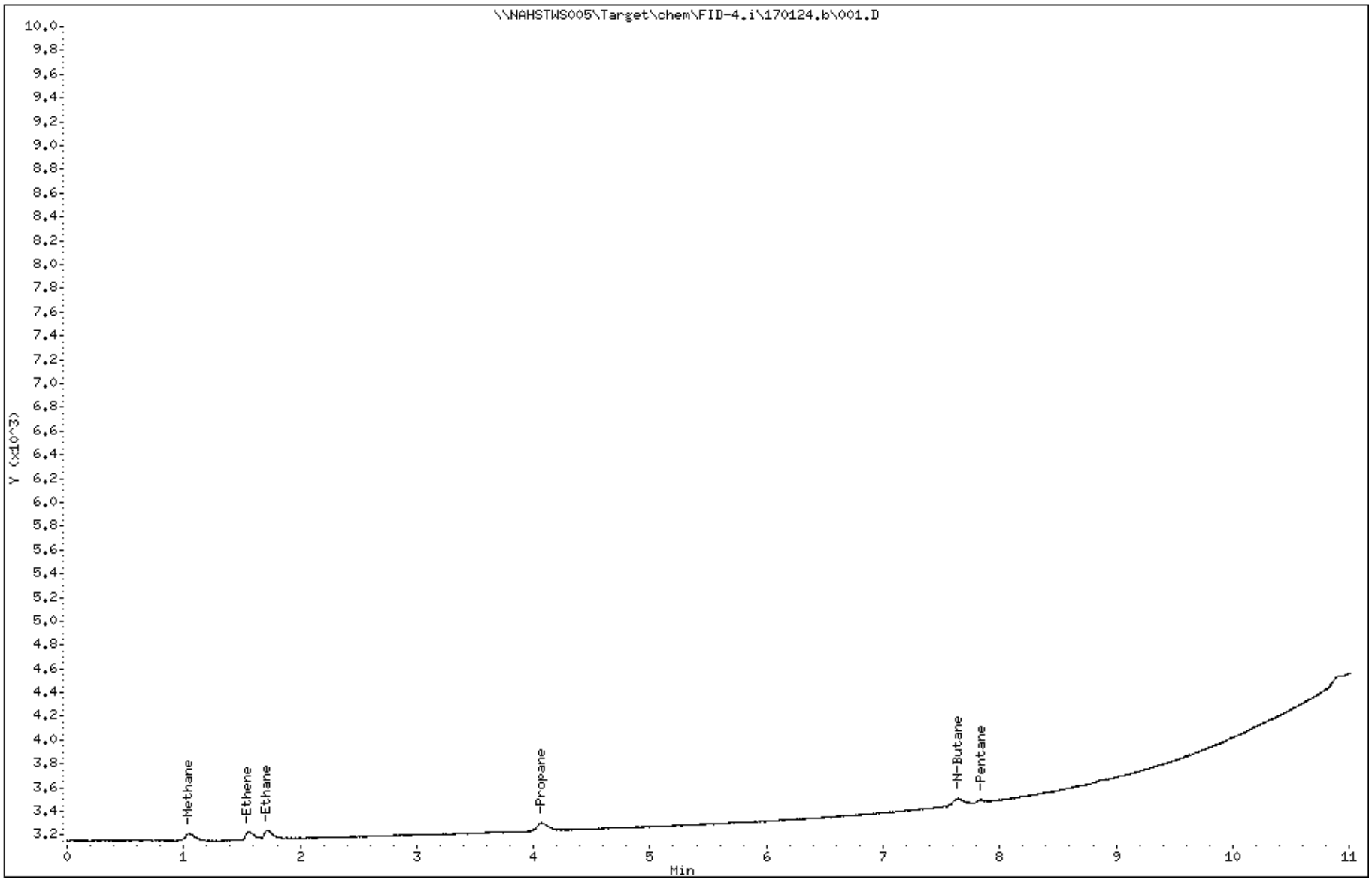
Instrument: FID-4.i

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

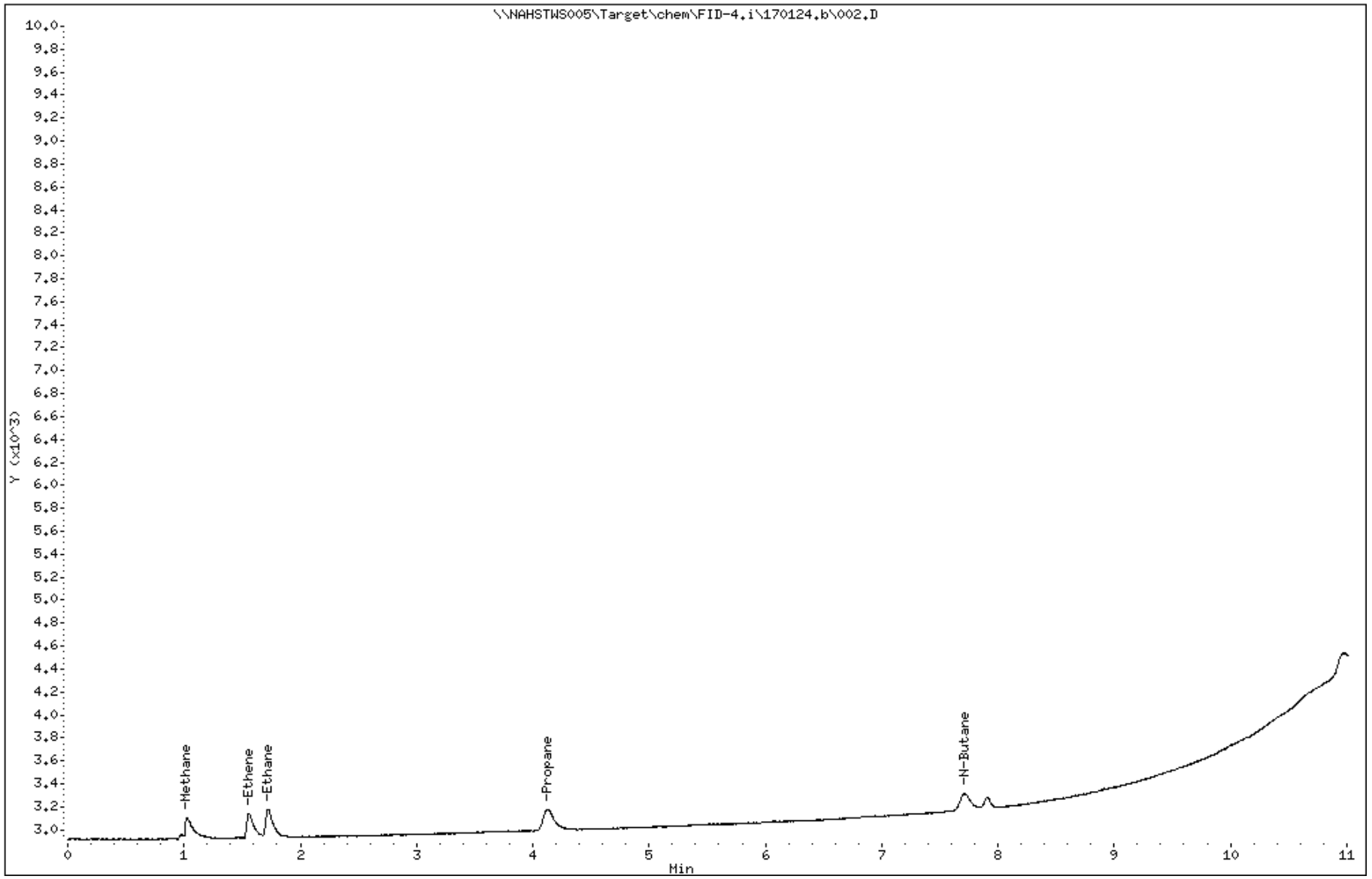
Instrument: FID-4.i

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

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)	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

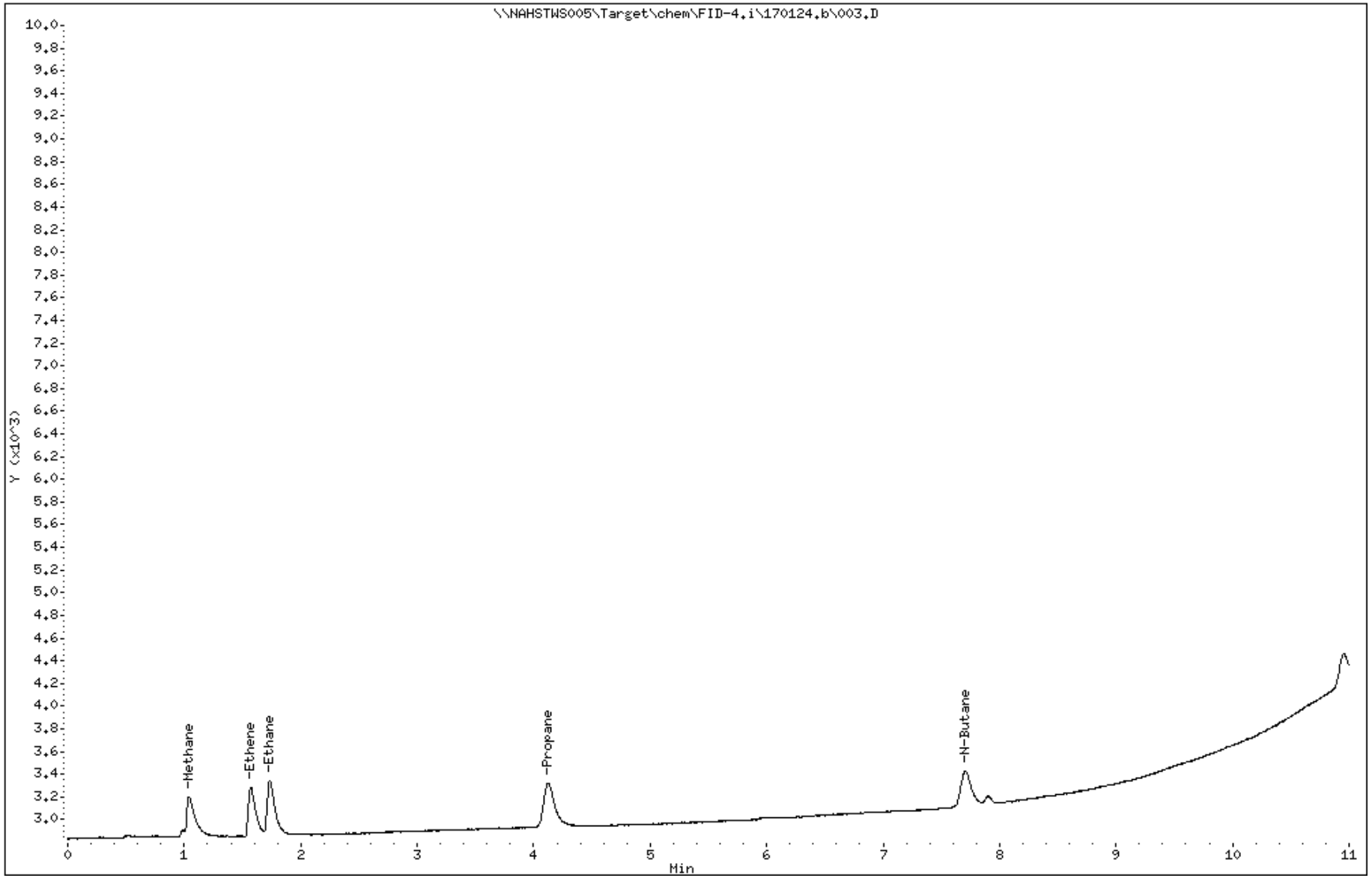
Instrument: FID-4.i

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

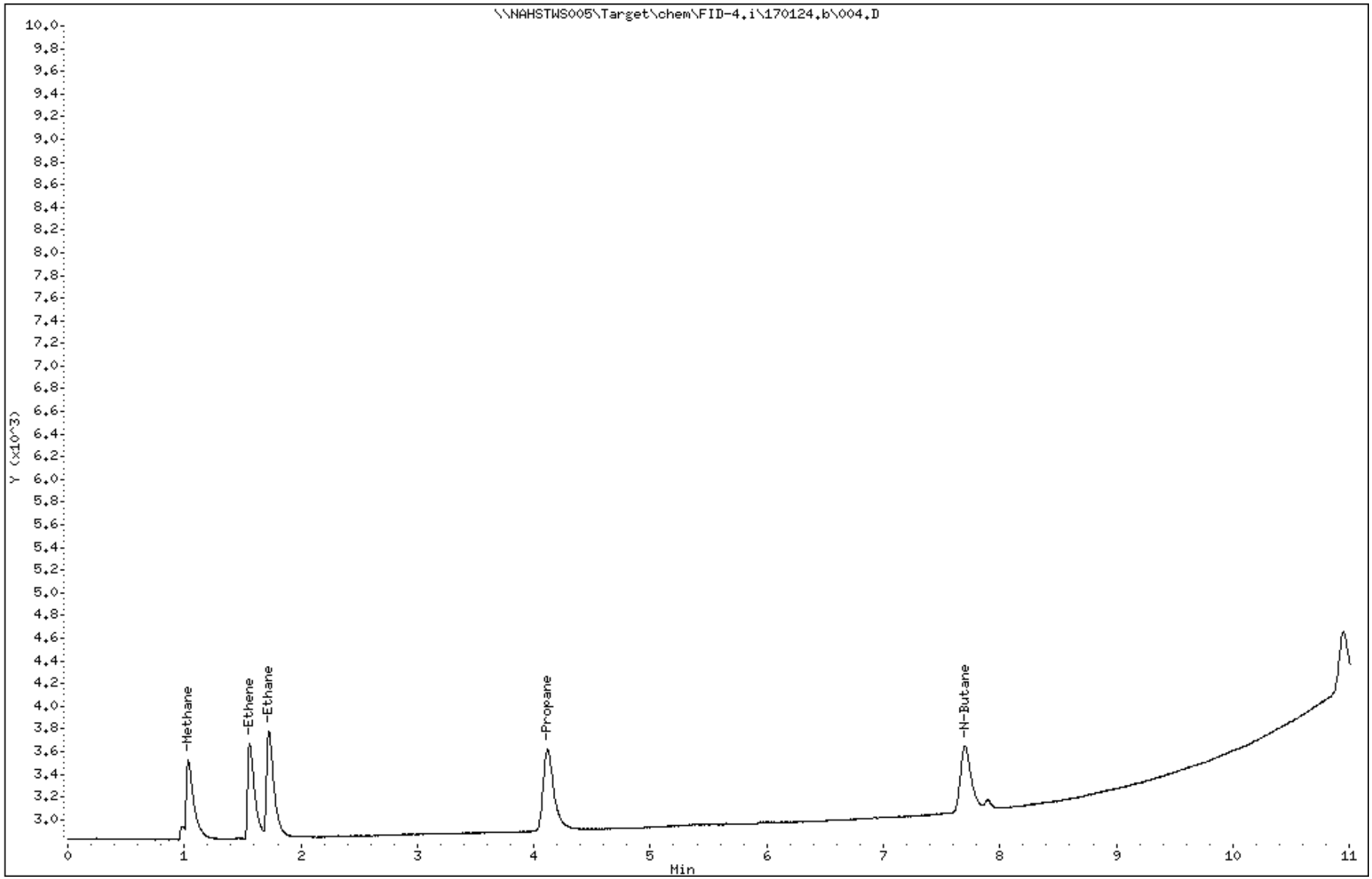
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



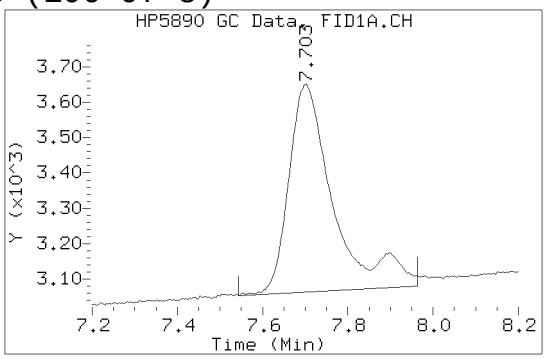
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

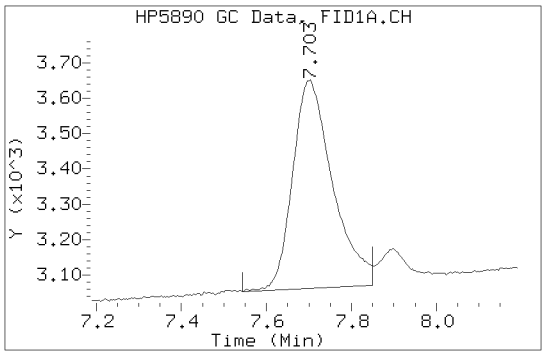
BEFORE

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



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

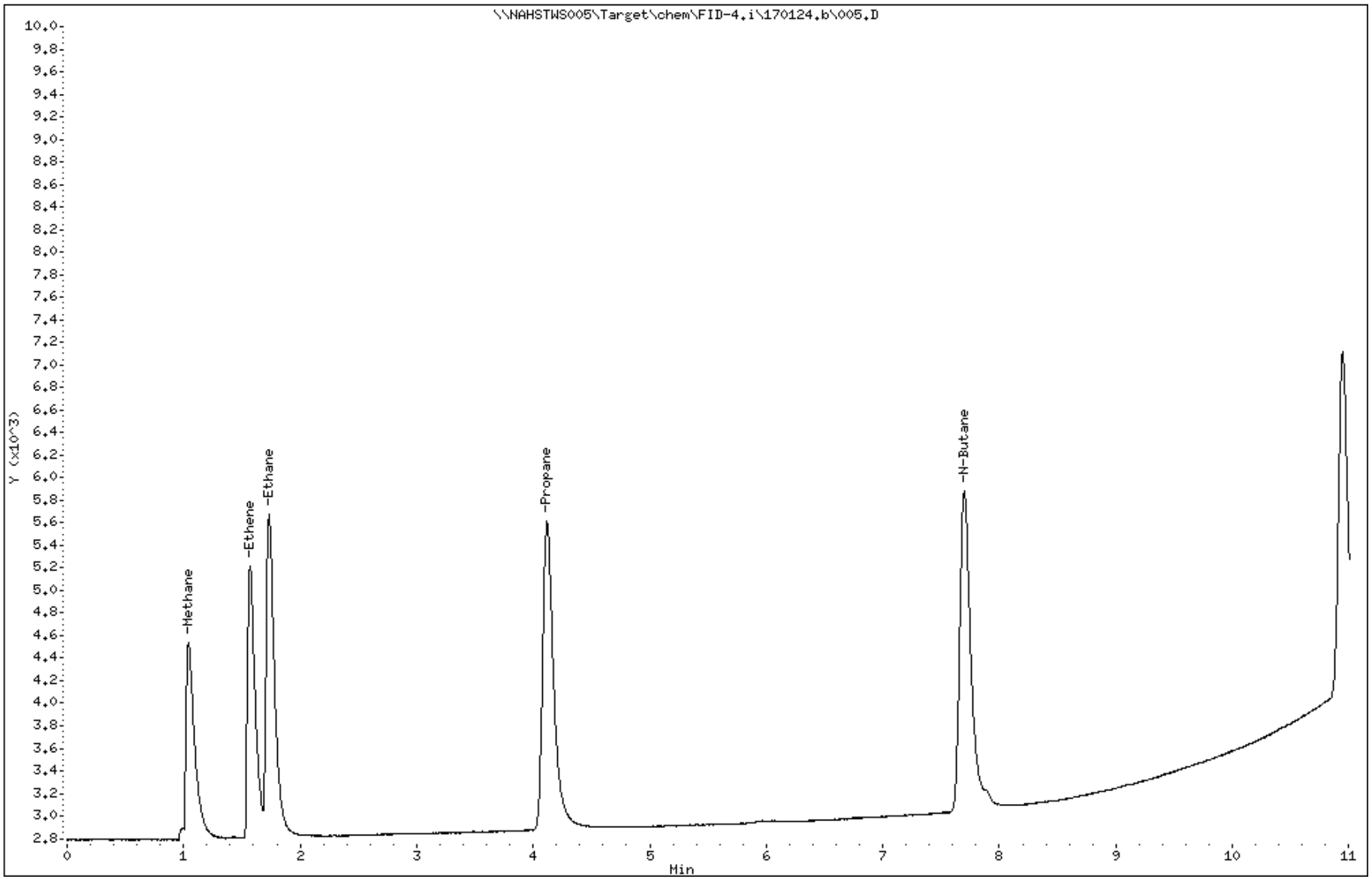
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



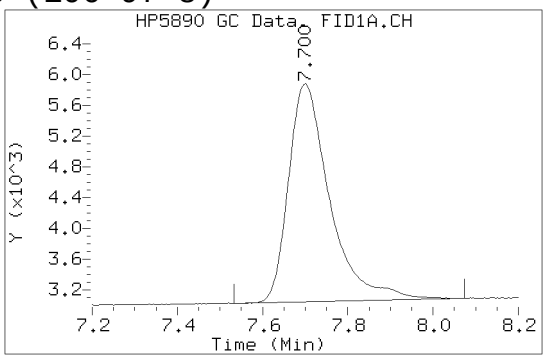
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

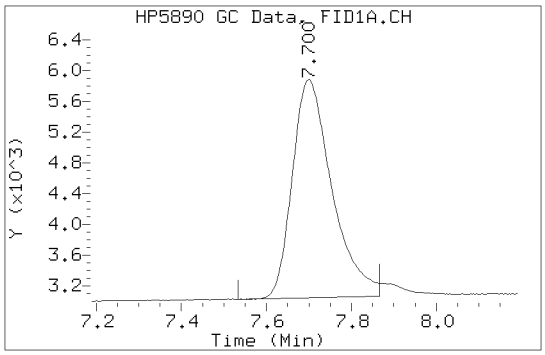
BEFORE

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

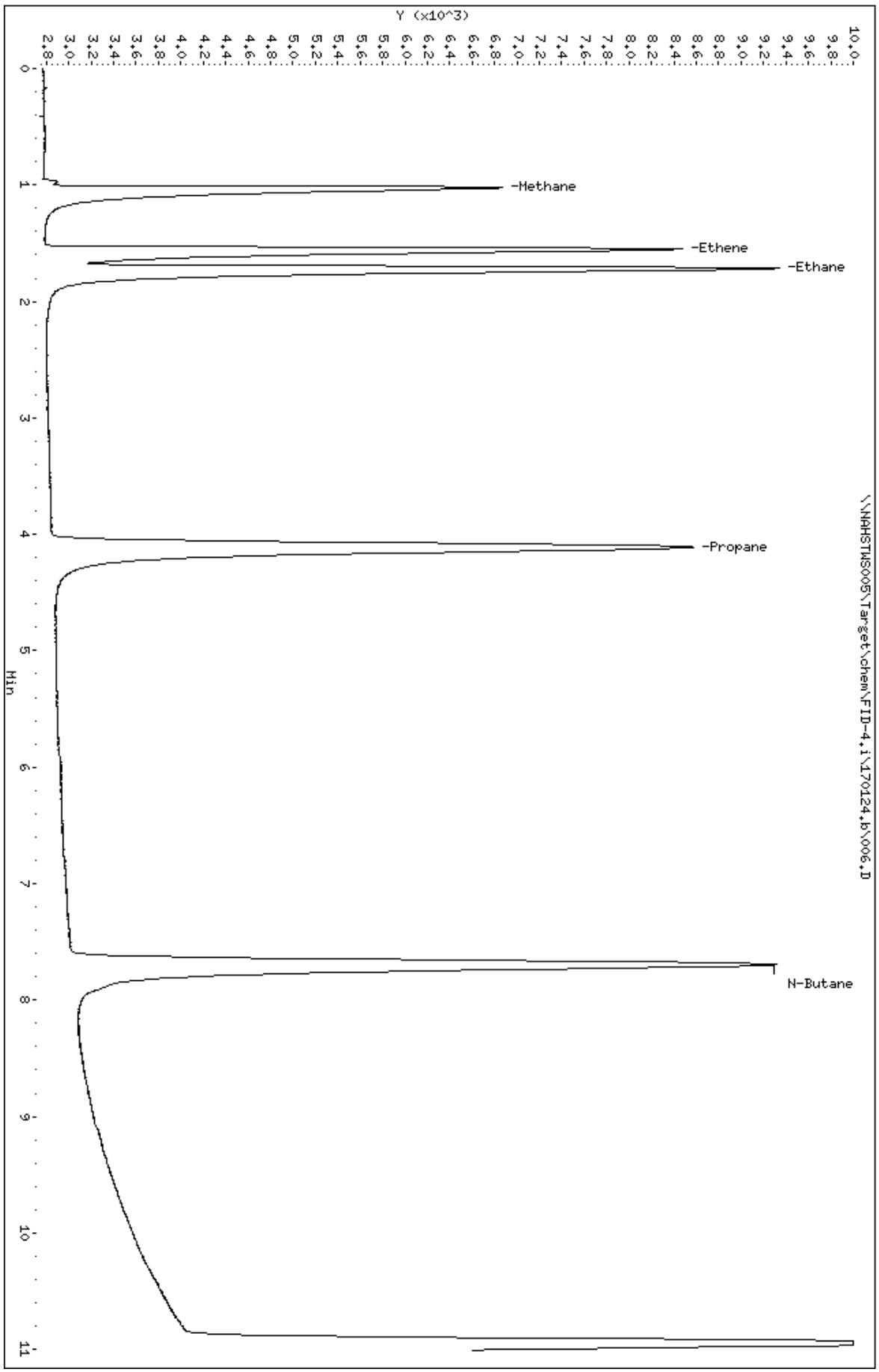
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 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: HA
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

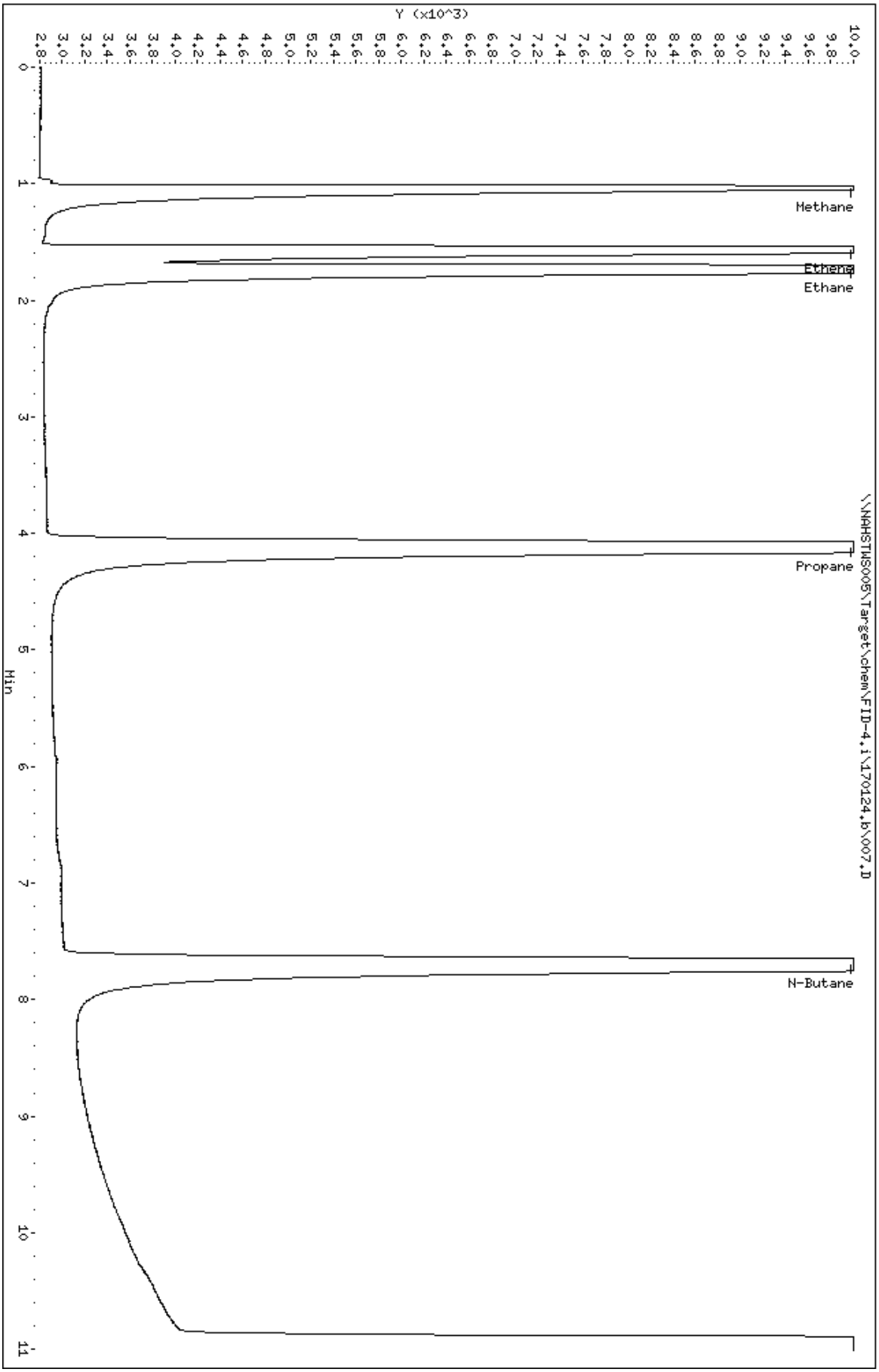
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	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

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

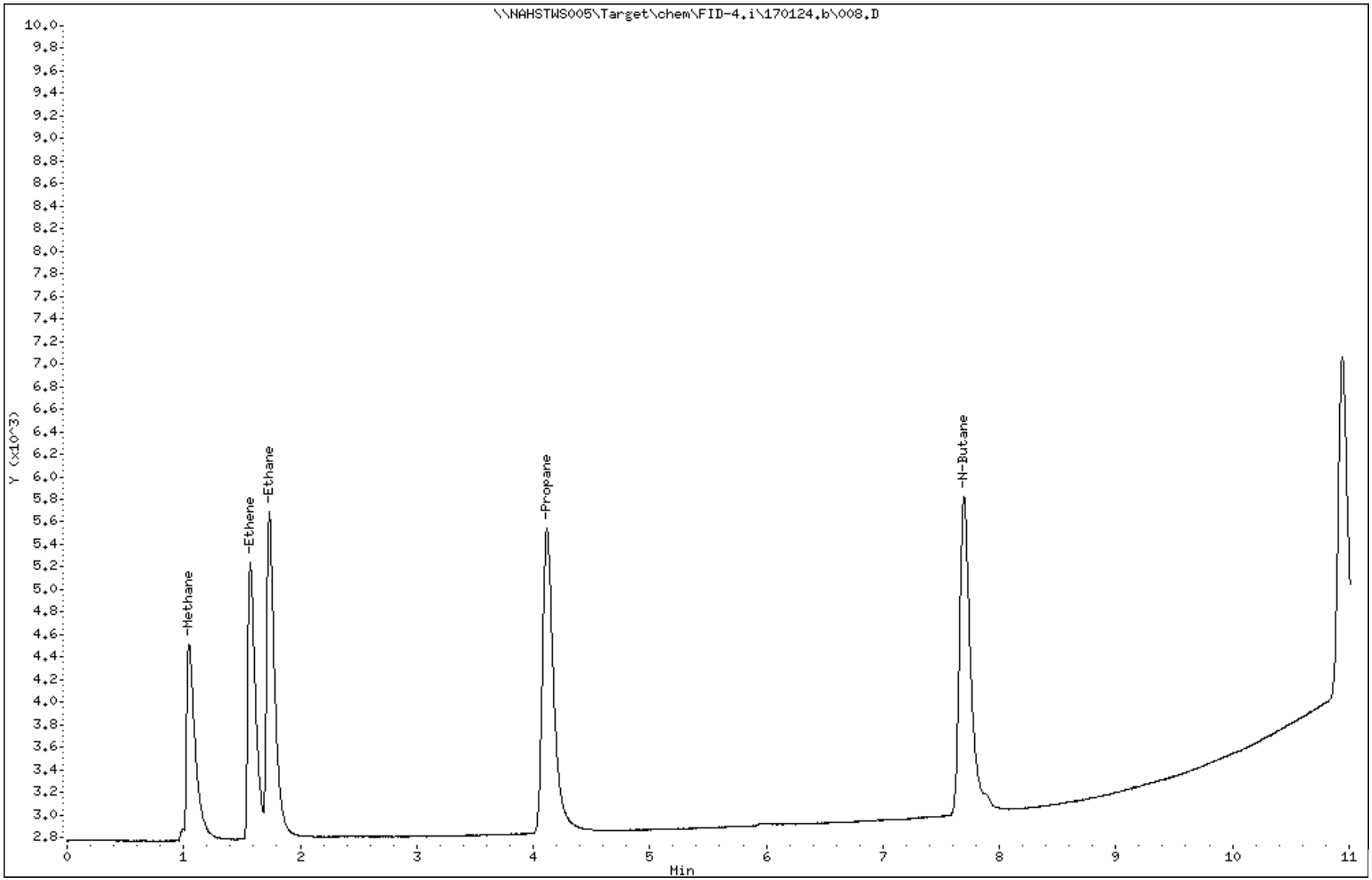
Instrument: FID-4.i

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 427362

Semi-Volatiles by RSK-175

Workorder

HS23011294

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\230130.b\001.D Page 1
Report Date: 02-Feb-2023 08:19

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230130.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 09:25
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad 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: 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	0.430	0.430	0.000	8944	9.64700	9.173
2 Ethene	0.650	0.650	0.000	10500	16.8500	17.925
3 Ethane	0.720	0.720	0.000	14618	18.0430	20.317

Data File: \\nahstws005\Target\chem\FID-4.i\230130.b\001.D

Date : 30-JAN-2023 09:25

Client ID: RSK-CCV

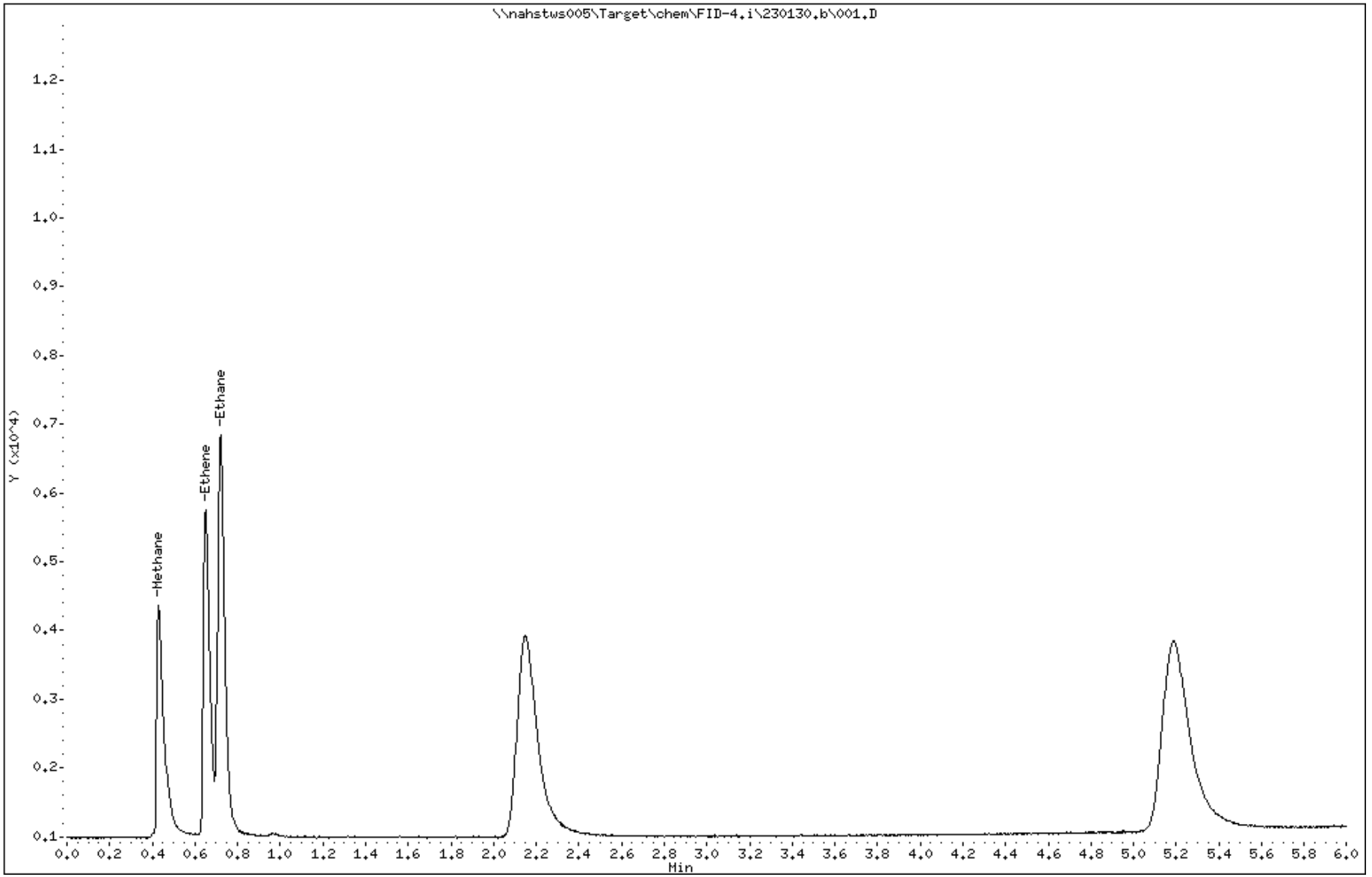
Instrument: FID-4.i

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\230130.b\001.D
Inj Date : 30-JAN-2023 09:25
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\002.D Page 1
Report Date: 30-Jan-2023 10:58

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\002.D
Lab Smp Id: MBLK-230130 Client Smp ID: MBLK-230130
Inj Date : 30-JAN-2023 09:35
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230130;MBLK-230130;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 09:34 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\230130.b\002.D

Date : 30-JAN-2023 09:35

Client ID: MBLK-230130

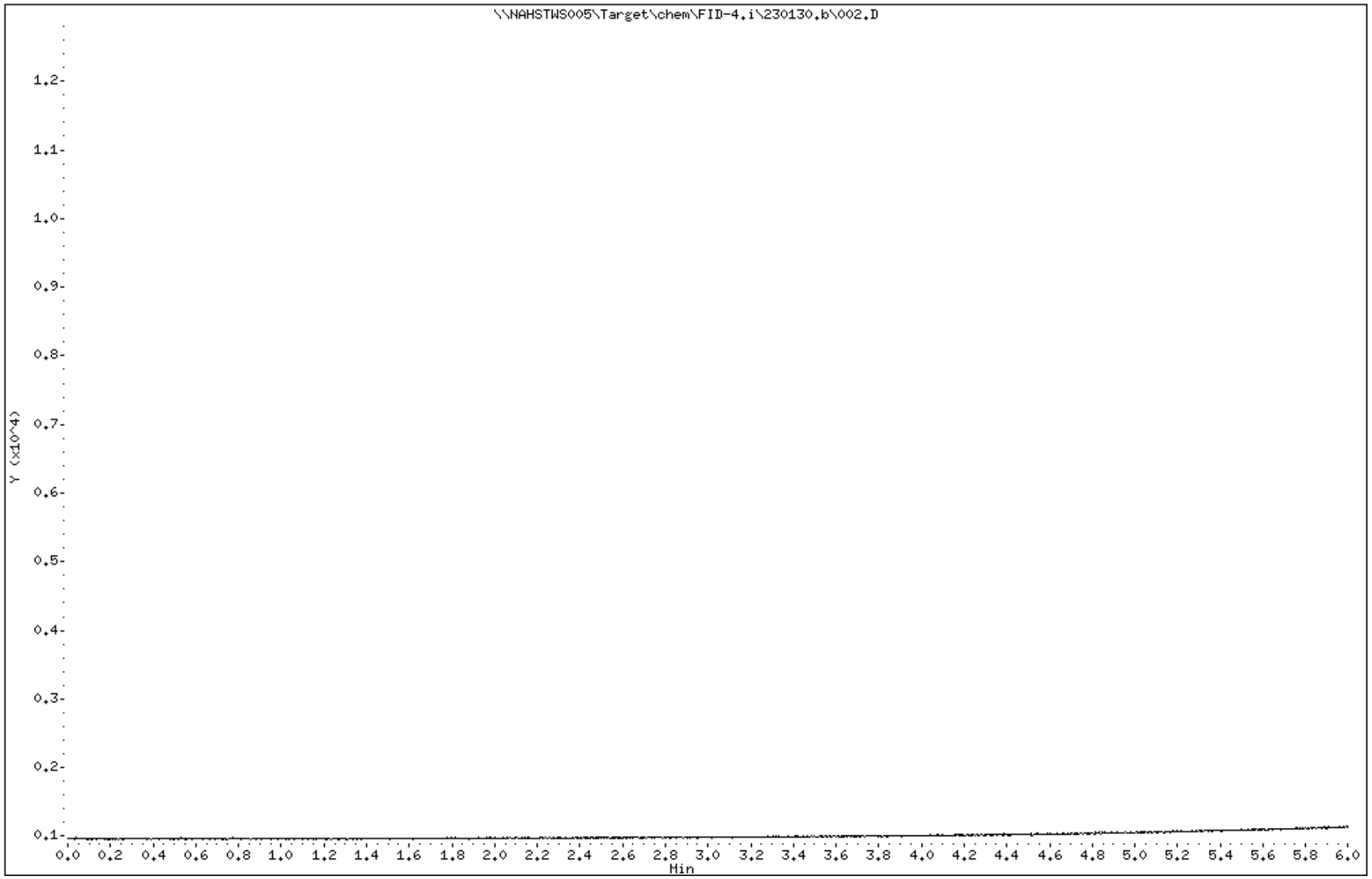
Instrument: FID-4.i

Sample Info: MBLK-230130;MBLK-230130;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\002.D
Inj Date : 30-JAN-2023 09:35
InstruID : FID-4.i
LabSampID : MBLK-230130

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\003.D Page 1
Report Date: 30-Jan-2023 10:57

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\003.D
Lab Smp Id: LCS-230130 Client Smp ID: LCS-230130
Inj Date : 30-JAN-2023 09:43
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-230130;LCS-230130;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 09:34 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	0.433	0.430	0.003	9149	9.38366	9.383
2 Ethene	0.650	0.650	0.000	10022	17.1094	17.109
3 Ethane	0.723	0.720	0.003	13952	19.3915	19.391

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\003.D

Date : 30-JAN-2023 09:43

Client ID: LCS-230130

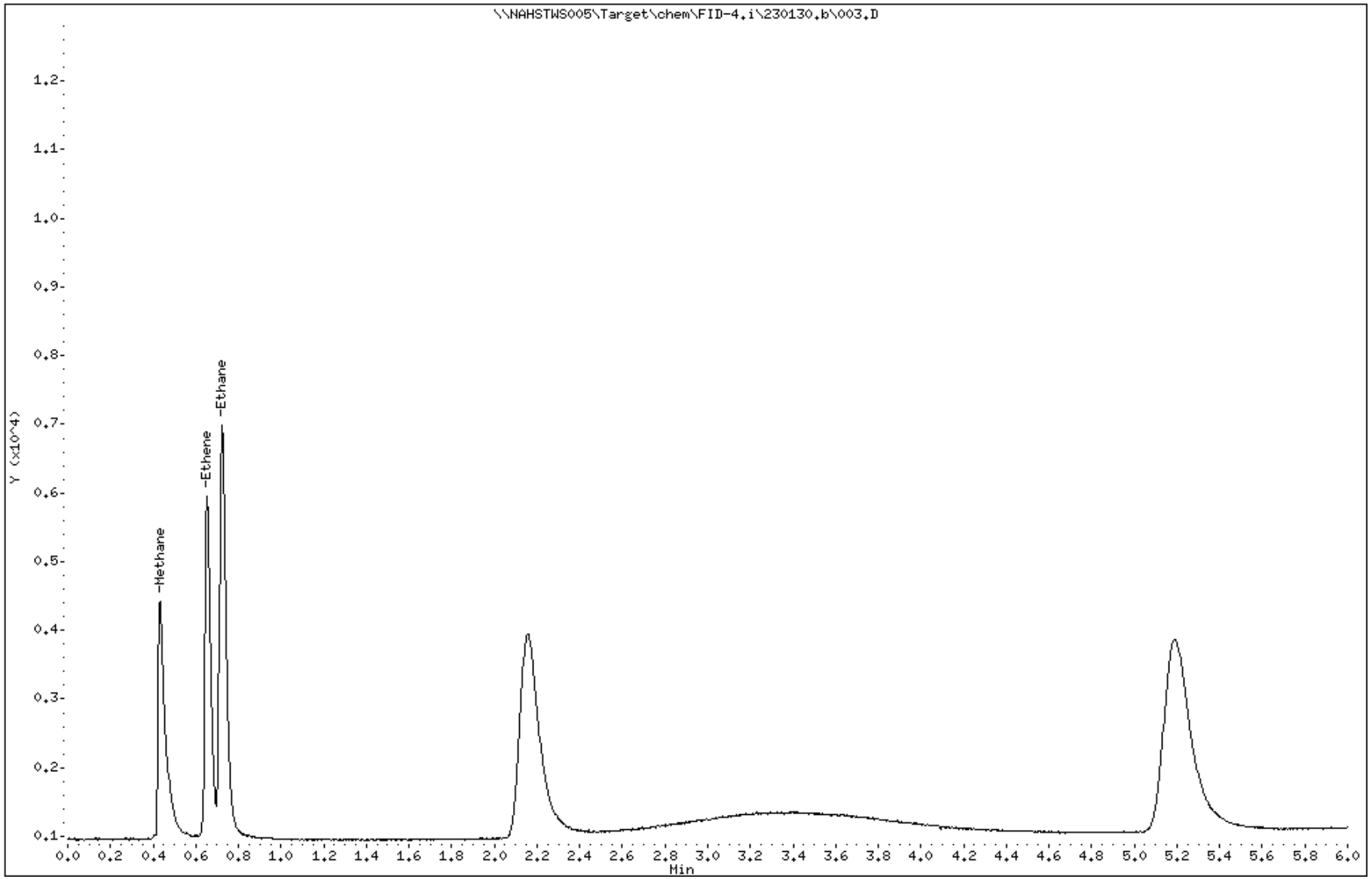
Instrument: FID-4.i

Sample Info: LCS-230130;LCS-230130;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\003.D
Inj Date : 30-JAN-2023 09:43
InstruID : FID-4.i
LabSampID : LCS-230130

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\004.D Page 1
Report Date: 16-Feb-2023 13:24

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\004.D
Lab Smp Id: HS23011294-01 Client Smp ID: HS23011294-01
Inj Date : 30-JAN-2023 09:55
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011294-01;HS23011294-01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 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: 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	0.423	0.007	920683	944.298	944.297(AM)
2 Ethene	0.646	0.643	0.003	3129	5.34177	5.341(M)
3 Ethane	0.716	0.716	0.000	2130	2.96043	2.960(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\230130.b\004.D

Date : 30-JAN-2023 09:55

Client ID: HS23011294-01

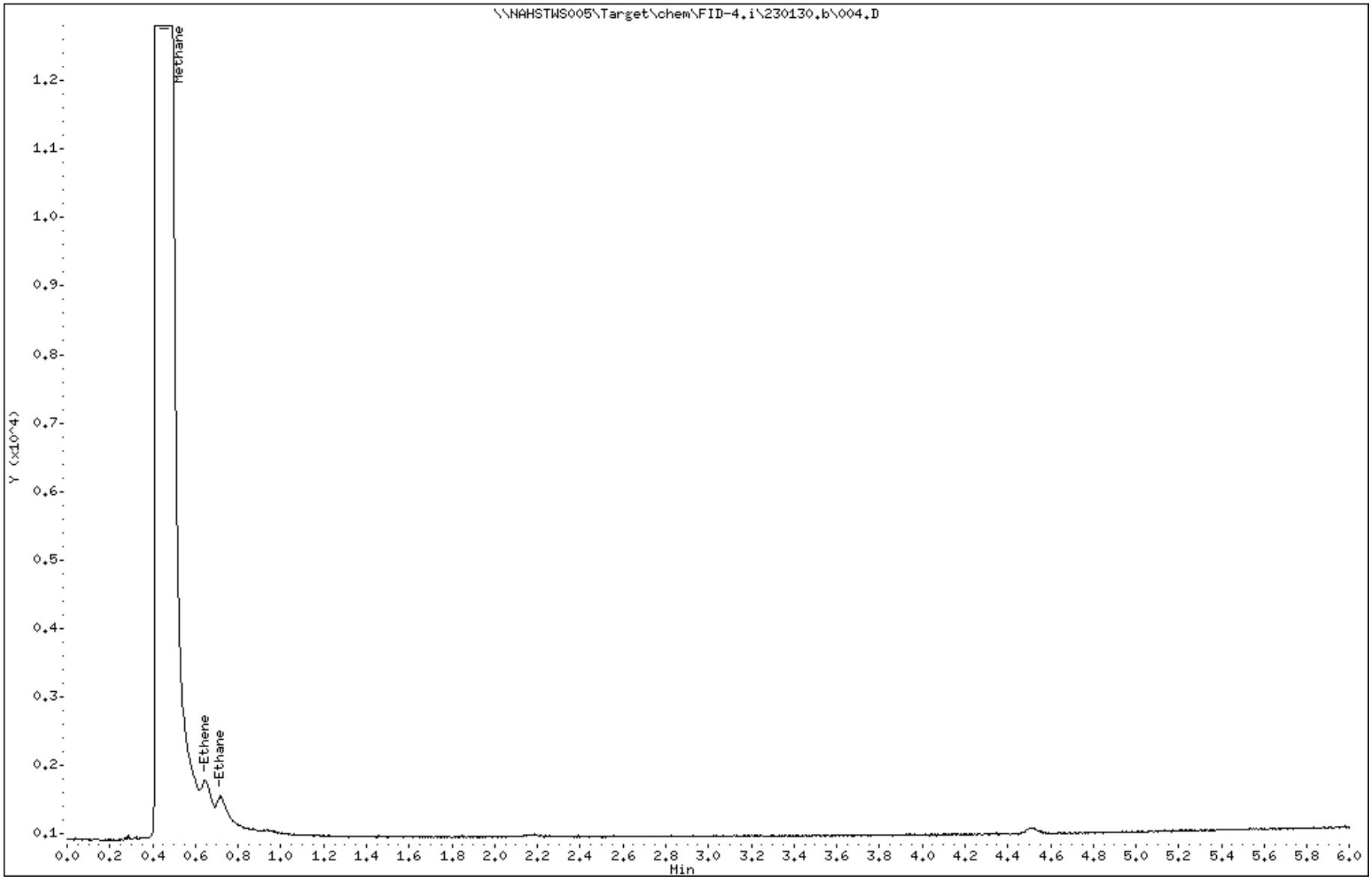
Instrument: FID-4.i

Sample Info: HS23011294-01;HS23011294-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

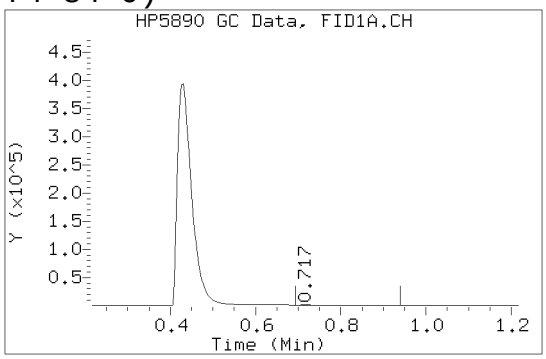


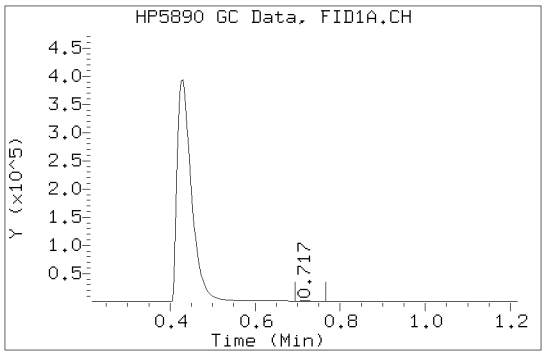
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\004.D
Inj Date : 30-JAN-2023 09:55
InstruID : FID-4.i
LabSampID : HS23011294-01

Ethane (74-84-0)

Reason Code:

BEFORE		AFTER	
MASS		MASS	
44		44	
AREA		AREA	
3381		2130	
HEIGHT		HEIGHT	
597		604	
30-Jan-2023		16-Feb-2023	
10:15		13:24	
ALSHS		ALSHS	
Server		Ser	

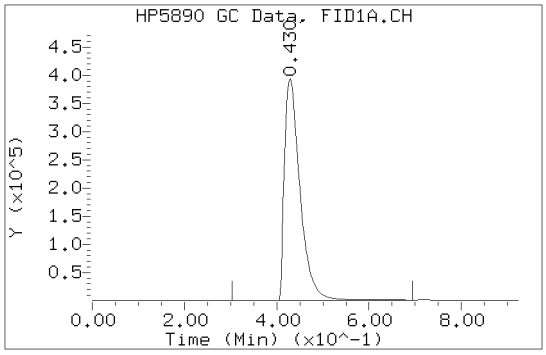


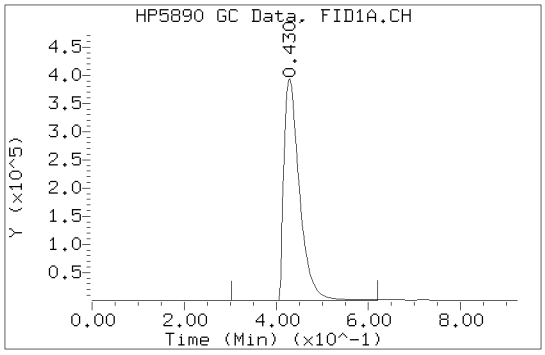


Methane (74-82-8)

Reason Code:

BEFORE		AFTER	
MASS		MASS	
100		100	
AREA		AREA	
0		920683	
HEIGHT		HEIGHT	
0		393006	
30-Jan-2023		16-Feb-2023	
10:15		13:24	
ALSHS		ALSHS	
Server		Ser	

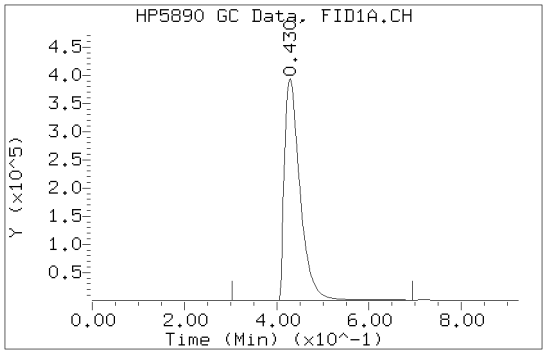


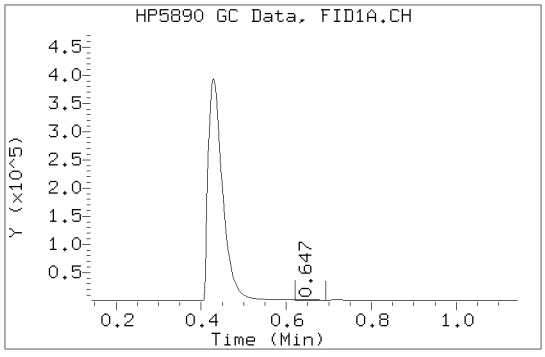


Ethene (74-85-1)

Reason Code:

BEFORE		AFTER	
MASS		MASS	
100		100	
AREA		AREA	
0		3129	
HEIGHT		HEIGHT	
0		838	
30-Jan-2023		16-Feb-2023	
10:15		13:24	
ALSHS		ALSHS	
Server		Ser	





ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 11:12
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 11:26 purvi.lad 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: 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	0.430	0.430	0.000	8505	9.64700	8.723
2 Ethene	0.650	0.650	0.000	10176	16.8500	17.372
3 Ethane	0.720	0.720	0.000	15136	18.0430	21.037

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\011.D

Date : 30-JAN-2023 11:12

Client ID: RSK-CCV

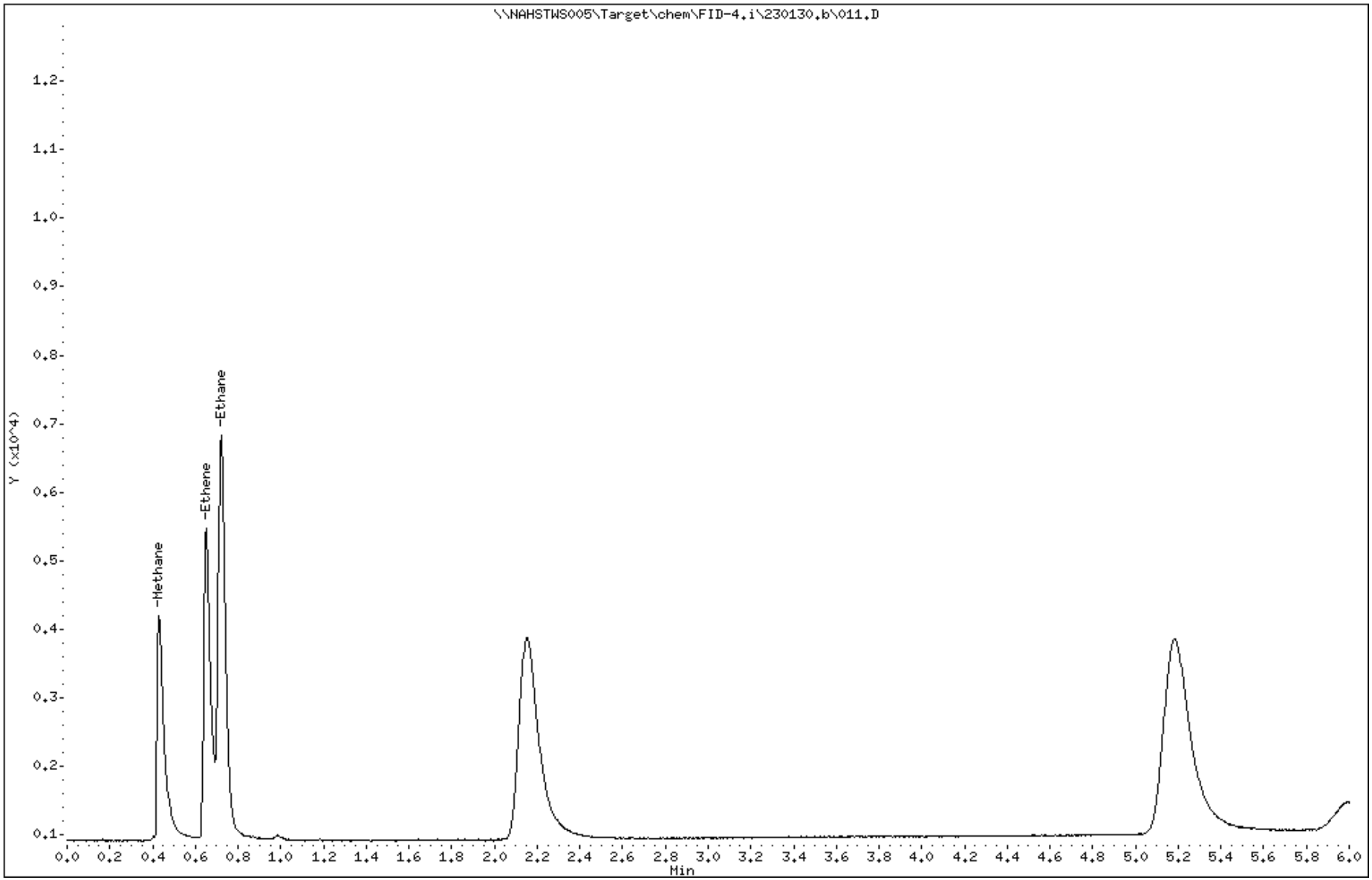
Instrument: FID-4.i

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\230130.b\011.D
Inj Date : 30-JAN-2023 11:12
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\013.D Page 1
Report Date: 06-Feb-2023 12:14

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\013.D
Lab Smp Id: HS23011136-04MS Client Smp ID: HS23011136-04MS
Inj Date : 30-JAN-2023 11:28
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011136-04MS;HS23011136-04MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13 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	0.436	0.430	0.006	4744960	4866.66	4866.663(ARM)
2 Ethene	0.646	0.650	-0.004	27702	47.2924	47.292(RM)
3 Ethane	0.726	0.720	0.006	22730	31.5918	31.591(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\230130.b\013.D

Page 1

Date : 30-JAN-2023 11:28

Client ID: HS23011136-04MS

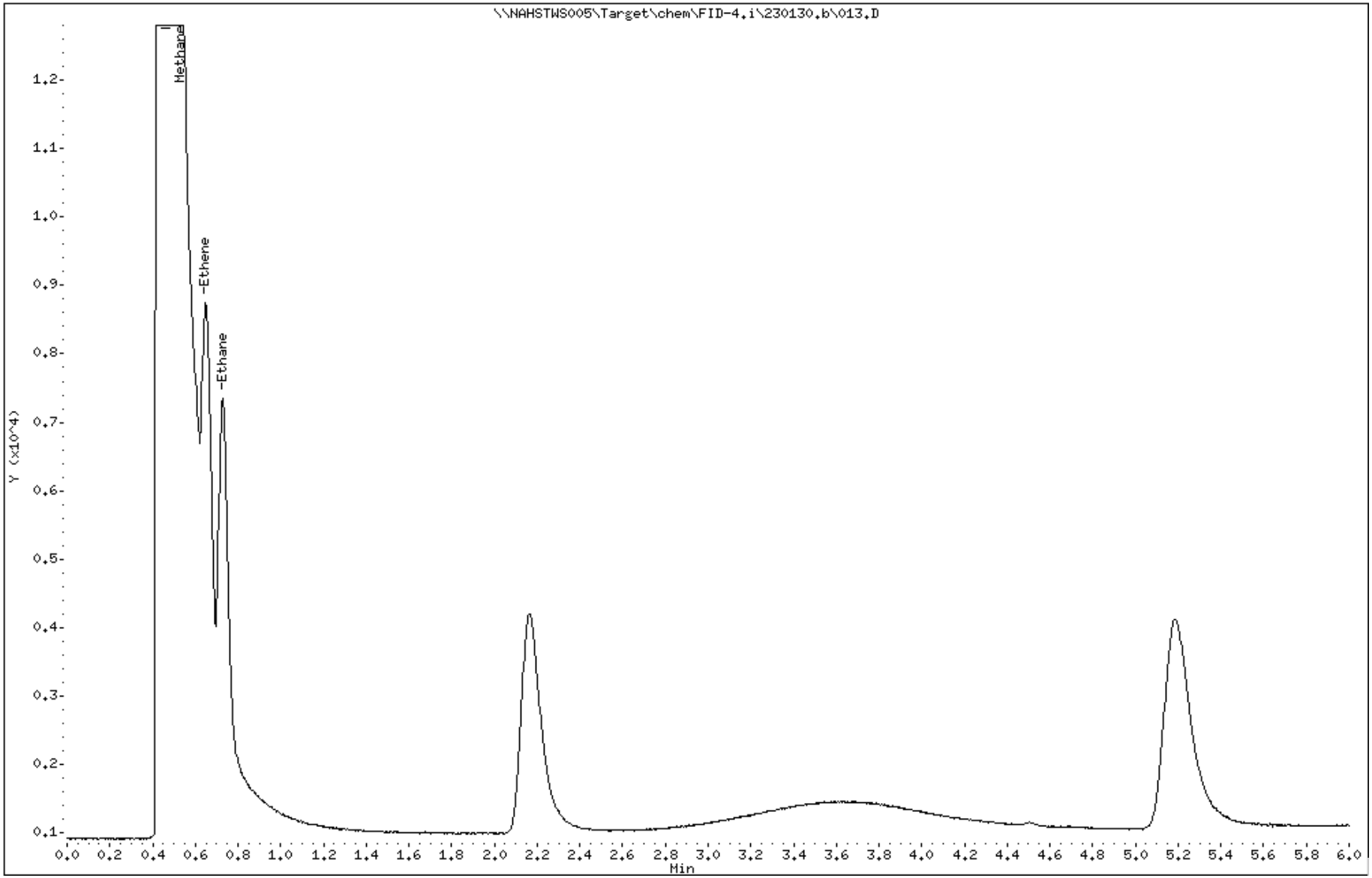
Instrument: FID-4.i

Sample Info: HS23011136-04MS;HS23011136-04MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

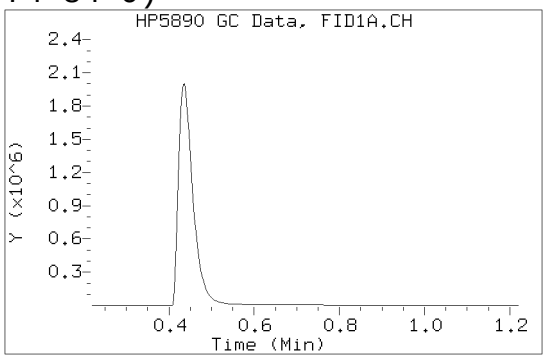


Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\013.D
Inj Date : 30-JAN-2023 11:28
InstruID : FID-4.i
LabSampID : HS23011136-04MS

Ethane (74-84-0)

BEFORE

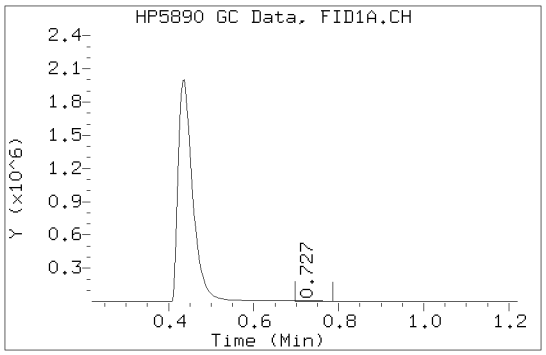
MASS
44
AREA
36147
HEIGHT
6418
30-Jan-2023
11:35
ALSHS
Server



Reason Code:

AFTER

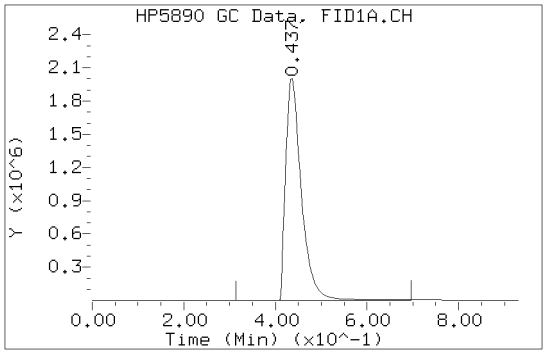
MASS
44
AREA
22730
HEIGHT
6448
06-Feb-2023
12:14
ALSHS
Ser



Methane (74-82-8)

BEFORE

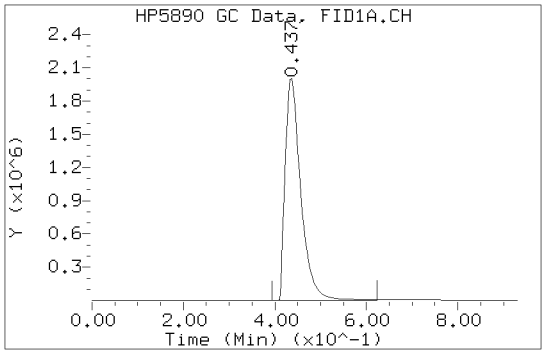
MASS
100
AREA
0
HEIGHT
0
30-Jan-2023
11:35
ALSHS
Server



Reason Code:

AFTER

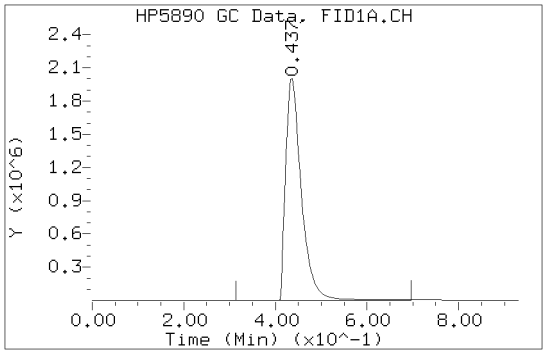
MASS
100
AREA
4744960
HEIGHT
2000494
06-Feb-2023
12:14
ALSHS
Ser



Ethene (74-85-1)

BEFORE

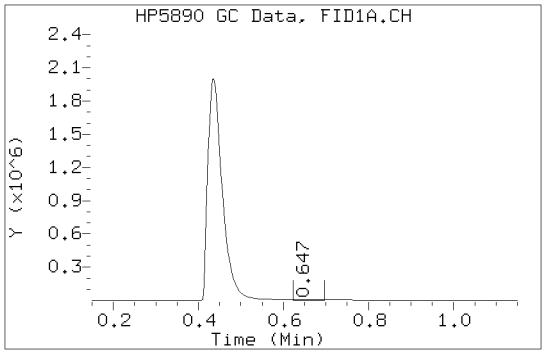
MASS
100
AREA
0
HEIGHT
0
30-Jan-2023
11:35
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
27702
HEIGHT
7852
06-Feb-2023
12:14
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\014.D Page 1
Report Date: 06-Feb-2023 12:14

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\014.D
Lab Smp Id: HS23011136-04MSD Client Smp ID: HS23011136-04MSD
Inj Date : 30-JAN-2023 11:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011136-04MSD;HS23011136-04MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 14 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	0.430	0.430	0.000	4691938	4812.28	4812.281(AR)
2 Ethene	0.636	0.650	-0.014	24015	40.9980	40.997(R)
3 Ethane	0.716	0.720	-0.004	21212	29.4820	29.482(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\230130.b\014.D

Date : 30-JAN-2023 11:37

Client ID: HS23011136-04MSD

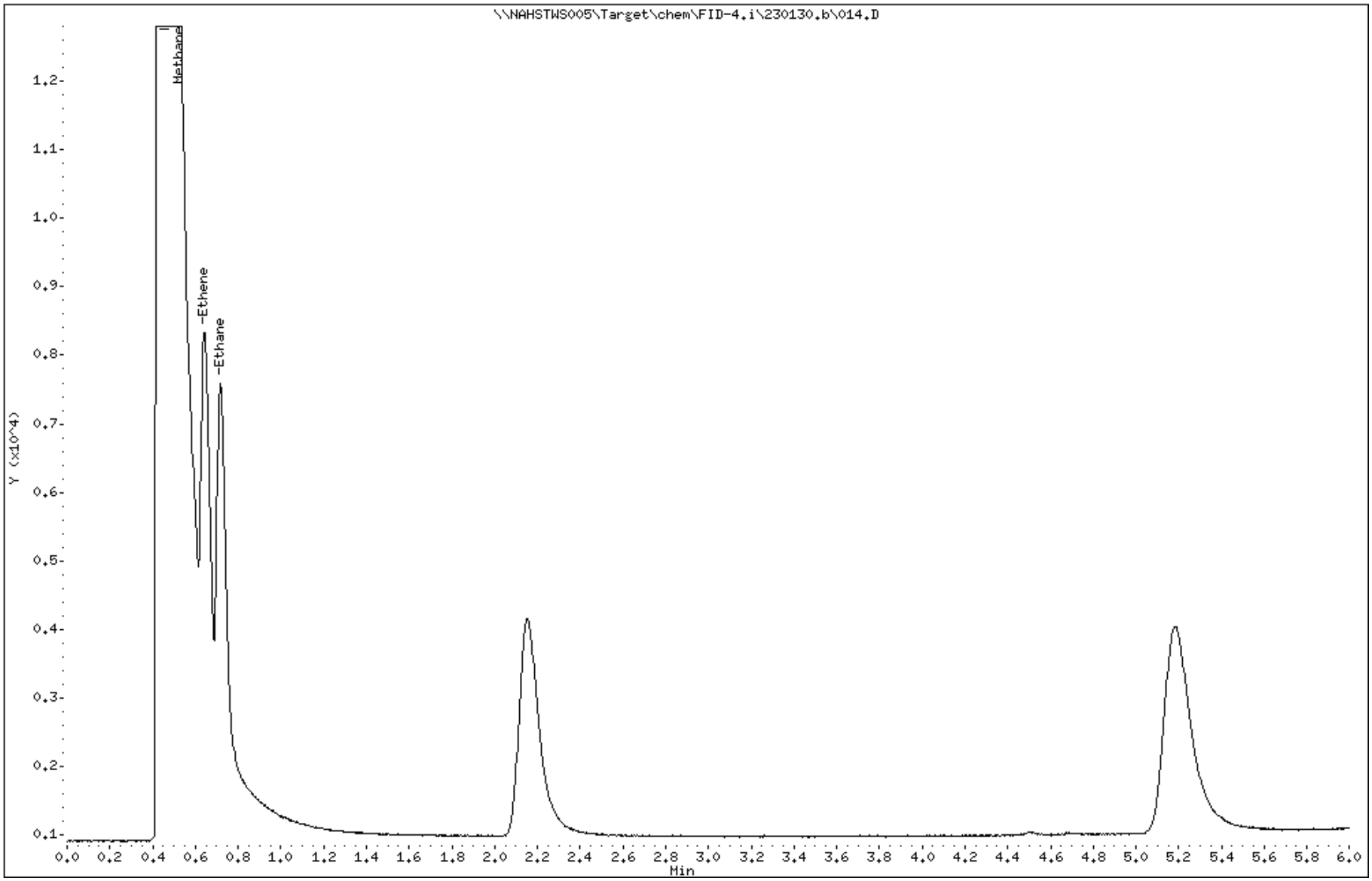
Instrument: FID-4.i

Sample Info: HS23011136-04MSD;HS23011136-04MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



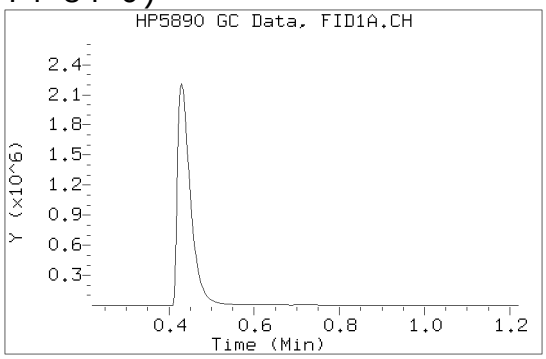
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\014.D
Inj Date : 30-JAN-2023 11:37
InstruID : FID-4.i
LabSampID : HS23011136-04MSD

Ethane (74-84-0)

Reason Code:

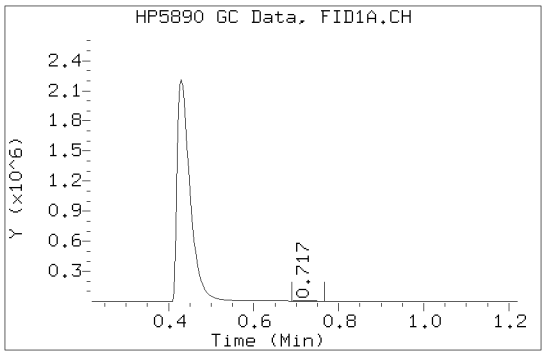
BEFORE

MASS
44
AREA
35857
HEIGHT
6673
30-Jan-2023
11:45
ALSHS
Server



AFTER

MASS
44
AREA
21212
HEIGHT
6673
06-Feb-2023
12:14
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\020.D Page 1
Report Date: 30-Jan-2023 13:51

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\020.D
Lab Smp Id: HS23011294-01 Client Smp ID: HS23011294-01
Inj Date : 30-JAN-2023 12:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011294-01;HS23011294-01
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 13:04 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 20
Dil Factor: 50.00000
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	0.433	0.017	17725	18.1796	908.981

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\020.D

Date : 30-JAN-2023 12:36

Client ID: HS23011294-01

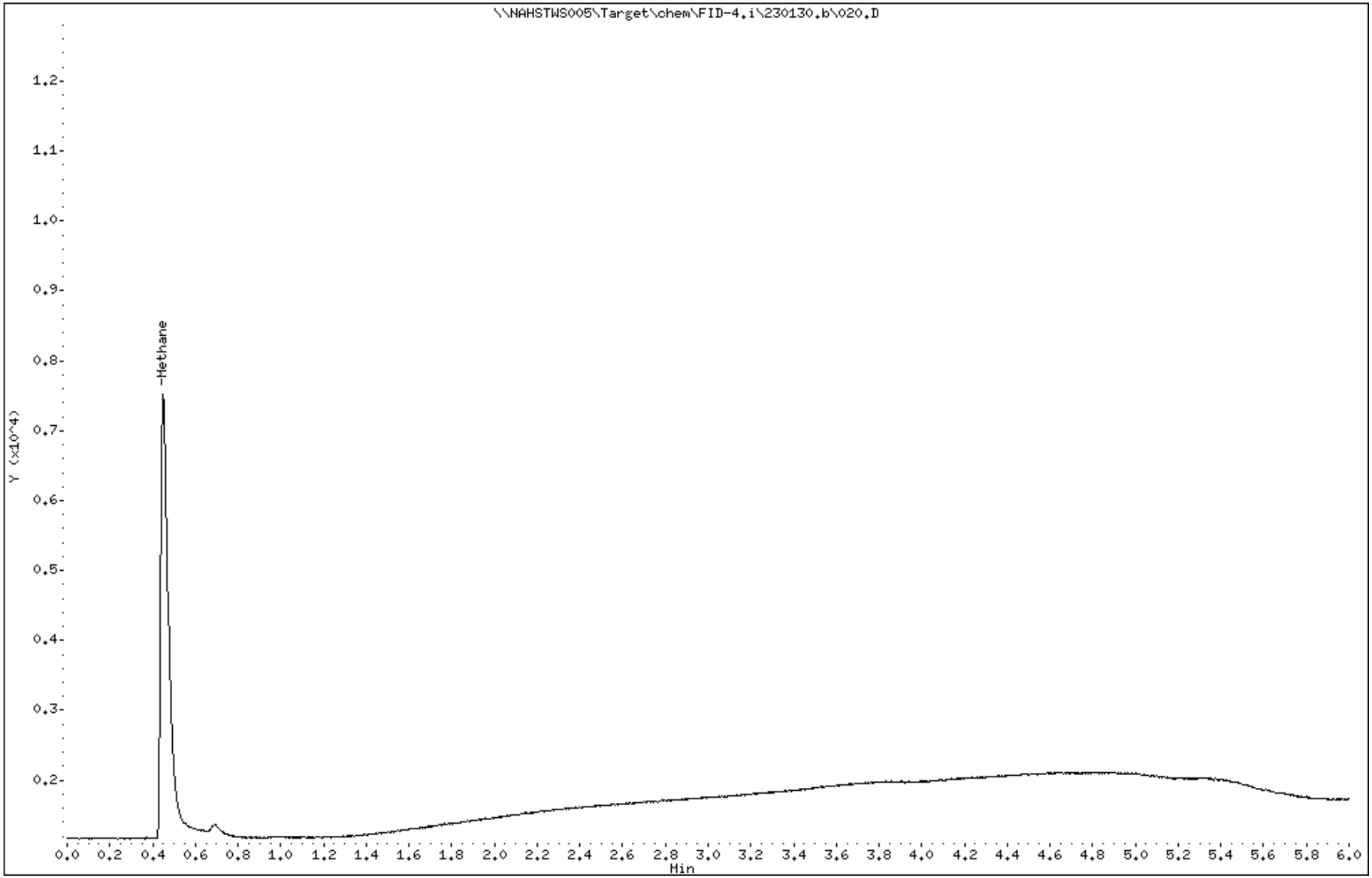
Instrument: FID-4.i

Sample Info: HS23011294-01;HS23011294-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\020.D
Inj Date : 30-JAN-2023 12:36
InstruID : FID-4.i
LabSampID : HS23011294-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\022.D Page 1
Report Date: 06-Feb-2023 12:15

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 12:55
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 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	0.433	0.433	0.000	9180	9.64700	9.415
2 Ethene	0.660	0.660	0.000	9682	16.8500	16.528(M)
3 Ethane	0.730	0.730	0.000	13798	18.0430	19.177(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\022.D

Date : 30-JAN-2023 12:55

Client ID: RSK-CCV

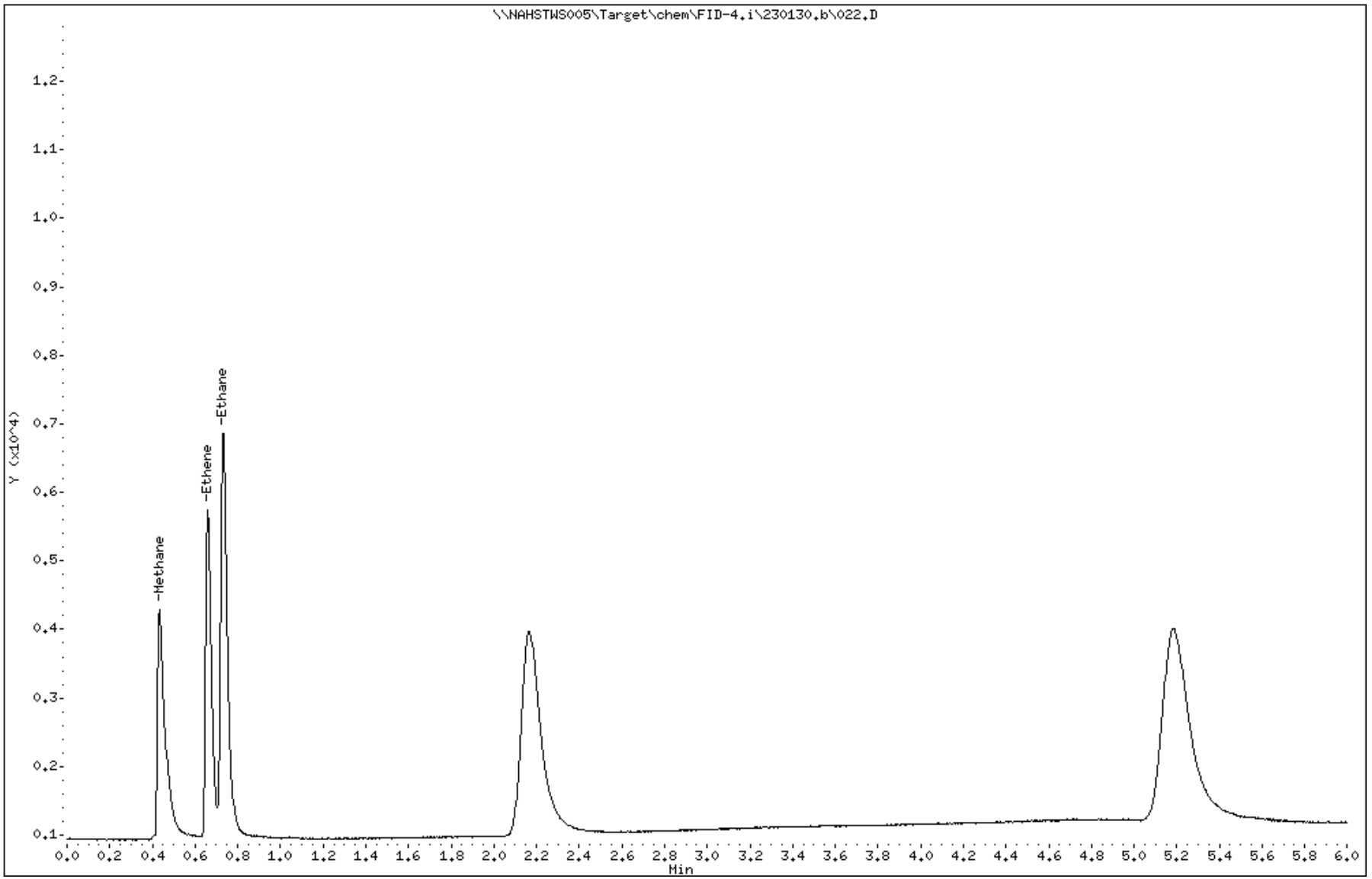
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



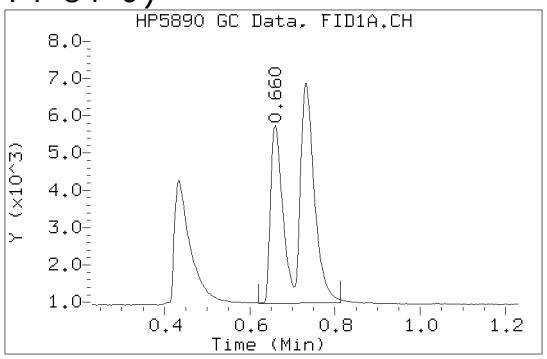
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\022.D
Inj Date : 30-JAN-2023 12:55
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

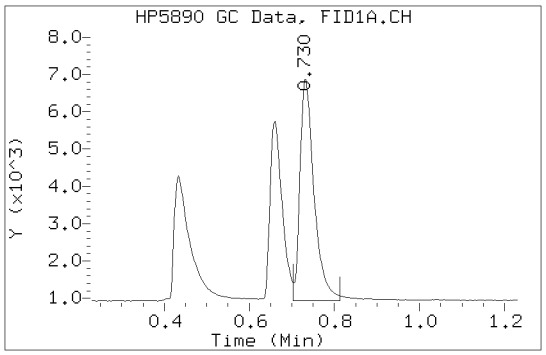
BEFORE

MASS
44
AREA
22792
HEIGHT
4768
30-Jan-2023
13:02
ALSHS
Server



AFTER

MASS
44
AREA
13798
HEIGHT
5930
06-Feb-2023
12:15
ALSHS
Ser

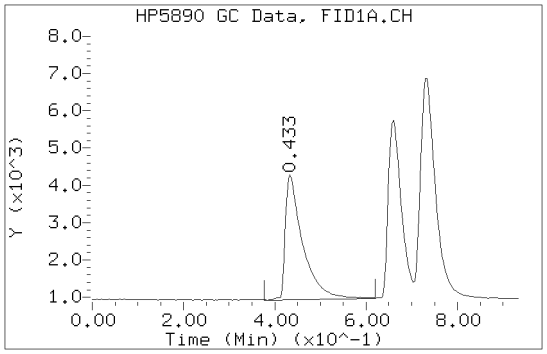


Ethene (74-85-1)

Reason Code:

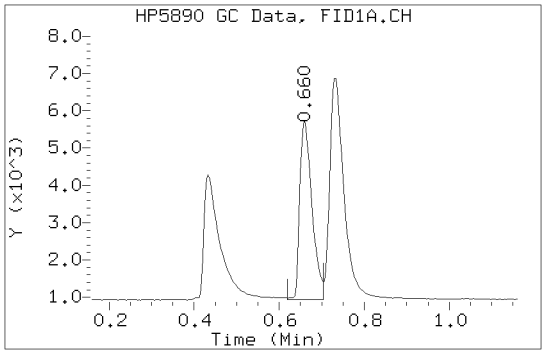
BEFORE

MASS
100
AREA
157
HEIGHT
23
30-Jan-2023
13:02
ALSHS
Server



AFTER

MASS
100
AREA
9682
HEIGHT
4816
06-Feb-2023
12:15
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D Page 1
Report Date: 06-Feb-2023 12:16

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 14:30
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	0.423	0.423	0.000	8678	9.64700	8.900
2 Ethene	0.643	0.643	0.000	10361	16.8500	17.688
3 Ethane	0.716	0.716	0.000	14064	18.0430	19.547(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D

Date : 30-JAN-2023 14:30

Client ID: RSK-CCV

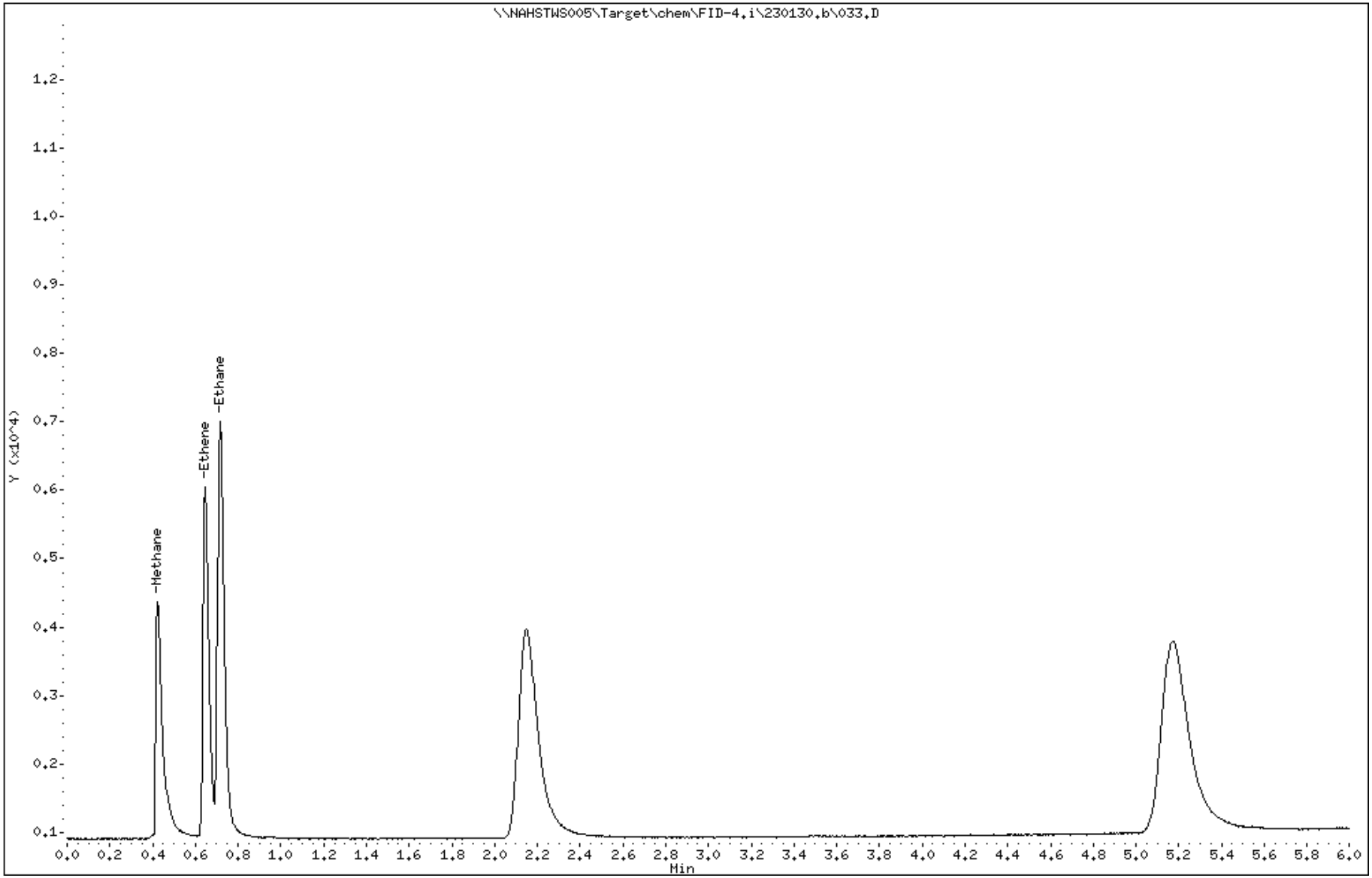
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



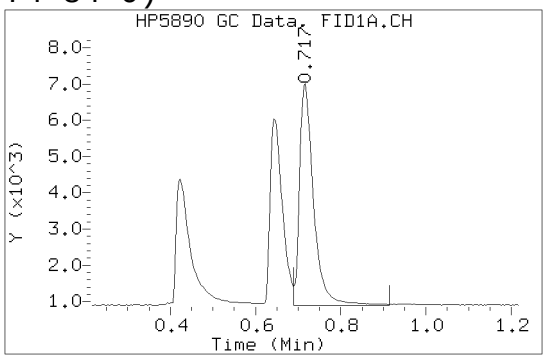
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D
Inj Date : 30-JAN-2023 14:30
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

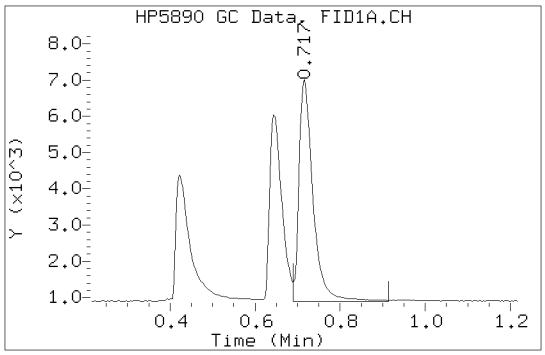
BEFORE

MASS
44
AREA
14064
HEIGHT
6114
06-Feb-2023
12:16
purvi
lad



AFTER

MASS
44
AREA
14064
HEIGHT
6114
06-Feb-2023
12:16
purvi
lad



HS23011294 Wet Chemistry

ALS WO# HS23011294

C:\TOC-L\Data\2022_12_22_002_CAL.tlx

HS2301129 4

	Type	Analysis	Sample Nam	Sample ID	Origin	Manual Diluti	Result	Notes	Status
1	Standard	NPOC	CAL	3100606518	12_22_2022.2	1.000			Completed
2	Unknown	NPOC	ICV	3100606203	12_22_2022.c	1.000	NPOC:10.7		Completed
3	Unknown	NPOC	ICB		12_22_2022.c	1.000	NPOC:0.34		Completed

C:\TOC-L\Data\2022_12_22_002_CAL.tlx

	Date / Time	Vial
1	12/22/2022	1, 2, 3, 4, 5,
2	12/22/2022	8
3	12/22/2022	1

TOC-Control L Report

2022_12_22_002_CAL.tlx

Instr.Information

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

Cal. Curve

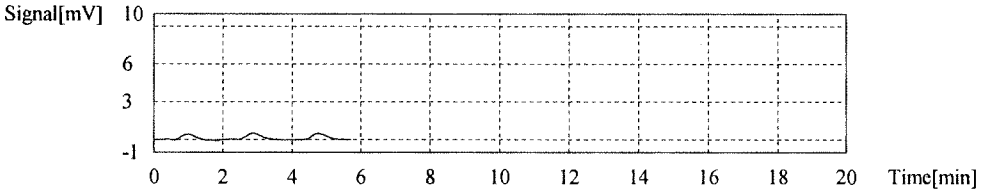
Sample Name:	CAL
Sample ID:	3100606518
Cal. Curve:	12_22_2022.2022_12_22_13_06_45.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.350	50uL	1.000	*******		12/22/2022 12:15:57 PM
2	1.448	50uL	1.000	*******		12/22/2022 12:18:06 PM
3	1.380	50uL	1.000	*******		12/22/2022 12:20:13 PM

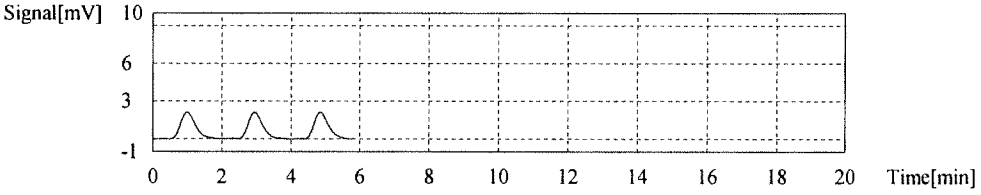
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	1.393



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	6.297	50uL	1.000	*******		12/22/2022 12:28:55 PM
2	5.988	50uL	1.000	*******		12/22/2022 12:31:02 PM
3	6.247	50uL	1.000	*******		12/22/2022 12:33:14 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	6.177



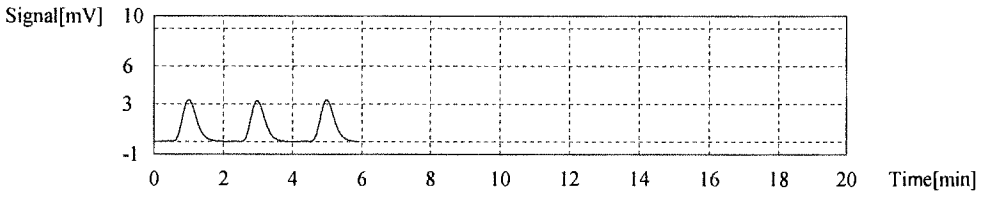
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	9.406	50uL	1.000	*******		12/22/2022 12:41:58 PM
2	9.448	50uL	1.000	*******		12/22/2022 12:44:11 PM
3	9.385	50uL	1.000	*******		12/22/2022 12:46:20 PM

TOC-Control L Report

2022_12_22_002_CAL.tlx

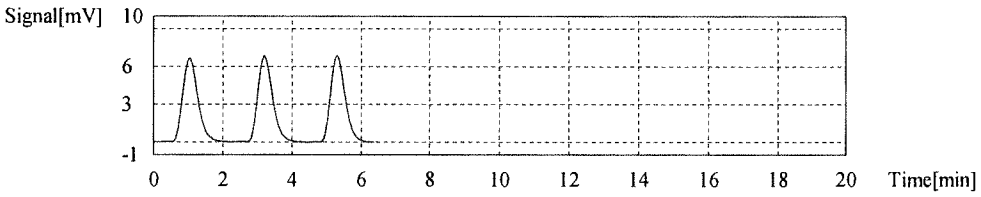
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 9.413



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	20.41	50uL	1.000	*******		12/22/2022 12:55:16 PM
2	20.23	50uL	1.000	*******		12/22/2022 12:57:35 PM
3	20.36	50uL	1.000	*******		12/22/2022 12:59:53 PM

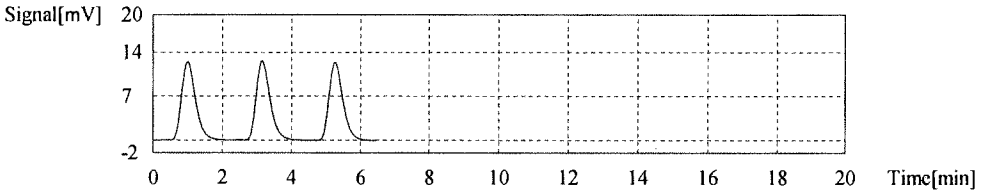
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 20.33



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	35.65	50uL	1.000	*******		12/22/2022 1:08:48 PM
2	35.20	50uL	1.000	*******		12/22/2022 1:11:07 PM
3	35.02	50uL	1.000	*******		12/22/2022 1:13:30 PM

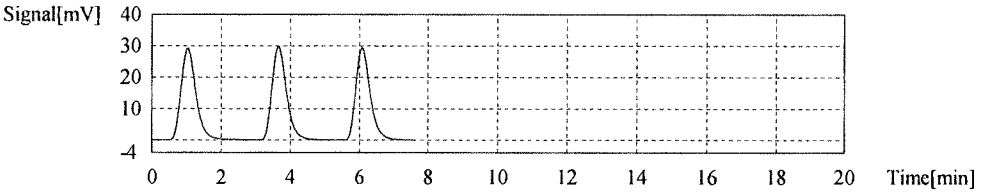
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 35.29



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	88.49	50uL	1.000	*******		12/22/2022 1:22:53 PM
2	87.55	50uL	1.000	*******		12/22/2022 1:25:34 PM
3	87.85	50uL	1.000	*******		12/22/2022 1:28:20 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 87.96



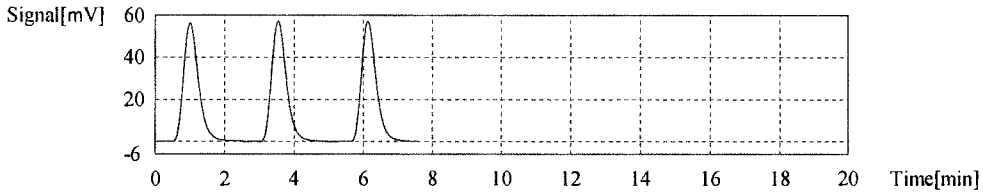
Conc: 50.00mg/L

TOC-Control L Report

2022_12_22_002_CAL.tlx

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	169.8	50uL	1.000	*******		12/22/2022 1:37:37 PM
2	171.3	50uL	1.000	*******		12/22/2022 1:40:28 PM
3	168.9	50uL	1.000	*******		12/22/2022 1:43:09 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 170.0



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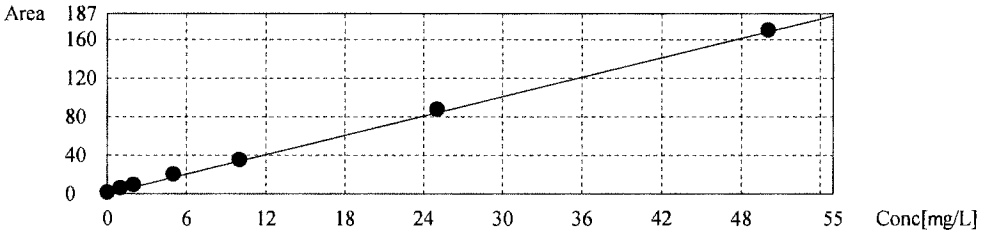
Intercept 0.000
r^2 0.9998
r 0.9999
RSE(%) N/A
Zero Shift Yes



Sample

Sample Name: ICV
Sample ID: 3100606203
Origin: 12_22_2022.cal
Status Completed
Chk. Result

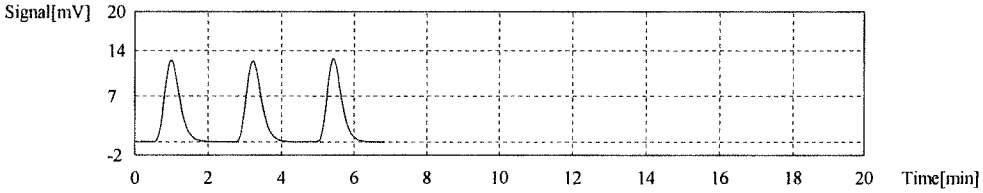
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.41	10.83mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 1:52:08 PM
2	36.34	10.81mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 1:54:34 PM
3	36.03	10.72mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 1:57:10 PM

Mean Area 36.26
Mean Conc. 10.79mg/L



Sample

TOC-Control L Report

2022_12_22_002_CAL.tlx

Sample Name: ICB
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

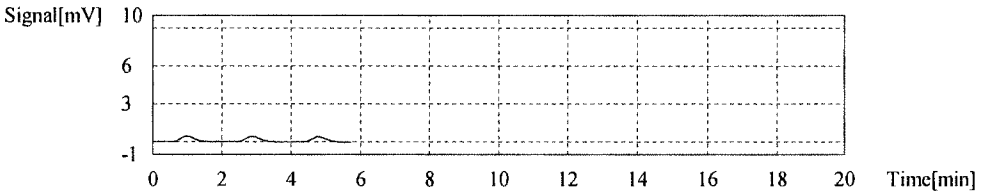
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3481mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil	Ex.	Cal. Curve	Date / Time
1	1.237	0.3681mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 2:06:02 PM
2	1.118	0.3327mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 2:08:10 PM
3	1.155	0.3437mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 2:10:18 PM

Mean Area 1.170
Mean Conc. 0.3481mg/L



C:\TOC-L\Data\2023_01_30_001.tlx

HS23011294

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:25.79mg/L	
2	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.09327mg/	
3	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.06803mg/	
4	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:11.05mg/L	
5	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:11.18mg/L	
6	Unknown	NPOC	HS23011389-04		12_22_2022	1.000	NPOC:2.056mg/L	
7	Unknown	NPOC	HS23011389-05		12_22_2022	1.000	NPOC:0.6773mg/L	
8	Unknown	NPOC	HS23011136-01		12_22_2022	1.000	NPOC:6.477mg/L	
9	Unknown	NPOC	HS23011136-02		12_22_2022	1.000	NPOC:19.93mg/L	
10	Unknown	NPOC	HS23011136-03		12_22_2022	1.000	NPOC:91.46mg/L	
11	Unknown	NPOC	HS23011136-04		12_22_2022	1.000	NPOC:166.0mg/L	
12	Unknown	NPOC	HS23011136-04MS		12_22_2022	1.000	NPOC:177.1mg/L	
13	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.87mg/L	
14	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.2545mg/L	
15	Unknown	NPOC	HS23011136-05		12_22_2022	1.000	NPOC:1555mg/L	
16	Unknown	NPOC	HS23011136-06		12_22_2022	1.000	NPOC:1483mg/L	
17	Unknown	NPOC	HS23011271-01		12_22_2022	1.000	NPOC:5.974mg/L	
18	Unknown	NPOC	HS23011271-02		12_22_2022	1.000	NPOC:5.235mg/L	
19	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.54mg/L	
20	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.2016mg/L	
21	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.1783mg/L	
22	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:11.29mg/L	
23	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:11.14mg/L	
24	Unknown	NPOC	HS23011271-03		12_22_2022	1.000	NPOC:4.907mg/L	
25	Unknown	NPOC	HS23011271-03MS		12_22_2022	1.000	NPOC:15.53mg/L	
26	Unknown	NPOC	HS23011294-01		12_22_2022	1.000	NPOC:4.995mg/L	
27	Unknown	NPOC	HS23011304-02		12_22_2022	1.000	NPOC:0.5531mg/L	
28	Unknown	NPOC	HS23011397-10		12_22_2022	1.000	NPOC:1.679mg/L	
29	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.28mg/L	
30	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.1365mg/L	
31	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.04622mg/	
32	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:10.88mg/L	
33	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:11.08mg/L	
34	Unknown	NPOC	HS23011351-01		12_22_2022	1.000	NPOC:5.602mg/L	
35	Unknown	NPOC	HS23011351-01MS		12_22_2022	1.000	NPOC:16.02mg/L	
36	Unknown	NPOC	HS23011251-01		12_22_2022	1.000	NPOC:43.33mg/L	
37	Unknown	NPOC	HS23011408-01		12_22_2022	1.000	NPOC:25.62mg/L	
38	Unknown	NPOC	HS23011405-01		12_22_2022	1.000	NPOC:32.06mg/L	
39	Unknown	NPOC	HS23011261-01		12_22_2022	1.000	NPOC:6.841mg/L	
40	Unknown	NPOC	HS23011261-02		12_22_2022	1.000	NPOC:12.37mg/L	
41	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.36mg/L	
42	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.4125mg/L	
43	Unknown	NPOC	HS23011447-01		12_22_2022	1.000	NPOC:9.126mg/L	
44	Unknown	NPOC	HS23011353-01		12_22_2022	1.000	NPOC:6.311mg/L	
45	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:25.88mg/L	
46	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.4115mg/L	

C:\TOC-L\Data\2023_01_30_001.tlx

	Status	Date / Time	Vial
1	Completed	1/30/2023 3:18:06 P	1
2	Completed	1/30/2023 3:31:03 P	2
3	Completed	1/30/2023 3:43:56 P	3
4	Completed	1/30/2023 3:58:00 P	4
5	Completed	1/30/2023 4:11:50 P	5
6	Completed	1/30/2023 4:24:55 P	6
7	Completed	1/30/2023 4:37:58 P	7
8	Completed	1/30/2023 4:52:00 P	8
9	Completed	1/30/2023 5:06:32 P	9
10	Completed	1/30/2023 5:20:59 P	10
11	Completed	1/30/2023 5:35:59 P	11
12	Completed	1/30/2023 5:51:05 P	12
13	Completed	1/30/2023 6:05:50 P	1
14	Completed	1/30/2023 6:18:53 P	2
15	Completed	1/30/2023 6:38:36 P	13
16	Completed	1/30/2023 6:57:33 P	14
17	Completed	1/30/2023 7:11:05 P	15
18	Completed	1/30/2023 7:24:52 P	16
19	Completed	1/30/2023 7:39:27 P	1
20	Completed	1/30/2023 7:52:20 P	2
21	Completed	1/30/2023 8:05:16 P	3
22	Completed	1/30/2023 8:19:44 P	4
23	Completed	1/30/2023 8:33:45 P	5
24	Completed	1/30/2023 8:47:31 P	17
25	Completed	1/30/2023 9:01:48 P	18
26	Completed	1/30/2023 9:15:21 P	19
27	Completed	1/30/2023 9:28:18 P	20
28	Completed	1/30/2023 9:41:23 P	21
29	Completed	1/30/2023 9:56:03 P	23
30	Completed	1/30/2023 10:08:56 P	24
31	Completed	1/30/2023 10:21:56 P	3
32	Completed	1/30/2023 10:36:00 P	4
33	Completed	1/30/2023 10:50:17 P	5
34	Completed	1/30/2023 11:04:26 P	25
35	Completed	1/30/2023 11:18:54 P	26
36	Completed	1/30/2023 11:33:41 P	27
37	Completed	1/30/2023 11:48:32 P	28
38	Completed	1/31/2023 12:03:06 A	29
39	Completed	1/31/2023 12:17:14 A	30
40	Completed	1/31/2023 12:33:10 A	31
41	Completed	1/31/2023 12:48:27 A	23
42	Completed	1/31/2023 1:01:20 A	24
43	Completed	1/31/2023 1:15:58 A	32
44	Completed	1/31/2023 1:30:19 A	33
45	Completed	1/31/2023 1:45:47 A	23
46	Completed	1/31/2023 1:58:40 A	24

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: 321100711
Origin: 12_22_2022.cal
Status: Completed
Chk. Result:

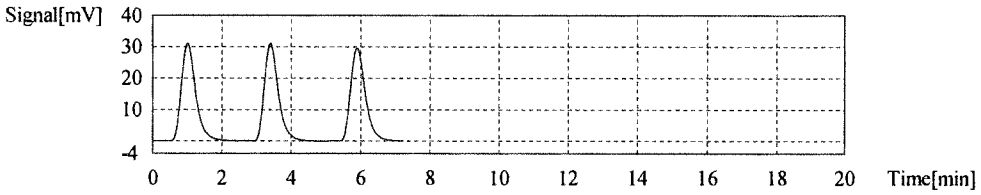
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc	Inj. Vol	Aut. Dil	Ex.	Cal. Curve	Date / Time
1	89.94	26.76mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:34:07 PM
2	89.02	26.49mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:36:52 PM
3	88.60	26.36mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:39:27 PM

Mean Area: 89.19
Mean Conc.: 26.54mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022.cal
Status: Completed
Chk. Result:

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2016mg/L

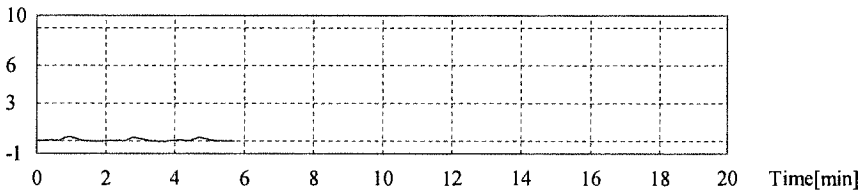
1. Det

Anal.: NPOC

No.	Area	Conc	Inj. Vol	Aut. Dil	Ex.	Cal. Curve	Date / Time
1	0.6359	0.1892mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:48:06 PM
2	0.6281	0.1869mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:50:13 PM
3	0.7681	0.2286mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:52:20 PM

TOC-Control L Report

Mean Area 0.6774
Mean Conc. 0.2016mg/L



Sample

Sample Name: MBLK-01302023
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

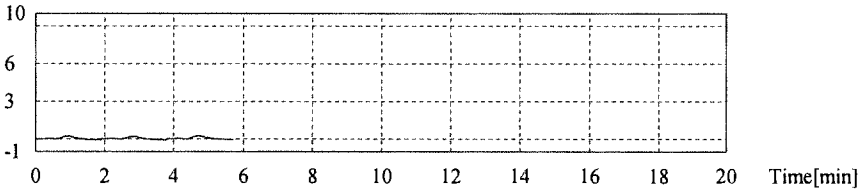
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1783mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5521	0.1643mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:00:59 PM
2	0.5938	0.1767mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:03:06 PM
3	0.6513	0.1938mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:05:16 PM

Mean Area 0.5991
Mean Conc. 0.1783mg/L



Sample

Sample Name: LCS-01302023
Sample ID: 3100606203
Origin: 12_22_2022.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.29mg/L

1. Det

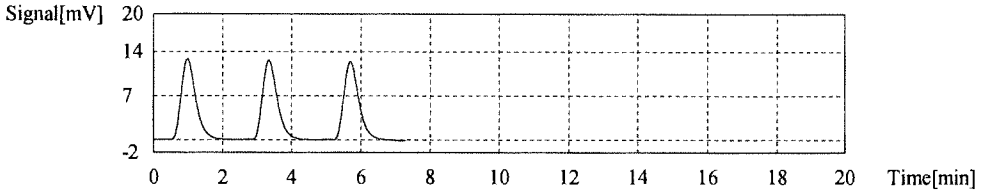
Anal.: NPOC

TOC-Control L Report

2023_01_30_001.tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.98	11.30mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:14:22 PM
2	38.02	11.31mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:16:56 PM
3	37.78	11.24mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:19:44 PM

Mean Area 37.93
Mean Conc. 11.29mg/L



Sample

Sample Name: LCSD-01302023
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

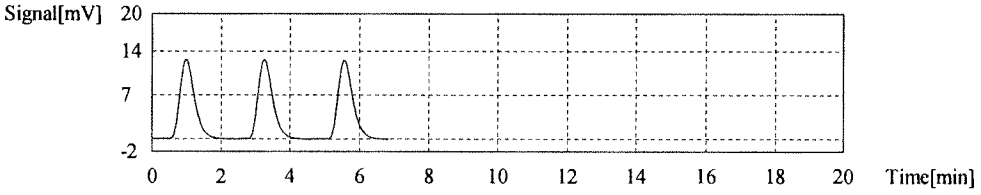
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.24	11.08mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:28:45 PM
2	37.70	11.22mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:31:17 PM
3	37.34	11.11mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:33:45 PM

Mean Area 37.43
Mean Conc. 11.14mg/L



Sample

Sample Name: HS23011271-03
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.907mg/L

1. Det

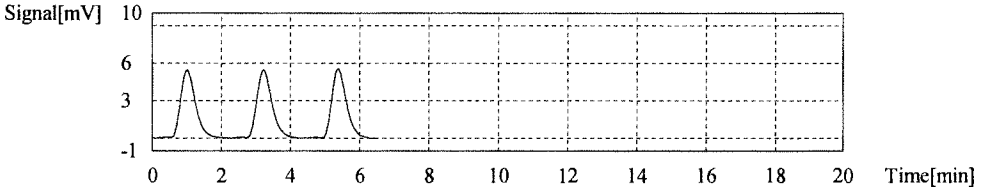
TOC-Control L Report

2023_01_30_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.47	4.901mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:42:48 PM
2	16.60	4.939mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:45:12 PM
3	16.40	4.880mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:47:31 PM

Mean Area 16.49
Mean Conc. 4.907mg/L



Sample

Sample Name: HS23011271-03MS
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

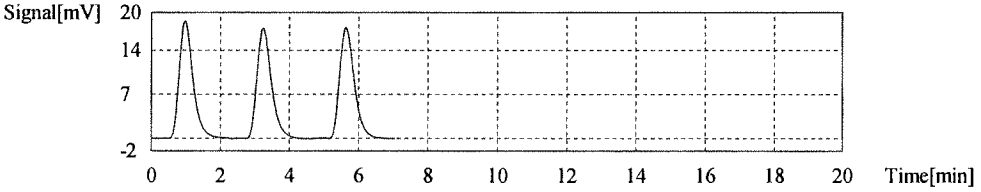
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.05	15.49mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:56:31 PM
2	52.04	15.48mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:59:09 PM
3	52.45	15.61mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:01:48 PM

Mean Area 52.18
Mean Conc. 15.53mg/L



Sample

Sample Name: HS23011294-01
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.995mg/L

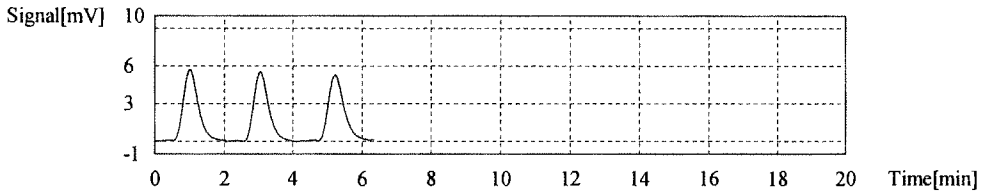
TOC-Control L Report

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.94	5.041mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:10:35 PM
2	16.92	5.035mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:13:00 PM
3	16.50	4.910mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:15:21 PM

Mean Area 16.79
Mean Conc. 4.995mg/L



Sample

Sample Name: CCV
Sample ID: 321100711
Origin: 12_22_2022.cal
Status Completed
Chk. Result

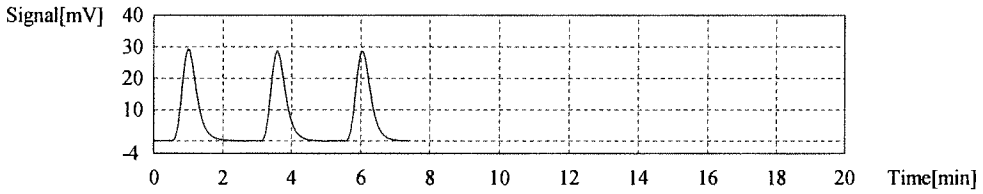
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.83	26.43mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:50:44 PM
2	88.05	26.20mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:53:25 PM
3	88.12	26.22mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:56:03 PM

Mean Area 88.33
Mean Conc. 26.28mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

TOC-Control L Report

2023_01_30_001.tlx

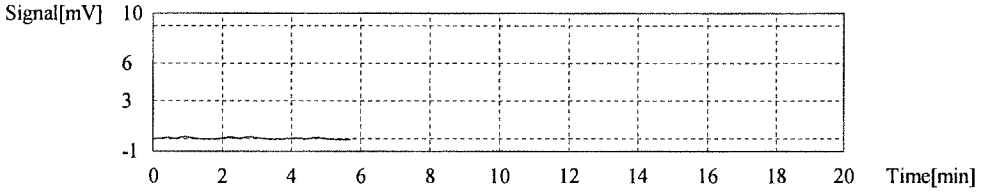
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1365mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4610	0.1372mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 10:04:42 PM
2	0.6250	0.1860mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 10:06:49 PM
3	0.2898	0.08623mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 10:08:56 PM

Mean Area 0.4586
Mean Conc. 0.1365mg/L



HS23011294-E2300085 Perchlorate Level IV Report

ALS WO# HS23011294

January 31, 2023 Service Request No:E2300085

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

Laboratory Results for: HS23011294

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 26, 2023
For your reference, these analyses have been assigned our service request number **E2300085.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston 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.:**	E2300085
Project:	HS23011294	**Date Received:**	01/26/23
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

Ten samples were received for analysis at ALS Environmental in Houston on 01/26/23.

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:

EQ2300044: 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:**E2300085
Project: HS23011294

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300085-001	16WW40-230121	1/21/2023	0740
E2300085-002	16EW08-230121	1/21/2023	0825
E2300085-003	16EW04-230121	1/21/2023	0910
E2300085-004	16WW27-230121	1/21/2023	1030
E2300085-005	16WW43-230121	1/21/2023	1115
E2300085-006	16WW23-230121	1/21/2023	1155
E2300085-007	16WW23-230121-FD	1/21/2023	1155
E2300085-008	16WW24-230121	1/21/2023	1240
E2300085-009	16WW13-230121	1/21/2023	1325
E2300085-010	16WW42-230121	1/21/2023	1405

Service Request Summary

Folder #: **E2300085**
Client Name: ALS Environmental - US
Project Name: HS23011294
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: JGUIN
Date Received: 01/26/23
Internal Due Date: 2/7/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011294
EDD: BASIC_WQC_CASNo_LOD

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300085-001	16WW40-230121	Ground Water	01/21/23 0740	**IV**
E2300085-002	16EW08-230121	Ground Water	01/21/23 0825	**IV**
E2300085-003	16EW04-230121	Ground Water	01/21/23 0910	**IV**
E2300085-004	16WW27-230121	Ground Water	01/21/23 1030	**IV**
E2300085-005	16WW43-230121	Ground Water	01/21/23 1115	**IV**
E2300085-006	16WW23-230121	Ground Water	01/21/23 1155	**IV**
E2300085-007	16WW23-230121-FD	Ground Water	01/21/23 1155	**IV**
E2300085-008	16WW24-230121	Ground Water	01/21/23 1240	**IV**
E2300085-009	16WW13-230121	Ground Water	01/21/23 1325	**IV**
E2300085-010	16WW42-230121	Ground Water	01/21/23 1405	**IV**

Service Request Summary

Folder #: **E2300085**
Client Name: ALS Environmental - US
Project Name: HS23011294
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: JGUIN
Date Received: 01/26/23
Internal Due Date: 2/7/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011294
EDD: BASIC_WQC_CASNo_LOD

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	9	IV Due 2/13
Semivoa GCMS	ClO4 DOD/6850	1	MS/DMS

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
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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20840**

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:	HS23011294
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23011294-01**	**16WW40-230121**	**Groundwater**	**21 Jan 2023 07:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
2.	**HS23011294-02**	**16EW08-230121**	**Groundwater**	**21 Jan 2023 08:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
3.	**HS23011294-03**	**16EW04-230121**	**Groundwater**	**21 Jan 2023 09:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
4.	**HS23011294-04**	**16WW27-230121**	**Groundwater**	**21 Jan 2023 10:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
5.	**HS23011294-05**	**16WW43-230121**	**Groundwater**	**21 Jan 2023 11:15**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
6.	**HS23011294-06**	**16WW23-230121**	**Groundwater**	**21 Jan 2023 11:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
7.	**HS23011294-07**	**16WW23-230121-FD**	**Groundwater**	**21 Jan 2023 11:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
8.	**HS23011294-08**	**16WW24-230121**	**Groundwater**	**21 Jan 2023 12:40**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 20840**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
9.	**HS23011294-09**	**16WW13-230121**	**Groundwater**	**21 Jan 2023 13:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
10.	**HS23011294-10**	**16WW42-230121**	**Groundwater**	**21 Jan 2023 14:05**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023

Comments: 16WW24-230121 ms/msd

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: JLouis Date/Time: 01/26/23 0900

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

ALS Environmental

Cooler Receipt Form

Project Chemist JC

Client/Project ALS Houston

Thermometer ID IR31

Date/Time Received: 01/26/23 0900 Initials: JC

Date/Time Logged in: 01/27/23 0800 Initials JC

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ○ 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?
		01/26/23	0900	CG	2.0	☑
						☐
						☐
						☐

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

ALS Environmental - Houston HRMS
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Preparation Information Benchsheet

Prep Run#: 413779 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/30/23 13:47

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300083-001	CTC-37_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300083-002	EA-42_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300083-003	CTC-27_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300083-004	CTC-7_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300083-005	CTC-1_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300083-006	EA-22_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300083-007	CTC-49_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300083-008	900-1_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300083-009	CTC-20_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300083-010	EA-52_0123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300085-001	16WW40-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300085-002	16EW08-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300085-003	16EW04-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300085-004	16WW27-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300085-005	16WW43-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300085-006	16WW23-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300085-007	16WW23-230121-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300085-008	16WW24-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2300085-009	16WW13-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
20	E2300085-010	16WW42-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
21	EQ2300044-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2300044-02	LCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2300044-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
24	EQ2300044-04	16WW24-230121 MS	.01	6850/ClO4 DOD			Liquid	10mL	
25	EQ2300044-05	16WW24-230121 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

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

E2300083-001	100.00µL	E2300083-002	100.00µL	E2300083-003	100.00µL	E2300083-004	100.00µL	E2300083-005	100.00µL	E2300083-006	100.00µL
E2300083-007	100.00µL	E2300083-008	100.00µL	E2300083-009	100.00µL	E2300083-010	100.00µL	E2300085-001	100.00µL	E2300085-002	100.00µL
E2300085-003	100.00µL	E2300085-004	100.00µL	E2300085-005	100.00µL	E2300085-006	100.00µL	E2300085-007	100.00µL	E2300085-008	100.00µL
E2300085-009	100.00µL	E2300085-010	100.00µL	EQ2300044-01	100.00µL	EQ2300044-02	100.00µL	EQ2300044-03	100.00µL	EQ2300044-04	100.00µL
EQ2300044-05	100.00µL										

Preparation Information Benchsheet

Prep Run#: 413779 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/30/23 13:47

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

EQ2300044-02 1.00µL EQ2300044-03 1.00µL EQ2300044-04 1.00µL EQ2300044-05 1.00µL

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 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)		

Preparation Steps

Step: Preparation
Started: 1/30/23 13:47
Finished: 1/30/23 15:30
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 01/30/23

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:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 0740
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW40-230121	**Units:**	µg/L
Lab Code:	E2300085-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0305**	J	0.100	0.0500	0.0250	1	1/30/23	1/31/23 11:09	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 0825
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16EW08-230121	**Units:**	µg/L
Lab Code:	E2300085-002	**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	1/30/23	1/31/23 11:15	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 0910
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16EW04-230121	**Units:**	µg/L
Lab Code:	E2300085-003	**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	1/30/23	1/31/23 11:20	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1030
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW27-230121	**Units:**	µg/L
Lab Code:	E2300085-004	**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	1/30/23	1/31/23 11:27	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1115
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW43-230121	**Units:**	µg/L
Lab Code:	E2300085-005	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.105**		0.100	0.0500	0.0250	1	1/30/23	1/31/23 11:33	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1155
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW23-230121	**Units:**	µg/L
Lab Code:	E2300085-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/30/23	1/31/23 11:39	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1155
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW23-230121-FD	**Units:**	µg/L
Lab Code:	E2300085-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/30/23	1/31/23 11:45	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1240
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW24-230121	**Units:**	µg/L
Lab Code:	E2300085-008	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/30/23	1/31/23 11:56	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1325
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW13-230121	**Units:**	µg/L
Lab Code:	E2300085-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/30/23	1/31/23 12:02	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1405
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW42-230121	**Units:**	µg/L
Lab Code:	E2300085-010	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0572**	J	0.100	0.0500	0.0250	1	1/30/23	1/31/23 12:08	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300044-01	**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	1/30/23	1/31/23 09:34	413779	793155	

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: HS23011294
Sample Matrix: Ground Water

Service Request: E2300085
Date Analyzed: 1/31/23

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: 413779

	Lab Control Sample EQ2300044-02			Duplicate Lab Control Sample EQ2300044-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0989	0.100	99	0.0865	0.100	87	84 - 119	13	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:**	E2300085
Project:	HS23011294	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300044-02	**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	**0.0989**	J	0.100	0.0500	0.0250	1	1/30/23	1/31/23 09:39	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300044-03	**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	**0.0865**	J	0.100	0.0500	0.0250	1	1/30/23	1/31/23 09:45	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
		Date Analyzed:	1/31/23

Matrix Spike Summary

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

Sample Name:	16WW24-230121	**Units:**	µg/L
Lab Code:	E2300085-008	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW24-230121MS Matrix Spike EQ2300044-04			16WW24-230121DMS Duplicate Matrix Spike EQ2300044-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.0983	0.100	98	0.0887	0.100	89	84 - 119	10	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:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1240
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW24-230121	**Units:**	µg/L
Lab Code:	EQ2300044-04	**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	**0.0983**	J	0.100	0.0500	0.0250	1	1/30/23	1/31/23 10:00	413779	793155	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Collected:**	1/21/23 1240
Sample Matrix:	Ground Water	**Date Received:**	1/26/23
Sample Name:	16WW24-230121	**Units:**	µg/L
Lab Code:	EQ2300044-05	**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	**0.0887**	J	0.100	0.0500	0.0250	1	1/30/23	1/31/23 10:06	413779	793155	

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

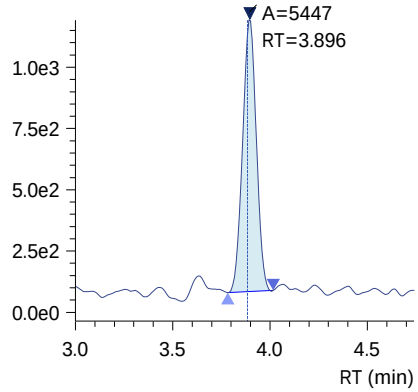
Sample ID: PERCHLORATE1
Date Acquired: 12/14/2022 3:40:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_004.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

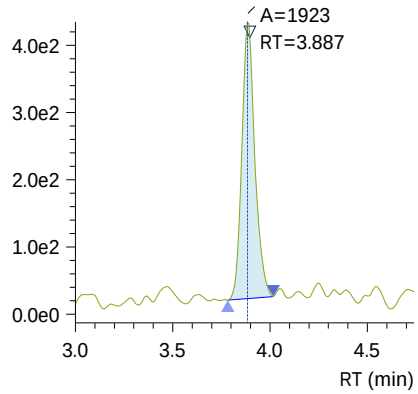
Perchlorate

Conc 0.1031
R#1 35.31 (34.02)

Q 99.00>83.00 (-) 1.19e3



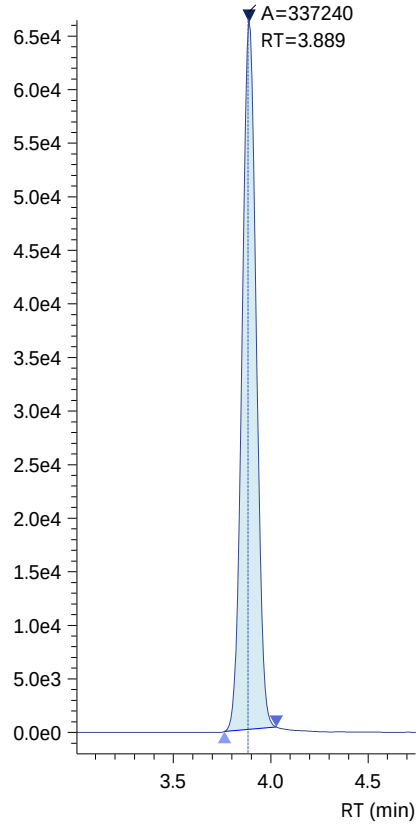
R1 101.00>85.00 (-) 4.35e2



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

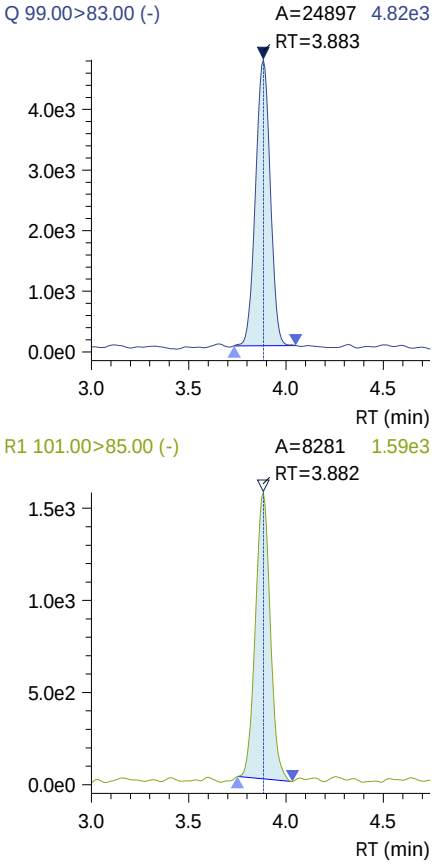
PERCHLORATE2

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	----	----	

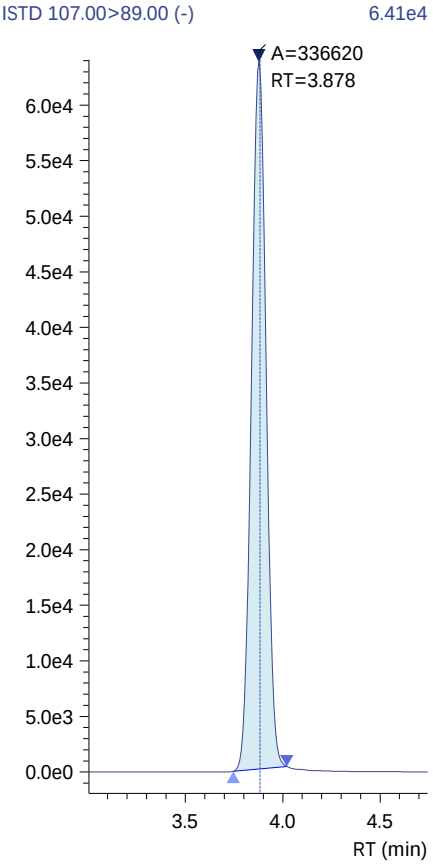
Perchlorate

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

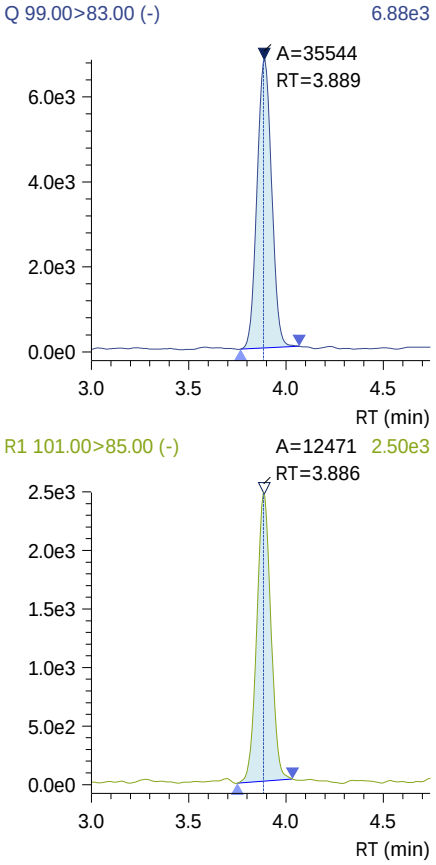
PERCHLORATE3

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	----	----	

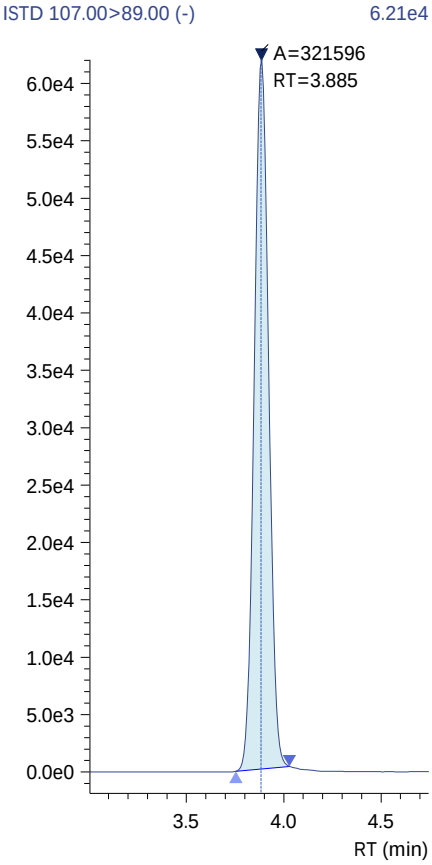
Perchlorate

Conc 0.7053
R#1 35.09 (34.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE4

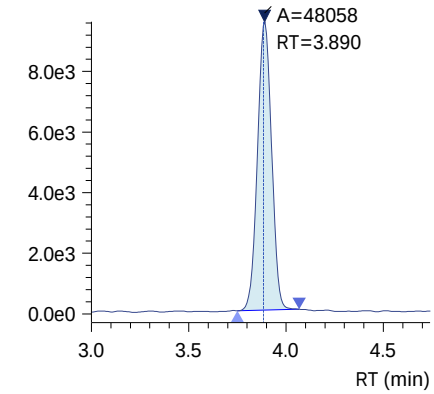
Sample ID: PERCHLORATE4
Date Acquired: 12/14/2022 3:57:06 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_007.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

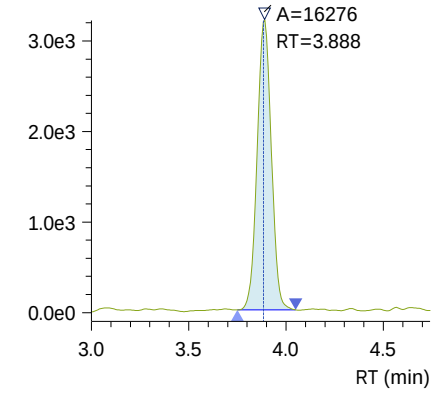
Perchlorate

Conc 1.0036
R#1 33.87 (34.02)

Q 99.00>83.00 (-) 9.64e3



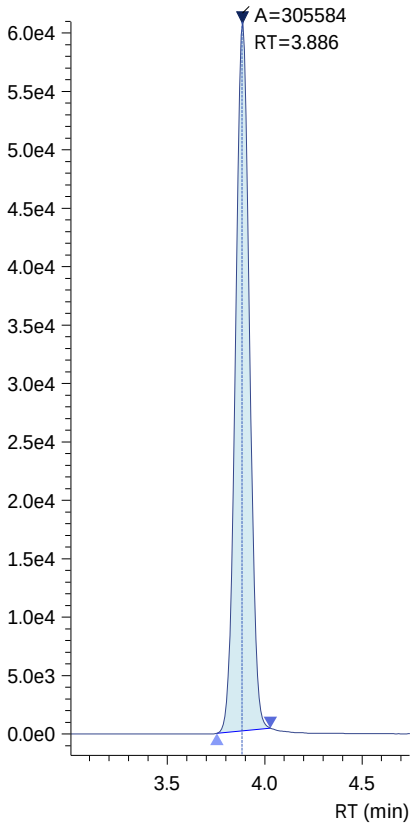
R1 101.00>85.00 (-) 3.23e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.10e4



Insight Report

Printed at 12/15/2022 10:55:51 AM

PERCHLORATE5

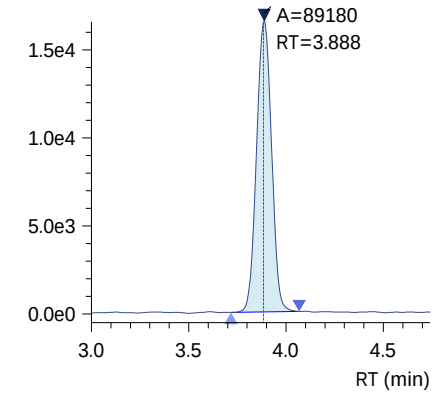
Sample ID: PERCHLORATE5
Date Acquired: 12/14/2022 4:02:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_008.lcd
Vial: 5 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

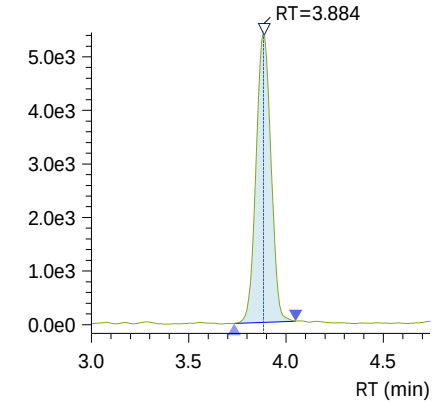
Perchlorate

Conc 1.9213
R#1 32.32 (34.02)

Q 99.00>83.00 (-) 1.66e4



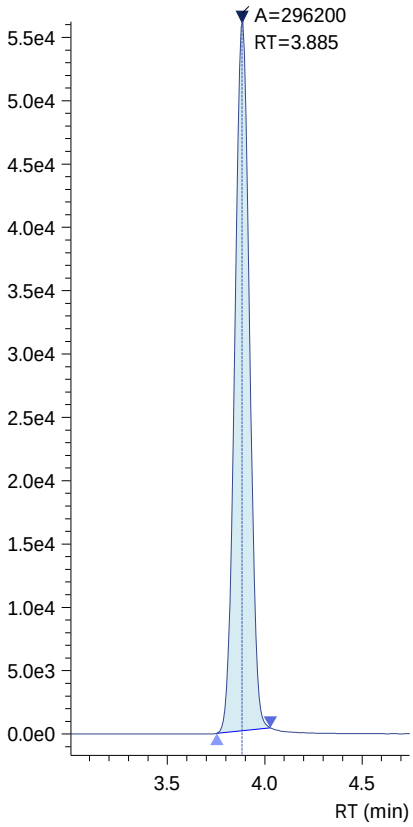
R1 101.00>85.00 (-) A=28822 5.45e3



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

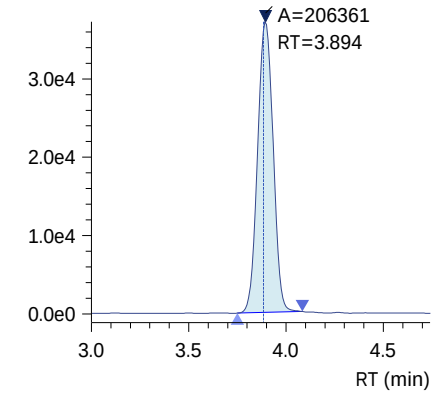
Sample ID: PERCHLORATE6
Date Acquired: 12/14/2022 4:09:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_009.lcd
Vial: 6 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

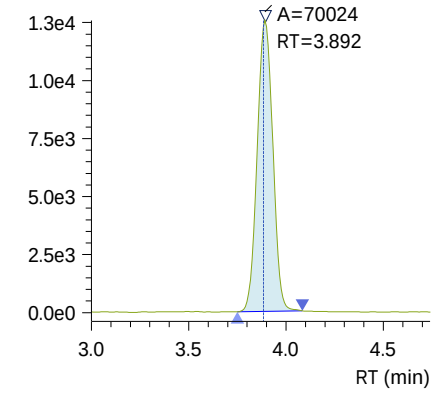
Perchlorate

Conc 5.0202
R#1 33.93 (34.02)

Q 99.00>83.00 (-) 3.73e4



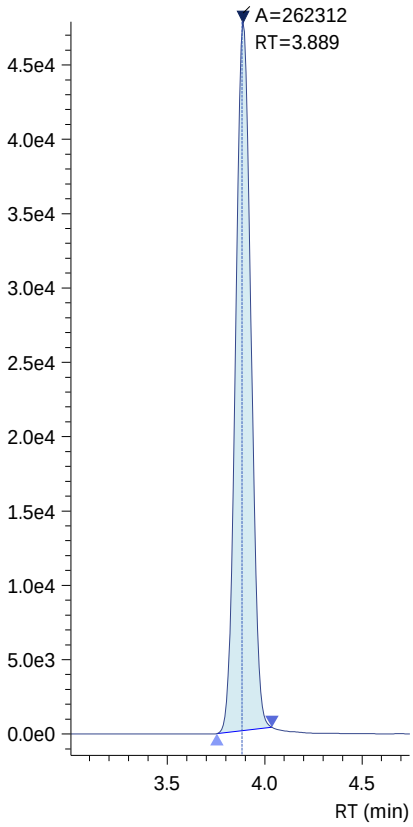
R1 101.00>85.00 (-) 1.26e4



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

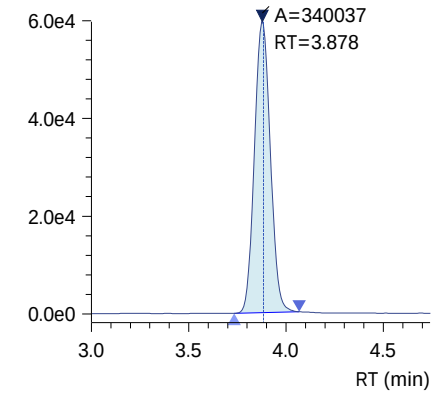
Sample ID: PERCHLORATE7
Date Acquired: 12/14/2022 4:15:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_010.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

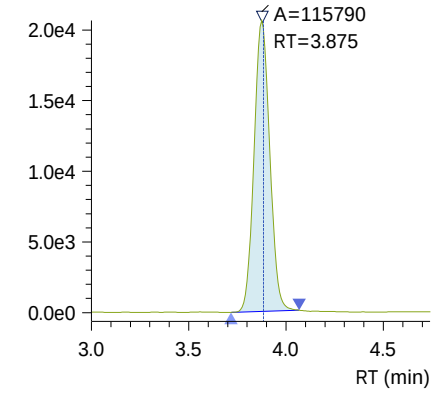
Perchlorate

Conc 9.8317
R#1 34.05 (34.02)

Q 99.00>83.00 (-) 5.98e4



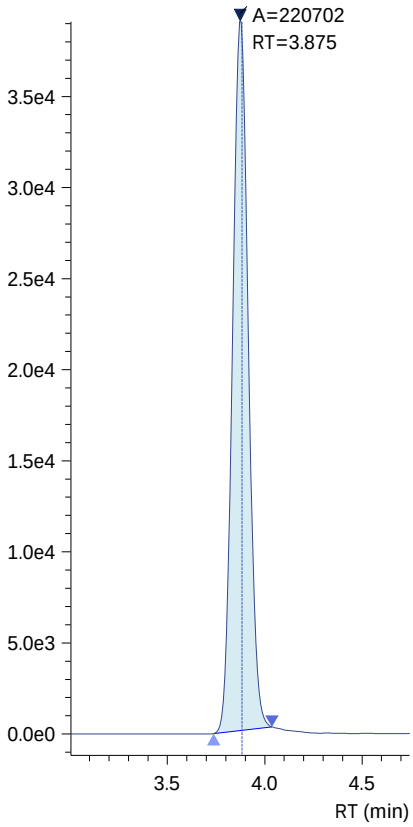
R1 101.00>85.00 (-) 2.07e4



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

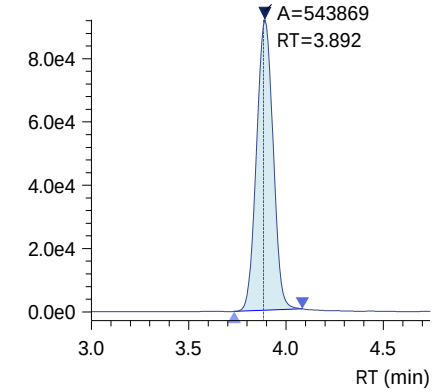
Sample ID: PERCHLORATE8
Date Acquired: 12/14/2022 4:20:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_011.lcd
Vial: 8 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

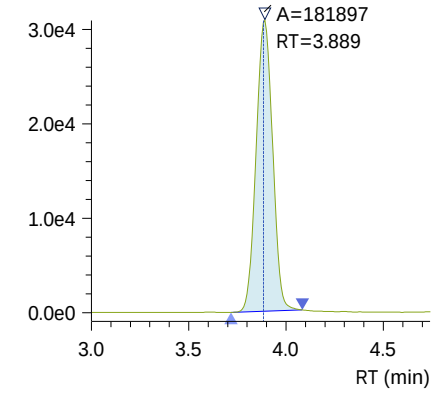
Perchlorate

Conc 20.6806
R#1 33.45 (34.02)

Q 99.00>83.00 (-) 9.23e4



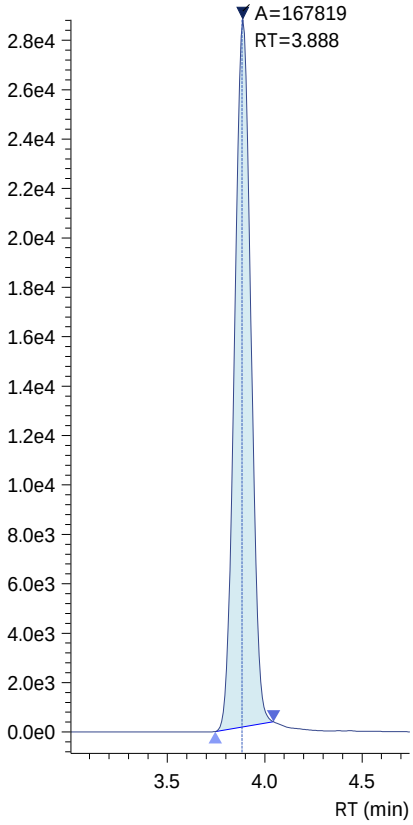
R1 101.00>85.00 (-) 3.09e4



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

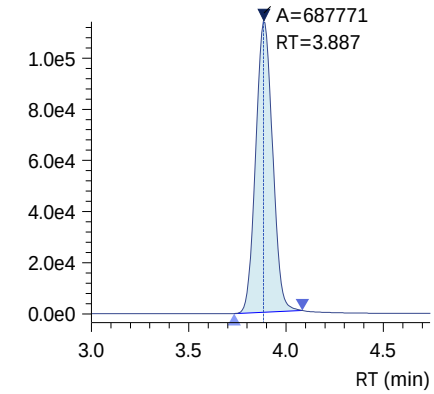
Sample ID: PERCHLORATE9
Date Acquired: 12/14/2022 4:25:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_012.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

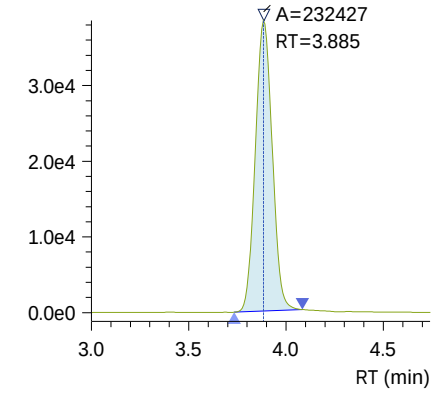
Perchlorate

Conc 30.5860
R#1 33.79 (34.02)

Q 99.00>83.00 (-) 1.14e5



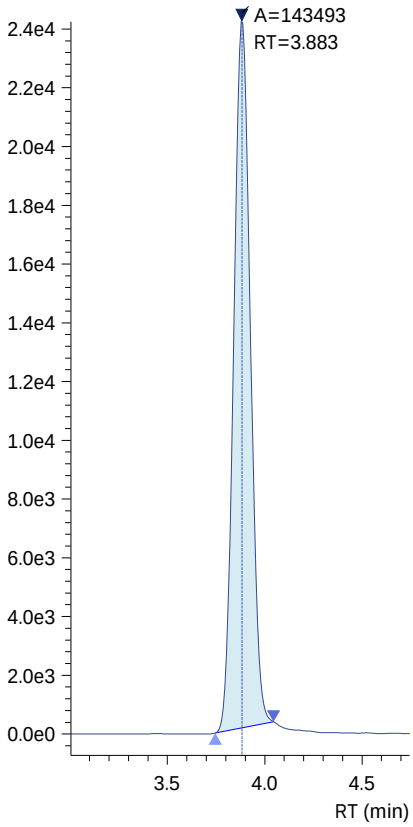
R1 101.00>85.00 (-) 3.86e4



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

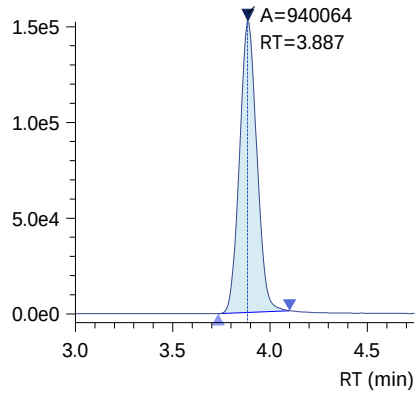
Sample ID: PERCHLORATE10
Date Acquired: 12/14/2022 4:31:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20221214\20221214_013.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 1

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	----	----	

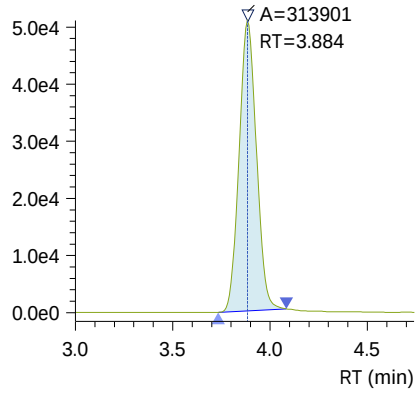
Perchlorate

Conc 50.6464
R#1 33.39 (34.02)

Q 99.00>83.00 (-) 1.53e5



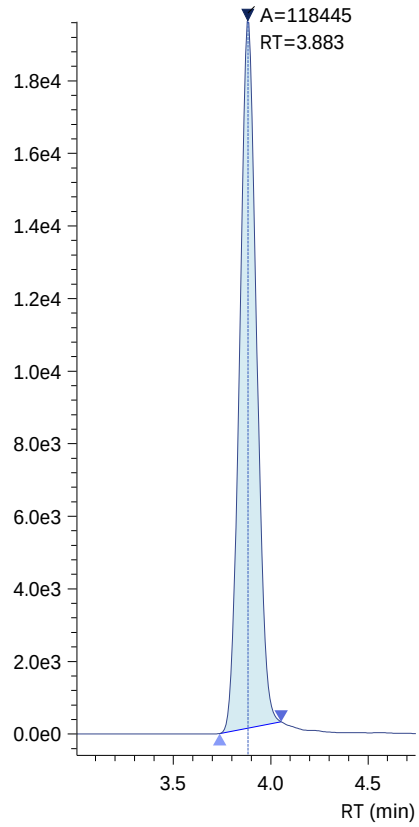
R1 101.00>85.00 (-) 5.12e4



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

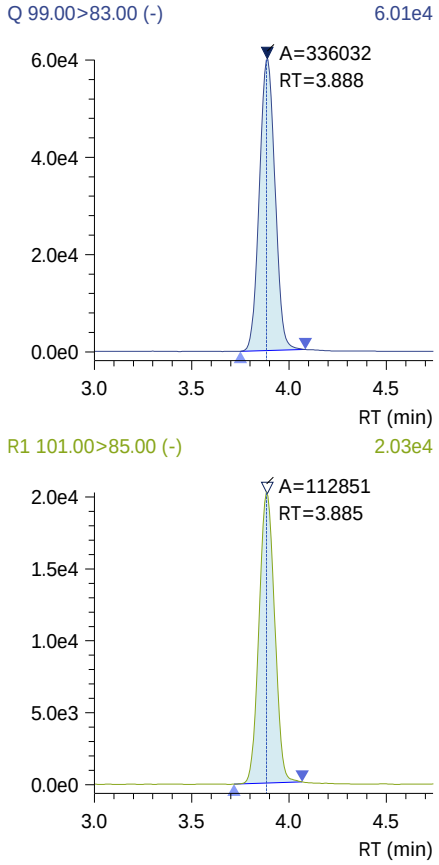
PERCHLORATEICV

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	----	----	

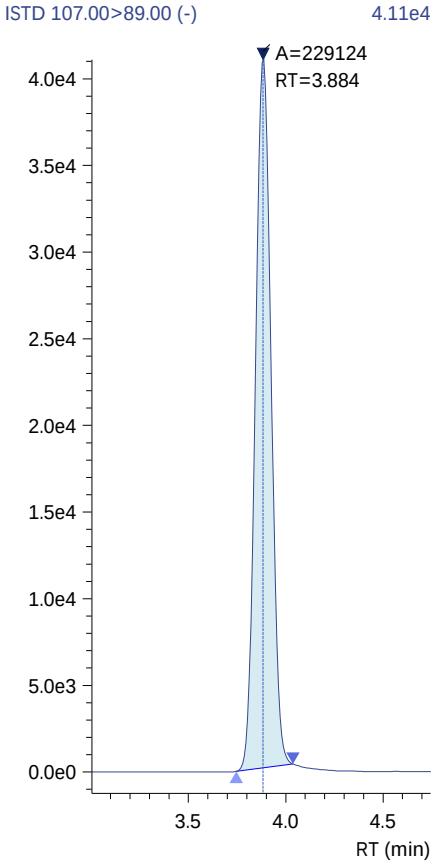
Perchlorate

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

20230131-793155

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	ICS		20230131-002	Perchlorate6850c.lcm	1x	☒	32103024	1/31/2023 9:15
2	LODV		20230131-003	Perchlorate6850c.lcm	1x	☒	225199	1/31/2023 9:21
3	PERCHLORATE7		20230131-004	Perchlorate6850c.lcm	1x	☒	226067	1/31/2023 9:28
4	EQ2300044-01		20230131-005	Perchlorate6850c.lcm	1x	☒		1/31/2023 9:34
5	EQ2300044-02		20230131-006	Perchlorate6850c.lcm	1x	☒		1/31/2023 9:39
6	EQ2300044-03		20230131-007	Perchlorate6850c.lcm	1x	☒		1/31/2023 9:45
7	EQ2300044-04		20230131-008	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:00
8	EQ2300044-05		20230131-009	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:06
9	E2300083-001		20230131-010	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:17
10	E2300083-002		20230131-011	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:23
11	E2300083-003		20230131-012	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:28
12	E2300083-004		20230131-013	Perchlorate6850c.lcm	1x	☒	DNU-OUT OF ICAL RANGE	1/31/2023 10:34
13	E2300083-005		20230131-014	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:40
14	PERCHLORATE7		20230131-015	Perchlorate6850c.lcm	1x	☒	226067	1/31/2023 10:46
15	E2300083-007		20230131-016	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:51
16	E2300083-009		20230131-017	Perchlorate6850c.lcm	1x	☒		1/31/2023 10:57
17	E2300083-010		20230131-018	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:03
18	E2300085-001		20230131-019	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:09
19	E2300085-002		20230131-020	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:15
20	E2300085-003		20230131-021	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:20
21	E2300085-004		20230131-022	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:27
22	E2300085-005		20230131-023	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:33
23	E2300085-006		20230131-024	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:39
24	E2300085-007		20230131-025	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:45
25	PERCHLORATE7		20230131-026	Perchlorate6850c.lcm	1x	☒	226067	1/31/2023 11:51
26	E2300085-008		20230131-027	Perchlorate6850c.lcm	1x	☒		1/31/2023 11:56
27	E2300085-009		20230131-028	Perchlorate6850c.lcm	1x	☒		1/31/2023 12:02
28	E2300085-010		20230131-029	Perchlorate6850c.lcm	1x	☒		1/31/2023 12:08
29	E2300083-004x5		20230131-030	Perchlorate6850c.lcm	5x	☒		1/31/2023 12:27
30	E2300083-006x1k		20230131-031	Perchlorate6850c.lcm	1000x	☒		1/31/2023 12:32
31	E2300083-008x1k		20230131-032	Perchlorate6850c.lcm	1000x	☒		1/31/2023 12:38
32	PERCHLORATE7		20230131-033	Perchlorate6850c.lcm	1x	☒	226067	1/31/2023 12:44

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300085
Project:	HS23011294	**Date Analyzed:**	1/31/23 09:28

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230131\20230131-004	**Lab Code:**	EQ2300046-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793155
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	EQ2300046-01	210,287	3.44
Method Blank	EQ2300044-01	255,867	3.45
Lab Control Sample	EQ2300044-02	244,692	3.45
Duplicate Lab Control Sample	EQ2300044-03	247,596	3.45
16WW24-230121MS	EQ2300044-04	257,088	3.45
16WW24-230121DMS	EQ2300044-05	260,700	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:**	E2300085
Project:	HS23011294	**Date Analyzed:**	1/31/23 10:46

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230131\20230131-015	**Lab Code:**	EQ2300046-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793155
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	EQ2300046-02	191,787	3.44
16WW40-230121	E2300085-001	264,292	3.45
16EW08-230121	E2300085-002	270,697	3.45
16EW04-230121	E2300085-003	288,689	3.45
16WW27-230121	E2300085-004	268,347	3.44
16WW43-230121	E2300085-005	258,354	3.44
16WW23-230121	E2300085-006	249,634	3.45
16WW23-230121-FD	E2300085-007	242,754	3.44

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:**	E2300085
Project:	HS23011294	**Date Analyzed:**	1/31/23 11:51

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230131\20230131-026	**Lab Code:**	EQ2300046-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793155
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	EQ2300046-03	178,513	3.44
16WW24-230121	E2300085-008	243,970	3.44
16WW13-230121	E2300085-009	245,753	3.44
16WW42-230121	E2300085-010	250,315	3.44

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:**	E2300085
Project:	HS23011294	**Date Analyzed:**	1/31/23 12:44

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230131\20230131-033	**Lab Code:**	EQ2300046-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793155
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	EQ2300046-04	172,709	3.44

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: HS23011294

Service Request: E2300085
Date Analyzed: 1/31/23

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\20230131\20230131-004

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 793155
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1567	0.1616	3.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011294

Service Request: E2300085
Date Analyzed: 1/31/23

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\20230131\20230131-015

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 793155
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1567	0.1572	0.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011294

Service Request: E2300085
Date Analyzed: 1/31/23

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\20230131\20230131-026

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 793155
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.94	0.1567	0.1557	-0.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011294

Service Request: E2300085
Date Analyzed: 1/31/23

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\20230131\20230131-033

Calibration Date: 12/14/22
Calibration ID: EC2200016
Analysis Lot: 793155
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.79	0.1567	0.1535	-2.1	NA	± 15 %	Average RF

Insight Report

Printed at 1/31/2023 2:25:57 PM

Method File: I:\LCMS01\DATA\20230131\20230131.lcm
Project File: I:\LCMS01\DATA\20230131\20230131.damlp

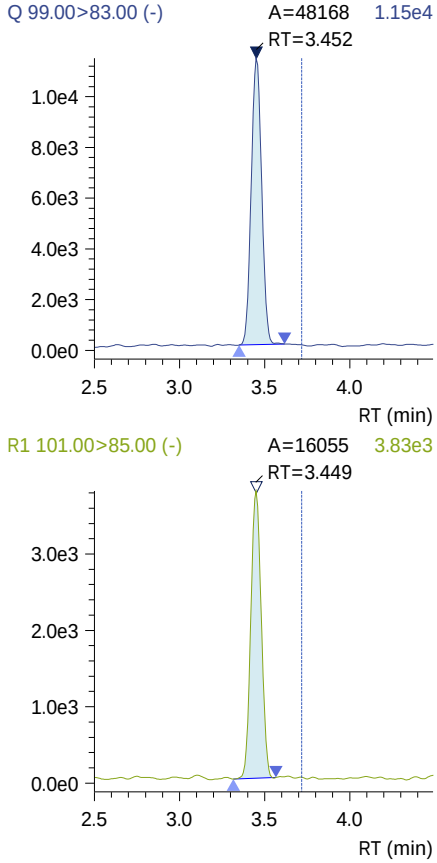
ICS

Sample ID: ICS
Date Acquired: 1/31/2023 9:15:55 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-002.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	3.452	48168	295444	1.0404	ng/mL	101.00 >85.00	33.33	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.449	295444	295444	1.0000	ng/mL	----	----	

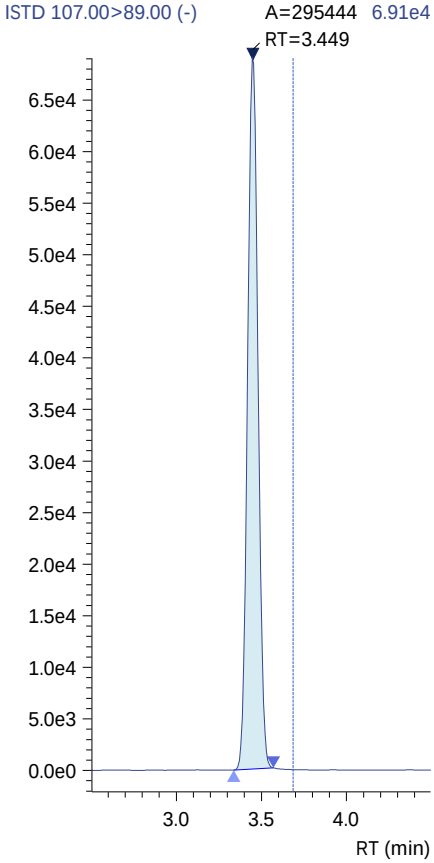
Perchlorate

Conc 1.0404
R#1 33.33 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

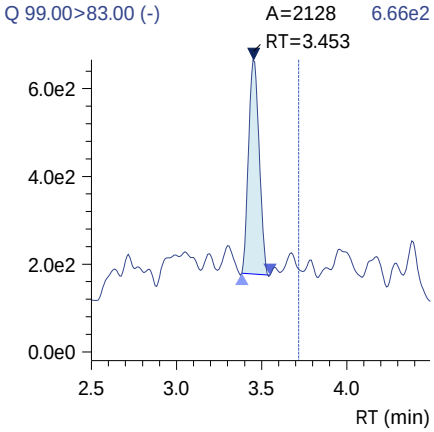
LODV

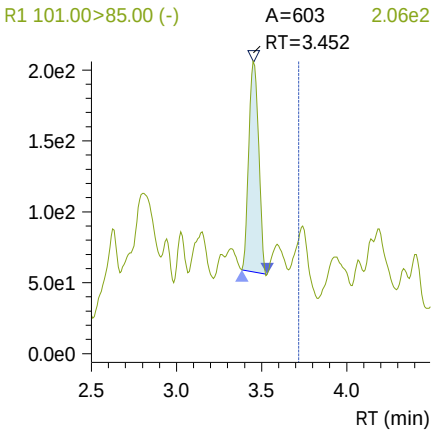
Sample ID: LODV
Date Acquired: 1/31/2023 9:21:41 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-003.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.453	2128	256160	0.0530	ng/mL	101.00 >85.00	28.33	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.451	256160	256160	1.0000	ng/mL	----	----	

Perchlorate

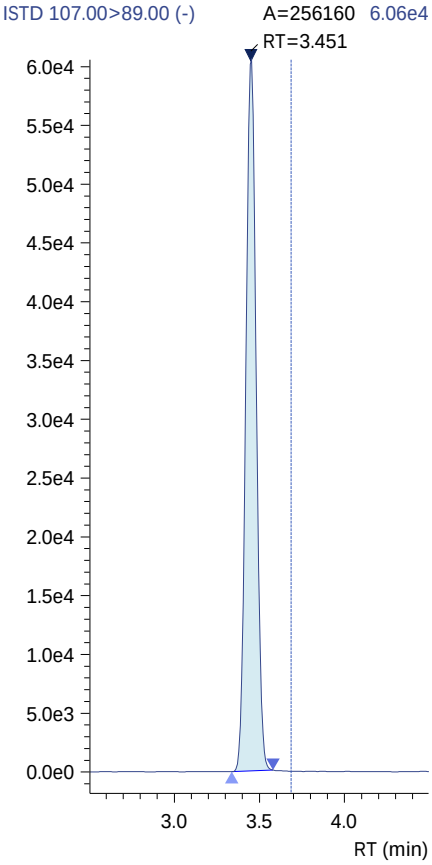
Conc 0.0530
R#1 28.33 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

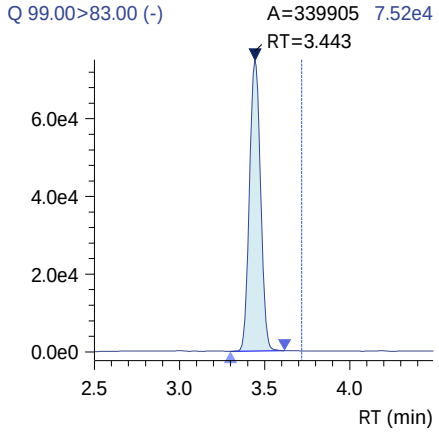
PERCHLORATE7

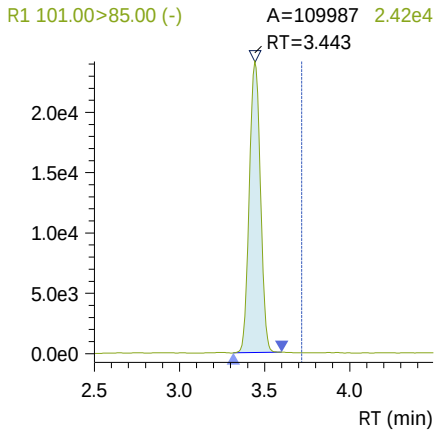
Sample ID: PERCHLORATE7
Date Acquired: 1/31/2023 9:28:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-004.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.443	339905 146	210287	10.3	ng/mL	101.00 >85.00	32.36	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.440	210287	210287	1.0000	ng/mL	----	----	

Perchlorate

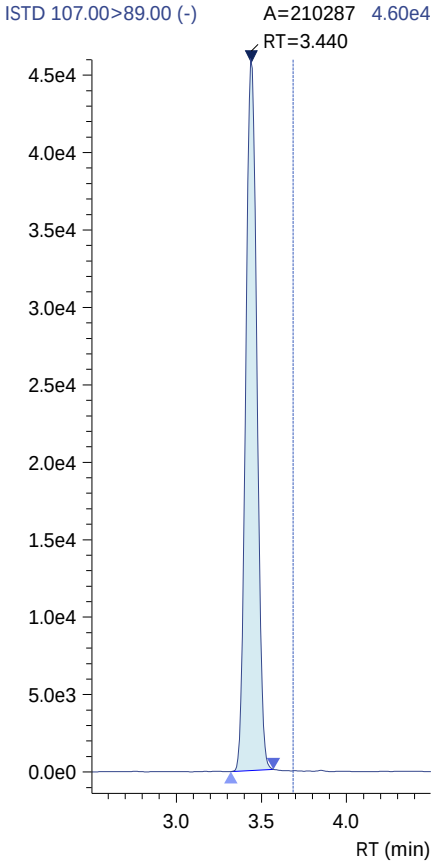
Conc 10.3146
R#1 32.36 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

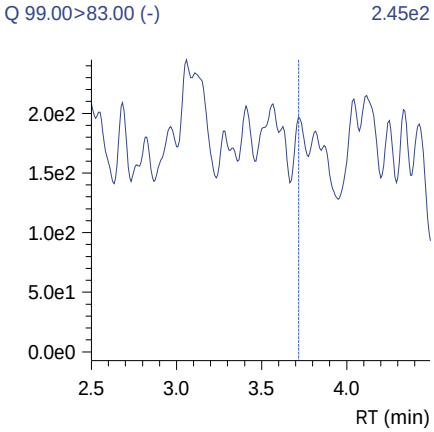
EQ2300044-01

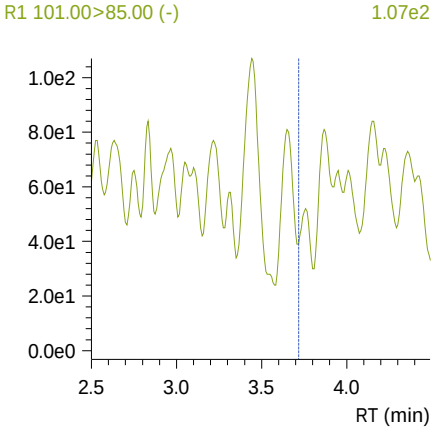
Sample ID: EQ2300044-01
Date Acquired: 1/31/2023 9:34:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-005.lcd
Vial: 6 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	255867	----	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.448	255867	255867	1.0000	ng/mL	----	----	

Perchlorate

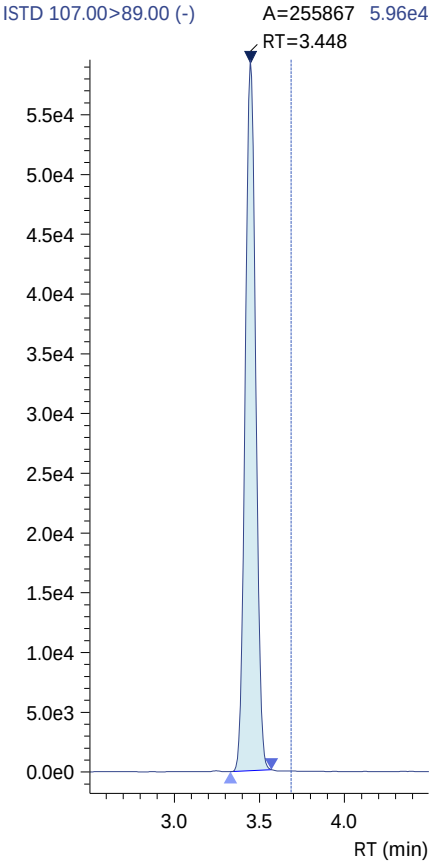
Conc ----
R#1 0.00 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:32:32 PM

Method File: I:\LCMS01\DATA\20230131\20230131.lcm
Project File: I:\LCMS01\DATA\20230131\20230131.damlp

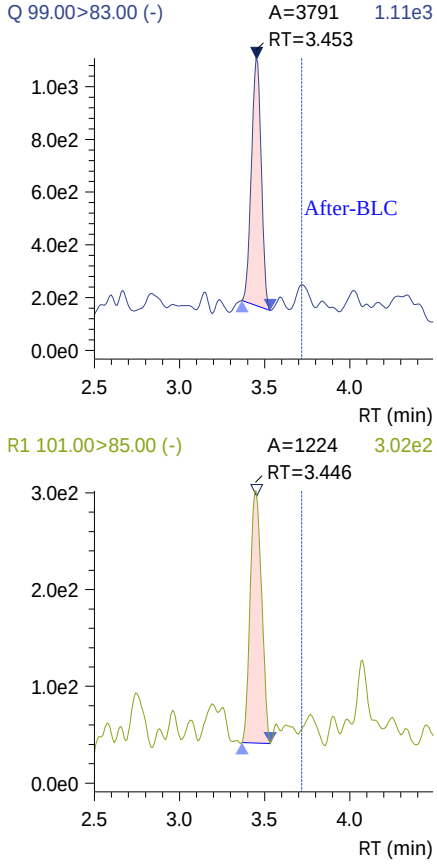
EQ2300044-02

Sample ID: EQ2300044-02
Date Acquired: 1/31/2023 9:39:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-006.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.453	3791	244692	0.0989	ng/mL	101.00 >85.00	32.28	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.449	244692	244692	1.0000	ng/mL	----	----	

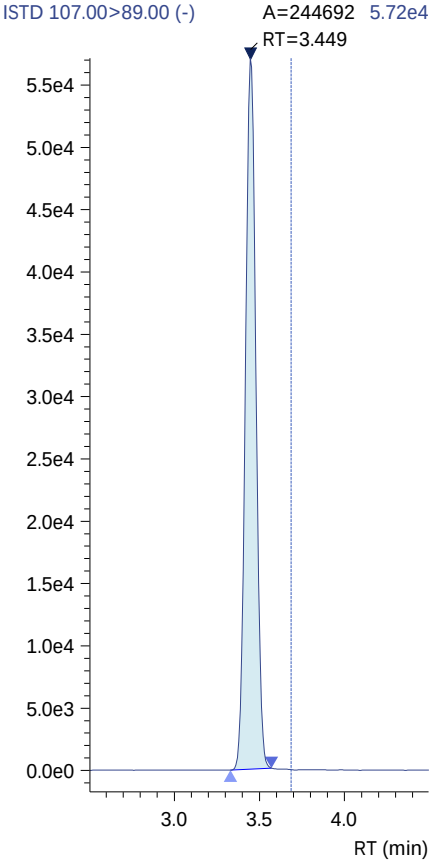
Perchlorate

Conc 0.0989
R#1 32.28 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

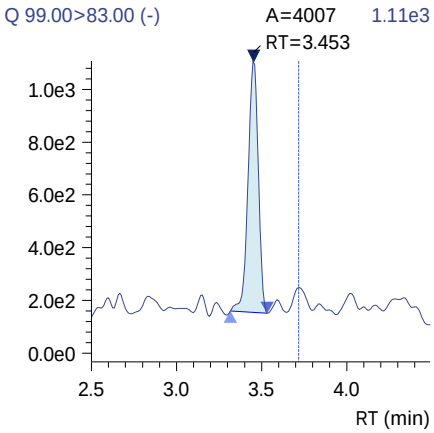
Method File: I:\LCMS01\DATA\20230131\20230131.lcm
Project File: I:\LCMS01\DATA\20230131\20230131.damlp

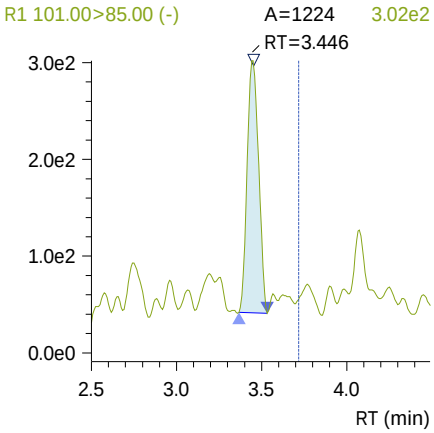
EQ2300044-02

Sample ID: EQ2300044-02
Date Acquired: 1/31/2023 9:39:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-006.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 6

Perchlorate

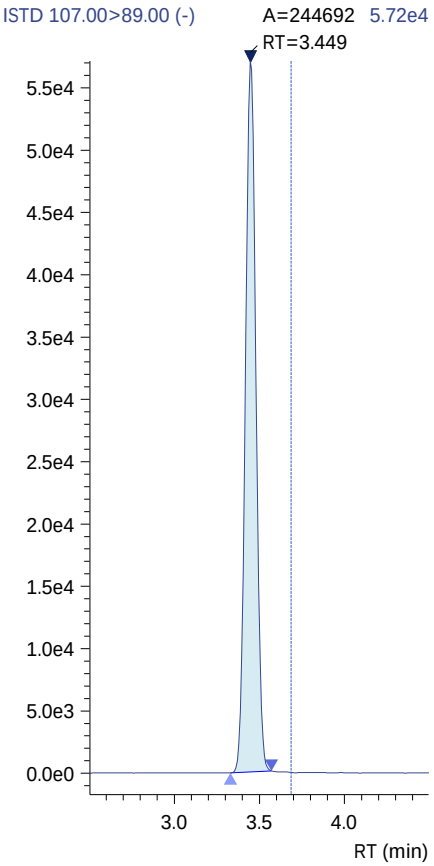
Conc 0.1045
R#1 30.54 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

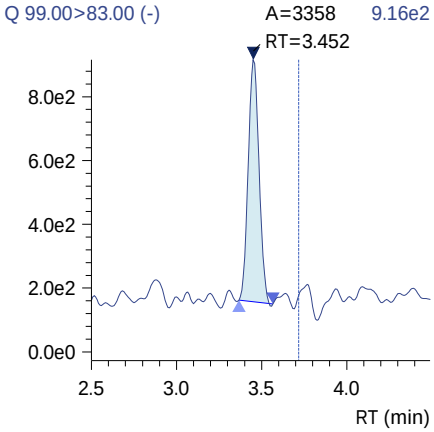
EQ2300044-03

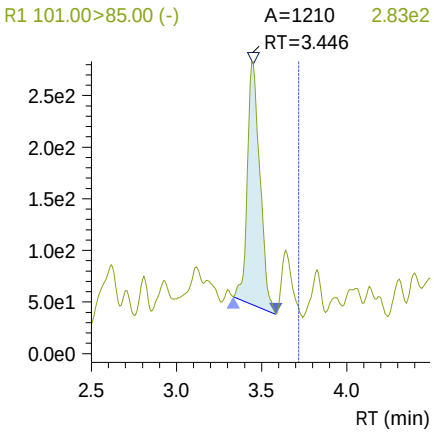
Sample ID: EQ2300044-03
Date Acquired: 1/31/2023 9:45:44 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-007.lcd
Vial: 8 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.452	3358	247596	0.0865	ng/mL	101.00 >85.00	36.03	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.448	247596	247596	1.0000	ng/mL	----	----	

Perchlorate

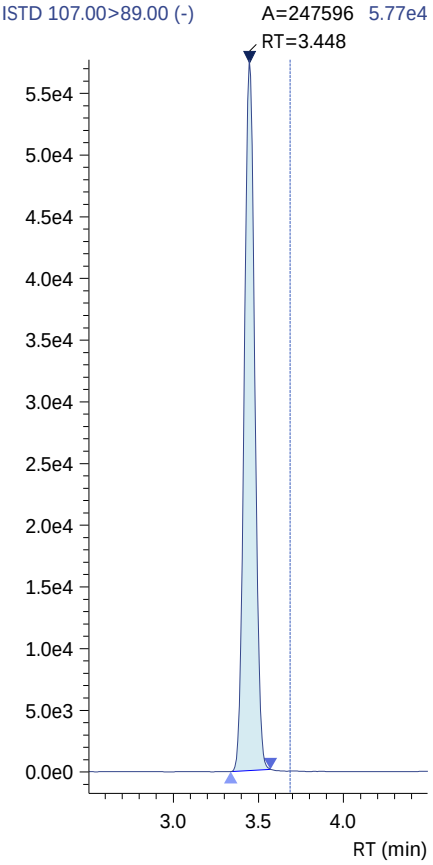
Conc 0.0865
R#1 36.03 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

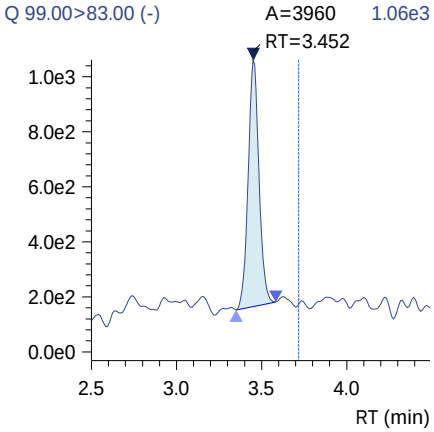
EQ2300044-04

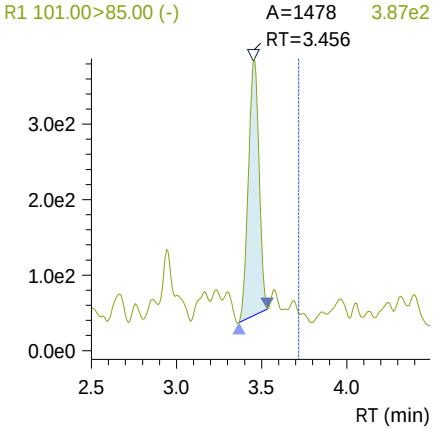
Sample ID: EQ2300044-04
Date Acquired: 1/31/2023 10:00:50 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-008.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.452	3960	257088	0.0983	ng/mL	101.00 >85.00	37.31	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.449	257088	257088	1.0000	ng/mL	----	----	

Perchlorate

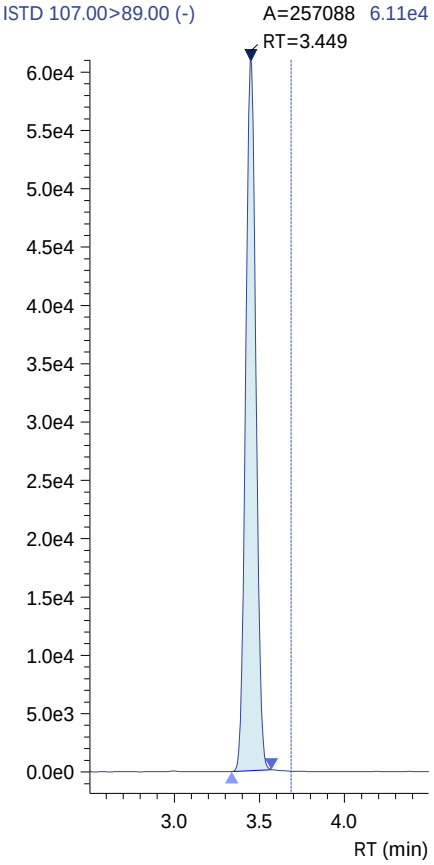
Conc 0.0983
R#1 37.31 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

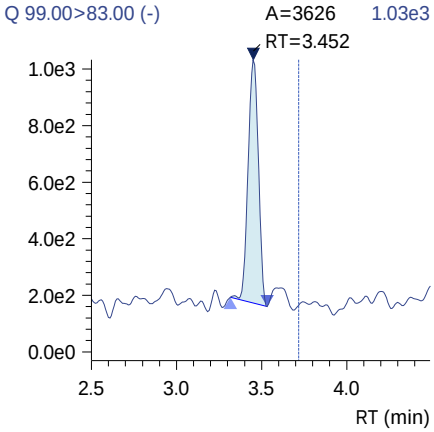
EQ2300044-05

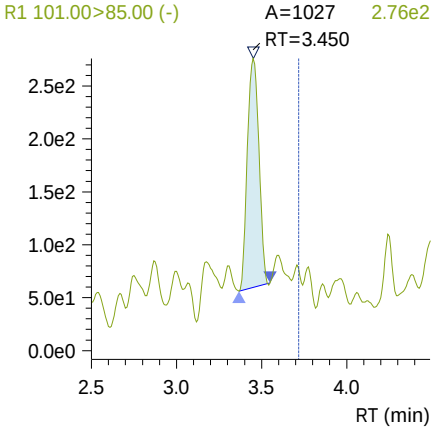
Sample ID: EQ2300044-05
Date Acquired: 1/31/2023 10:06:36 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-009.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.452	3626	260700	0.0887	ng/mL	101.00 >85.00	28.31	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.449	260700	260700	1.0000	ng/mL	----	----	

Perchlorate

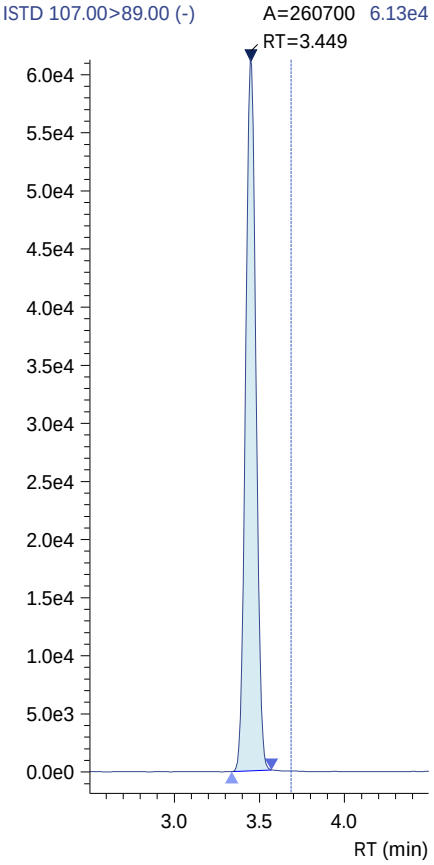
Conc 0.0887
R#1 28.31 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

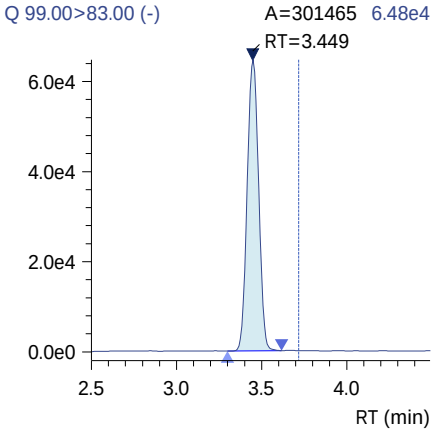
PERCHLORATE7

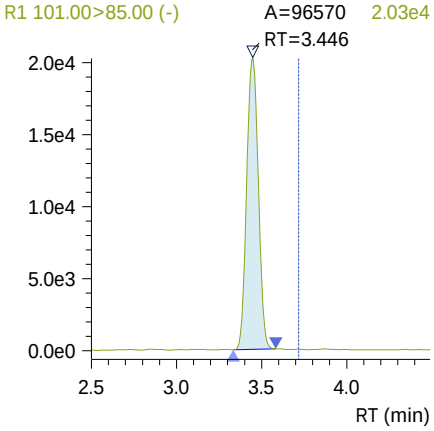
Sample ID: PERCHLORATE7
Date Acquired: 1/31/2023 10:46:12 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-015.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.449	3014 65	191787	10.0 306	ng/mL	101.00 >85.00	32.03	22.34 -41.49
Sodium Perchlorate-18O4 _IS	Auto	3.444	1917 87	191787	1.0000	ng/mL	----	----	

Perchlorate

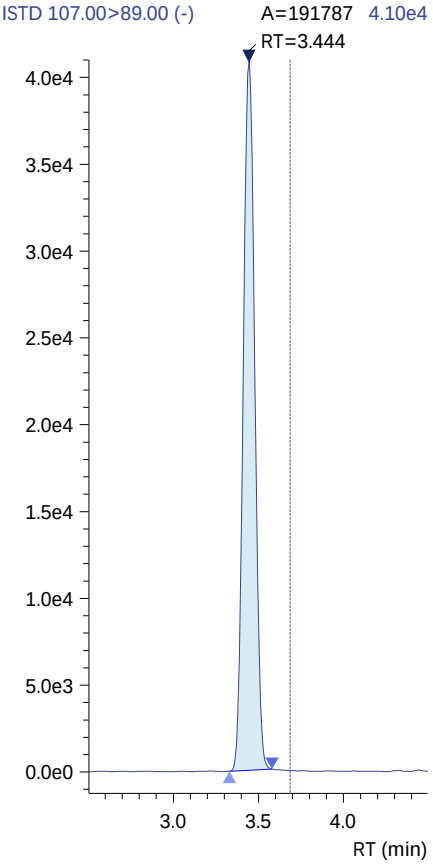
Conc 10.0306
R#1 32.03 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

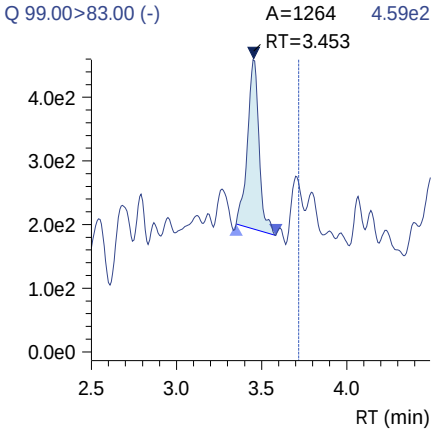
E2300085-001

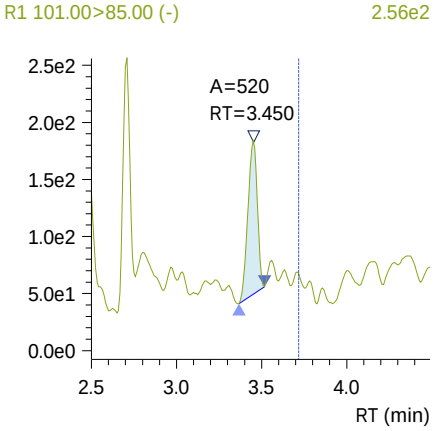
Sample ID: E2300085-001
Date Acquired: 1/31/2023 11:09:21 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-019.lcd
Vial: 47 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.453	1264	264292	0.0305	ng/mL	101.00 >85.00	41.16	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.447	2642 92	264292	1.0000	ng/mL	----	----	

Perchlorate

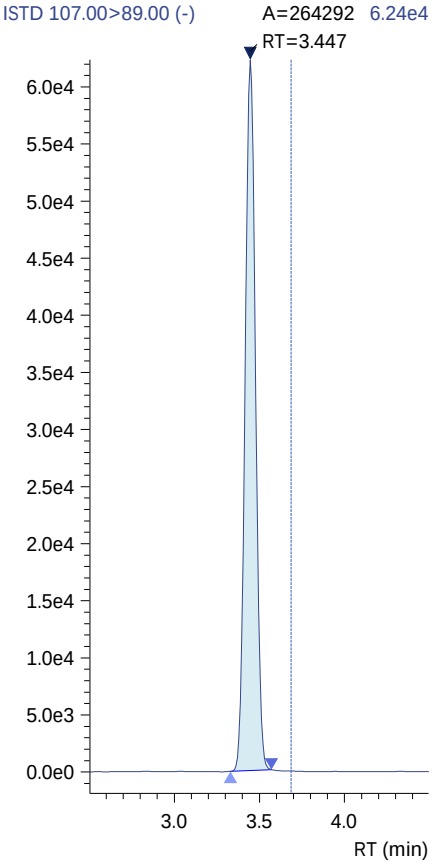
Conc 0.0305
R#1 41.16 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

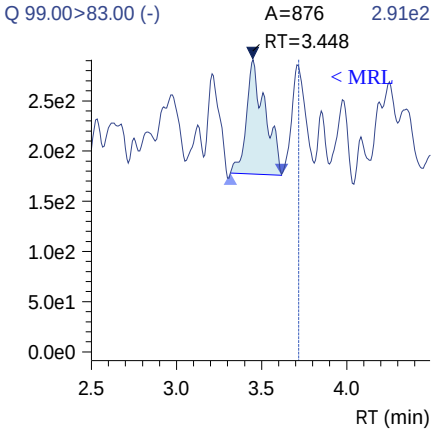
E2300085-002

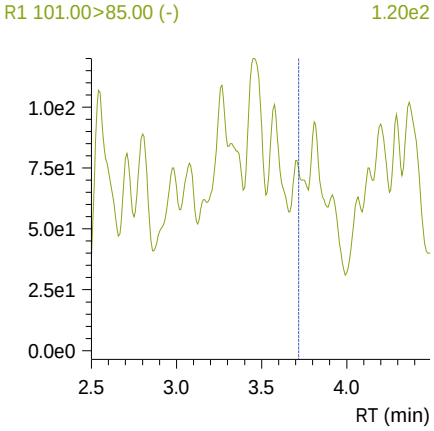
Sample ID: E2300085-002
Date Acquired: 1/31/2023 11:15:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-020.lcd
Vial: 48 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.448	876	270697	0.0206	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.446	270697	270697	1.0000	ng/mL	----	----	

Perchlorate

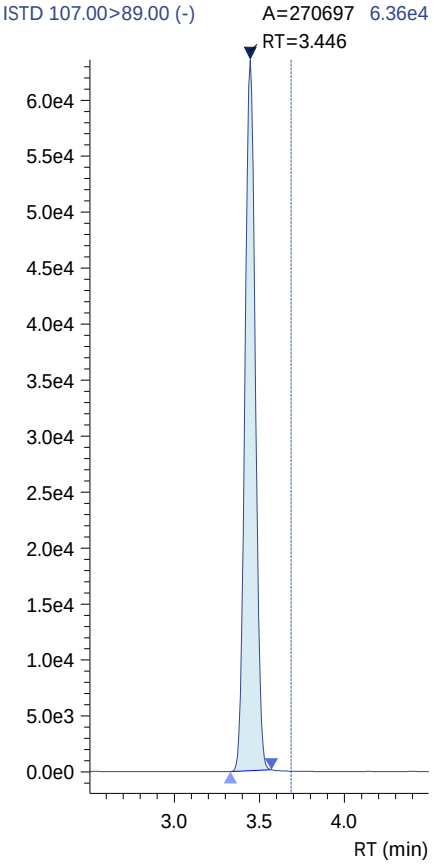
Conc 0.0206
R#1 0.00 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

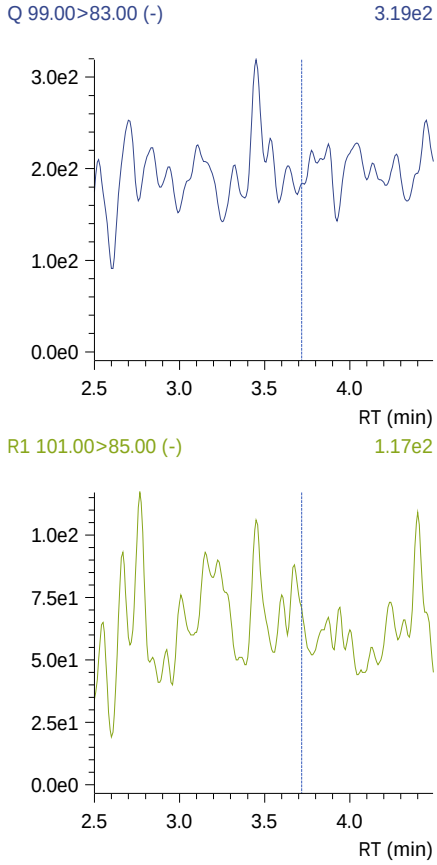
E2300085-003

Sample ID: E2300085-003
Date Acquired: 1/31/2023 11:20:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-021.lcd
Vial: 49 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	288689	----	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.448	288689	288689	1.0000	ng/mL	----	----	

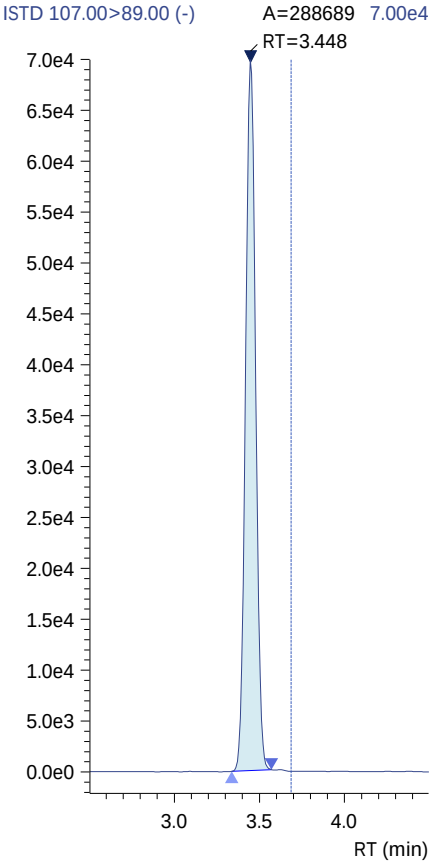
Perchlorate

Conc ----
R#1 0.00 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

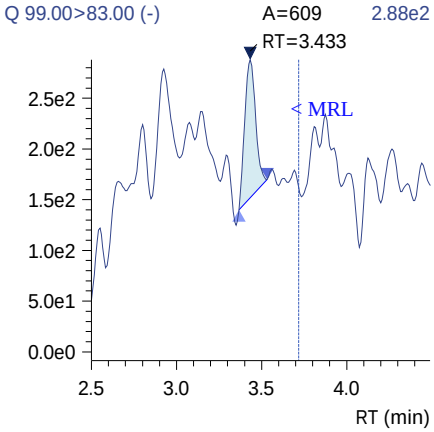
E2300085-004

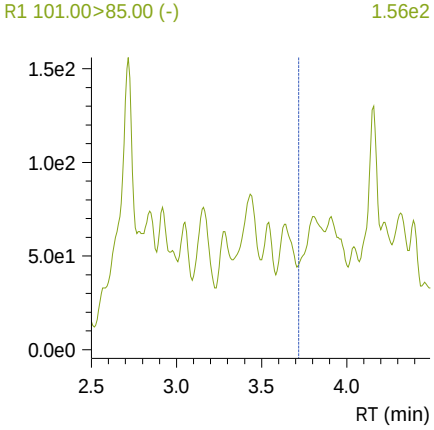
Sample ID: E2300085-004
Date Acquired: 1/31/2023 11:27:56 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-022.lcd
Vial: 50 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.433	609	268347	0.0145	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.437	268347	268347	1.0000	ng/mL	----	----	

Perchlorate

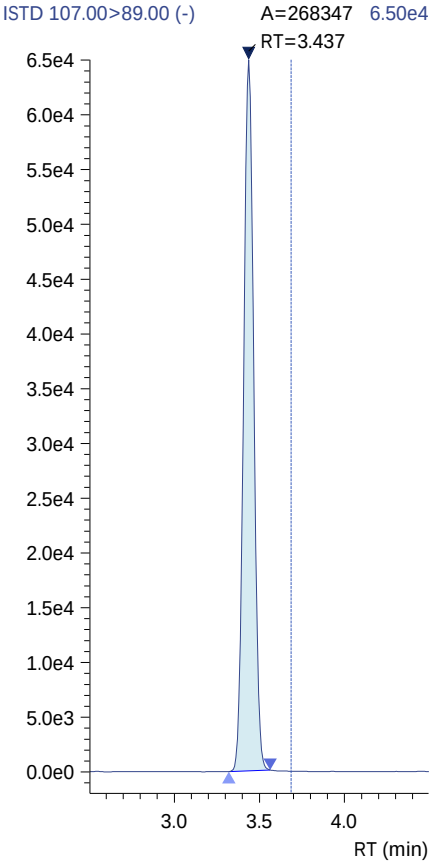
Conc 0.0145
R#1 0.00 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

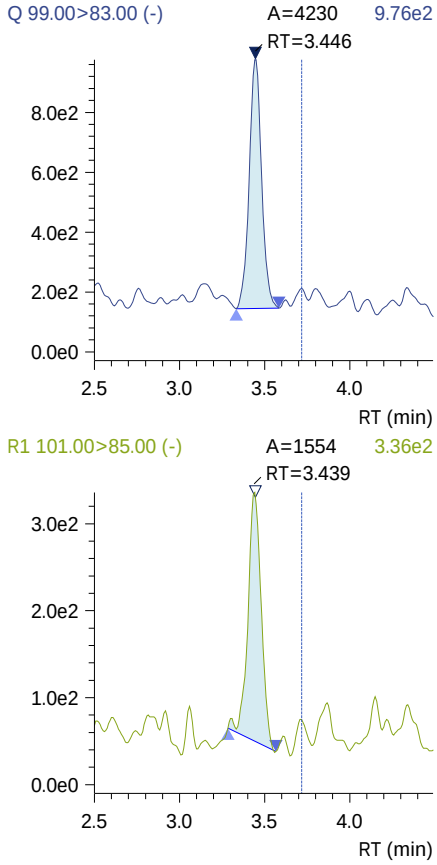
E2300085-005

Sample ID: E2300085-005
Date Acquired: 1/31/2023 11:33:43 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-023.lcd
Vial: 51 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.446	4230	258354	0.1045	ng/mL	101.00 >85.00	36.74	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.444	258354	258354	1.0000	ng/mL	----	----	

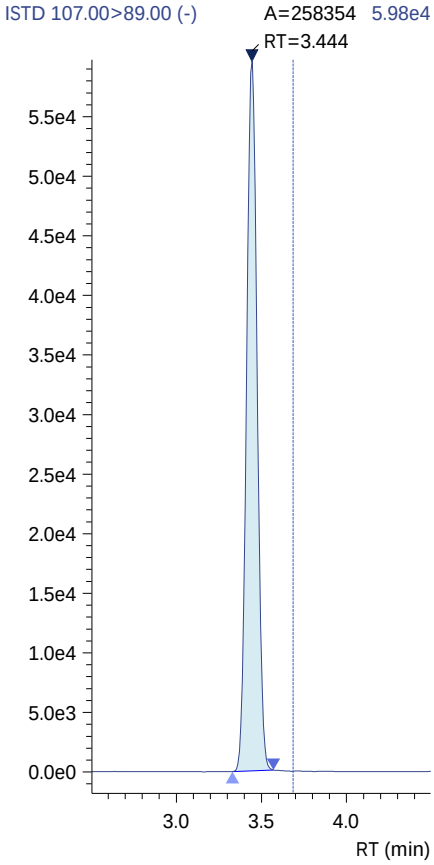
Perchlorate

Conc 0.1045
R#1 36.74 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

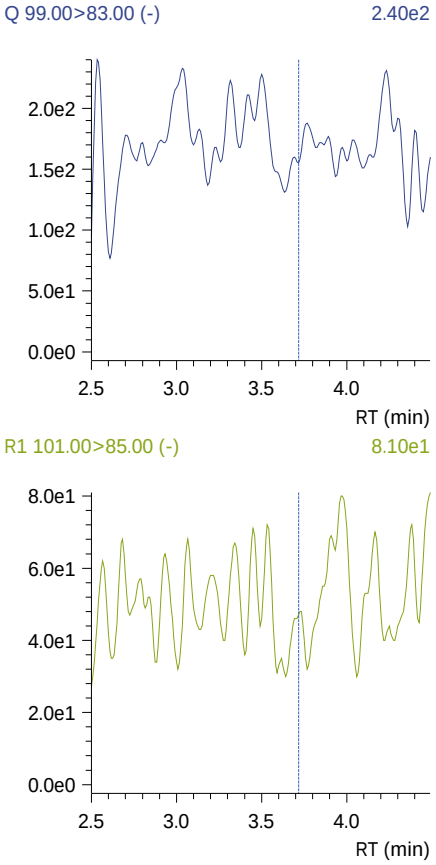
E2300085-006

Sample ID: E2300085-006
Date Acquired: 1/31/2023 11:39:28 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-024.lcd
Vial: 52 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	249634	----	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.446	249634	249634	1.0000	ng/mL	----	----	

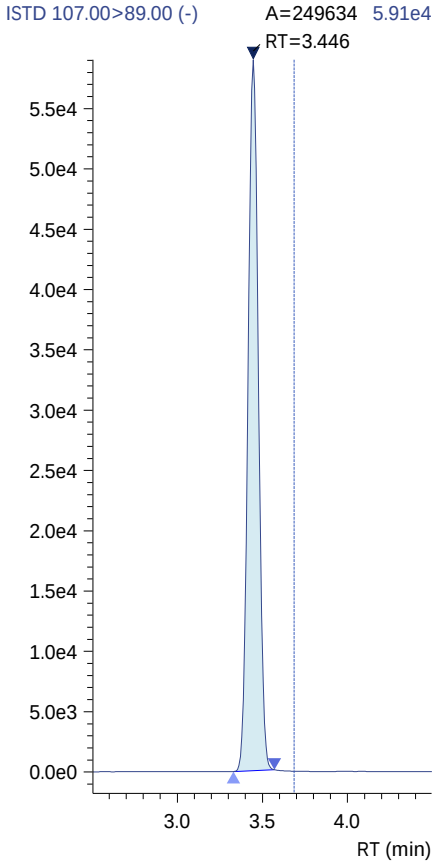
Perchlorate

Conc ----
R#1 0.00 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

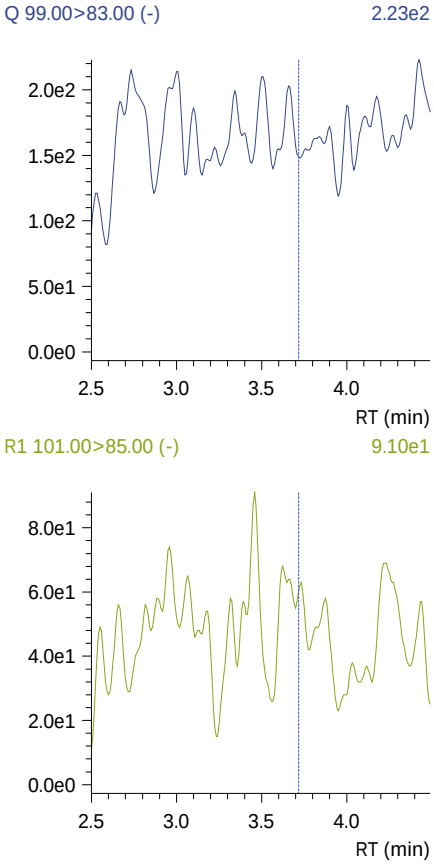
E2300085-007

Sample ID: E2300085-007
Date Acquired: 1/31/2023 11:45:15 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-025.lcd
Vial: 53 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	242754	----	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.444	242754	242754	1.0000	ng/mL	----	----	

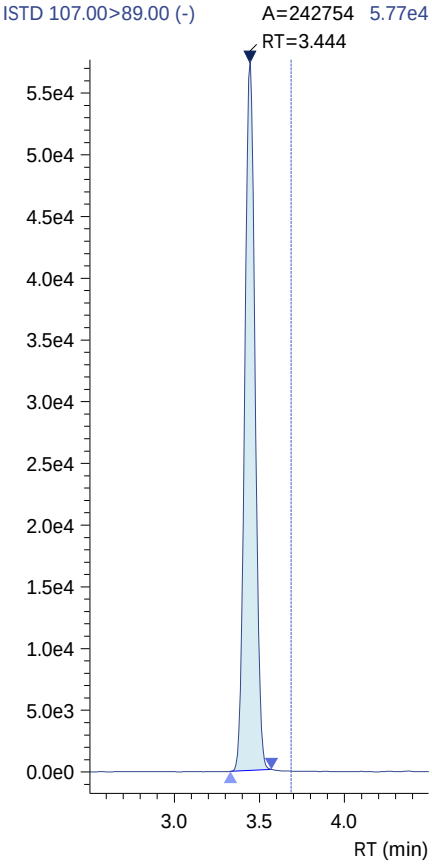
Perchlorate

Conc ----
R#1 0.00 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

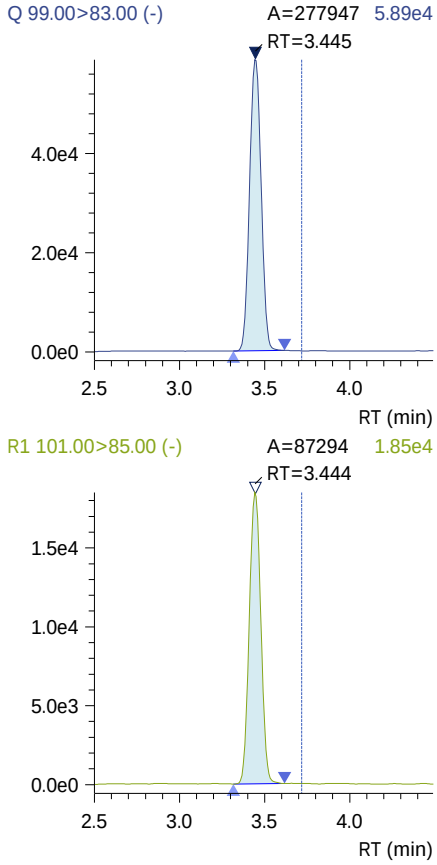
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 1/31/2023 11:51:02 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-026.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	3.445	277947	178513	9.9357	ng/mL	101.00 >85.00	31.41	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.442	178513	178513	1.0000	ng/mL	----	----	

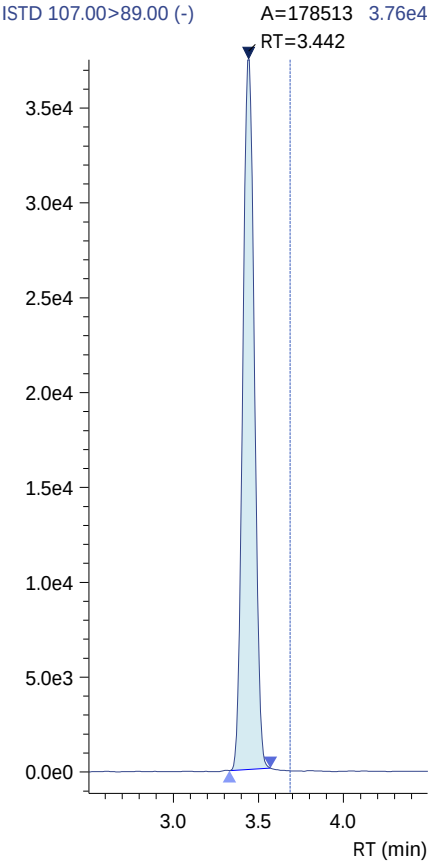
Perchlorate

Conc 9.9357
R#1 31.41 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

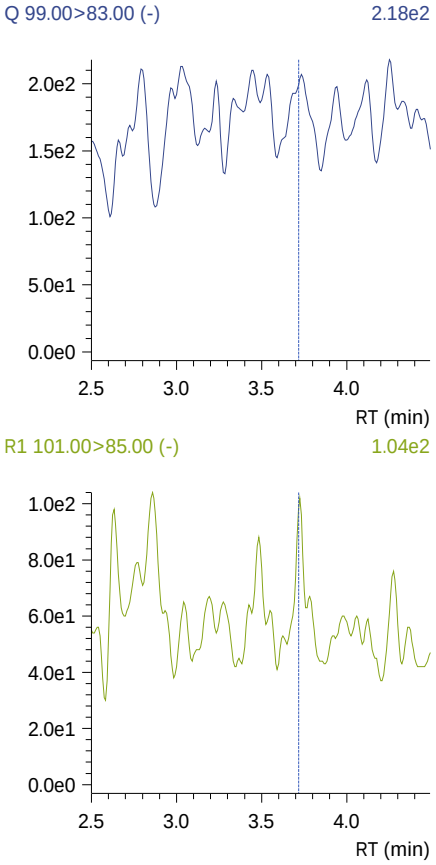
E2300085-008

Sample ID: E2300085-008
Date Acquired: 1/31/2023 11:56:50 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-027.lcd
Vial: 54 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	243970	----	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.443	243970	243970	1.0000	ng/mL	----	----	

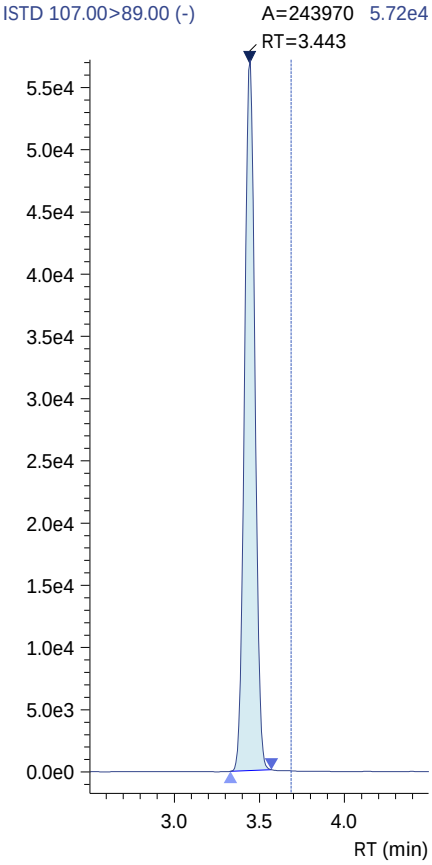
Perchlorate

Conc ----
R#1 0.00 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

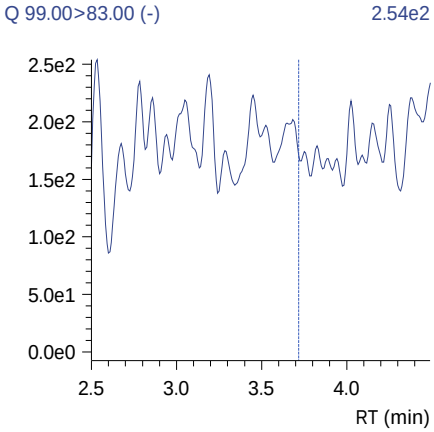
E2300085-009

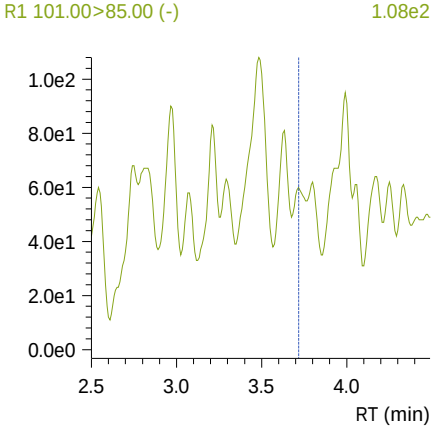
Sample ID: E2300085-009
Date Acquired: 1/31/2023 12:02:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-028.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	245753	----	ng/mL	101.00 >85.00	0.00	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.444	245753	245753	1.0000	ng/mL	----	----	

Perchlorate

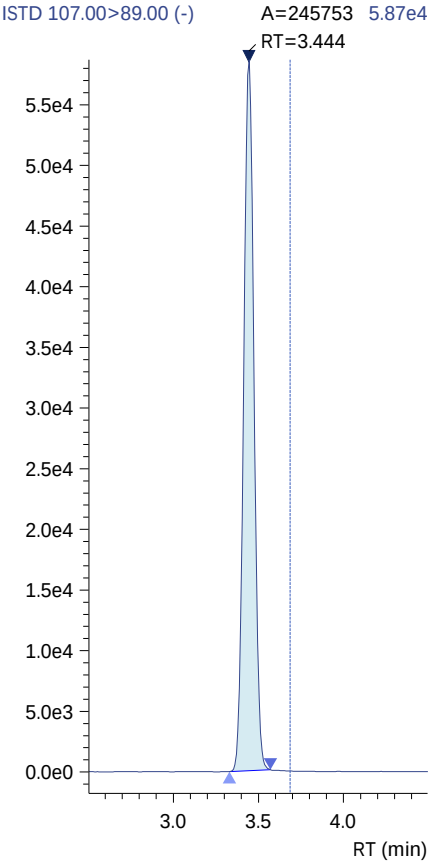
Conc ----
R#1 0.00 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

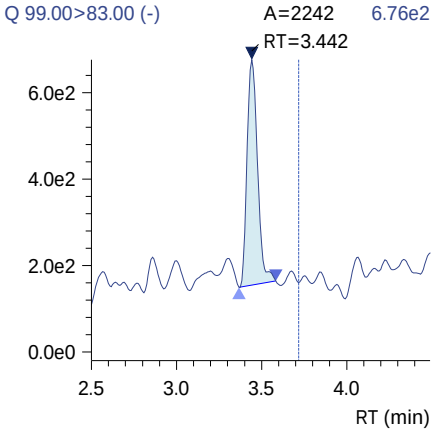
E2300085-010

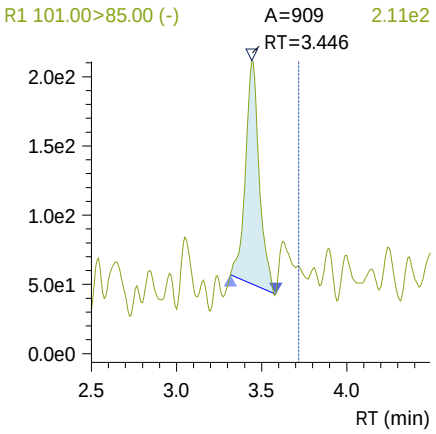
Sample ID: E2300085-010
Date Acquired: 1/31/2023 12:08:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-029.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.442	2242	250315	0.0572	ng/mL	101.00 >85.00	40.52	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.442	250315	250315	1.0000	ng/mL	----	----	

Perchlorate

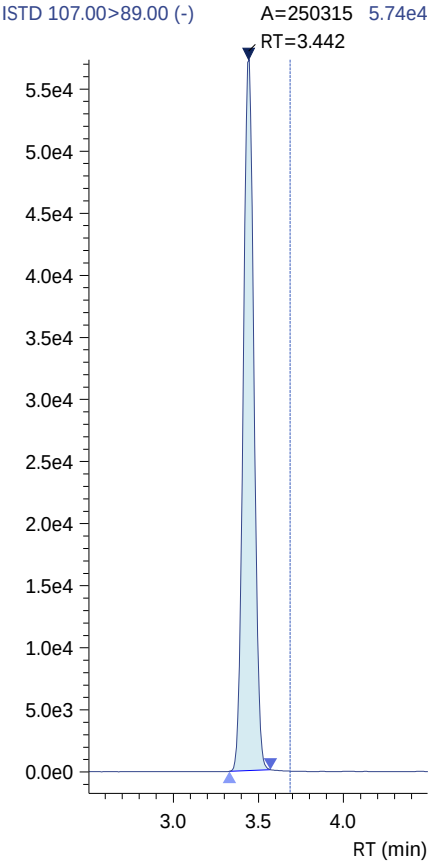
Conc 0.0572
R#1 40.52 (31.91)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/31/2023 2:25:57 PM

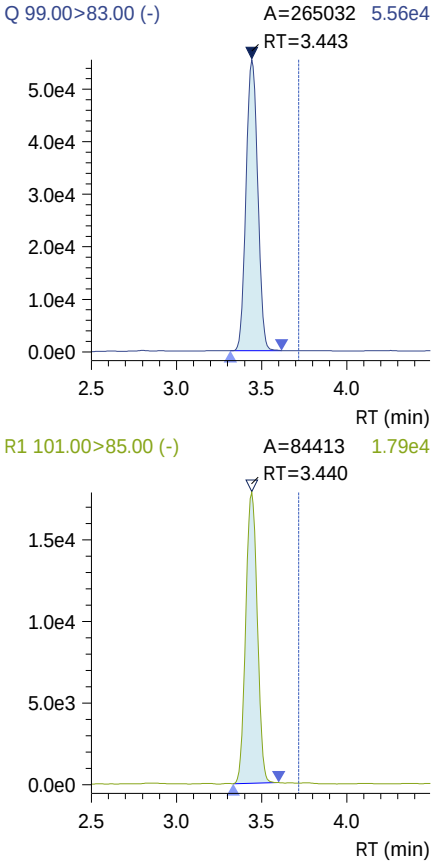
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 1/31/2023 12:44:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230131\20230131-033.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	3.443	265032	172709	9.7924	ng/mL	101.00 >85.00	31.85	22.34 -41.49
Sodium Perchlorate-18O4_IS	Auto	3.439	172709	172709	1.0000	ng/mL	----	----	

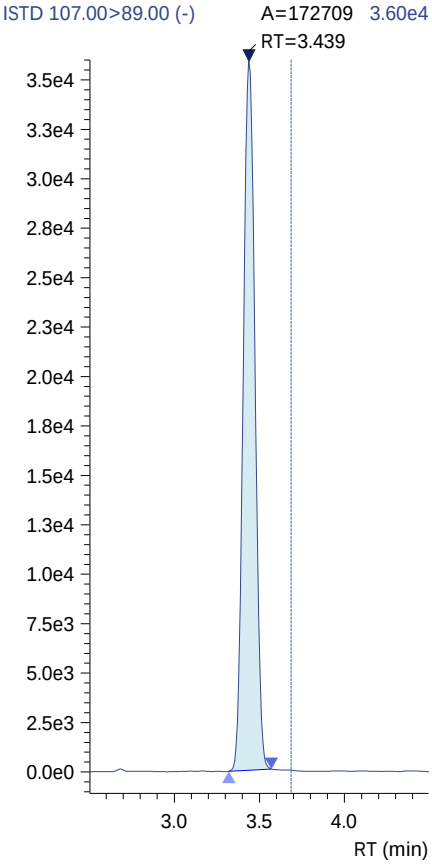
Perchlorate

Conc 9.7924
R#1 31.85 (31.91)



Sodium Perchlorate-18O4_IS

Conc 1.0000



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alsglobal.com

WorkOrder: HS23011397

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

16-Feb-2023

ALS Environmental
ALS Group USA, Corp
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HS23011397-MSVOA-SW8260

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Form 3A - MS/MSD

Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 5 - Tune

Form 6 - ICAL

Form 6I - ICV

Form 7 - CCV

Form 8 - ISTD

Run Log

Raw Data VOA6 424237

Raw Data VOA6 427080

Raw Data VOA6 427191

HS23011397-GCSEMI-RSK-175

Form 1 - Sample Results

Form 3A - MS/MSD

Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 6 - ICAL

Form 6I - ICV

Form 7 - CCV

Run Log

Raw Data FID-4 322102

Raw Data FID-4 427362

HS23011397 Wet Chemistry

HS23011397-E2300095 Perchlorate Level IV Report

CoverLetter

Certificate of Analysis

Chain of Custody

HS23011397 LHAAP 16 January 2023 Final

ALS WO# HS23011397

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February 07, 2023

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

Work Order: **HS23011397**

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

Dear Vicki Graves ,

ALS Environmental received 13 sample(s) on Jan 24, 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: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23011397

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23011397-01	Trip Blank-230121	Water		21-Jan-2023 07:35	24-Jan-2023 09:50	☐
HS23011397-02	16WW44-230121	Groundwater		21-Jan-2023 08:45	24-Jan-2023 09:50	☐
HS23011397-03	16PM14-230121	Groundwater		21-Jan-2023 09:45	24-Jan-2023 09:50	☐
HS23011397-04	16PM09-230121	Groundwater		21-Jan-2023 10:40	24-Jan-2023 09:50	☐
HS23011397-05	16PM03-230121	Groundwater		21-Jan-2023 11:40	24-Jan-2023 09:50	☐
HS23011397-06	16PM06-230121	Groundwater		21-Jan-2023 12:30	24-Jan-2023 09:50	☐
HS23011397-07	16PM02-230121	Groundwater		21-Jan-2023 13:25	24-Jan-2023 09:50	☐
HS23011397-08	16RW01-230123	Groundwater		23-Jan-2023 09:25	24-Jan-2023 09:50	☐
HS23011397-09	16RW05-230123	Groundwater		23-Jan-2023 10:30	24-Jan-2023 09:50	☐
HS23011397-10	16WW26-230123	Groundwater		23-Jan-2023 11:25	24-Jan-2023 09:50	☐
HS23011397-11	16WW25-230123	Groundwater		23-Jan-2023 12:45	24-Jan-2023 09:50	☐
HS23011397-12	16WW29-230123	Groundwater		23-Jan-2023 13:45	24-Jan-2023 09:50	☐
HS23011397-13	16WW30-230123	Groundwater		23-Jan-2023 14:35	24-Jan-2023 09:50	☐

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23011397

Work Order Comments

- The analysis for Perchlorate was performed by ALS Houston Specialty Lab. The final report is appended.

GC Semivolatiles by Method RSK-175

Batch ID: R427362

Sample ID: HS23011136-04MS

- MS and MSD are for an unrelated sample

GCMS Volatiles by Method SW8260

Batch ID: R427080

Sample ID: 16PM03-230121 (HS23011397-05)

- Lowest practical dilution due to matrix.

Sample ID: 16PM09-230121 (HS23011397-04)

- Lowest practical dilution due to matrix.

Sample ID: 16PM14-230121 (HS23011397-03)

- Lowest practical dilution due to matrix.

Sample ID: 16RW01-230123 (HS23011397-08)

- Lowest practical dilution due to matrix.

Batch ID: R427191

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

WetChemistry by Method SM5310B

Batch ID: R427017

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: Trip Blank-230121
Collection Date: 21-Jan-2023 07:35

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	01-Feb-2023 13:03
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:03
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:03
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:03
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	01-Feb-2023 13:03
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:03
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:03
Surr: 1,2-Dichloroethane-d4	*98.9*			**0**	*81-118*	*%REC*	*1*	*01-Feb-2023 13:03*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*1*	*01-Feb-2023 13:03*
Surr: Dibromofluoromethane	*91.1*			**0**	*80-119*	*%REC*	*1*	*01-Feb-2023 13:03*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1*	*01-Feb-2023 13:03*

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW44-230121
Collection Date: 21-Jan-2023 08:45

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	01-Feb-2023 13:45
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:45
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:45
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:45
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	01-Feb-2023 13:45
Trichloroethene	**2.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 13:45
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 13:45
Surr: 1,2-Dichloroethane-d4	*97.8*			**0**	*81-118*	*%REC*	*1*	*01-Feb-2023 13:45*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*1*	*01-Feb-2023 13:45*
Surr: Dibromofluoromethane	*91.5*			**0**	*80-119*	*%REC*	*1*	*01-Feb-2023 13:45*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*01-Feb-2023 13:45*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM14-230121
Collection Date: 21-Jan-2023 09:45

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-03
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	50	U	15	50	50	ug/L	50	01-Feb-2023 14:27
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	01-Feb-2023 14:27
1,2-Dichloroethane	**30**	J	**10**	**50**	**50**	**ug/L**	50	01-Feb-2023 14:27
cis-1,2-Dichloroethene	**5,300**		**10**	**50**	**50**	**ug/L**	50	01-Feb-2023 14:27
Methylene chloride	50	U	20	50	100	ug/L	50	01-Feb-2023 14:27
Trichloroethene	**5,400**		**10**	**50**	**50**	**ug/L**	50	01-Feb-2023 14:27
Vinyl chloride	**170**		**10**	**50**	**50**	**ug/L**	50	01-Feb-2023 14:27
Surr: 1,2-Dichloroethane-d4	*100*			**0**	*81-118*	*%REC*	*50*	*01-Feb-2023 14:27*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*50*	*01-Feb-2023 14:27*
Surr: Dibromofluoromethane	*94.0*			**0**	*80-119*	*%REC*	*50*	*01-Feb-2023 14:27*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*50*	*01-Feb-2023 14:27*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM09-230121
Collection Date: 21-Jan-2023 10:40

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-04
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	25	U	7.5	25	25	ug/L	25	01-Feb-2023 14:06
1,1-Dichloroethene	**41**		**5.0**	**25**	**25**	**ug/L**	25	01-Feb-2023 14:06
1,2-Dichloroethane	25	U	5.0	25	25	ug/L	25	01-Feb-2023 14:06
cis-1,2-Dichloroethene	**700**		**5.0**	**25**	**25**	**ug/L**	25	01-Feb-2023 14:06
Methylene chloride	25	U	10	25	50	ug/L	25	01-Feb-2023 14:06
Trichloroethene	**2,100**		**5.0**	**25**	**25**	**ug/L**	25	01-Feb-2023 14:06
Vinyl chloride	**26**		**5.0**	**25**	**25**	**ug/L**	25	01-Feb-2023 14:06
Surr: 1,2-Dichloroethane-d4	*96.8*			**0**	*81-118*	*%REC*	*25*	*01-Feb-2023 14:06*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*25*	*01-Feb-2023 14:06*
Surr: Dibromofluoromethane	*90.7*			**0**	*80-119*	*%REC*	*25*	*01-Feb-2023 14:06*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*25*	*01-Feb-2023 14:06*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM03-230121
Collection Date: 21-Jan-2023 11:40

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	01-Feb-2023 18:48
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	01-Feb-2023 18:48
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	01-Feb-2023 18:48
cis-1,2-Dichloroethene	**4,200**		**10**	**50**	**50**	**ug/L**	50	01-Feb-2023 18:48
Methylene chloride	50	U	20	50	100	ug/L	50	01-Feb-2023 18:48
Trichloroethene	**9,100**		**10**	**50**	**50**	**ug/L**	50	01-Feb-2023 18:48
Vinyl chloride	**220**		**10**	**50**	**50**	**ug/L**	50	01-Feb-2023 18:48
Surr: 1,2-Dichloroethane-d4	*94.9*			**0**	*81-118*	*%REC*	*50*	*01-Feb-2023 18:48*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*50*	*01-Feb-2023 18:48*
Surr: Dibromofluoromethane	*89.0*			**0**	*80-119*	*%REC*	*50*	*01-Feb-2023 18:48*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*50*	*01-Feb-2023 18:48*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM06-230121
Collection Date: 21-Jan-2023 12:30

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	250	U	75	250	250	ug/L	250	01-Feb-2023 19:30
1,1-Dichloroethene	250	U	50	250	250	ug/L	250	01-Feb-2023 19:30
1,2-Dichloroethane	250	U	50	250	250	ug/L	250	01-Feb-2023 19:30
cis-1,2-Dichloroethene	**29,000**		**50**	**250**	**250**	**ug/L**	250	01-Feb-2023 19:30
Methylene chloride	250	U	100	250	500	ug/L	250	01-Feb-2023 19:30
Trichloroethene	**85,000**		**500**	**2500**	**2500**	**ug/L**	2500	01-Feb-2023 19:51
Vinyl chloride	**1,100**		**50**	**250**	**250**	**ug/L**	250	01-Feb-2023 19:30
Surr: 1,2-Dichloroethane-d4	*98.6*		**0**	*81-118*		*%REC*	*2500*	*01-Feb-2023 19:51*
Surr: 1,2-Dichloroethane-d4	*98.0*		**0**	*81-118*		*%REC*	*250*	*01-Feb-2023 19:30*
Surr: 4-Bromofluorobenzene	*102*		**0**	*85-114*		*%REC*	*250*	*01-Feb-2023 19:30*
Surr: 4-Bromofluorobenzene	*102*		**0**	*85-114*		*%REC*	*2500*	*01-Feb-2023 19:51*
Surr: Dibromofluoromethane	*91.7*		**0**	*80-119*		*%REC*	*250*	*01-Feb-2023 19:30*
Surr: Dibromofluoromethane	*92.2*		**0**	*80-119*		*%REC*	*2500*	*01-Feb-2023 19:51*
Surr: Toluene-d8	*104*		**0**	*89-112*		*%REC*	*250*	*01-Feb-2023 19:30*
Surr: Toluene-d8	*105*		**0**	*89-112*		*%REC*	*2500*	*01-Feb-2023 19:51*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.0711**		**0.00720**	**0.0250**	**0.0500**	**mg/L**	50	30-Jan-2023 12:48
Ethene	**0.548**		**0.0117**	**0.0250**	**0.0500**	**mg/L**	50	30-Jan-2023 12:48
Methane	**0.865**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	30-Jan-2023 12:48
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM02-230121
Collection Date: 21-Jan-2023 13:25

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	250	U	75	250	250	ug/L	250	01-Feb-2023 20:12
1,1-Dichloroethene	250	U	50	250	250	ug/L	250	01-Feb-2023 20:12
1,2-Dichloroethane	250	U	50	250	250	ug/L	250	01-Feb-2023 20:12
cis-1,2-Dichloroethene	**7,100**		**50**	**250**	**250**	**ug/L**	250	01-Feb-2023 20:12
Methylene chloride	250	U	100	250	500	ug/L	250	01-Feb-2023 20:12
Trichloroethene	**80,000**		**500**	**2500**	**2500**	**ug/L**	2500	01-Feb-2023 20:33
Vinyl chloride	**160**	J	**50**	**250**	**250**	**ug/L**	250	01-Feb-2023 20:12
Surr: 1,2-Dichloroethane-d4	*97.7*			**0**	*81-118*	*%REC*	*250*	*01-Feb-2023 20:12*
Surr: 1,2-Dichloroethane-d4	*99.8*			**0**	*81-118*	*%REC*	*2500*	*01-Feb-2023 20:33*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*250*	*01-Feb-2023 20:12*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*2500*	*01-Feb-2023 20:33*
Surr: Dibromofluoromethane	*91.1*			**0**	*80-119*	*%REC*	*250*	*01-Feb-2023 20:12*
Surr: Dibromofluoromethane	*91.8*			**0**	*80-119*	*%REC*	*2500*	*01-Feb-2023 20:33*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*250*	*01-Feb-2023 20:12*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*2500*	*01-Feb-2023 20:33*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW01-230123
Collection Date: 23-Jan-2023 09:25

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	10	U	3.0	10	10	ug/L	10	01-Feb-2023 17:45
1,1-Dichloroethene	10	U	2.0	10	10	ug/L	10	01-Feb-2023 17:45
1,2-Dichloroethane	10	U	2.0	10	10	ug/L	10	01-Feb-2023 17:45
cis-1,2-Dichloroethene	**73**		**2.0**	**10**	**10**	**ug/L**	10	01-Feb-2023 17:45
Methylene chloride	10	U	4.0	10	20	ug/L	10	01-Feb-2023 17:45
Trichloroethene	**2,000**		**10**	**50**	**50**	**ug/L**	50	02-Feb-2023 20:47
Vinyl chloride	10	U	2.0	10	10	ug/L	10	01-Feb-2023 17:45
Surr: 1,2-Dichloroethane-d4	*99.8*			**0**	*81-118*	*%REC*	*10*	*01-Feb-2023 17:45*
Surr: 1,2-Dichloroethane-d4	*94.9*			**0**	*81-118*	*%REC*	*50*	*02-Feb-2023 20:47*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*10*	*01-Feb-2023 17:45*
Surr: 4-Bromofluorobenzene	*105*			**0**	*85-114*	*%REC*	*50*	*02-Feb-2023 20:47*
Surr: Dibromofluoromethane	*91.5*			**0**	*80-119*	*%REC*	*10*	*01-Feb-2023 17:45*
Surr: Dibromofluoromethane	*87.4*			**0**	*80-119*	*%REC*	*50*	*02-Feb-2023 20:47*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*10*	*01-Feb-2023 17:45*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*50*	*02-Feb-2023 20:47*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastructure, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW05-230123
Collection Date: 23-Jan-2023 10:30

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	01-Feb-2023 17:23
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 17:23
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 17:23
cis-1,2-Dichloroethene	**2.0**		**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 17:23
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	01-Feb-2023 17:23
Trichloroethene	**6.1**		**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 17:23
Vinyl chloride	**0.51**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 17:23
Surr: 1,2-Dichloroethane-d4	*98.2*			**0**	*81-118*	*%REC*	*1*	*01-Feb-2023 17:23*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*01-Feb-2023 17:23*
Surr: Dibromofluoromethane	*90.8*			**0**	*80-119*	*%REC*	*1*	*01-Feb-2023 17:23*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*01-Feb-2023 17:23*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.936**		**0.0576**	**0.200**	**0.400**	**mg/L**	400	30-Jan-2023 13:07
Ethene	**1.35**		**0.0936**	**0.200**	**0.400**	**mg/L**	400	30-Jan-2023 13:07
Methane	**4.54**		**0.0428**	**0.200**	**0.200**	**mg/L**	400	30-Jan-2023 13:07
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW26-230123
Collection Date: 23-Jan-2023 11:25

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	02-Feb-2023 21:08
1,1-Dichloroethene	**1.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	02-Feb-2023 21:08
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 21:08
cis-1,2-Dichloroethene	**57**		**0.20**	**1.0**	**1.0**	**ug/L**	1	02-Feb-2023 21:08
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	02-Feb-2023 21:08
Trichloroethene	**710**		**2.0**	**10**	**10**	**ug/L**	10	01-Feb-2023 18:06
Vinyl chloride	**3.6**		**0.20**	**1.0**	**1.0**	**ug/L**	1	02-Feb-2023 21:08
Surr: 1,2-Dichloroethane-d4	*99.4*			**0**	*81-118*	*%REC*	*10*	*01-Feb-2023 18:06*
Surr: 1,2-Dichloroethane-d4	*94.2*			**0**	*81-118*	*%REC*	*1*	*02-Feb-2023 21:08*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*10*	*01-Feb-2023 18:06*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*1*	*02-Feb-2023 21:08*
Surr: Dibromofluoromethane	*92.3*			**0**	*80-119*	*%REC*	*10*	*01-Feb-2023 18:06*
Surr: Dibromofluoromethane	*88.3*			**0**	*80-119*	*%REC*	*1*	*02-Feb-2023 21:08*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*10*	*01-Feb-2023 18:06*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*02-Feb-2023 21:08*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**1.68**		**0.500**	**1.00**	**1.00**	**mg/L**	1	30-Jan-2023 21:41
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW25-230123
Collection Date: 23-Jan-2023 12:45

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	01-Feb-2023 16:20
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:20
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:20
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:20
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	01-Feb-2023 16:20
Trichloroethene	**4.9**		**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 16:20
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:20
Surr: 1,2-Dichloroethane-d4	*98.5*			**0**	*81-118*	*%REC*	*1*	*01-Feb-2023 16:20*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*01-Feb-2023 16:20*
Surr: Dibromofluoromethane	*89.6*			**0**	*80-119*	*%REC*	*1*	*01-Feb-2023 16:20*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*01-Feb-2023 16:20*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW29-230123
Collection Date: 23-Jan-2023 13:45

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-12
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	01-Feb-2023 16:41
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:41
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:41
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:41
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	01-Feb-2023 16:41
Trichloroethene	**2.8**		**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 16:41
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 16:41
Surr: 1,2-Dichloroethane-d4	*97.5*			**0**	*81-118*	*%REC*	*1*	*01-Feb-2023 16:41*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*01-Feb-2023 16:41*
Surr: Dibromofluoromethane	*90.3*			**0**	*80-119*	*%REC*	*1*	*01-Feb-2023 16:41*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*01-Feb-2023 16:41*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW30-230123
Collection Date: 23-Jan-2023 14:35

ANALYTICAL REPORT
WorkOrder:HS23011397
Lab ID:HS23011397-13
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	01-Feb-2023 17:02
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 17:02
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 17:02
cis-1,2-Dichloroethene	**3.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 17:02
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	01-Feb-2023 17:02
Trichloroethene	**120**		**0.20**	**1.0**	**1.0**	**ug/L**	1	01-Feb-2023 17:02
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	01-Feb-2023 17:02
Surr: 1,2-Dichloroethane-d4	*99.5*			**0**	*81-118*	*%REC*	*1*	*01-Feb-2023 17:02*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*01-Feb-2023 17:02*
Surr: Dibromofluoromethane	*91.5*			**0**	*80-119*	*%REC*	*1*	*01-Feb-2023 17:02*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*01-Feb-2023 17:02*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011397

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R427017 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS23011397-10	16WW26-230123	23 Jan 2023 11:25			30 Jan 2023 21:41	1
Batch ID: R427080 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23011397-02	16WW44-230121	21 Jan 2023 08:45			01 Feb 2023 13:45	1
HS23011397-03	16PM14-230121	21 Jan 2023 09:45			01 Feb 2023 14:27	50
HS23011397-04	16PM09-230121	21 Jan 2023 10:40			01 Feb 2023 14:06	25
HS23011397-05	16PM03-230121	21 Jan 2023 11:40			01 Feb 2023 18:48	50
HS23011397-06	16PM06-230121	21 Jan 2023 12:30			01 Feb 2023 19:51	2500
HS23011397-06	16PM06-230121	21 Jan 2023 12:30			01 Feb 2023 19:30	250
HS23011397-07	16PM02-230121	21 Jan 2023 13:25			01 Feb 2023 20:33	2500
HS23011397-07	16PM02-230121	21 Jan 2023 13:25			01 Feb 2023 20:12	250
HS23011397-08	16RW01-230123	23 Jan 2023 09:25			01 Feb 2023 17:45	10
HS23011397-09	16RW05-230123	23 Jan 2023 10:30			01 Feb 2023 17:23	1
HS23011397-10	16WW26-230123	23 Jan 2023 11:25			01 Feb 2023 18:06	10
HS23011397-11	16WW25-230123	23 Jan 2023 12:45			01 Feb 2023 16:20	1
HS23011397-12	16WW29-230123	23 Jan 2023 13:45			01 Feb 2023 16:41	1
HS23011397-13	16WW30-230123	23 Jan 2023 14:35			01 Feb 2023 17:02	1
Batch ID: R427080 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23011397-01	Trip Blank-230121	21 Jan 2023 07:35			01 Feb 2023 13:03	1
Batch ID: R427191 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23011397-08	16RW01-230123	23 Jan 2023 09:25			02 Feb 2023 20:47	50
HS23011397-10	16WW26-230123	23 Jan 2023 11:25			02 Feb 2023 21:08	1
Batch ID: R427276 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23011397-02	16WW44-230121	21 Jan 2023 08:45			03 Feb 2023 16:12	1
HS23011397-03	16PM14-230121	21 Jan 2023 09:45			03 Feb 2023 16:12	1
HS23011397-04	16PM09-230121	21 Jan 2023 10:40			03 Feb 2023 16:12	1
HS23011397-05	16PM03-230121	21 Jan 2023 11:40			03 Feb 2023 16:12	1
HS23011397-06	16PM06-230121	21 Jan 2023 12:30			03 Feb 2023 16:12	1
HS23011397-07	16PM02-230121	21 Jan 2023 13:25			03 Feb 2023 16:12	1
HS23011397-08	16RW01-230123	23 Jan 2023 09:25			03 Feb 2023 16:12	1
HS23011397-09	16RW05-230123	23 Jan 2023 10:30			03 Feb 2023 16:12	1
HS23011397-10	16WW26-230123	23 Jan 2023 11:25			03 Feb 2023 16:12	1
HS23011397-11	16WW25-230123	23 Jan 2023 12:45			03 Feb 2023 16:12	1
HS23011397-12	16WW29-230123	23 Jan 2023 13:45			03 Feb 2023 16:12	1
HS23011397-13	16WW30-230123	23 Jan 2023 14:35			03 Feb 2023 16:12	1
Batch ID: R427362 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS23011397-06	16PM06-230121	21 Jan 2023 12:30			30 Jan 2023 12:48	50
HS23011397-09	16RW05-230123	23 Jan 2023 10:30			30 Jan 2023 13:07	400

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011397

QC BATCH REPORT

Batch ID: R427362 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-230130** Units: **mg/L** Analysis Date: **30-Jan-2023 09:35**
Client ID: Run ID: **FID-4_427362** SeqNo: **7109613** 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-230130** Units: **mg/L** Analysis Date: **30-Jan-2023 09:43**
Client ID: Run ID: **FID-4_427362** SeqNo: **7109614** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0194	0.00100	0.01804	0	107	75 - 125				
Ethene	0.0171	0.00100	0.0168	0	102	75 - 125				
Methane	0.00938	0.000500	0.009647	0	97.3	75 - 125				

MS Sample ID: **HS23011136-04MS** Units: **mg/L** Analysis Date: **30-Jan-2023 11:28**
Client ID: Run ID: **FID-4_427362** SeqNo: **7109624** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0316	0.00100	0.01804	0	175	75 - 125				S
Ethene	0.0473	0.00100	0.0168	0	282	75 - 125				S
Methane	4.87	0.000500	0.009647	5.190	-3350	75 - 125				SEO

MSD Sample ID: **HS23011136-04MSD** Units: **mg/L** Analysis Date: **30-Jan-2023 11:37**
Client ID: Run ID: **FID-4_427362** SeqNo: **7109625** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0295	0.00100	0.01804	0	163	75 - 125	0.03159	6.91	30	S
Ethene	0.0410	0.00100	0.0168	0	244	75 - 125	0.04729	14.3	30	S
Methane	4.81	0.000500	0.009647	5.190	-3910	75 - 125	4.867	1.12	30	SEO

The following samples were analyzed in this batch: HS23011397-06 HS23011397-09

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011397

QC BATCH REPORT

Batch ID: R427080 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230201** Units: **ug/L** Analysis Date: **01-Feb-2023 12:42**
Client ID: Run ID: **VOA6_427080** SeqNo: **7102059** 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	*49.87*	*1.0*	*50*	*0*	*99.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.86*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*46.27*	*1.0*	*50*	*0*	*92.5*	*80 - 119*				
Surr: Toluene-d8	*51.82*	*1.0*	*50*	*0*	*104*	*89 - 112*				

LCS Sample ID: **VLCSW-230201** Units: **ug/L** Analysis Date: **01-Feb-2023 12:00**
Client ID: Run ID: **VOA6_427080** SeqNo: **7102058** 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	19.06	1.0	20	0	95.3	80 - 119				
1,1-Dichloroethene	19.57	1.0	20	0	97.8	71 - 131				
1,2-Dichloroethane	22.53	1.0	20	0	113	73 - 128				
cis-1,2-Dichloroethene	19.58	1.0	20	0	97.9	78 - 123				
Methylene chloride	19.22	2.0	20	0	96.1	74 - 124				
Trichloroethene	21.38	1.0	20	0	107	79 - 123				
Vinyl chloride	20.5	1.0	20	0	103	58 - 137				
Surr: 1,2-Dichloroethane-d4	*51.44*	*1.0*	*50*	*0*	*103*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.38*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*47.17*	*1.0*	*50*	*0*	*94.3*	*80 - 119*				
Surr: Toluene-d8	*47.75*	*1.0*	*50*	*0*	*95.5*	*89 - 112*				

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011397

QC BATCH REPORT

Batch ID: R427080 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23011397-02MS** Units: **ug/L** Analysis Date: **01-Feb-2023 14:48**
Client ID: **16WW44-230121** Run ID: **VOA6_427080** SeqNo: **7102065** 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	19.5	1.0	20	0	97.5	80 - 119				
1,1-Dichloroethene	18.29	1.0	20	0	91.4	71 - 131				
1,2-Dichloroethane	20.66	1.0	20	0	103	73 - 128				
cis-1,2-Dichloroethene	18.33	1.0	20	0	91.7	78 - 123				
Methylene chloride	16.83	2.0	20	0	84.1	74 - 124				
Trichloroethene	24.26	1.0	20	2.228	110	79 - 123				
Vinyl chloride	16.55	1.0	20	0	82.7	58 - 137				
Surr: 1,2-Dichloroethane-d4	*49.57*	*1.0*	*50*	*0*	*99.1*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.08*	*1.0*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*44.8*	*1.0*	*50*	*0*	*89.6*	*80 - 119*				
Surr: Toluene-d8	*52.12*	*1.0*	*50*	*0*	*104*	*89 - 112*				

MSD Sample ID: **HS23011397-02MSD** Units: **ug/L** Analysis Date: **01-Feb-2023 15:09**
Client ID: **16WW44-230121** Run ID: **VOA6_427080** SeqNo: **7102066** 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	19.2	1.0	20	0	96.0	80 - 119	19.5	1.55	20	
1,1-Dichloroethene	17.87	1.0	20	0	89.3	71 - 131	18.29	2.31	20	
1,2-Dichloroethane	21.08	1.0	20	0	105	73 - 128	20.66	1.98	20	
cis-1,2-Dichloroethene	17.79	1.0	20	0	88.9	78 - 123	18.33	3.02	20	
Methylene chloride	16.43	2.0	20	0	82.2	74 - 124	16.83	2.37	20	
Trichloroethene	23.11	1.0	20	2.228	104	79 - 123	24.26	4.88	20	
Vinyl chloride	15.44	1.0	20	0	77.2	58 - 137	16.55	6.91	20	
Surr: 1,2-Dichloroethane-d4	*48.78*	*1.0*	*50*	*0*	*97.6*	*81 - 118*	*49.57*	*1.61*	*20*	
Surr: 4-Bromofluorobenzene	*52.02*	*1.0*	*50*	*0*	*104*	*85 - 114*	*52.08*	*0.115*	*20*	
Surr: Dibromofluoromethane	*45.01*	*1.0*	*50*	*0*	*90.0*	*80 - 119*	*44.8*	*0.47*	*20*	
Surr: Toluene-d8	*52.1*	*1.0*	*50*	*0*	*104*	*89 - 112*	*52.12*	*0.0414*	*20*	

The following samples were analyzed in this batch:

HS23011397-01	HS23011397-02	HS23011397-03	HS23011397-04
HS23011397-05	HS23011397-06	HS23011397-07	HS23011397-08
HS23011397-09	HS23011397-10	HS23011397-11	HS23011397-12
HS23011397-13			

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011397

QC BATCH REPORT

Batch ID: R427191 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230202** Units: **ug/L** Analysis Date: **02-Feb-2023 16:13**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105061** 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	*48.13*	*1.0*	*50*	*0*	*96.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.46*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*44.9*	*1.0*	*50*	*0*	*89.8*	*80 - 119*				
Surr: Toluene-d8	*52.85*	*1.0*	*50*	*0*	*106*	*89 - 112*				

LCS Sample ID: **VLCSW-230202** Units: **ug/L** Analysis Date: **02-Feb-2023 15:10**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105060** 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	20.71	1.0	20	0	104	80 - 119				
1,1-Dichloroethene	18.71	1.0	20	0	93.5	71 - 131				
1,2-Dichloroethane	23.27	1.0	20	0	116	73 - 128				
cis-1,2-Dichloroethene	19.27	1.0	20	0	96.4	78 - 123				
Methylene chloride	19.48	2.0	20	0	97.4	74 - 124				
Trichloroethene	22.24	1.0	20	0	111	79 - 123				
Vinyl chloride	20.11	1.0	20	0	101	58 - 137				
Surr: 1,2-Dichloroethane-d4	*50.74*	*1.0*	*50*	*0*	*101*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.78*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*45.19*	*1.0*	*50*	*0*	*90.4*	*80 - 119*				
Surr: Toluene-d8	*48.09*	*1.0*	*50*	*0*	*96.2*	*89 - 112*				

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011397

QC BATCH REPORT

Batch ID: R427191 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23011294-08MS** Units: **ug/L** Analysis Date: **02-Feb-2023 19:23**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105069** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.28	1.0	20	0	91.4	80 - 119				
1,1-Dichloroethene	16.4	1.0	20	0	82.0	71 - 131				
1,2-Dichloroethane	20.19	1.0	20	0	101	73 - 128				
cis-1,2-Dichloroethene	16.74	1.0	20	0	83.7	78 - 123				
Methylene chloride	16.13	2.0	20	0	80.6	74 - 124				
Trichloroethene	21.32	1.0	20	0	107	79 - 123				
Vinyl chloride	15.24	1.0	20	0	76.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*47.65*	*1.0*	*50*	*0*	*95.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.23*	*1.0*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*43.12*	*1.0*	*50*	*0*	*86.2*	*80 - 119*				
Surr: Toluene-d8	*51.75*	*1.0*	*50*	*0*	*103*	*89 - 112*				

MSD Sample ID: **HS23011294-08MSD** Units: **ug/L** Analysis Date: **02-Feb-2023 19:44**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105070** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.61	1.0	20	0	93.1	80 - 119	18.28	1.82	20	
1,1-Dichloroethene	15.86	1.0	20	0	79.3	71 - 131	16.4	3.35	20	
1,2-Dichloroethane	19.66	1.0	20	0	98.3	73 - 128	20.19	2.66	20	
cis-1,2-Dichloroethene	16.3	1.0	20	0	81.5	78 - 123	16.74	2.65	20	
Methylene chloride	15.39	2.0	20	0	76.9	74 - 124	16.13	4.7	20	
Trichloroethene	20.13	1.0	20	0	101	79 - 123	21.32	5.72	20	
Vinyl chloride	14.73	1.0	20	0	73.7	58 - 137	15.24	3.39	20	
Surr: 1,2-Dichloroethane-d4	*47.49*	*1.0*	*50*	*0*	*95.0*	*81 - 118*	*47.65*	*0.337*	*20*	
Surr: 4-Bromofluorobenzene	*52.87*	*1.0*	*50*	*0*	*106*	*85 - 114*	*52.23*	*1.22*	*20*	
Surr: Dibromofluoromethane	*43.1*	*1.0*	*50*	*0*	*86.2*	*80 - 119*	*43.12*	*0.0325*	*20*	
Surr: Toluene-d8	*52.02*	*1.0*	*50*	*0*	*104*	*89 - 112*	*51.75*	*0.525*	*20*	

The following samples were analyzed in this batch: HS23011397-08 HS23011397-10

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011397

QC BATCH REPORT

Batch ID: R427017 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 20:05**
Client ID: Run ID: **TOC_04_427017** SeqNo: **7100606** 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 20:19**
Client ID: Run ID: **TOC_04_427017** SeqNo: **7100607** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	11.29	1.00	10	0	113	85 - 115				

LCSD Sample ID: **LCSD-01302023** Units: **mg/L** Analysis Date: **30-Jan-2023 20:33**
Client ID: Run ID: **TOC_04_427017** SeqNo: **7100608** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	11.14	1.00	10	0	111	85 - 115	11.29	1.34	20	

MS Sample ID: **HS23011271-03MS** Units: **mg/L** Analysis Date: **30-Jan-2023 21:01**
Client ID: Run ID: **TOC_04_427017** SeqNo: **7100610** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	15.53	1.00	10	4.907	106	80 - 120				

The following samples were analyzed in this batch: HS23011397-10

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23011397**

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: 07-Feb-23

Sample Receipt Checklist

Work Order ID: HS23011397 **Date/Time Received:** 24-Jan-2023 09:50

Client Name: CBI-Houston **Received by:** Corey Grandits

Completed By:	/S/ Paresh M. Giga	27-Jan-2023 19:27	**Reviewed by:**	/S/ Dane J. Wacasey	06-Feb-2023 16:52
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **GW/Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 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):	45898	
Date/Time sample(s) sent to storage:	1/24/23 19:00	

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

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

Page 1 of 1

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.#
Trip Blank-230124/0735	TB	1-21-23	TB	2	✓											
16WW44-230124/0845	GW	1-21-23	N	4	✓					✓						
16PM14-230121/0945	GW	1-21-23	N	4	✓					✓						
16PM09-230121/1040	GW	1-21-23	N	4	✓					✓						
16PM03-230121/1140	GW	1-21-23	N	4	✓					✓						
16PM06-230121/1230	GW	1-21-23	N	7	✓		✓			✓						
16PM02-230121/1325	GW	1-21-23	N	4	✓					✓						
16RW01-230123/0925	GW	1-23-23	N	4	✓					✓						

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
	1-23-23	1600		1-24-23	0756						

For Lab Use Only

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

Remarks:

HS23011397

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

49898 IRM1 2.0

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

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											
16RWD5-230123/1030	GW	1-23-23	N	7	✓		✓			✓						
16WW26-230123/1125	GW	1-23-23	N	6	✓	✓				✓						
16WW25-230123/1245	GW	1-23-23	N	4	✓					✓						
16WW29-230123/1345	GW	1-23-23	N	4	✓					✓						
16WW30-230123/1435	GW	1-23-23	N	4	✓					✓						

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
	1-23-23	1605		1-24-23	0650						

For Lab Use Only

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

Remarks:

HS23011397

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

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ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL
Date: 12-30-13 Time: 1600
Name: Brian
Company:
Seal Broken By:
Date:

ORIGIN ID:SGRA (903) 930-6193
SCOTT BEESINGER
APTIM ENVIRONMENTAL & INFRASTRUCTURE
1203 E EAST GRAND AVE
PMB 202
MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 04JAN14
ACTWGT: 1.00 LB MAN
CAD: 022124/CAFE3616
DIMS: 26x14x14 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-6666
REF: PERFORMANCE MONITORING - BO 90113 - DW
RMA:

FedEx Express

7798 2002 8386

PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

47 10h74 23Jan2023 GGGA 581C2/D7F2/C0B8

February 03, 2023 Service Request No:E2300095

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

Laboratory Results for: HS23011397

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 31, 2023
For your reference, these analyses have been assigned our service request number **E2300095.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston 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.:**	E2300095
Project:	HS23011397	**Date Received:**	01/31/23
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

Twelve samples were received for analysis at ALS Environmental in Houston on 01/31/23.

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:

EQ2300049: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

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

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

Client: ALS Environmental - US **Service Request:**E2300095
Project: HS23011397

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300095-001	16WW44-230121	1/21/2023	0845
E2300095-002	16PM14-230121	1/21/2023	0945
E2300095-003	16PM09-230121	1/21/2023	1040
E2300095-004	16PM03-230121	1/21/2023	1140
E2300095-005	16PM06-230121	1/21/2023	1230
E2300095-006	16PM02-230121	1/21/2023	1325
E2300095-007	16RW01-230123	1/23/2023	0925
E2300095-008	16RW05-230123	1/23/2023	1030
E2300095-009	16WW26-230123	1/23/2023	1125
E2300095-010	16WW25-230123	1/23/2023	1245
E2300095-011	16WW29-230123	1/23/2023	1345
E2300095-012	16WW30-230123	1/23/2023	1435

Service Request Summary

Folder #: **E2300095**
Client Name: ALS Environmental - US
Project Name: HS23011397
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: 01/31/23
Internal Due Date: 2/7/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011397
EDD: EQUIS
EFWEDD_LHAAP

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300095-001	16WW44-230121	Ground Water	01/21/23 0845	**IV**
E2300095-002	16PM14-230121	Ground Water	01/21/23 0945	**IV**
E2300095-003	16PM09-230121	Ground Water	01/21/23 1040	**IV**
E2300095-004	16PM03-230121	Ground Water	01/21/23 1140	**IV**
E2300095-005	16PM06-230121	Ground Water	01/21/23 1230	**IV**
E2300095-006	16PM02-230121	Ground Water	01/21/23 1325	**IV**
E2300095-007	16RW01-230123	Ground Water	01/23/23 0925	**IV**
E2300095-008	16RW05-230123	Ground Water	01/23/23 1030	**IV**
E2300095-009	16WW26-230123	Ground Water	01/23/23 1125	**IV**
E2300095-010	16WW25-230123	Ground Water	01/23/23 1245	**IV**
E2300095-011	16WW29-230123	Ground Water	01/23/23 1345	**IV**
E2300095-012	16WW30-230123	Ground Water	01/23/23 1435	**IV**

Service Request Summary

Folder #: **E2300095**
Client Name: ALS Environmental - US
Project Name: HS23011397
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: 01/31/23
Internal Due Date: 2/7/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011397
EDD: EQUIS
EFWEDD_LHAAP

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	12	IV Due 2/14

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
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Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 20853

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:	HS23011397
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23011397-02**	**16WW44-230121**	**Groundwater**	**21 Jan 2023 08:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
2.	**HS23011397-03**	**16PM14-230121**	**Groundwater**	**21 Jan 2023 09:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
3.	**HS23011397-04**	**16PM09-230121**	**Groundwater**	**21 Jan 2023 10:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
4.	**HS23011397-05**	**16PM03-230121**	**Groundwater**	**21 Jan 2023 11:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
5.	**HS23011397-06**	**16PM06-230121**	**Groundwater**	**21 Jan 2023 12:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
6.	**HS23011397-07**	**16PM02-230121**	**Groundwater**	**21 Jan 2023 13:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
7.	**HS23011397-08**	**16RW01-230123**	**Groundwater**	**23 Jan 2023 09:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
8.	**HS23011397-09**	**16RW05-230123**	**Groundwater**	**23 Jan 2023 10:30**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 20853**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
9.	**HS23011397-10**	**16WW26-230123**	**Groundwater**	**23 Jan 2023 11:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
10.	**HS23011397-11**	**16WW25-230123**	**Groundwater**	**23 Jan 2023 12:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
11.	**HS23011397-12**	**16WW29-230123**	**Groundwater**	**23 Jan 2023 13:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
12.	**HS23011397-13**	**16WW30-230123**	**Groundwater**	**23 Jan 2023 14:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 1-31-23 0800

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

ALS Environmental

Cooler Receipt Form

Project Chemist JA

Client/Project ALS-H

Thermometer ID IR31

Date/Time Received: 1-31-23 Initials: CA Date/Time Logged in: 1-31-23 Initials CA

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		1-31-23	0800	CA	0.9	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

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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#: 413929 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/2/23 09:20

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300095-001	16WW44-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300095-002	16PM14-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300095-003	16PM09-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300095-004	16PM03-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300095-005	16PM06-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300095-006	16PM02-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300095-007	16RW01-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300095-008	16RW05-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300095-009	16WW26-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300095-010	16WW25-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300095-011	16WW29-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300095-012	16WW30-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300098-001	RSA-095-OVB-05	.02	6850/ClO4 DOD			Water	10mL	
14	E2300098-002	RSA-095-OVB-06	.01	6850/ClO4 DOD			Water	10mL	
15	E2300098-003	RSA-FD-02-260123	.01	6850/ClO4 DOD			Water	10mL	
16	E2300098-004	RSA-095-OVB-07	.01	6850/ClO4 DOD			Water	10mL	
17	EQ2300049-01	MB		6850/ClO4			Liquid	10mL	
18	EQ2300049-02	LCS		6850/ClO4			Liquid	10mL	
19	EQ2300049-03	DLCS		6850/ClO4			Liquid	10mL	
20	EQ2300049-04	RSA-095-OVB-05 MS	.02	6850/ClO4 DOD			Liquid	10mL	
21	EQ2300049-05	RSA-095-OVB-05 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
22	R2300537-012	2301180933 600L-SB-28	.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

EQ2300049-01 100.00µL EQ2300049-01 100.00µL EQ2300049-02 100.00µL EQ2300049-02 100.00µL EQ2300049-03 100.00µL EQ2300049-03 100.00µL
EQ2300049-04 100.00µL EQ2300049-05 100.00µL R2300537-012 100.00µL

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

EQ2300049-02 1.00µL EQ2300049-02 1.00µL EQ2300049-03 1.00µL EQ2300049-03 1.00µL EQ2300049-04 1.00µL EQ2300049-05 1.00µL

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 Luer-Lok Syringes Luer-Lok Syringes (221305) 6850 Pipette Tips 50-1000 uL 6850 Pipette Tips (221929)

Preparation Information Benchsheet

Prep Run#: 413929
Team: Semivoa GCMS/XMI
Prep WorkFlow: GenExt28Day
Prep Method: Method
Status: Prepped
Prep Date/Time: 2/2/23 09:20

Preparation Steps

Step: Preparation
Started: 2/2/23 09:20
Finished: 2/2/23 10:31
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 02/02/23

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:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 0845
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW44-230121	**Units:**	µg/L
Lab Code:	E2300095-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 19:52	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 0945
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM14-230121	**Units:**	µg/L
Lab Code:	E2300095-002	**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	2/ 2/23	2/2/23 19:58	413929	793492	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1040
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM09-230121	**Units:**	µg/L
Lab Code:	E2300095-003	**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	2/ 2/23	2/2/23 20:04	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1140
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM03-230121	**Units:**	µg/L
Lab Code:	E2300095-004	**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	**285**		2.00	1.00	0.500	20	2/ 2/23	2/2/23 20:09	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1230
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM06-230121	**Units:**	µg/L
Lab Code:	E2300095-005	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0360**	J	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:15	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1325
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM02-230121	**Units:**	µg/L
Lab Code:	E2300095-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:26	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 0925
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW01-230123	**Units:**	µg/L
Lab Code:	E2300095-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:32	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1030
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW05-230123	**Units:**	µg/L
Lab Code:	E2300095-008	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:38	413929	793492	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1125
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW26-230123	**Units:**	µg/L
Lab Code:	E2300095-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:43	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1245
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW25-230123	**Units:**	µg/L
Lab Code:	E2300095-010	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:49	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1345
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW29-230123	**Units:**	µg/L
Lab Code:	E2300095-011	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:55	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1435
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW30-230123	**Units:**	µg/L
Lab Code:	E2300095-012	**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	2/ 2/23	2/2/23 21:00	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300049-01	**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	2/ 2/23	2/2/23 15:41	413929	793492	

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: HS23011397
Sample Matrix: Ground Water

Service Request: E2300095
Date Analyzed: 2/ 2/23

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: 413929

	Lab Control Sample EQ2300049-02			Duplicate Lab Control Sample EQ2300049-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0908	0.100	91	0.0882	0.100	88	84 - 119	3	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:**	E2300095
Project:	HS23011397	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300049-02	**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	**0.0908**	J	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 15:47	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300049-03	**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	**0.0882**	J	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 15:53	413929	793492	

HS23011397-MSVOA-SW8260

ALS WO# HS23011397

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Form 1

Organic Analysis Data Sheet

Volatiles by by EPA 8260

Workorder

HS23011397

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
HS23011397

Volatiles by EPA 8260

HS23011397-01	Collected	Received	Matrix	Basis
Trip Blank-230121	01/21/23 07:35	01/24/23 09:50	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	02/01/23 13:03	VOA6_427080	X020108
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:03	VOA6_427080	X020108
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:03	VOA6_427080	X020108
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:03	VOA6_427080	X020108
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/01/23 13:03	VOA6_427080	X020108
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:03	VOA6_427080	X020108
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:03	VOA6_427080	X020108

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-02	Collected	Received	Matrix	Basis
16WW44-230121	01/21/23 08:45	01/24/23 09:50	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	02/01/23 13:45	VOA6_427080	X020110
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:45	VOA6_427080	X020110
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:45	VOA6_427080	X020110
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:45	VOA6_427080	X020110
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/01/23 13:45	VOA6_427080	X020110
Trichloroethene	ug/L	2.2		0.20	1.0	1.0	1	02/01/23 13:45	VOA6_427080	X020110
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 13:45	VOA6_427080	X020110

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-03				Collected	Received	Matrix	Basis
16PM14-230121				01/21/23 09:45	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	02/01/23 14:27	VOA6_427080	X020112
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	02/01/23 14:27	VOA6_427080	X020112
1,2-Dichloroethane	ug/L	30	J	10	50	50	50	02/01/23 14:27	VOA6_427080	X020112
cis-1,2-Dichloroethene	ug/L	5,300		10	50	50	50	02/01/23 14:27	VOA6_427080	X020112
Methylene chloride	ug/L	100	U	20	100	100	50	02/01/23 14:27	VOA6_427080	X020112
Trichloroethene	ug/L	5,400		10	50	50	50	02/01/23 14:27	VOA6_427080	X020112
Vinyl chloride	ug/L	170		10	50	50	50	02/01/23 14:27	VOA6_427080	X020112

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-04	Collected	Received	Matrix	Basis
16PM09-230121	01/21/23 10:40	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	25	U	7.5	25	25	25	02/01/23 14:06	VOA6_427080	X020111
1,1-Dichloroethene	ug/L	41		5.0	25	25	25	02/01/23 14:06	VOA6_427080	X020111
1,2-Dichloroethane	ug/L	25	U	5.0	25	25	25	02/01/23 14:06	VOA6_427080	X020111
cis-1,2-Dichloroethene	ug/L	700		5.0	25	25	25	02/01/23 14:06	VOA6_427080	X020111
Methylene chloride	ug/L	50	U	10	50	50	25	02/01/23 14:06	VOA6_427080	X020111
Trichloroethene	ug/L	2,100		5.0	25	25	25	02/01/23 14:06	VOA6_427080	X020111
Vinyl chloride	ug/L	26		5.0	25	25	25	02/01/23 14:06	VOA6_427080	X020111

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Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-05				Collected	Received	Matrix	Basis
16PM03-230121				01/21/23 11:40	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	02/01/23 18:48	VOA6_427080	X020124
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	02/01/23 18:48	VOA6_427080	X020124
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	02/01/23 18:48	VOA6_427080	X020124
cis-1,2-Dichloroethene	ug/L	4,200		10	50	50	50	02/01/23 18:48	VOA6_427080	X020124
Methylene chloride	ug/L	100	U	20	100	100	50	02/01/23 18:48	VOA6_427080	X020124
Trichloroethene	ug/L	9,100		10	50	50	50	02/01/23 18:48	VOA6_427080	X020124
Vinyl chloride	ug/L	220		10	50	50	50	02/01/23 18:48	VOA6_427080	X020124

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Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-06	Collected	Received	Matrix	Basis
16PM06-230121	01/21/23 12:30	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	250	U	75	250	250	250	02/01/23 19:30	VOA6_427080	X020126
1,1-Dichloroethene	ug/L	250	U	50	250	250	250	02/01/23 19:30	VOA6_427080	X020126
1,2-Dichloroethane	ug/L	250	U	50	250	250	250	02/01/23 19:30	VOA6_427080	X020126
cis-1,2-Dichloroethene	ug/L	29,000		50	250	250	250	02/01/23 19:30	VOA6_427080	X020126
Methylene chloride	ug/L	500	U	100	500	500	250	02/01/23 19:30	VOA6_427080	X020126
Trichloroethene	ug/L	85,000		500	2500	2500	2500	02/01/23 19:51	VOA6_427080	X020127
Vinyl chloride	ug/L	1,100		50	250	250	250	02/01/23 19:30	VOA6_427080	X020126

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-07	Collected	Received	Matrix	Basis
16PM02-230121	01/21/23 13:25	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	250	U	75	250	250	250	02/01/23 20:12	VOA6_427080	X020128
1,1-Dichloroethene	ug/L	250	U	50	250	250	250	02/01/23 20:12	VOA6_427080	X020128
1,2-Dichloroethane	ug/L	250	U	50	250	250	250	02/01/23 20:12	VOA6_427080	X020128
cis-1,2-Dichloroethene	ug/L	7,100		50	250	250	250	02/01/23 20:12	VOA6_427080	X020128
Methylene chloride	ug/L	500	U	100	500	500	250	02/01/23 20:12	VOA6_427080	X020128
Trichloroethene	ug/L	80,000		500	2500	2500	2500	02/01/23 20:33	VOA6_427080	X020129
Vinyl chloride	ug/L	160	J	50	250	250	250	02/01/23 20:12	VOA6_427080	X020128

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-08	Collected	Received	Matrix	Basis
16RW01-230123	01/23/23 09:25	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	10	U	3.0	10	10	10	02/01/23 17:45	VOA6_427080	X020121
1,1-Dichloroethene	ug/L	10	U	2.0	10	10	10	02/01/23 17:45	VOA6_427080	X020121
1,2-Dichloroethane	ug/L	10	U	2.0	10	10	10	02/01/23 17:45	VOA6_427080	X020121
cis-1,2-Dichloroethene	ug/L	73		2.0	10	10	10	02/01/23 17:45	VOA6_427080	X020121
Methylene chloride	ug/L	20	U	4.0	20	20	10	02/01/23 17:45	VOA6_427080	X020121
Trichloroethene	ug/L	2,000		10	50	50	50	02/02/23 20:47	VOA6_427191	X020221
Vinyl chloride	ug/L	10	U	2.0	10	10	10	02/01/23 17:45	VOA6_427080	X020121

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-09	Collected	Received	Matrix	Basis
16RW05-230123	01/23/23 10:30	01/24/23 09:50	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	02/01/23 17:23	VOA6_427080	X020120
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 17:23	VOA6_427080	X020120
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 17:23	VOA6_427080	X020120
cis-1,2-Dichloroethene	ug/L	2.0		0.20	1.0	1.0	1	02/01/23 17:23	VOA6_427080	X020120
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/01/23 17:23	VOA6_427080	X020120
Trichloroethene	ug/L	6.1		0.20	1.0	1.0	1	02/01/23 17:23	VOA6_427080	X020120
Vinyl chloride	ug/L	0.51	J	0.20	1.0	1.0	1	02/01/23 17:23	VOA6_427080	X020120

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-10	Collected	Received	Matrix	Basis
16WW26-230123	01/23/23 11:25	01/24/23 09:50	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	02/02/23 21:08	VOA6_427191	X020222
1,1-Dichloroethene	ug/L	1.2		0.20	1.0	1.0	1	02/02/23 21:08	VOA6_427191	X020222
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 21:08	VOA6_427191	X020222
cis-1,2-Dichloroethene	ug/L	57		0.20	1.0	1.0	1	02/02/23 21:08	VOA6_427191	X020222
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 21:08	VOA6_427191	X020222
Trichloroethene	ug/L	710		2.0	10	10	10	02/01/23 18:06	VOA6_427080	X020122
Vinyl chloride	ug/L	3.6		0.20	1.0	1.0	1	02/02/23 21:08	VOA6_427191	X020222

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-11

16WW25-230123

Collected	Received	Matrix	Basis
01/23/23 12:45	01/24/23 09:50	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	02/01/23 16:20	VOA6_427080	X020117
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:20	VOA6_427080	X020117
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:20	VOA6_427080	X020117
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:20	VOA6_427080	X020117
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/01/23 16:20	VOA6_427080	X020117
Trichloroethene	ug/L	4.9		0.20	1.0	1.0	1	02/01/23 16:20	VOA6_427080	X020117
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:20	VOA6_427080	X020117

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-12	Collected	Received	Matrix	Basis
16WW29-230123	01/23/23 13:45	01/24/23 09:50	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	02/01/23 16:41	VOA6_427080	X020118
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:41	VOA6_427080	X020118
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:41	VOA6_427080	X020118
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:41	VOA6_427080	X020118
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/01/23 16:41	VOA6_427080	X020118
Trichloroethene	ug/L	2.8		0.20	1.0	1.0	1	02/01/23 16:41	VOA6_427080	X020118
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 16:41	VOA6_427080	X020118

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

HS23011397-13	Collected	Received	Matrix	Basis
16WW30-230123	01/23/23 14:35	01/24/23 09:50	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	02/01/23 17:02	VOA6_427080	X020119
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 17:02	VOA6_427080	X020119
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 17:02	VOA6_427080	X020119
cis-1,2-Dichloroethene	ug/L	3.3		0.20	1.0	1.0	1	02/01/23 17:02	VOA6_427080	X020119
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/01/23 17:02	VOA6_427080	X020119
Trichloroethene	ug/L	120		0.20	1.0	1.0	1	02/01/23 17:02	VOA6_427080	X020119
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 17:02	VOA6_427080	X020119

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Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

VBLKW-230201	Collected	Received	Matrix	Basis
VBLKW-230201	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	02/01/23 12:42	VOA6_427080	X020107
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 12:42	VOA6_427080	X020107
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 12:42	VOA6_427080	X020107
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 12:42	VOA6_427080	X020107
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/01/23 12:42	VOA6_427080	X020107
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 12:42	VOA6_427080	X020107
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/01/23 12:42	VOA6_427080	X020107

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

VBLKW-230202	Collected	Received	Matrix	Basis
VBLKW-230202	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	02/02/23 16:13	VOA6_427191	X020208
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 16:13	VOA6_427191	X020208
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208

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Form 2

System Monitoring Compound Recovery

Volatiles by by EPA 8260

Workorder

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Client

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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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Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

RunID
VOA6_427080

Volatiles by EPA 8260

CCV	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.71	50	99.4	80-120	
4-Bromofluorobenzene	51.62	50	103	80-120	
Dibromofluoromethane	45.62	50	91.2	80-120	
Toluene-d8	48.47	50	96.9	80-120	

CCB	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.3	50	98.6	80-120	
4-Bromofluorobenzene	51	50	102	80-120	
Dibromofluoromethane	45.53	50	91.1	80-120	
Toluene-d8	52.43	50	105	80-120	

VLCSW-230201	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	51.44	50	103	81-118	
4-Bromofluorobenzene	50.38	50	101	85-114	
Dibromofluoromethane	47.17	50	94.3	80-119	
Toluene-d8	47.75	50	95.5	89-112	

VBLKW-230201	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.87	50	99.7	81-118	
4-Bromofluorobenzene	50.86	50	102	85-114	
Dibromofluoromethane	46.27	50	92.5	80-119	
Toluene-d8	51.82	50	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
HS23011397

RunID
VOA6_427080

Volatiles by EPA 8260

HS23011397-01	Analyzed 02/01/23		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	52	50	103	85-114	
Dibromofluoromethane	46	50	91.1	80-119	
Toluene-d8	53	50	107	89-112	

HS23011397-02	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	97.8	81-118	
4-Bromofluorobenzene	52	50	103	85-114	
Dibromofluoromethane	46	50	91.5	80-119	
Toluene-d8	52	50	105	89-112	

HS23011397-04	Analyzed 02/01/23		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	1,200	1250	96.8	81-118	
4-Bromofluorobenzene	1,300	1250	102	85-114	
Dibromofluoromethane	1,100	1250	90.7	80-119	
Toluene-d8	1,300	1250	104	89-112	

HS23011397-03	Analyzed 02/01/23		Conc Units µg/L		DF 50
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	2,500	2500	100	81-118	
4-Bromofluorobenzene	2,500	2500	102	85-114	
Dibromofluoromethane	2,300	2500	94.0	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

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RunID
VOA6_427080

Volatiles by EPA 8260

HS23011397-02MS	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.57	50	99.1	81-118	
4-Bromofluorobenzene	52.08	50	104	85-114	
Dibromofluoromethane	44.8	50	89.6	80-119	
Toluene-d8	52.12	50	104	89-112	

HS23011397-02MSD	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.78	50	97.6	81-118	
4-Bromofluorobenzene	52.02	50	104	85-114	
Dibromofluoromethane	45.01	50	90.0	80-119	
Toluene-d8	52.1	50	104	89-112	

HS23011397-11	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	98.5	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	45	50	89.6	80-119	
Toluene-d8	53	50	106	89-112	

HS23011397-12	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	97.5	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	45	50	90.3	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

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Volatiles by EPA 8260

HS23011397-13	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50	50	99.5	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	46	50	91.5	80-119	
Toluene-d8	53	50	106	89-112	

HS23011397-09	Analyzed 02/01/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	98.2	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	45	50	90.8	80-119	
Toluene-d8	52	50	104	89-112	

HS23011397-08	Analyzed 02/01/23		Conc Units µg/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	500	500	99.8	81-118	
4-Bromofluorobenzene	520	500	103	85-114	
Dibromofluoromethane	460	500	91.5	80-119	
Toluene-d8	520	500	105	89-112	

HS23011397-10	Analyzed 02/01/23		Conc Units µg/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	500	500	99.4	81-118	
4-Bromofluorobenzene	510	500	102	85-114	
Dibromofluoromethane	460	500	92.3	80-119	
Toluene-d8	530	500	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

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RunID
VOA6_427080

Volatiles by EPA 8260

HS23011397-05	Analyzed 02/01/23		Conc Units µg/L		DF 50
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	2,400	2500	94.9	81-118	
4-Bromofluorobenzene	2,500	2500	102	85-114	
Dibromofluoromethane	2,200	2500	89.0	80-119	
Toluene-d8	2,700	2500	107	89-112	

HS23011397-06	Analyzed 02/01/23		Conc Units µg/L		DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	12,000	12500	98.0	81-118	
4-Bromofluorobenzene	13,000	12500	102	85-114	
Dibromofluoromethane	11,000	12500	91.7	80-119	
Toluene-d8	13,000	12500	104	89-112	
1,2-Dichloroethane-d4	120,000	125000	98.6	81-118	
4-Bromofluorobenzene	130,000	125000	102	85-114	
Dibromofluoromethane	120,000	125000	92.2	80-119	
Toluene-d8	130,000	125000	105	89-112	

HS23011397-07	Analyzed 02/01/23		Conc Units µg/L		DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	12,000	12500	97.7	81-118	
4-Bromofluorobenzene	13,000	12500	102	85-114	
Dibromofluoromethane	11,000	12500	91.1	80-119	
Toluene-d8	13,000	12500	107	89-112	
1,2-Dichloroethane-d4	120,000	125000	99.8	81-118	
4-Bromofluorobenzene	130,000	125000	102	85-114	
Dibromofluoromethane	110,000	125000	91.8	80-119	
Toluene-d8	130,000	125000	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
HS23011397

RunID
VOA6_427191

Volatiles by EPA 8260

CCV	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50.4	50	101	80-120	
4-Bromofluorobenzene	51.2	50	102	80-120	
Dibromofluoromethane	46.85	50	93.7	80-120	
Toluene-d8	48.95	50	97.9	80-120	

CCB	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.01	50	94.0	80-120	
4-Bromofluorobenzene	50.64	50	101	80-120	
Dibromofluoromethane	43.94	50	87.9	80-120	
Toluene-d8	52.58	50	105	80-120	

VLCSW-230202	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50.74	50	101	81-118	
4-Bromofluorobenzene	50.78	50	102	85-114	
Dibromofluoromethane	45.19	50	90.4	80-119	
Toluene-d8	48.09	50	96.2	89-112	

VBLKW-230202	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.13	50	96.3	81-118	
4-Bromofluorobenzene	51.46	50	103	85-114	
Dibromofluoromethane	44.9	50	89.8	80-119	
Toluene-d8	52.85	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
HS23011397

RunID
VOA6_427191

Volatiles by EPA 8260

HS23011294-08MS	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.65	50	95.3	81-118	
4-Bromofluorobenzene	52.23	50	104	85-114	
Dibromofluoromethane	43.12	50	86.2	80-119	
Toluene-d8	51.75	50	103	89-112	

HS23011294-08MSD	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.49	50	95.0	81-118	
4-Bromofluorobenzene	52.87	50	106	85-114	
Dibromofluoromethane	43.1	50	86.2	80-119	
Toluene-d8	52.02	50	104	89-112	

HS23011397-08	Analyzed 02/02/23		Conc Units µg/L		DF 50
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	2,400	2500	94.9	81-118	
4-Bromofluorobenzene	2,600	2500	105	85-114	
Dibromofluoromethane	2,200	2500	87.4	80-119	
Toluene-d8	2,600	2500	104	89-112	

HS23011397-10	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47	50	94.2	81-118	
4-Bromofluorobenzene	52	50	103	85-114	
Dibromofluoromethane	44	50	88.3	80-119	
Toluene-d8	51	50	102	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

HS23011397

Client

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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
HS23011397

16WW44-230121		HS23011397-02		HS23011397-02MS				HS23011397-02MSD						
Sample Matrix	Aqueous	**Run Date**	02/01/23	02/01/23				02/01/23						
Units	µg/L	**Run Time**	13:45	14:48				15:09						
		Data File	X020110.D	X020113.D				X020114.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	1	0	19.50	20.00	98		19.2	20.00	96		20	1.50	
1,1-Dichloroethene	71-131	1	0	18.29	20.00	91		17.87	20.00	89		20	2.30	
1,2-Dichloroethane	73-128	1	0	20.66	20.00	103		21.08	20.00	105		20	2.00	
cis-1,2-Dichloroethene	78-123	1	0	18.33	20.00	92		17.79	20.00	89		20	3.00	
Methylene chloride	74-124	1	0	16.83	20.00	84		16.43	20.00	82		20	2.40	
Trichloroethene	79-123	1	2.228	24.26	20.00	110		23.11	20.00	104		20	4.90	
Vinyl chloride	58-137	1	0	16.55	20.00	83		15.44	20.00	77		20	6.90	

- %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
HS23011397

		HS23011294-08		HS23011294-08MS				HS23011294-08MSD						
Sample Matrix	Aqueous	**Run Date**	02/02/23	02/02/23				02/02/23						
Units	µg/L	**Run Time**	16:55	19:23				19:44						
		Data File	X020210.D	X020217.D				X020218.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	1	0	18.28	20.00	91		18.61	20.00	93		20	1.80	
1,1-Dichloroethene	71-131	1	0	16.40	20.00	82		15.86	20.00	79		20	3.30	
1,2-Dichloroethane	73-128	1	0	20.19	20.00	101		19.66	20.00	98		20	2.70	
cis-1,2-Dichloroethene	78-123	1	0	16.74	20.00	84		16.3	20.00	82		20	2.70	
Methylene chloride	74-124	1	0	16.13	20.00	81		15.39	20.00	77		20	4.70	
Trichloroethene	79-123	1	0	21.32	20.00	107		20.13	20.00	101		20	5.70	
Vinyl chloride	58-137	1	0	15.24	20.00	76		14.73	20.00	74		20	3.40	

- %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

HS23011397

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

VOA6_427080		QC ID	VLCSW-230201			
QC Matrix Aqueous	Units	Run Date	02/01/23			
	ug/L	Run Time	12:00			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	19.06	95		
1,1-Dichloroethene	71-131	20	19.57	98		
1,2-Dichloroethane	73-128	20	22.53	113		
1,2-Dichloroethane-d4	81-118	50	51.44	103		
4-Bromofluorobenzene	85-114	50	50.38	101		
cis-1,2-Dichloroethene	78-123	20	19.58	98		
Dibromofluoromethane	80-119	50	47.17	94		
Methylene chloride	74-124	20	19.22	96		
Toluene-d8	89-112	50	47.75	96		
Trichloroethene	79-123	20	21.38	107		
Vinyl chloride	58-137	20	20.5	103		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

VOA6_427191		QC ID	VLCSW-230202			
QC Matrix Aqueous	Units	Run Date	02/02/23			
	ug/L	Run Time	15:10			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	20.71	104		
1,1-Dichloroethene	71-131	20	18.71	94		
1,2-Dichloroethane	73-128	20	23.27	116		
1,2-Dichloroethane-d4	81-118	50	50.74	101		
4-Bromofluorobenzene	85-114	50	50.78	102		
cis-1,2-Dichloroethene	78-123	20	19.27	96		
Dibromofluoromethane	80-119	50	45.19	90		
Methylene chloride	74-124	20	19.48	97		
Toluene-d8	89-112	50	48.09	96		
Trichloroethene	79-123	20	22.24	111		
Vinyl chloride	58-137	20	20.11	101		

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

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Form 4

Method Blank Summary

Volatiles by by EPA 8260

Workorder

HS23011397

Client

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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 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230201	X020107.D	02/01/23 12:42	VOA6_427080
VLCSW-230201	LCS	VLCSW-230201	X020105.D	02/01/23 12:00	VOA6_427080
Trip Blank-230121	SAMP	HS23011397-01	X020108.D	02/01/23 13:03	VOA6_427080
16WW44-230121	SAMP	HS23011397-02	X020110.D	02/01/23 13:45	VOA6_427080
16PM09-230121	SAMP	HS23011397-04	X020111.D	02/01/23 14:06	VOA6_427080
16PM14-230121	SAMP	HS23011397-03	X020112.D	02/01/23 14:27	VOA6_427080
16WW44-230121	MS	HS23011397-02MS	X020113.D	02/01/23 14:48	VOA6_427080
16WW44-230121	MSD	HS23011397-02MSD	X020114.D	02/01/23 15:09	VOA6_427080
16WW25-230123	SAMP	HS23011397-11	X020117.D	02/01/23 16:20	VOA6_427080
16WW29-230123	SAMP	HS23011397-12	X020118.D	02/01/23 16:41	VOA6_427080
16WW30-230123	SAMP	HS23011397-13	X020119.D	02/01/23 17:02	VOA6_427080
16RW05-230123	SAMP	HS23011397-09	X020120.D	02/01/23 17:23	VOA6_427080
16RW01-230123	SAMP	HS23011397-08	X020121.D	02/01/23 17:45	VOA6_427080
16WW26-230123	SAMP	HS23011397-10	X020122.D	02/01/23 18:06	VOA6_427080
16PM03-230121	SAMP	HS23011397-05	X020124.D	02/01/23 18:48	VOA6_427080
16PM06-230121	SAMP	HS23011397-06	X020126.D	02/01/23 19:30	VOA6_427080
16PM06-230121	SAMP	HS23011397-06	X020127.D	02/01/23 19:51	VOA6_427080
16PM02-230121	SAMP	HS23011397-07	X020128.D	02/01/23 20:12	VOA6_427080
16PM02-230121	SAMP	HS23011397-07	X020129.D	02/01/23 20:33	VOA6_427080

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230202	X020208.D	02/02/23 16:13	VOA6_427191
VLCSW-230202	LCS	VLCSW-230202	X020205.D	02/02/23 15:10	VOA6_427191
BatchQC	MS	HS23011294-08MS	X020217.D	02/02/23 19:23	VOA6_427191
BatchQC	MSD	HS23011294-08MSD	X020218.D	02/02/23 19:44	VOA6_427191
16RW01-230123	SAMP	HS23011397-08	X020221.D	02/02/23 20:47	VOA6_427191
16WW26-230123	SAMP	HS23011397-10	X020222.D	02/02/23 21:08	VOA6_427191

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Form 5

Instrument Performance Check

Volatiles by by EPA 8260

Workorder

HS23011397

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
HS23011397

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
HS23011397

RunID
VOA6_427080

Tune File X020101.D 02/01/23 10:36

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	20.1 (20.1)
75	30.0 - 60.0% of mass 95	50.7 (50.7)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.7 (7.67)
173	Less than 2.0% of mass 174	0.6 (0.699) 1
174	50.0 - 120.0% of mass 95	82.7 (82.7)
175	4.0 - 9.0% of mass 174	6.7 (8.11) 1
176	93.0 - 101.0% of mass 174	82.6 (99.8) 1
177	5.0 - 9.0% of mass 176	5.8 (7) 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	02/01/23 11:18	X020103	CCV
2	CCB	02/01/23 11:39	X020104	CCB
3	LCS	02/01/23 12:00	X020105	VLCSW-230201
4	MBLK	02/01/23 12:42	X020107	VBLKW-230201
5	SAMP	02/01/23 13:03	X020108	Trip Blank-230121
6	SAMP	02/01/23 13:45	X020110	16WW44-230121
7	SAMP	02/01/23 14:06	X020111	16PM09-230121
8	SAMP	02/01/23 14:27	X020112	16PM14-230121
9	MS	02/01/23 14:48	X020113	HS23011397-02MS
10	MSD	02/01/23 15:09	X020114	HS23011397-02MSD
11	SAMP	02/01/23 16:20	X020117	16WW25-230123
12	SAMP	02/01/23 16:41	X020118	16WW29-230123
13	SAMP	02/01/23 17:02	X020119	16WW30-230123
14	SAMP	02/01/23 17:23	X020120	16RW05-230123
15	SAMP	02/01/23 17:45	X020121	16RW01-230123
16	SAMP	02/01/23 18:06	X020122	16WW26-230123
17	SAMP	02/01/23 18:48	X020124	16PM03-230121
18	SAMP	02/01/23 19:30	X020126	16PM06-230121
19	SAMP	02/01/23 19:51	X020127	16PM06-230121
20	SAMP	02/01/23 20:12	X020128	16PM02-230121
21	SAMP	02/01/23 20:33	X020129	16PM02-230121
22	CCV_EN	02/01/23 20:54	X020130	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

RunID
VOA6_427191

Tune File X020201.D 02/02/23 13:46

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	17.5 (17.5)
75	30.0 - 60.0% of mass 95	46.9 (46.9)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.1 (7.11)
173	Less than 2.0% of mass 174	0.4 (0.507) 1
174	50.0 - 120.0% of mass 95	82.6 (82.6)
175	4.0 - 9.0% of mass 174	6.5 (7.88) 1
176	93.0 - 101.0% of mass 174	81 (98.1) 1
177	5.0 - 9.0% of mass 176	5.2 (6.38) 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	02/02/23 14:28	X020203	CCV
2	CCB	02/02/23 14:49	X020204	CCB
3	LCS	02/02/23 15:10	X020205	VLCSW-230202
4	MBLK	02/02/23 16:13	X020208	VBLKW-230202
5	MS	02/02/23 19:23	X020217	ZZZZZZMS
6	MSD	02/02/23 19:44	X020218	ZZZZZZMSD
7	SAMP	02/02/23 20:47	X020221	16RW01-230123
8	SAMP	02/02/23 21:08	X020222	16WW26-230123
9	CCV_EN	02/03/23 00:17	X020231	CCV-END

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Form 6

Initial Calibration Data

Volatiles by by EPA 8260

Workorder

HS23011397

Client

Aptim Environmental & Infrastucture, Inc.

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 HS23011397

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 HS23011397

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 HS23011397

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 HS23011397

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	

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 HS23011397

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
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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Initial Calibration Data

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

Workorder HS23011397

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

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Initial Calibration Data

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

Workorder HS23011397

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
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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Initial Calibration Data

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Project LHAAP 16 January 2023

Workorder HS23011397

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
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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Project LHAAP 16 January 2023

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RunID VOA6_424237

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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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Project LHAAP 16 January 2023

Workorder HS23011397

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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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Project LHAAP 16 January 2023

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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

HS23011397

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 HS23011397

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	

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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
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 HS23011397

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	

right solutions.
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Form 7

Continuing Calibration Verification (CCV)

Volatiles by by EPA 8260

Workorder

HS23011397

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 HS23011397

RunID VOA6_427080

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 01-FEB-2023 1118
Lab File ID X020103.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	0.00531	0.00531	0.001	-16.20132	20.0	Averaged	
1,3-Butadiene	0.34316	0.37063	0.37063	0.100	-8.00588	20.0	Averaged	
Methacrylonitrile	0.35404	0.36131	0.36131	0.100	-2.05374	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06128	0.06128	0.005	-8.96943	20.0	Averaged	
Acetonitrile	0.04551	0.04761	0.04761	0.005	-4.61591	20.0	Averaged	
Allyl Chloride	0.86670	0.90620	0.90620	0.100	-4.55759	20.0	Averaged	
Propionitrile	0.05102	0.05209	0.05209	0.010	-2.10017	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.13033	0.13033	0.050	-20.74905	20.0	Averaged	<-
Ethyl Acetate	0.39016	0.43521	0.43521	0.100	-11.54576	20.0	Averaged	
Methyl Methacrylate	0.34093	0.38469	0.38469	0.100	-12.83647	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.26050	0.26050	0.100	-10.63678	20.0	Averaged	
Tetrahydrofuran	100	97.91680	0.06090	0.001	2.08320	20.0	Linear	
alpha-Methylstyrene	1.10787	1.26068	1.26068	0.100	-13.79348	20.0	Averaged	
Diisopropyl ether	1.29704	1.27770	1.27770	0.100	1.49107	20.0	Averaged	
Epichlorohydrin	200	229	0.02568	0.001	-14.47989	20.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.48407	2.48407	0.100	-3.16942	20.0	Averaged	
Dichlorodifluoromethane	50.0	133	0.93596	0.100	-166	20.0	Linear	<-
Chloromethane	50.0	52.17771	0.47300	0.100	-4.35543	20.0	Linear	
Vinyl Chloride	0.43678	0.44932	0.44932	0.100	-2.87128	20.0	Averaged	
Bromomethane	50.0	44.69406	0.29402	0.100	10.61187	20.0	Linear	
Chloroethane	0.30401	0.27734	0.27734	0.100	8.77308	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.66238	0.66238	0.100	-8.36895	20.0	Averaged	
Acrolein	100	95.33487	0.03255	0.010	4.66513	20.0	Linear	
Acetone	100	104	0.14579	0.100	-3.91485	20.0	Linear	
1,1-Dichloroethene	0.37948	0.36496	0.36496	0.100	3.82453	20.0	Averaged	
Iodomethane	100	104	0.52108	0.100	-3.86983	20.0	Quadratic	
Acrylonitrile	0.12870	0.13618	0.13618	0.050	-5.80809	20.0	Averaged	
Methylene Chloride	0.52052	0.48631	0.48631	0.100	6.57200	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.23527	1.23527	0.100	0.55074	20.0	Averaged	
Carbon Disulfide	0.99285	1.00996	1.00996	0.100	-1.72315	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.44009	0.44009	0.100	-3.62291	20.0	Averaged	
Vinyl Acetate	1.09037	1.21609	1.21609	0.010	-11.53007	20.0	Averaged	
1,1-Dichloroethane	0.74536	0.76093	0.76093	0.200	-2.08823	20.0	Averaged	
2-Butanone	100	112	0.16661	0.100	-11.59639	20.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427080

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 01-FEB-2023 1118
Lab File ID X020103.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
2,2-Dichloropropane	0.63286	0.73539	0.73539	0.100	-16.20181	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.50660	0.50660	0.100	1.98435	20.0	Averaged	
Chloroform	0.83541	0.85507	0.85507	0.200	-2.35325	20.0	Averaged	
Bromochloromethane	0.28299	0.26876	0.26876	0.100	5.02765	20.0	Averaged	
Dibromofluoromethane	50.0	45.61999	0.43818	0.100	8.76002	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.75935	0.75935	0.100	-14.56308	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.44452	0.44452	0.100	-25.22600	20.0	Averaged	<-
1,2-Dichloroethane	0.40967	0.45983	0.45983	0.100	-12.24577	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.44327	0.44327	0.100	-16.93833	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	49.71102	0.50379	0.100	0.57796	20.0	Linear	
Benzene	1.19399	1.29331	1.29331	0.500	-8.31881	20.0	Averaged	
Trichloroethene	0.33865	0.37791	0.37791	0.200	-11.59255	20.0	Averaged	
Bromodichloromethane	0.44810	0.48105	0.48105	0.200	-7.35457	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.17800	0.17800	0.001	-39.62986	20.0	Averaged	<-
1,2-Dichloropropane	0.31761	0.33576	0.33576	0.100	-5.71461	20.0	Averaged	
Dibromomethane	0.21588	0.22205	0.22205	0.100	-2.85822	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.30543	0.30543	0.100	-14.28559	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.59662	0.59662	0.200	-13.37084	20.0	Averaged	
Toluene-d8	1.23554	1.19767	1.19767	0.100	3.06441	20.0	Averaged	
Toluene	1.38201	1.51273	1.51273	0.400	-9.45810	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.51756	0.51756	0.100	-18.50895	20.0	Averaged	
2-Hexanone	0.18183	0.21640	0.21640	0.100	-19.01374	20.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.28748	0.28748	0.100	-3.68876	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.59765	0.59765	0.100	-9.51364	20.0	Averaged	
Dibromochloromethane	0.40016	0.44105	0.44105	0.100	-10.21769	20.0	Averaged	
Tetrachloroethene	0.28594	0.33804	0.33804	0.200	-18.22062	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.38323	0.38323	0.100	-10.55273	20.0	Averaged	
1-Chlorohexane	0.24163	0.31435	0.31435	0.100	-30.09523	20.0	Averaged	<-
Chlorobenzene	0.98026	1.05032	1.05032	0.500	-7.14705	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.40564	0.40564	0.100	-11.19611	20.0	Averaged	
Ethylbenzene	0.46175	0.53590	0.53590	0.100	-16.05711	20.0	Averaged	
m,p-Xylenes	0.59525	0.67497	0.67497	0.100	-13.39285	20.0	Averaged	
o-Xylene	0.58751	0.65489	0.65489	0.300	-11.46963	20.0	Averaged	
Styrene	0.98473	1.12717	1.12717	0.300	-14.46464	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427080

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 01-FEB-2023 1118
Lab File ID X020103.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
Bromoform	0.27722	0.30300	0.30300	0.100	-9.29840	20.0	Averaged	
Isopropylbenzene	1.34224	1.66551	1.66551	0.100	-24.08491	20.0	Averaged	<-
1,1,2,2-Tetrachloroethane	0.79693	0.85137	0.85137	0.300	-6.83198	20.0	Averaged	
4-Bromofluorobenzene	50.0	51.62338	0.47684	0.100	-3.24677	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.65994	0.65994	0.100	-18.61898	20.0	Averaged	
n-Propylbenzene	2.76956	3.55964	3.55964	0.100	-28.52737	20.0	Averaged	<-
Bromobenzene	0.82033	0.90372	0.90372	0.100	-10.16625	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.59942	2.59942	0.100	-27.05149	20.0	Averaged	<-
2-Chlorotoluene	1.81741	2.16788	2.16788	0.100	-19.28410	20.0	Averaged	
4-Chlorotoluene	2.07183	2.53751	2.53751	0.100	-22.47686	20.0	Averaged	<-
tert-Butylbenzene	1.67475	2.16387	2.16387	0.100	-29.20551	20.0	Averaged	<-
1,2,4-Trimethylbenzene	2.15277	2.64095	2.64095	0.100	-22.67704	20.0	Averaged	<-
sec-Butylbenzene	2.22832	3.04569	3.04569	0.100	-36.68121	20.0	Averaged	<-
p-Isopropyltoluene	1.99679	2.74580	2.74580	0.100	-37.51095	20.0	Averaged	<-
1,3-Dichlorobenzene	1.36155	1.60776	1.60776	0.600	-18.08255	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.67836	1.67836	0.400	-12.96248	20.0	Averaged	
n-Butylbenzene	50.0	63.62860	2.46825	0.500	-27.25719	20.0	Linear	<-
1,2-Dichlorobenzene	1.40225	1.58882	1.58882	0.400	-13.30486	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	58.00376	0.14784	0.040	-16.00753	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.19798	1.19798	0.100	-35.37376	20.0	Averaged	<-
Hexachlorobutadiene	50.0	71.36608	0.56255	0.100	-42.73215	20.0	Quadratic	<-
Naphthalene	2.01347	2.49634	2.49634	0.200	-23.98237	20.0	Averaged	<-
1,2,3-Trichlorobenzene	0.84755	1.06178	1.06178	0.010	-25.27698	20.0	Averaged	<-
1,2-Dichloroethylene (total	0.47078	0.47335	0.47335	0.200	-0.54487	20.0	Averaged	
Xylenes (total)	0.56589	0.63232	0.63232	0.100	-11.73748	20.0	Averaged	
Cyclohexane	50.0	61.38789	0.62175	0.100	-22.77577	20.0	Linear	<-
Freon TF	0.36703	0.40535	0.40535	0.100	-10.44031	20.0	Averaged	
Methylcyclohexane	0.61204	0.75718	0.75718	0.100	-23.71373	20.0	Averaged	<-
Methyl Acetate	0.22499	0.24223	0.24223	0.100	-7.66186	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.04154	0.04154	0.005	-19.97477	20.0	Averaged	
Isopropyl alcohol	0.01808	0.02230	0.02230	0.005	-23.31082	20.0	Averaged	<-

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427080

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 01-FEB-2023 2054
Lab File ID X020130.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	0.00532	0.00532	0.001	-16.35894	50.0	Averaged	
1,3-Butadiene	0.34316	0.34825	0.34825	0.100	-1.48383	50.0	Averaged	
Methacrylonitrile	0.35404	0.36284	0.36284	0.100	-2.48417	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06069	0.06069	0.005	-7.91622	50.0	Averaged	
Acetonitrile	0.04551	0.04727	0.04727	0.005	-3.87853	50.0	Averaged	
Allyl Chloride	0.86670	0.88698	0.88698	0.100	-2.34058	50.0	Averaged	
Propionitrile	0.05102	0.05277	0.05277	0.010	-3.42851	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11549	0.11549	0.050	-6.99532	50.0	Averaged	
Ethyl Acetate	0.39016	0.43205	0.43205	0.100	-10.73819	50.0	Averaged	
Methyl Methacrylate	0.34093	0.38308	0.38308	0.100	-12.36462	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.24734	0.24734	0.100	-5.04747	50.0	Averaged	
Tetrahydrofuran	100	98.83489	0.06146	0.001	1.16511	50.0	Linear	
alpha-Methylstyrene	1.10787	1.13323	1.13323	0.100	-2.28914	50.0	Averaged	
Diisopropyl ether	1.29704	1.28672	1.28672	0.100	0.79620	50.0	Averaged	
Epichlorohydrin	200	203	0.02270	0.001	-1.35453	50.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.45171	2.45171	0.100	-1.82572	50.0	Averaged	
Dichlorodifluoromethane	50.0	132	0.92946	0.100	-164	50.0	Linear	
Chloromethane	50.0	48.50691	0.43825	0.100	2.98618	50.0	Linear	
Vinyl Chloride	0.43678	0.43525	0.43525	0.100	0.34883	50.0	Averaged	
Bromomethane	50.0	44.81477	0.29485	0.100	10.37045	50.0	Linear	
Chloroethane	0.30401	0.26605	0.26605	0.100	12.48543	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.63226	0.63226	0.100	-3.44172	50.0	Averaged	
Acrolein	100	97.77983	0.03341	0.010	2.22017	50.0	Linear	
Acetone	100	101	0.14120	0.100	-0.64743	50.0	Linear	
1,1-Dichloroethene	0.37948	0.35040	0.35040	0.100	7.66262	50.0	Averaged	
Iodomethane	100	94.28685	0.46940	0.100	5.71315	50.0	Quadratic	
Acrylonitrile	0.12870	0.13723	0.13723	0.050	-6.62241	50.0	Averaged	
Methylene Chloride	0.52052	0.49342	0.49342	0.100	5.20568	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.24226	1.24226	0.100	-0.01195	50.0	Averaged	
Carbon Disulfide	0.99285	0.96048	0.96048	0.100	3.26062	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.42552	0.42552	0.100	-0.19218	50.0	Averaged	
Vinyl Acetate	1.09037	1.08234	1.08234	0.010	0.73592	50.0	Averaged	
1,1-Dichloroethane	0.74536	0.74406	0.74406	0.200	0.17453	50.0	Averaged	
2-Butanone	100	108	0.16178	0.100	-8.45085	50.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427080

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 01-FEB-2023 2054
Lab File ID X020130.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
2,2-Dichloropropane	0.63286	0.61706	0.61706	0.100	2.49543	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.50146	0.50146	0.100	2.97941	50.0	Averaged	
Chloroform	0.83541	0.85583	0.85583	0.200	-2.44362	50.0	Averaged	
Bromochloromethane	0.28299	0.27232	0.27232	0.100	3.76930	50.0	Averaged	
Dibromofluoromethane	50.0	50.08828	0.48094	0.100	-0.17656	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.72674	0.72674	0.100	-9.64213	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.39903	0.39903	0.100	-12.41124	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.46494	0.46494	0.100	-13.49170	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.40156	0.40156	0.100	-5.93614	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	53.94871	0.54697	0.100	-7.89742	50.0	Linear	
Benzene	1.19399	1.22160	1.22160	0.500	-2.31286	50.0	Averaged	
Trichloroethene	0.33865	0.36237	0.36237	0.200	-7.00378	50.0	Averaged	
Bromodichloromethane	0.44810	0.45928	0.45928	0.200	-2.49510	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.16549	0.16549	0.001	-29.81464	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.31426	0.31426	0.100	1.05284	50.0	Averaged	
Dibromomethane	0.21588	0.21549	0.21549	0.100	0.17913	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.28596	0.28596	0.100	-7.00231	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.54588	0.54588	0.200	-3.73020	50.0	Averaged	
Toluene-d8	1.23554	1.26564	1.26564	0.100	-2.43659	50.0	Averaged	
Toluene	1.38201	1.41127	1.41127	0.400	-2.11687	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.47364	0.47364	0.100	-8.45251	50.0	Averaged	
2-Hexanone	0.18183	0.20204	0.20204	0.100	-11.11317	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.28122	0.28122	0.100	-1.43149	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.56905	0.56905	0.100	-4.27390	50.0	Averaged	
Dibromochloromethane	0.40016	0.42123	0.42123	0.100	-5.26641	50.0	Averaged	
Tetrachloroethene	0.28594	0.30053	0.30053	0.200	-5.10016	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.37156	0.37156	0.100	-7.18527	50.0	Averaged	
1-Chlorohexane	0.24163	0.25337	0.25337	0.100	-4.85498	50.0	Averaged	
Chlorobenzene	0.98026	0.98525	0.98525	0.500	-0.50940	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.38423	0.38423	0.100	-5.32633	50.0	Averaged	
Ethylbenzene	0.46175	0.48122	0.48122	0.100	-4.21601	50.0	Averaged	
m,p-Xylenes	0.59525	0.60619	0.60619	0.100	-1.83790	50.0	Averaged	
o-Xylene	0.58751	0.59803	0.59803	0.300	-1.79122	50.0	Averaged	
Styrene	0.98473	1.05515	1.05515	0.300	-7.15097	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427080

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 01-FEB-2023 2054
Lab File ID X020130.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
Bromoform	0.27722	0.29188	0.29188	0.100	-5.28849	50.0	Averaged	
Isopropylbenzene	1.34224	1.46262	1.46262	0.100	-8.96913	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.79054	0.79054	0.300	0.80120	50.0	Averaged	
4-Bromofluorobenzene	50.0	53.29185	0.49227	0.100	-6.58370	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.62629	0.62629	0.100	-12.56988	50.0	Averaged	
n-Propylbenzene	2.76956	3.04778	3.04778	0.100	-10.04559	50.0	Averaged	
Bromobenzene	0.82033	0.85503	0.85503	0.100	-4.23080	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.27011	2.27011	0.100	-10.95563	50.0	Averaged	
2-Chlorotoluene	1.81741	1.93947	1.93947	0.100	-6.71619	50.0	Averaged	
4-Chlorotoluene	2.07183	2.26781	2.26781	0.100	-9.45934	50.0	Averaged	
tert-Butylbenzene	1.67475	1.85785	1.85785	0.100	-10.93278	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.32636	2.32636	0.100	-8.06374	50.0	Averaged	
sec-Butylbenzene	2.22832	2.56189	2.56189	0.100	-14.96989	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.28382	2.28382	0.100	-14.37465	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.44247	1.44247	0.600	-5.94292	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.52215	1.52215	0.400	-2.44919	50.0	Averaged	
n-Butylbenzene	50.0	50.99709	1.96419	0.500	-1.99418	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.46897	1.46897	0.400	-4.75797	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	54.15957	0.13803	0.040	-8.31913	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.01603	1.01603	0.100	-14.81264	50.0	Averaged	
Hexachlorobutadiene	50.0	53.39797	0.41917	0.100	-6.79595	50.0	Quadratic	
Naphthalene	2.01347	2.26827	2.26827	0.200	-12.65484	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.93253	0.93253	0.010	-10.02674	50.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.46349	0.46349	0.200	1.54882	50.0	Averaged	
Xylenes (total)	0.56589	0.56940	0.56940	0.100	-0.62015	50.0	Averaged	
Cyclohexane	50.0	53.19794	0.53706	0.100	-6.39587	50.0	Linear	
Freon TF	0.36703	0.36145	0.36145	0.100	1.52007	50.0	Averaged	
Methylcyclohexane	0.61204	0.72328	0.72328	0.100	-18.17477	50.0	Averaged	
Methyl Acetate	0.22499	0.23037	0.23037	0.100	-2.39257	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.03959	0.03959	0.005	-14.36040	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02119	0.02119	0.005	-17.20670	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 02-FEB-2023 1428
Lab File ID X020203.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	0.00525	0.00525	0.001	-14.77845	20.0	Averaged	
1,3-Butadiene	0.34316	0.29905	0.29905	0.100	12.85358	20.0	Averaged	
Methacrylonitrile	0.35404	0.36869	0.36869	0.100	-4.13839	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06279	0.06279	0.005	-11.64577	20.0	Averaged	
Acetonitrile	0.04551	0.04605	0.04605	0.005	-1.18855	20.0	Averaged	
Allyl Chloride	0.86670	0.91522	0.91522	0.100	-5.59876	20.0	Averaged	
Propionitrile	0.05102	0.05338	0.05338	0.010	-4.63368	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12219	0.12219	0.050	-13.20876	20.0	Averaged	
Acetaldehyde	200	128	0.02143	0.001	36.11303	20.0	Linear	<-
Chloroprene	0.17001	0.13938	0.13938	0.100	18.01277	20.0	Averaged	
Ethyl Acetate	0.39016	0.42945	0.42945	0.100	-10.06934	20.0	Averaged	
Methyl Methacrylate	0.34093	0.38083	0.38083	0.100	-11.70311	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.25590	0.25590	0.100	-8.68460	20.0	Averaged	
Tetrahydrofuran	100	96.92813	0.06031	0.001	3.07187	20.0	Linear	
alpha-Methylstyrene	1.10787	1.11200	1.11200	0.100	-0.37311	20.0	Averaged	
Diisopropyl ether	1.29704	1.30745	1.30745	0.100	-0.80231	20.0	Averaged	
Epichlorohydrin	200	216	0.02425	0.001	-8.17127	20.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.44547	2.44547	0.100	-1.56621	20.0	Averaged	
Dichlorodifluoromethane	50.0	108	0.75858	0.100	-116	20.0	Linear	<-
Chloromethane	50.0	50.72926	0.45928	0.100	-1.45852	20.0	Linear	
Vinyl Chloride	0.43678	0.37268	0.37268	0.100	14.67629	20.0	Averaged	
Bromomethane	50.0	41.54621	0.27246	0.100	16.90759	20.0	Linear	
Chloroethane	0.30401	0.24769	0.24769	0.100	18.52440	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.52104	0.52104	0.100	14.75486	20.0	Averaged	
Acrolein	100	83.93679	0.02854	0.010	16.06321	20.0	Linear	
Acetone	100	110	0.15436	0.100	-10.03153	20.0	Linear	
1,1-Dichloroethene	0.37948	0.31179	0.31179	0.100	17.83618	20.0	Averaged	
Iodomethane	100	97.15779	0.48483	0.100	2.84221	20.0	Quadratic	
Acrylonitrile	0.12870	0.14059	0.14059	0.050	-9.23750	20.0	Averaged	
Methylene Chloride	0.52052	0.46878	0.46878	0.100	9.94031	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.25088	1.25088	0.100	-0.70616	20.0	Averaged	
Carbon Disulfide	0.99285	0.86593	0.86593	0.100	12.78342	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.39534	0.39534	0.100	6.91376	20.0	Averaged	
Vinyl Acetate	1.09037	1.04709	1.04709	0.010	3.96944	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 02-FEB-2023 1428
Lab File ID X020203.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	0.70667	0.70667	0.200	5.19160	20.0	Averaged	
2-Butanone	100	113	0.16839	0.100	-12.75957	20.0	Linear	
2,2-Dichloropropane	0.63286	0.60721	0.60721	0.100	4.05189	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.47700	0.47700	0.100	7.71199	20.0	Averaged	
Chloroform	0.83541	0.81183	0.81183	0.200	2.82279	20.0	Averaged	
Bromochloromethane	0.28299	0.25777	0.25777	0.100	8.91218	20.0	Averaged	
Dibromofluoromethane	50.0	46.84827	0.44994	0.100	6.30347	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.64260	0.64260	0.100	3.05076	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.35571	0.35571	0.100	-0.20616	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.43413	0.43413	0.100	-5.97163	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.34588	0.34588	0.100	8.75334	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	50.39533	0.51076	0.100	-0.79066	20.0	Linear	
Benzene	1.19399	1.16425	1.16425	0.500	2.49043	20.0	Averaged	
Trichloroethene	0.33865	0.33723	0.33723	0.200	0.41998	20.0	Averaged	
Bromodichloromethane	0.44810	0.44826	0.44826	0.200	-0.03721	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.16992	0.16992	0.001	-33.28795	20.0	Averaged	<-
1,2-Dichloropropane	0.31761	0.31294	0.31294	0.100	1.46952	20.0	Averaged	
Dibromomethane	0.21588	0.20970	0.20970	0.100	2.86222	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.29775	0.29775	0.100	-11.41258	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.55453	0.55453	0.200	-5.37380	20.0	Averaged	
Toluene-d8	1.23554	1.20964	1.20964	0.100	2.09603	20.0	Averaged	
Toluene	1.38201	1.35807	1.35807	0.400	1.73292	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.48043	0.48043	0.100	-10.00722	20.0	Averaged	
2-Hexanone	0.18183	0.21835	0.21835	0.100	-20.08572	20.0	Averaged	<-
1,1,2-Trichloroethane	0.27726	0.27877	0.27877	0.100	-0.54721	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.56930	0.56930	0.100	-4.31876	20.0	Averaged	
Dibromochloromethane	0.40016	0.41428	0.41428	0.100	-3.52934	20.0	Averaged	
Tetrachloroethene	0.28594	0.27089	0.27089	0.200	5.26347	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.36865	0.36865	0.100	-6.34515	20.0	Averaged	
1-Chlorohexane	0.24163	0.22843	0.22843	0.100	5.46529	20.0	Averaged	
Chlorobenzene	0.98026	0.96041	0.96041	0.500	2.02413	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37469	0.37469	0.100	-2.71131	20.0	Averaged	
Ethylbenzene	0.46175	0.45557	0.45557	0.100	1.33879	20.0	Averaged	
m,p-Xylenes	0.59525	0.58228	0.58228	0.100	2.17844	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 02-FEB-2023 1428
Lab File ID X020203.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	0.58177	0.58177	0.300	0.97677	20.0	Averaged	
Styrene	0.98473	1.03694	1.03694	0.300	-5.30169	20.0	Averaged	
Bromoform	0.27722	0.28933	0.28933	0.100	-4.36552	20.0	Averaged	
Isopropylbenzene	1.34224	1.34808	1.34808	0.100	-0.43499	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.80876	0.80876	0.300	-1.48474	20.0	Averaged	
4-Bromofluorobenzene	50.0	51.19768	0.47290	0.100	-2.39536	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.64937	0.64937	0.100	-16.71859	20.0	Averaged	
n-Propylbenzene	2.76956	2.90096	2.90096	0.100	-4.74453	20.0	Averaged	
Bromobenzene	0.82033	0.84735	0.84735	0.100	-3.29381	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.18547	2.18547	0.100	-6.81868	20.0	Averaged	
2-Chlorotoluene	1.81741	1.92216	1.92216	0.100	-5.76352	20.0	Averaged	
4-Chlorotoluene	2.07183	2.25298	2.25298	0.100	-8.74354	20.0	Averaged	
tert-Butylbenzene	1.67475	1.72720	1.72720	0.100	-3.13156	20.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.26399	2.26399	0.100	-5.16640	20.0	Averaged	
sec-Butylbenzene	2.22832	2.36813	2.36813	0.100	-6.27456	20.0	Averaged	
p-Isopropyltoluene	1.99679	2.16035	2.16035	0.100	-8.19144	20.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.43567	1.43567	0.600	-5.44377	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.50670	1.50670	0.400	-1.40932	20.0	Averaged	
n-Butylbenzene	50.0	48.47542	1.86356	0.500	3.04917	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.44139	1.44139	0.400	-2.79078	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	56.54391	0.14412	0.040	-13.08782	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.01913	1.01913	0.100	-15.16360	20.0	Averaged	
Hexachlorobutadiene	50.0	49.07094	0.38484	0.100	1.85812	20.0	Quadratic	
Naphthalene	2.01347	2.34879	2.34879	0.200	-16.65413	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.95068	0.95068	0.010	-12.16852	20.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.43617	0.43617	0.200	7.35194	20.0	Averaged	
Xylenes (total)	0.56589	0.54279	0.54279	0.100	4.08275	20.0	Averaged	
Cyclohexane	50.0	44.30695	0.44512	0.100	11.38610	20.0	Linear	
Freon TF	0.36703	0.29364	0.29364	0.100	19.99727	20.0	Averaged	
Methylcyclohexane	0.61204	0.68816	0.68816	0.100	-12.43678	20.0	Averaged	
Methyl Acetate	0.22499	0.24551	0.24551	0.100	-9.11941	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.04072	0.04072	0.005	-17.60450	20.0	Averaged	
Isopropyl alcohol	0.01808	0.02193	0.02193	0.005	-21.30283	20.0	Averaged	<-

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 0017
Lab File ID X020231.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	0.00548	0.00548	0.001	-19.90665	50.0	Averaged	
1,3-Butadiene	0.34316	0.31163	0.31163	0.100	9.18696	50.0	Averaged	
Methacrylonitrile	0.35404	0.38555	0.38555	0.100	-8.90072	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06188	0.06188	0.005	-10.03570	50.0	Averaged	
Acetonitrile	0.04551	0.04711	0.04711	0.005	-3.51903	50.0	Averaged	
Allyl Chloride	0.86670	0.93441	0.93441	0.100	-7.81302	50.0	Averaged	
Propionitrile	0.05102	0.05478	0.05478	0.010	-7.38265	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12033	0.12033	0.050	-11.48233	50.0	Averaged	
Acetaldehyde	200	244	0.03784	0.001	-21.75328	50.0	Linear	
Chloroprene	0.17001	0.14730	0.14730	0.100	13.35747	50.0	Averaged	
Ethyl Acetate	0.39016	0.42636	0.42636	0.100	-9.27740	50.0	Averaged	
Methyl Methacrylate	0.34093	0.39048	0.39048	0.100	-14.53465	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.27459	0.27459	0.100	-16.62347	50.0	Averaged	
Tetrahydrofuran	100	101	0.06261	0.001	-0.75206	50.0	Linear	
alpha-Methylstyrene	1.10787	1.16580	1.16580	0.100	-5.22964	50.0	Averaged	
Diisopropyl ether	1.29704	1.31016	1.31016	0.100	-1.01153	50.0	Averaged	
Epichlorohydrin	200	224	0.02515	0.001	-12.15314	50.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.54801	2.54801	0.100	-5.82529	50.0	Averaged	
Dichlorodifluoromethane	50.0	120	0.84077	0.100	-139	50.0	Linear	
Chloromethane	50.0	49.87399	0.45119	0.100	0.25203	50.0	Linear	
Vinyl Chloride	0.43678	0.39326	0.39326	0.100	9.96229	50.0	Averaged	
Bromomethane	50.0	41.81984	0.27434	0.100	16.36032	50.0	Linear	
Chloroethane	0.30401	0.25464	0.25464	0.100	16.23868	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.57250	0.57250	0.100	6.33492	50.0	Averaged	
Acrolein	100	91.23337	0.03111	0.010	8.76663	50.0	Linear	
Acetone	100	84.96921	0.11922	0.100	15.03079	50.0	Linear	
1,1-Dichloroethene	0.37948	0.32501	0.32501	0.100	14.35234	50.0	Averaged	
Iodomethane	100	92.87765	0.46184	0.100	7.12235	50.0	Quadratic	
Acrylonitrile	0.12870	0.14253	0.14253	0.050	-10.74606	50.0	Averaged	
Methylene Chloride	0.52052	0.47767	0.47767	0.100	8.23123	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.25726	1.25726	0.100	-1.21959	50.0	Averaged	
Carbon Disulfide	0.99285	0.88337	0.88337	0.100	11.02667	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.41188	0.41188	0.100	3.01910	50.0	Averaged	
Vinyl Acetate	1.09037	0.94008	0.94008	0.010	13.78356	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 0017
Lab File ID X020231.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	0.70854	0.70854	0.200	4.94065	50.0	Averaged	
2-Butanone	100	105	0.15632	0.100	-4.88960	50.0	Linear	
2,2-Dichloropropane	0.63286	0.57501	0.57501	0.100	9.13982	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.48521	0.48521	0.100	6.12233	50.0	Averaged	
Chloroform	0.83541	0.81463	0.81463	0.200	2.48734	50.0	Averaged	
Bromochloromethane	0.28299	0.25810	0.25810	0.100	8.79705	50.0	Averaged	
Dibromofluoromethane	50.0	44.79738	0.43031	0.100	10.40524	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.67560	0.67560	0.100	-1.92671	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.38653	0.38653	0.100	-8.88934	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.44524	0.44524	0.100	-8.68308	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.37581	0.37581	0.100	0.85676	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	49.00983	0.49665	0.100	1.98034	50.0	Linear	
Benzene	1.19399	1.21350	1.21350	0.500	-1.63435	50.0	Averaged	
Trichloroethene	0.33865	0.36693	0.36693	0.200	-8.34959	50.0	Averaged	
Bromodichloromethane	0.44810	0.44530	0.44530	0.200	0.62437	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.17102	0.17102	0.001	-34.15161	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.31464	0.31464	0.100	0.93368	50.0	Averaged	
Dibromomethane	0.21588	0.21073	0.21073	0.100	2.38645	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.30354	0.30354	0.100	-13.57923	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.54067	0.54067	0.200	-2.74024	50.0	Averaged	
Toluene-d8	1.23554	1.17468	1.17468	0.100	4.92559	50.0	Averaged	
Toluene	1.38201	1.39859	1.39859	0.400	-1.19954	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.47371	0.47371	0.100	-8.46800	50.0	Averaged	
2-Hexanone	0.18183	0.20948	0.20948	0.100	-15.20808	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.28196	0.28196	0.100	-1.69721	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.56750	0.56750	0.100	-3.98881	50.0	Averaged	
Dibromochloromethane	0.40016	0.41513	0.41513	0.100	-3.74194	50.0	Averaged	
Tetrachloroethene	0.28594	0.29533	0.29533	0.200	-3.28384	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.37233	0.37233	0.100	-7.40593	50.0	Averaged	
1-Chlorohexane	0.24163	0.25312	0.25312	0.100	-4.75447	50.0	Averaged	
Chlorobenzene	0.98026	0.98461	0.98461	0.500	-0.44398	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37973	0.37973	0.100	-4.09238	50.0	Averaged	
Ethylbenzene	0.46175	0.48449	0.48449	0.100	-4.92456	50.0	Averaged	
m,p-Xylenes	0.59525	0.60771	0.60771	0.100	-2.09350	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 0017
Lab File ID X020231.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	0.60615	0.60615	0.300	-3.17385	50.0	Averaged	
Styrene	0.98473	1.05962	1.05962	0.300	-7.60472	50.0	Averaged	
Bromoform	0.27722	0.29370	0.29370	0.100	-5.94305	50.0	Averaged	
Isopropylbenzene	1.34224	1.46789	1.46789	0.100	-9.36106	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.81186	0.81186	0.300	-1.87361	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.69367	0.46824	0.100	-1.38733	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.66285	0.66285	0.100	-19.14187	50.0	Averaged	
n-Propylbenzene	2.76956	3.11307	3.11307	0.100	-12.40293	50.0	Averaged	
Bromobenzene	0.82033	0.86073	0.86073	0.100	-4.92526	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.34208	2.34208	0.100	-14.47335	50.0	Averaged	
2-Chlorotoluene	1.81741	2.01911	2.01911	0.100	-11.09802	50.0	Averaged	
4-Chlorotoluene	2.07183	2.34487	2.34487	0.100	-13.17896	50.0	Averaged	
tert-Butylbenzene	1.67475	1.91886	1.91886	0.100	-14.57576	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.40132	2.40132	0.100	-11.54582	50.0	Averaged	
sec-Butylbenzene	2.22832	2.62210	2.62210	0.100	-17.67186	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.37358	2.37358	0.100	-18.87029	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.49717	1.49717	0.600	-9.96024	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.56881	1.56881	0.400	-5.58966	50.0	Averaged	
n-Butylbenzene	50.0	52.78886	2.03569	0.500	-5.57772	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.50894	1.50894	0.400	-7.60810	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	59.08015	0.15059	0.040	-18.16030	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.09738	1.09738	0.100	-24.00509	50.0	Averaged	
Hexachlorobutadiene	50.0	55.48490	0.43576	0.100	-10.96981	50.0	Quadratic	
Naphthalene	2.01347	2.53699	2.53699	0.200	-26.00101	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	1.05489	1.05489	0.010	-24.46357	50.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.44855	0.44855	0.200	4.72258	50.0	Averaged	
Xylenes (total)	0.56589	0.57757	0.57757	0.100	-2.06378	50.0	Averaged	
Cyclohexane	50.0	50.24704	0.50655	0.100	-0.49408	50.0	Linear	
Freon TF	0.36703	0.32638	0.32638	0.100	11.07593	50.0	Averaged	
Methylcyclohexane	0.61204	0.75086	0.75086	0.100	-22.68196	50.0	Averaged	
Methyl Acetate	0.22499	0.24711	0.24711	0.100	-9.83025	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.04276	0.04276	0.005	-23.50115	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02299	0.02299	0.005	-27.14244	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by by EPA 8260

Workorder

HS23011397

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
HS23011397

RunID
VOA6_427080

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X020103	598154	#	4.18	#	866437	#	4.97	#	819811	#	7.67	#	459085	#	9.66	#
CCB	X020104	694183		4.18		975624		4.96		867529		7.67		444798		9.66	
VLCSW-230201	X020105	602534		4.18		897186		4.96		842554		7.67		471247		9.66	
VBLKW-230201	X020107	695936		4.18		984782		4.97		883477		7.67		457336		9.66	
HS23011397-01	X020108	697078		4.18		979902		4.96		856319		7.67		438932		9.66	
HS23011397-02	X020110	687481		4.18		968563		4.97		852944		7.67		451962		9.66	
HS23011397-04	X020111	693546		4.17		974795		4.97		870145		7.67		460380		9.66	
HS23011397-03	X020112	688317		4.18		978623		4.96		858779		7.67		439149		9.66	
HS23011397-02MS	X020113	696603		4.17		983884		4.96		883819		7.67		482145		9.66	
HS23011397-02MSD	X020114	687487		4.18		975136		4.97		872582		7.67		472119		9.66	
HS23011397-11	X020117	684847		4.18		956766		4.96		842090		7.67		437707		9.66	
HS23011397-12	X020118	713763		4.17		1003435		4.97		883726		7.67		453398		9.66	
HS23011397-13	X020119	685874		4.17		964488		4.96		845191		7.67		438242		9.66	
HS23011397-09	X020120	698642		4.18		974586		4.96		882363		7.67		456670		9.66	
HS23011397-08	X020121	696321		4.18		985049		4.97		873648		7.67		455844		9.66	
HS23011397-10	X020122	698561		4.18		984370		4.97		868821		7.67		455112		9.66	
HS23011397-05	X020124	701091		4.17		968860		4.97		841847		7.67		430754		9.66	
HS23011397-06	X020126	689720		4.18		975493		4.96		860590		7.67		440690		9.66	
HS23011397-06	X020127	703808		4.18		1002602		4.97		883535		7.67		468720		9.66	
HS23011397-07	X020128	705313		4.18		992631		4.96		854976		7.67		434773		9.66	
HS23011397-07	X020129	689403		4.18		970073		4.97		857635		7.67		443083		9.66	
CCV-END	X020130	568208		4.17		863055		4.96		814334		7.67		458624		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
HS23011397

RunID
VOA6_427191

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X020203	583476	#	4.18	#	880046	#	4.96	#	820599	#	7.67	#	451653	#	9.66	#
CCB	X020204	730612		4.18		1012385		4.96		908237		7.67		456862		9.66	
VLCSW-230202	X020205	594963		4.18		872700		4.97		823868		7.67		462872		9.66	
VBLKW-230202	X020208	709559		4.17		999005		4.96		876582		7.67		449203		9.66	
ZZZZZZMS	X020217	708429		4.18		994906		4.96		901784		7.67		491734		9.66	
ZZZZZZMSD	X020218	712554		4.18		1000871		4.96		904027		7.67		490817		9.66	
HS23011397-08	X020221	731638		4.18		1018731		4.97		913025		7.67		486581		9.66	
HS23011397-10	X020222	723284		4.17		1014812		4.96		913366		7.67		481008		9.66	
CCV-END	X020231	569105		4.17		851640		4.96		810096		7.67		447952		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

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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
HS23011397

Volatiles by EPA 8260

RUNID
VOA6_427080

Run ID VOA6_427080 **Start Date** 02/01/23 **EndDate** 02/01/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X020103.D	02/01/23 11:18	1
CCB	CCB	CCB	X020104.D	02/01/23 11:39	1
VLCSW-230201	LCS	VLCSW-230201	X020105.D	02/01/23 12:00	1
VBLKW-230201	MBLK	VBLKW-230201	X020107.D	02/01/23 12:42	1
Trip Blank-230121	SAMP	HS23011397-01	X020108.D	02/01/23 13:03	1
16WW44-230121	SAMP	HS23011397-02	X020110.D	02/01/23 13:45	1
16PM09-230121	SAMP	HS23011397-04	X020111.D	02/01/23 14:06	25
16PM14-230121	SAMP	HS23011397-03	X020112.D	02/01/23 14:27	50
16WW44-230121	MS	HS23011397-02MS	X020113.D	02/01/23 14:48	1
16WW44-230121	MSD	HS23011397-02MSD	X020114.D	02/01/23 15:09	1
16WW25-230123	SAMP	HS23011397-11	X020117.D	02/01/23 16:20	1
16WW29-230123	SAMP	HS23011397-12	X020118.D	02/01/23 16:41	1
16WW30-230123	SAMP	HS23011397-13	X020119.D	02/01/23 17:02	1
16RW05-230123	SAMP	HS23011397-09	X020120.D	02/01/23 17:23	1
16RW01-230123	SAMP	HS23011397-08	X020121.D	02/01/23 17:45	10
16WW26-230123	SAMP	HS23011397-10	X020122.D	02/01/23 18:06	10
16PM03-230121	SAMP	HS23011397-05	X020124.D	02/01/23 18:48	50
16PM06-230121	SAMP	HS23011397-06	X020126.D	02/01/23 19:30	250
16PM06-230121	SAMP	HS23011397-06	X020127.D	02/01/23 19:51	2500
16PM02-230121	SAMP	HS23011397-07	X020128.D	02/01/23 20:12	250
16PM02-230121	SAMP	HS23011397-07	X020129.D	02/01/23 20:33	2500

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Volatiles by EPA 8260

RUNID
VOA6_427191

Run ID VOA6_427191 **Start Date** 02/02/23 **EndDate** 02/02/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X020203.D	02/02/23 14:28	1
CCB	CCB	CCB	X020204.D	02/02/23 14:49	1
VLCSW-230202	LCS	VLCSW-230202	X020205.D	02/02/23 15:10	1
VBLKW-230202	MBLK	VBLKW-230202	X020208.D	02/02/23 16:13	1
BatchQC	MS	HS23011294-08MS	X020217.D	02/02/23 19:23	1
BatchQC	MSD	HS23011294-08MSD	X020218.D	02/02/23 19:44	1
16RW01-230123	SAMP	HS23011397-08	X020221.D	02/02/23 20:47	50
16WW26-230123	SAMP	HS23011397-10	X020222.D	02/02/23 21:08	1

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Raw Data VOA6 424237

Volatiles by by EPA 8260

Workorder

HS23011397

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)	FINAL (ug/l)	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

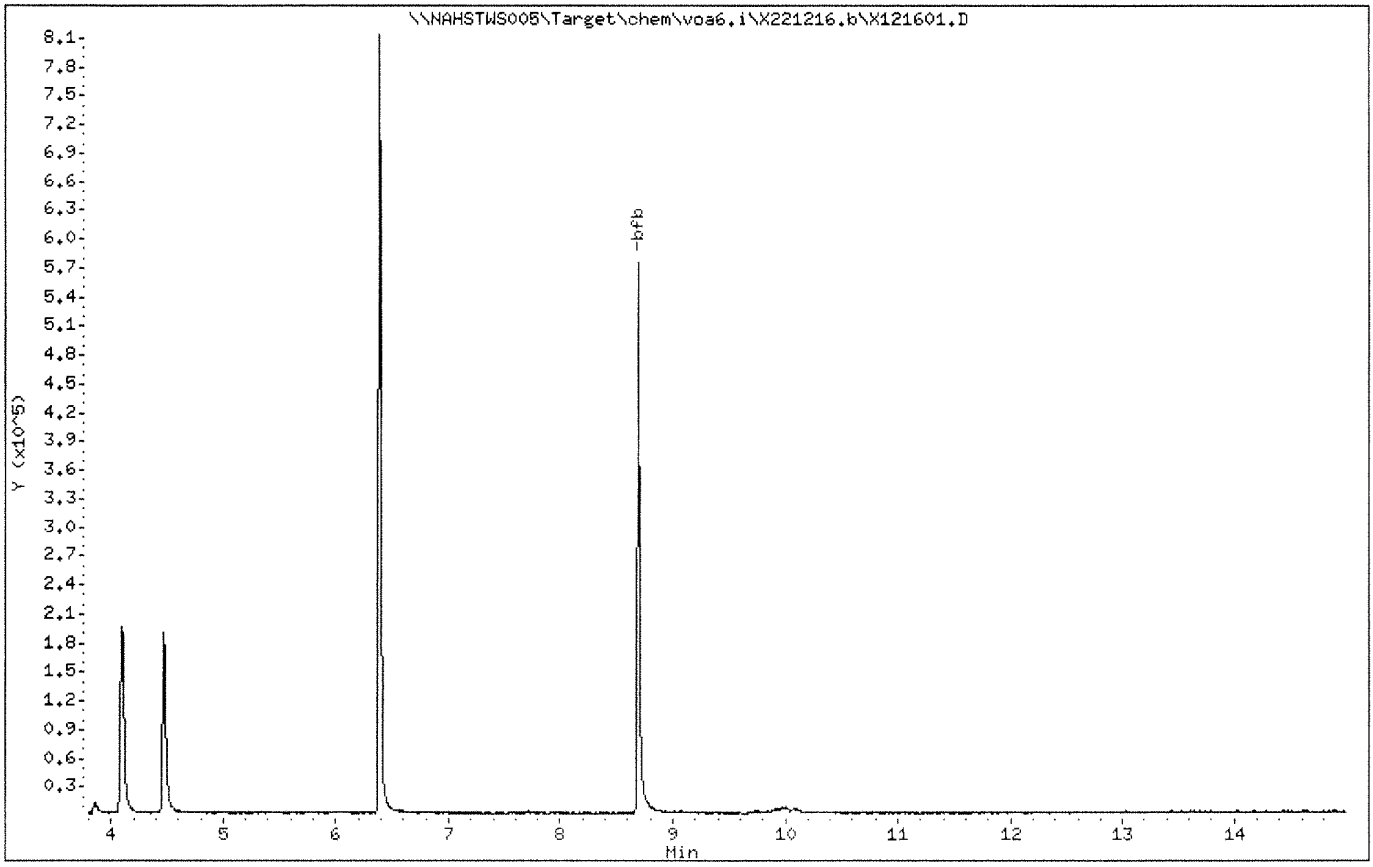
Date : 16-DEC-2022 11:17

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

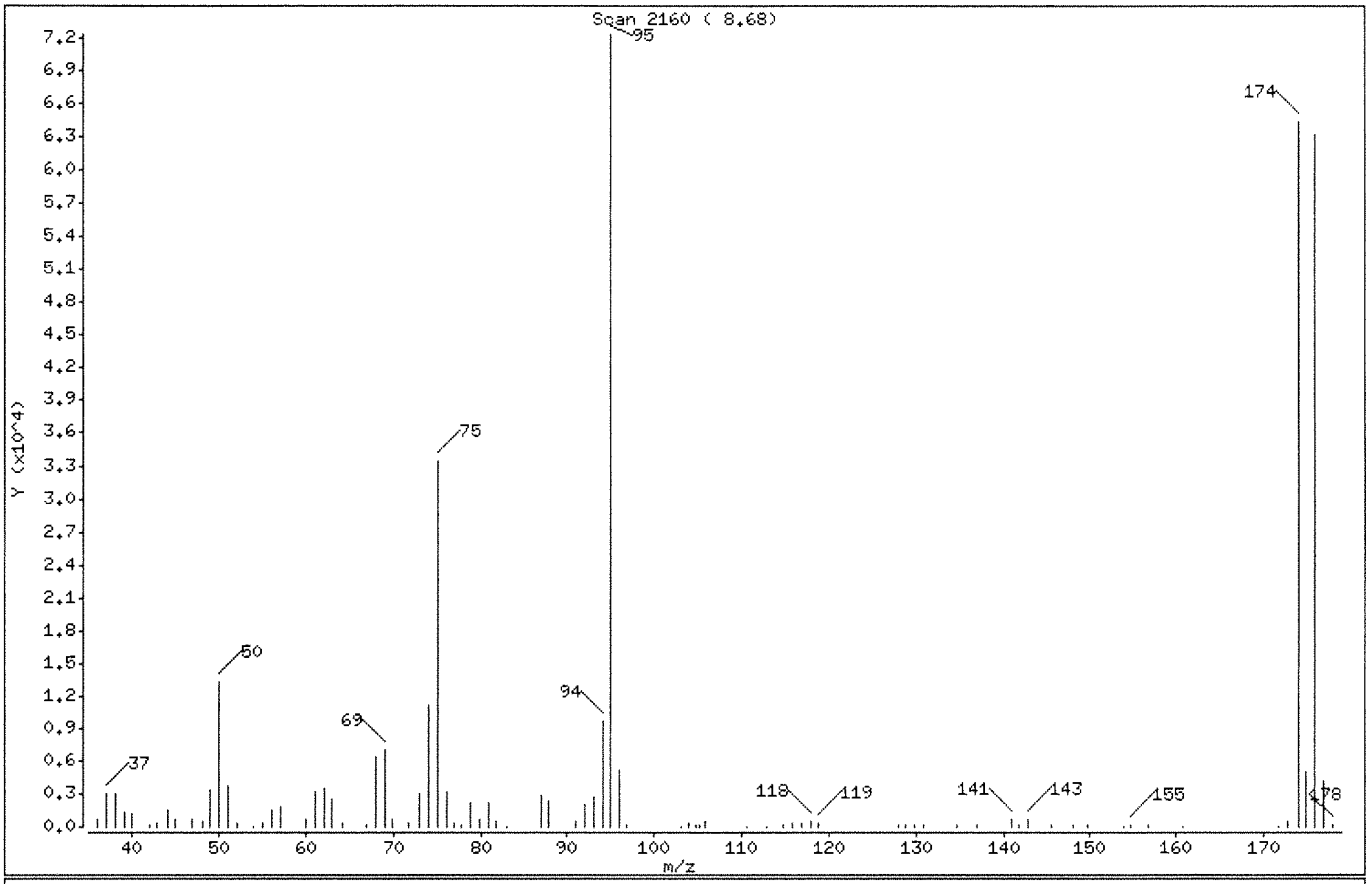
Client ID: BFB Instrument: voa6.i

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
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

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)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D Page 2
Report Date: 27-Dec-2022 16:07

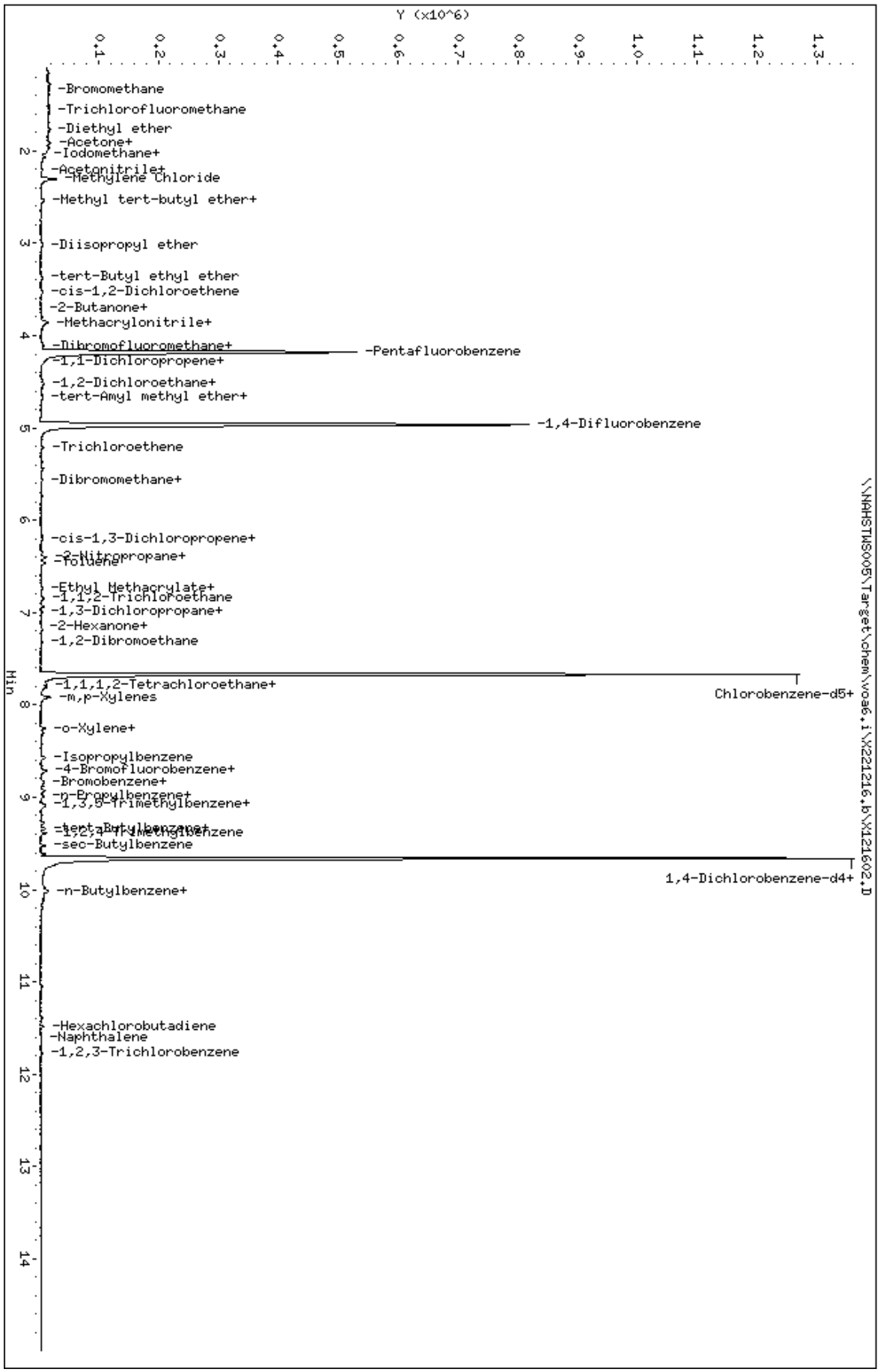
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	15	Iodomethane	142	2.026	2.026	(0.485)	1106	0.50000	3.56(T)
	17	Methylene Chloride	84	2.292	2.292	(0.549)	1436	0.25000	0.29(M)
	18	Methyl tert-butyl ether	73	2.536	2.536	(0.607)	2787	0.25000	0.24
	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.



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Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;
Purge Volume: 5.0
Column phase: DB624

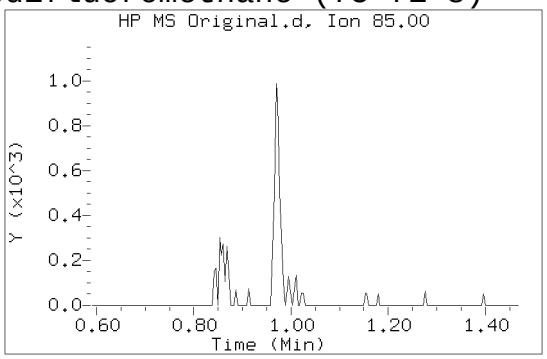
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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)

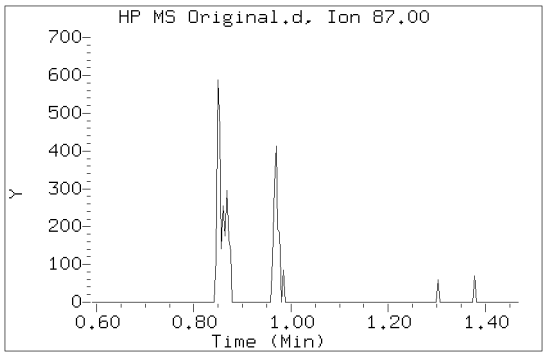
BEFORE

MASS
50
AREA
1420
HEIGHT
1809
16-Dec-2022
11:54
ALSHS
Server



BEFORE

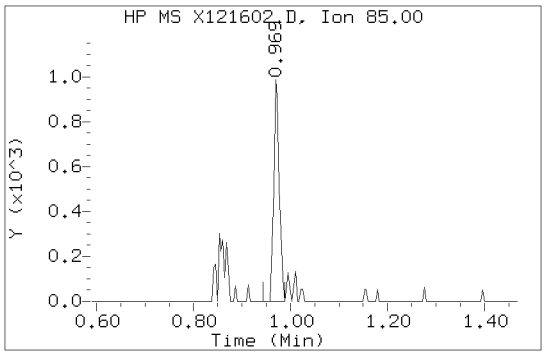
MASS
52
AREA
731
HEIGHT
740
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

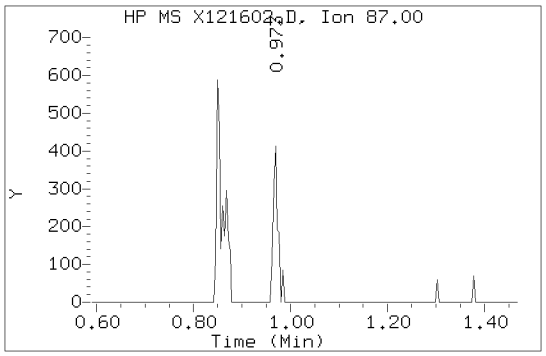
AFTER

MASS
85
AREA
801
HEIGHT
987
27-Dec-2022
16:07
ALSHS
Ser



AFTER

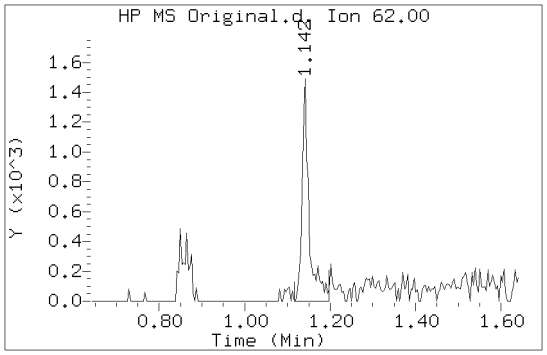
MASS
87
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Vinyl Chloride (75-01-4)

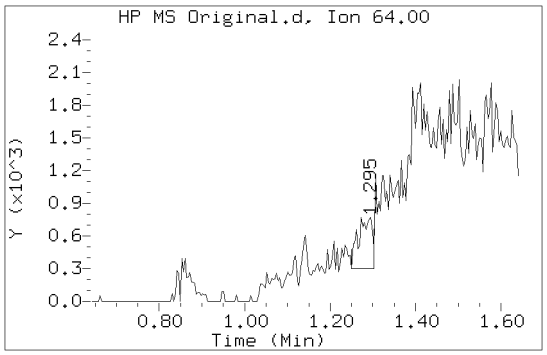
BEFORE

MASS
94
AREA
1572
HEIGHT
983
16-Dec-2022
11:54
ALSHS
Server



BEFORE

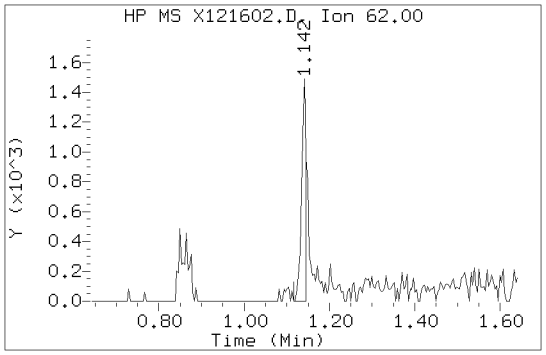
MASS
96
AREA
1330
HEIGHT
961
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

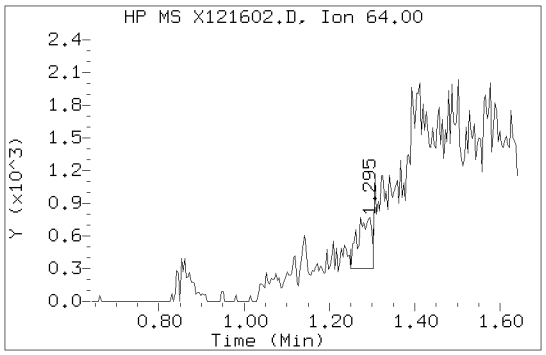
AFTER

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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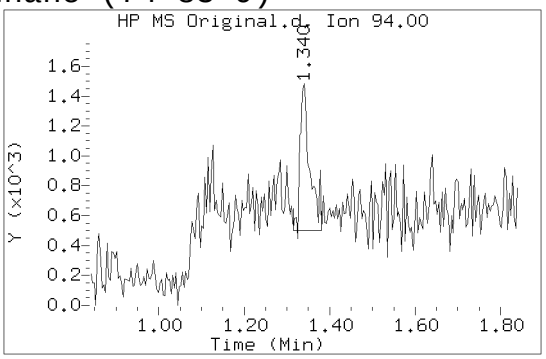
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Bromomethane (74-83-9)

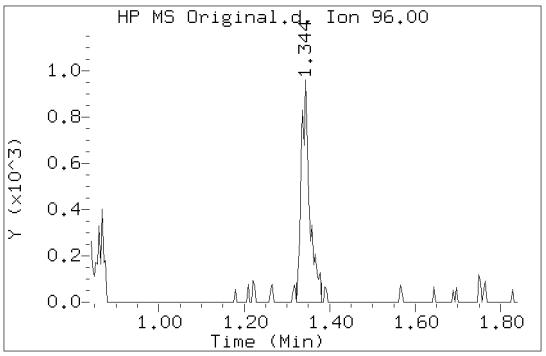
BEFORE

MASS
64
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



BEFORE

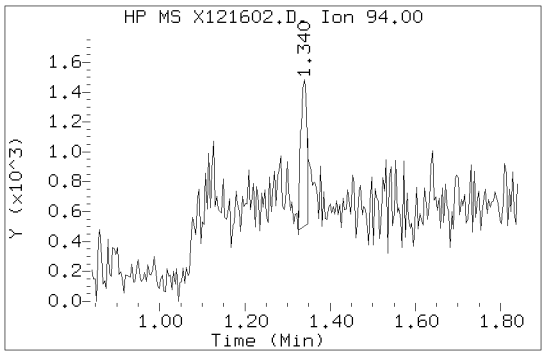
MASS
66
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

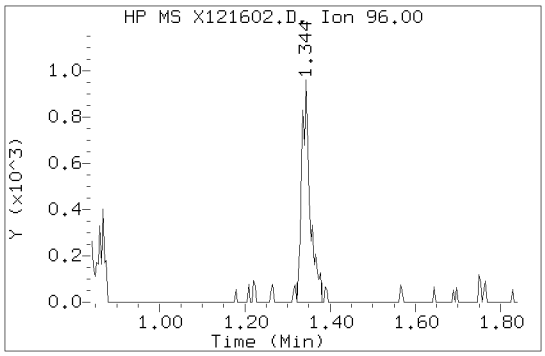
AFTER

MASS
94
AREA
1009
HEIGHT
977
27-Dec-2022
16:07
ALSHS
Ser



AFTER

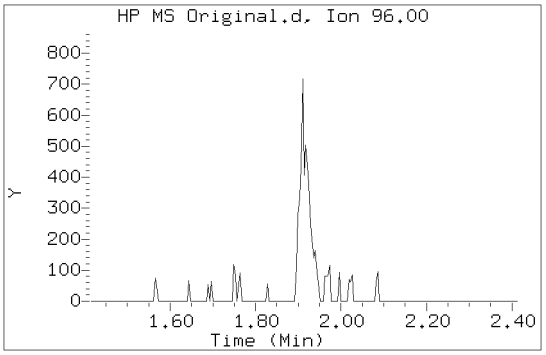
MASS
96
AREA
1330
HEIGHT
961
27-Dec-2022
16:07
ALSHS
Ser



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

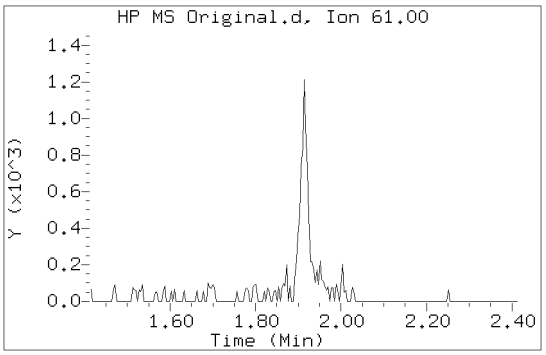
BEFORE

MASS
142
AREA
1106
HEIGHT
699
16-Dec-2022
11:54
ALSHS
Server



BEFORE

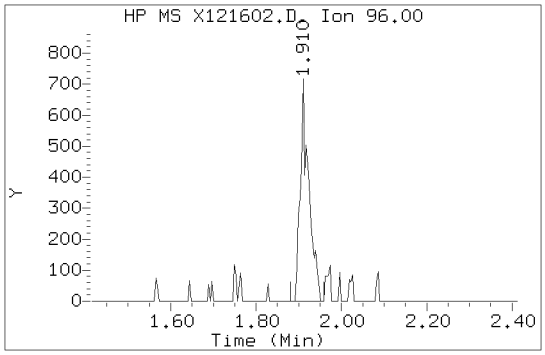
MASS
127
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

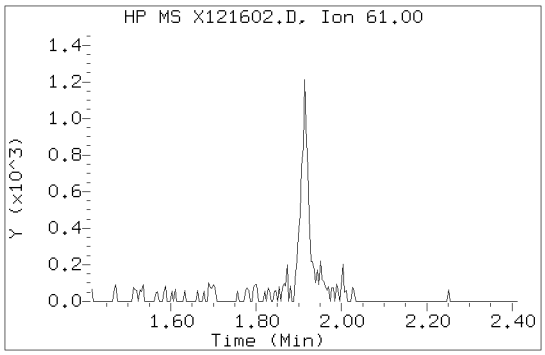
AFTER

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



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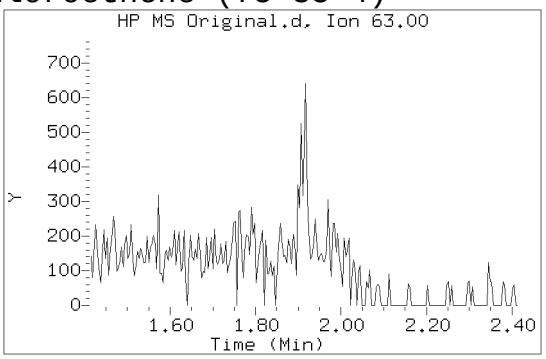
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

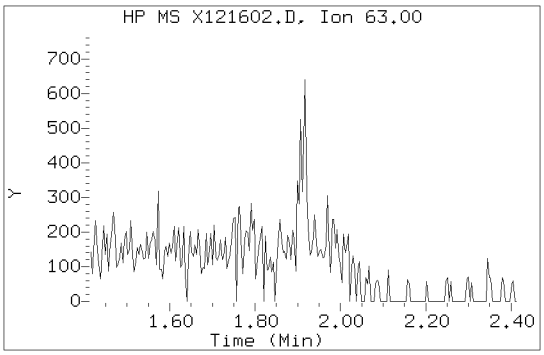
BEFORE

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

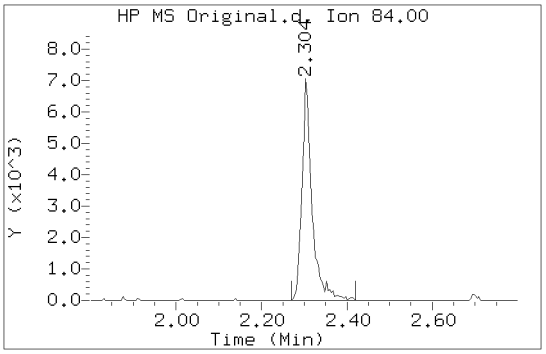


Methylene Chloride (75-09-2)

Reason Code:

BEFORE

MASS
84
AREA
11777
HEIGHT
7057
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
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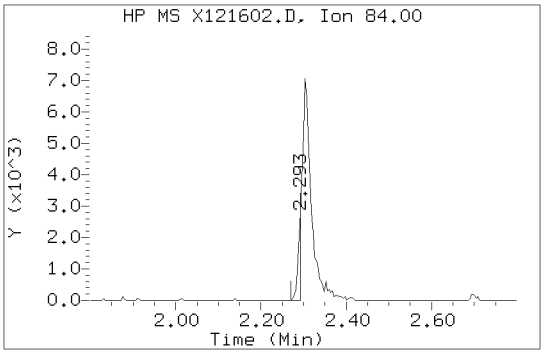
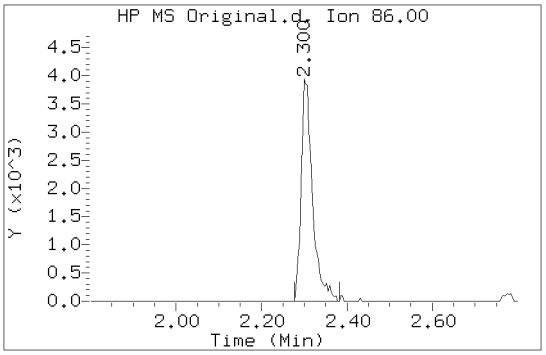
AREA
1436
HEIGHT
2786
27-Dec-2022
16:07
ALSHS
Ser



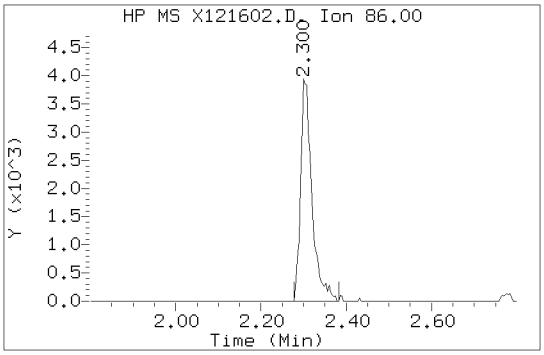
BEFORE

MASS
86
AREA
7453
HEIGHT
3944
16-Dec-2022
11:54
ALSHS
Server



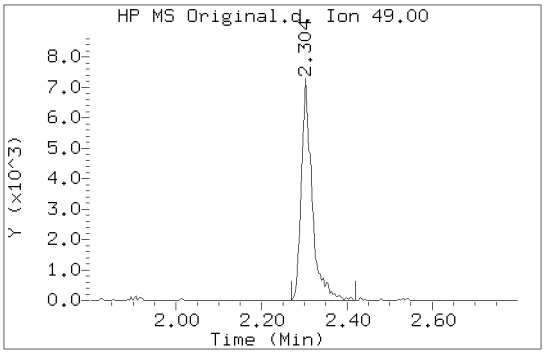
AFTER

MASS
86
AREA
7453
HEIGHT
3944
27-Dec-2022
16:07
ALSHS
Ser



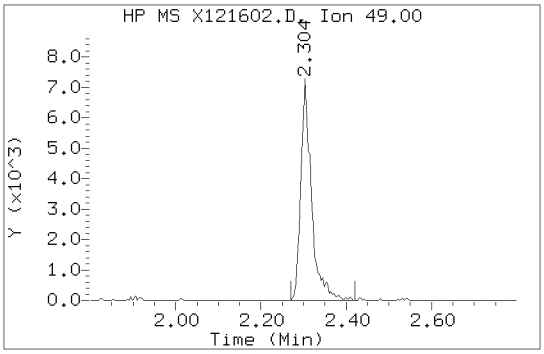
BEFORE

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
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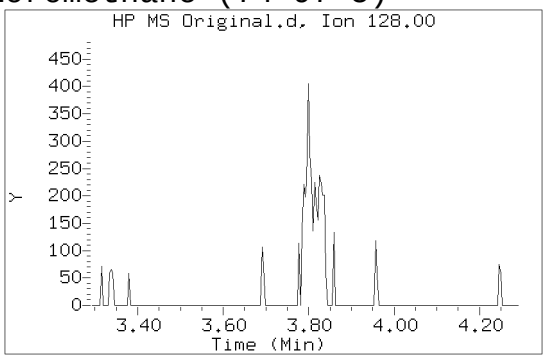
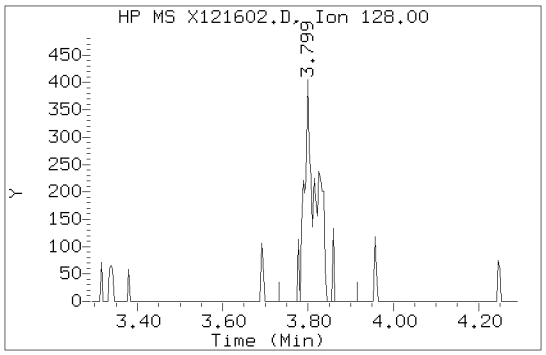
AREA
1402
HEIGHT
854
16-Dec-2022
11:54
ALSHS
Server



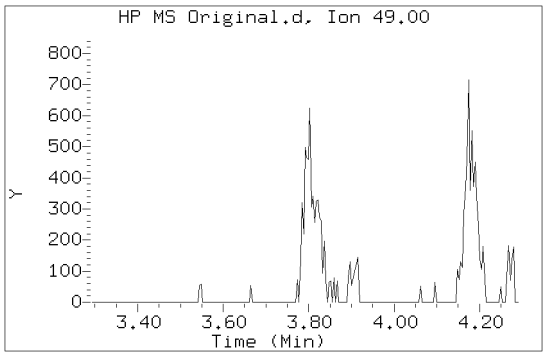
AFTER

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
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AREA
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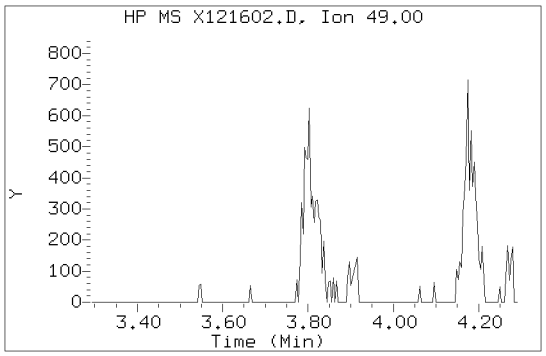
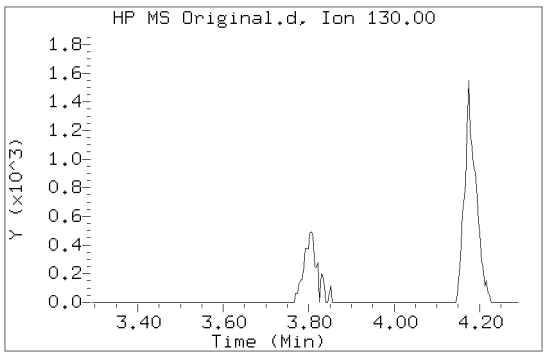
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



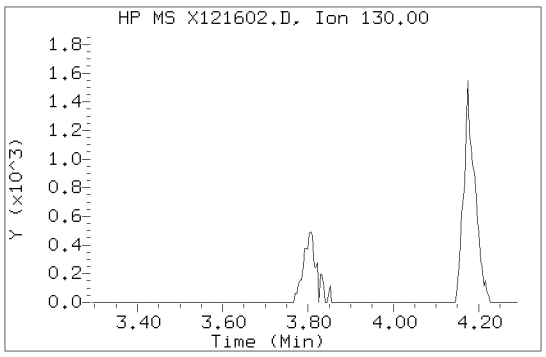
BEFORE

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

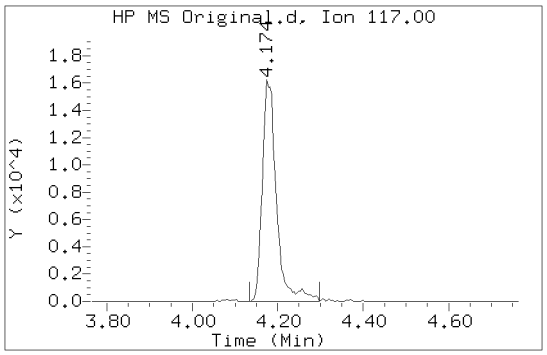


Carbon Tetrachloride (56-23-5)

Reason Code:

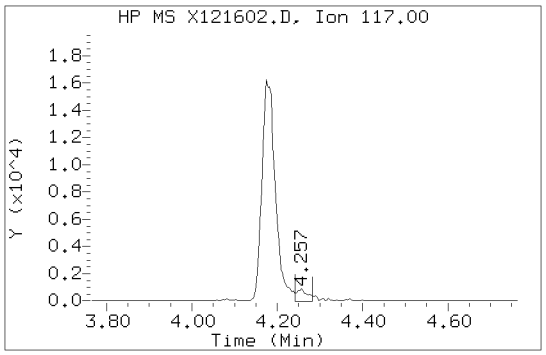
BEFORE

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



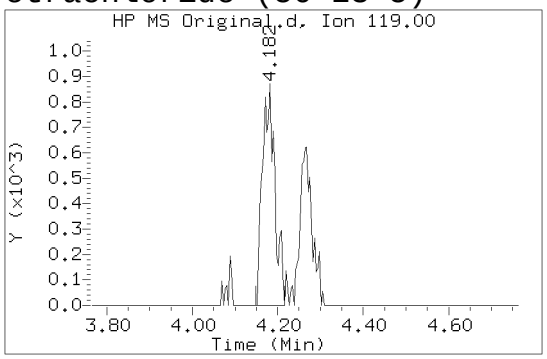
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Carbon Tetrachloride (56-23-5)

Reason Code:

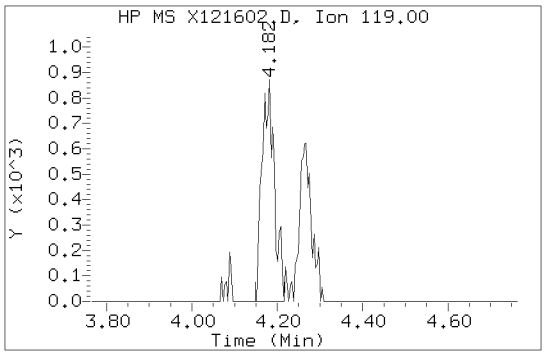
BEFORE

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

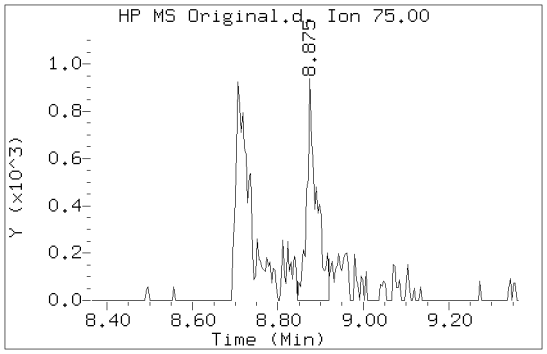


1,2,3-Trichloropropane (96-18-4)

Reason Code:

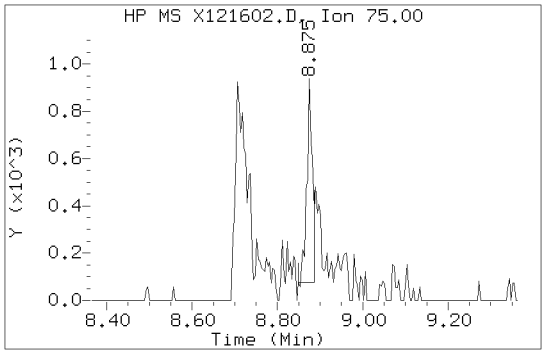
BEFORE

MASS
152
AREA
348702
HEIGHT
242350
16-Dec-2022
11:54
ALSHS
Server



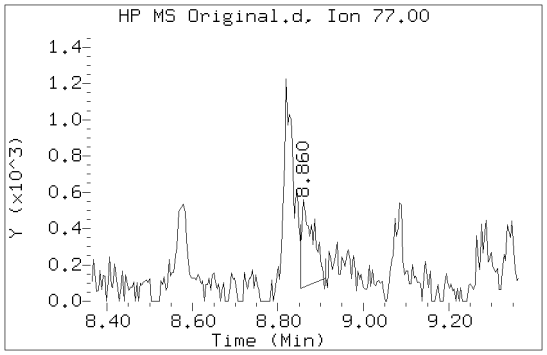
AFTER

MASS
75
AREA
766
HEIGHT
862
27-Dec-2022
16:07
ALSHS
Ser



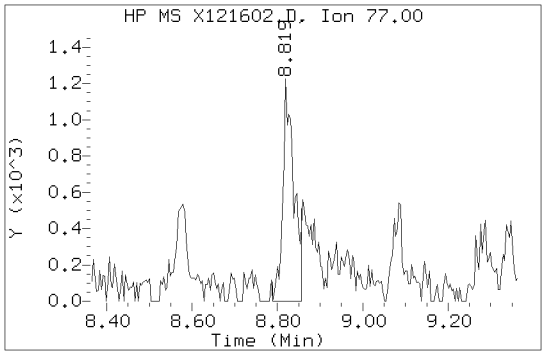
BEFORE

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

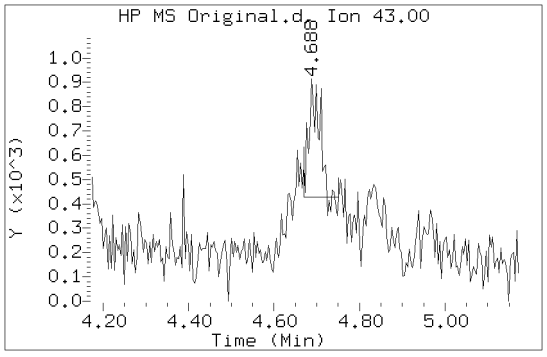


Isobutyl Alcohol (78-83-1)

Reason Code:

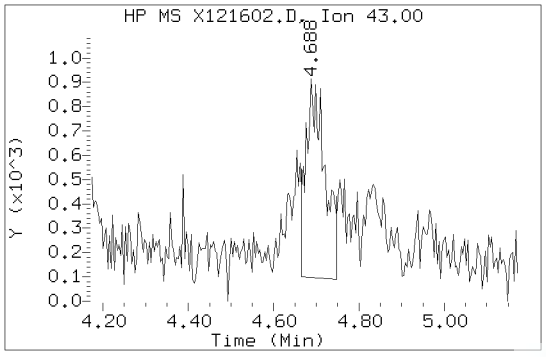
BEFORE

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

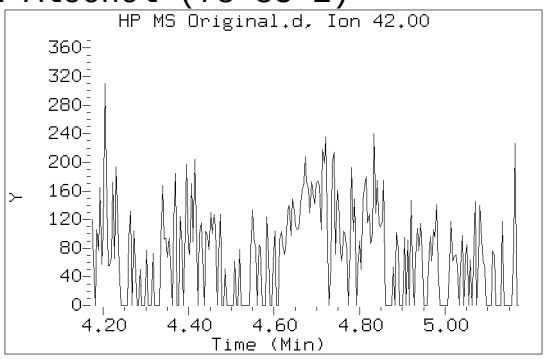


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Isobutyl Alcohol (78-83-1)

BEFORE

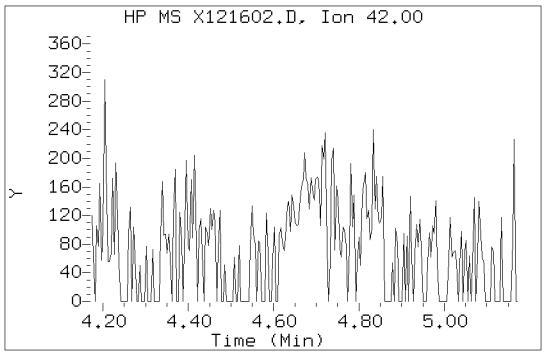
MASS
77
AREA
888
HEIGHT
483
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

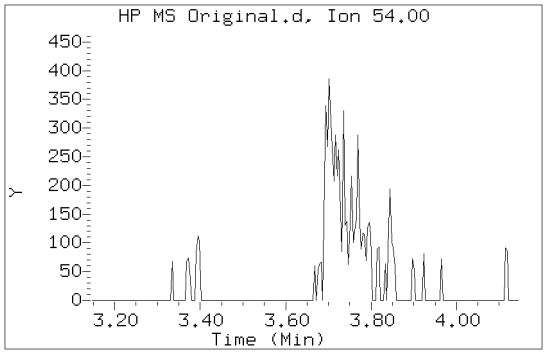
MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Propionitrile (107-12-0)

BEFORE

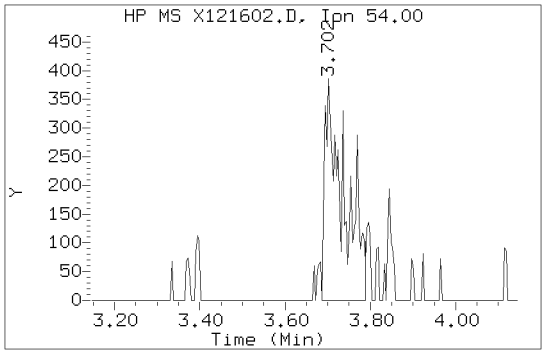
MASS
91
AREA
3881
HEIGHT
1822
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

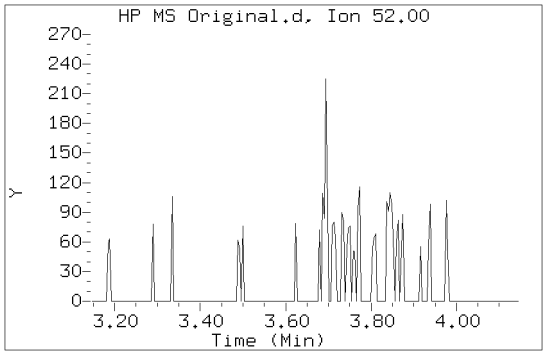
AFTER

MASS
54
AREA
1165
HEIGHT
386
27-Dec-2022
16:07
ALSHS
Ser



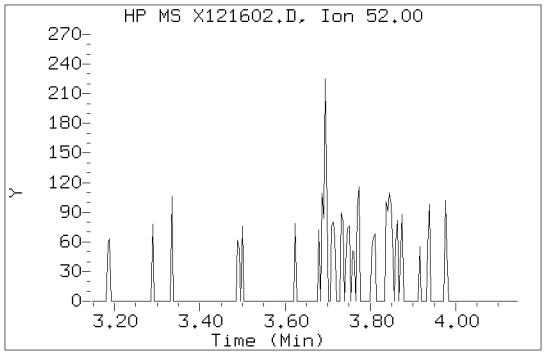
BEFORE

MASS
126
AREA
1511
HEIGHT
914
16-Dec-2022
11:54
ALSHS
Server



AFTER

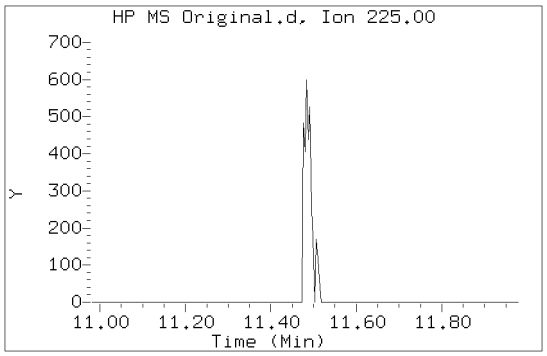
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Hexachlorobutadiene (87-68-3)

BEFORE

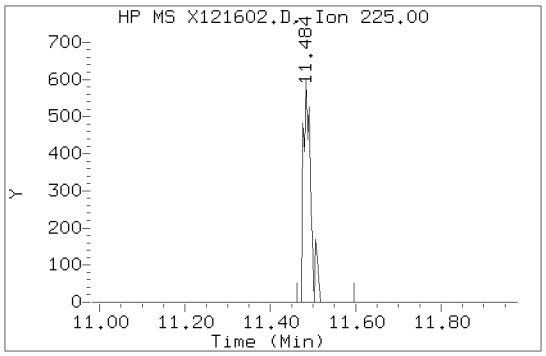
MASS
155
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

MASS
225
AREA
726
HEIGHT
599
27-Dec-2022
16:07
ALSHS
Ser

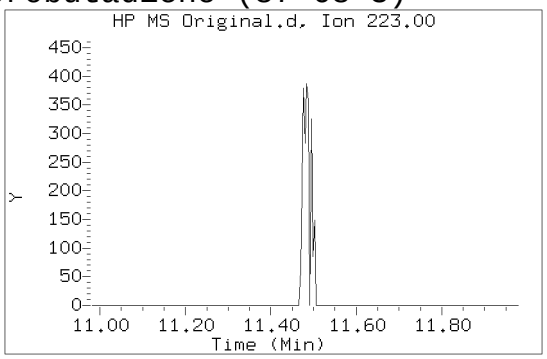


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

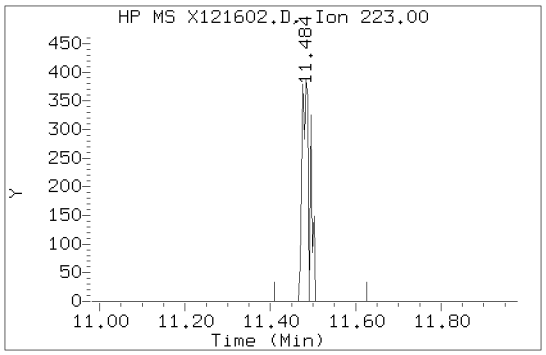
Hexachlorobutadiene (87-68-3)

Reason Code:

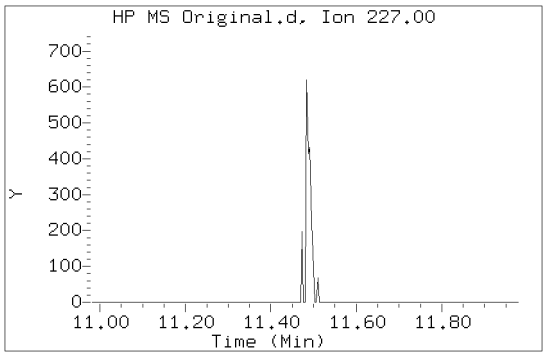
BEFORE
MASS
157
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



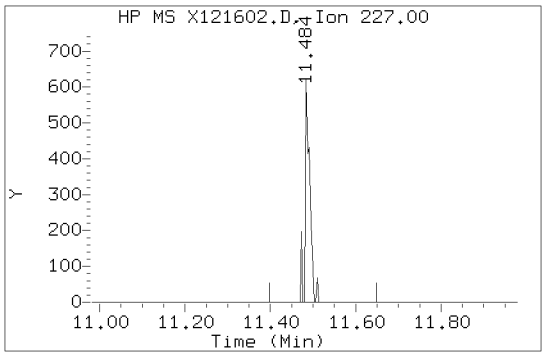
AFTER
MASS
223
AREA
502
HEIGHT
387
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
75
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



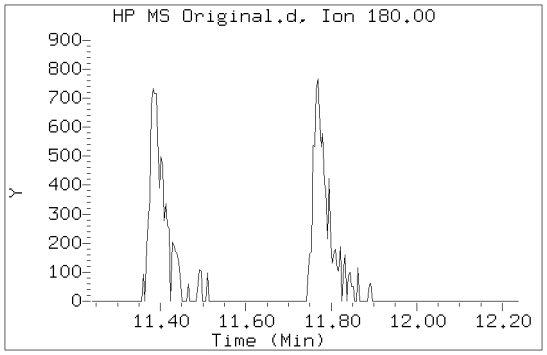
AFTER
MASS
227
AREA
469
HEIGHT
620
27-Dec-2022
16:07
ALSHS
Ser



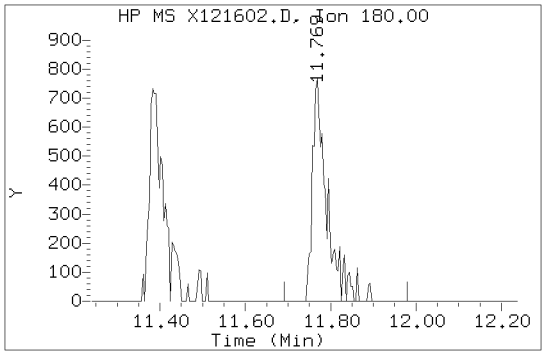
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

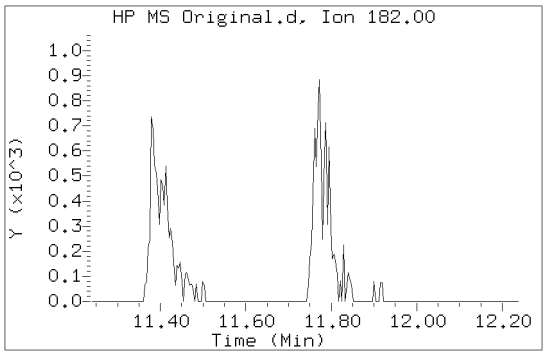
BEFORE
MASS
225
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



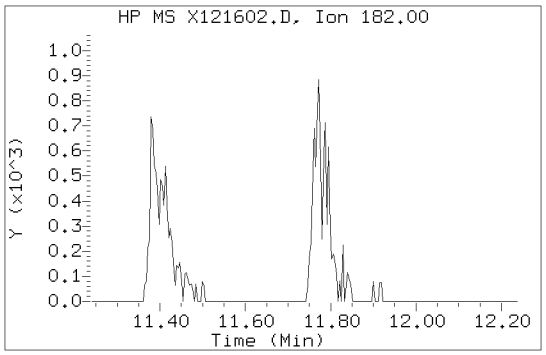
AFTER
MASS
180
AREA
1816
HEIGHT
766
27-Dec-2022
16:07
ALSHS
Ser



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



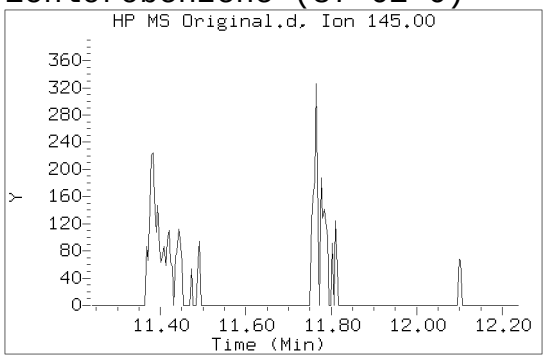
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

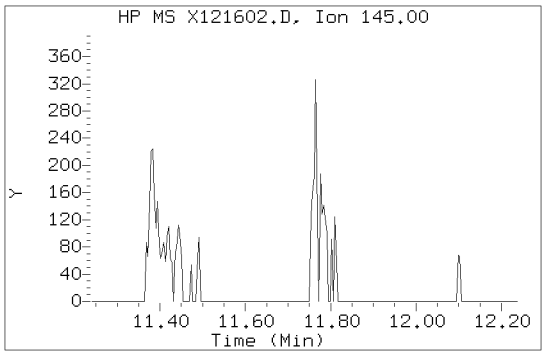
BEFORE

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

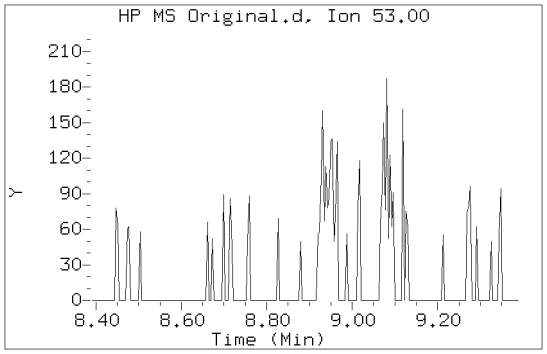


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

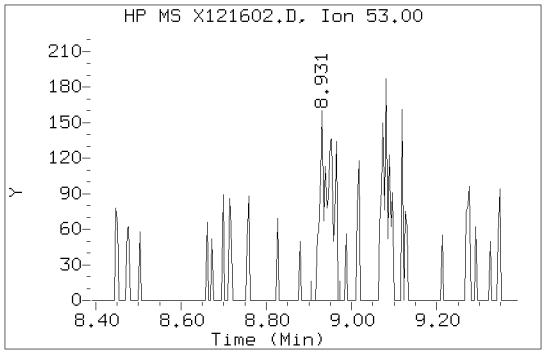
BEFORE

MASS
53
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



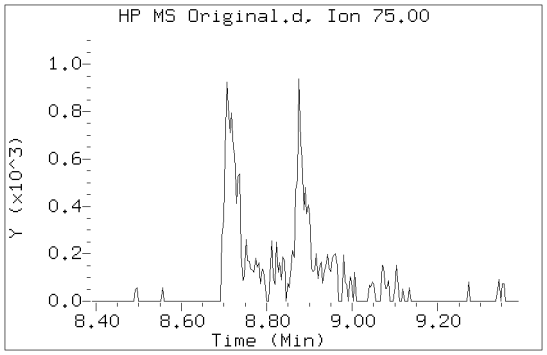
AFTER

MASS
53
AREA
280
HEIGHT
160
27-Dec-2022
16:07
ALSHS
Ser



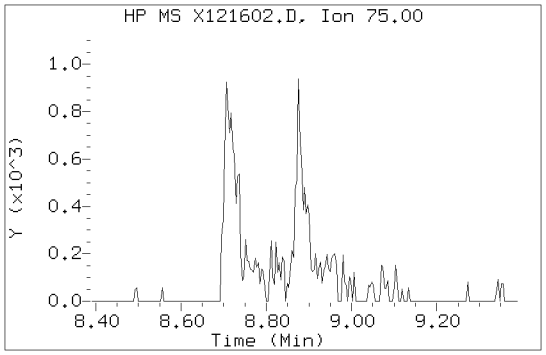
BEFORE

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

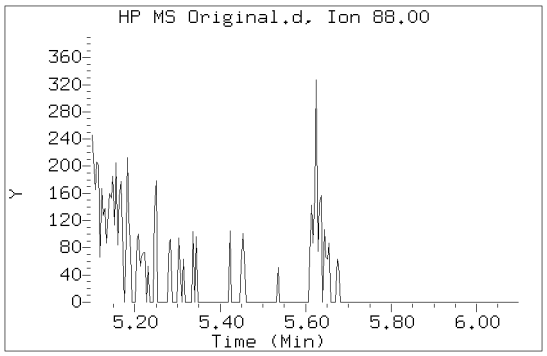


1,4-Dioxane ()

Reason Code:

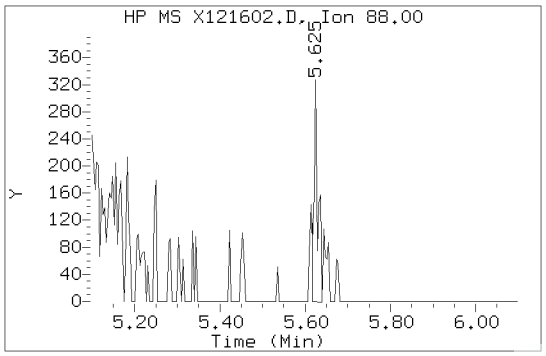
BEFORE

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



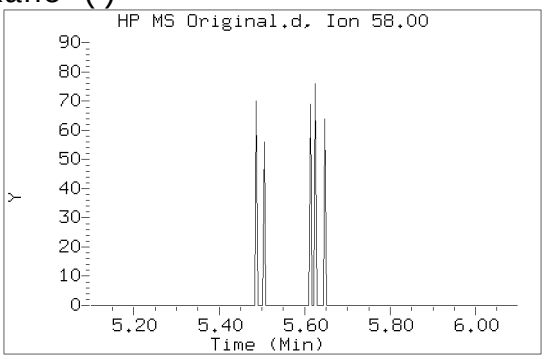
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

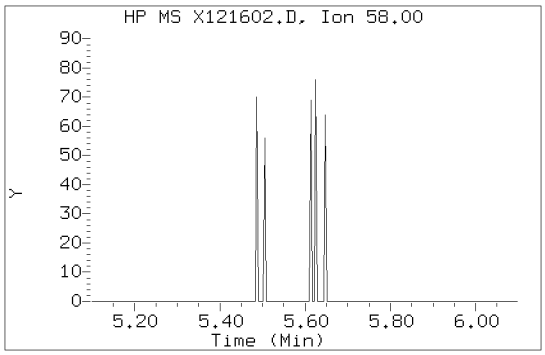
BEFORE

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

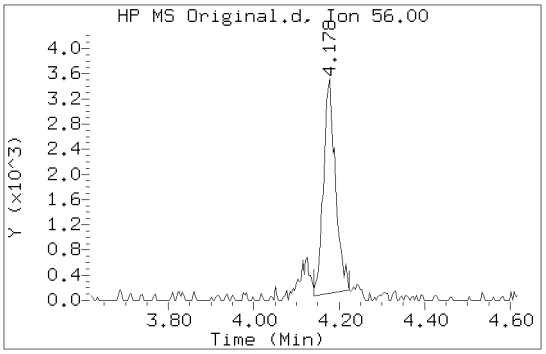


Cyclohexane (110-82-7)

Reason Code:

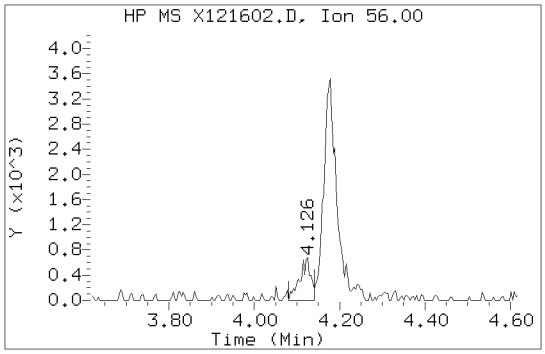
BEFORE

MASS
42
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



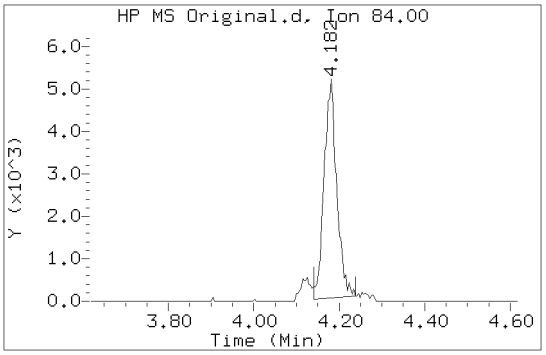
AFTER

MASS
56
AREA
1235
HEIGHT
682
27-Dec-2022
16:07
ALSHS
Ser



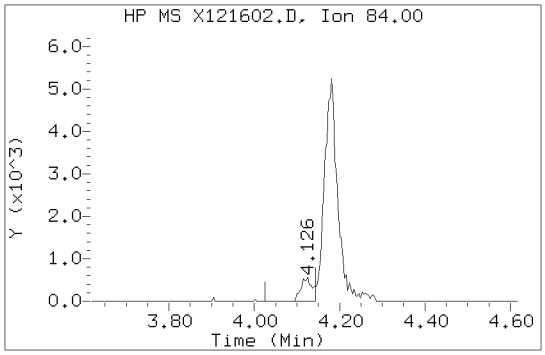
BEFORE

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:

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16-Dec-2022
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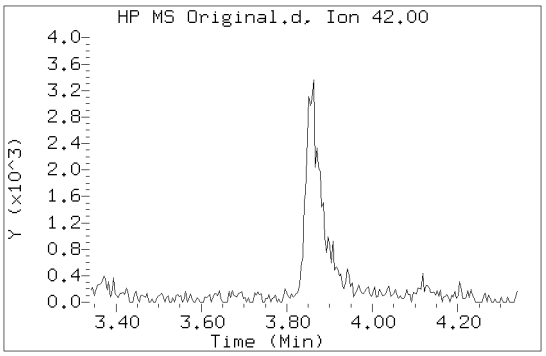

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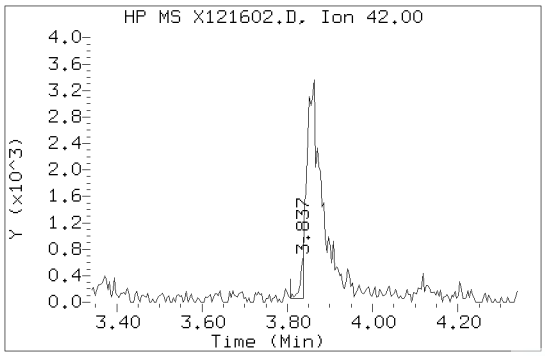

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Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Tetrahydrofuran (109-99-9)

Reason Code:

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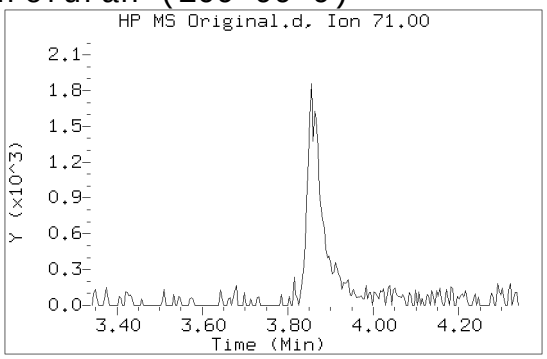

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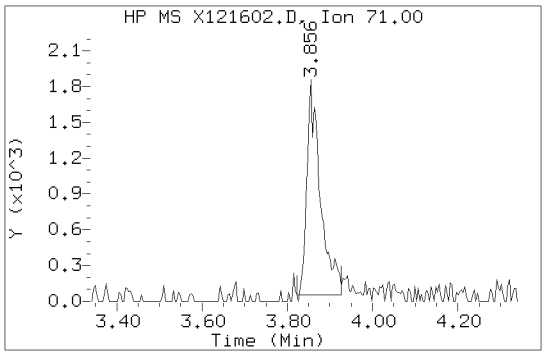

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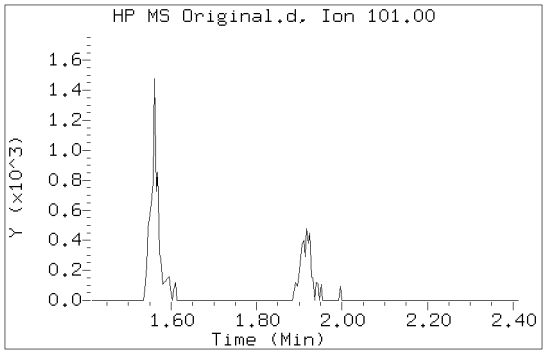

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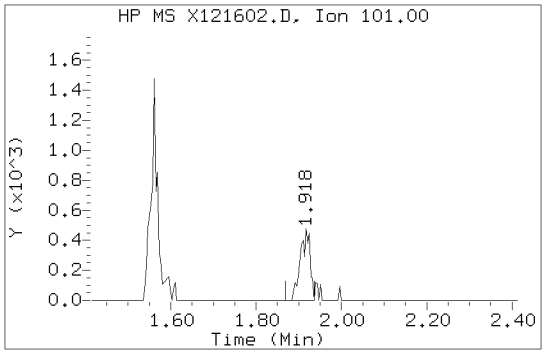

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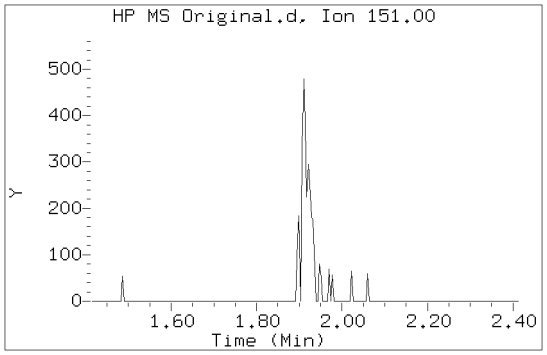

AFTER

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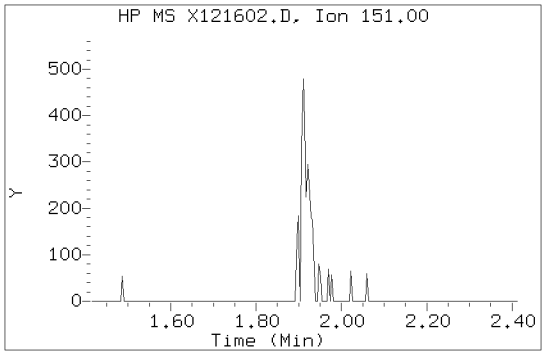
27-Dec-2022
16:07
ALSHS
Ser



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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
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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

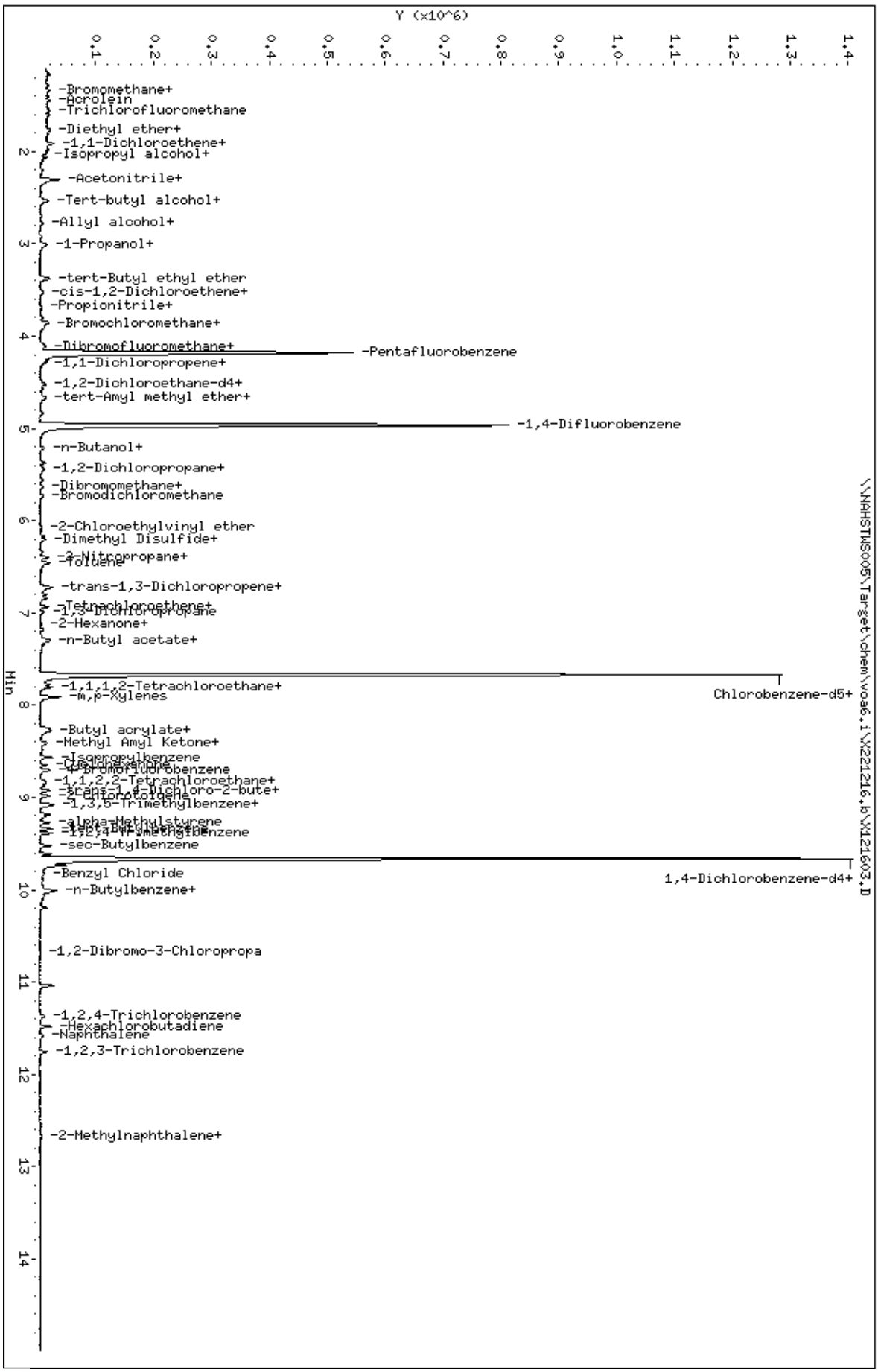
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	162	Butyl acrylate	55	8.271	8.271	(1.079)	4718	0.50000	0.55(M)
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1990	0.50000	1.00(M)
	3	Chloromethane	50	1.077	1.077	(0.258)	2466	0.50000	2.77(M)
	5	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)

			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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1.1
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Min
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12
13
14
-Bromomethane+
-Acrolein
-Trichlorofluoromethane
-Diethyl ether+
-1,1-Dichloroethene+
-Isopropyl alcohol+
-Acetonitrile+
-Tert-butyl alcohol+
-Allyl alcohol+
-1-Propanol+
-tert-Butyl ethyl ether
-cis-1,2-Dichloroethene+
-Propionitrile+
-Bromochloromethane+
-Dibromofluoromethane+
-Pentafluorobenzene
-1,1-Dichloropropene+
-1,2-Dichloroethane-d4+
-tert-Amyl methyl ether+
-1,4-Difluorobenzene
-n-Butanol+
-1,2-Dichloropropane+
-Dibromomethane+
-Bromodichloromethane
-2-Chloroethylvinyl ether
-Dimethyl Disulfide+
-2-Nitropropane+
-Toluene
-trans-1,3-Dichloropropene+
-Tetrachloroethene+
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Chlorobenzene-d5+
-Butyl acrylate+
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-Isopropylbenzene
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1,4-Dichlorobenzene-d4+
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Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

m,p-Xylenes ()

Reason Code:

BEFORE

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AREA
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HEIGHT
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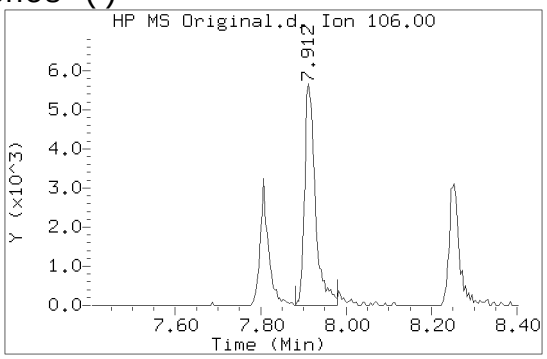
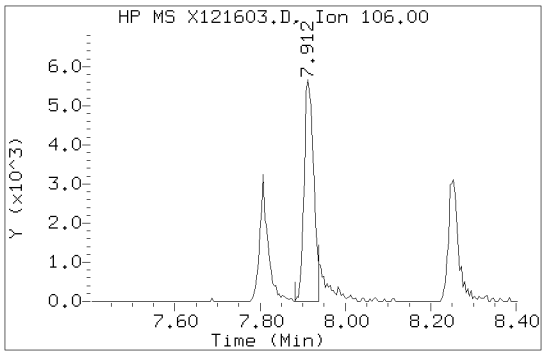
27-Dec-2022
16:03
linh
pham



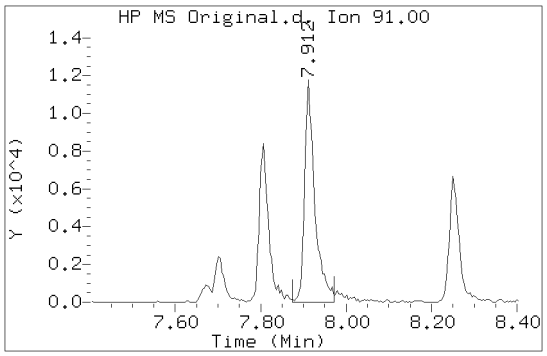
AFTER

MASS
106
AREA
9016
HEIGHT
5666
27-Dec-2022
16:07
linh
pham



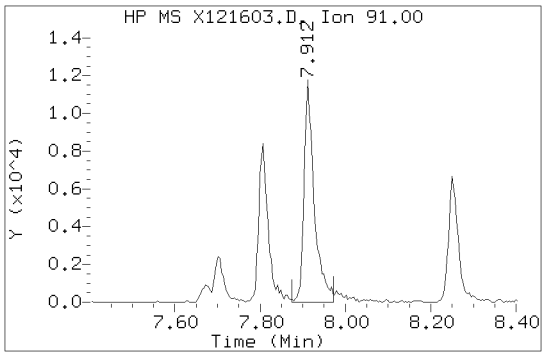
BEFORE

MASS
91
AREA
19887
HEIGHT
11768
27-Dec-2022
16:03
linh
pham



AFTER

MASS
91
AREA
19887
HEIGHT
11768
27-Dec-2022
16:07
linh
pham

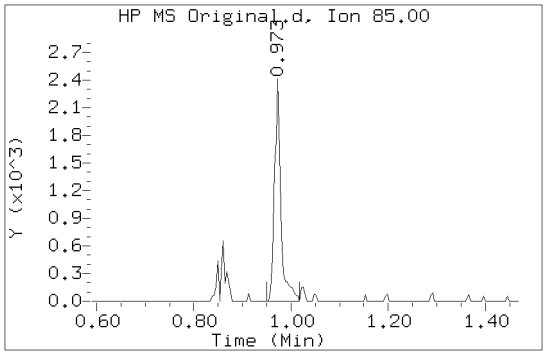


Dichlorodifluoromethane (75-71-8)

Reason Code:

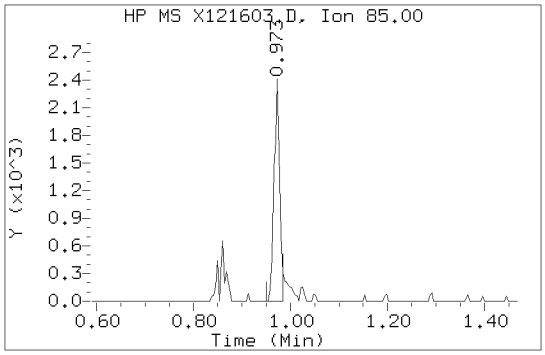
BEFORE

MASS
85
AREA
2242
HEIGHT
2413
27-Dec-2022
16:03
linh
pham



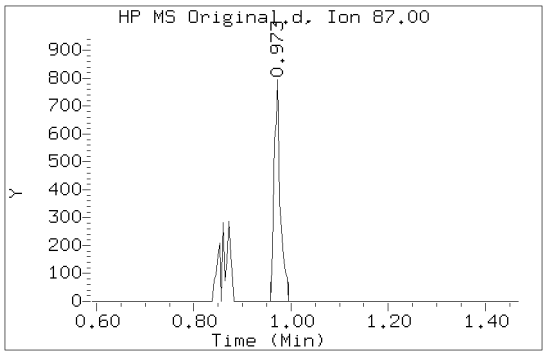
AFTER

MASS
85
AREA
1990
HEIGHT
2413
27-Dec-2022
16:07
linh
pham



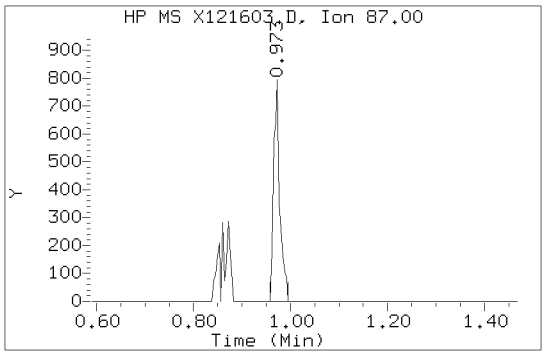
BEFORE

MASS
87
AREA
713
HEIGHT
795
27-Dec-2022
16:03
linh
pham



AFTER

MASS
87
AREA
713
HEIGHT
795
27-Dec-2022
16:07
linh
pham



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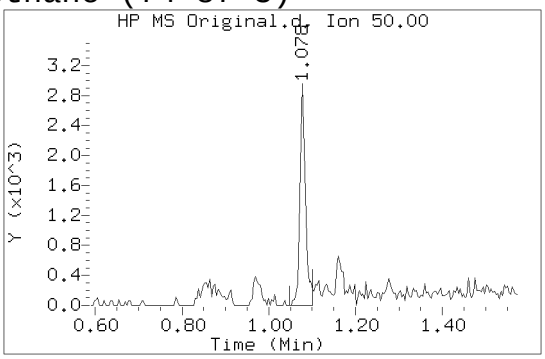
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloromethane (74-87-3)

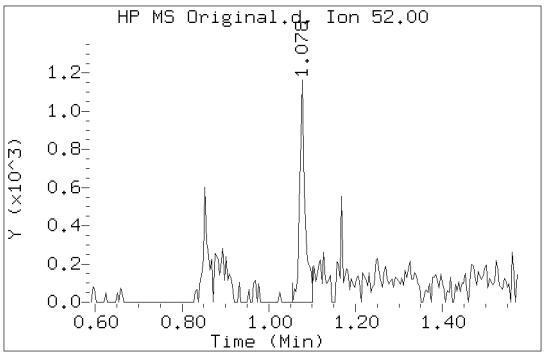
BEFORE

MASS
50
AREA
2589
HEIGHT
2959
27-Dec-2022
16:03
linh
pham



BEFORE

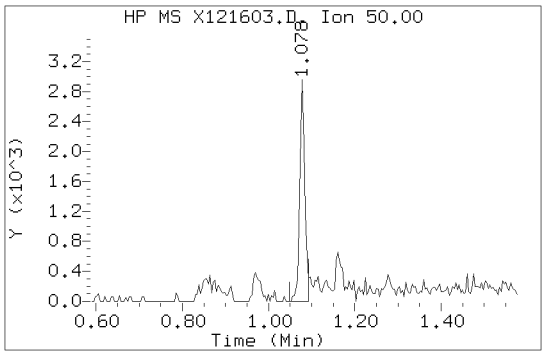
MASS
52
AREA
985
HEIGHT
1164
27-Dec-2022
16:03
linh
pham



Reason Code:

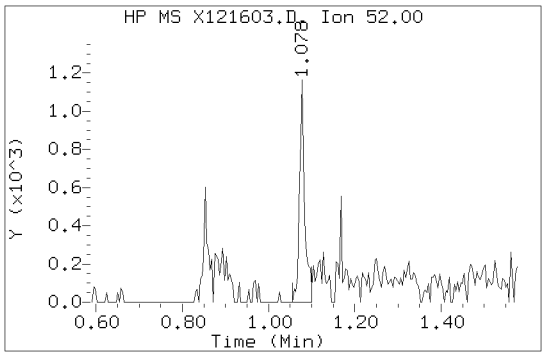
AFTER

MASS
50
AREA
2466
HEIGHT
2959
27-Dec-2022
16:07
linh
pham



AFTER

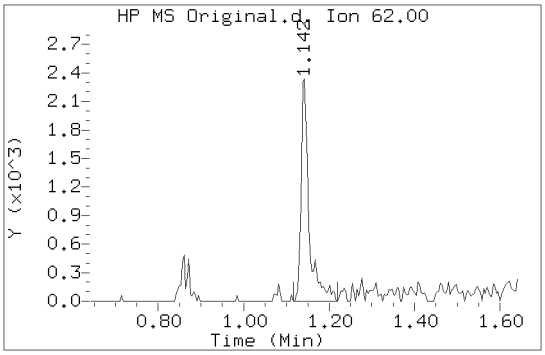
MASS
52
AREA
985
HEIGHT
1164
27-Dec-2022
16:07
linh
pham



Vinyl Chloride (75-01-4)

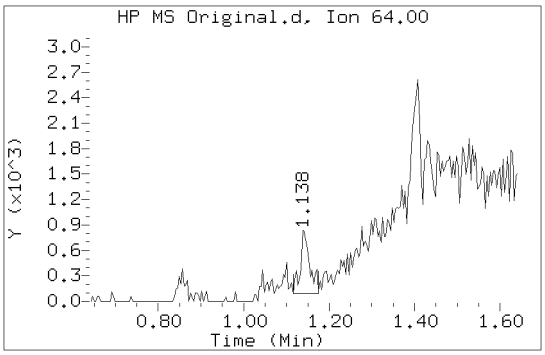
BEFORE

MASS
62
AREA
3132
HEIGHT
2337
27-Dec-2022
16:03
linh
pham



BEFORE

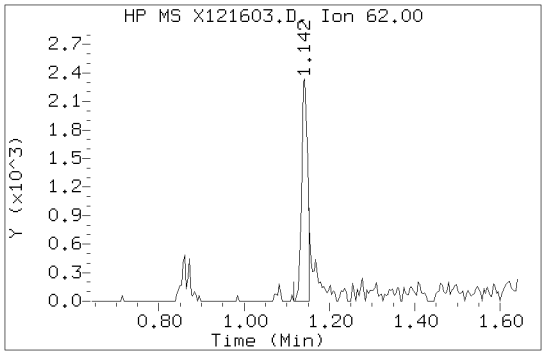
MASS
64
AREA
1174
HEIGHT
750
27-Dec-2022
16:03
linh
pham



Reason Code:

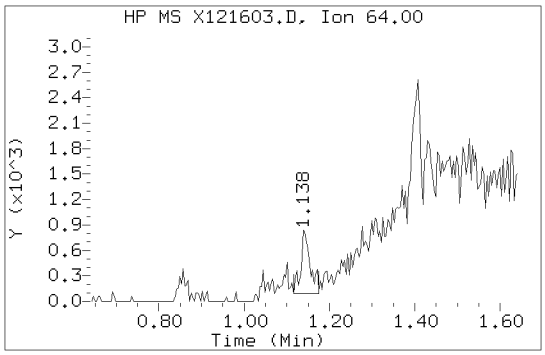
AFTER

MASS
62
AREA
2412
HEIGHT
2337
27-Dec-2022
16:07
linh
pham



AFTER

MASS
64
AREA
1174
HEIGHT
750
27-Dec-2022
16:07
linh
pham



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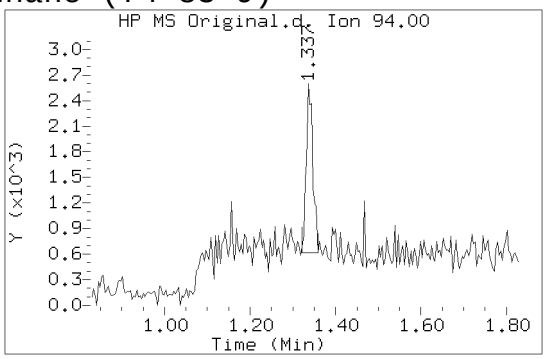
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

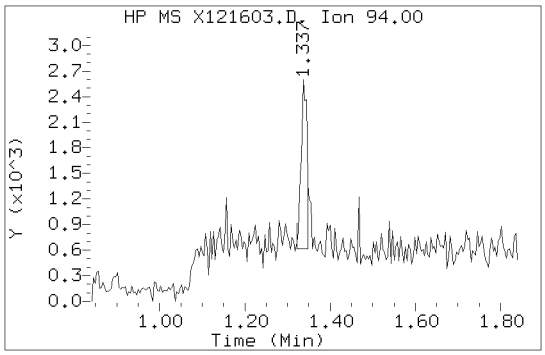
BEFORE

MASS
94
AREA
2146
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



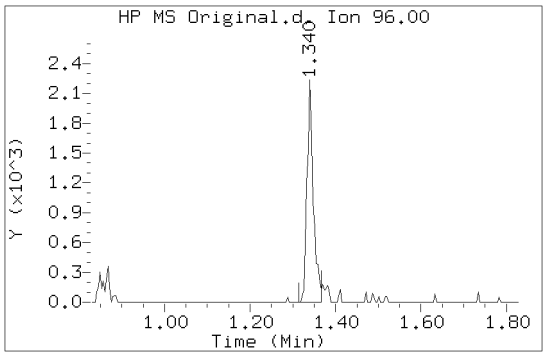
AFTER

MASS
94
AREA
1893
HEIGHT
1983
27-Dec-2022
16:07
linh
pham



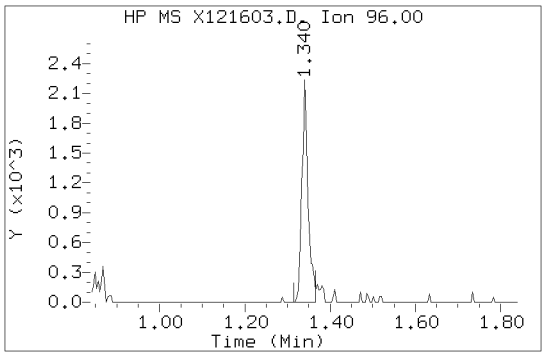
BEFORE

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

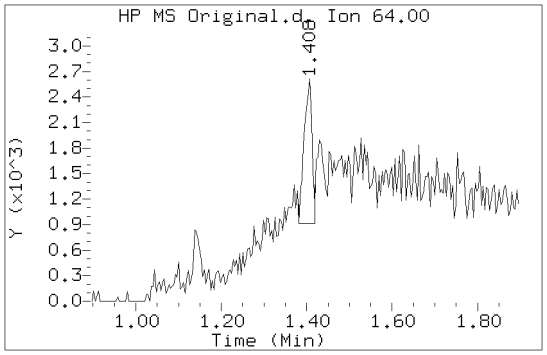


Chloroethane (75-00-3)

Reason Code:

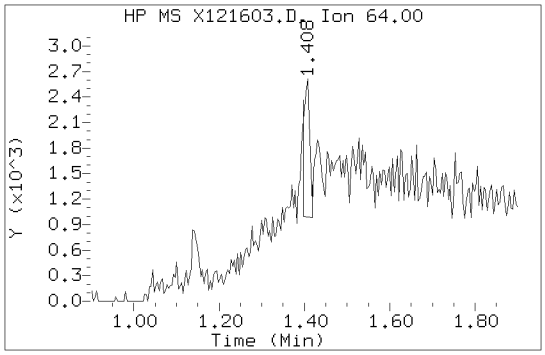
BEFORE

MASS
64
AREA
2196
HEIGHT
1702
27-Dec-2022
16:03
linh
pham



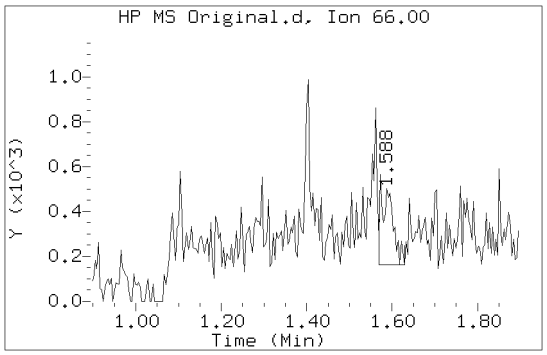
AFTER

MASS
64
AREA
1653
HEIGHT
1624
27-Dec-2022
16:07
linh
pham



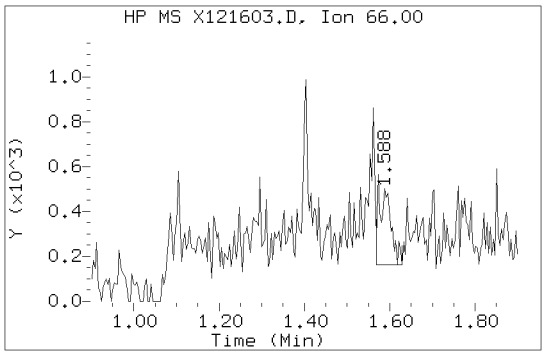
BEFORE

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



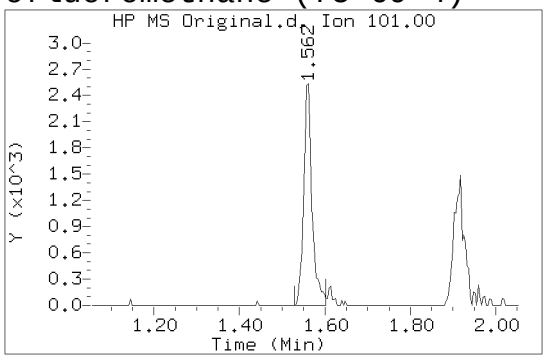
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Trichlorofluoromethane (75-69-4)

Reason Code:

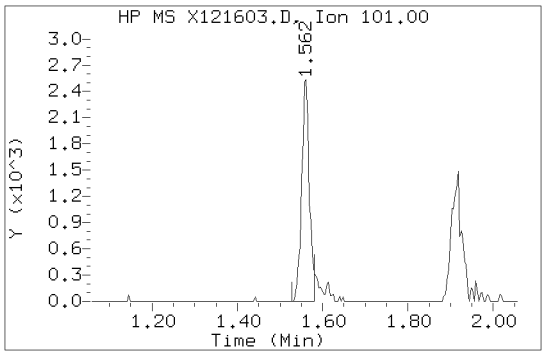
BEFORE

MASS
101
AREA
3530
HEIGHT
2534
27-Dec-2022
16:03
linh
pham



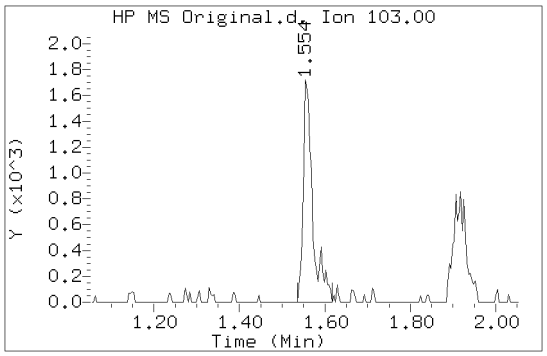
AFTER

MASS
101
AREA
3286
HEIGHT
2534
27-Dec-2022
16:07
linh
pham



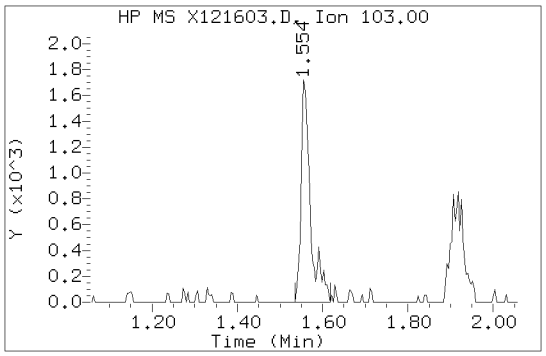
BEFORE

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

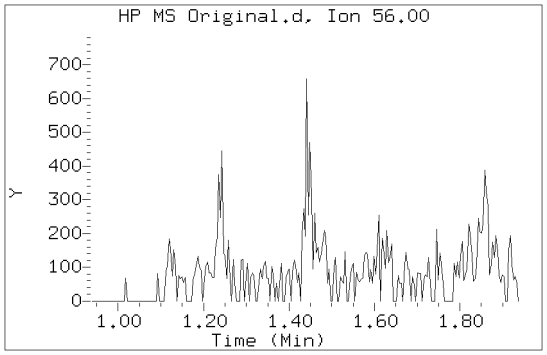


Acrolein (107-02-8)

Reason Code:

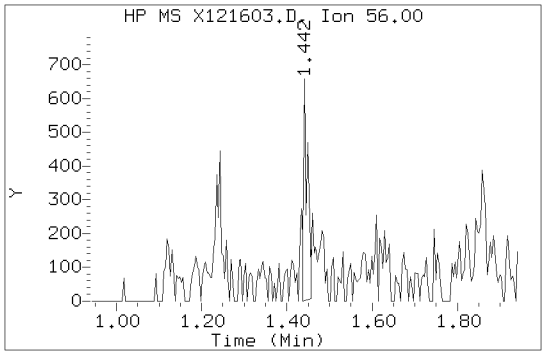
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



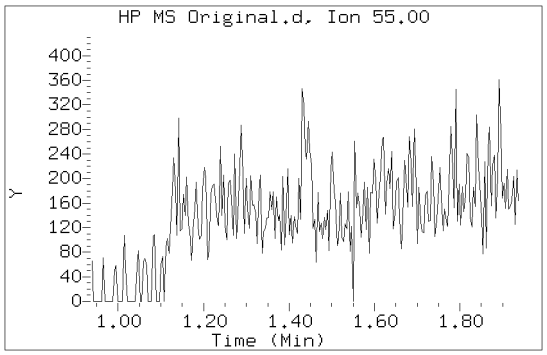
AFTER

MASS
56
AREA
440
HEIGHT
656
27-Dec-2022
16:07
linh
pham



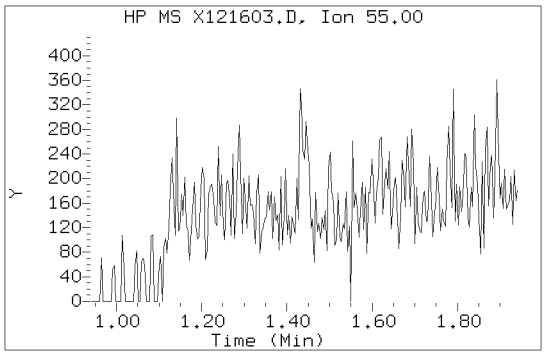
BEFORE

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



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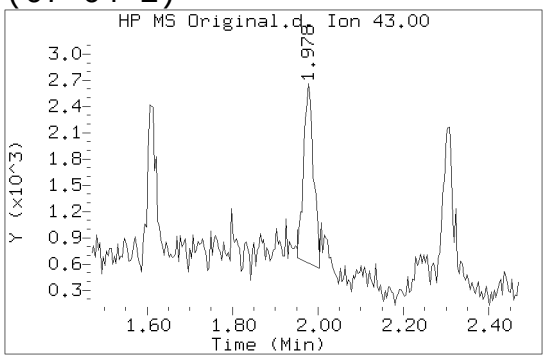
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acetone (67-64-1)

Reason Code:

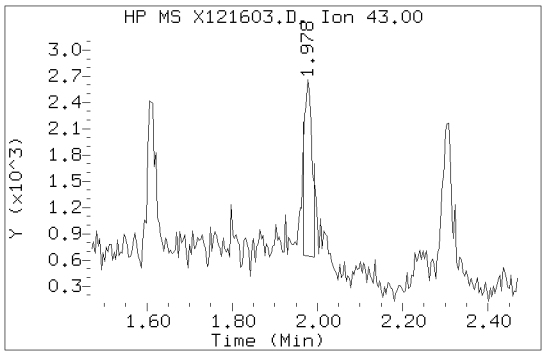
BEFORE

MASS
43
AREA
3388
HEIGHT
2046
27-Dec-2022
16:03
linh
pham



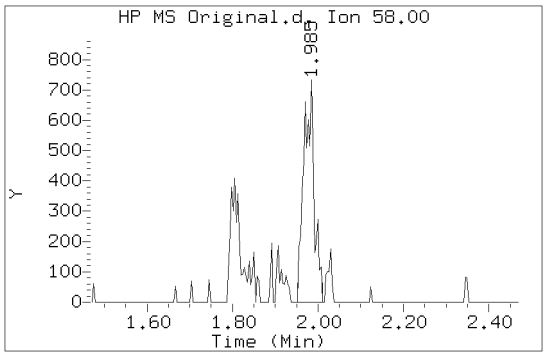
AFTER

MASS
43
AREA
2669
HEIGHT
2015
27-Dec-2022
16:07
linh
pham



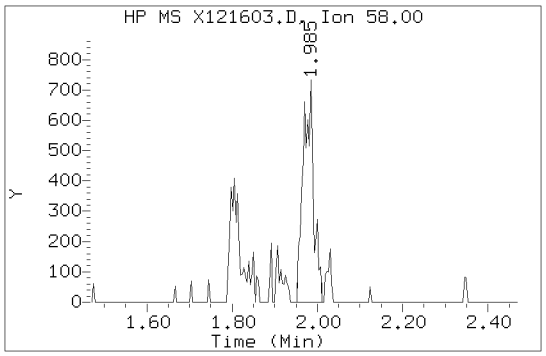
BEFORE

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

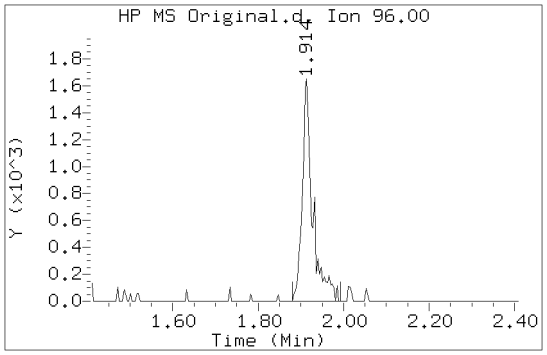


1,1-Dichloroethene (75-35-4)

Reason Code:

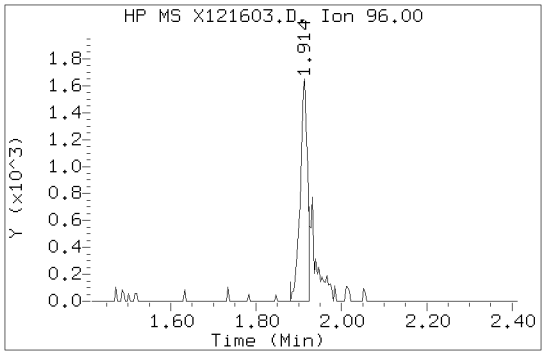
BEFORE

MASS
96
AREA
2836
HEIGHT
1651
27-Dec-2022
16:03
linh
pham



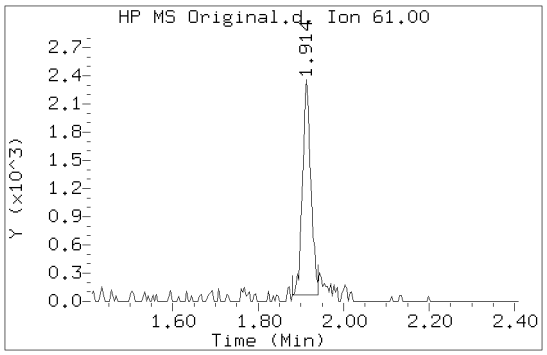
AFTER

MASS
96
AREA
2037
HEIGHT
1651
27-Dec-2022
16:07
linh
pham



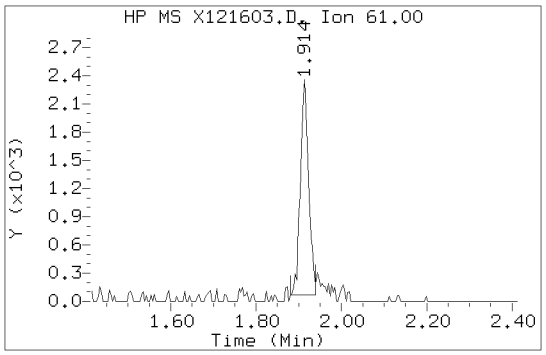
BEFORE

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



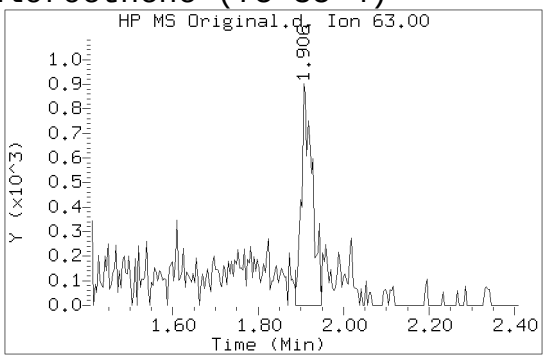
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

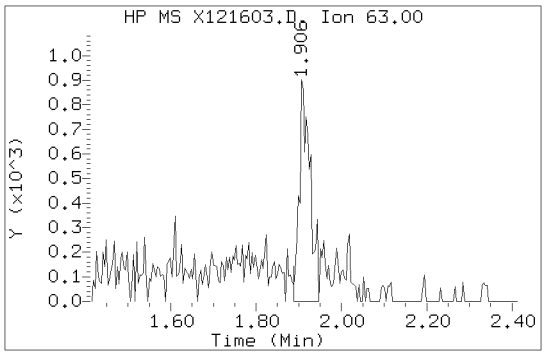
BEFORE

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

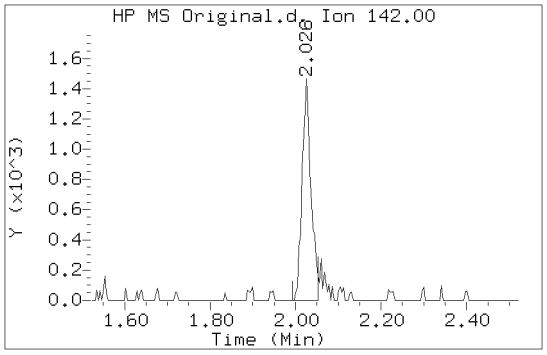


Iodomethane (74-88-4)

Reason Code:

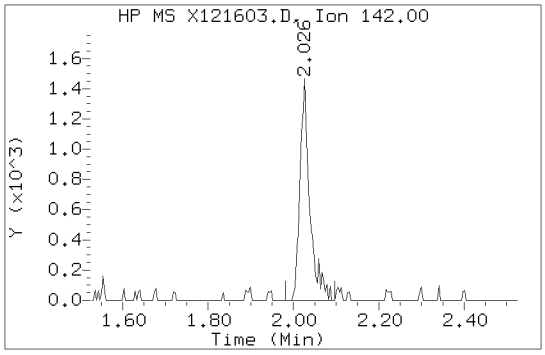
BEFORE

MASS
142
AREA
2166
HEIGHT
1466
27-Dec-2022
16:03
linh
pham



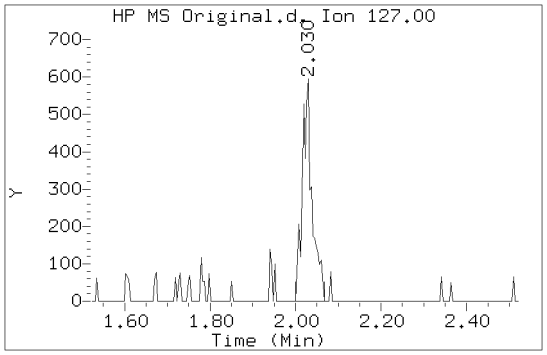
AFTER

MASS
142
AREA
2397
HEIGHT
1466
27-Dec-2022
16:07
linh
pham



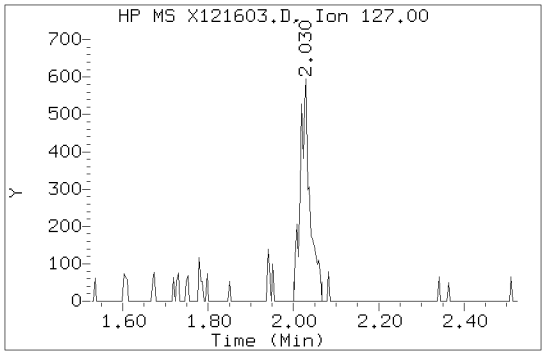
BEFORE

MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:03
linh
pham



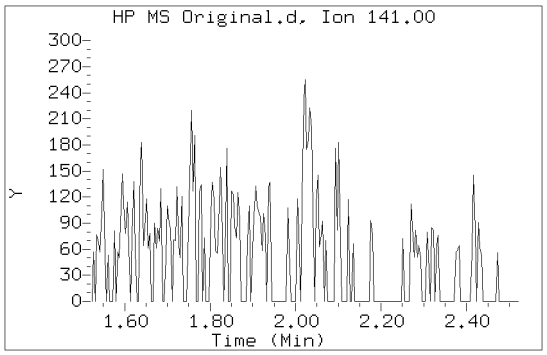
AFTER

MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:07
linh
pham



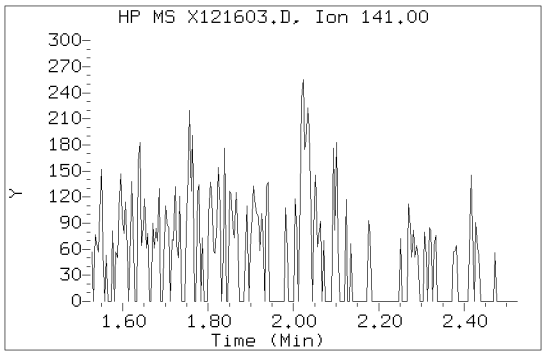
BEFORE

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



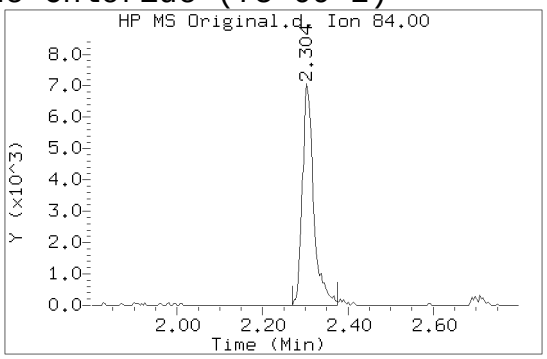
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

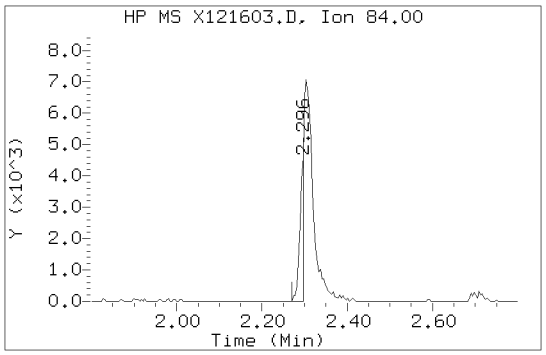
BEFORE

MASS
84
AREA
13307
HEIGHT
7067
27-Dec-2022
16:03
linh
pham



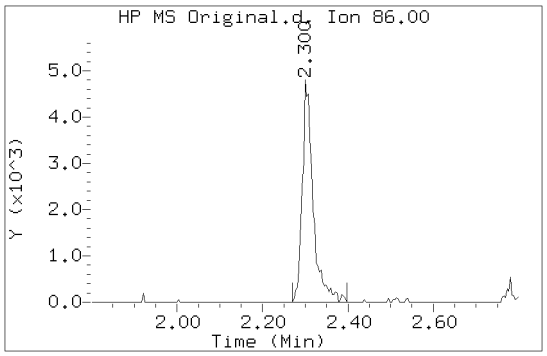
AFTER

MASS
84
AREA
2938
HEIGHT
4595
27-Dec-2022
16:07
linh
pham



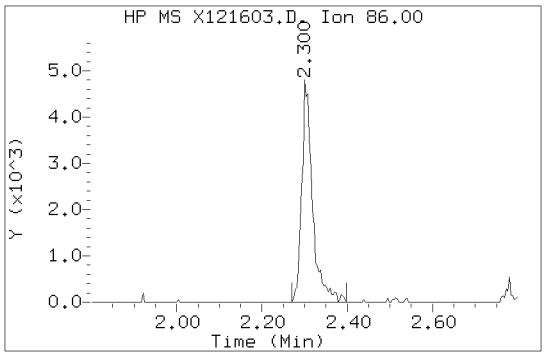
BEFORE

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:03
linh
pham



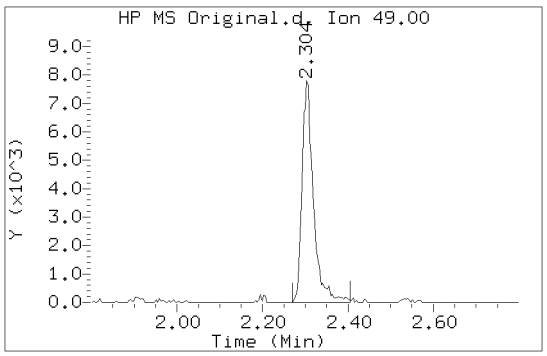
AFTER

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:07
linh
pham



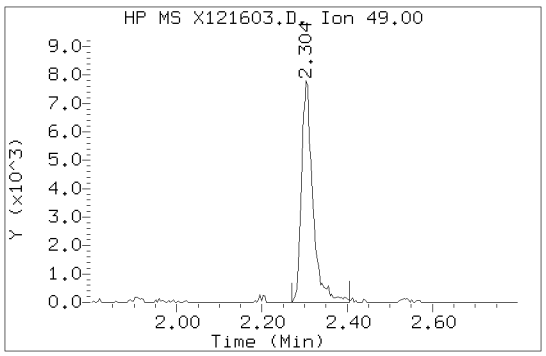
BEFORE

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

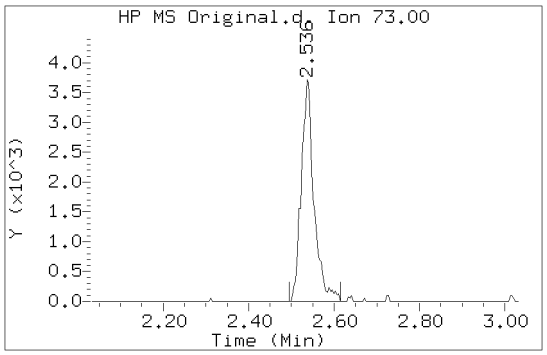


Methyl tert-butyl ether (1634-04-4)

Reason Code:

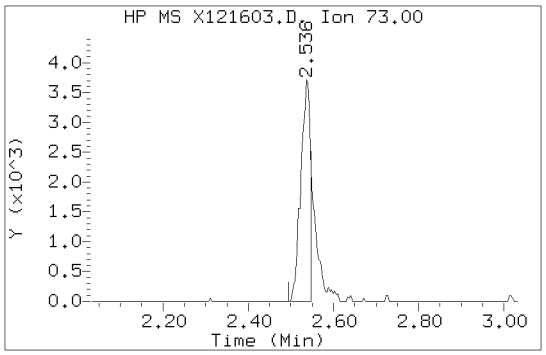
BEFORE

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

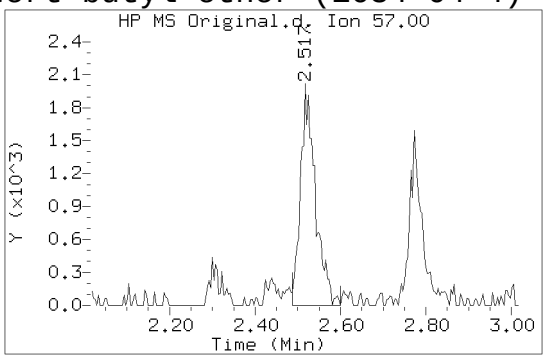


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl tert-butyl ether (1634-04-4)

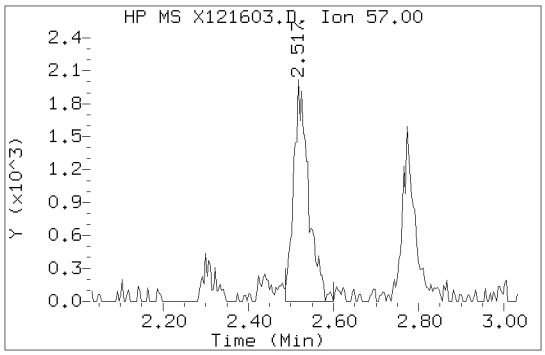
BEFORE

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

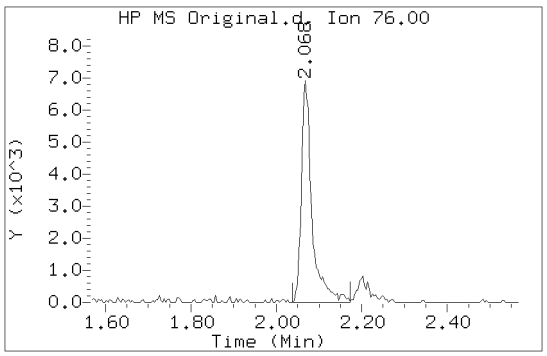


Reason Code:

Carbon Disulfide (75-15-0)

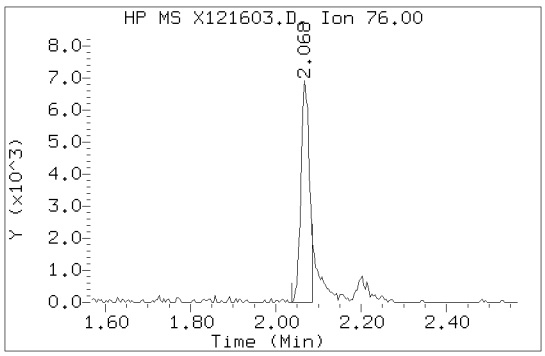
BEFORE

MASS
76
AREA
12313
HEIGHT
6923
27-Dec-2022
16:03
linh
pham



AFTER

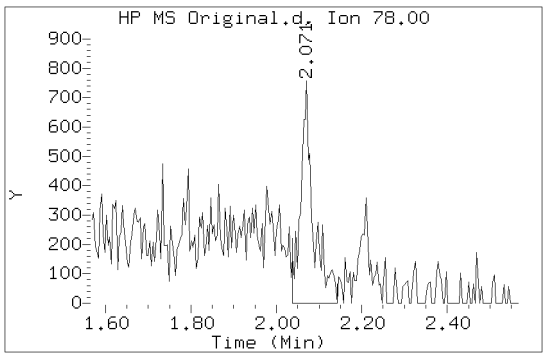
MASS
76
AREA
9921
HEIGHT
6923
27-Dec-2022
16:07
linh
pham



Reason Code:

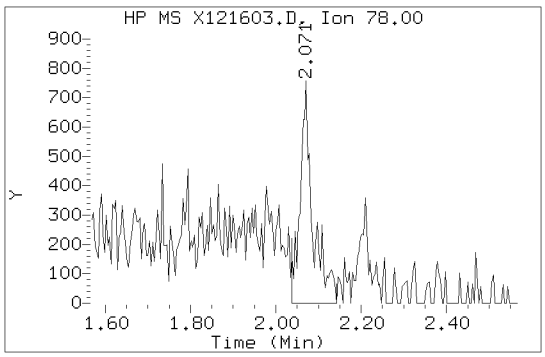
BEFORE

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

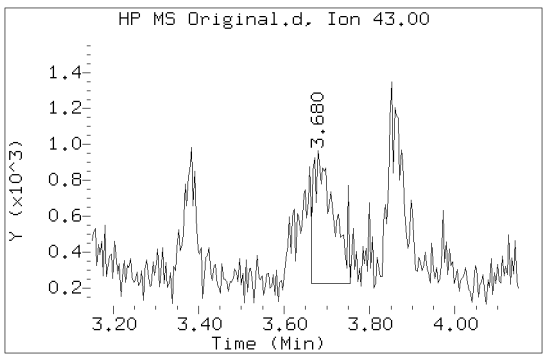


Reason Code:

2-Butanone (78-93-3)

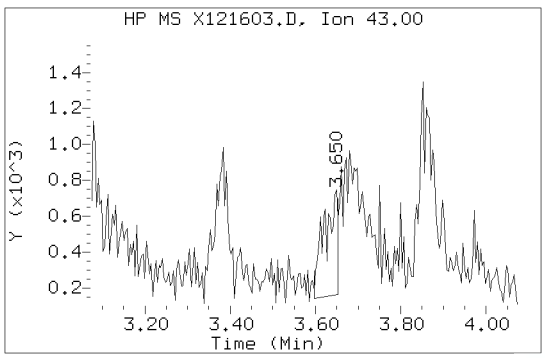
BEFORE

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:

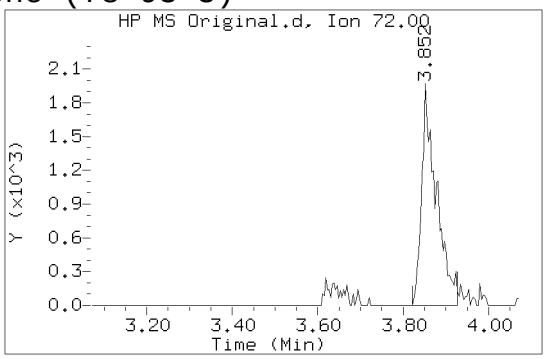
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

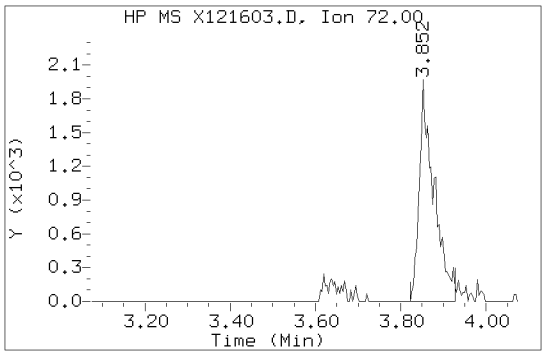
BEFORE

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

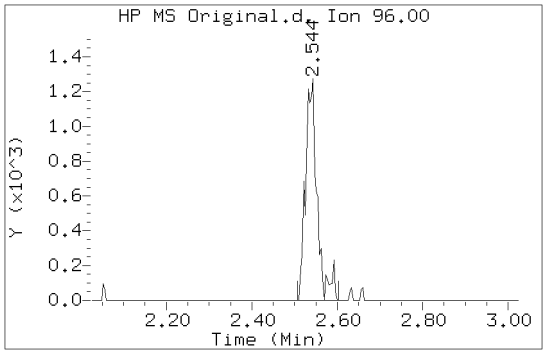


trans-1,2-Dichloroethene (156-60-5)

Reason Code:

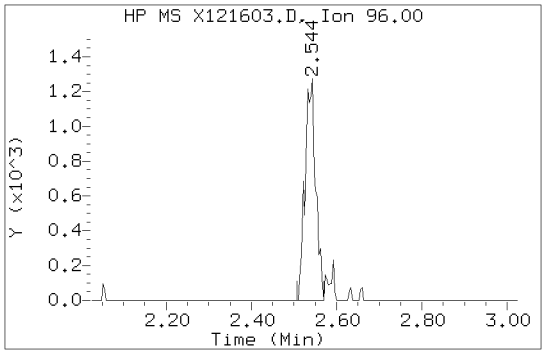
BEFORE

MASS
96
AREA
2404
HEIGHT
1274
27-Dec-2022
16:03
linh
pham



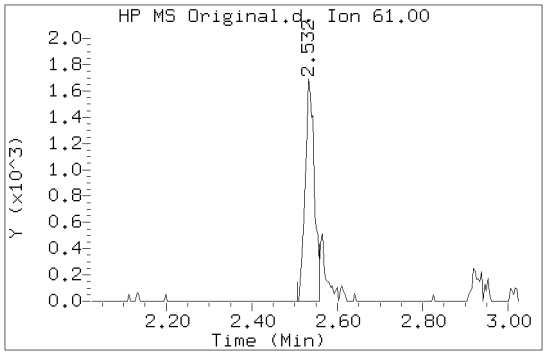
AFTER

MASS
96
AREA
2218
HEIGHT
1274
27-Dec-2022
16:07
linh
pham



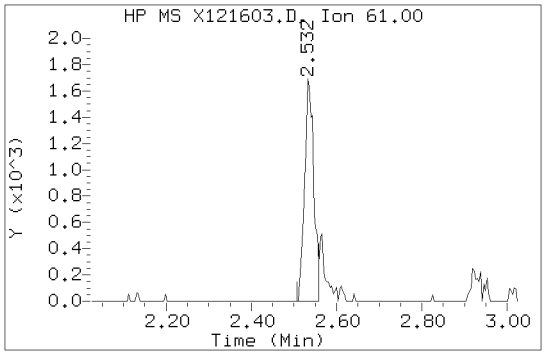
BEFORE

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:03
linh
pham



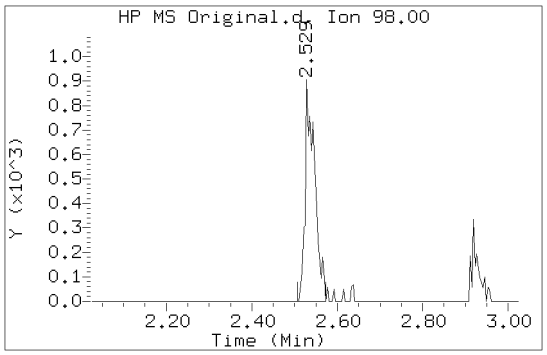
AFTER

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:07
linh
pham



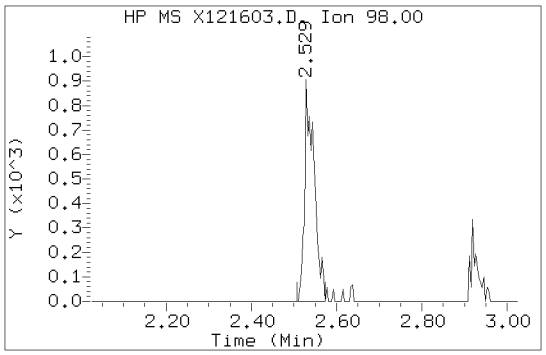
BEFORE

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

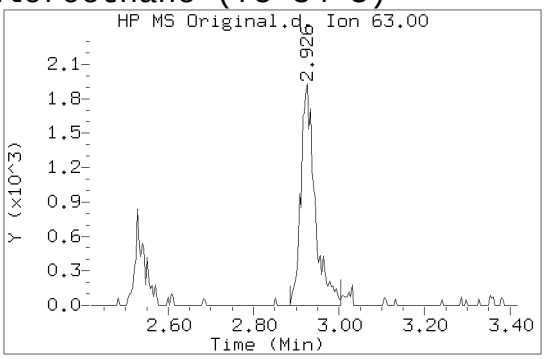


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

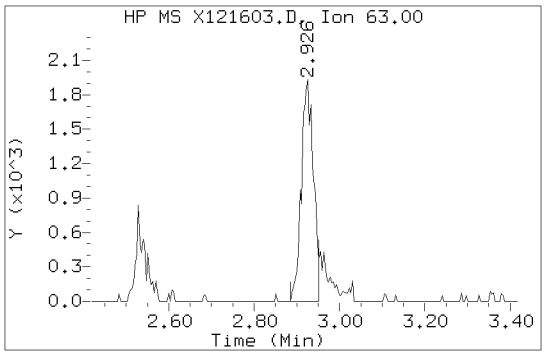
1,1-Dichloroethane (75-34-3)

Reason Code:

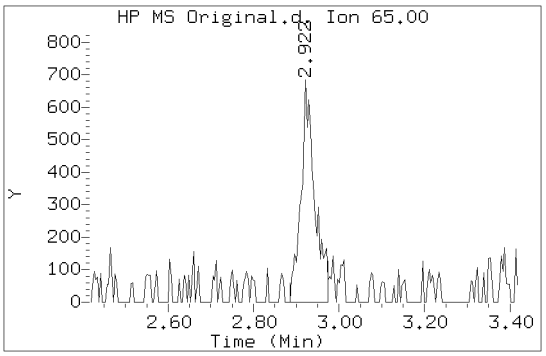
BEFORE
MASS
63
AREA
4504
HEIGHT
1931
27-Dec-2022
16:03
linh
pham



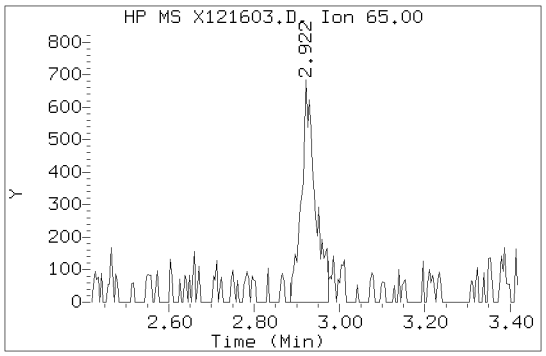
AFTER
MASS
63
AREA
3874
HEIGHT
1931
27-Dec-2022
16:07
linh
pham



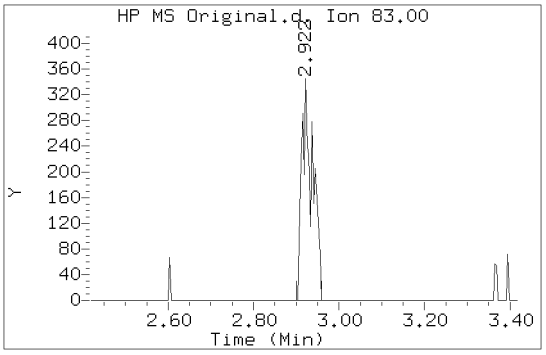
BEFORE
MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:03
linh
pham



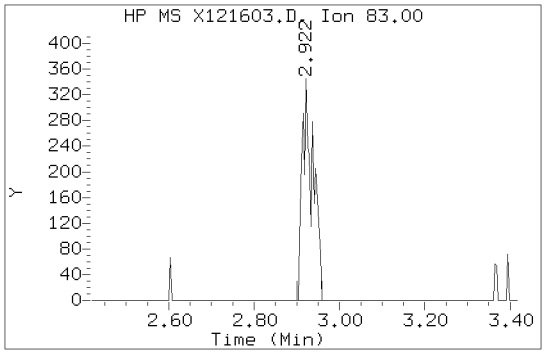
AFTER
MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
83
AREA
618
HEIGHT
345
27-Dec-2022
16:03
linh
pham



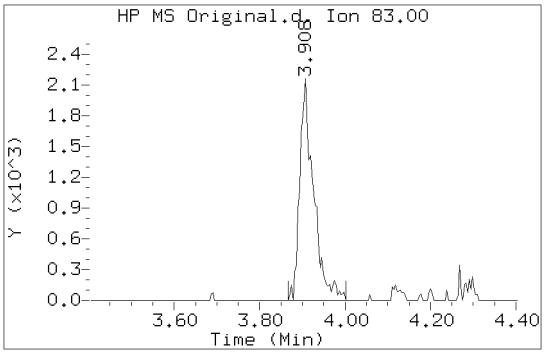
AFTER
MASS
83
AREA
618
HEIGHT
345
27-Dec-2022
16:07
linh
pham



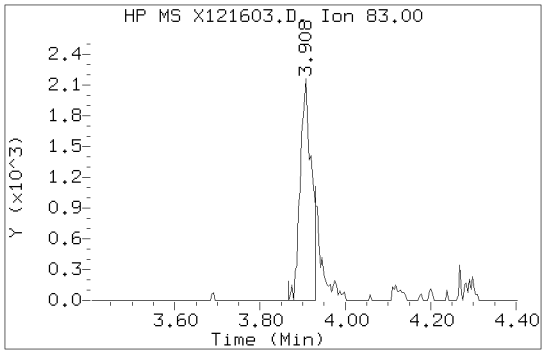
Chloroform (67-66-3)

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



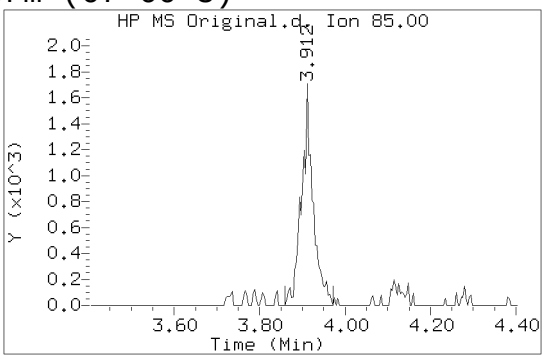
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroform (67-66-3)

Reason Code:

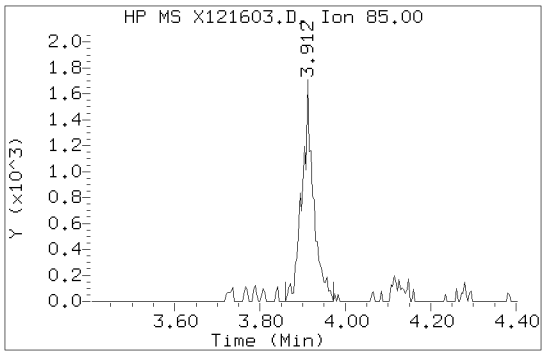
BEFORE

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

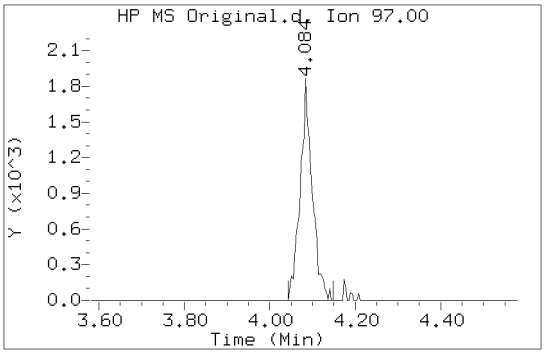


1,1,1-Trichloroethane (71-55-6)

Reason Code:

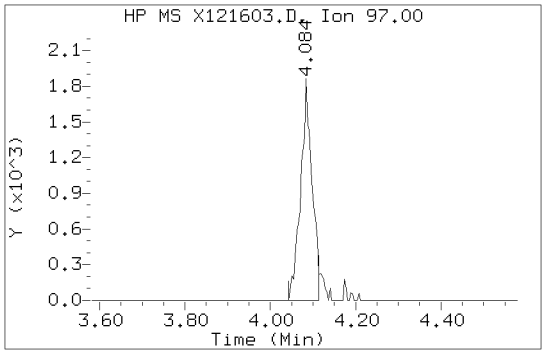
BEFORE

MASS
97
AREA
3710
HEIGHT
1863
27-Dec-2022
16:03
linh
pham



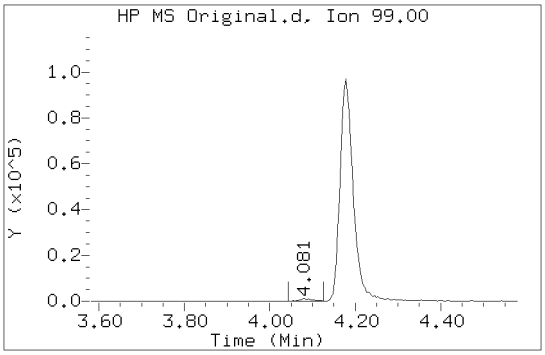
AFTER

MASS
97
AREA
3512
HEIGHT
1863
27-Dec-2022
16:07
linh
pham



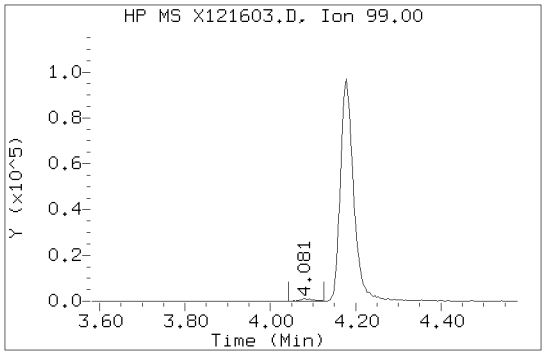
BEFORE

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:03
linh
pham



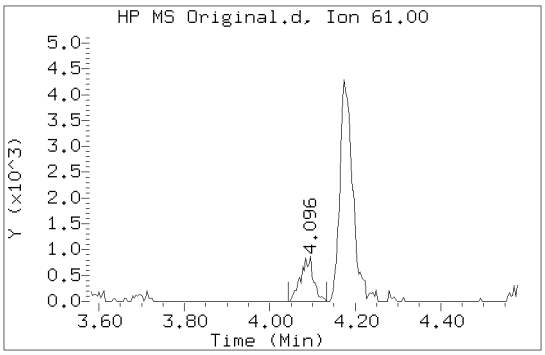
AFTER

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:07
linh
pham



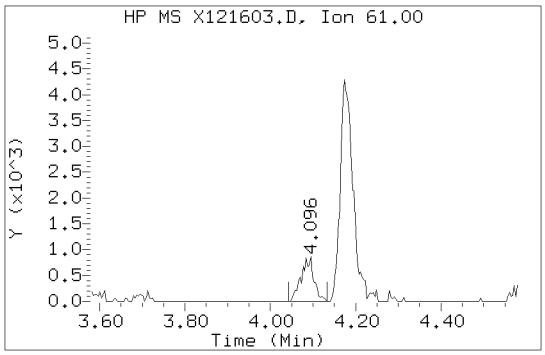
BEFORE

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



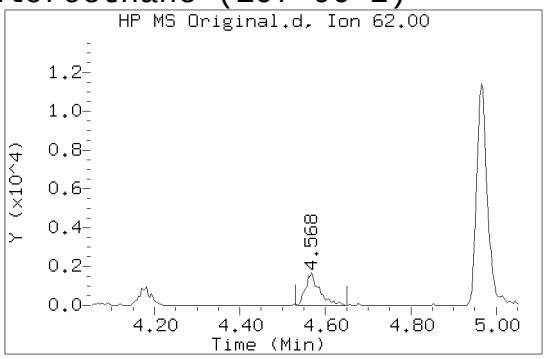
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

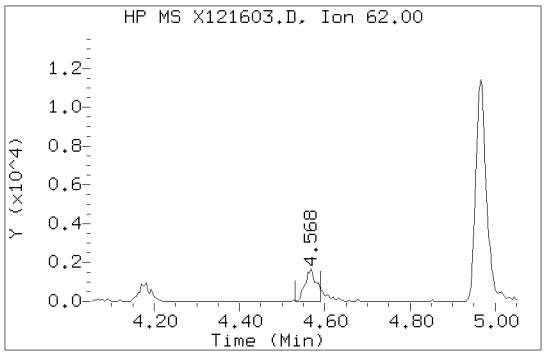
BEFORE

MASS
62
AREA
3822
HEIGHT
1678
27-Dec-2022
16:03
linh
pham



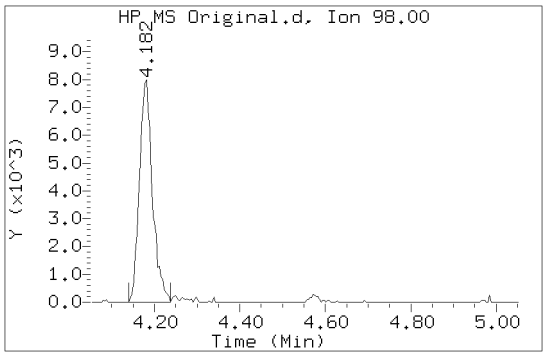
AFTER

MASS
62
AREA
3129
HEIGHT
1678
27-Dec-2022
16:07
linh
pham



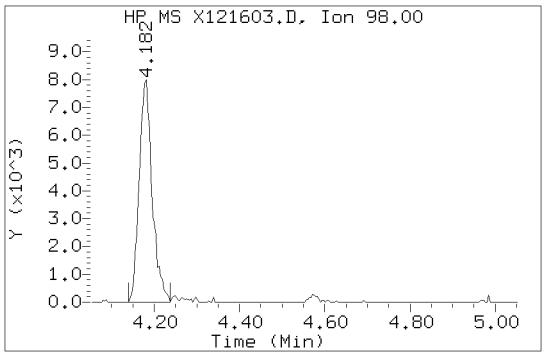
BEFORE

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

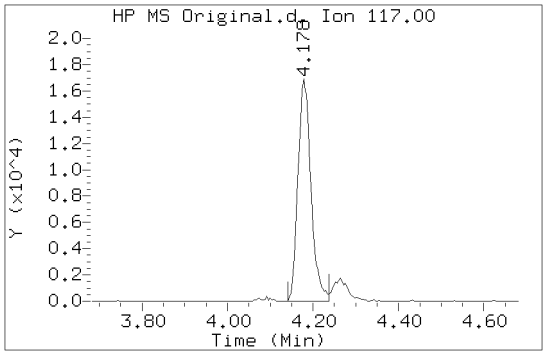


Carbon Tetrachloride (56-23-5)

Reason Code:

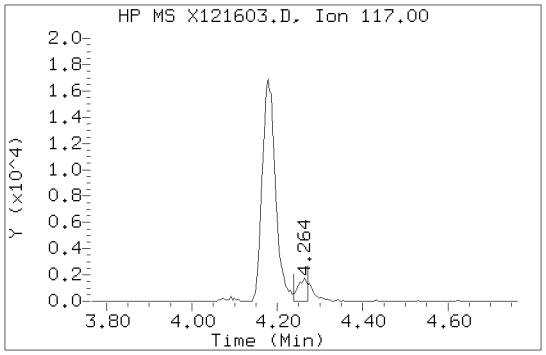
BEFORE

MASS
117
AREA
36559
HEIGHT
16920
27-Dec-2022
16:03
linh
pham



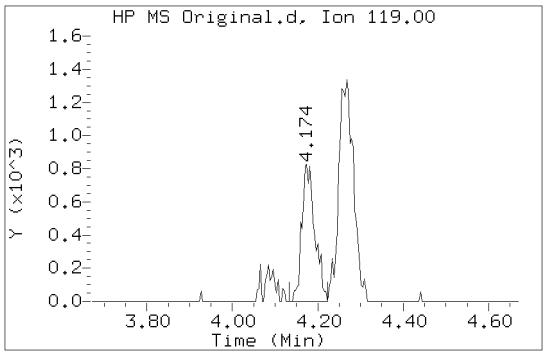
AFTER

MASS
117
AREA
2763
HEIGHT
1744
27-Dec-2022
16:07
linh
pham



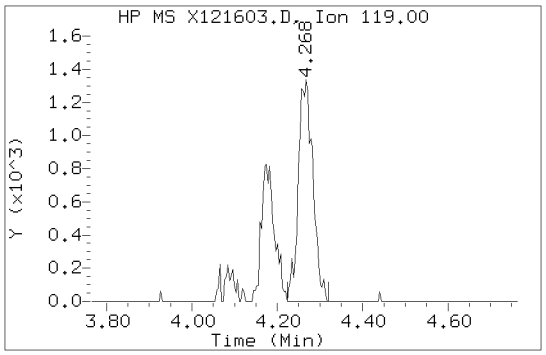
BEFORE

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

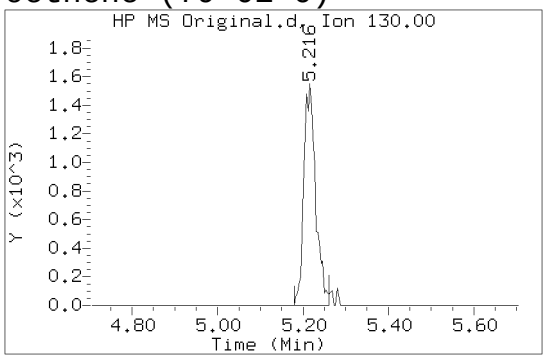


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

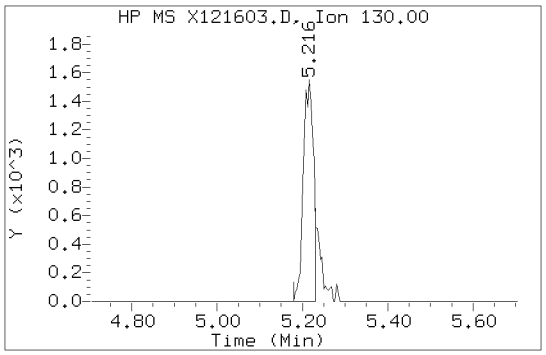
Trichloroethene (79-01-6)

Reason Code:

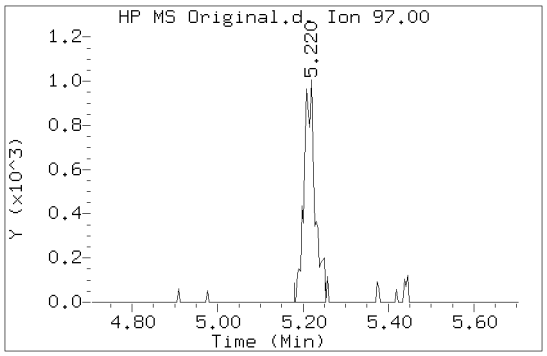
BEFORE
MASS
130
AREA
3011
HEIGHT
1551
27-Dec-2022
16:03
linh
pham



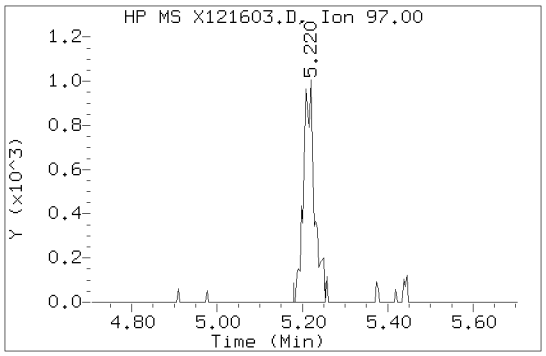
AFTER
MASS
130
AREA
2583
HEIGHT
1551
27-Dec-2022
16:07
linh
pham



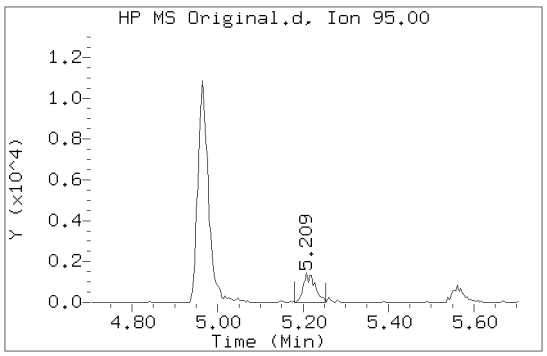
BEFORE
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:03
linh
pham



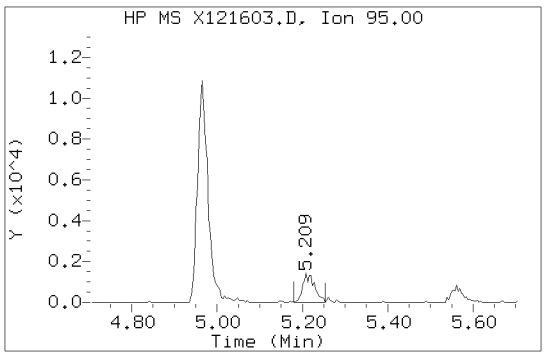
AFTER
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:03
linh
pham



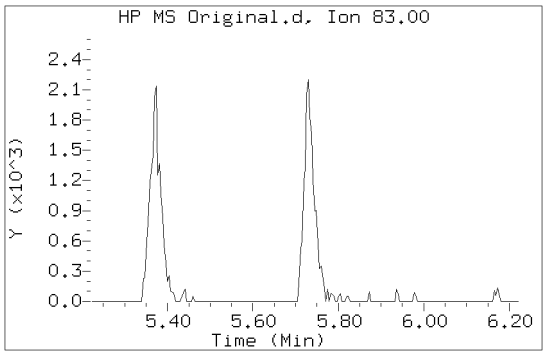
AFTER
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:07
linh
pham



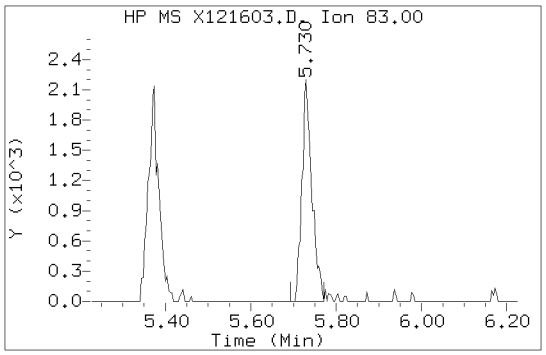
Bromodichloromethane (75-27-4)

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

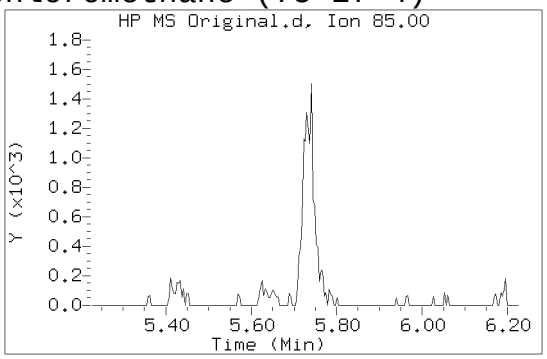


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

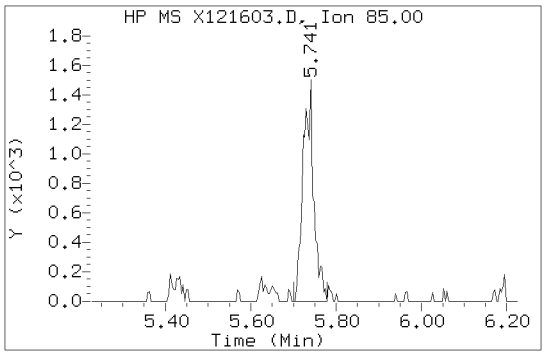
Bromodichloromethane (75-27-4)

Reason Code:

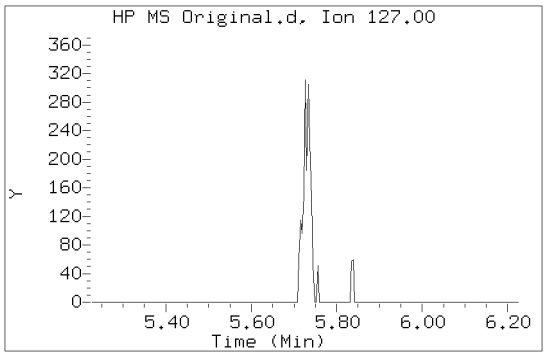
BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



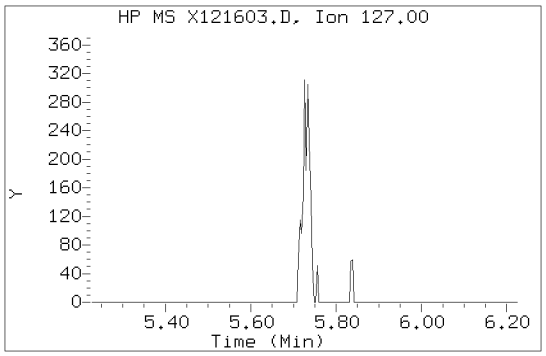
AFTER
MASS
85
AREA
2639
HEIGHT
1503
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



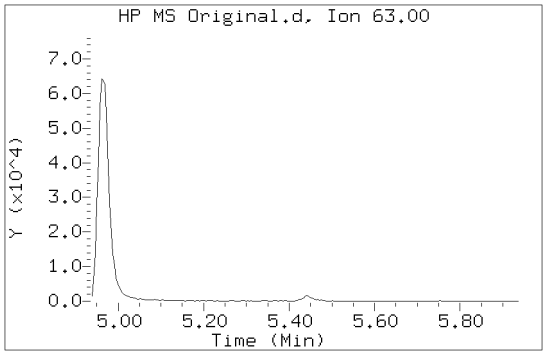
AFTER
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



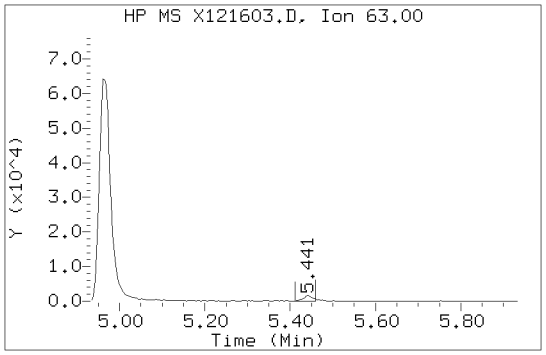
1,2-Dichloropropane (78-87-5)

Reason Code:

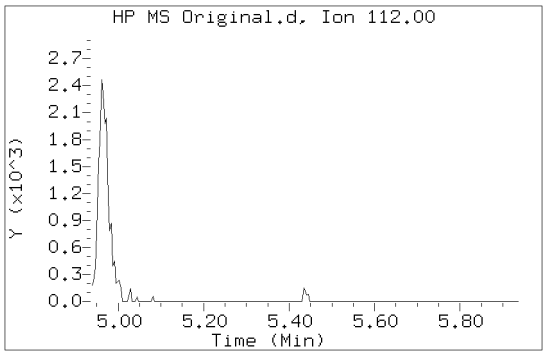
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



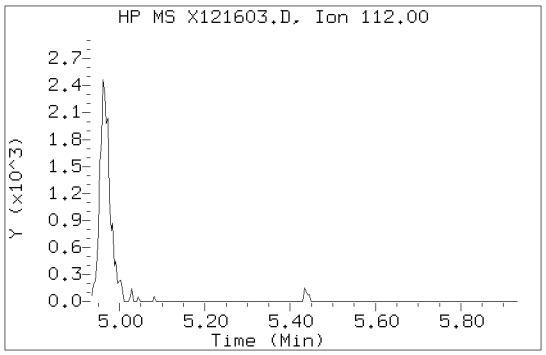
AFTER
MASS
63
AREA
2449
HEIGHT
1587
27-Dec-2022
16:07
linh
pham



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



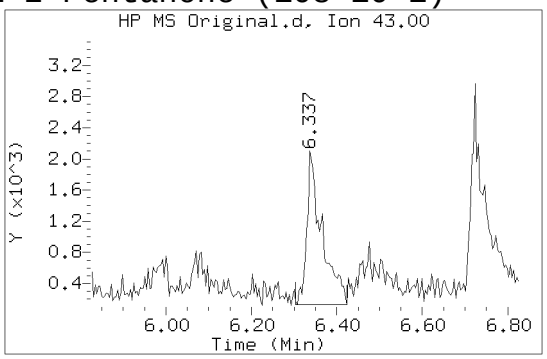
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

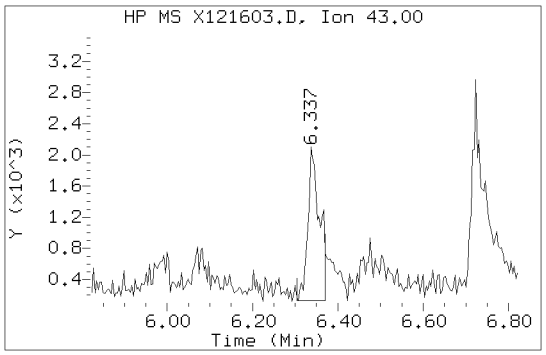
BEFORE

MASS
43
AREA
4873
HEIGHT
1970
27-Dec-2022
16:03
linh
pham



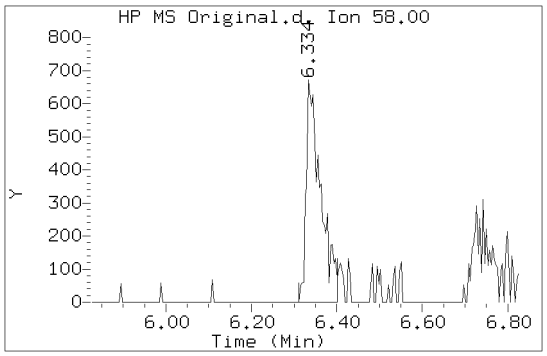
AFTER

MASS
43
AREA
3741
HEIGHT
1970
27-Dec-2022
16:07
linh
pham



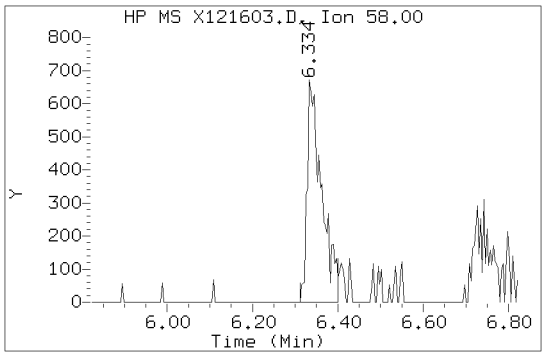
BEFORE

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:03
linh
pham



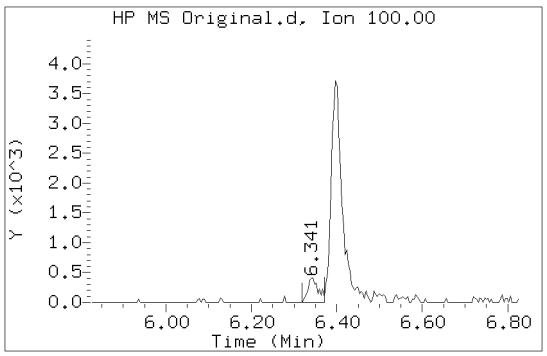
AFTER

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:07
linh
pham



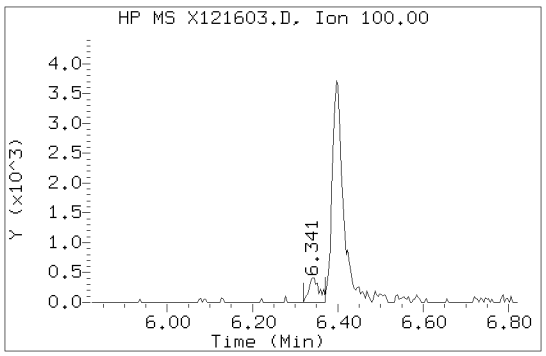
BEFORE

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

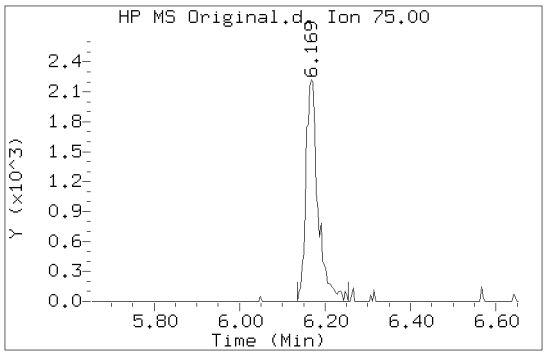


cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

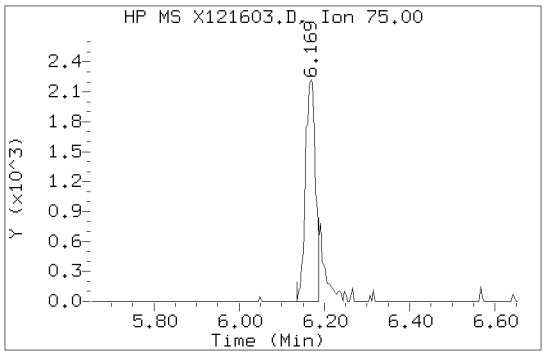
BEFORE

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



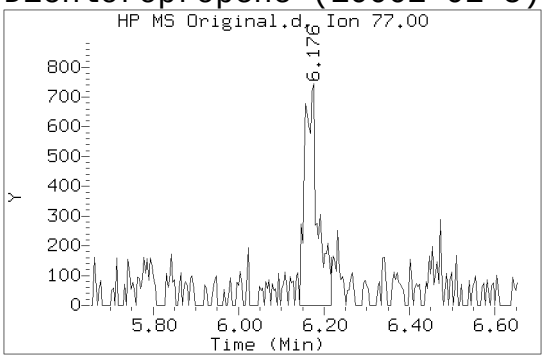
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

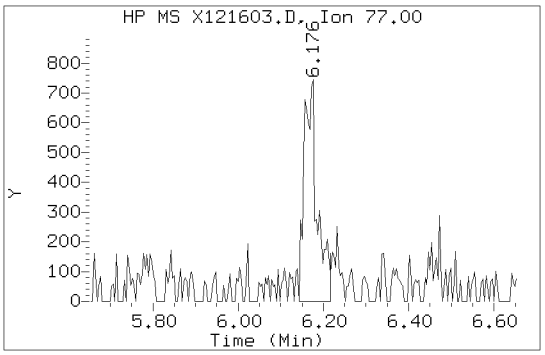
BEFORE

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:03
linh
pham



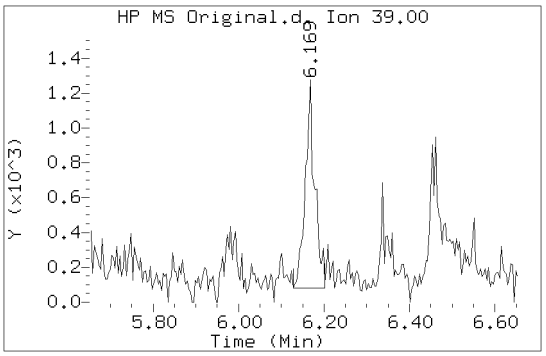
AFTER

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:07
linh
pham



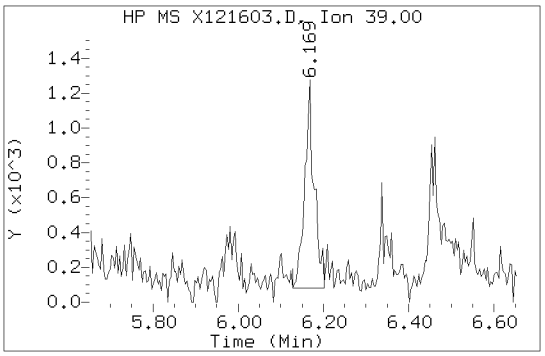
BEFORE

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

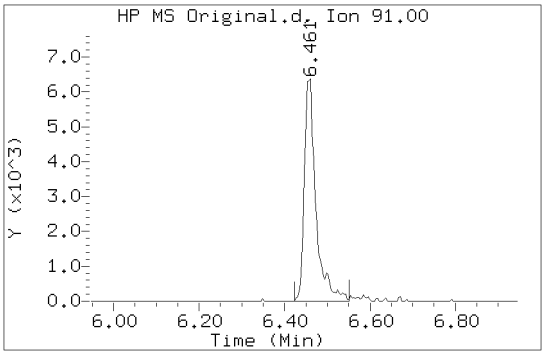


Toluene (108-88-3)

Reason Code:

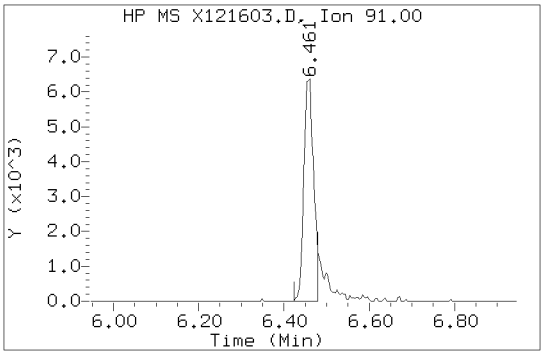
BEFORE

MASS
91
AREA
12225
HEIGHT
6374
27-Dec-2022
16:03
linh
pham



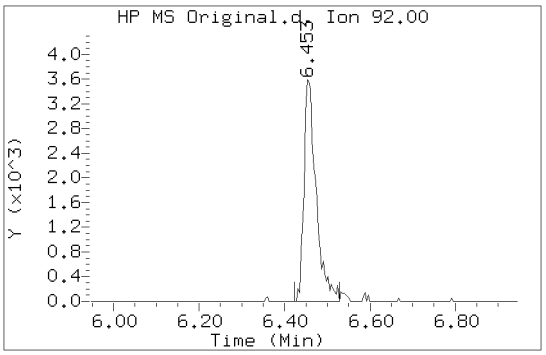
AFTER

MASS
91
AREA
10374
HEIGHT
6374
27-Dec-2022
16:07
linh
pham



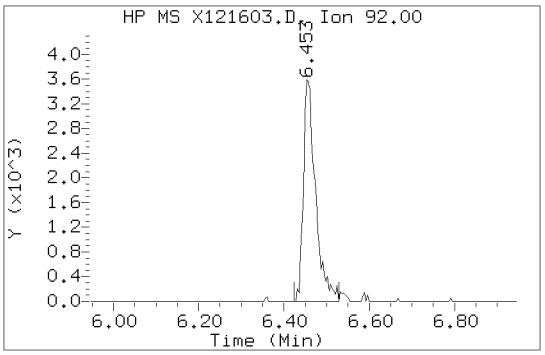
BEFORE

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



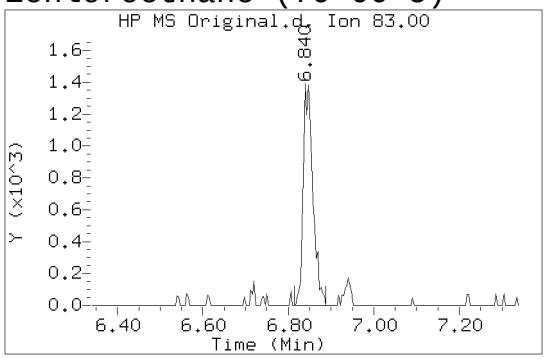
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2-Trichloroethane (79-00-5)

Reason Code:

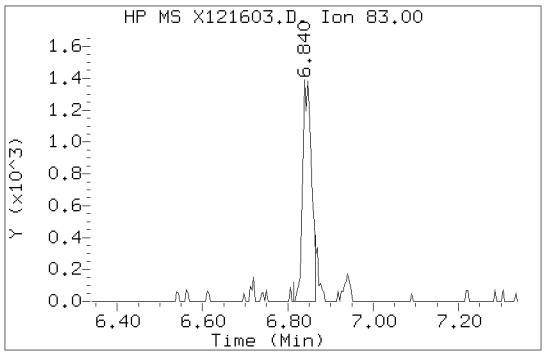
BEFORE

MASS
83
AREA
2247
HEIGHT
1391
27-Dec-2022
16:03
linh
pham



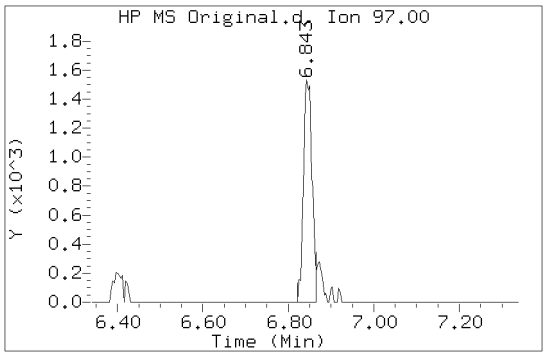
AFTER

MASS
83
AREA
2092
HEIGHT
1391
27-Dec-2022
16:07
linh
pham



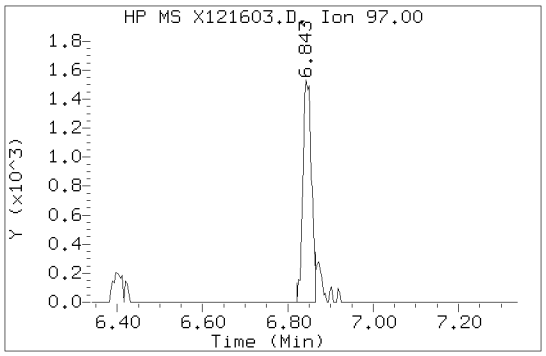
BEFORE

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

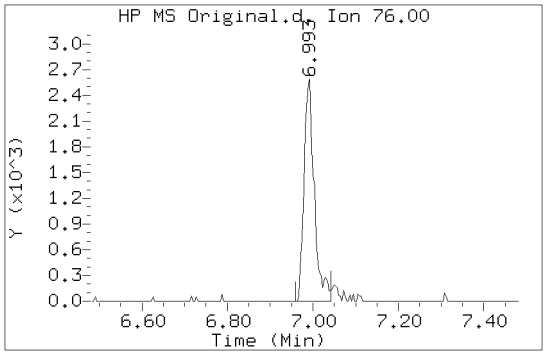


1,3-Dichloropropane (142-28-9)

Reason Code:

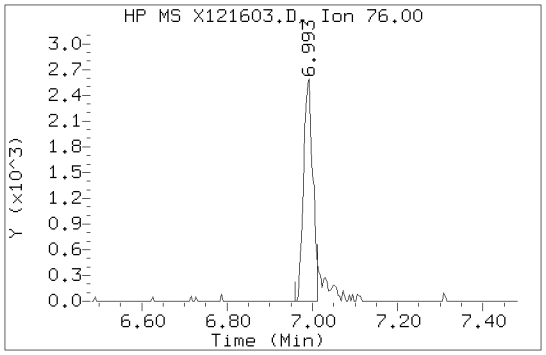
BEFORE

MASS
76
AREA
4415
HEIGHT
2592
27-Dec-2022
16:03
linh
pham



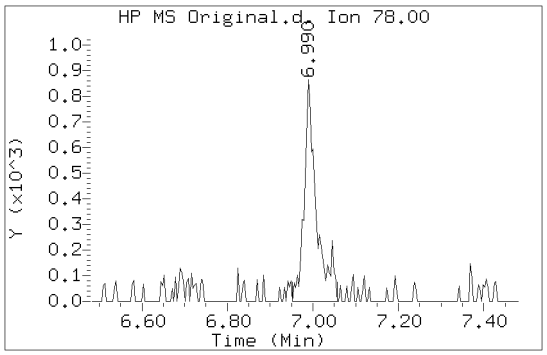
AFTER

MASS
76
AREA
4005
HEIGHT
2592
27-Dec-2022
16:07
linh
pham



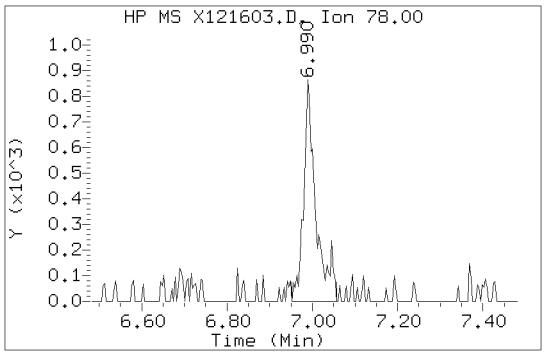
BEFORE

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



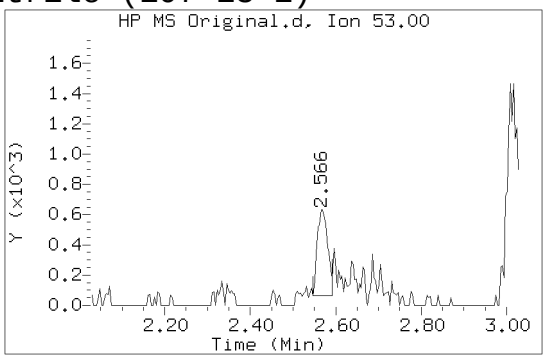
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acrylonitrile (107-13-1)

Reason Code:

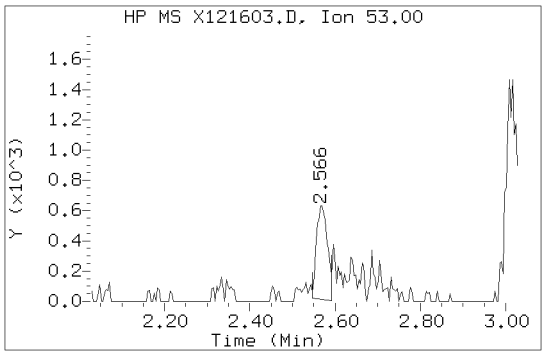
BEFORE

MASS
53
AREA
975
HEIGHT
571
27-Dec-2022
16:03
linh
pham



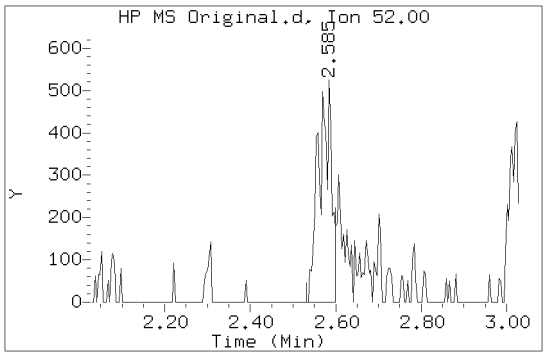
AFTER

MASS
53
AREA
1118
HEIGHT
618
27-Dec-2022
16:07
linh
pham



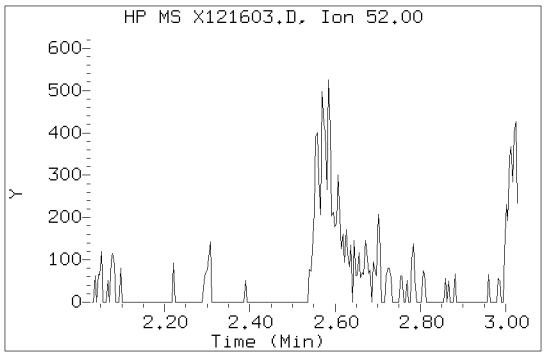
BEFORE

MASS
52
AREA
1100
HEIGHT
525
27-Dec-2022
16:03
linh
pham



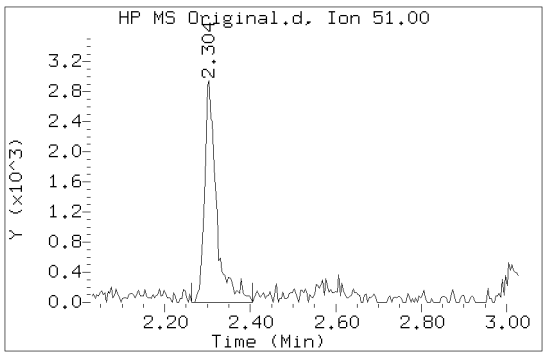
AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



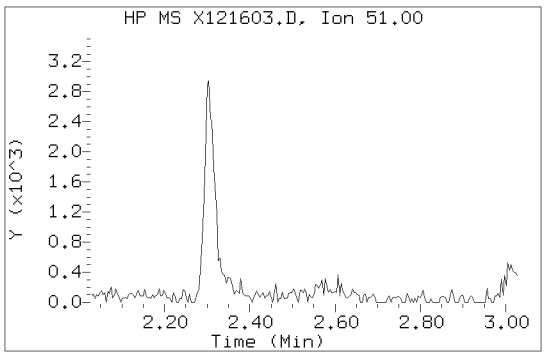
BEFORE

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

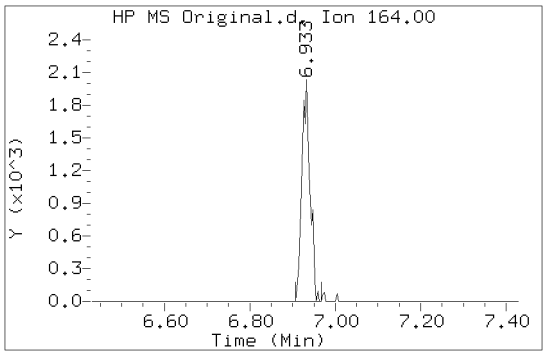


Tetrachloroethene (127-18-4)

Reason Code:

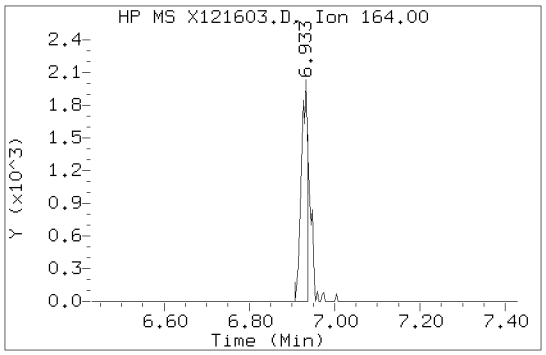
BEFORE

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



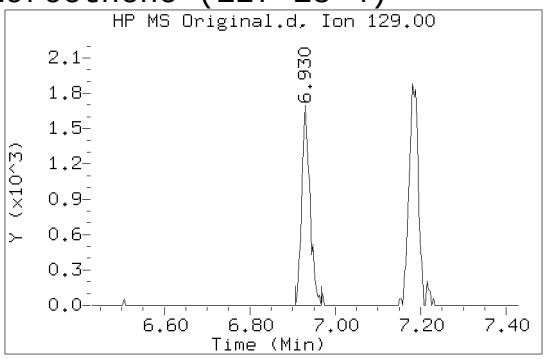
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrachloroethene (127-18-4)

Reason Code:

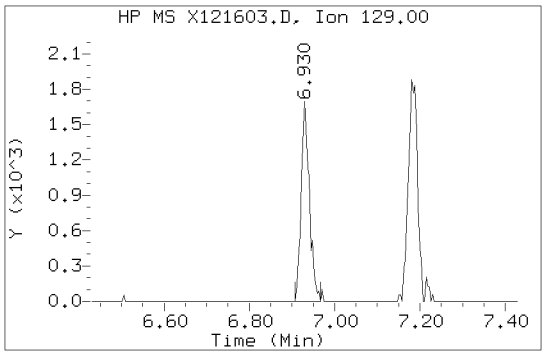
BEFORE

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:03
linh
pham



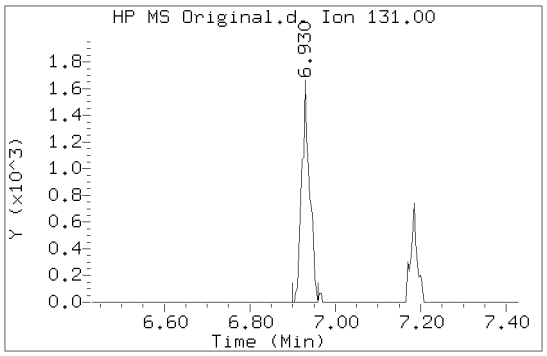
AFTER

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:07
linh
pham



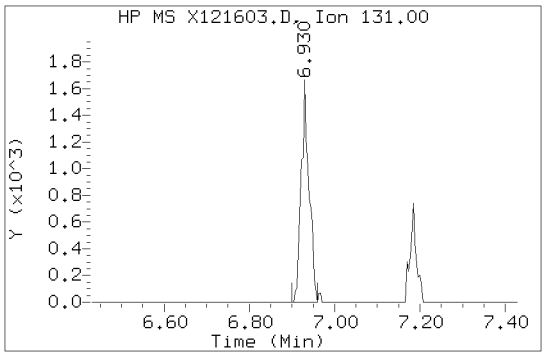
BEFORE

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

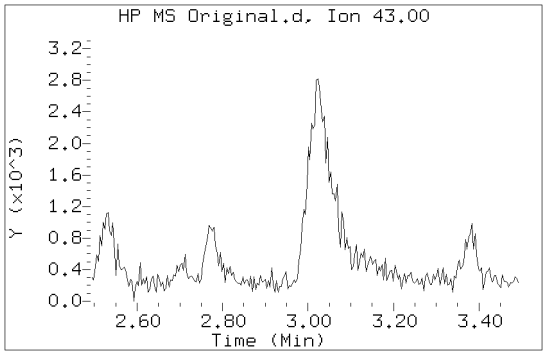


Vinyl Acetate (108-05-4)

Reason Code:

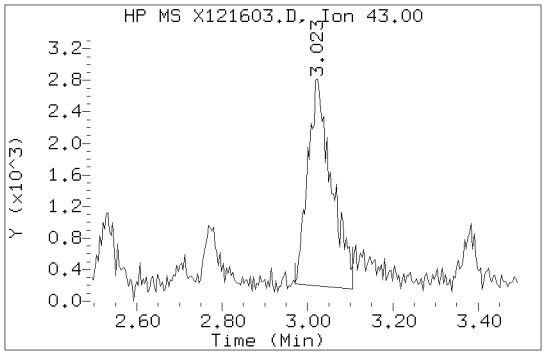
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



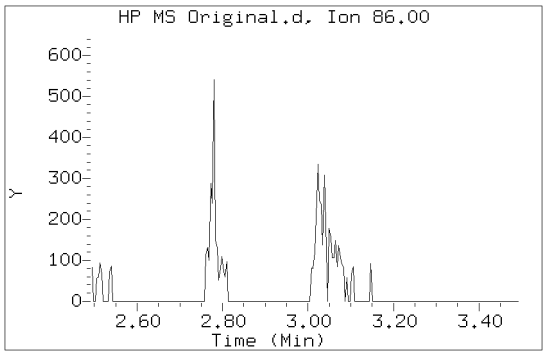
AFTER

MASS
43
AREA
10138
HEIGHT
2622
27-Dec-2022
16:07
linh
pham



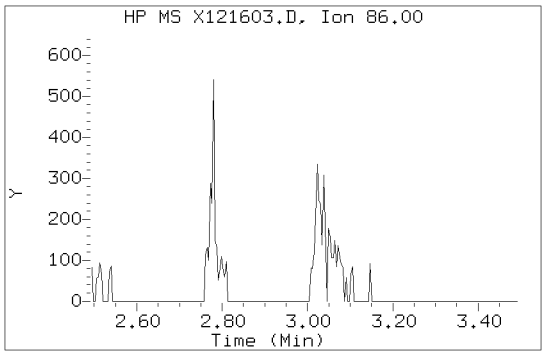
BEFORE

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



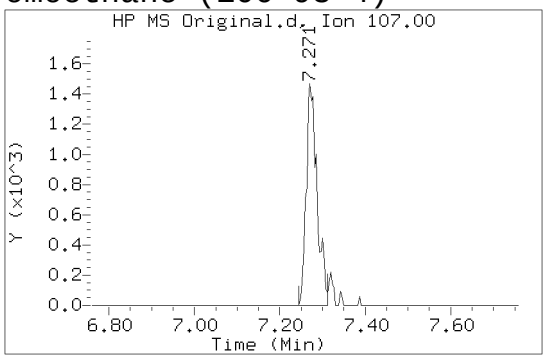
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,2-Dibromoethane (106-93-4)

Reason Code:

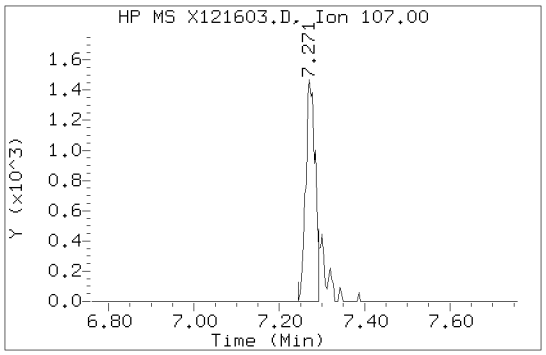
BEFORE

MASS
107
AREA
2627
HEIGHT
1469
27-Dec-2022
16:03
linh
pham



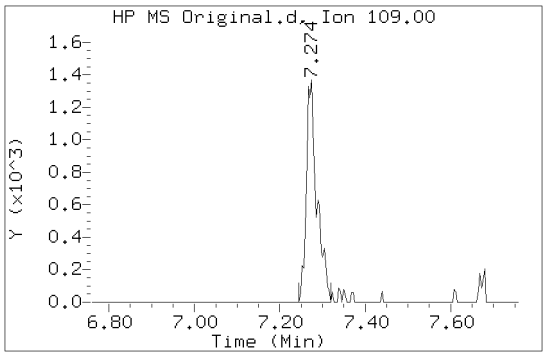
AFTER

MASS
107
AREA
2340
HEIGHT
1469
27-Dec-2022
16:07
linh
pham



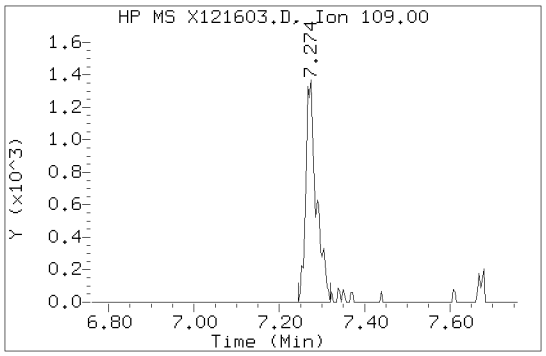
BEFORE

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

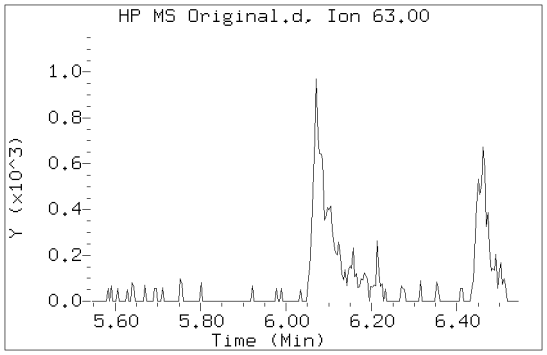


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

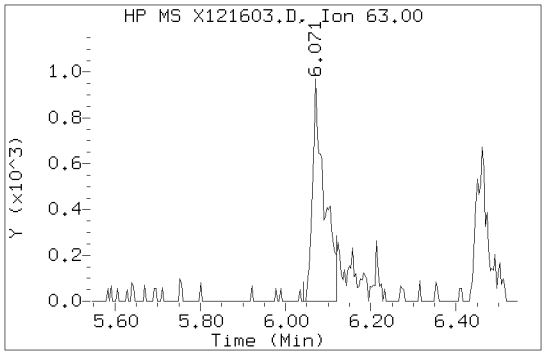
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



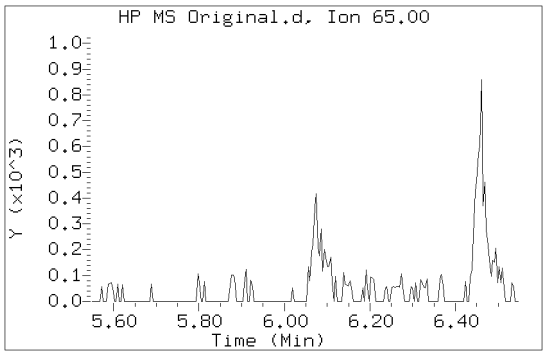
AFTER

MASS
63
AREA
1861
HEIGHT
970
27-Dec-2022
16:07
linh
pham



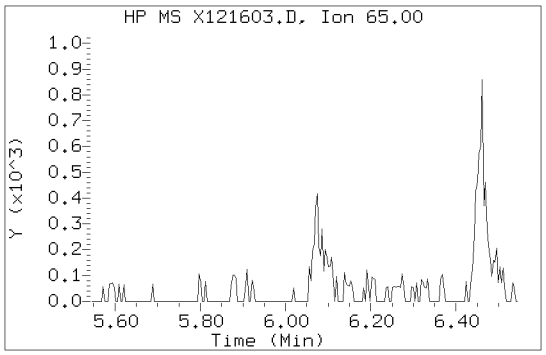
BEFORE

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



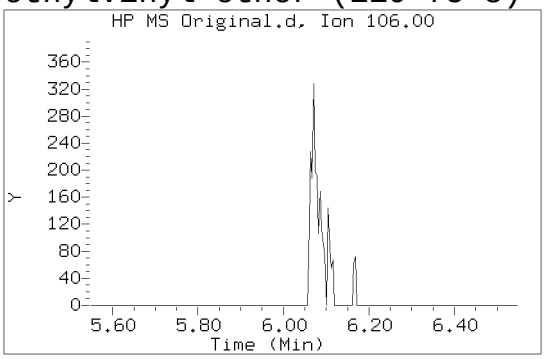
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

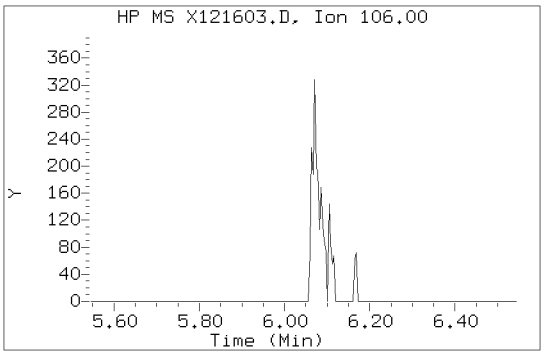
BEFORE

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

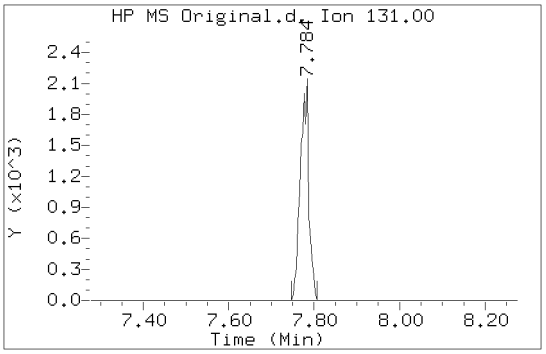


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

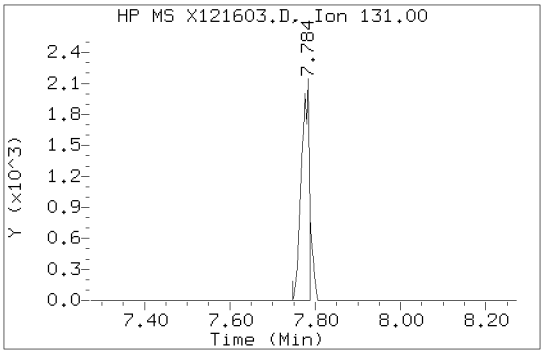
BEFORE

MASS
131
AREA
3036
HEIGHT
2146
27-Dec-2022
16:03
linh
pham



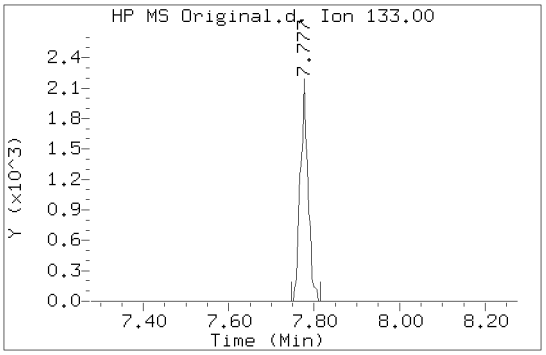
AFTER

MASS
131
AREA
2741
HEIGHT
2146
27-Dec-2022
16:07
linh
pham



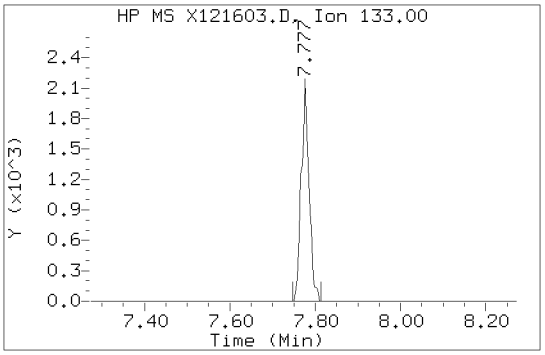
BEFORE

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:03
linh
pham



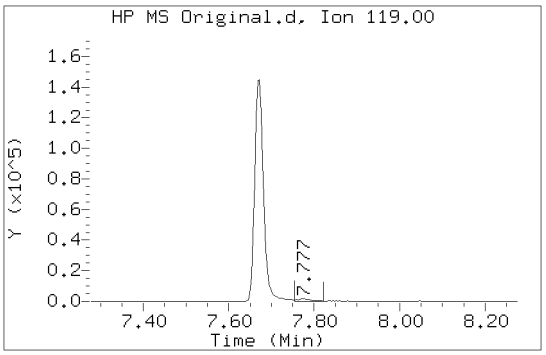
AFTER

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:07
linh
pham



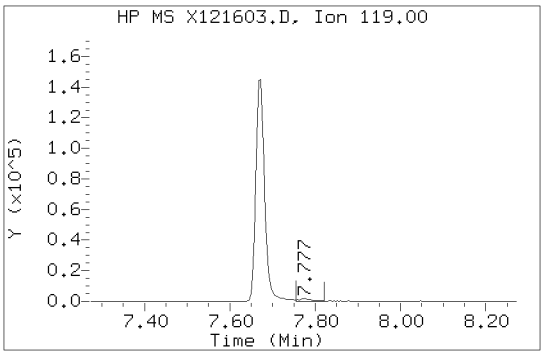
BEFORE

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



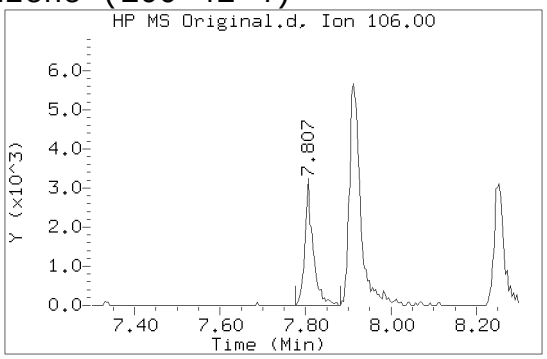
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

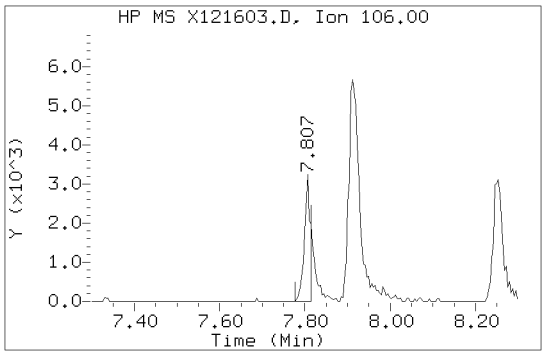
BEFORE

MASS
106
AREA
4331
HEIGHT
3242
27-Dec-2022
16:03
linh
pham



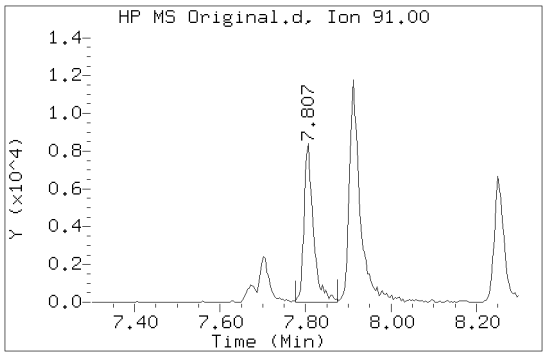
AFTER

MASS
106
AREA
3064
HEIGHT
3242
27-Dec-2022
16:07
linh
pham



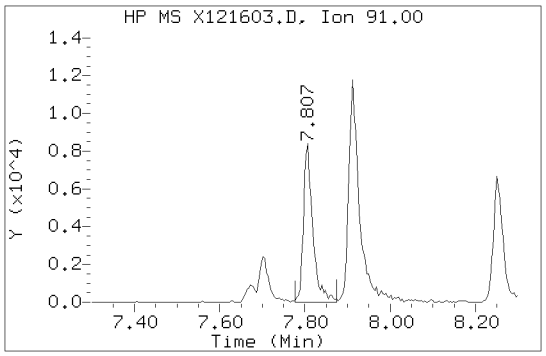
BEFORE

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

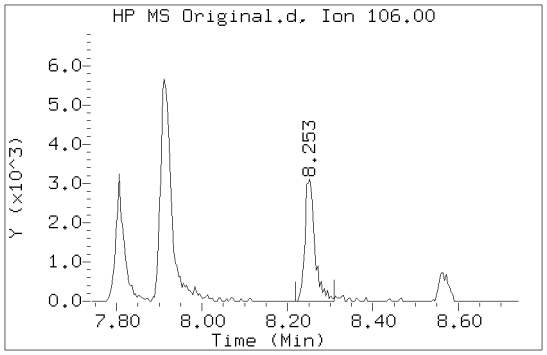


o-Xylene (95-47-6)

Reason Code:

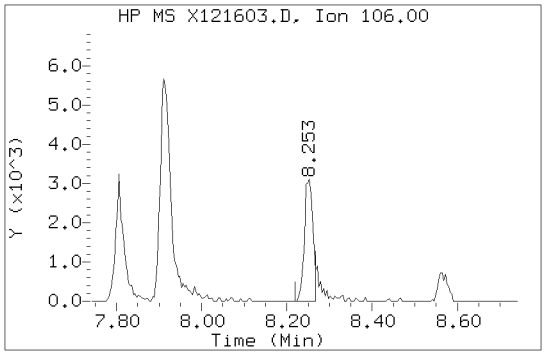
BEFORE

MASS
106
AREA
5100
HEIGHT
3111
27-Dec-2022
16:03
linh
pham



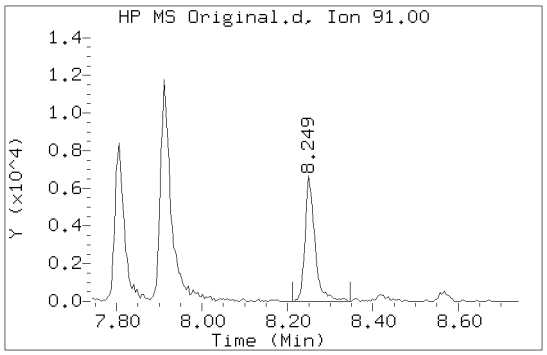
AFTER

MASS
106
AREA
4412
HEIGHT
3111
27-Dec-2022
16:07
linh
pham



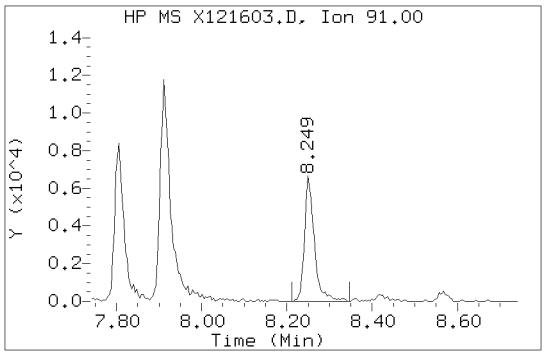
BEFORE

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

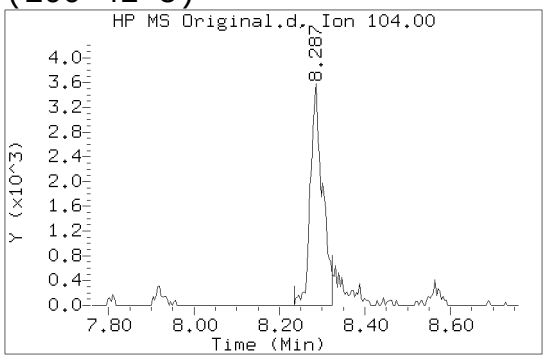


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Styrene (100-42-5)

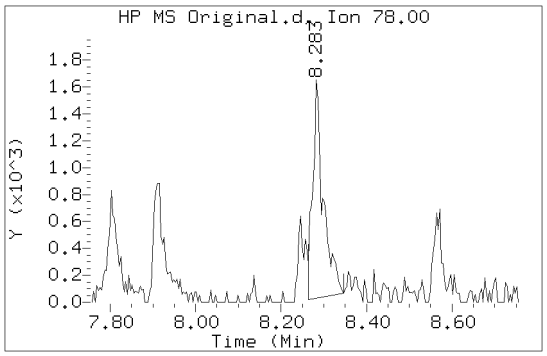
BEFORE

MASS
104
AREA
7074
HEIGHT
3581
27-Dec-2022
16:03
linh
pham



BEFORE

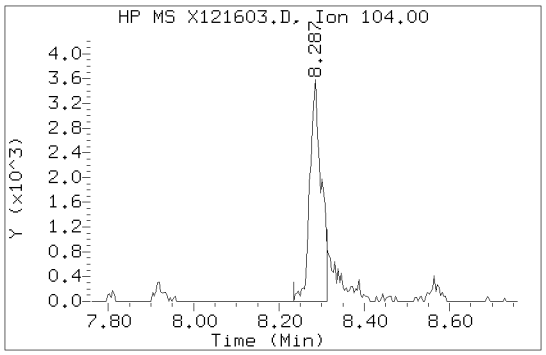
MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:03
linh
pham



Reason Code:

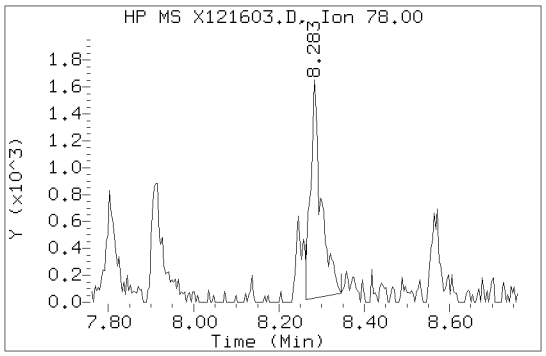
AFTER

MASS
104
AREA
6634
HEIGHT
3581
27-Dec-2022
16:07
linh
pham



AFTER

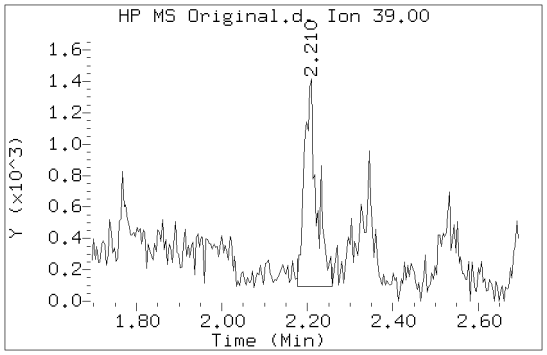
MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:07
linh
pham



Acetonitrile (75-05-8)

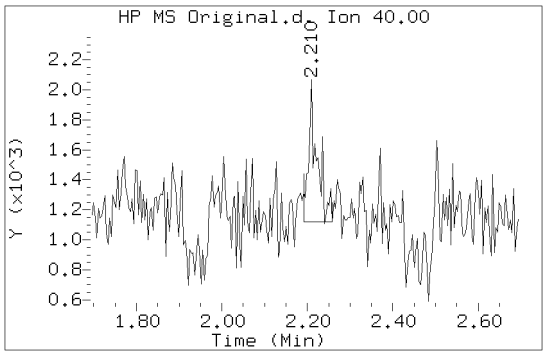
BEFORE

MASS
39
AREA
2674
HEIGHT
1321
27-Dec-2022
16:03
linh
pham



BEFORE

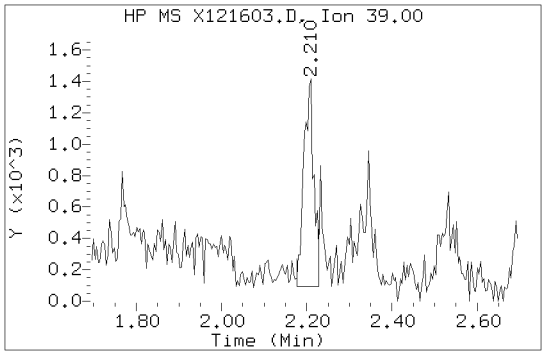
MASS
40
AREA
1296
HEIGHT
946
27-Dec-2022
16:03
linh
pham



Reason Code:

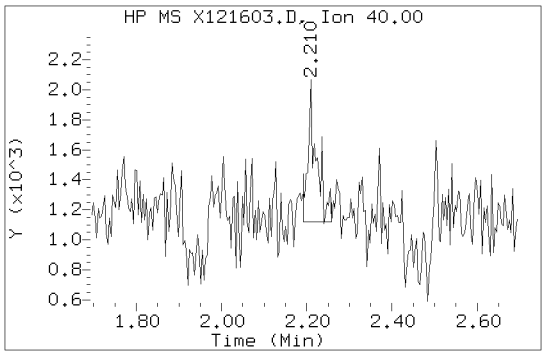
AFTER

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



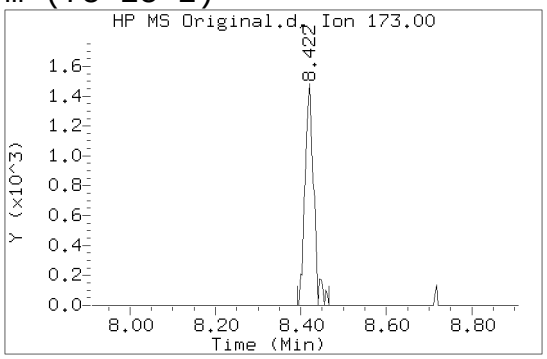
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromoform (75-25-2)

Reason Code:

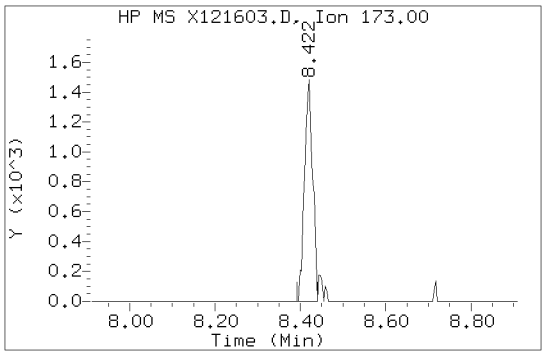
BEFORE

MASS
173
AREA
2158
HEIGHT
1483
27-Dec-2022
16:03
linh
pham



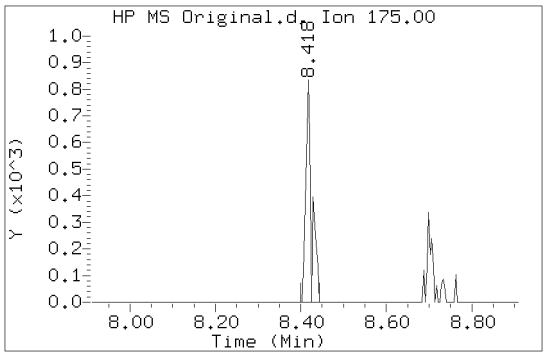
AFTER

MASS
173
AREA
2013
HEIGHT
1483
27-Dec-2022
16:07
linh
pham



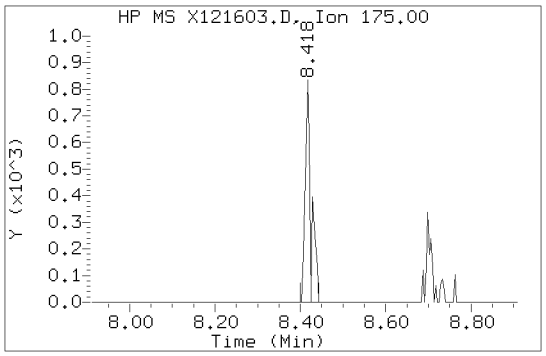
BEFORE

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:03
linh
pham



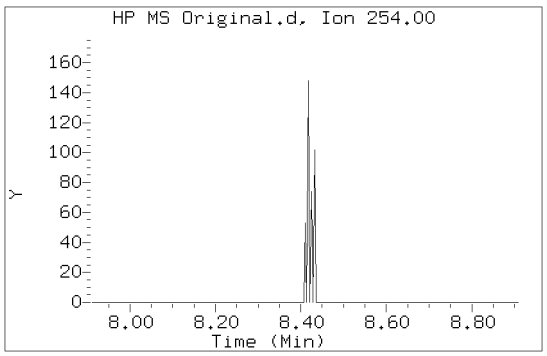
AFTER

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:07
linh
pham



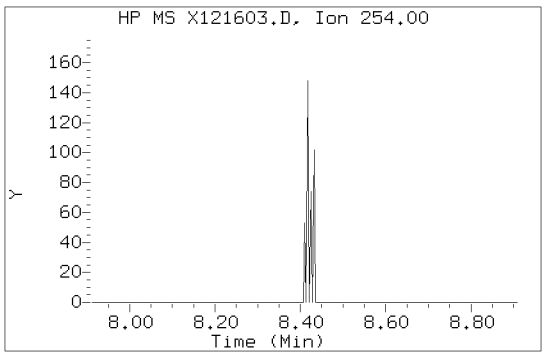
BEFORE

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

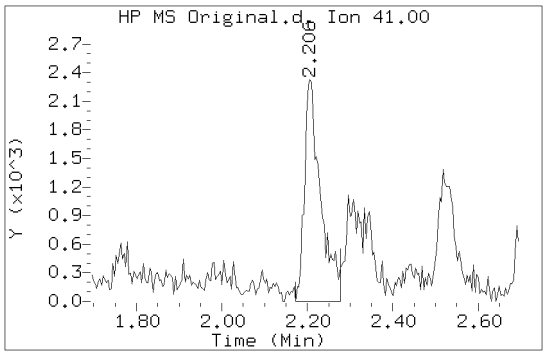


Allyl Chloride (107-05-1)

Reason Code:

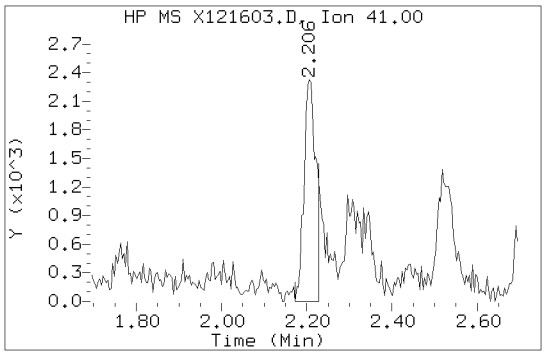
BEFORE

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



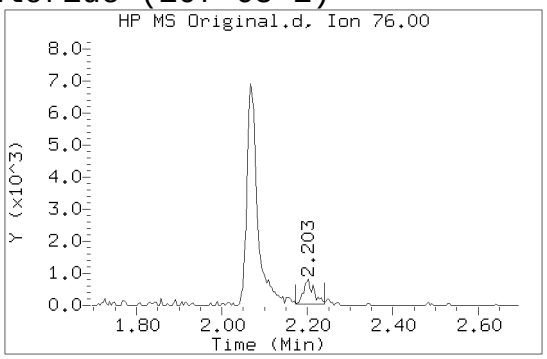
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Allyl Chloride (107-05-1)

Reason Code:

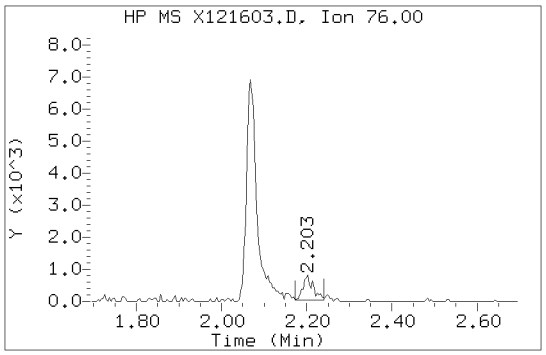
BEFORE

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

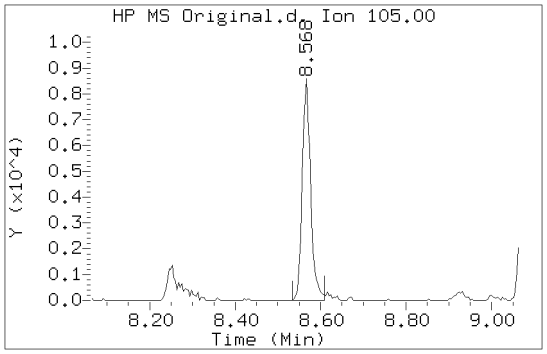


Isopropylbenzene (98-82-8)

Reason Code:

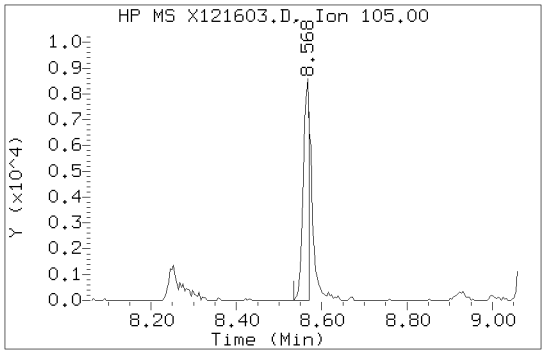
BEFORE

MASS
105
AREA
12091
HEIGHT
8588
27-Dec-2022
16:03
linh
pham



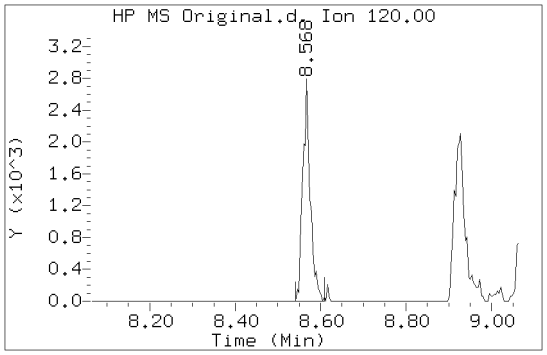
AFTER

MASS
105
AREA
8757
HEIGHT
8588
27-Dec-2022
16:07
linh
pham



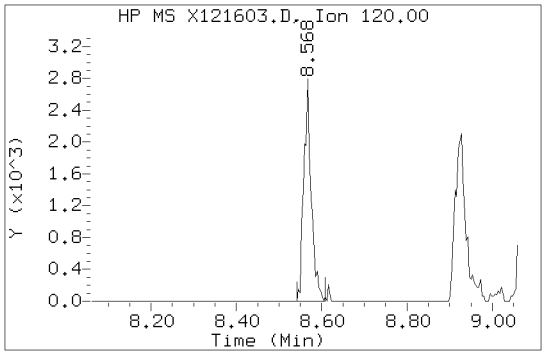
BEFORE

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

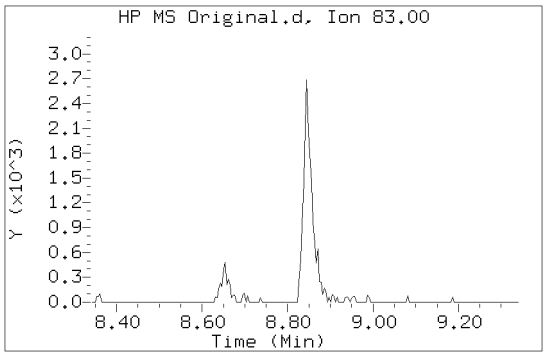


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

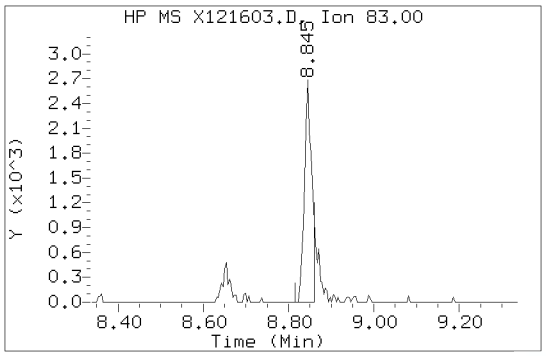
BEFORE

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



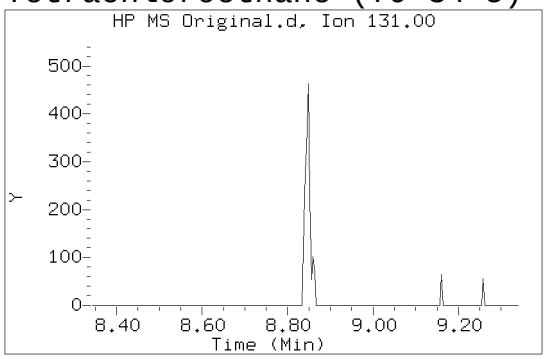
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

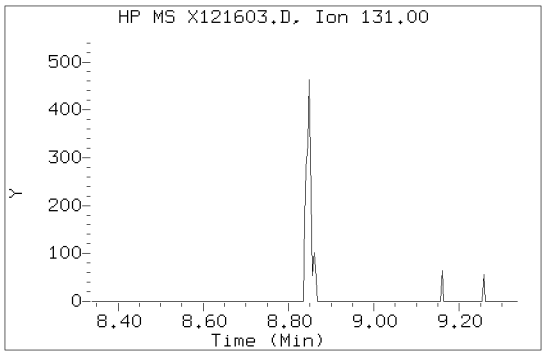
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



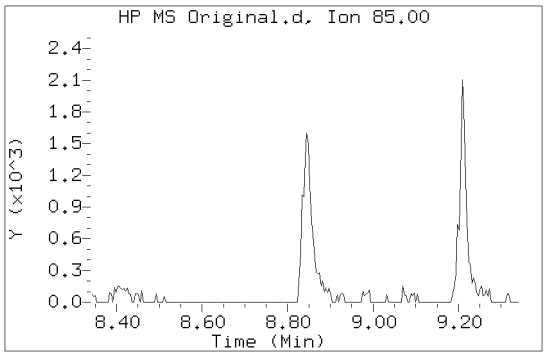
AFTER

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



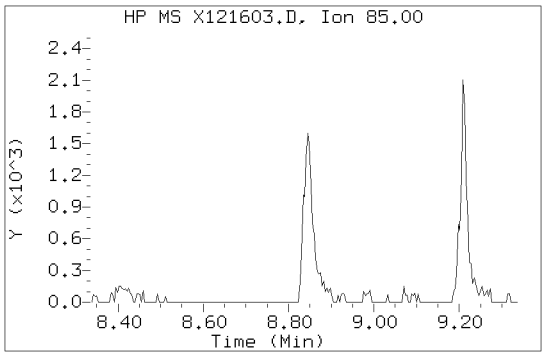
BEFORE

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

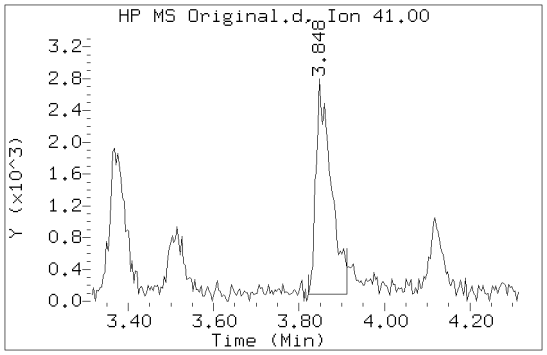


Methacrylonitrile (126-98-7)

Reason Code:

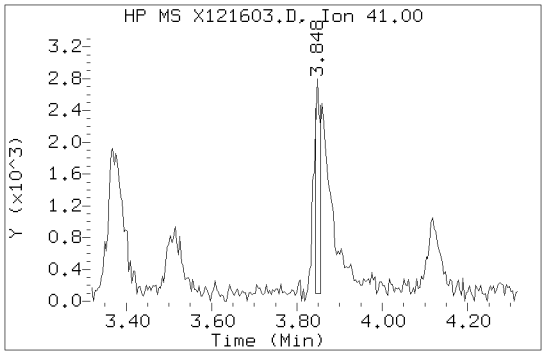
BEFORE

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
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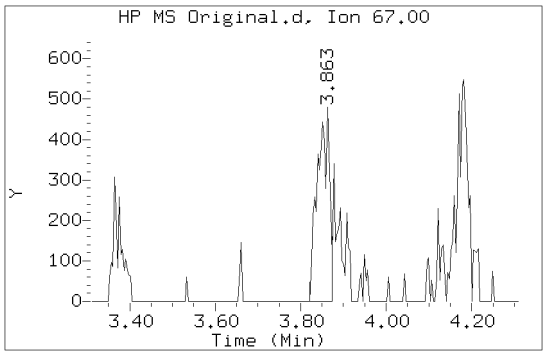
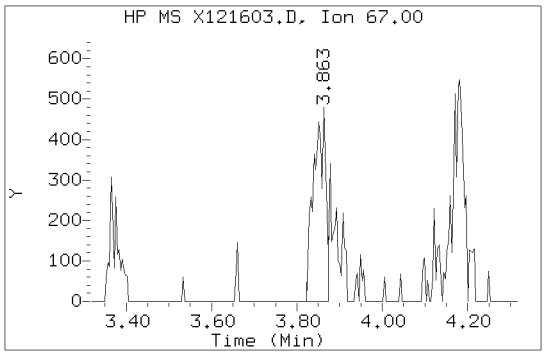


AFTER

MASS
67
AREA
937
HEIGHT
480
27-Dec-2022
16:07
linh
pham



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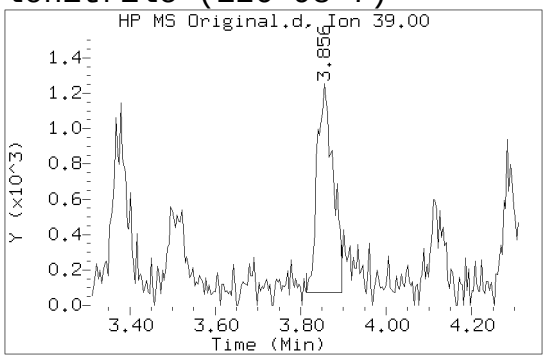
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methacrylonitrile (126-98-7)

Reason Code:

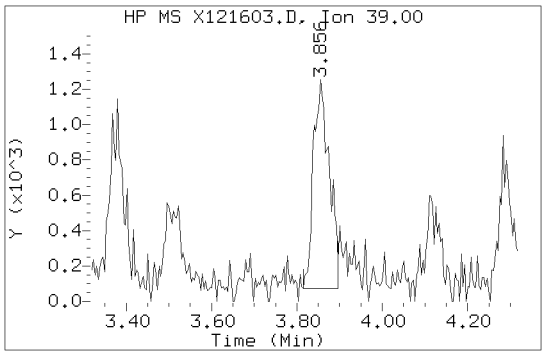
BEFORE

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

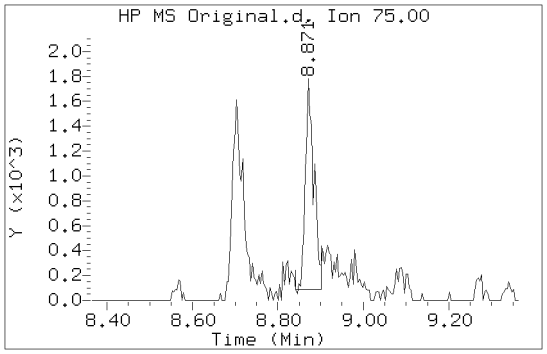


1,2,3-Trichloropropane (96-18-4)

Reason Code:

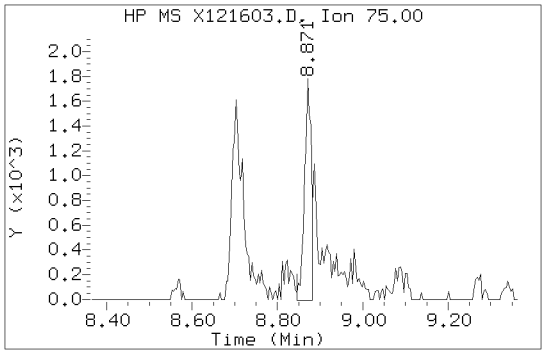
BEFORE

MASS
75
AREA
2351
HEIGHT
1693
27-Dec-2022
16:03
linh
pham



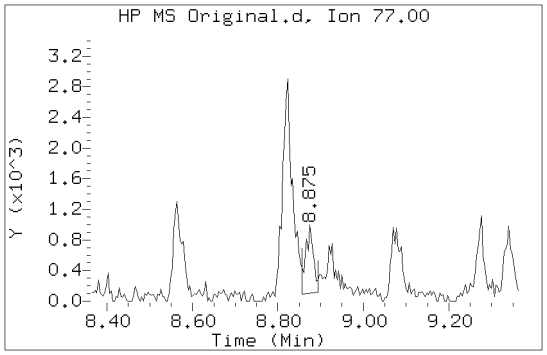
AFTER

MASS
75
AREA
2019
HEIGHT
1788
27-Dec-2022
16:07
linh
pham



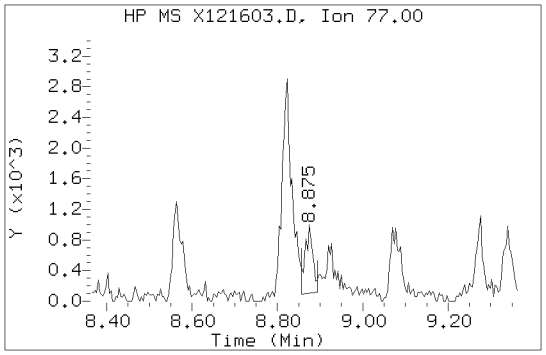
BEFORE

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

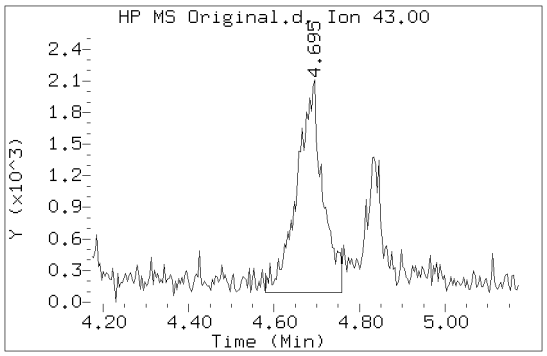


Isobutyl Alcohol (78-83-1)

Reason Code:

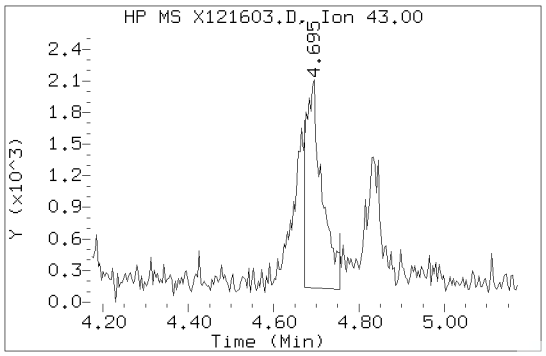
BEFORE

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



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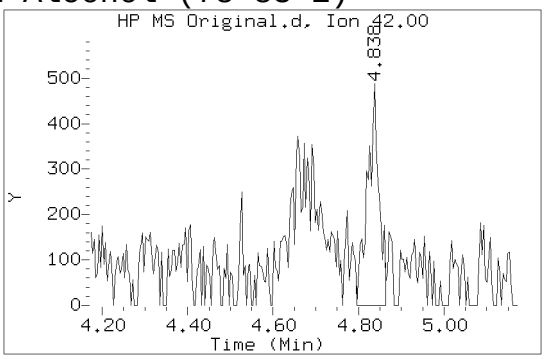
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutyl Alcohol (78-83-1)

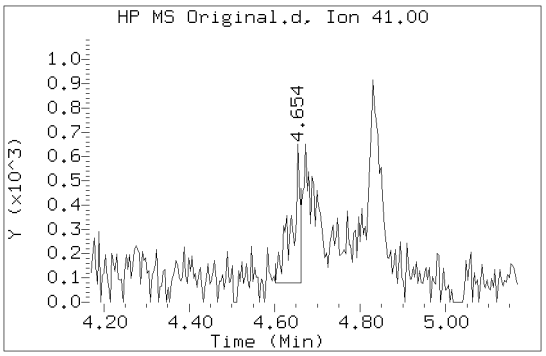
BEFORE

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:03
linh
pham



BEFORE

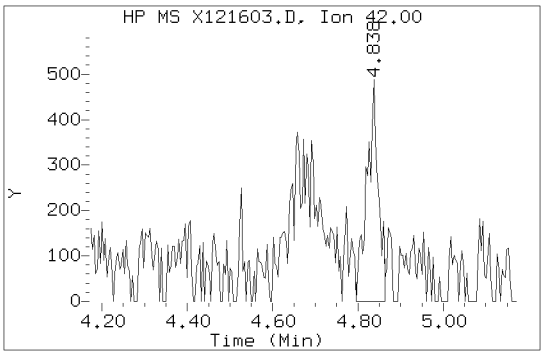
MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:03
linh
pham



Reason Code:

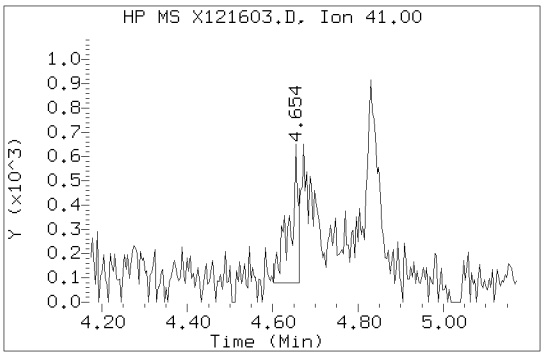
AFTER

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:07
linh
pham



AFTER

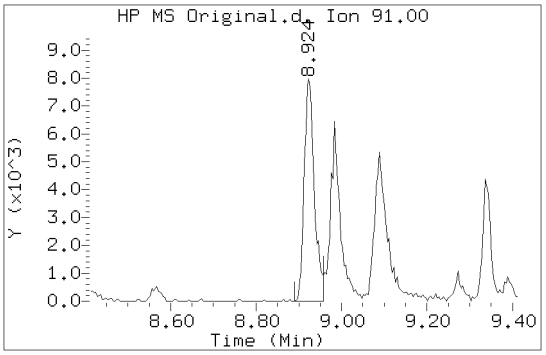
MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:07
linh
pham



n-Propylbenzene (106-65-1)

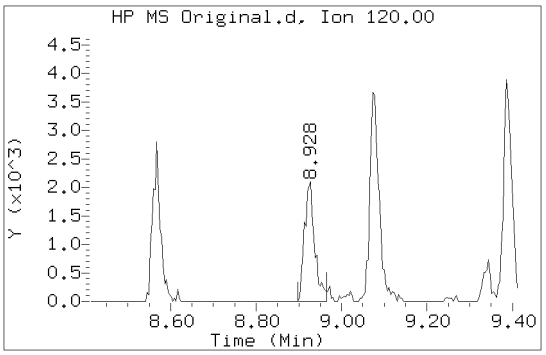
BEFORE

MASS
91
AREA
13496
HEIGHT
7972
27-Dec-2022
16:03
linh
pham



BEFORE

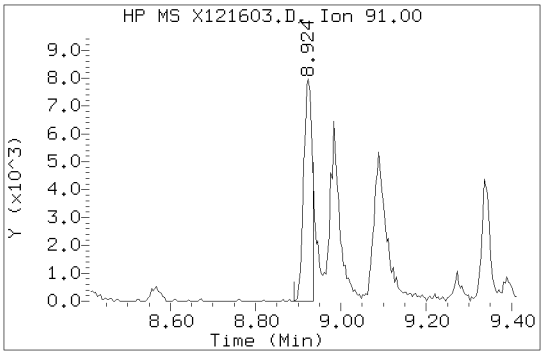
MASS
120
AREA
3559
HEIGHT
2104
27-Dec-2022
16:03
linh
pham



Reason Code:

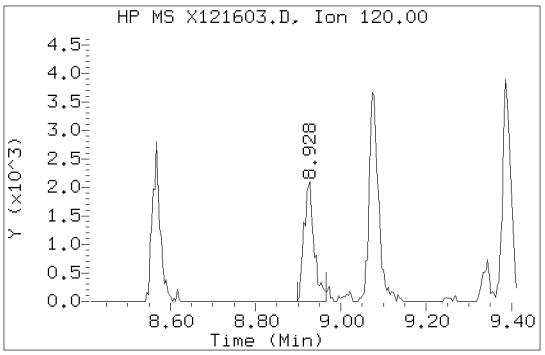
AFTER

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



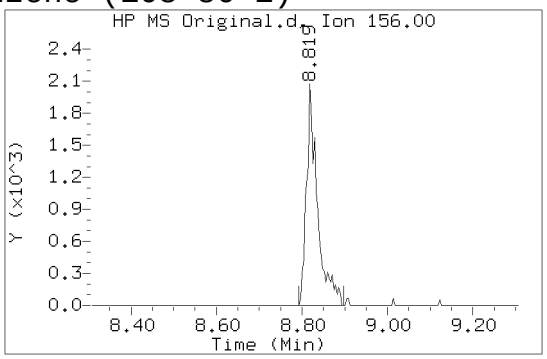
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromobenzene (108-86-1)

Reason Code:

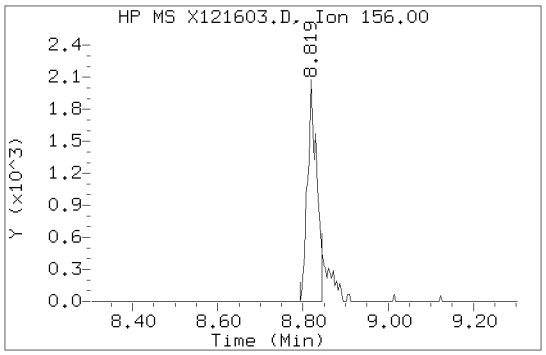
BEFORE

MASS
156
AREA
3747
HEIGHT
2077
27-Dec-2022
16:03
linh
pham



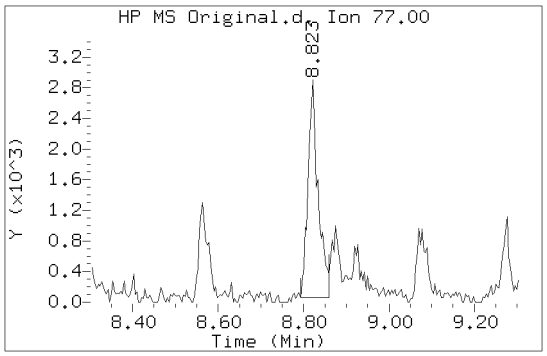
AFTER

MASS
156
AREA
3147
HEIGHT
2077
27-Dec-2022
16:07
linh
pham



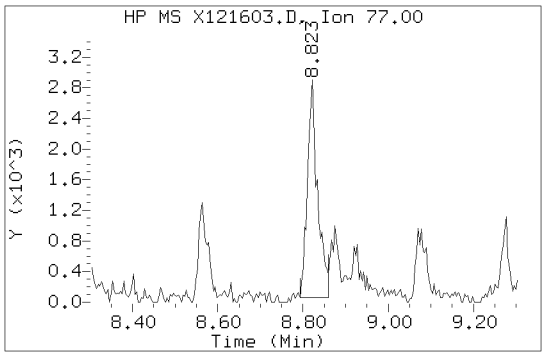
BEFORE

MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:03
linh
pham



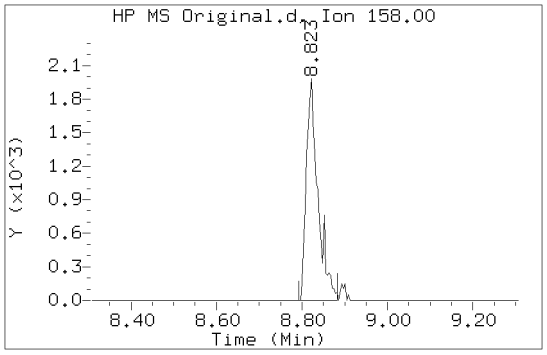
AFTER

MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:07
linh
pham



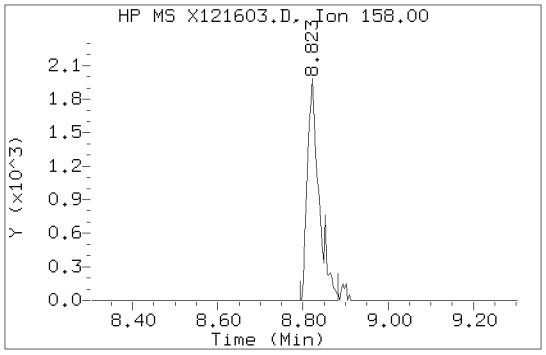
BEFORE

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

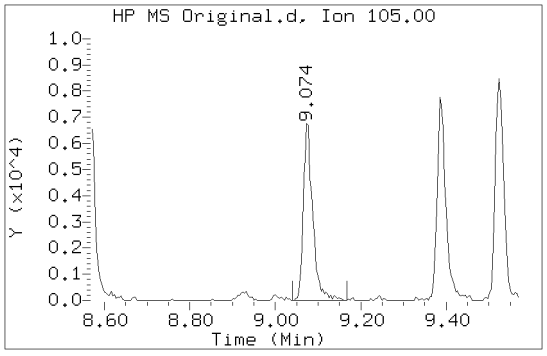


1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

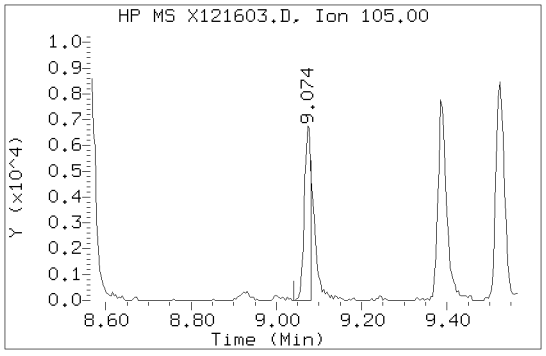
BEFORE

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



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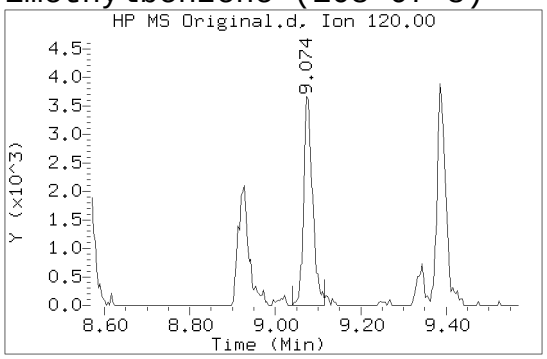
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

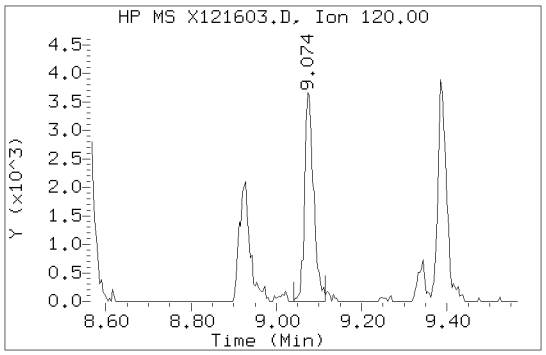
BEFORE

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

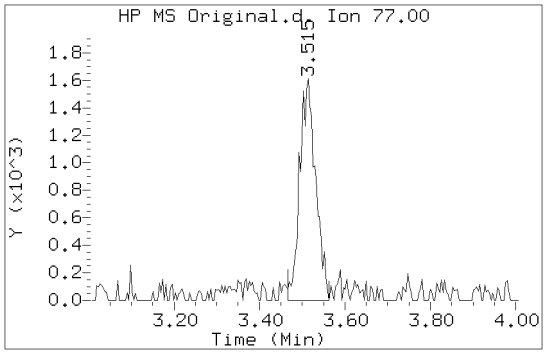


2,2-Dichloropropane (594-20-7)

Reason Code:

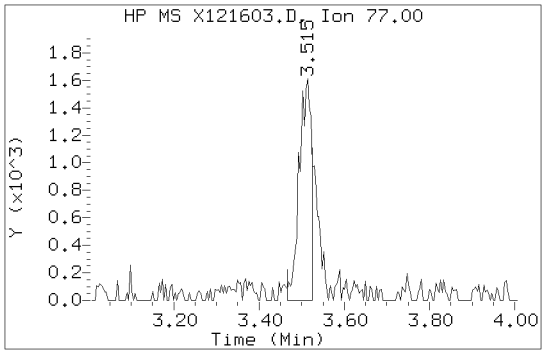
BEFORE

MASS
77
AREA
4217
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



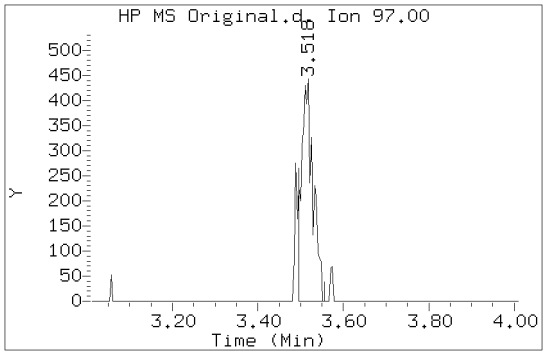
AFTER

MASS
77
AREA
3238
HEIGHT
1612
27-Dec-2022
16:07
linh
pham



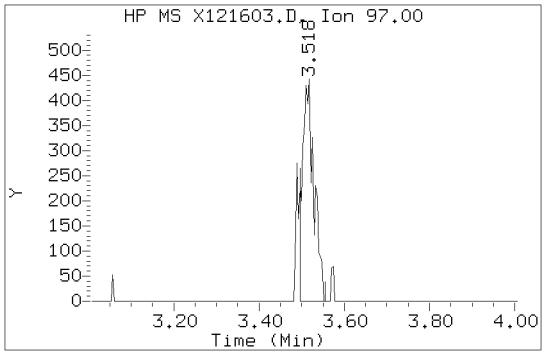
BEFORE

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

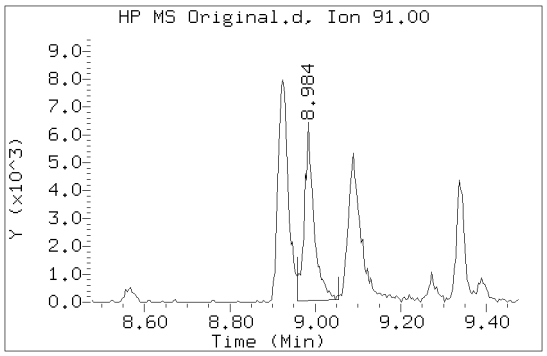


2-Chlorotoluene (95-49-8)

Reason Code:

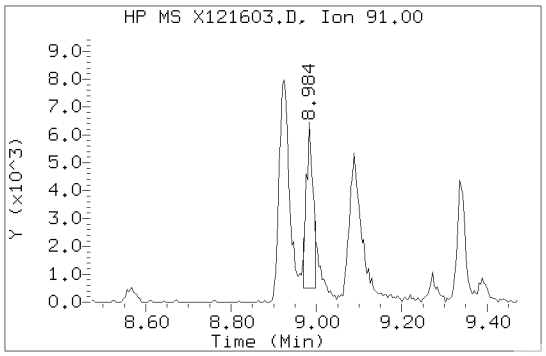
BEFORE

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



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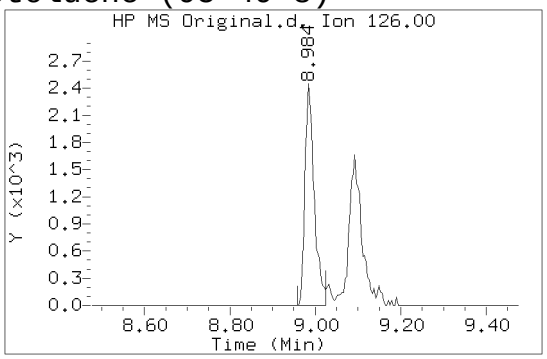
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

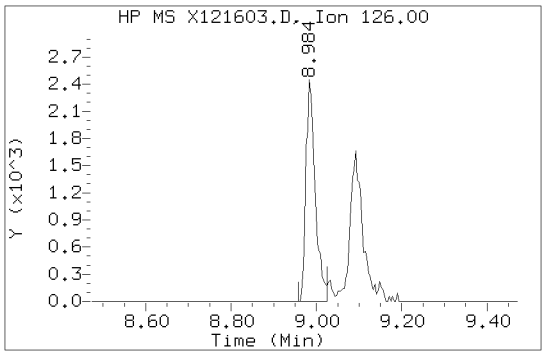
BEFORE

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

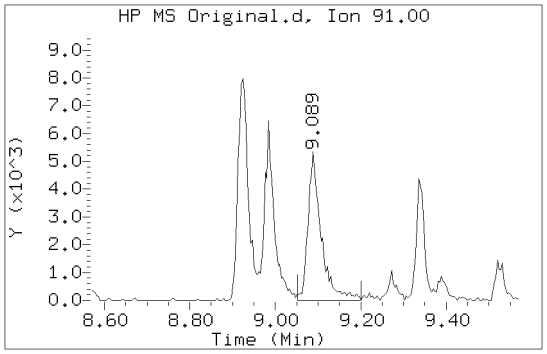


4-Chlorotoluene (106-43-4)

Reason Code:

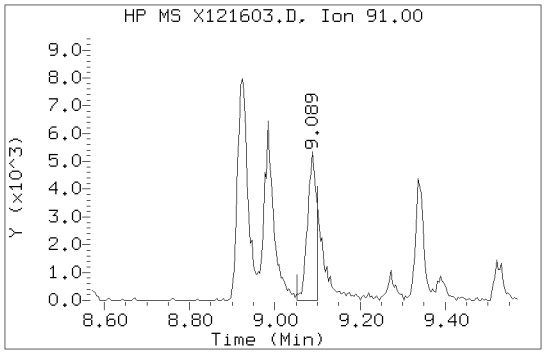
BEFORE

MASS
91
AREA
11481
HEIGHT
5337
27-Dec-2022
16:03
linh
pham



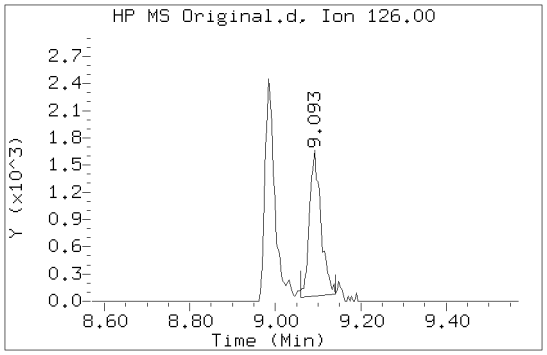
AFTER

MASS
91
AREA
7644
HEIGHT
5337
27-Dec-2022
16:07
linh
pham



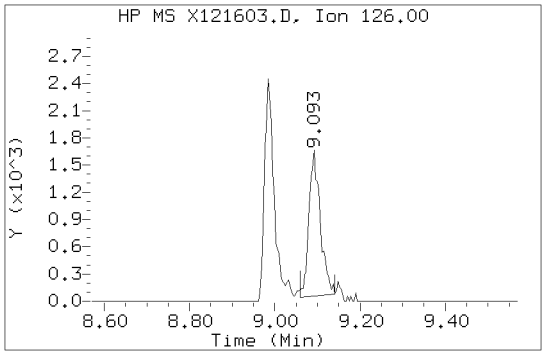
BEFORE

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

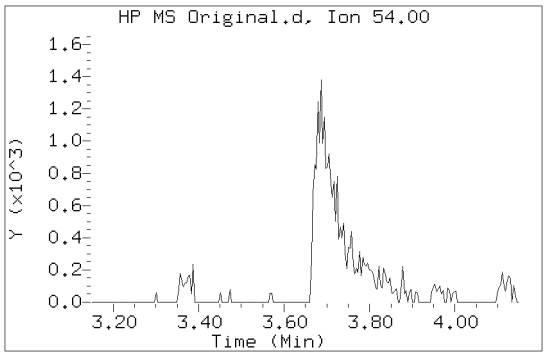


Propionitrile (107-12-0)

Reason Code:

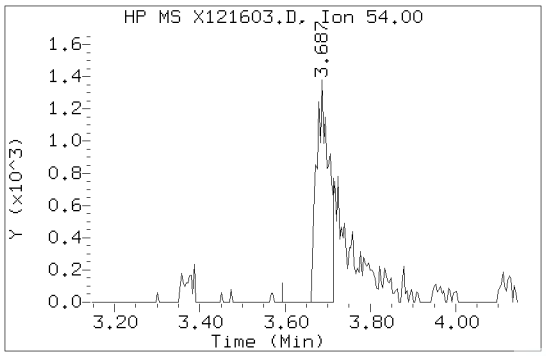
BEFORE

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



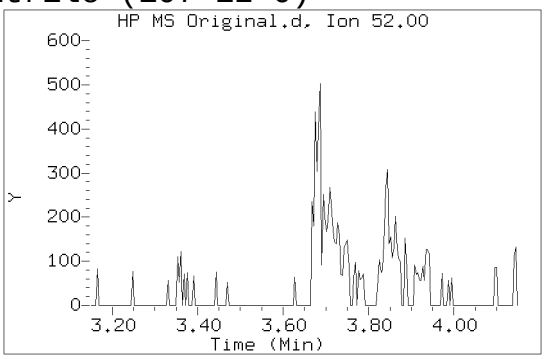
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Propionitrile (107-12-0)

Reason Code:

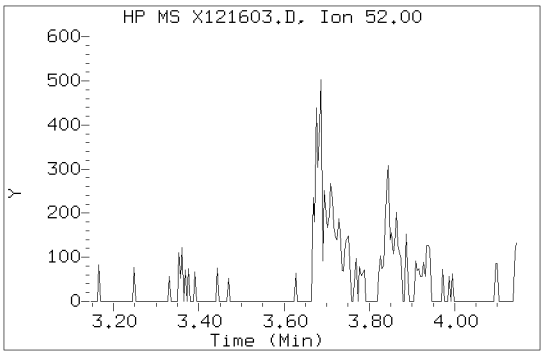
BEFORE

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



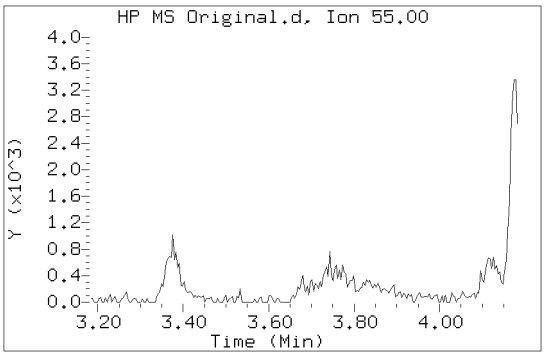
AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



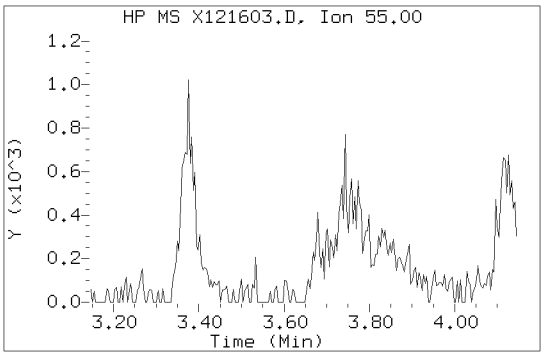
BEFORE

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

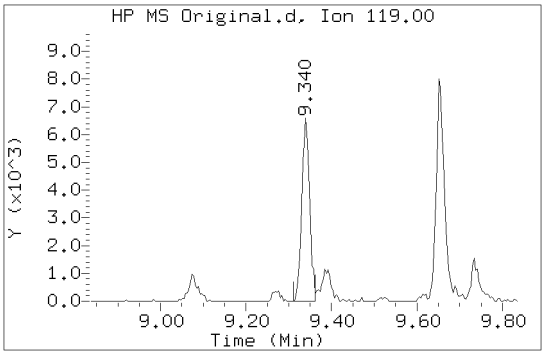


tert-Butylbenzene (98-06-6)

Reason Code:

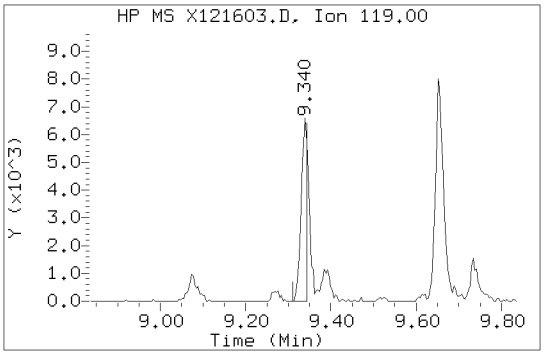
BEFORE

MASS
119
AREA
8660
HEIGHT
6598
27-Dec-2022
16:03
linh
pham



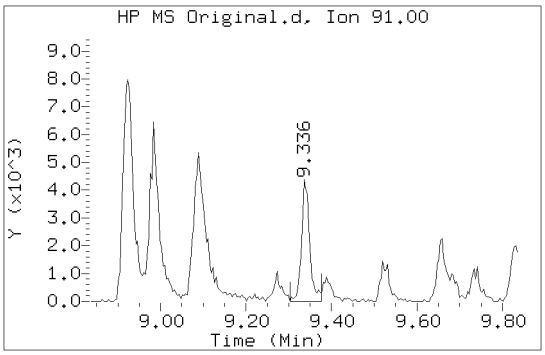
AFTER

MASS
119
AREA
6389
HEIGHT
6598
27-Dec-2022
16:07
linh
pham



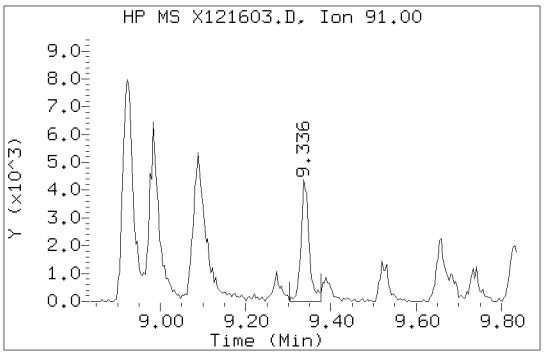
BEFORE

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



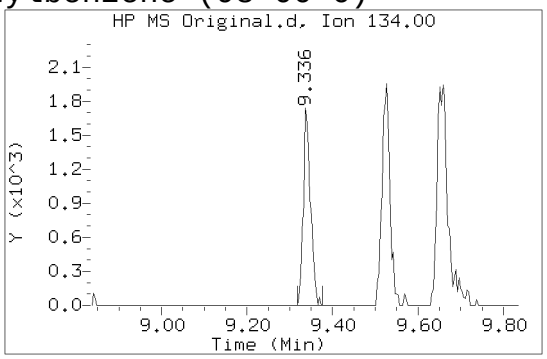
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butylbenzene (98-06-6)

Reason Code:

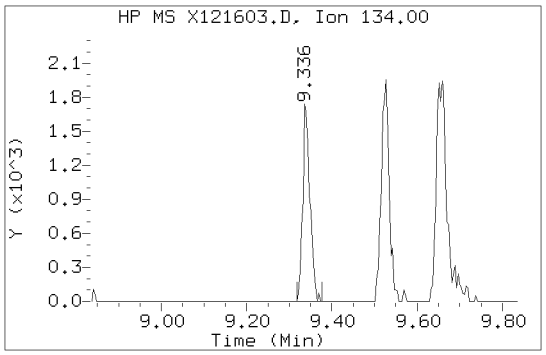
BEFORE

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

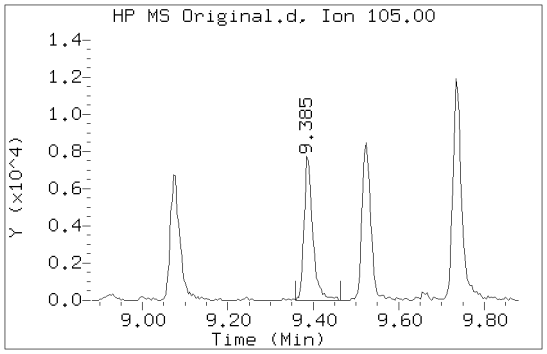


1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

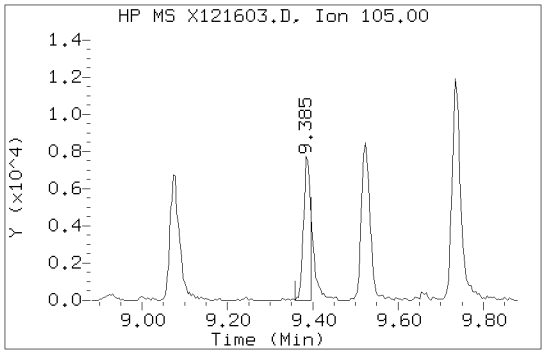
BEFORE

MASS
105
AREA
11065
HEIGHT
7775
27-Dec-2022
16:03
linh
pham



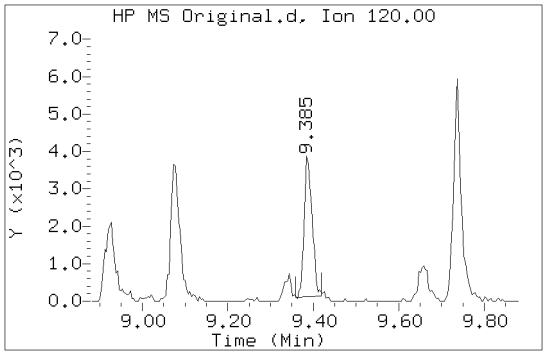
AFTER

MASS
105
AREA
8496
HEIGHT
7775
27-Dec-2022
16:07
linh
pham



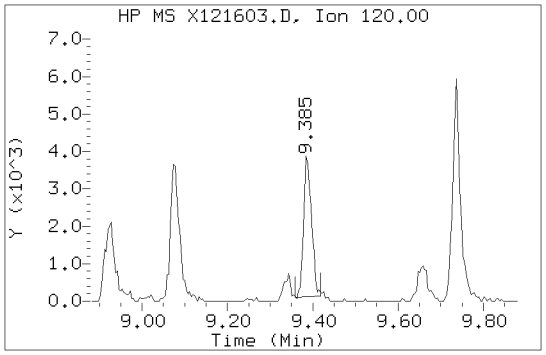
BEFORE

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

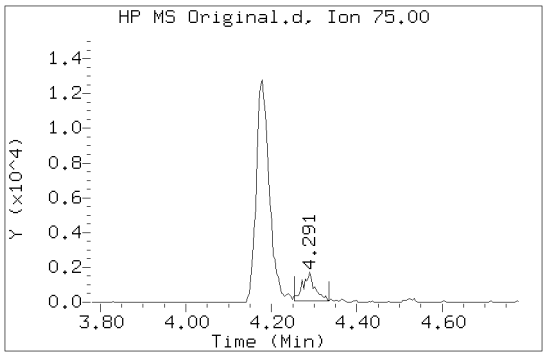


1,1-Dichloropropene (563-58-6)

Reason Code:

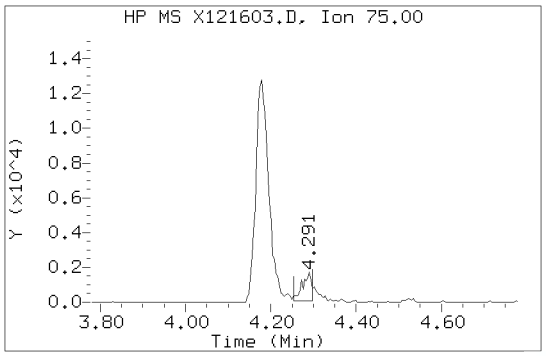
BEFORE

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



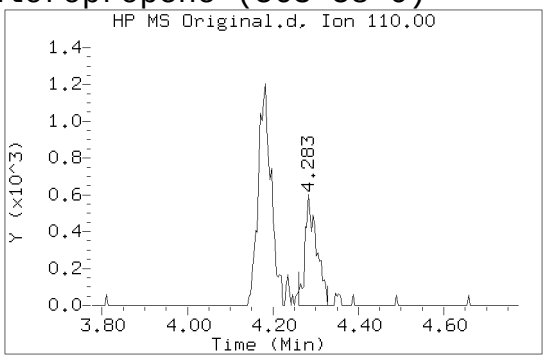
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

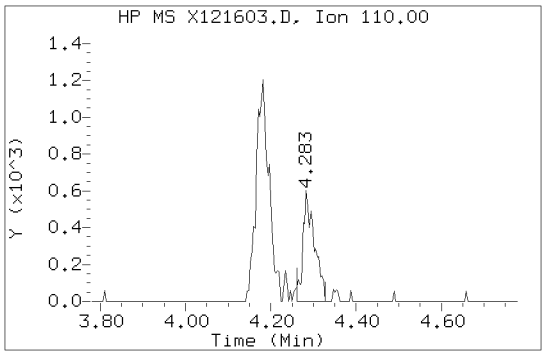
BEFORE

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:03
linh
pham



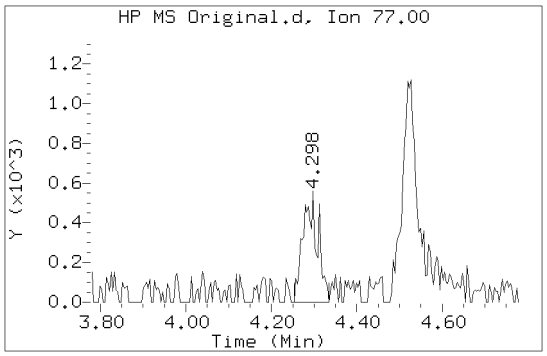
AFTER

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:07
linh
pham



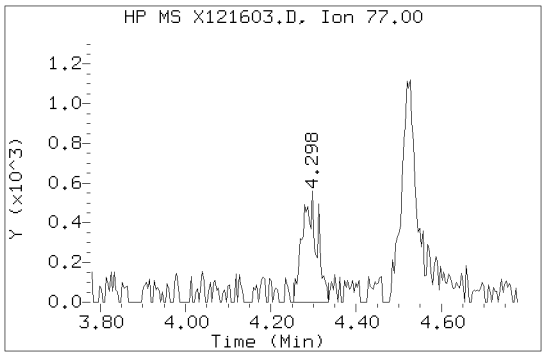
BEFORE

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

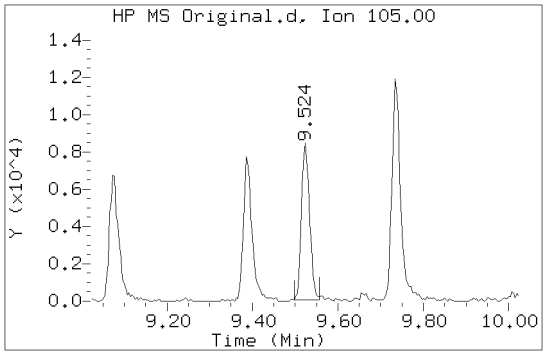


sec-Butylbenzene (135-98-8)

Reason Code:

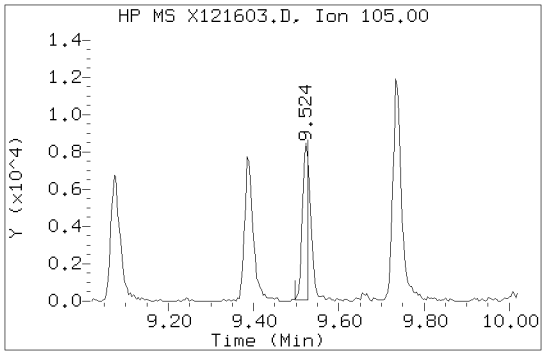
BEFORE

MASS
105
AREA
11512
HEIGHT
8394
27-Dec-2022
16:03
linh
pham



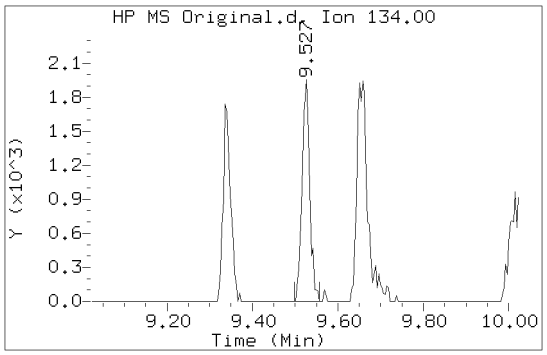
AFTER

MASS
105
AREA
7938
HEIGHT
8394
27-Dec-2022
16:07
linh
pham



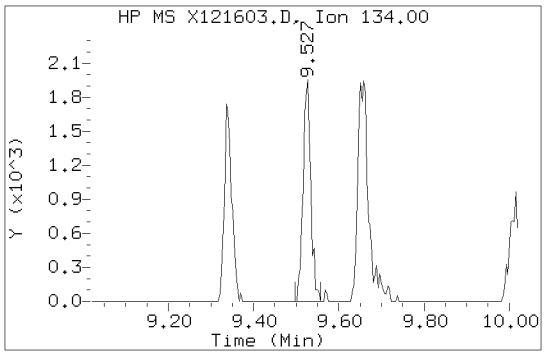
BEFORE

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



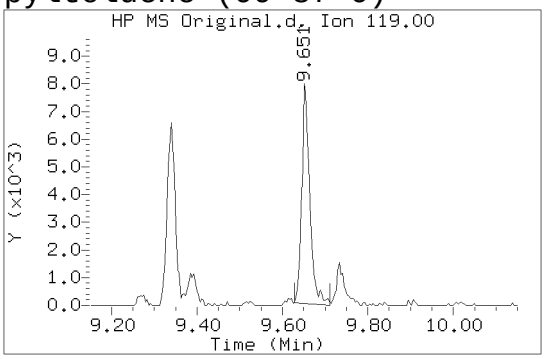
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

Reason Code:

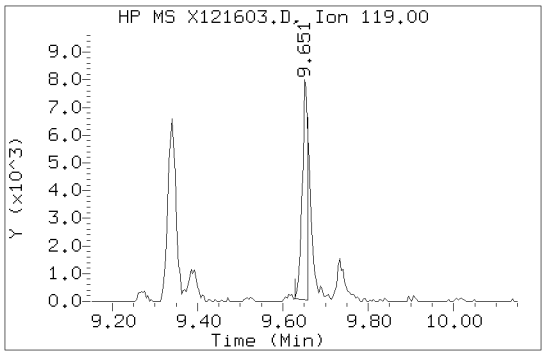
BEFORE

MASS
119
AREA
10660
HEIGHT
7944
27-Dec-2022
16:03
linh
pham



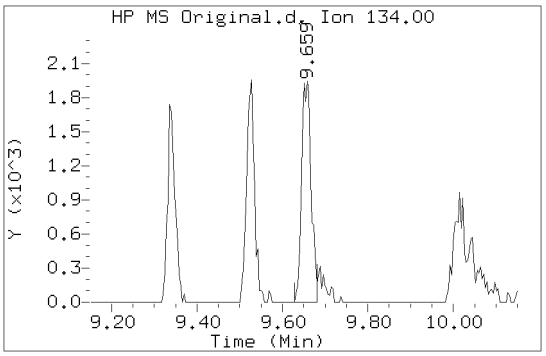
AFTER

MASS
119
AREA
7343
HEIGHT
7944
27-Dec-2022
16:07
linh
pham



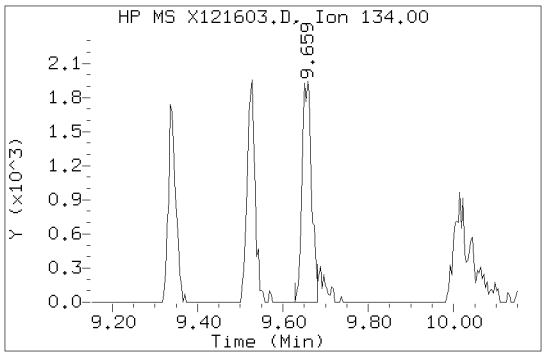
BEFORE

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:03
linh
pham



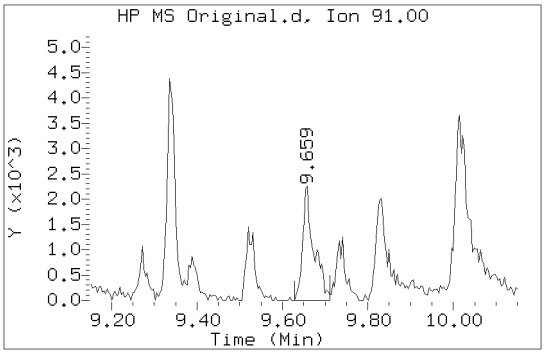
AFTER

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:07
linh
pham



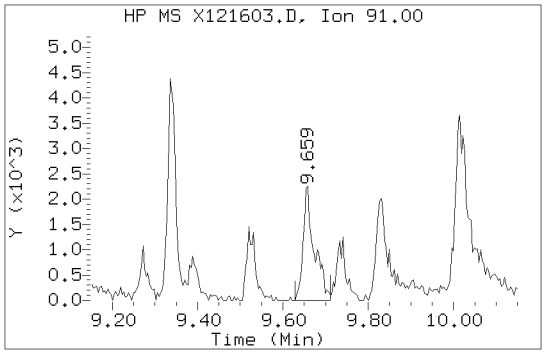
BEFORE

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

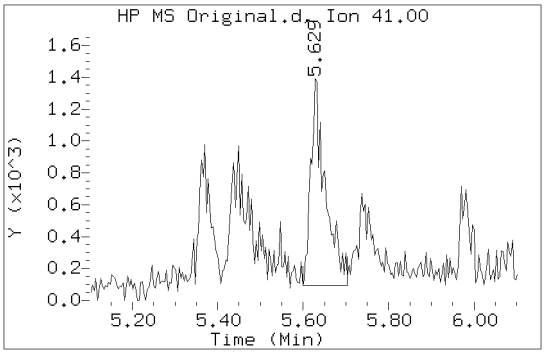


Methyl Methacrylate (80-62-6)

Reason Code:

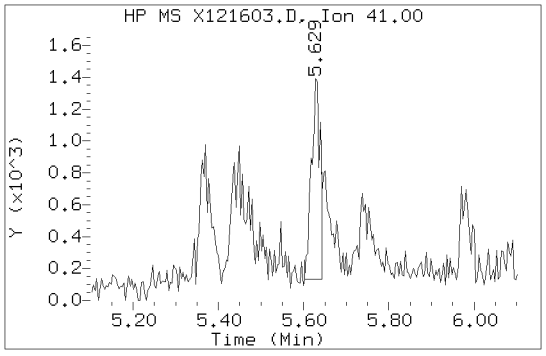
BEFORE

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



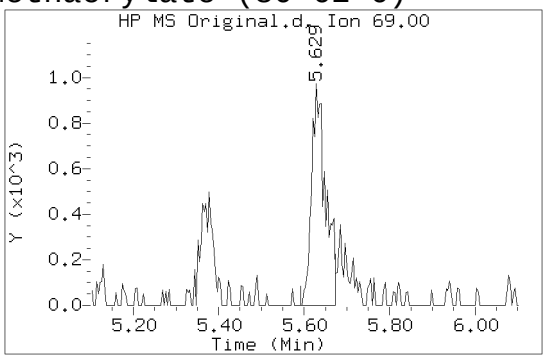
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Methacrylate (80-62-6)

Reason Code:

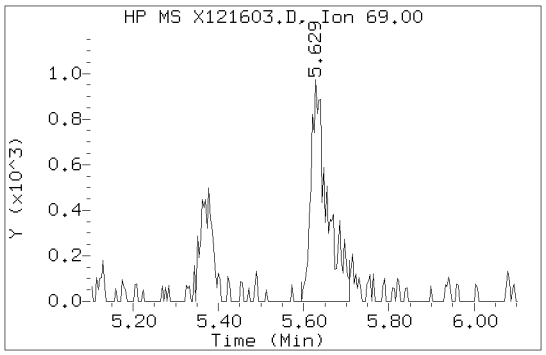
BEFORE

MASS
69
AREA
2216
HEIGHT
973
27-Dec-2022
16:03
linh
pham



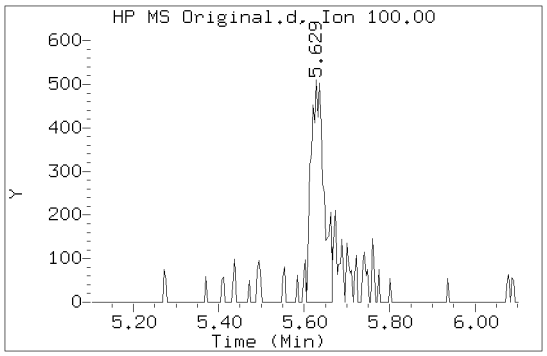
AFTER

MASS
69
AREA
2595
HEIGHT
973
27-Dec-2022
16:07
linh
pham



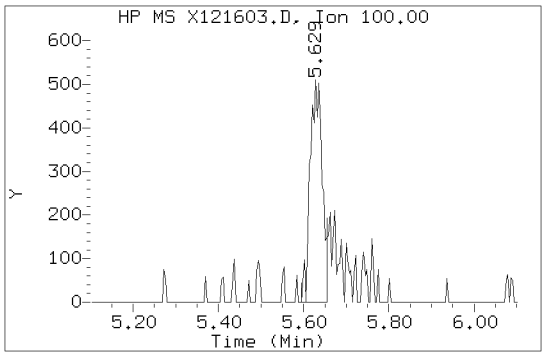
BEFORE

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

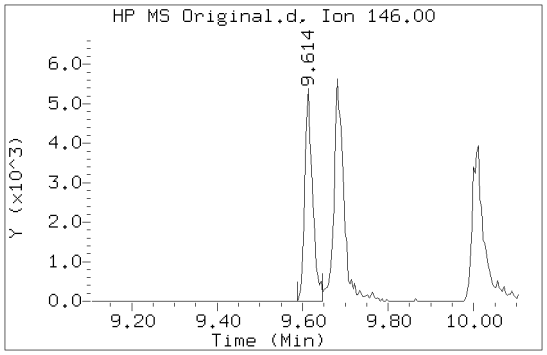


1,3-Dichlorobenzene (541-73-1)

Reason Code:

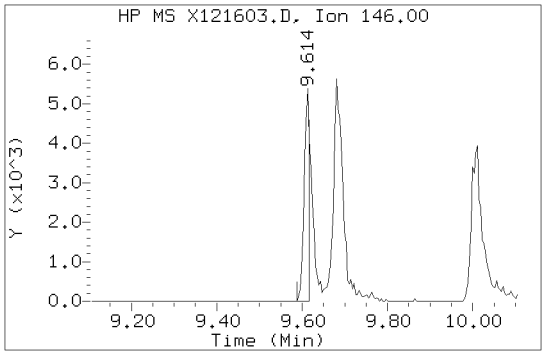
BEFORE

MASS
146
AREA
6964
HEIGHT
5387
27-Dec-2022
16:03
linh
pham



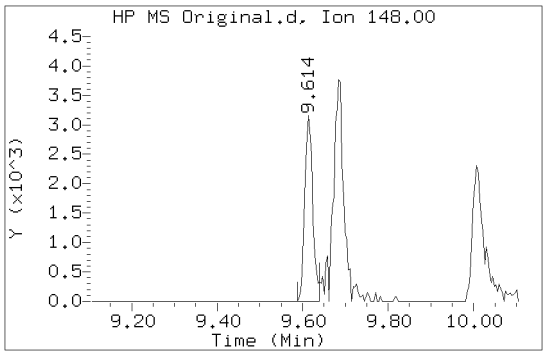
AFTER

MASS
146
AREA
4677
HEIGHT
5387
27-Dec-2022
16:07
linh
pham



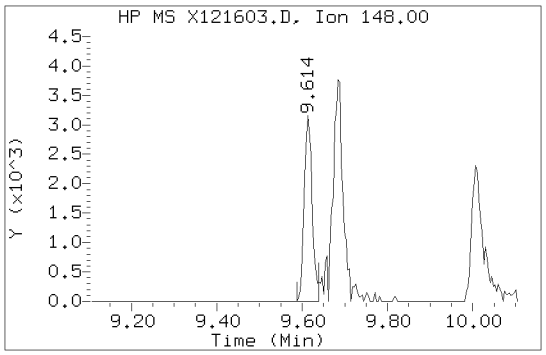
BEFORE

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



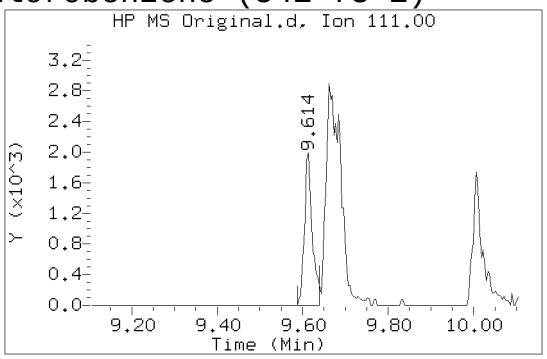
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,3-Dichlorobenzene (541-73-1)

Reason Code:

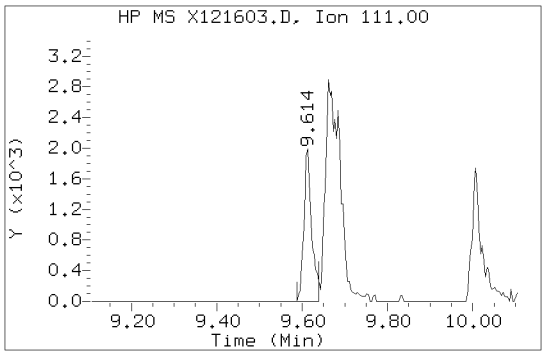
BEFORE

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

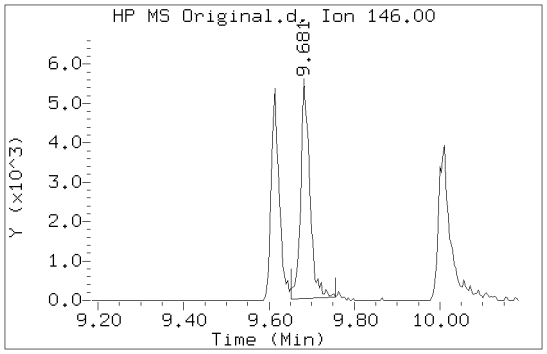


1,4-Dichlorobenzene (106-46-7)

Reason Code:

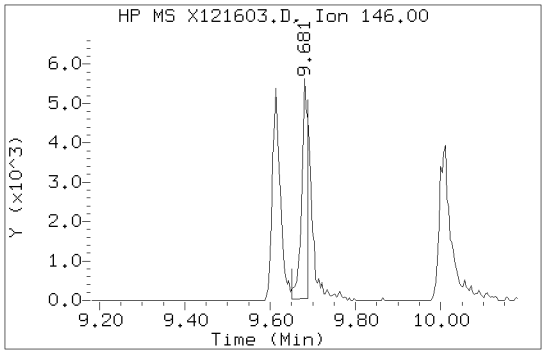
BEFORE

MASS
146
AREA
8510
HEIGHT
5586
27-Dec-2022
16:03
linh
pham



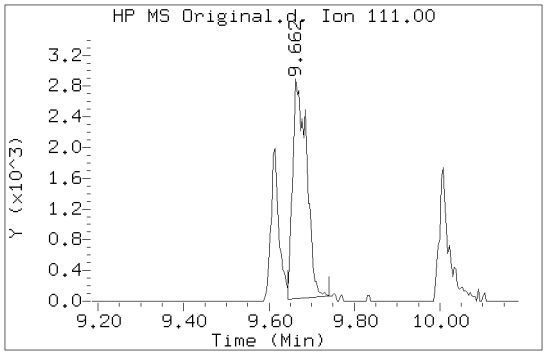
AFTER

MASS
146
AREA
5674
HEIGHT
5587
27-Dec-2022
16:07
linh
pham



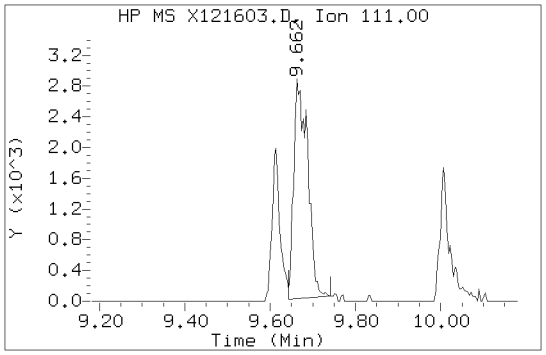
BEFORE

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:03
linh
pham



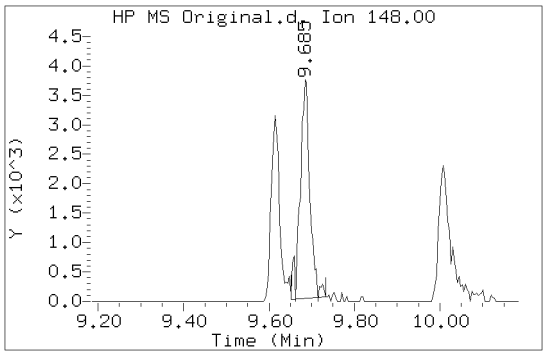
AFTER

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:07
linh
pham



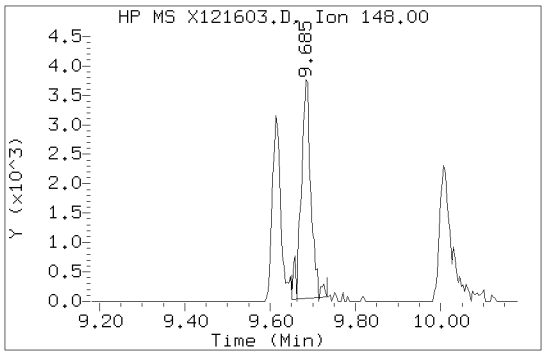
BEFORE

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



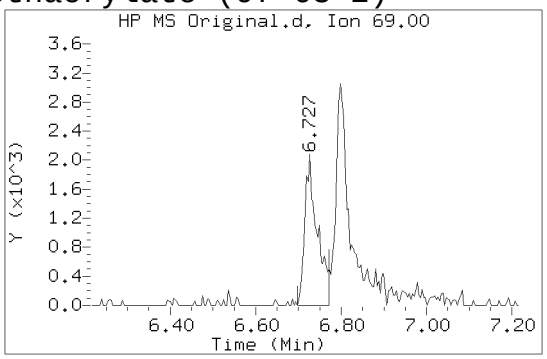
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

Reason Code:

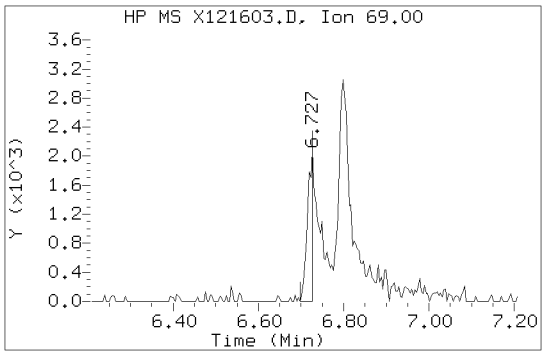
BEFORE

MASS
69
AREA
4283
HEIGHT
2083
27-Dec-2022
16:03
linh
pham



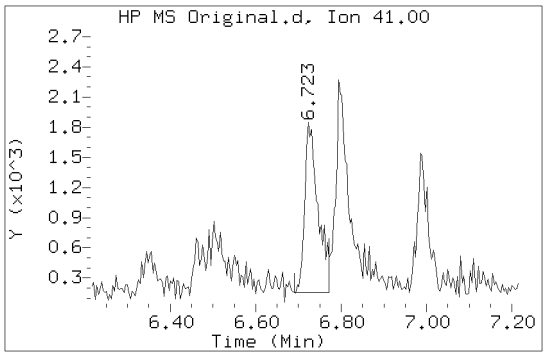
AFTER

MASS
69
AREA
1935
HEIGHT
2083
27-Dec-2022
16:07
linh
pham



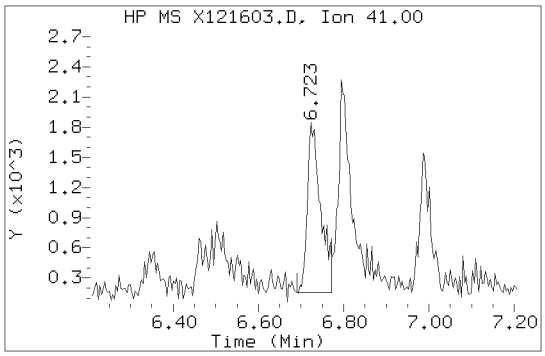
BEFORE

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

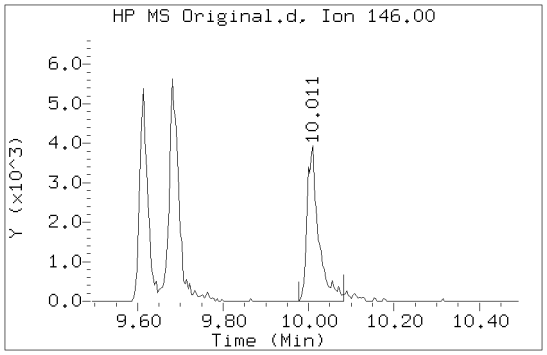


1,2-Dichlorobenzene (95-50-1)

Reason Code:

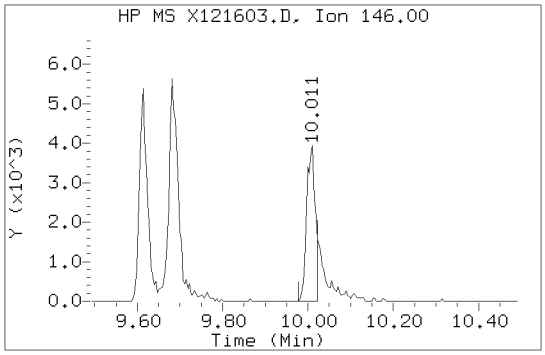
BEFORE

MASS
146
AREA
7400
HEIGHT
3934
27-Dec-2022
16:03
linh
pham



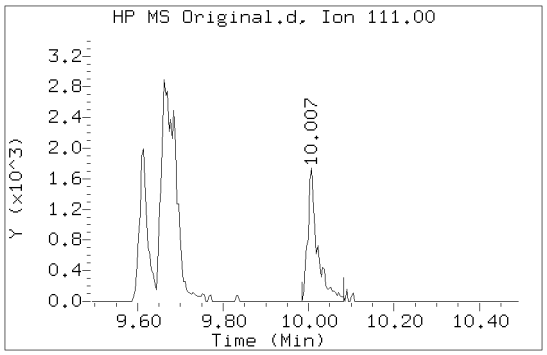
AFTER

MASS
146
AREA
5504
HEIGHT
3934
27-Dec-2022
16:07
linh
pham



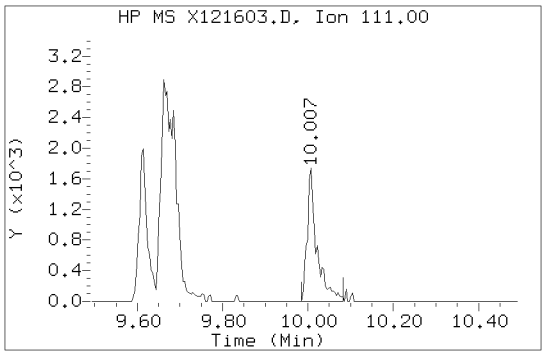
BEFORE

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



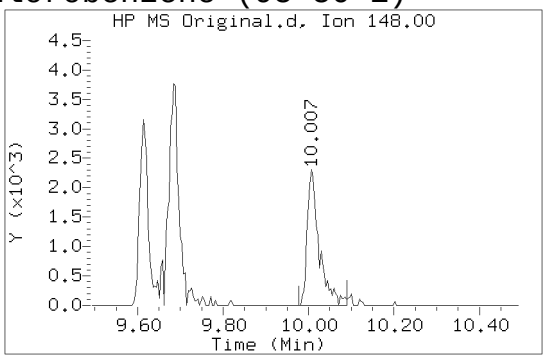
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

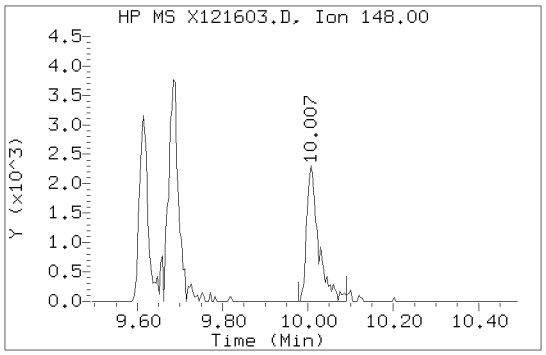
BEFORE

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

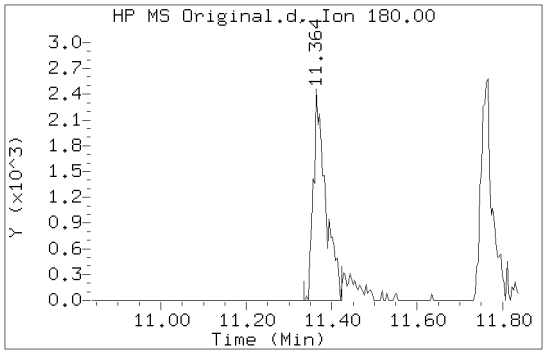


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

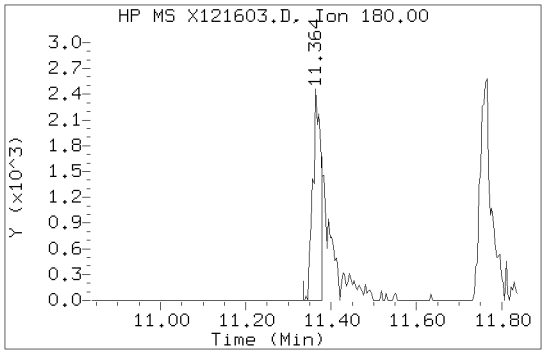
BEFORE

MASS
180
AREA
4912
HEIGHT
2459
27-Dec-2022
16:03
linh
pham



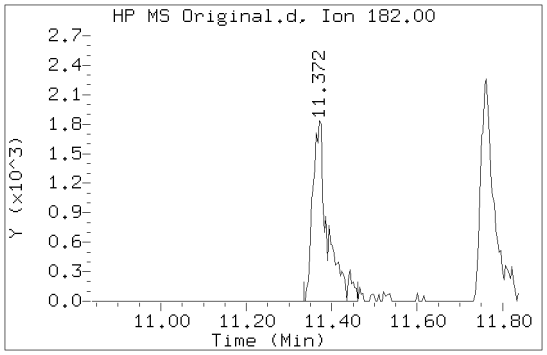
AFTER

MASS
180
AREA
3187
HEIGHT
2459
27-Dec-2022
16:07
linh
pham



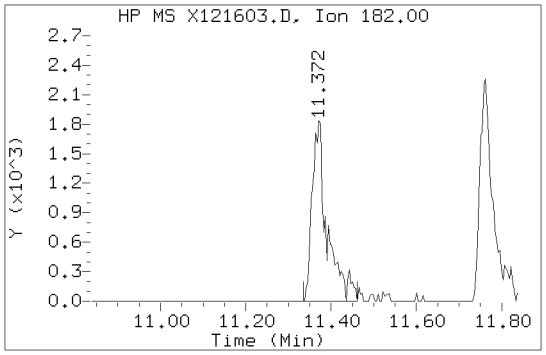
BEFORE

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:03
linh
pham



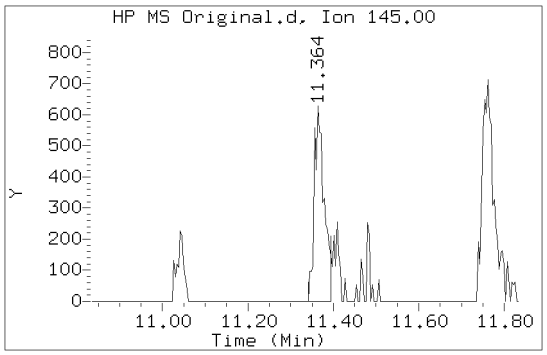
AFTER

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:07
linh
pham



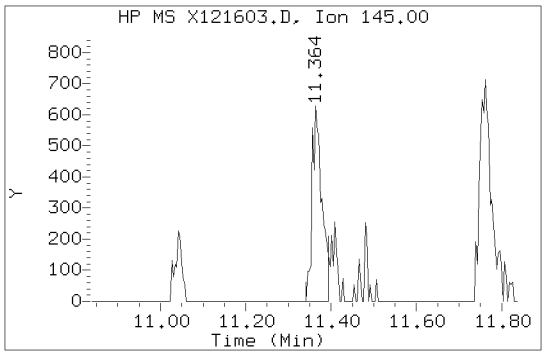
BEFORE

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

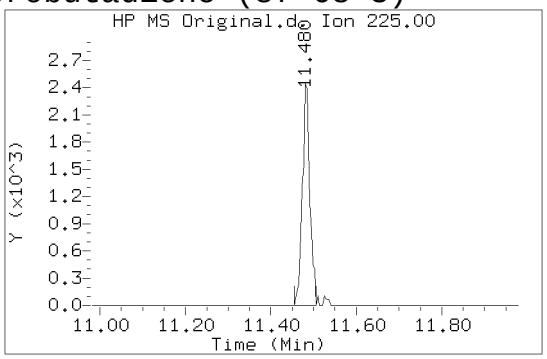


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

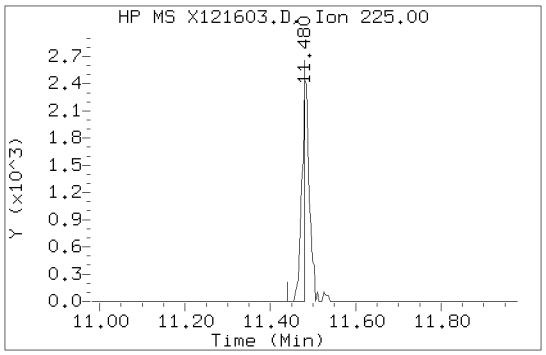
Hexachlorobutadiene (87-68-3)

Reason Code:

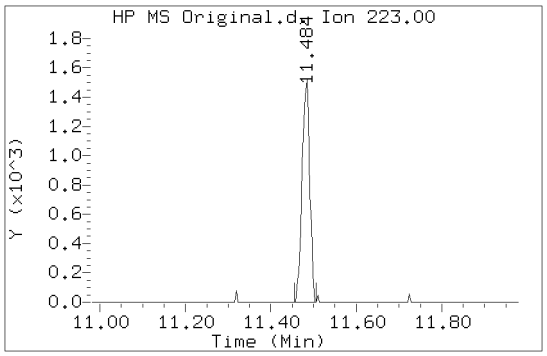
BEFORE
MASS
225
AREA
3038
HEIGHT
2444
27-Dec-2022
16:03
linh
pham



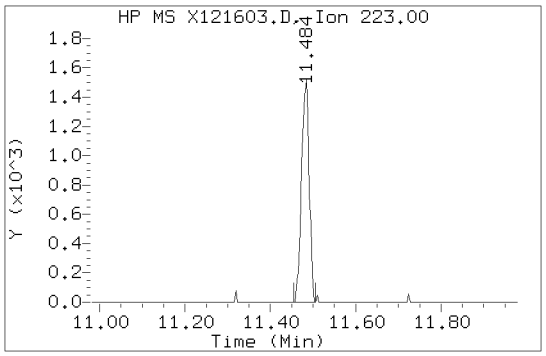
AFTER
MASS
225
AREA
1477
HEIGHT
2444
27-Dec-2022
16:07
linh
pham



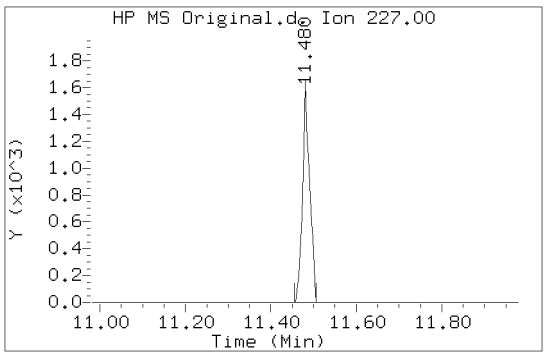
BEFORE
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:03
linh
pham



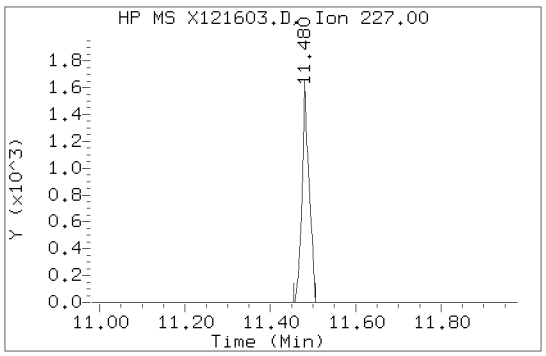
AFTER
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:03
linh
pham



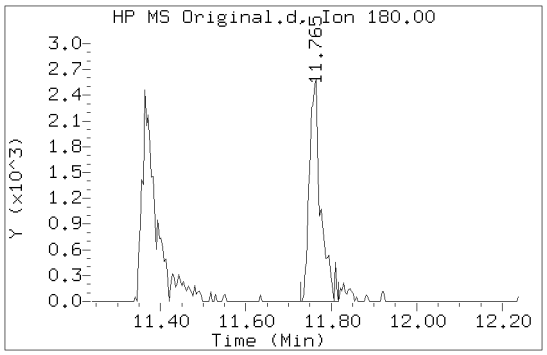
AFTER
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:07
linh
pham



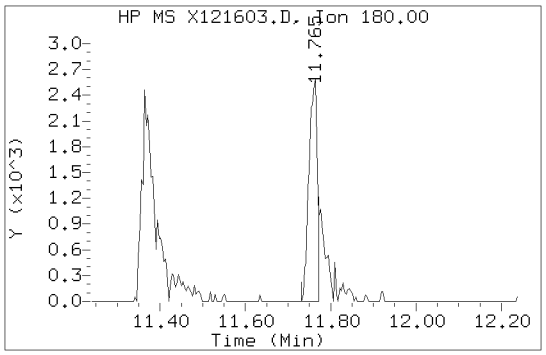
1,2,3-Trichlorobenzene (87-61-6)

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

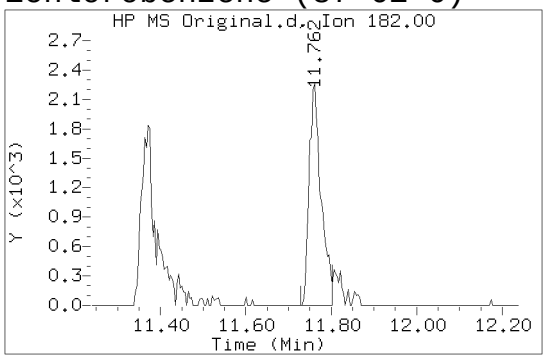


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

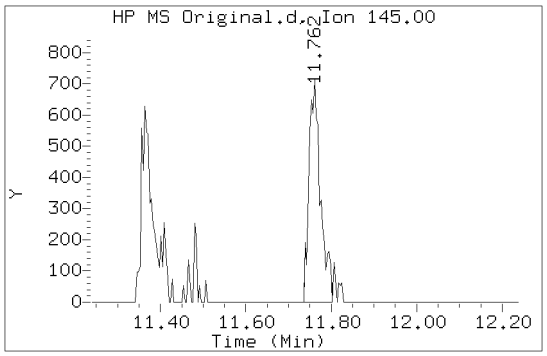
BEFORE

MASS
182
AREA
4404
HEIGHT
2261
27-Dec-2022
16:03
linh
pham



BEFORE

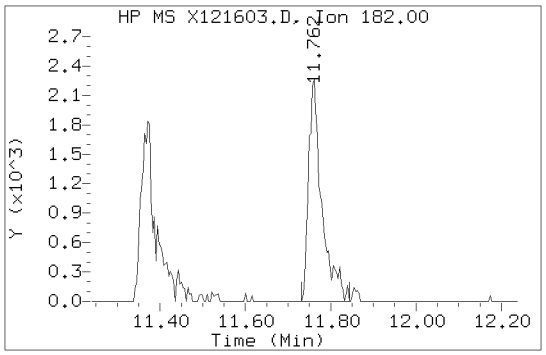
MASS
145
AREA
1338
HEIGHT
713
27-Dec-2022
16:03
linh
pham



Reason Code:

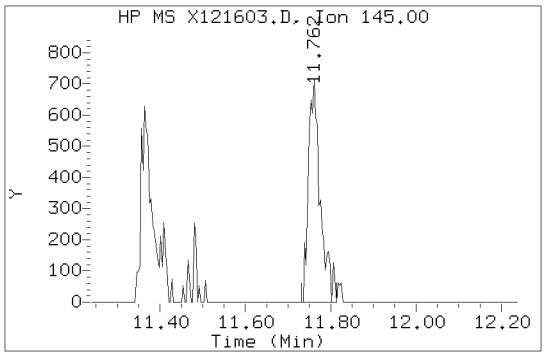
AFTER

MASS
182
AREA
4881
HEIGHT
2261
27-Dec-2022
16:07
linh
pham



AFTER

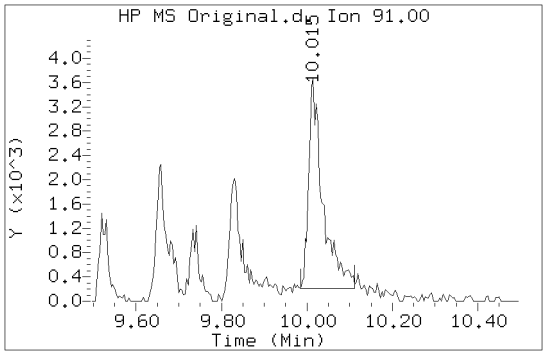
MASS
145
AREA
1384
HEIGHT
713
27-Dec-2022
16:07
linh
pham



n-Butylbenzene (104-51-8)

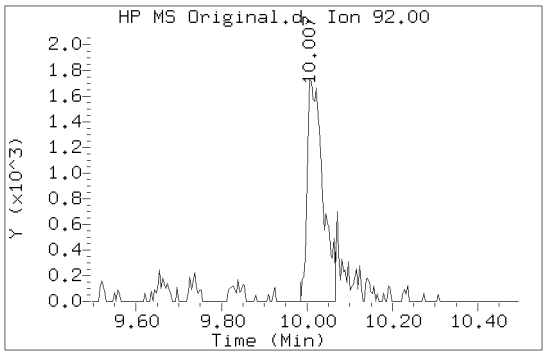
BEFORE

MASS
91
AREA
8005
HEIGHT
3451
27-Dec-2022
16:03
linh
pham



BEFORE

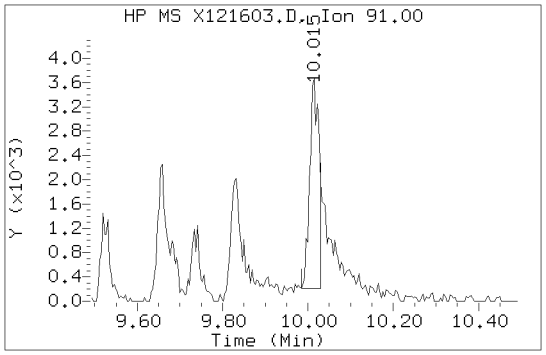
MASS
92
AREA
4404
HEIGHT
1727
27-Dec-2022
16:03
linh
pham



Reason Code:

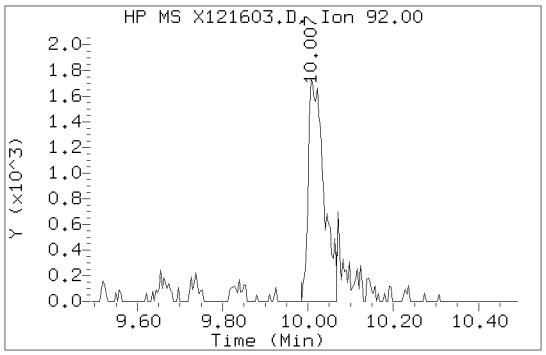
AFTER

MASS
91
AREA
5149
HEIGHT
3451
27-Dec-2022
16:07
linh
pham



AFTER

MASS
92
AREA
4404
HEIGHT
1727
27-Dec-2022
16:07
linh
pham



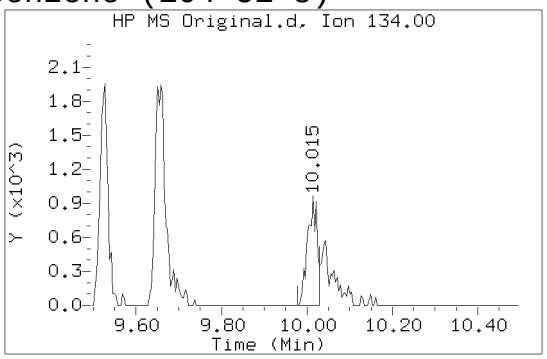
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

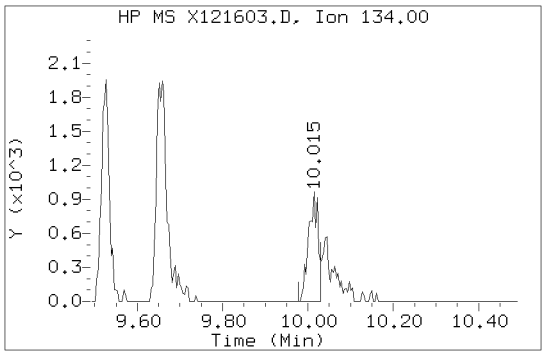
BEFORE

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

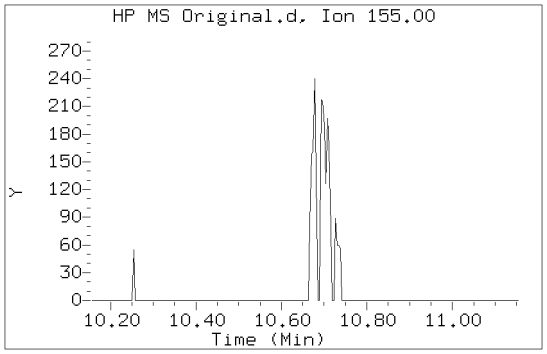


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

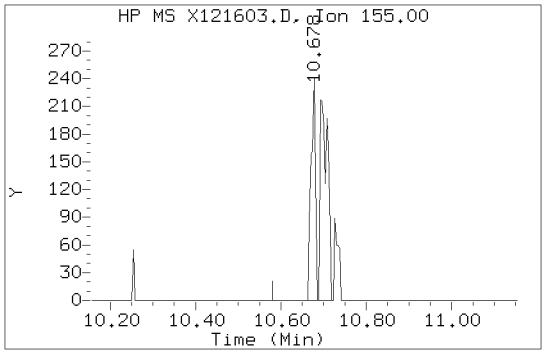
BEFORE

MASS
155
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



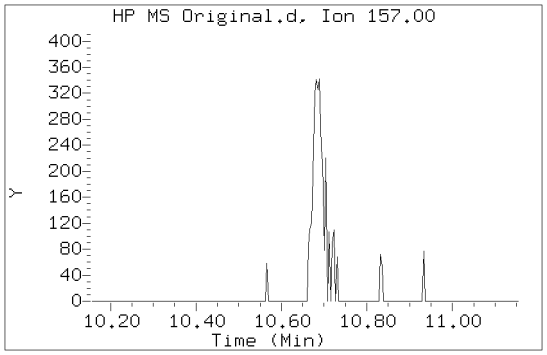
AFTER

MASS
155
AREA
441
HEIGHT
240
27-Dec-2022
16:07
linh
pham



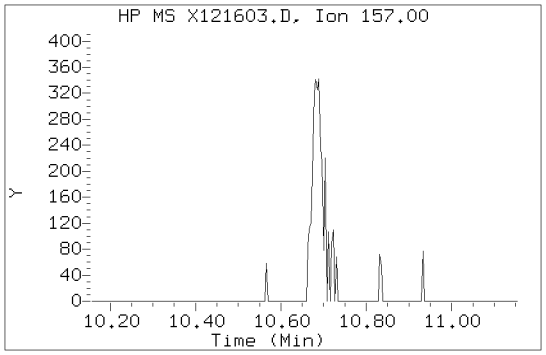
BEFORE

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



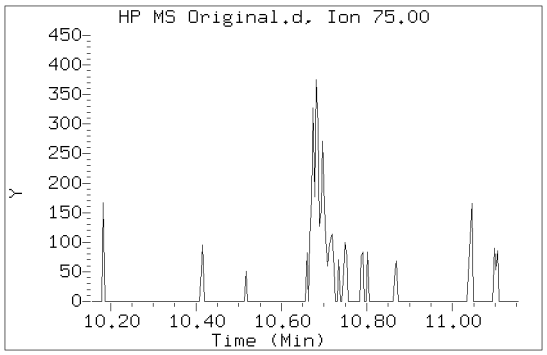
AFTER

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



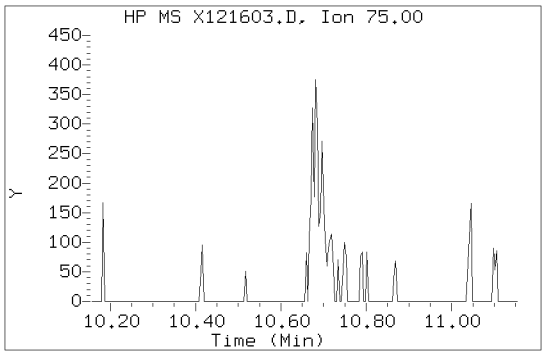
BEFORE

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



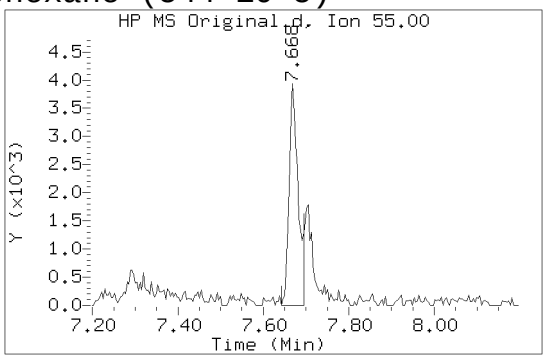
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1-Chlorohexane (544-10-5)

Reason Code:

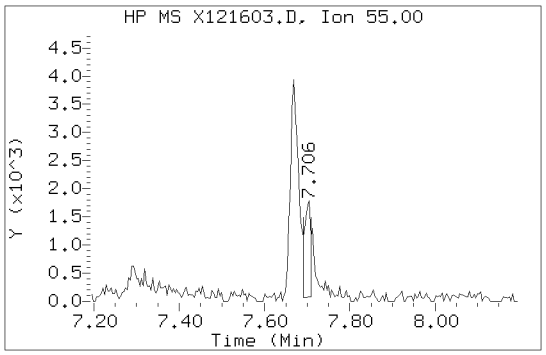
BEFORE

MASS
55
AREA
5785
HEIGHT
3936
27-Dec-2022
16:03
linh
pham



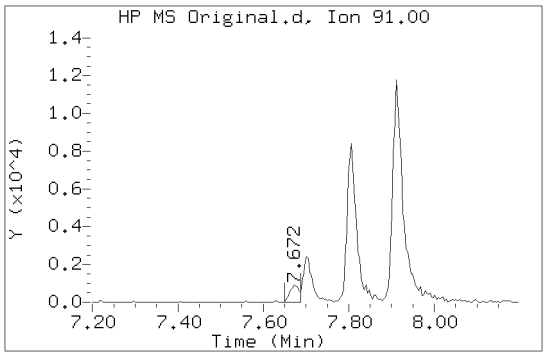
AFTER

MASS
55
AREA
1829
HEIGHT
1707
27-Dec-2022
16:07
linh
pham



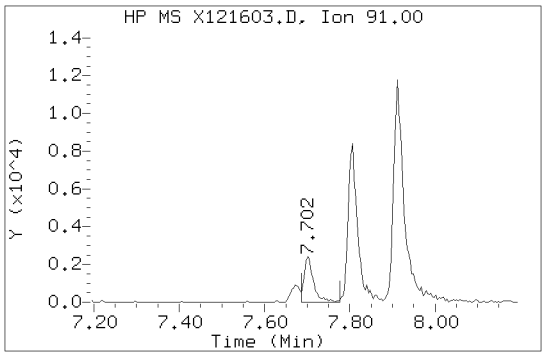
BEFORE

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

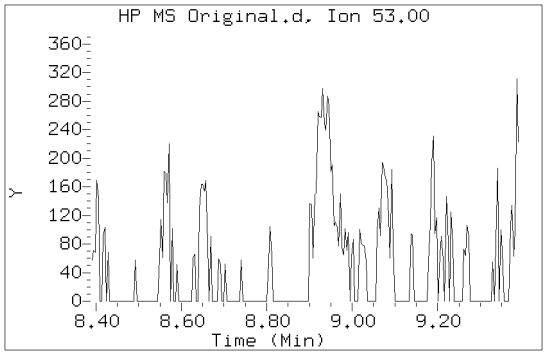


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

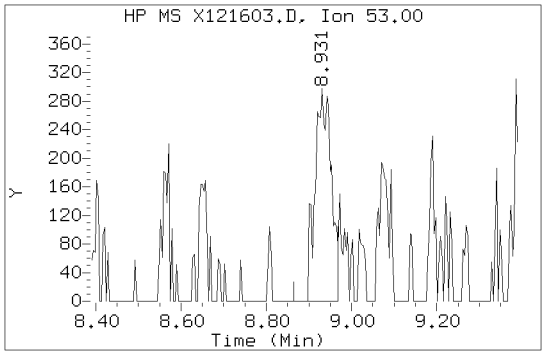
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



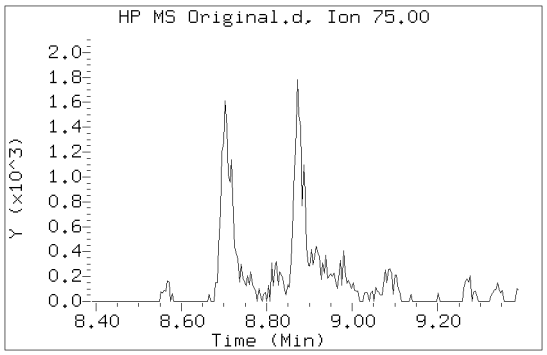
AFTER

MASS
53
AREA
792
HEIGHT
298
27-Dec-2022
16:07
linh
pham



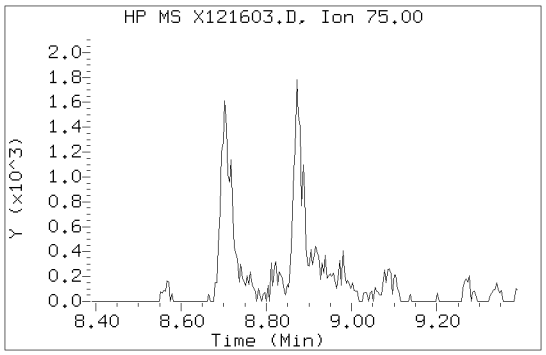
BEFORE

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



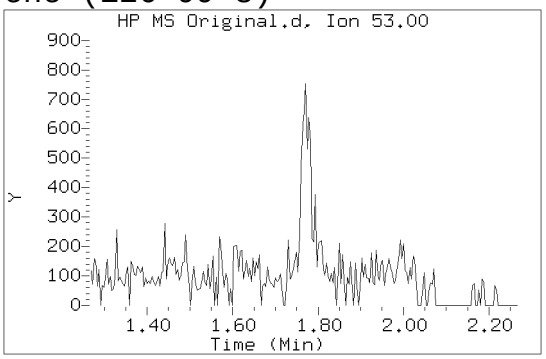
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroprene (126-99-8)

Reason Code:

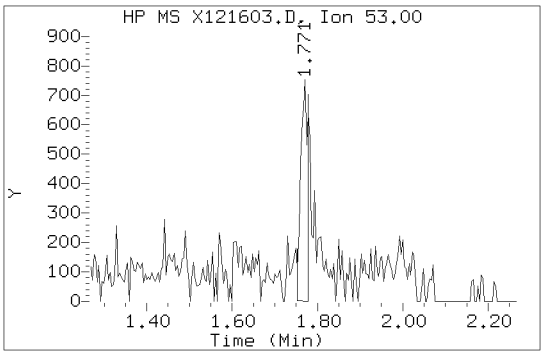
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



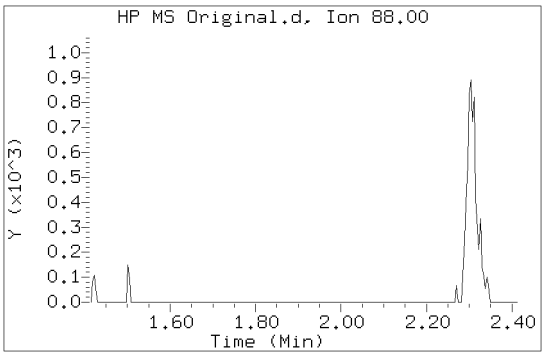
AFTER

MASS
53
AREA
900
HEIGHT
751
27-Dec-2022
16:07
linh
pham



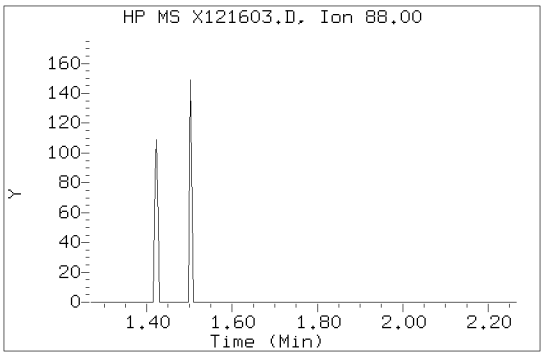
BEFORE

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

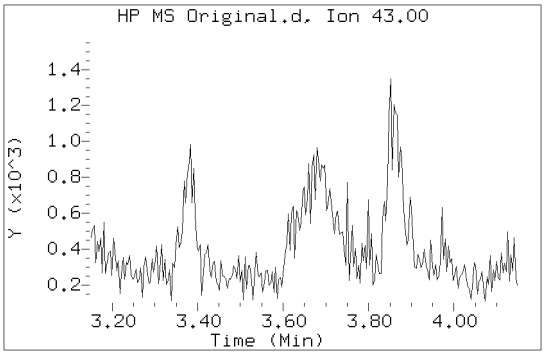


Ethyl Acetate (141-78-6)

Reason Code:

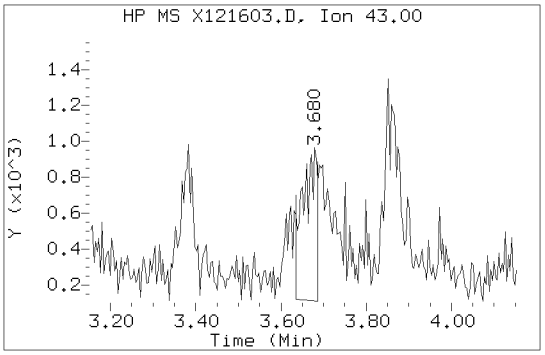
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



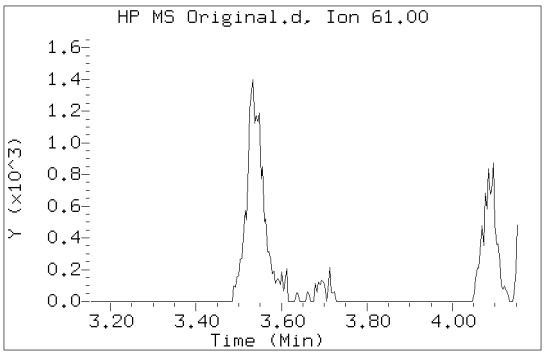
AFTER

MASS
43
AREA
2065
HEIGHT
853
27-Dec-2022
16:07
linh
pham



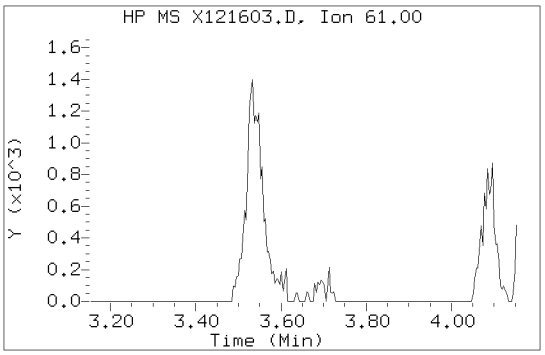
BEFORE

MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

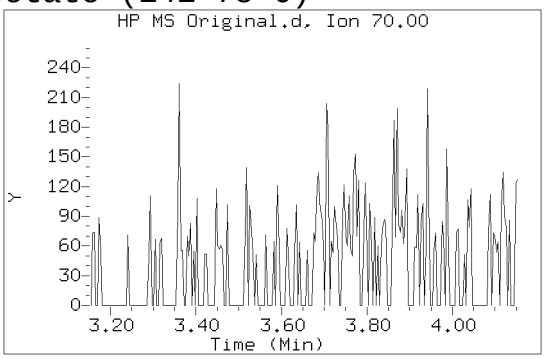
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

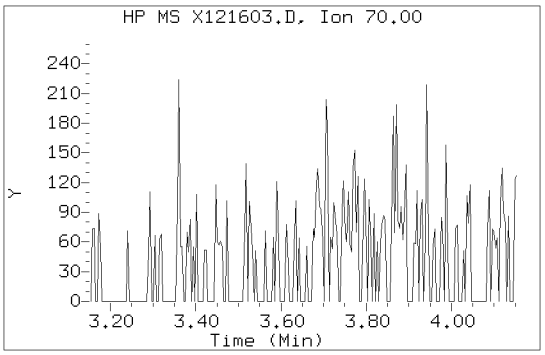
Ethyl Acetate (141-78-6)

BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



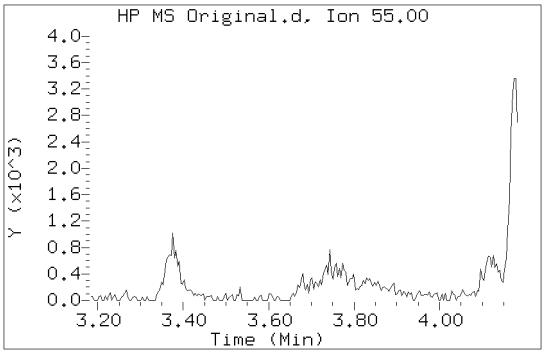
Reason Code:

AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



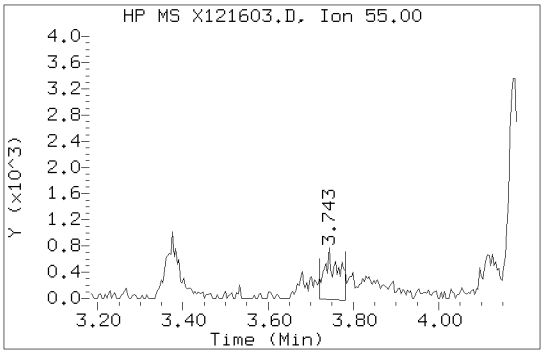
Methyl Acrylate (96-33-3)

BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

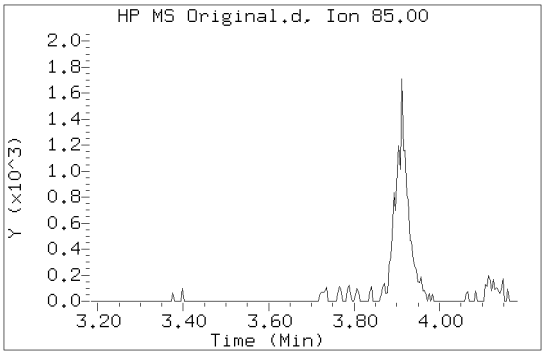


Reason Code:

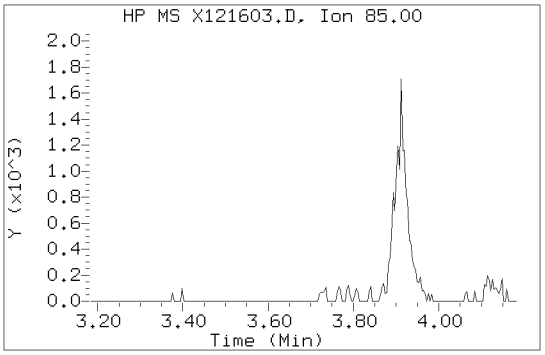
AFTER
MASS
55
AREA
1765
HEIGHT
787
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

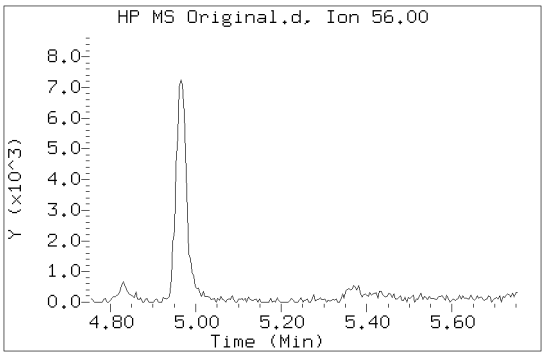


AFTER
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



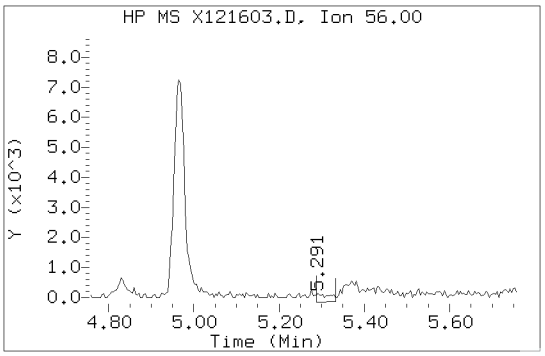
n-Butanol (71-36-3)

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



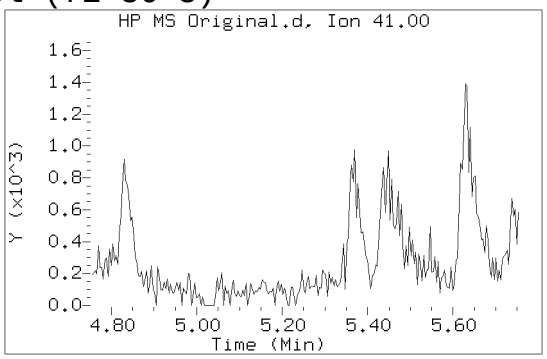
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butanol (71-36-3)

Reason Code:

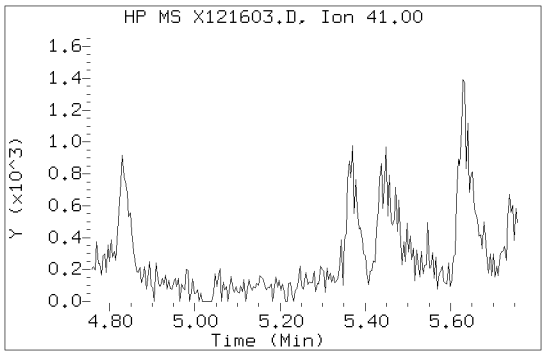
BEFORE

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

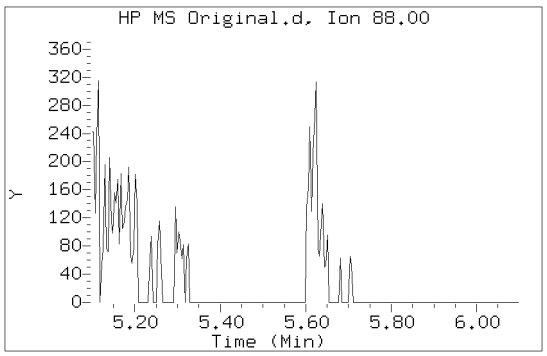


1,4-Dioxane ()

Reason Code:

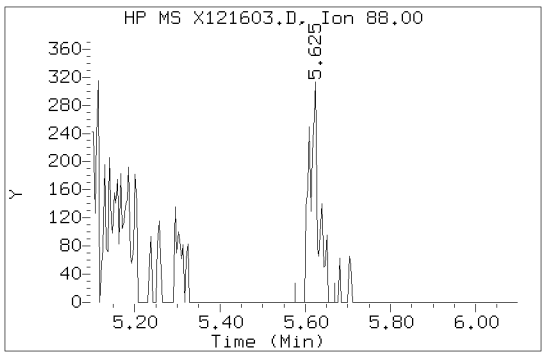
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



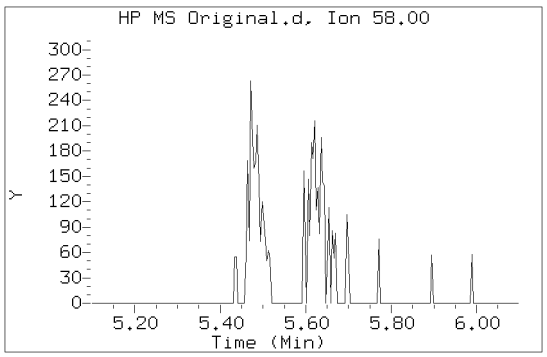
AFTER

MASS
88
AREA
462
HEIGHT
313
27-Dec-2022
16:07
linh
pham



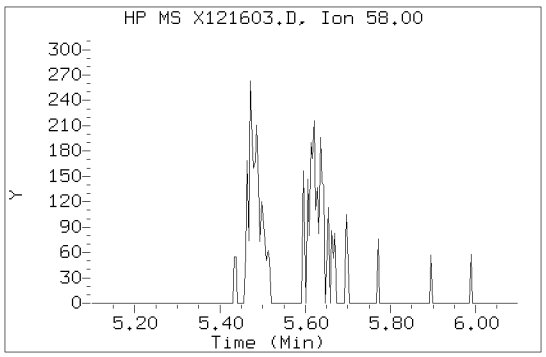
BEFORE

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

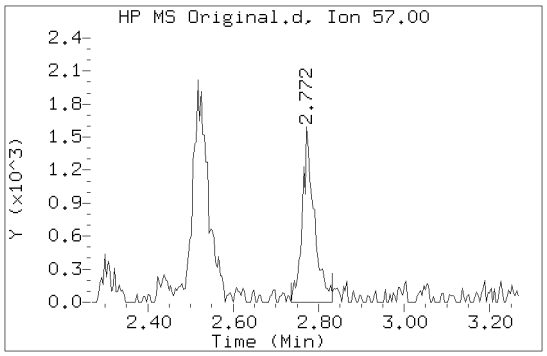


n-Hexane (110-54-3)

Reason Code:

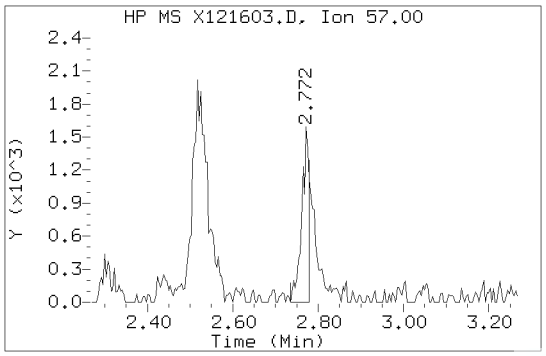
BEFORE

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

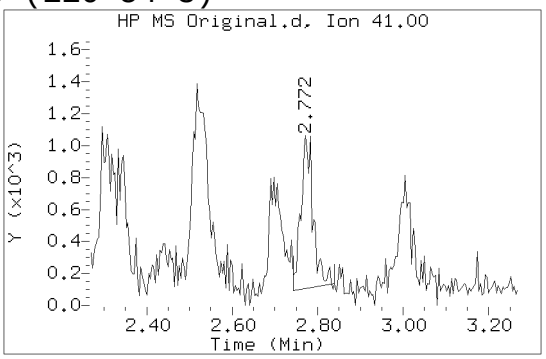


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

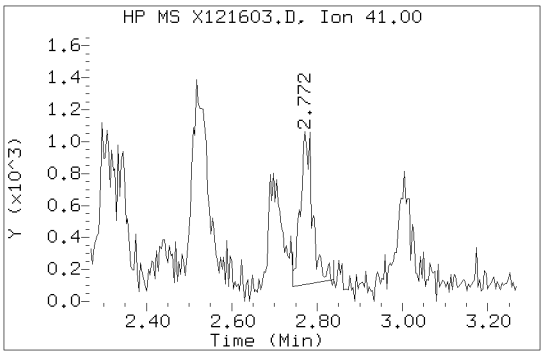
n-Hexane (110-54-3)

Reason Code:

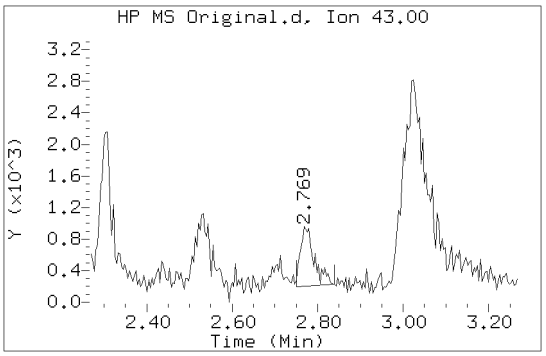
BEFORE
MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:03
linh
pham



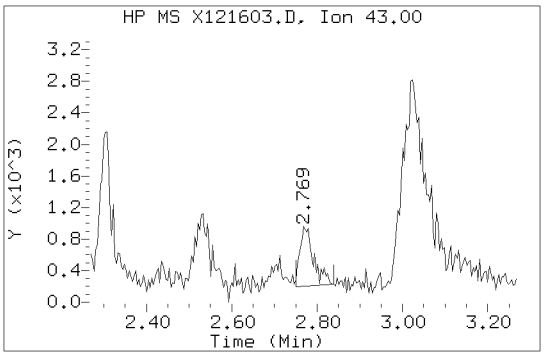
AFTER
MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:03
linh
pham



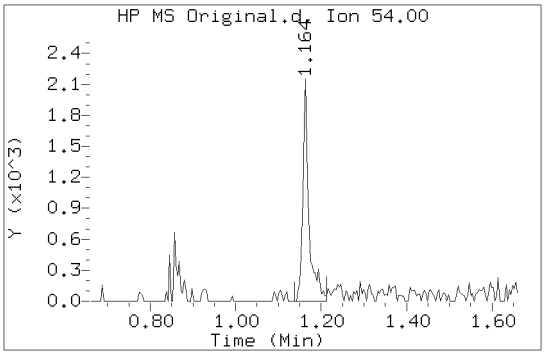
AFTER
MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:07
linh
pham



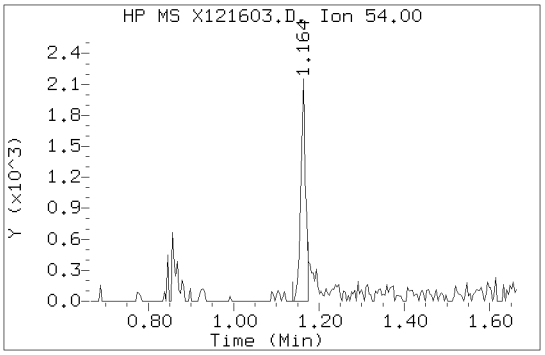
1,3-Butadiene (106-99-0)

Reason Code:

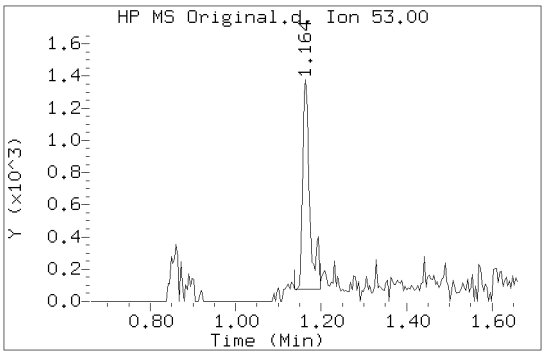
BEFORE
MASS
54
AREA
2206
HEIGHT
2153
27-Dec-2022
16:03
linh
pham



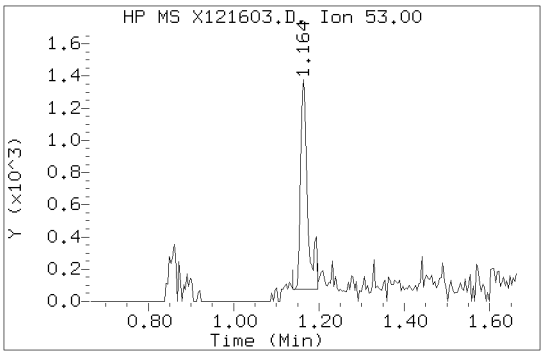
AFTER
MASS
54
AREA
1793
HEIGHT
2153
27-Dec-2022
16:07
linh
pham



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



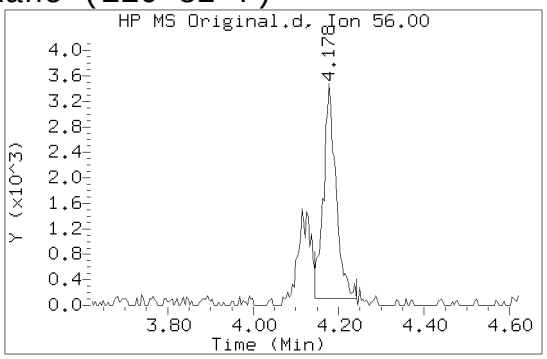
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexane (110-82-7)

Reason Code:

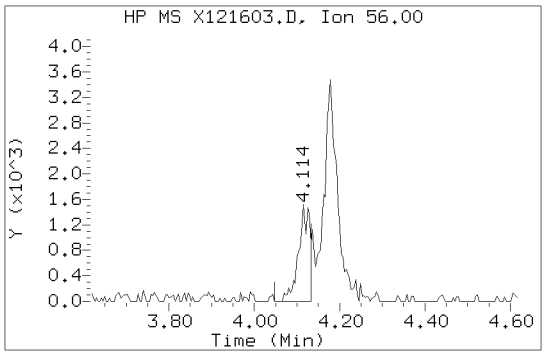
BEFORE

MASS
56
AREA
6884
HEIGHT
3363
27-Dec-2022
16:03
linh
pham



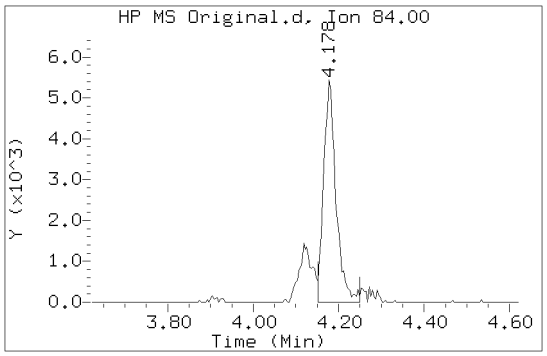
AFTER

MASS
56
AREA
2803
HEIGHT
1514
27-Dec-2022
16:07
linh
pham



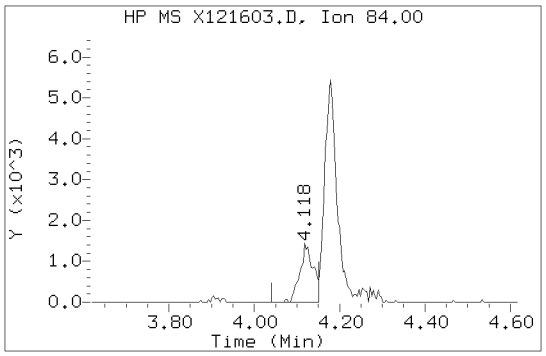
BEFORE

MASS
84
AREA
10951
HEIGHT
5440
27-Dec-2022
16:03
linh
pham



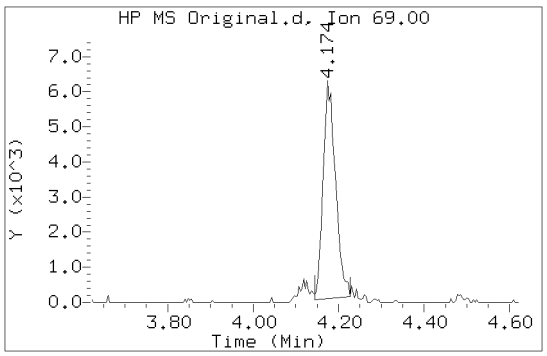
AFTER

MASS
84
AREA
3197
HEIGHT
1443
27-Dec-2022
16:07
linh
pham



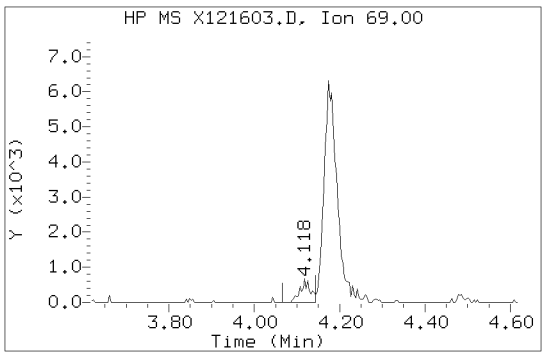
BEFORE

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

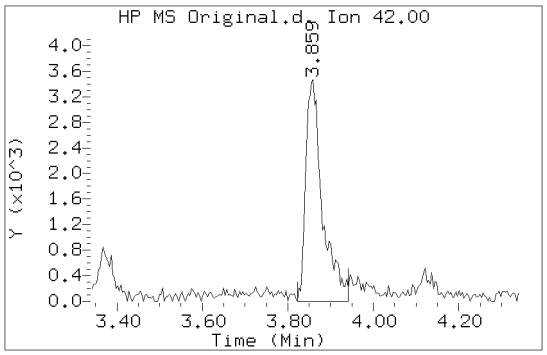


Tetrahydrofuran (109-99-9)

Reason Code:

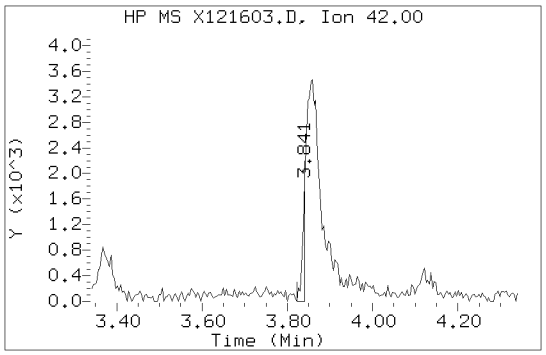
BEFORE

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

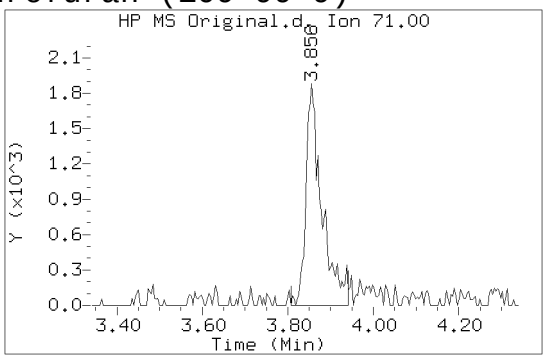


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

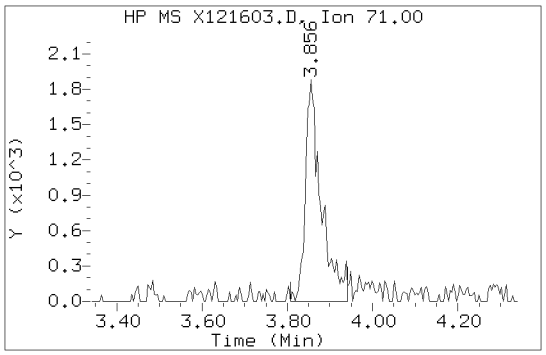
Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE
MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:03
linh
pham



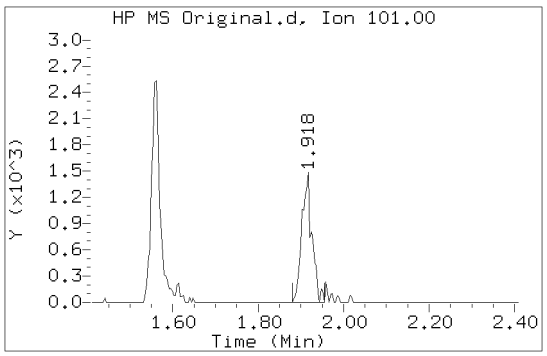
AFTER
MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:07
linh
pham



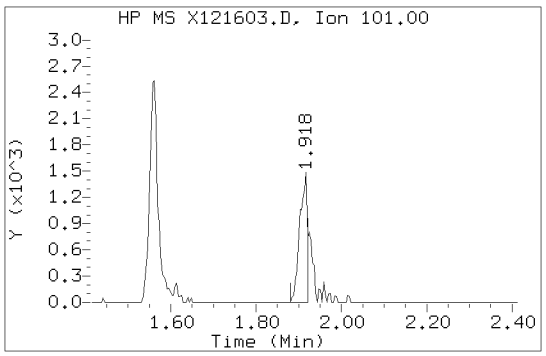
Freon TF (76-13-1)

Reason Code:

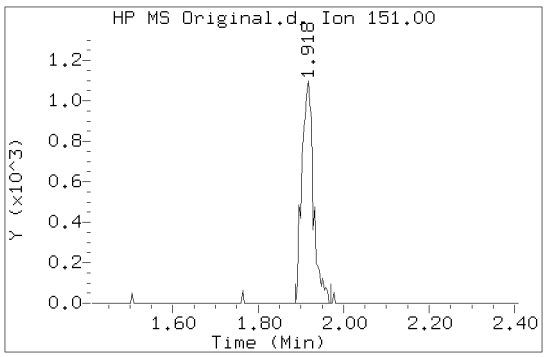
BEFORE
MASS
101
AREA
2478
HEIGHT
1484
27-Dec-2022
16:03
linh
pham



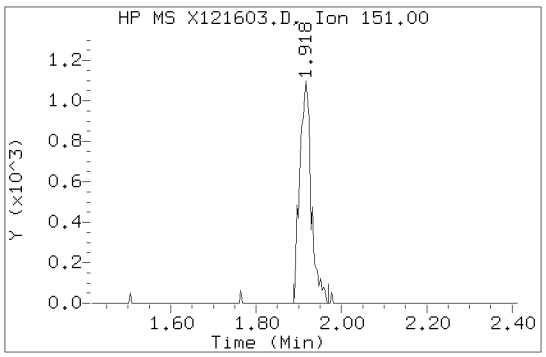
AFTER
MASS
101
AREA
1851
HEIGHT
1484
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:03
linh
pham



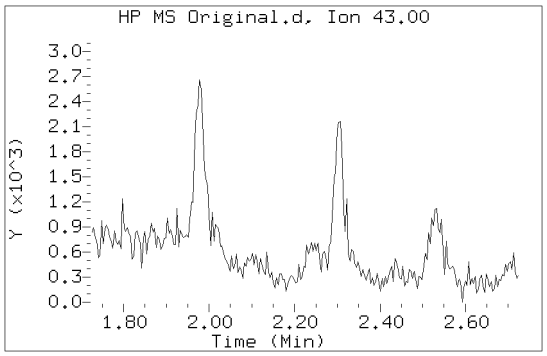
AFTER
MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:07
linh
pham



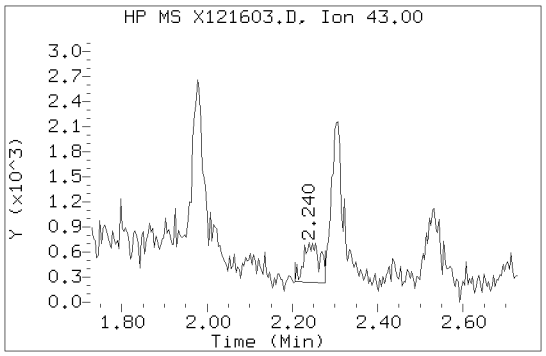
Methyl Acetate (79-20-9)

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



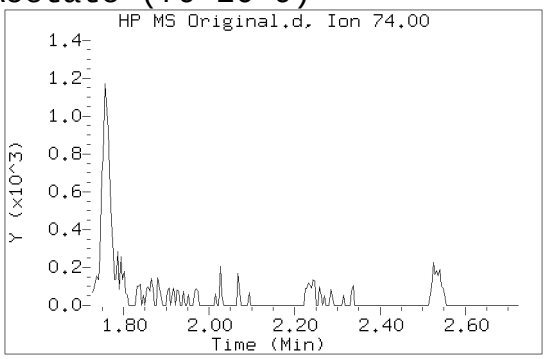
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Acetate (79-20-9)

Reason Code:

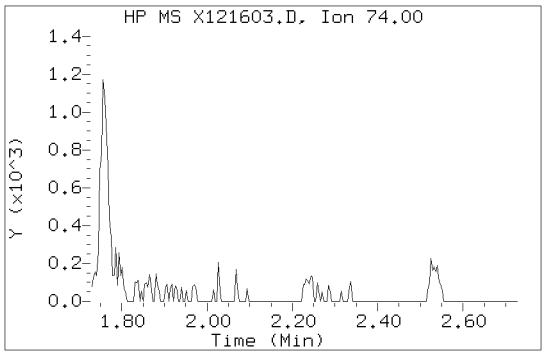
BEFORE

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

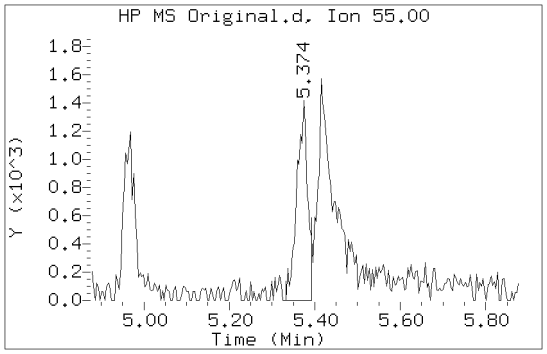


Methylcyclohexane (108-87-2)

Reason Code:

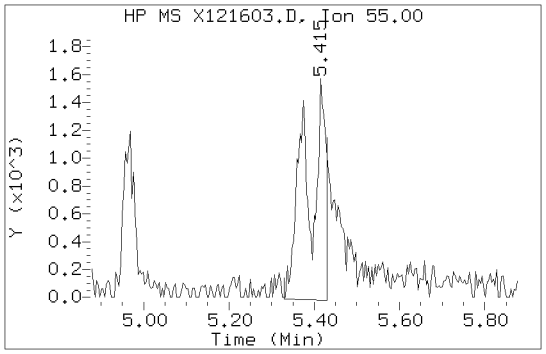
BEFORE

MASS
55
AREA
2505
HEIGHT
1416
27-Dec-2022
16:03
linh
pham



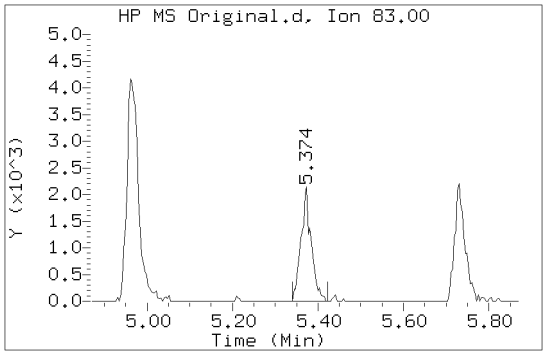
AFTER

MASS
55
AREA
4781
HEIGHT
1590
27-Dec-2022
16:07
linh
pham



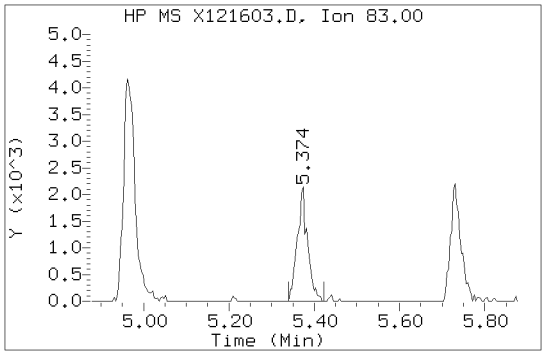
BEFORE

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

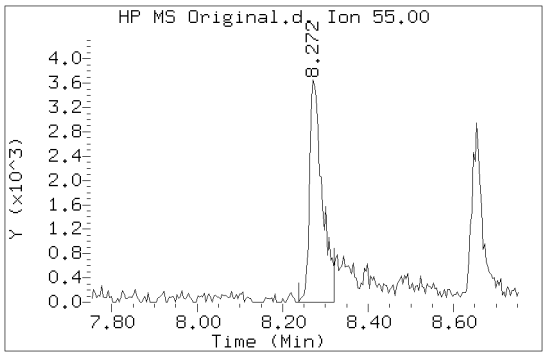


Butyl acrylate (141-32-2)

Reason Code:

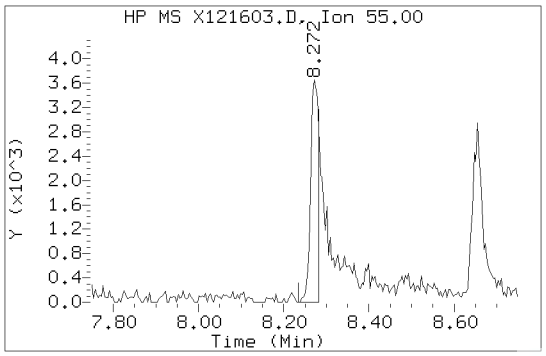
BEFORE

MASS
55
AREA
7480
HEIGHT
3653
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
4718
HEIGHT
3653
27-Dec-2022
16:07
linh
pham



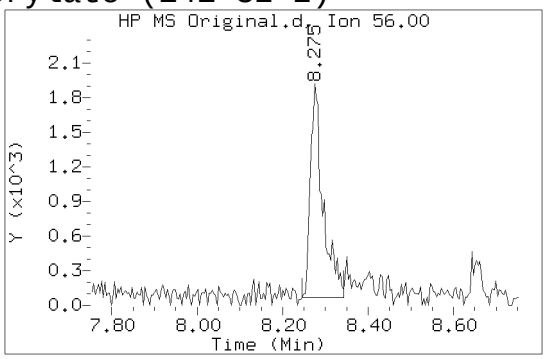
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl acrylate (141-32-2)

Reason Code:

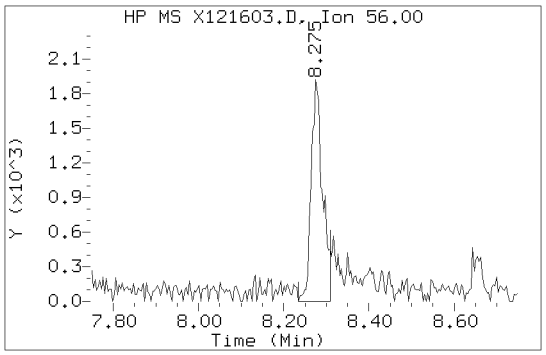
BEFORE

MASS
56
AREA
3795
HEIGHT
1858
27-Dec-2022
16:03
linh
pham



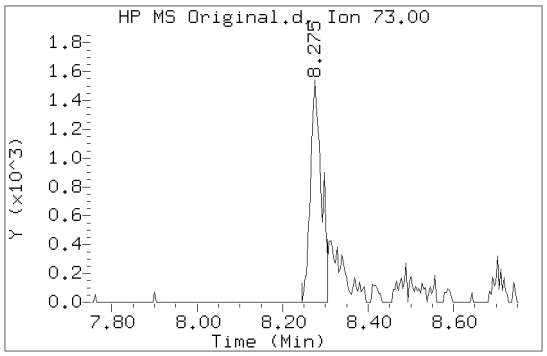
AFTER

MASS
56
AREA
3566
HEIGHT
1923
27-Dec-2022
16:07
linh
pham



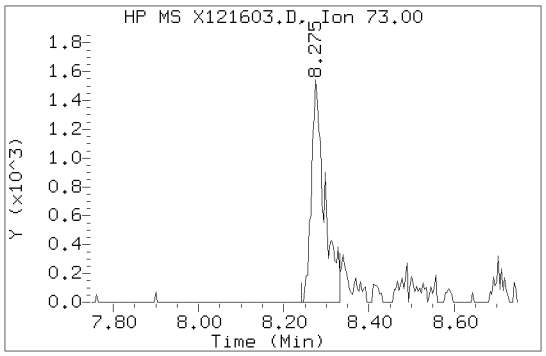
BEFORE

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

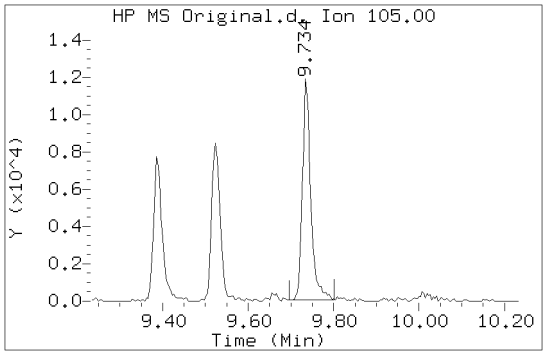


1,2,3-Trimethylbenzene (526-73-8)

Reason Code:

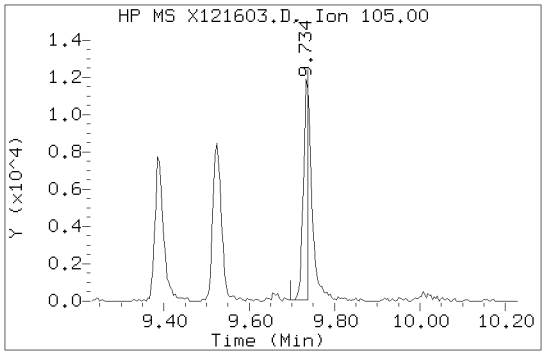
BEFORE

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

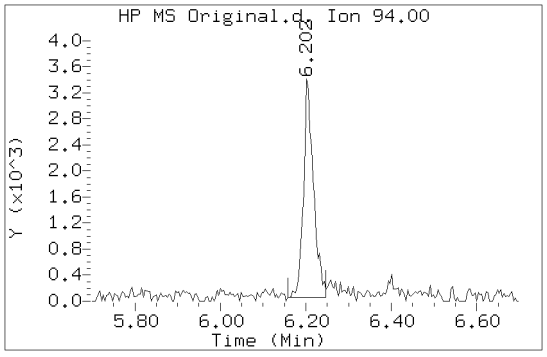


Dimethyl Disulfide (624-92-0)

Reason Code:

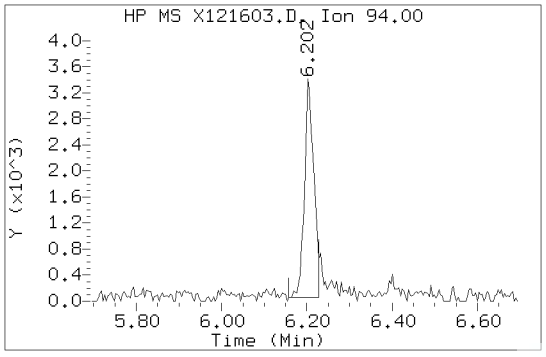
BEFORE

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

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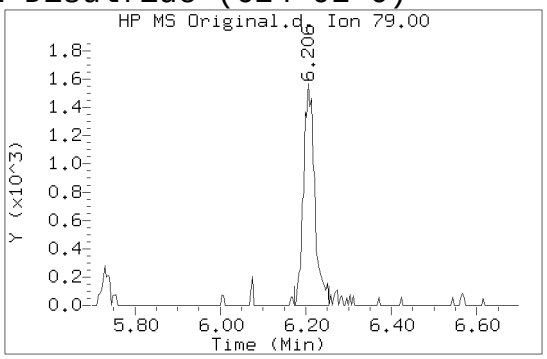

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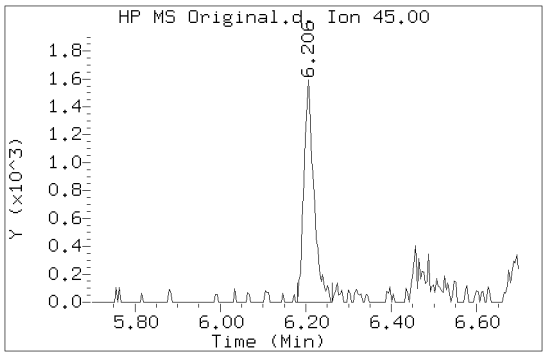

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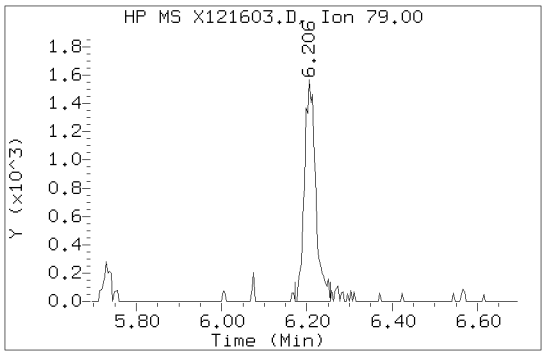

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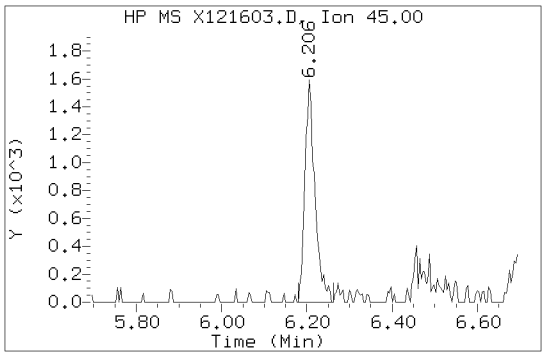

4-Bromofluorobenzene (460-00-4)

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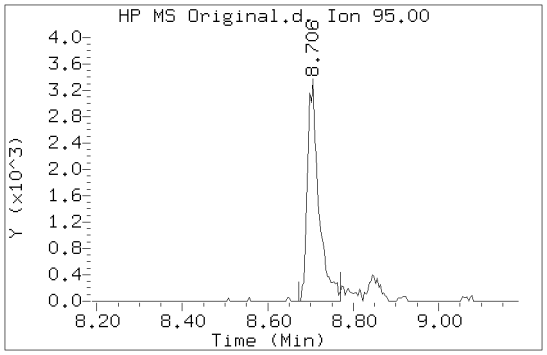

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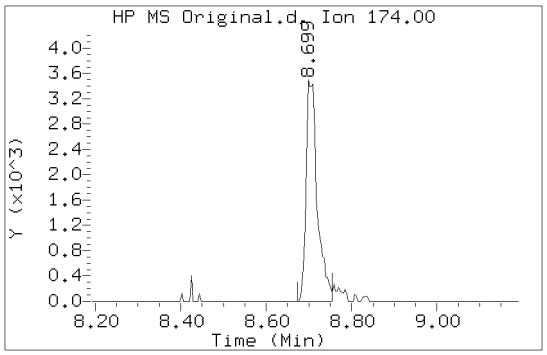

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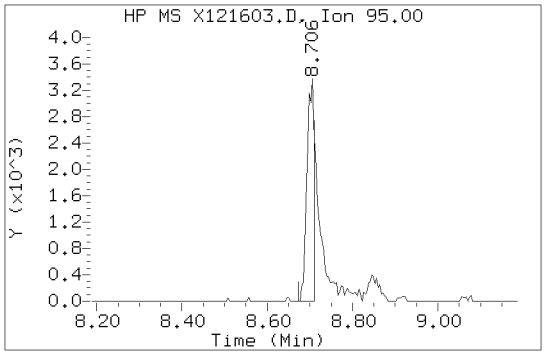

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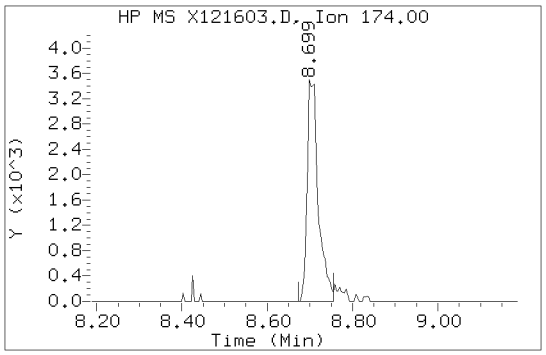

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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linh
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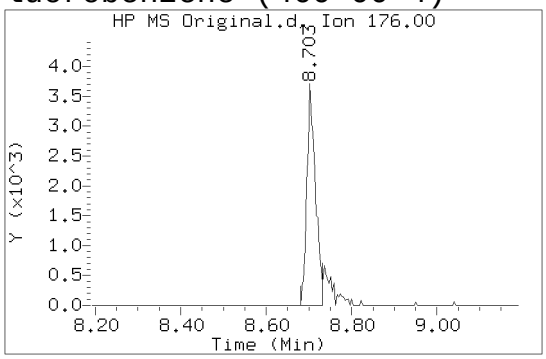

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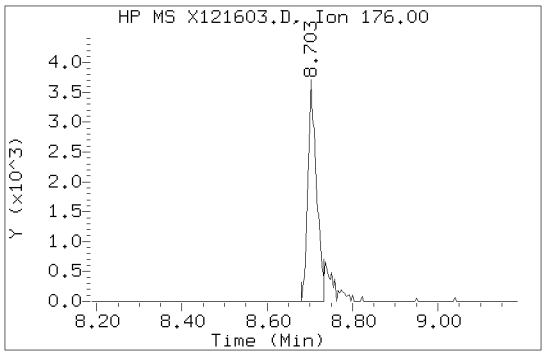

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D Page 1
Report Date: 27-Dec-2022 16:07

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

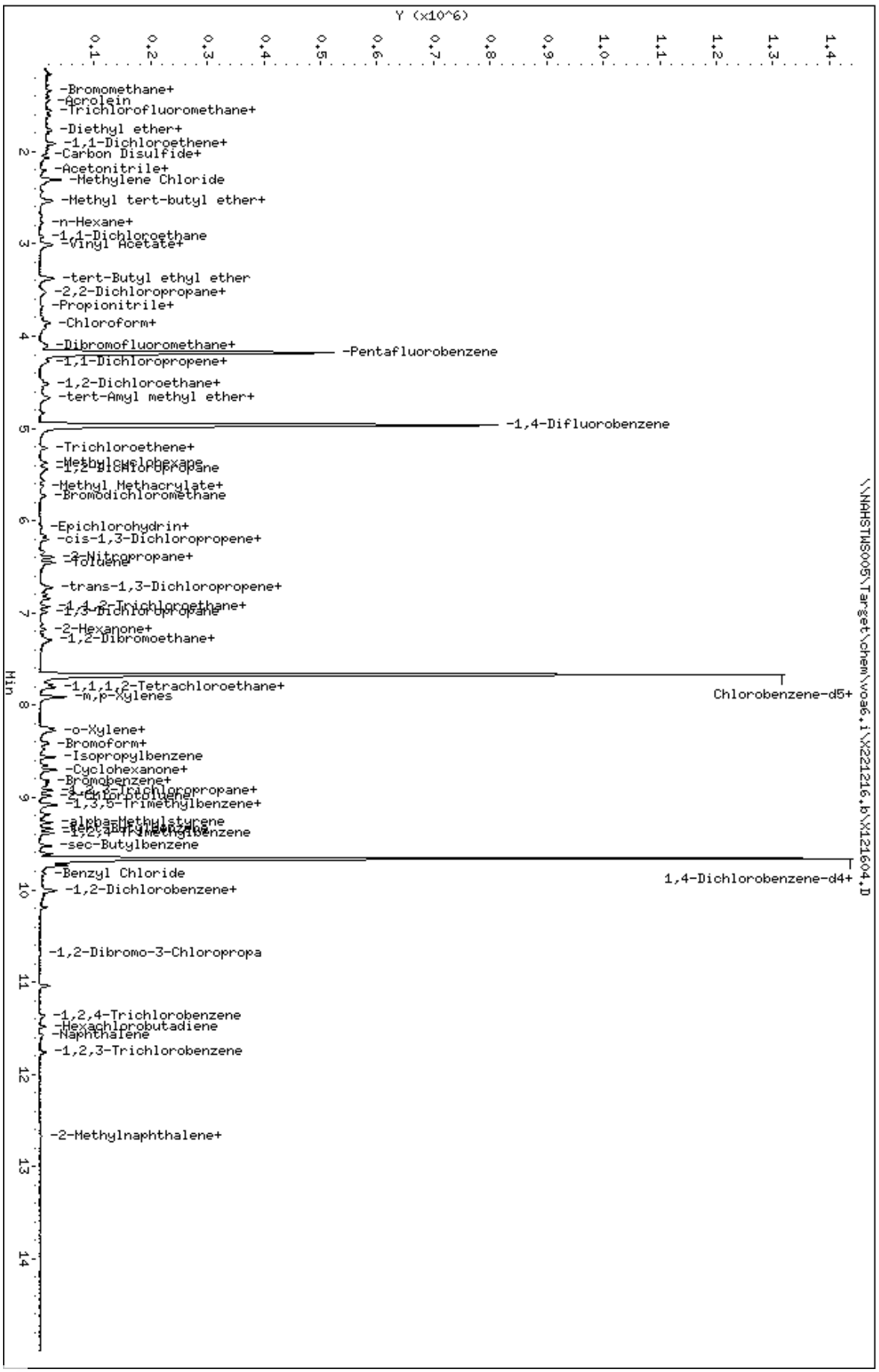
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.743	3.743	(0.896)	3084	1.00000	1.00(M)
	162	Butyl acrylate	55	8.271	8.271	(1.078)	7647	1.00000	0.90
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	2911	1.00000	1.30
	3	Chloromethane	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

\\NAHSTWS005\Target\chem\voa6,i\X221216,b\X121604.D

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
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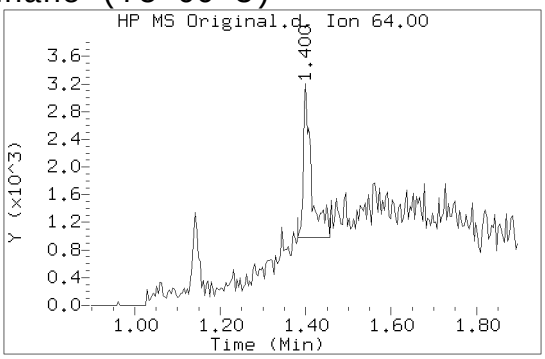
HEIGHT
2221
27-Dec-2022
16:03
linh
pham



AFTER

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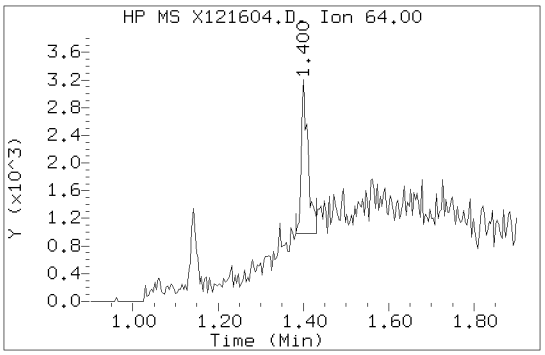

BEFORE

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27-Dec-2022
16:03
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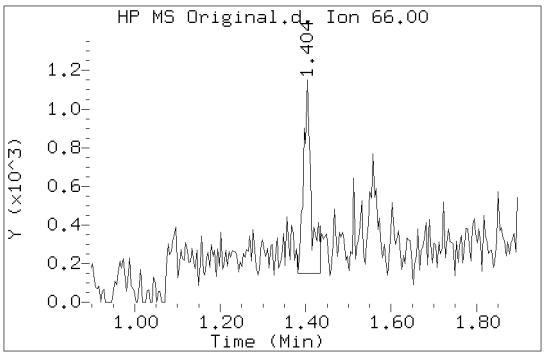

AFTER

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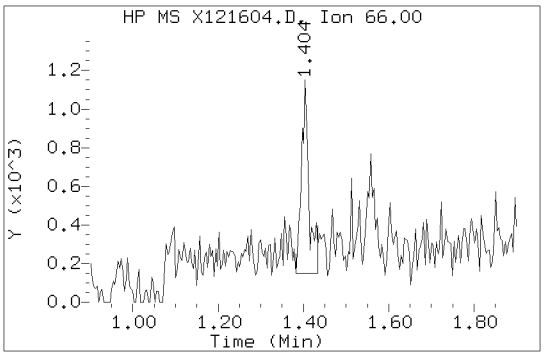
1002
27-Dec-2022
16:07
linh
pham

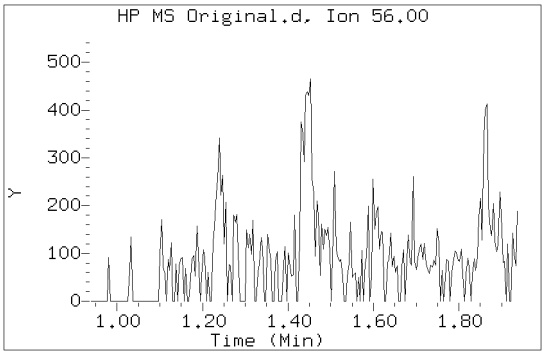


Acrolein (107-02-8)

Reason Code:

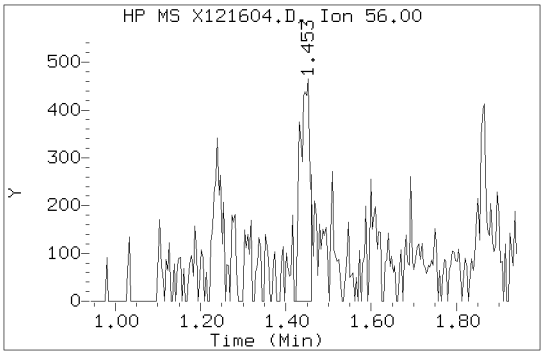
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



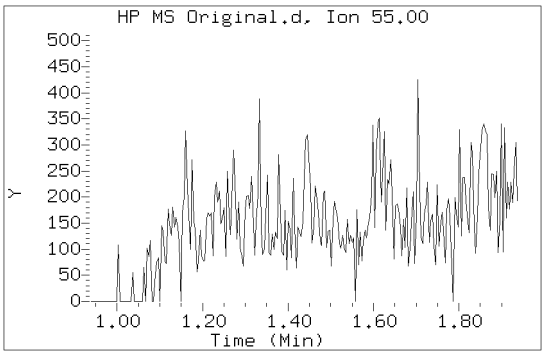
AFTER

MASS
56
AREA
761
HEIGHT
465
27-Dec-2022
16:07
linh
pham



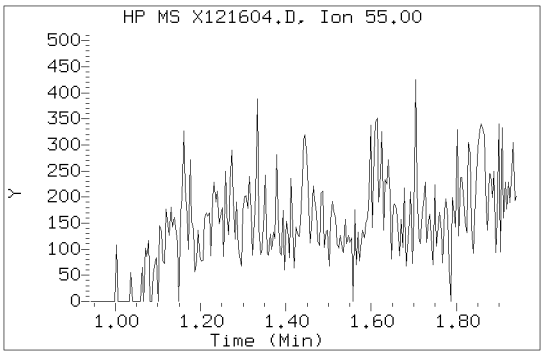
BEFORE

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

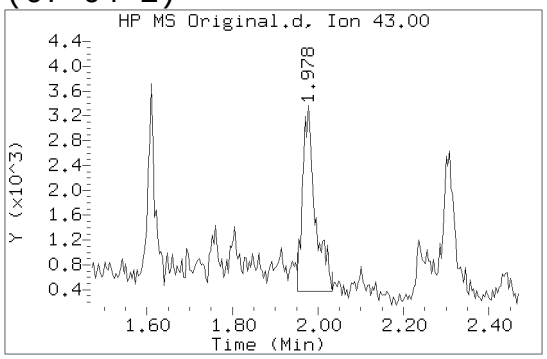


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

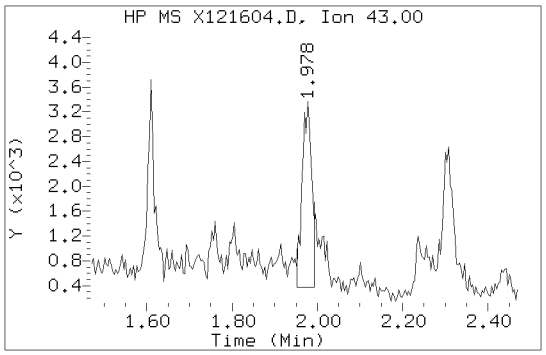
Acetone (67-64-1)

Reason Code:

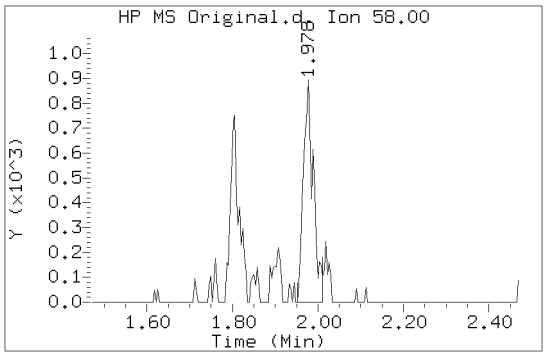
BEFORE
MASS
43
AREA
6265
HEIGHT
2993
27-Dec-2022
16:03
linh
pham



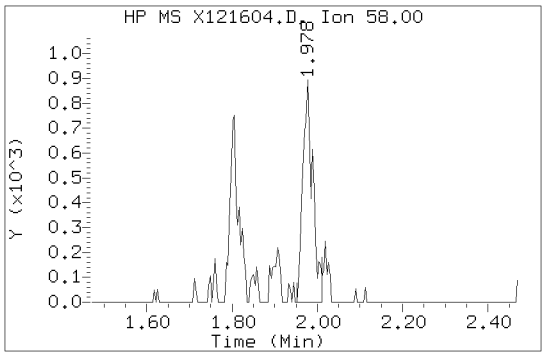
AFTER
MASS
43
AREA
4787
HEIGHT
2993
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
58
AREA
1474
HEIGHT
894
27-Dec-2022
16:03
linh
pham



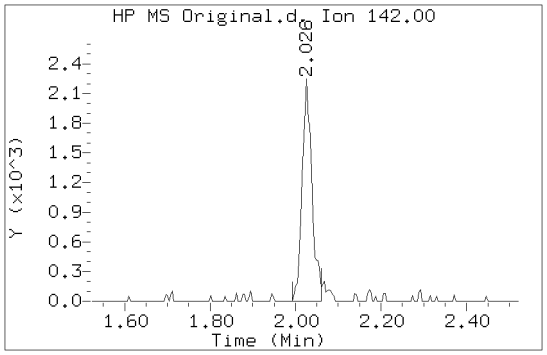
AFTER
MASS
58
AREA
1474
HEIGHT
894
27-Dec-2022
16:07
linh
pham



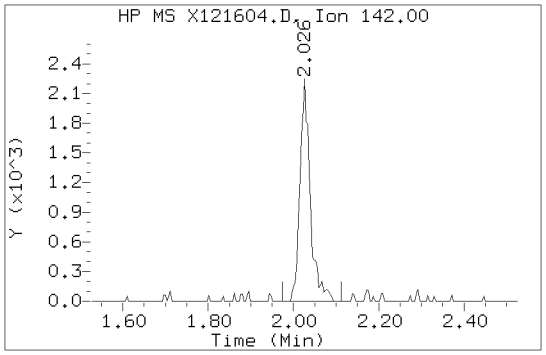
Iodomethane (74-88-4)

Reason Code:

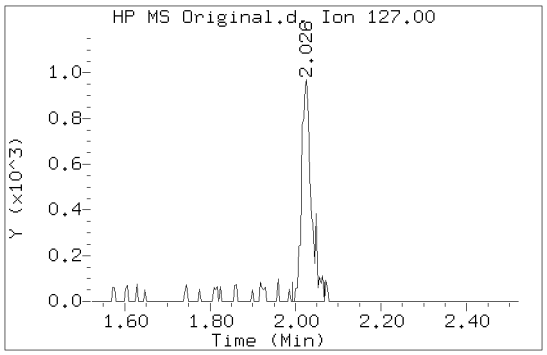
BEFORE
MASS
142
AREA
3661
HEIGHT
2248
27-Dec-2022
16:03
linh
pham



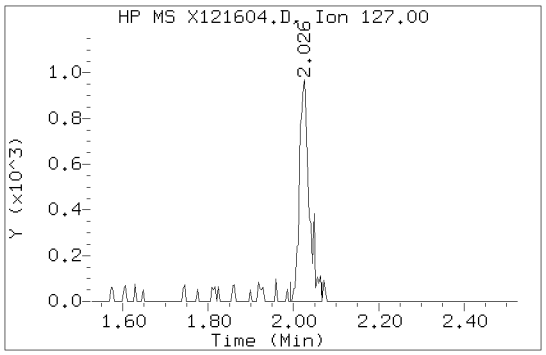
AFTER
MASS
142
AREA
3865
HEIGHT
2248
27-Dec-2022
16:07
linh
pham



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



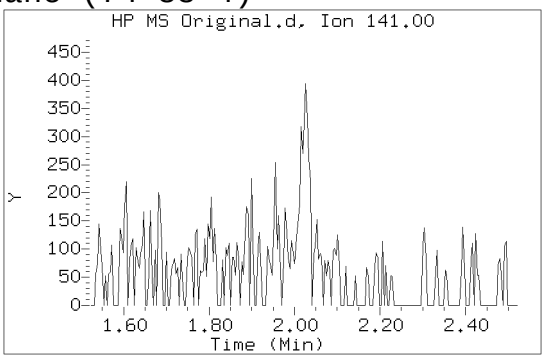
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Iodomethane (74-88-4)

Reason Code:

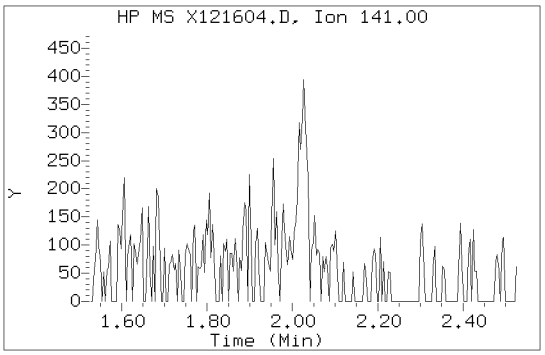
BEFORE

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

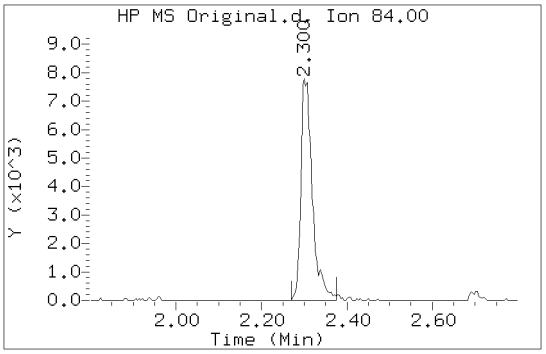


Methylene Chloride (75-09-2)

Reason Code:

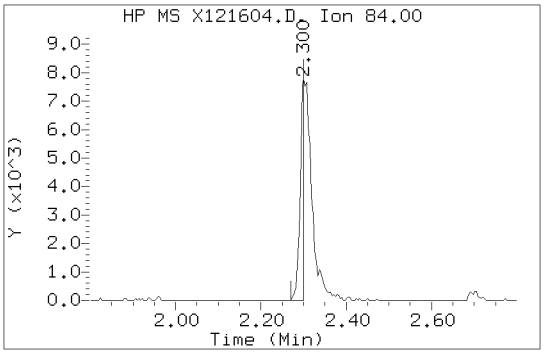
BEFORE

MASS
84
AREA
14864
HEIGHT
7788
27-Dec-2022
16:03
linh
pham



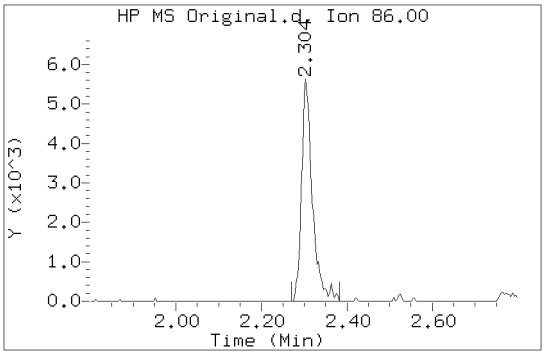
AFTER

MASS
84
AREA
5355
HEIGHT
7788
27-Dec-2022
16:07
linh
pham



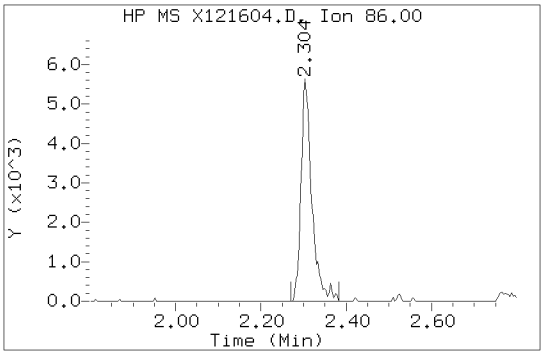
BEFORE

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:03
linh
pham



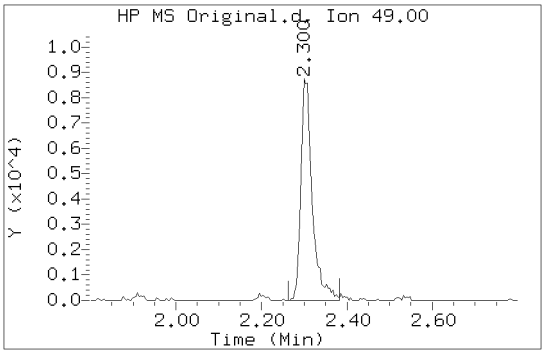
AFTER

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:07
linh
pham



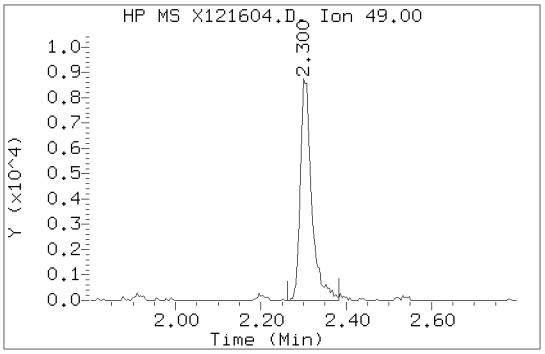
BEFORE

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

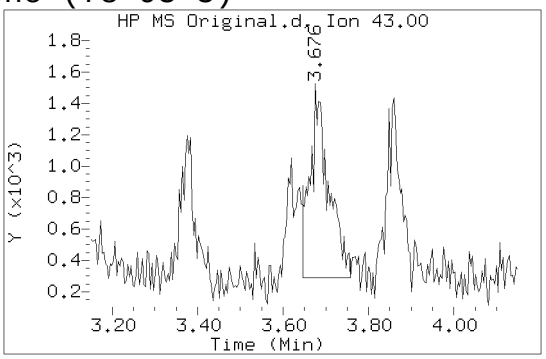


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Butanone (78-93-3)

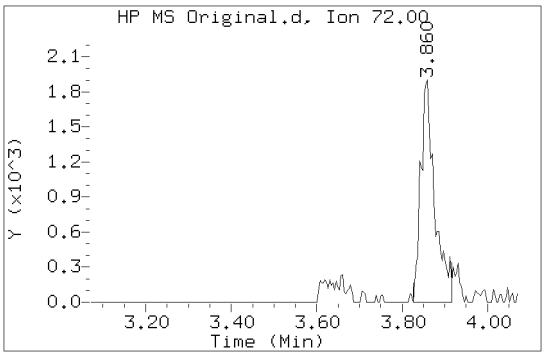
BEFORE

MASS
43
AREA
3758
HEIGHT
1236
27-Dec-2022
16:03
linh
pham



BEFORE

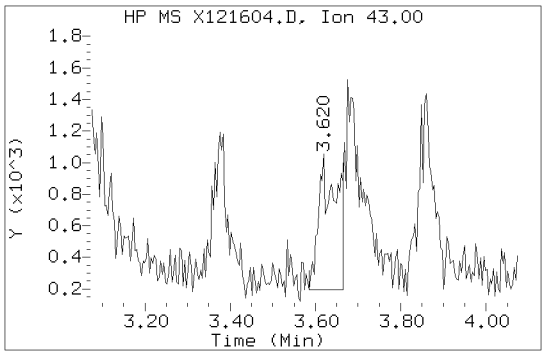
MASS
72
AREA
4320
HEIGHT
1902
27-Dec-2022
16:03
linh
pham



Reason Code:

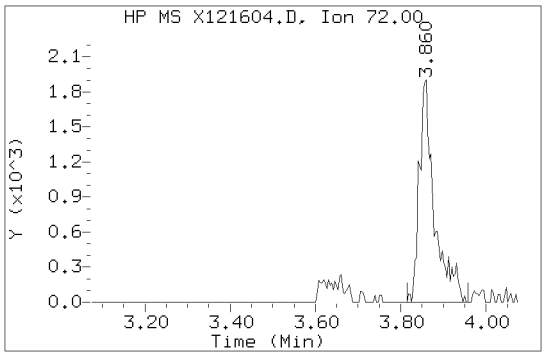
AFTER

MASS
43
AREA
2498
HEIGHT
859
27-Dec-2022
16:07
linh
pham



AFTER

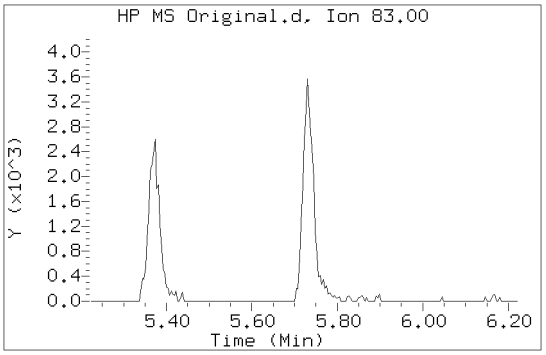
MASS
72
AREA
4690
HEIGHT
1902
27-Dec-2022
16:07
linh
pham



Bromodichloromethane (75-27-4)

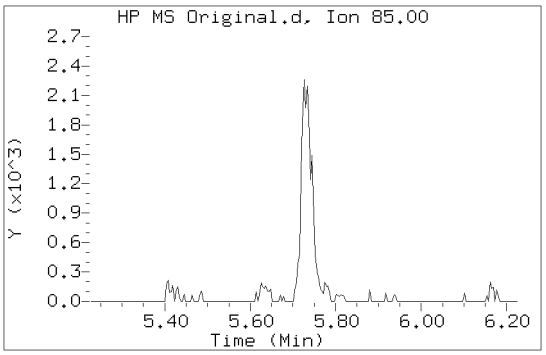
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

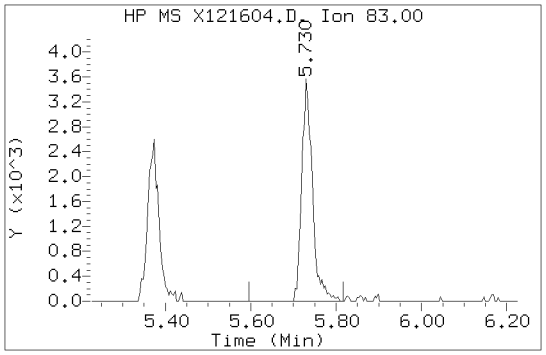
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

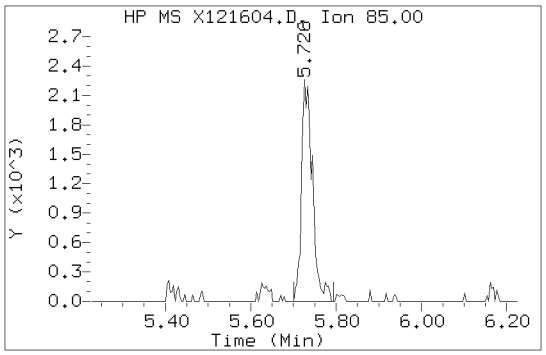
AFTER

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



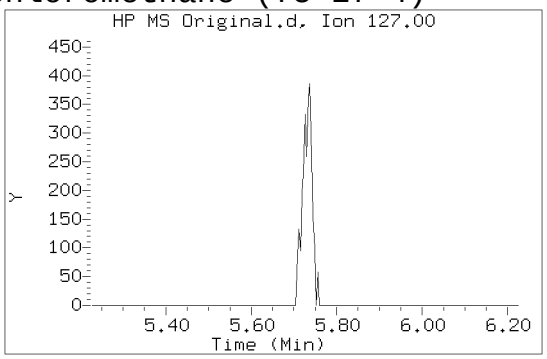
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Bromodichloromethane (75-27-4)

Reason Code:

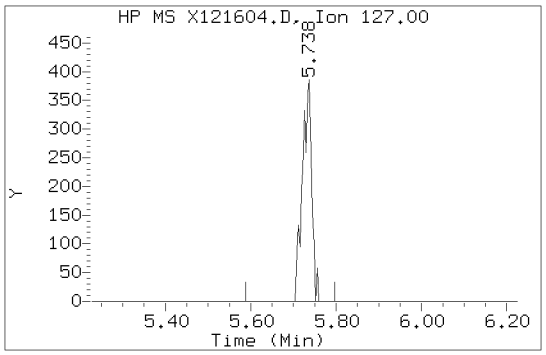
BEFORE

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

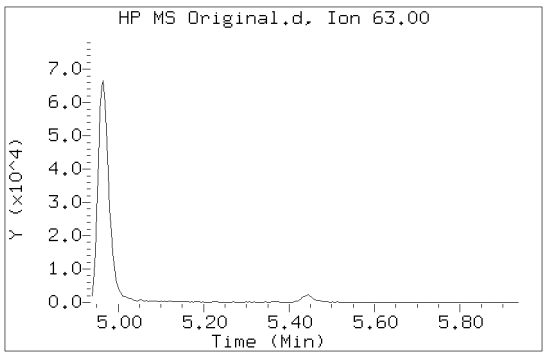


1,2-Dichloropropane (78-87-5)

Reason Code:

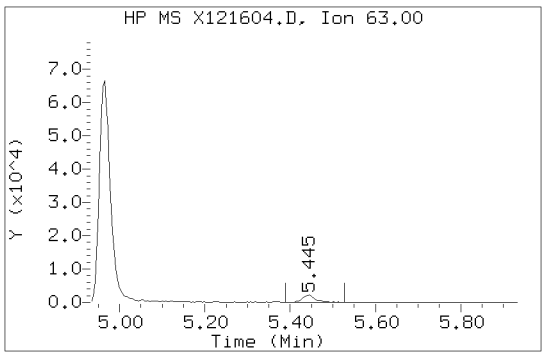
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



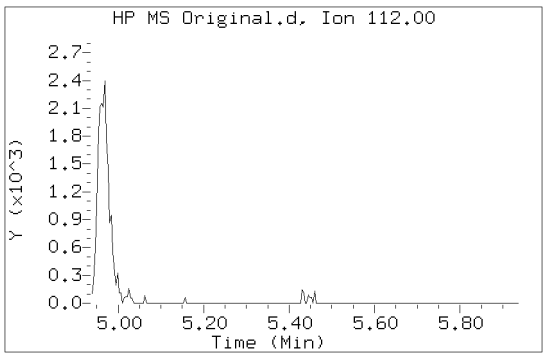
AFTER

MASS
63
AREA
4604
HEIGHT
2381
27-Dec-2022
16:07
linh
pham



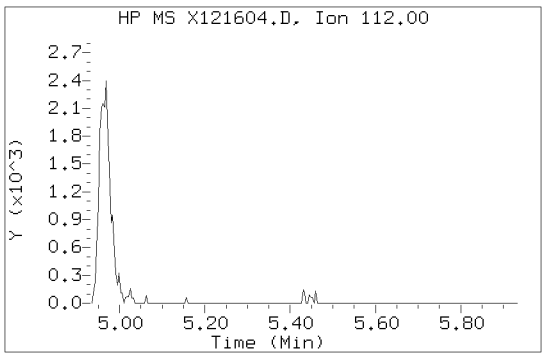
BEFORE

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

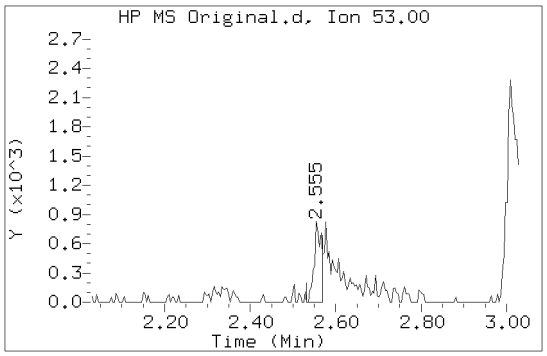


Acrylonitrile (107-13-1)

Reason Code:

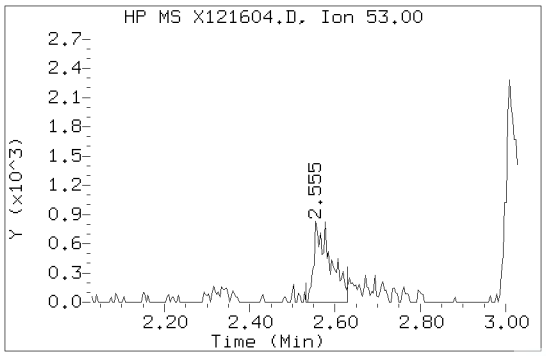
BEFORE

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



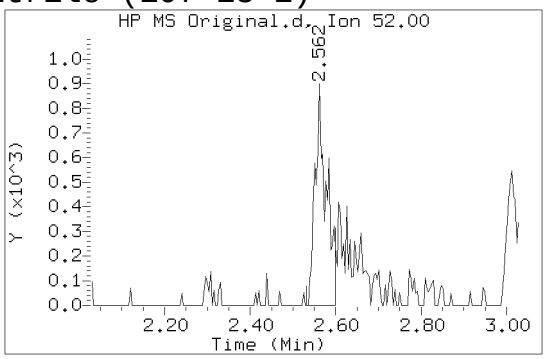
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

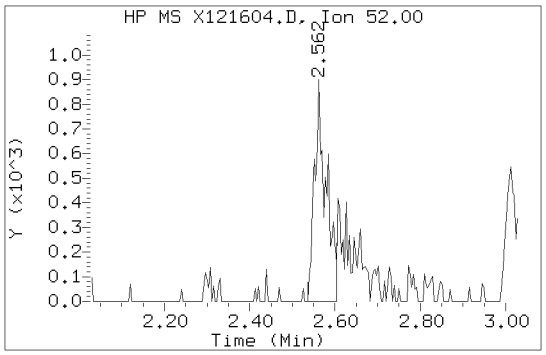
BEFORE

MASS
52
AREA
1657
HEIGHT
900
27-Dec-2022
16:03
linh
pham



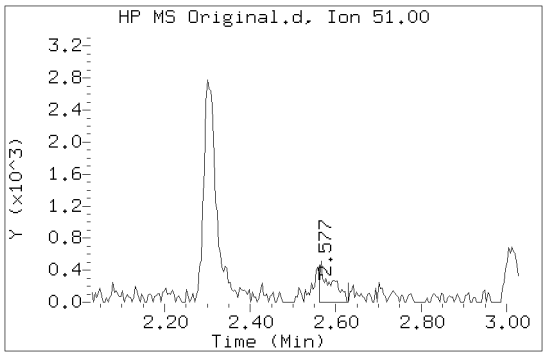
AFTER

MASS
52
AREA
1692
HEIGHT
900
27-Dec-2022
16:07
linh
pham



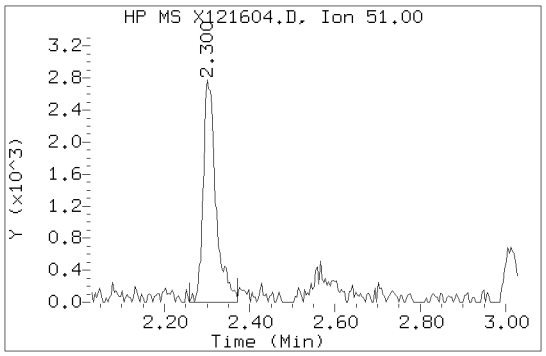
BEFORE

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

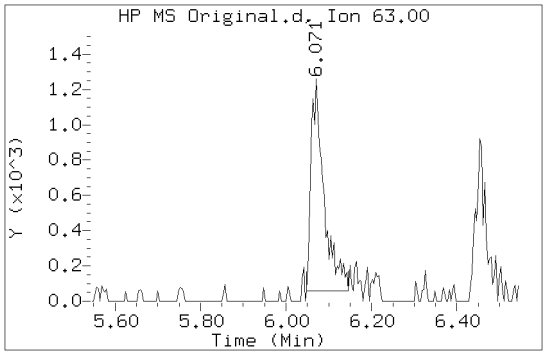


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

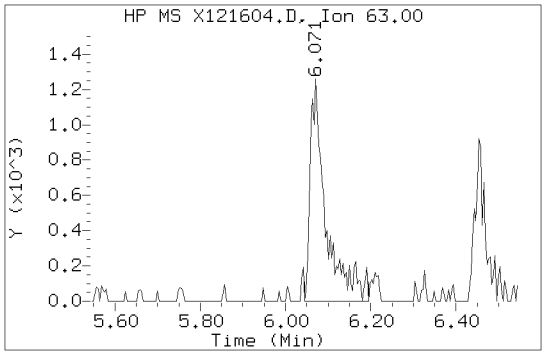
BEFORE

MASS
63
AREA
2513
HEIGHT
1202
27-Dec-2022
16:03
linh
pham



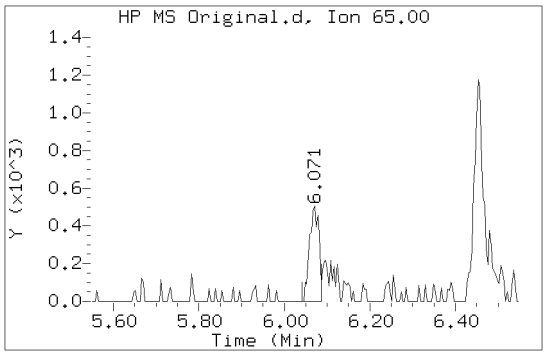
AFTER

MASS
63
AREA
3202
HEIGHT
1260
27-Dec-2022
16:07
linh
pham



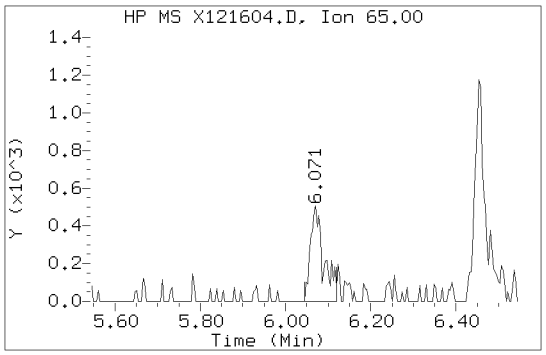
BEFORE

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



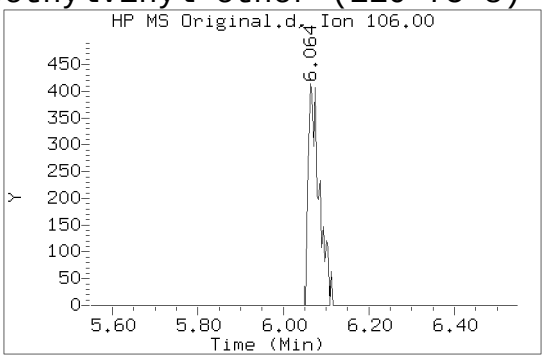
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

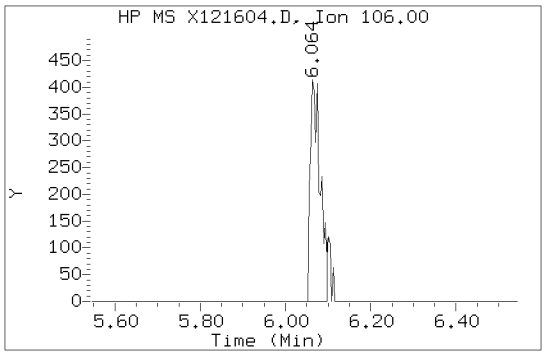
BEFORE

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

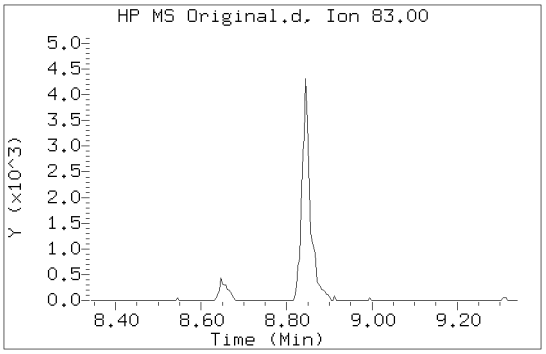


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

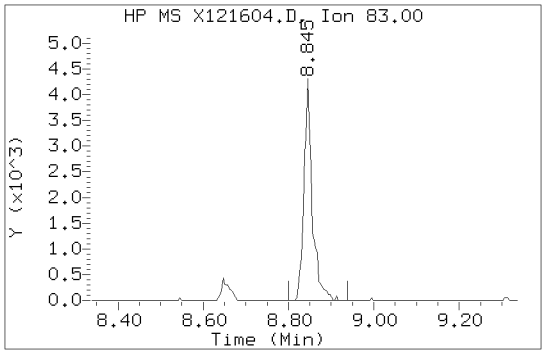
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



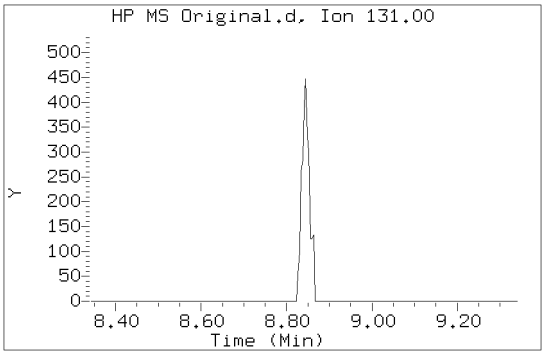
AFTER

MASS
83
AREA
5934
HEIGHT
4312
27-Dec-2022
16:07
linh
pham



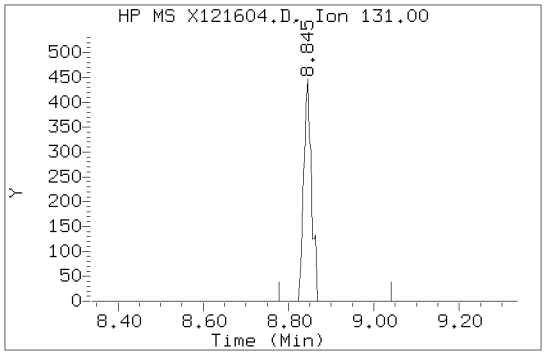
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



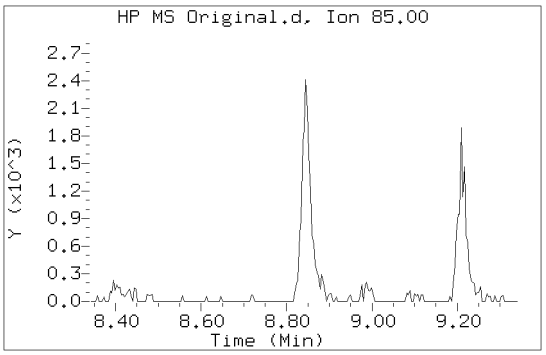
AFTER

MASS
131
AREA
574
HEIGHT
447
27-Dec-2022
16:07
linh
pham



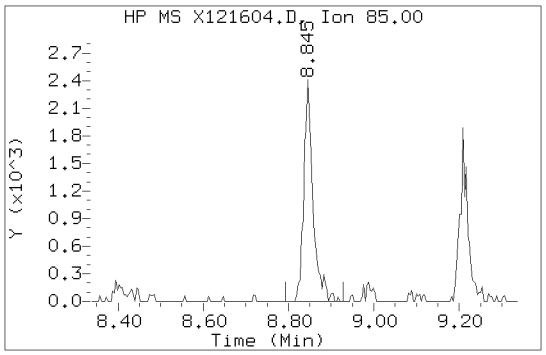
BEFORE

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

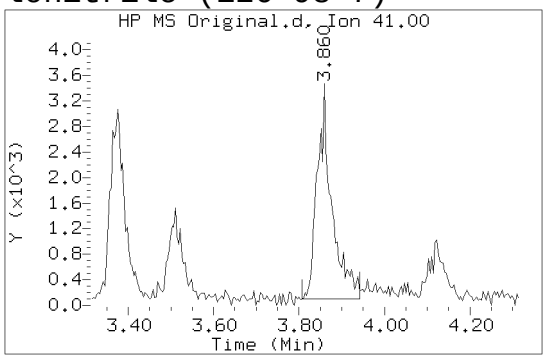


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

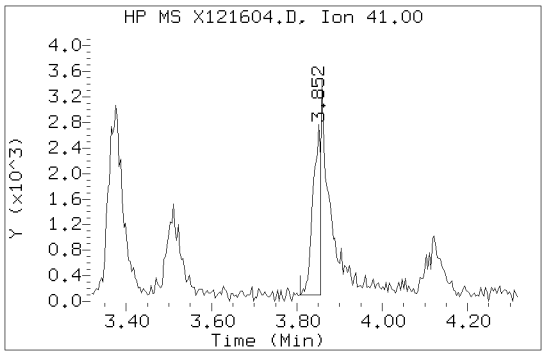
Methacrylonitrile (126-98-7)

Reason Code:

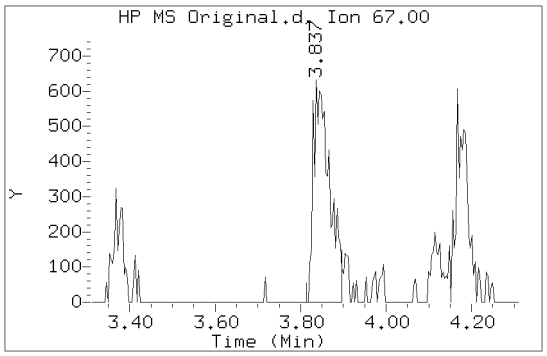
BEFORE
MASS
41
AREA
7966
HEIGHT
3370
27-Dec-2022
16:03
linh
pham



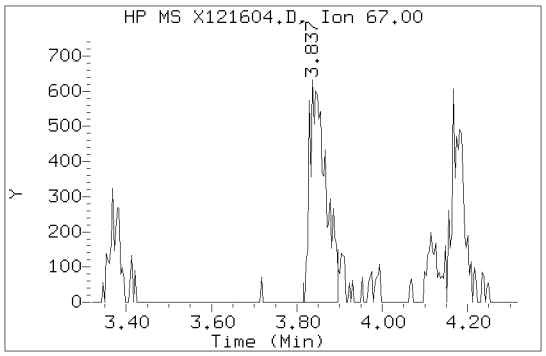
AFTER
MASS
41
AREA
3285
HEIGHT
2668
27-Dec-2022
16:07
linh
pham



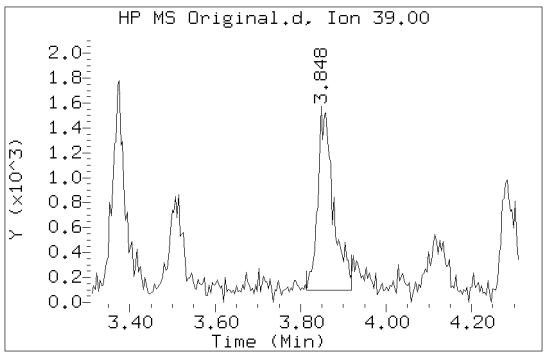
BEFORE
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:03
linh
pham



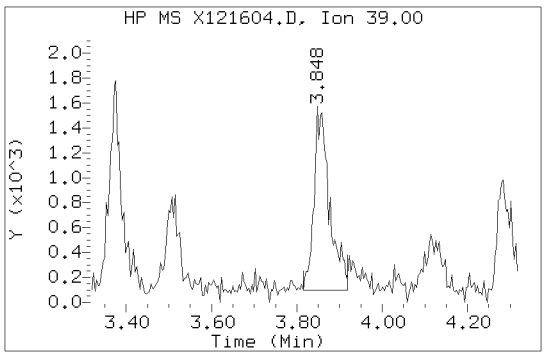
AFTER
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:03
linh
pham



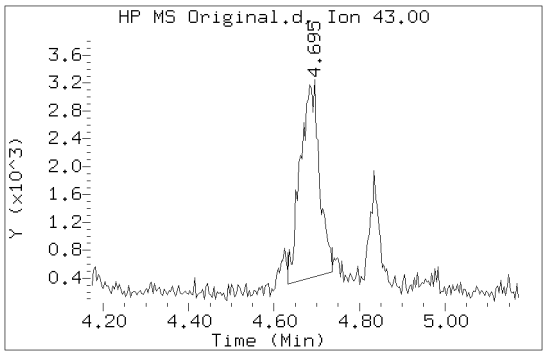
AFTER
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:07
linh
pham



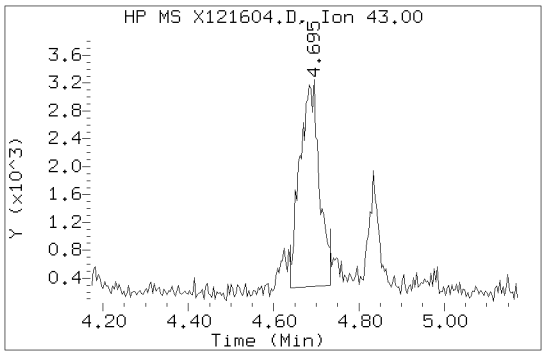
Isobutyl Alcohol (78-83-1)

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

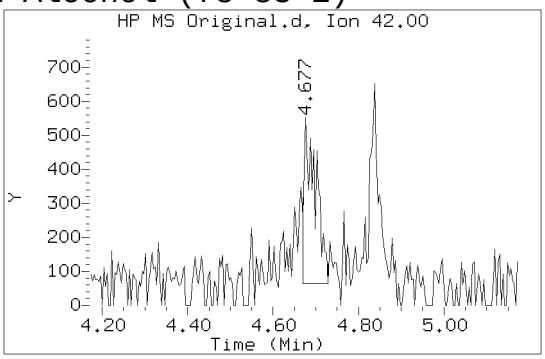


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Isobutyl Alcohol (78-83-1)

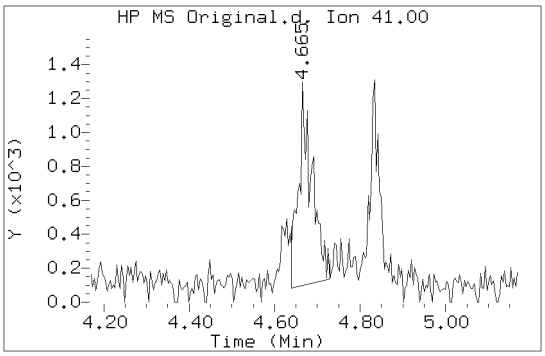
BEFORE

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:03
linh
pham



BEFORE

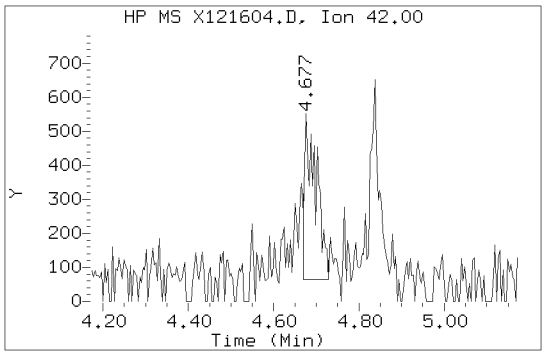
MASS
41
AREA
2650
HEIGHT
1200
27-Dec-2022
16:03
linh
pham



Reason Code:

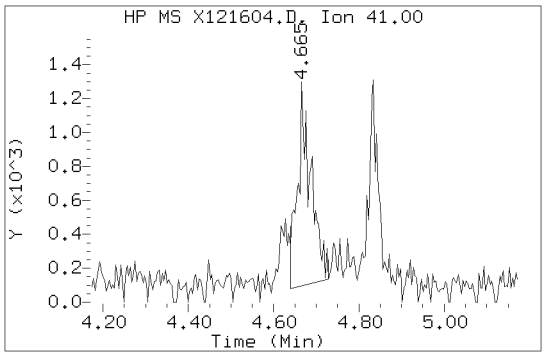
AFTER

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:07
linh
pham



AFTER

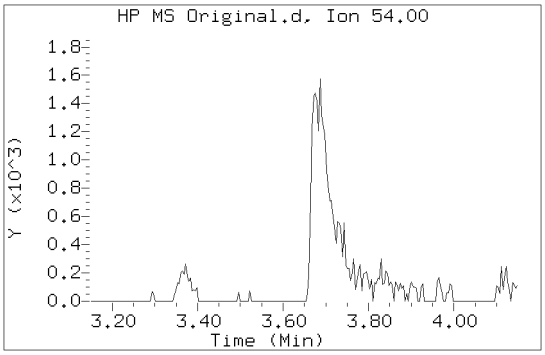
MASS
41
AREA
2656
HEIGHT
1201
27-Dec-2022
16:07
linh
pham



Propionitrile (107-12-0)

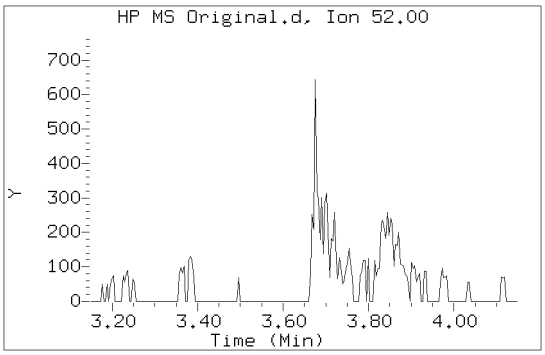
BEFORE

MASS
54
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

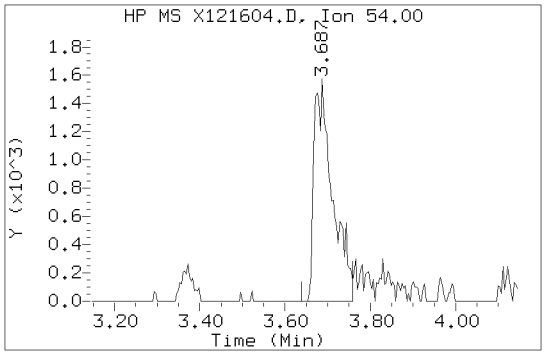
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

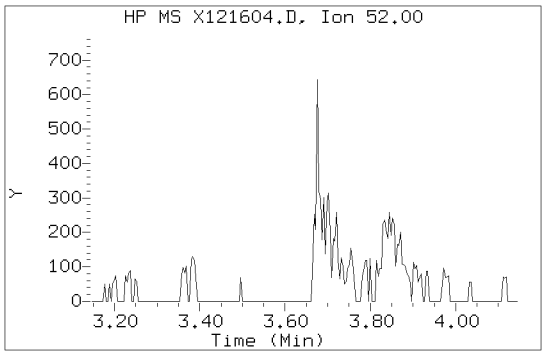
AFTER

MASS
54
AREA
4742
HEIGHT
1574
27-Dec-2022
16:07
linh
pham



AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



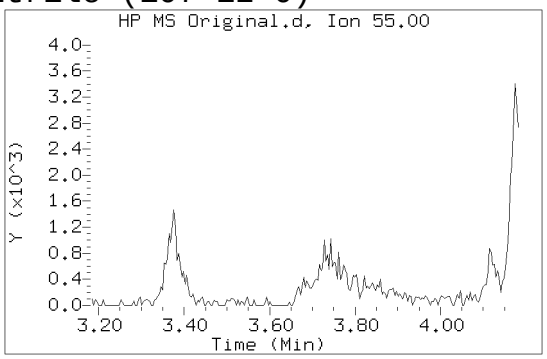
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Propionitrile (107-12-0)

Reason Code:

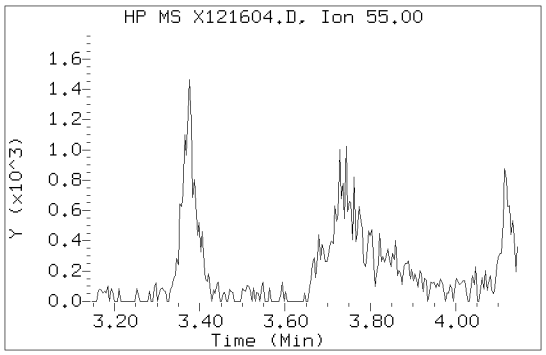
BEFORE

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

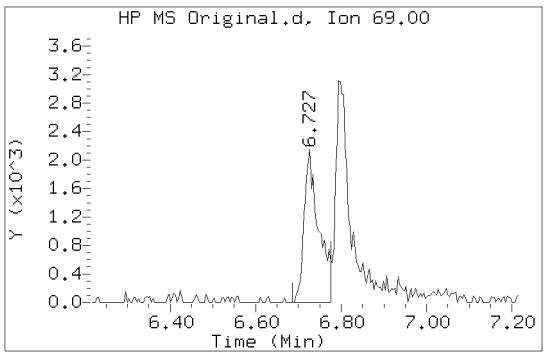


Ethyl Methacrylate (97-63-2)

Reason Code:

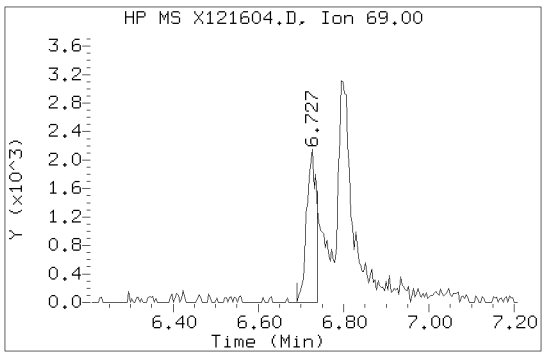
BEFORE

MASS
69
AREA
5177
HEIGHT
2156
27-Dec-2022
16:03
linh
pham



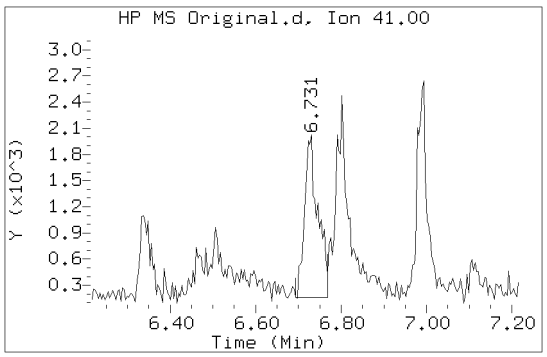
AFTER

MASS
69
AREA
3303
HEIGHT
2156
27-Dec-2022
16:07
linh
pham



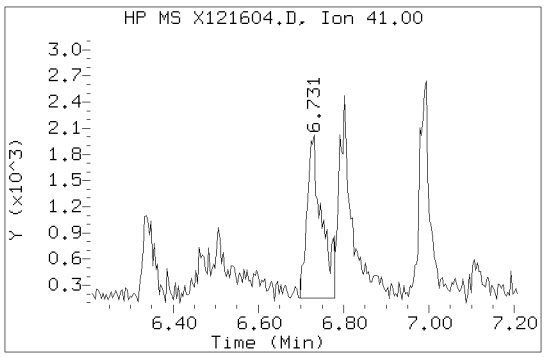
BEFORE

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

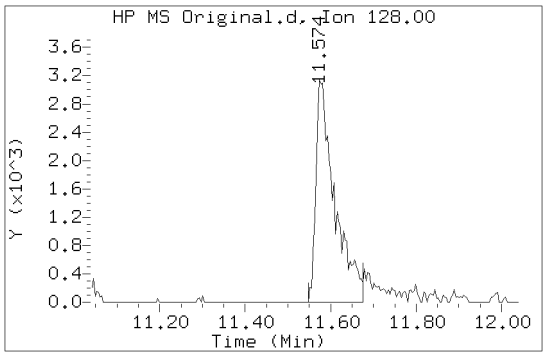


Naphthalene (91-20-3)

Reason Code:

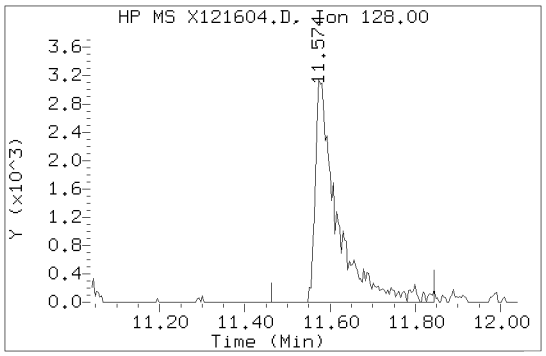
BEFORE

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



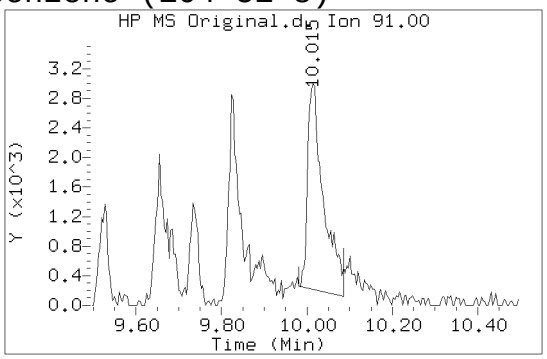
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

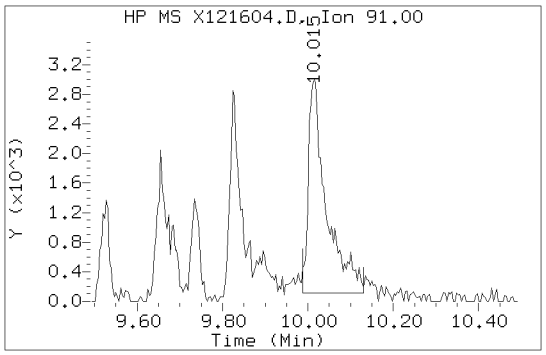
BEFORE

MASS
91
AREA
7194
HEIGHT
2783
27-Dec-2022
16:03
linh
pham



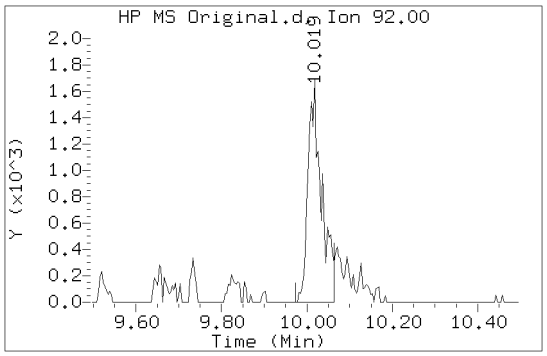
AFTER

MASS
91
AREA
8459
HEIGHT
2887
27-Dec-2022
16:07
linh
pham



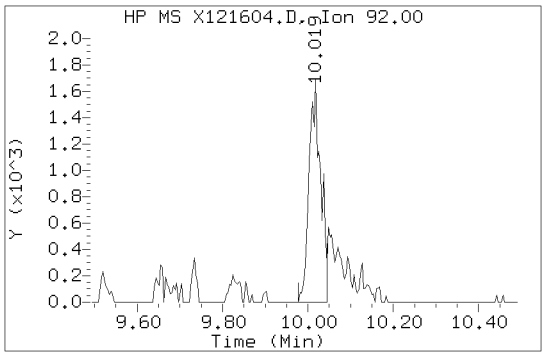
BEFORE

MASS
92
AREA
3696
HEIGHT
1686
27-Dec-2022
16:03
linh
pham



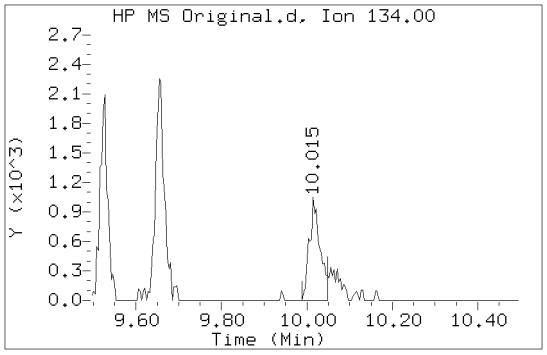
AFTER

MASS
92
AREA
3188
HEIGHT
1686
27-Dec-2022
16:07
linh
pham



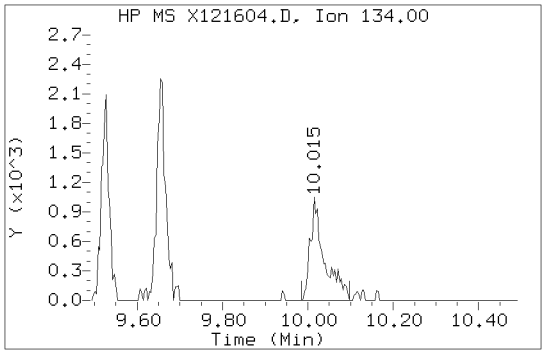
BEFORE

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

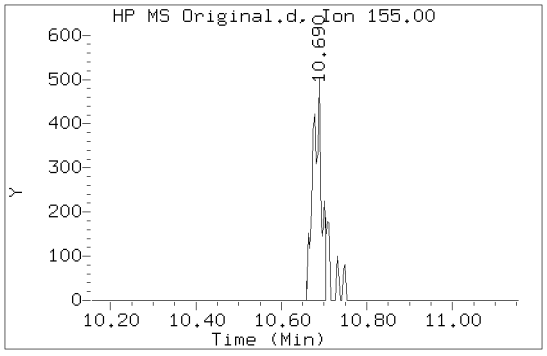


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

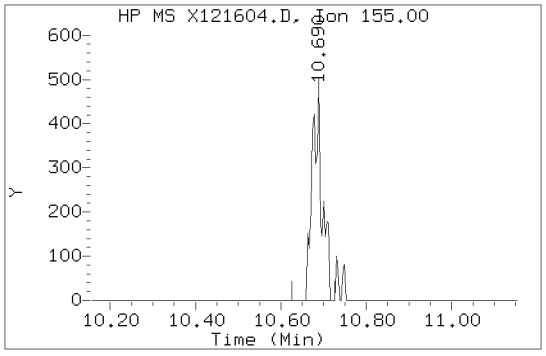
BEFORE

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



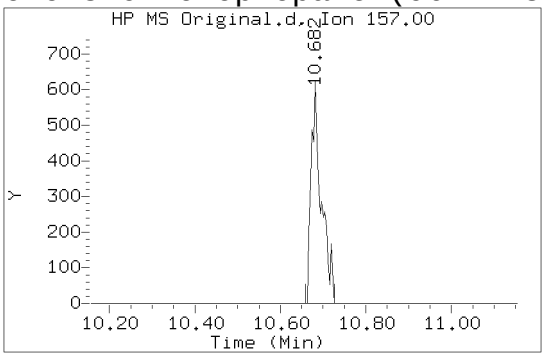
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

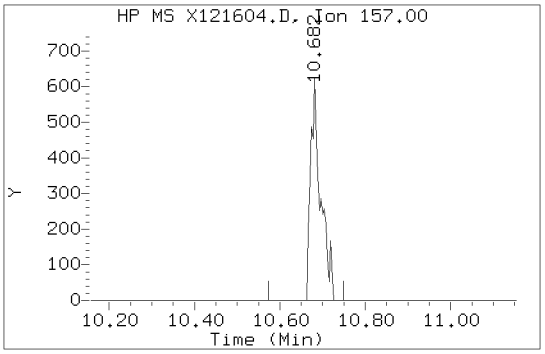
BEFORE

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:03
linh
pham



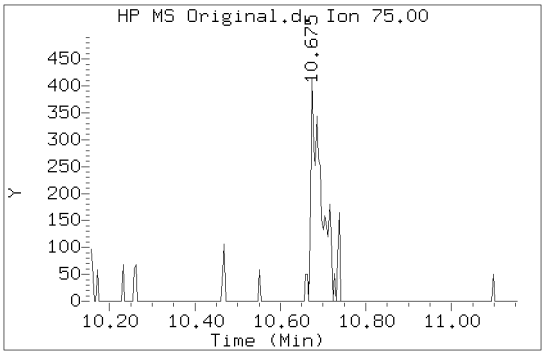
AFTER

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:07
linh
pham



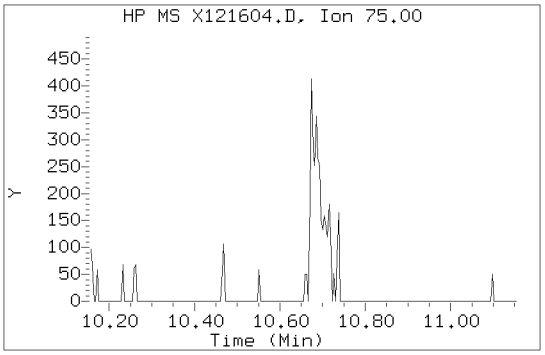
BEFORE

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

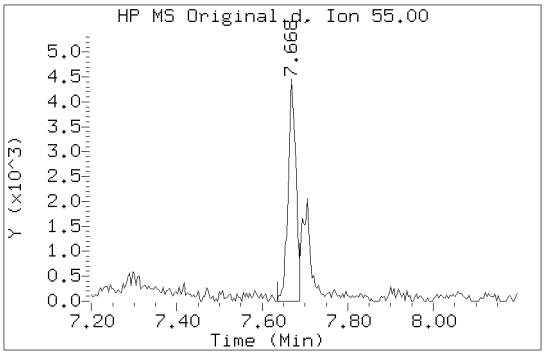


1-Chlorohexane (544-10-5)

Reason Code:

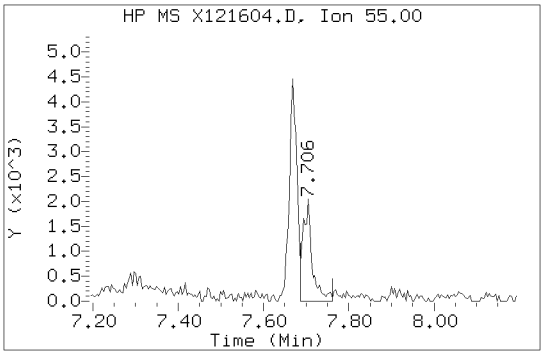
BEFORE

MASS
55
AREA
5660
HEIGHT
4460
27-Dec-2022
16:03
linh
pham



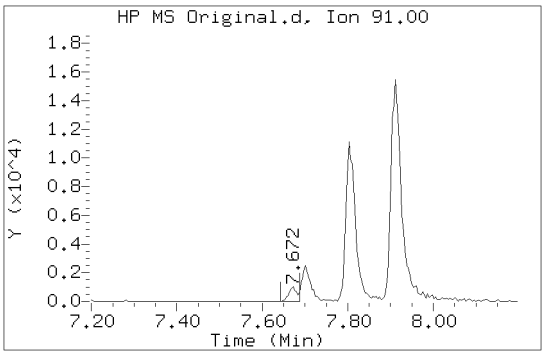
AFTER

MASS
55
AREA
3155
HEIGHT
2048
27-Dec-2022
16:07
linh
pham



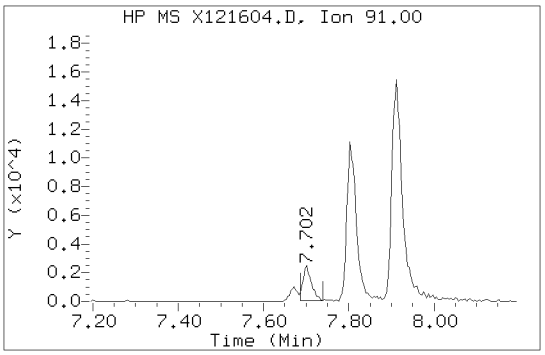
BEFORE

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

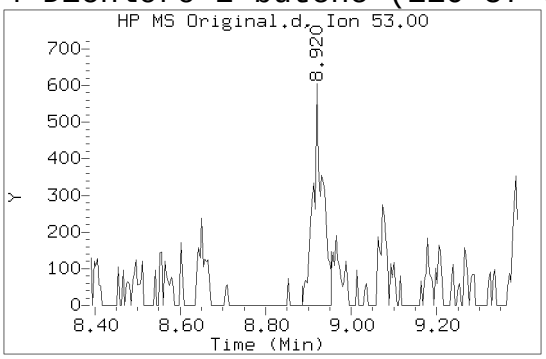


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

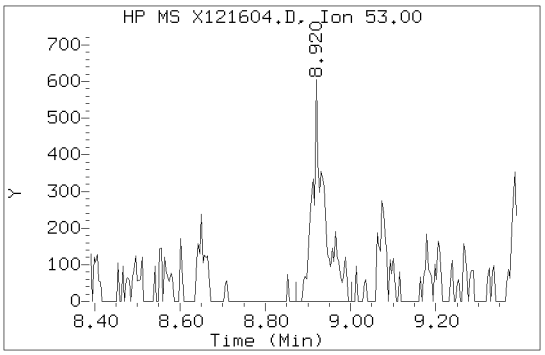
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

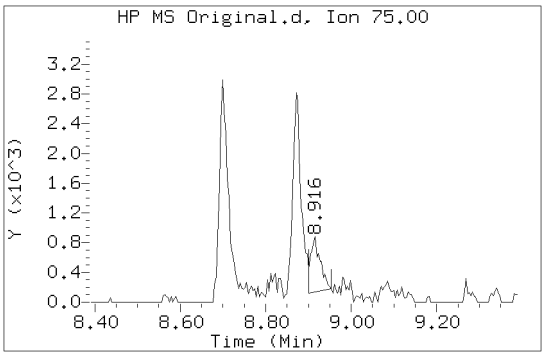
BEFORE
MASS
53
AREA
956
HEIGHT
605
27-Dec-2022
16:03
linh
pham



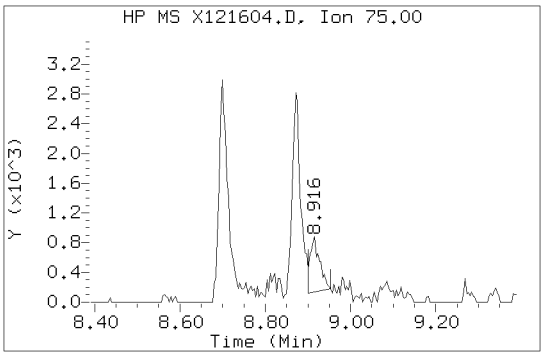
AFTER
MASS
53
AREA
1196
HEIGHT
605
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:03
linh
pham



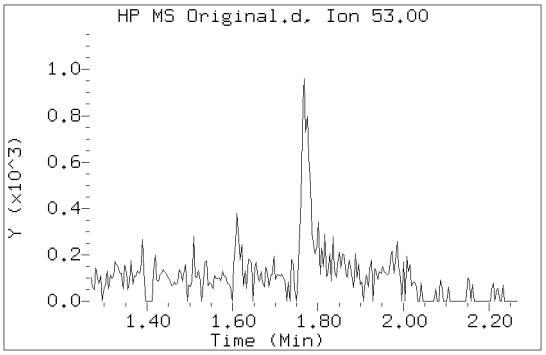
AFTER
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:07
linh
pham



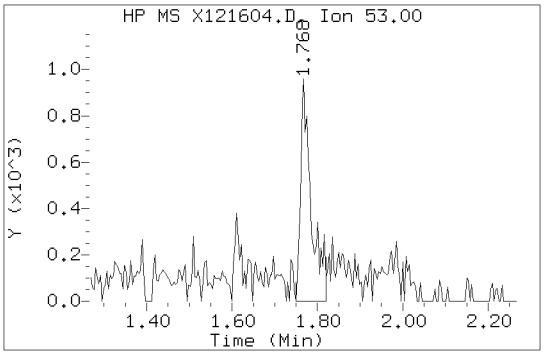
Chloroprene (126-99-8)

Reason Code:

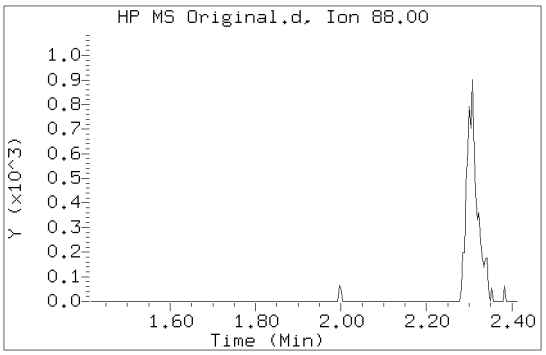
BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



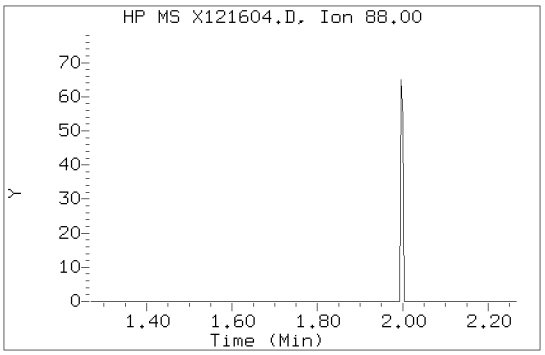
AFTER
MASS
53
AREA
1686
HEIGHT
959
27-Dec-2022
16:07
linh
pham



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

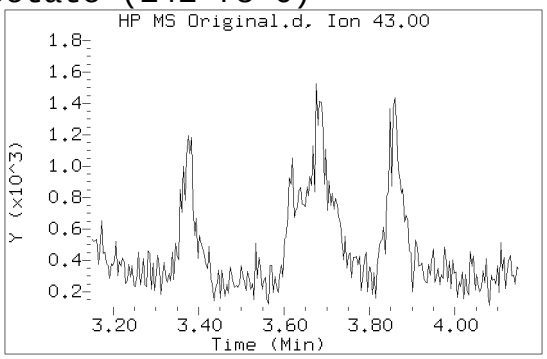


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

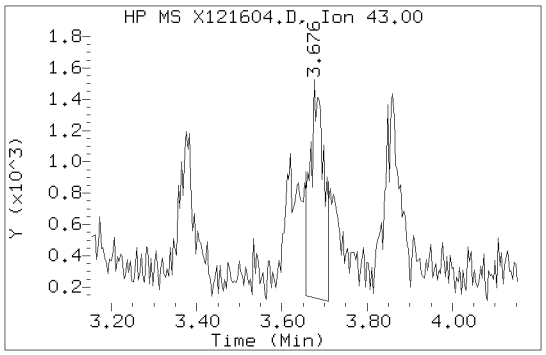
Ethyl Acetate (141-78-6)

Reason Code:

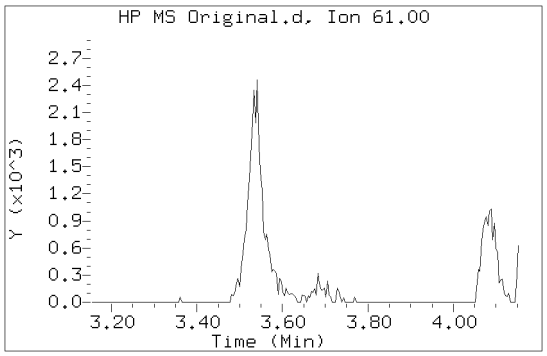
BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



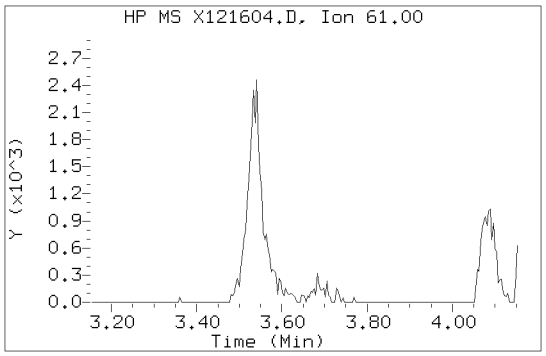
AFTER
MASS
43
AREA
3144
HEIGHT
1392
27-Dec-2022
16:07
linh
pham



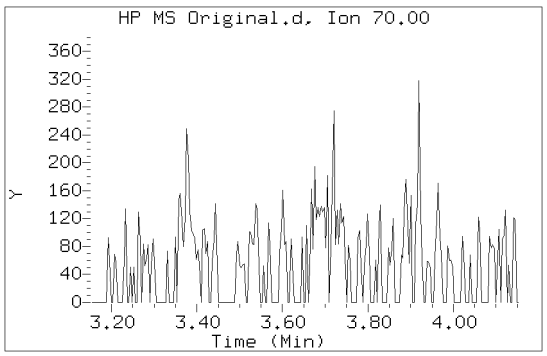
BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



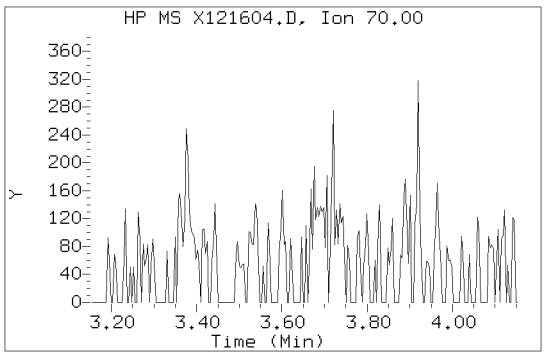
AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



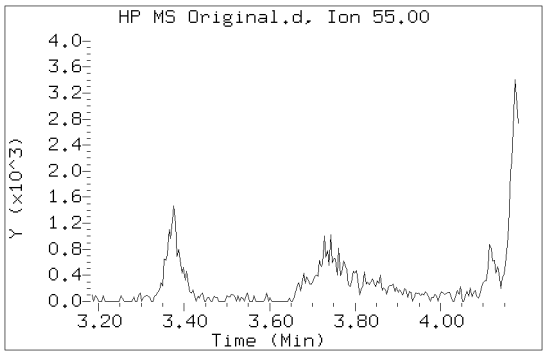
AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



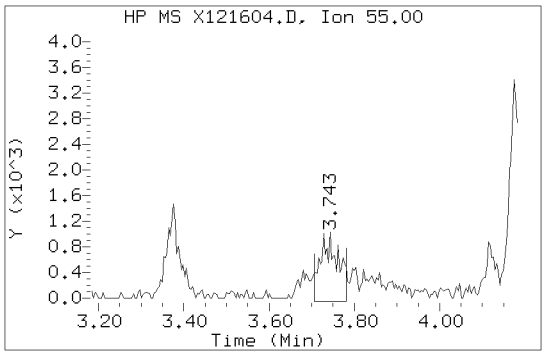
Methyl Acrylate (96-33-3)

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



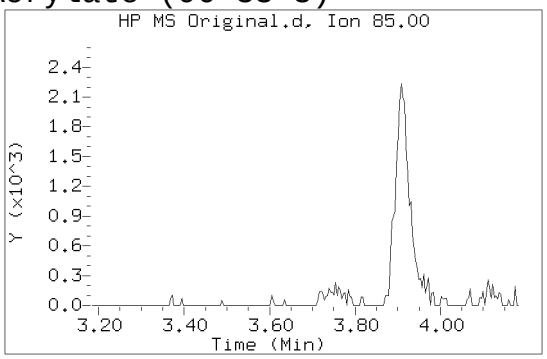
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acrylate (96-33-3)

Reason Code:

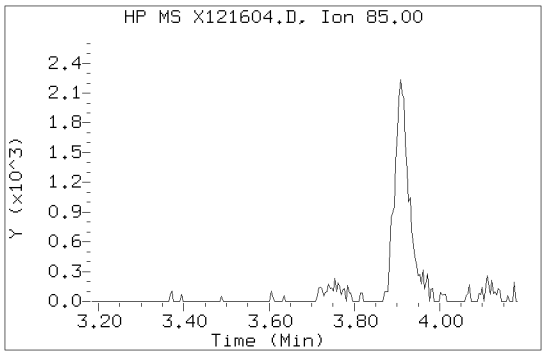
BEFORE

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

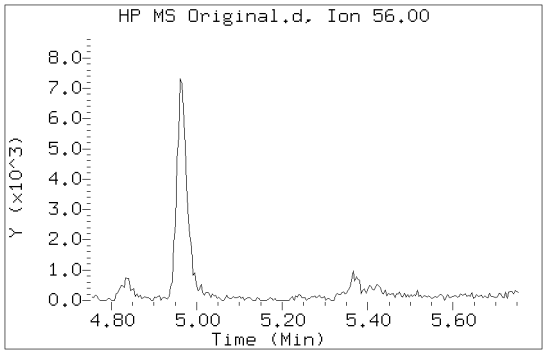


n-Butanol (71-36-3)

Reason Code:

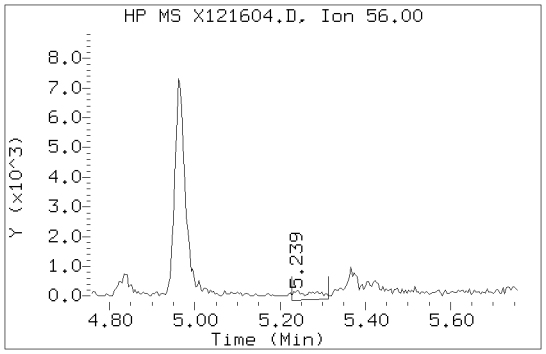
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



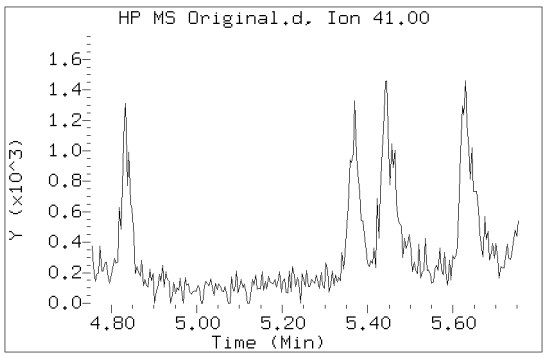
AFTER

MASS
56
AREA
1171
HEIGHT
317
27-Dec-2022
16:07
linh
pham



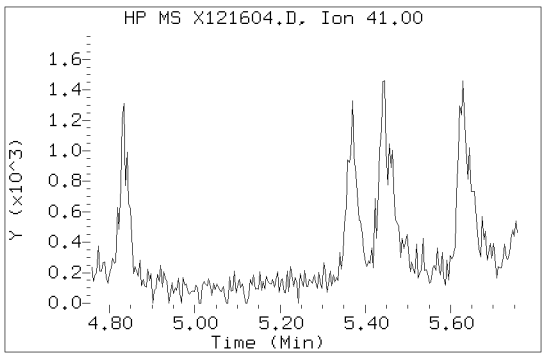
BEFORE

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

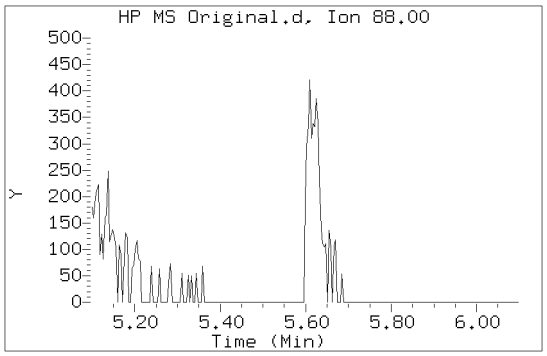


1,4-Dioxane ()

Reason Code:

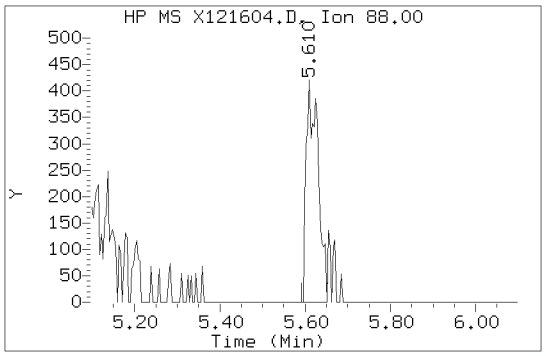
BEFORE

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



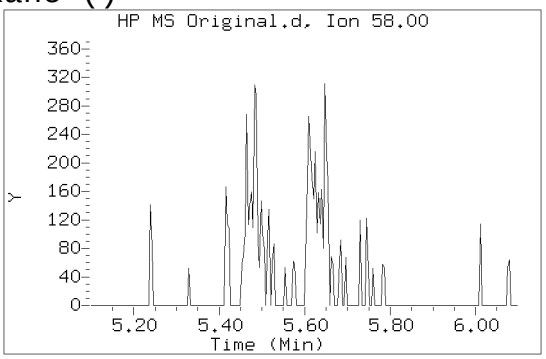
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

1,4-Dioxane ()

Reason Code:

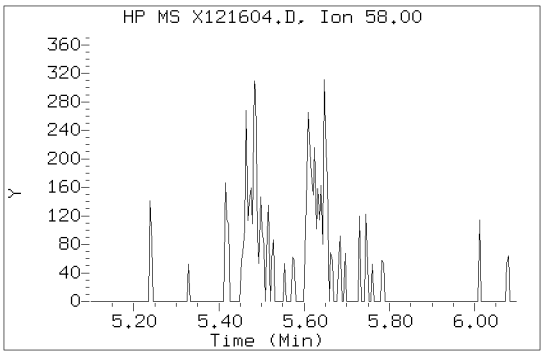
BEFORE

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

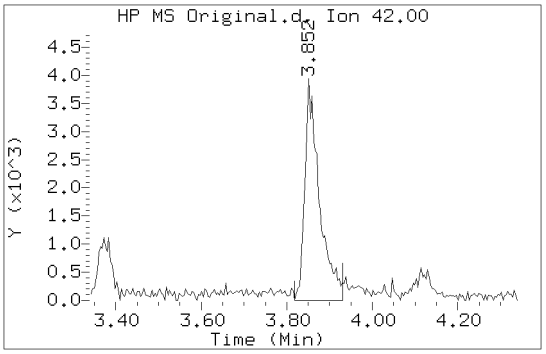


Tetrahydrofuran (109-99-9)

Reason Code:

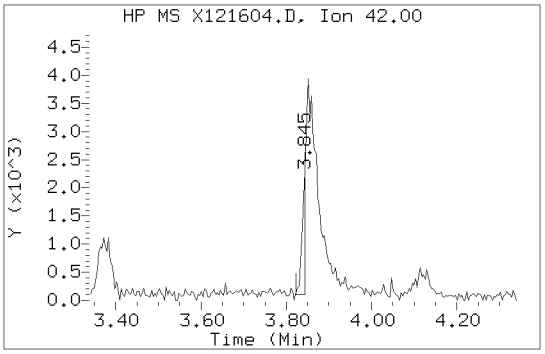
BEFORE

MASS
42
AREA
9396
HEIGHT
3939
27-Dec-2022
16:03
linh
pham



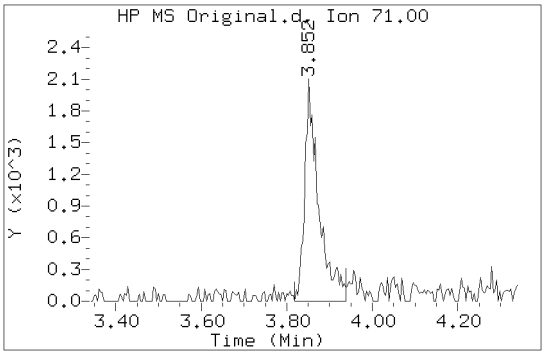
AFTER

MASS
42
AREA
1361
HEIGHT
2190
27-Dec-2022
16:07
linh
pham



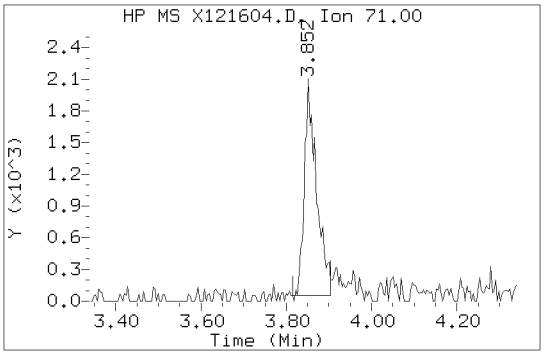
BEFORE

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

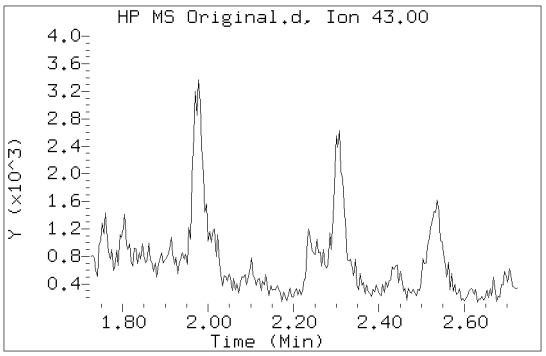


Methyl Acetate (79-20-9)

Reason Code:

BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

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968
27-Dec-2022
16:07
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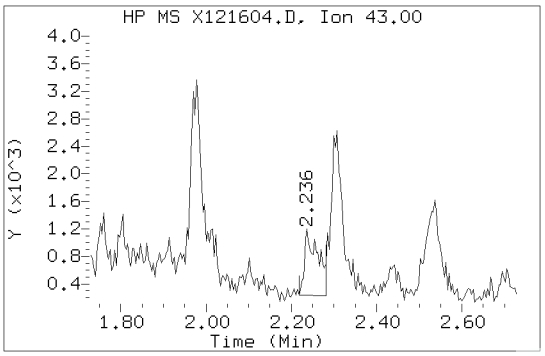

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acetate (79-20-9)

BEFORE

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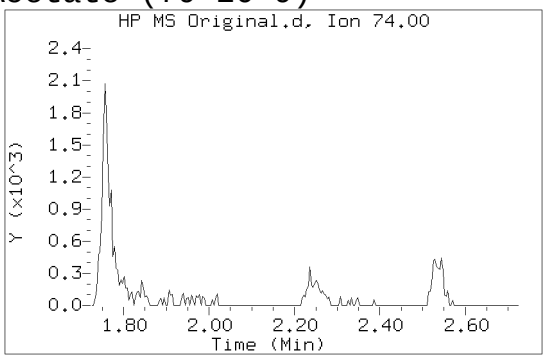

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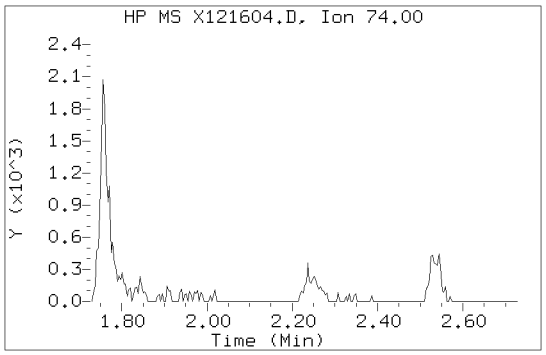

Methylcyclohexane (108-87-2)

BEFORE

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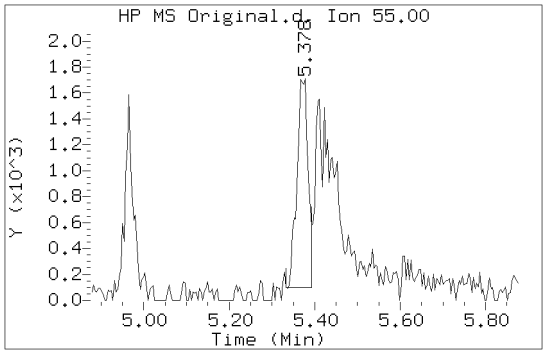

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AFTER

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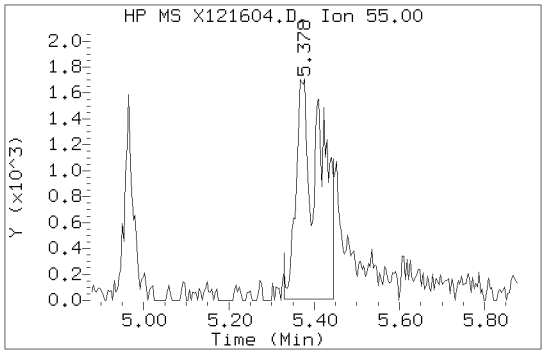

BEFORE

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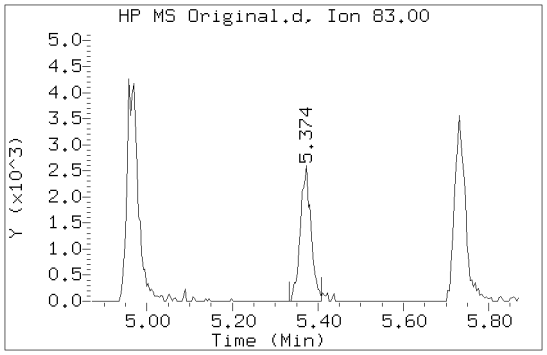

AFTER

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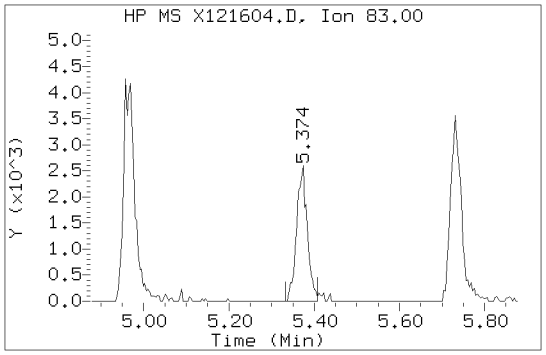

Acetaldehyde (75-07-0)

BEFORE

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HEIGHT
0
27-Dec-2022
16:03
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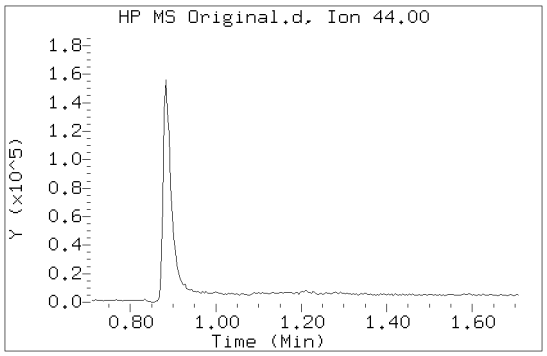

Reason Code:

AFTER

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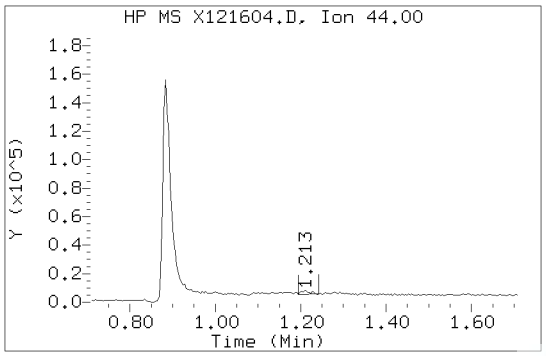

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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27-Dec-2022
16:03
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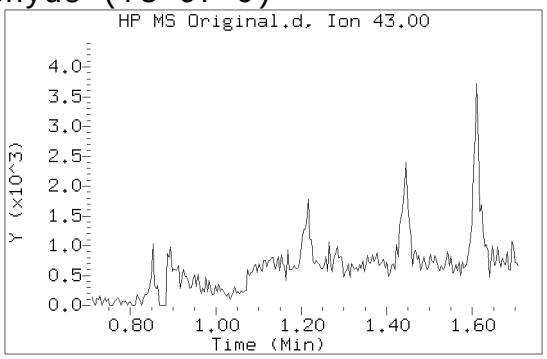

AFTER

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16:07
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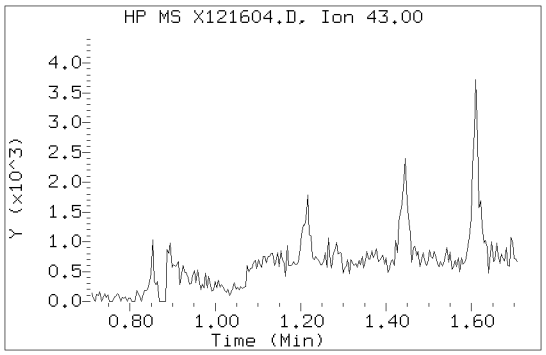

BEFORE

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16:03
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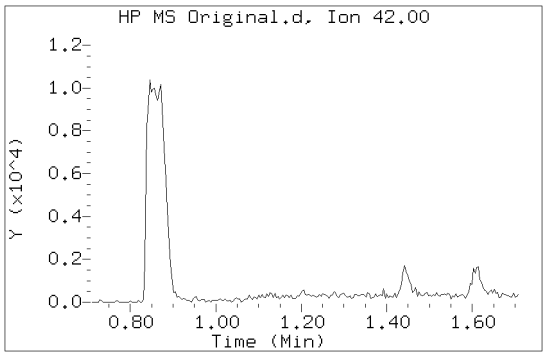

AFTER

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16:07
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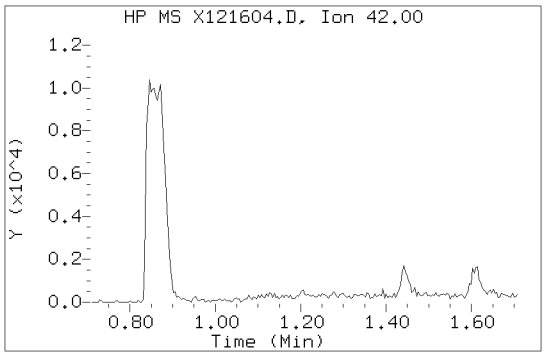

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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AREA
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16:03
linh
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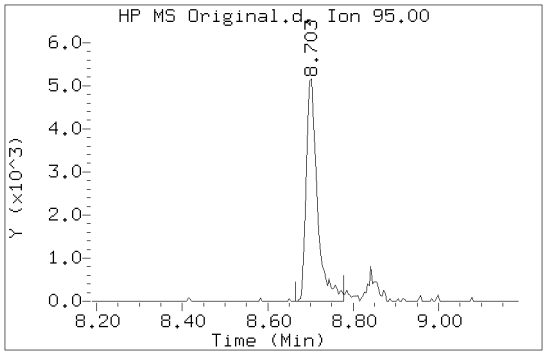

AFTER

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16:07
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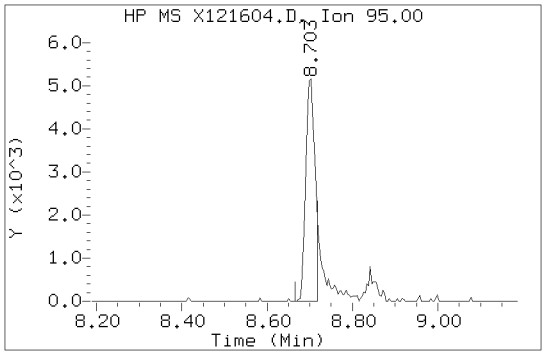

BEFORE

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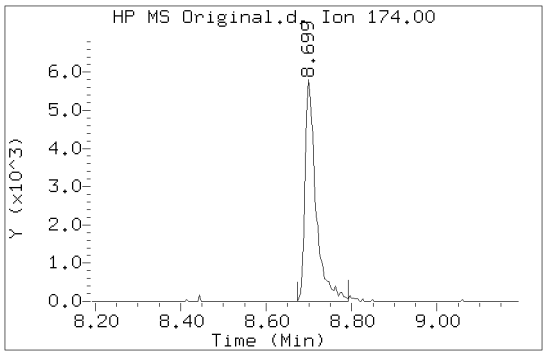

AFTER

MASS
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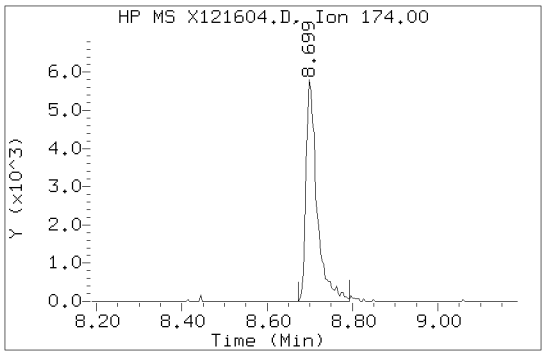

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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176
AREA
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HEIGHT
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16:03
linh
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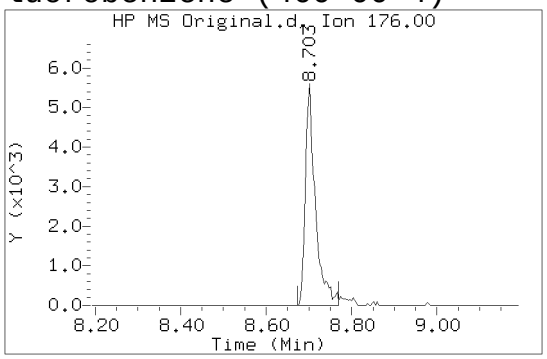

AFTER

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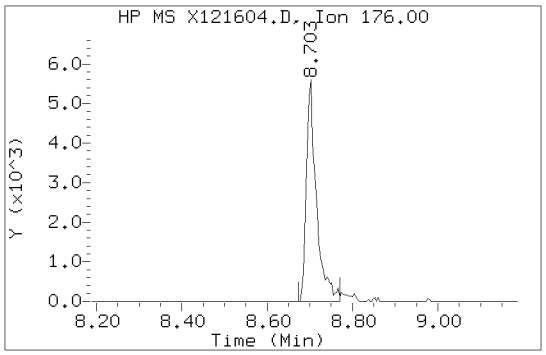

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D Page 1
Report Date: 27-Dec-2022 16:07

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

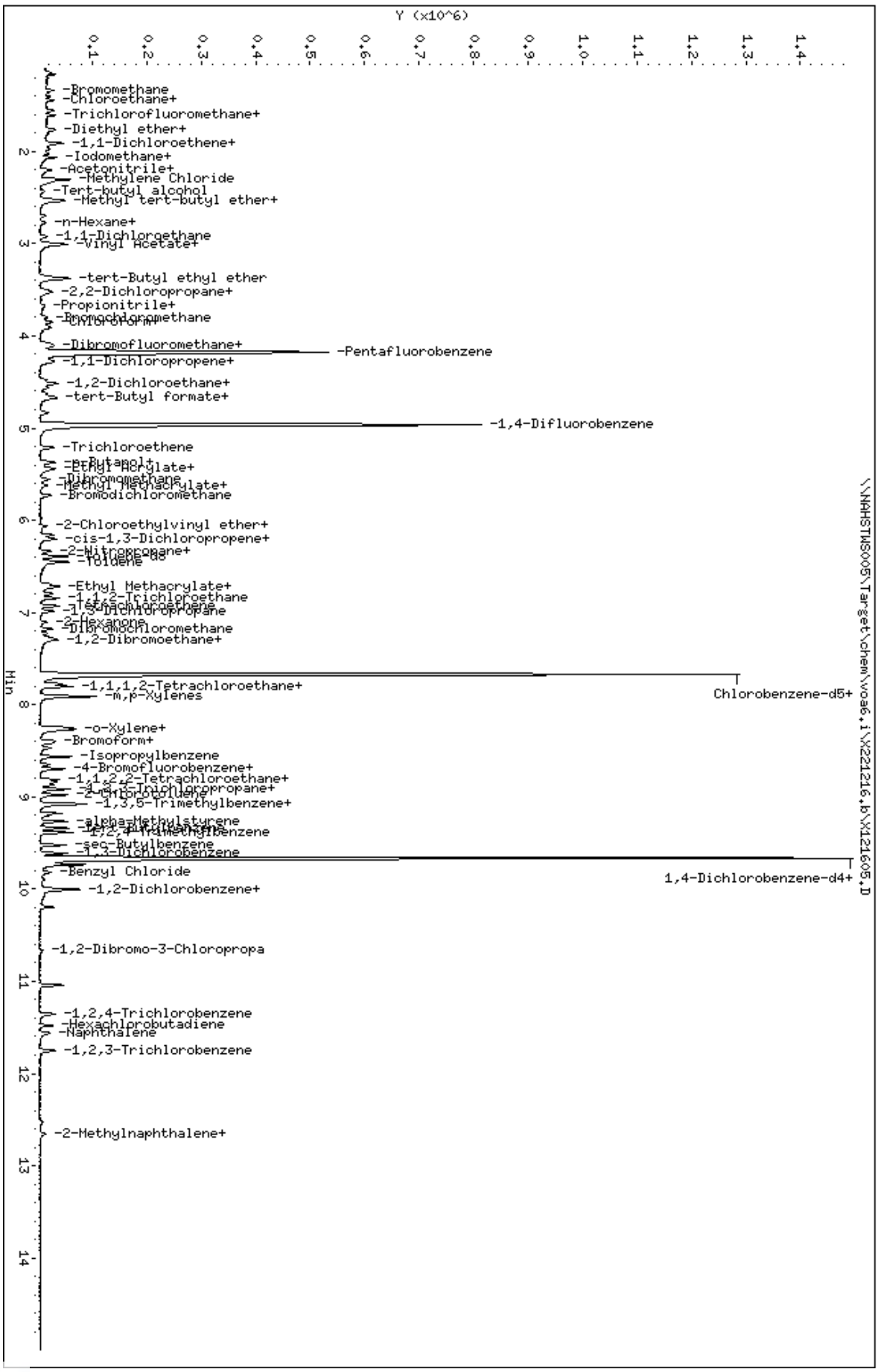
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.720	3.720	(0.891)	5443	2.00000	1.75(M)
	162 Butyl acrylate	55	8.267	8.267	(1.078)	15015	2.00000	1.77
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	6239	2.00000	2.33
	3 Chloromethane	50	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

	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.



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

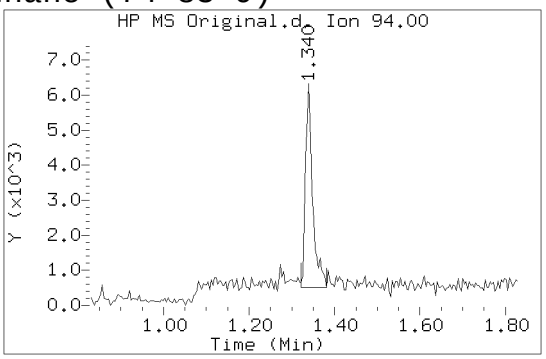
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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)

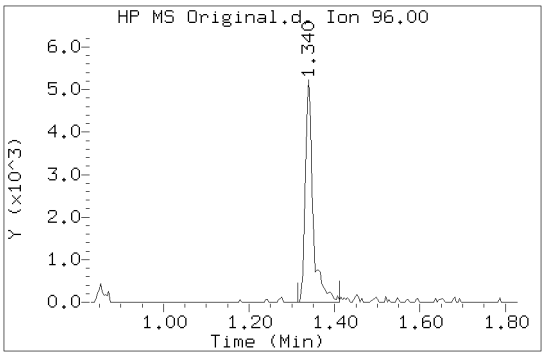
BEFORE

MASS
94
AREA
6762
HEIGHT
5808
27-Dec-2022
16:03
linh
pham



BEFORE

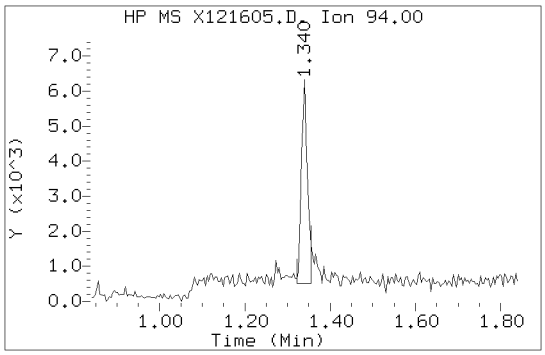
MASS
96
AREA
6661
HEIGHT
5227
27-Dec-2022
16:03
linh
pham



Reason Code:

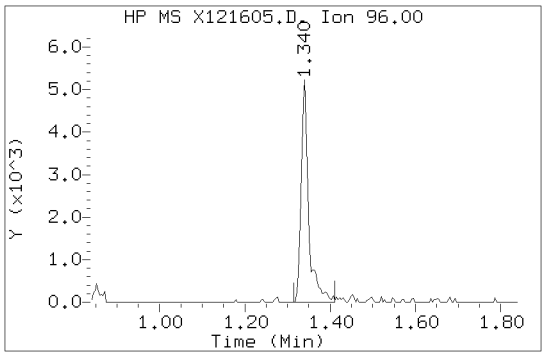
AFTER

MASS
94
AREA
5996
HEIGHT
5808
27-Dec-2022
16:07
linh
pham



AFTER

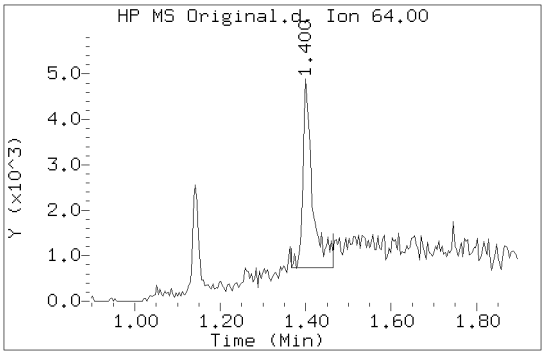
MASS
96
AREA
6661
HEIGHT
5227
27-Dec-2022
16:07
linh
pham



Chloroethane (75-00-3)

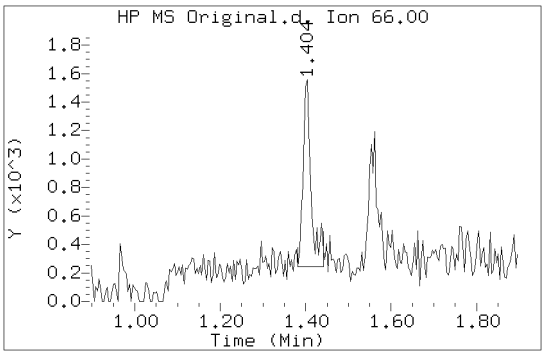
BEFORE

MASS
64
AREA
6641
HEIGHT
4162
27-Dec-2022
16:03
linh
pham



BEFORE

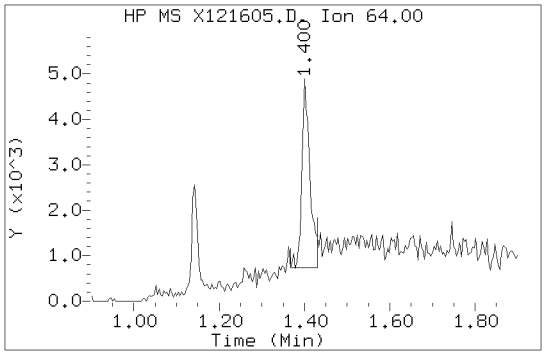
MASS
66
AREA
1745
HEIGHT
1315
27-Dec-2022
16:03
linh
pham



Reason Code:

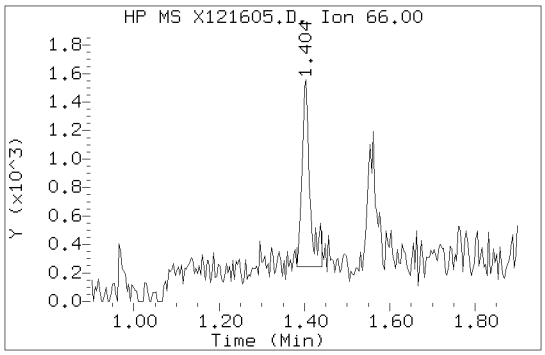
AFTER

MASS
64
AREA
5667
HEIGHT
4162
27-Dec-2022
16:07
linh
pham



AFTER

MASS
66
AREA
1745
HEIGHT
1315
27-Dec-2022
16:07
linh
pham



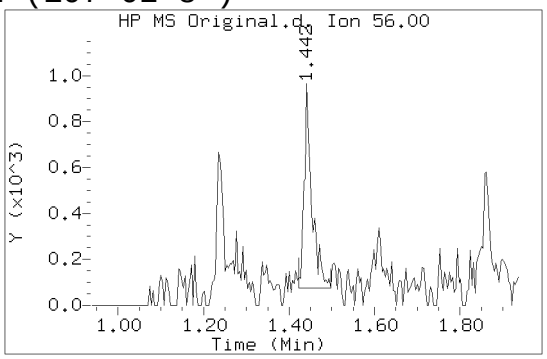
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Acrolein (107-02-8)

Reason Code:

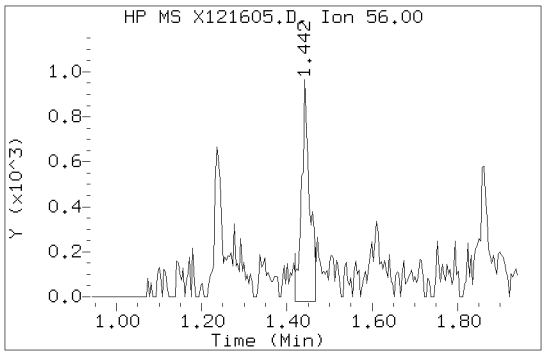
BEFORE

MASS
56
AREA
1122
HEIGHT
890
27-Dec-2022
16:03
linh
pham



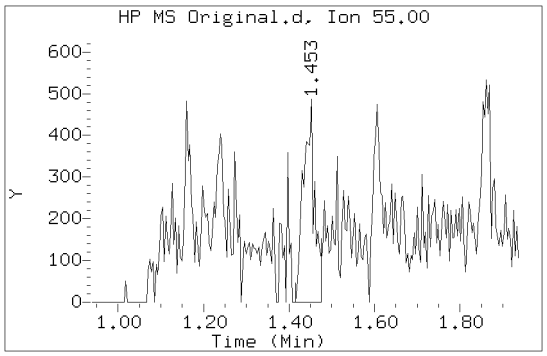
AFTER

MASS
56
AREA
1317
HEIGHT
985
27-Dec-2022
16:07
linh
pham



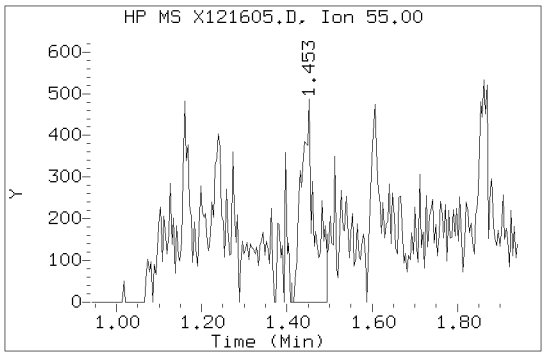
BEFORE

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

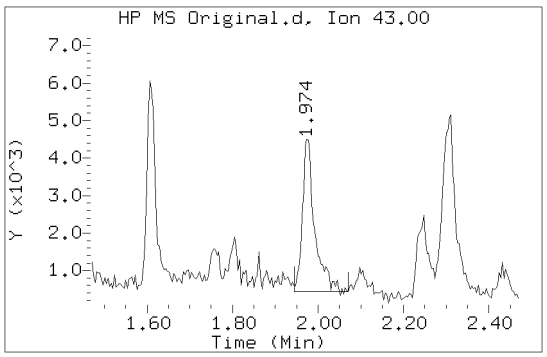


Acetone (67-64-1)

Reason Code:

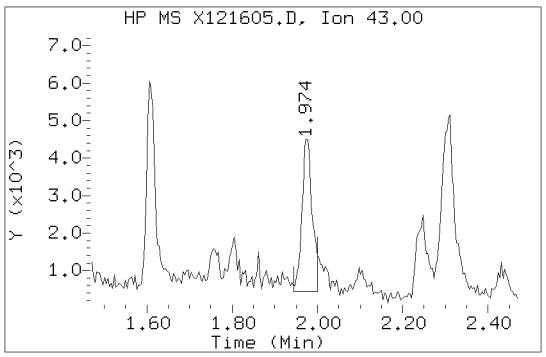
BEFORE

MASS
43
AREA
8369
HEIGHT
4066
27-Dec-2022
16:03
linh
pham



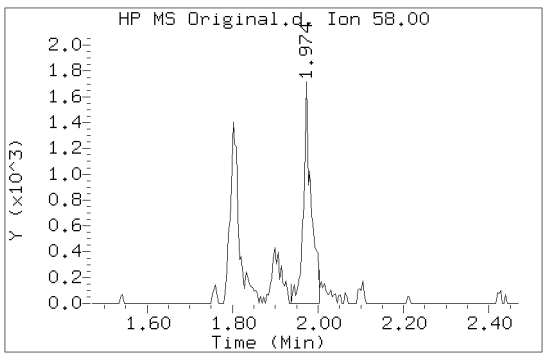
AFTER

MASS
43
AREA
7041
HEIGHT
4066
27-Dec-2022
16:07
linh
pham



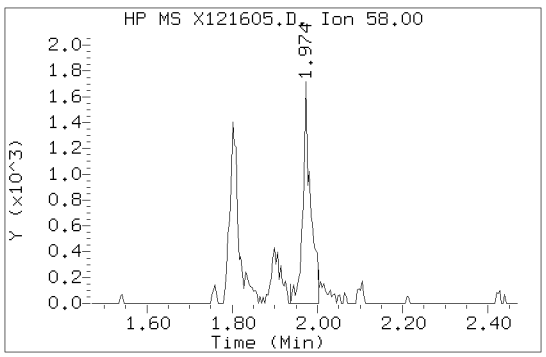
BEFORE

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

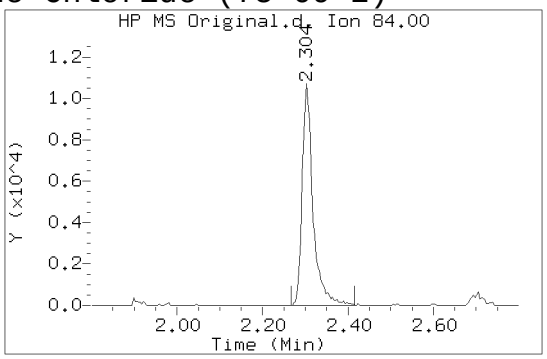


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Methylene Chloride (75-09-2)

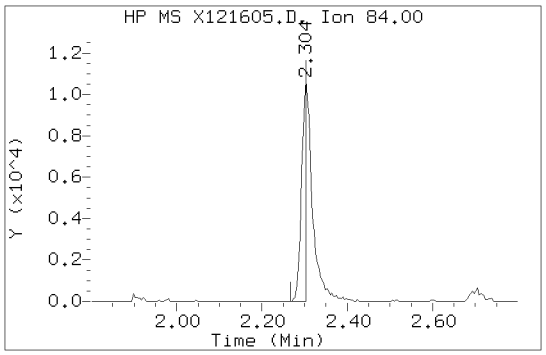
BEFORE

MASS
84
AREA
19299
HEIGHT
10710
27-Dec-2022
16:03
linh
pham



AFTER

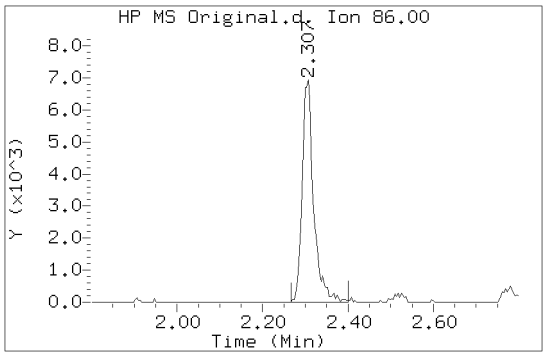
MASS
84
AREA
9194
HEIGHT
10710
27-Dec-2022
16:07
linh
pham



Reason Code:

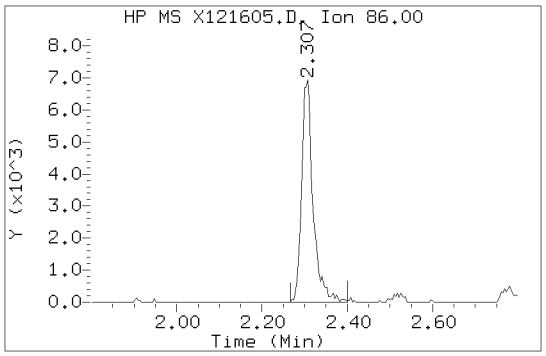
BEFORE

MASS
86
AREA
13231
HEIGHT
6936
27-Dec-2022
16:03
linh
pham



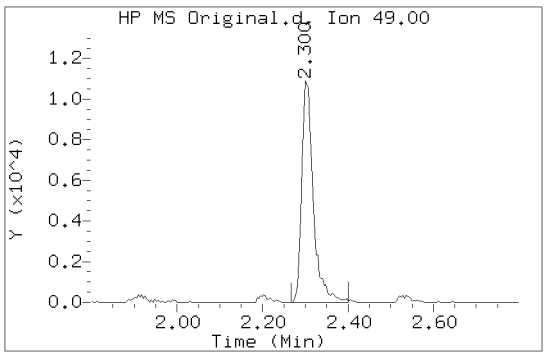
AFTER

MASS
86
AREA
13231
HEIGHT
6936
27-Dec-2022
16:07
linh
pham



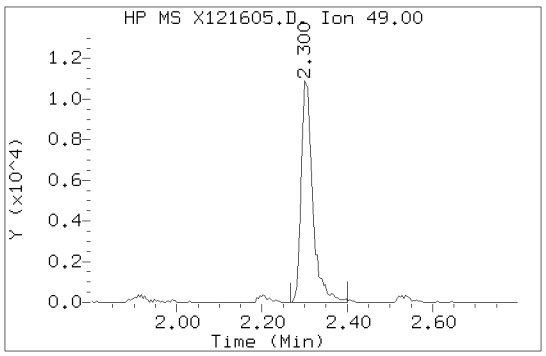
BEFORE

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

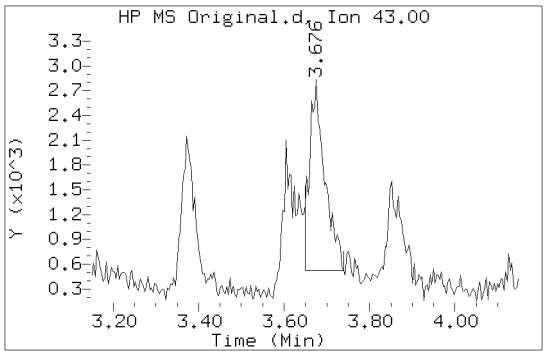


2-Butanone (78-93-3)

Reason Code:

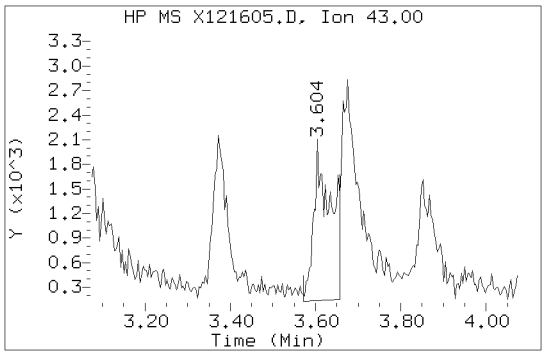
BEFORE

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



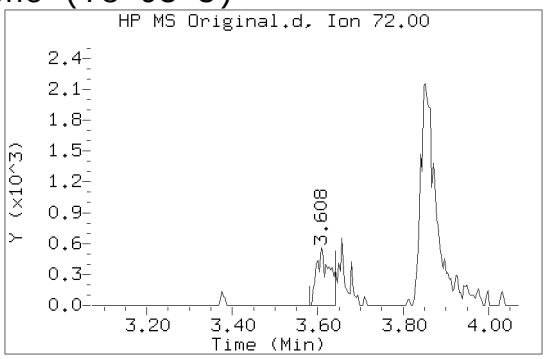
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

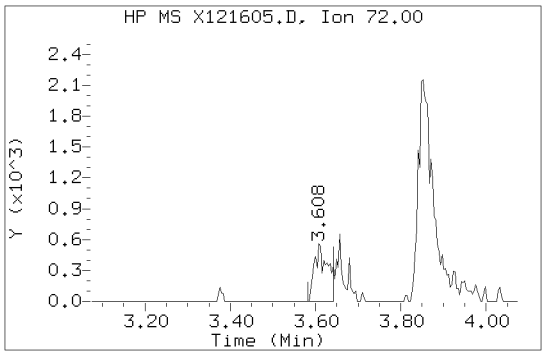
BEFORE

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

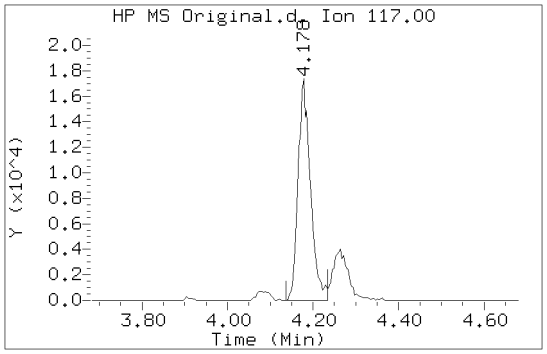


Carbon Tetrachloride (56-23-5)

Reason Code:

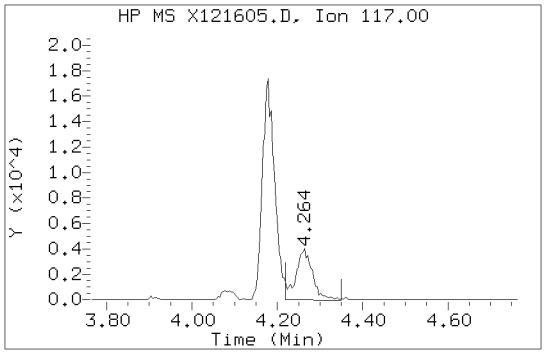
BEFORE

MASS
117
AREA
35555
HEIGHT
17376
27-Dec-2022
16:03
linh
pham



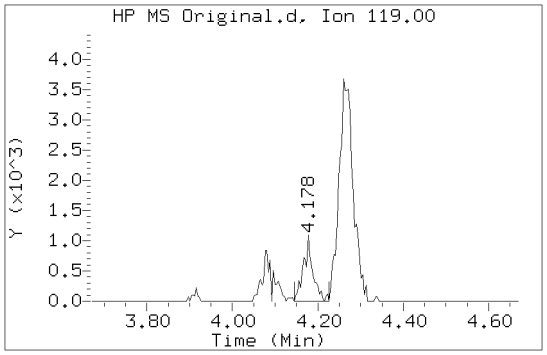
AFTER

MASS
117
AREA
11092
HEIGHT
4036
27-Dec-2022
16:07
linh
pham



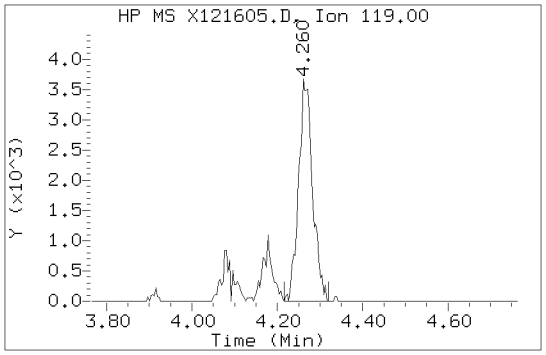
BEFORE

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

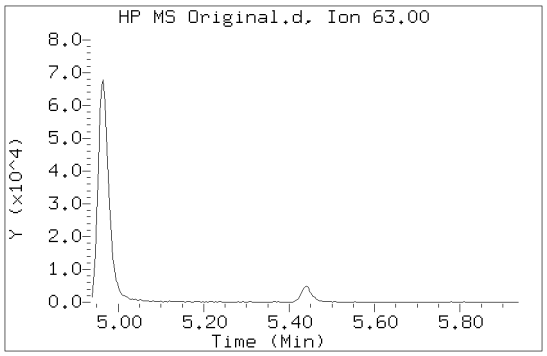


1,2-Dichloropropane (78-87-5)

Reason Code:

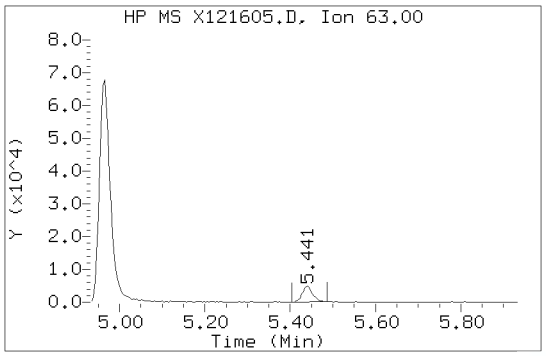
BEFORE

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



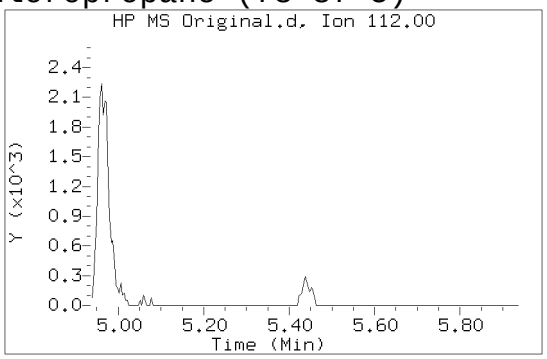
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

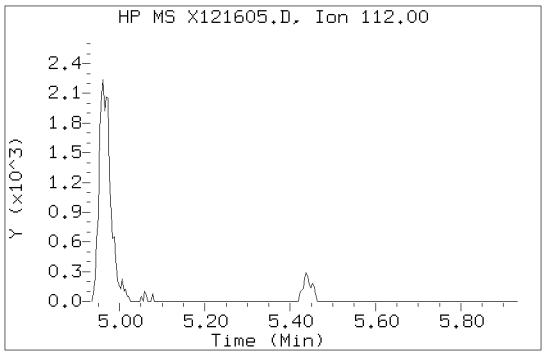
BEFORE

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

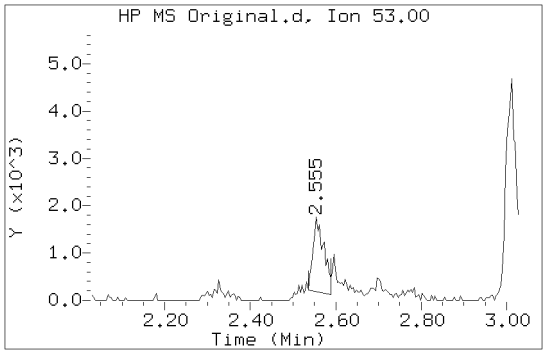


Acrylonitrile (107-13-1)

Reason Code:

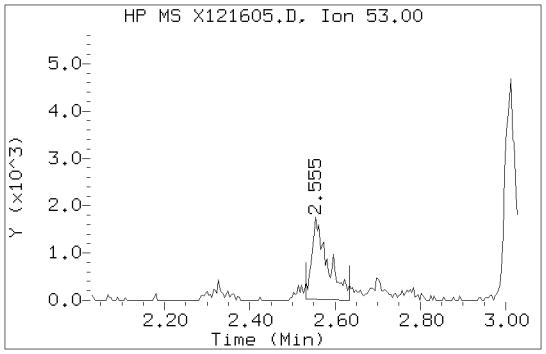
BEFORE

MASS
53
AREA
2810
HEIGHT
1577
27-Dec-2022
16:03
linh
pham



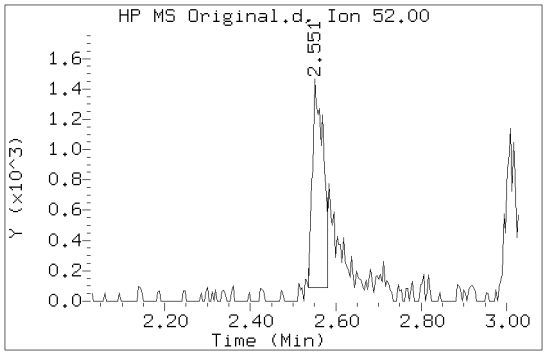
AFTER

MASS
53
AREA
4557
HEIGHT
1735
27-Dec-2022
16:07
linh
pham



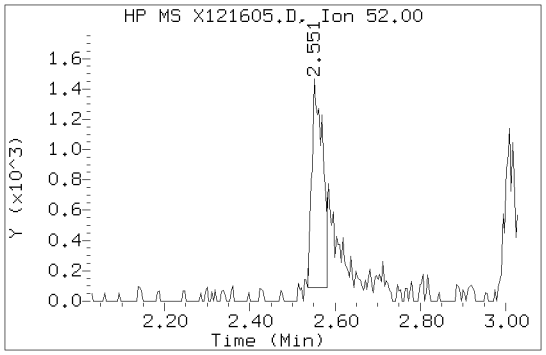
BEFORE

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:03
linh
pham



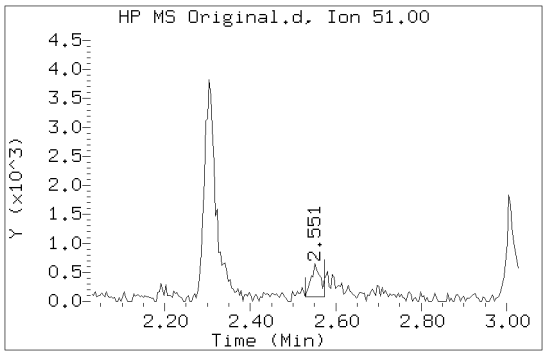
AFTER

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:07
linh
pham



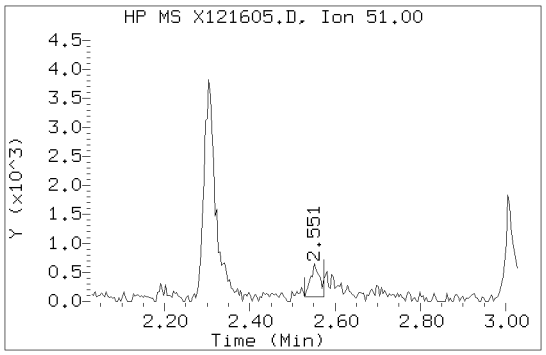
BEFORE

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

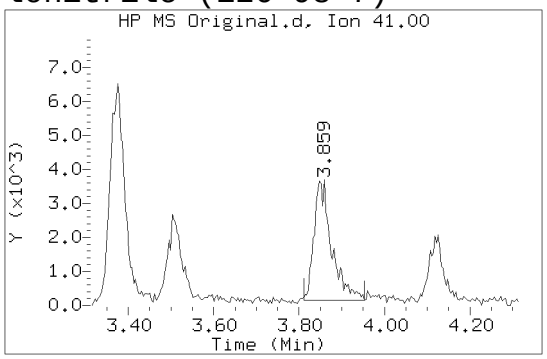


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

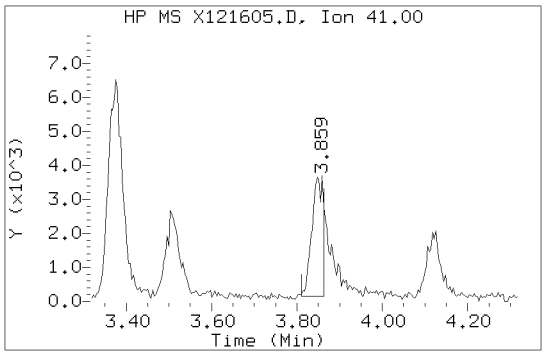
Methacrylonitrile (126-98-7)

Reason Code:

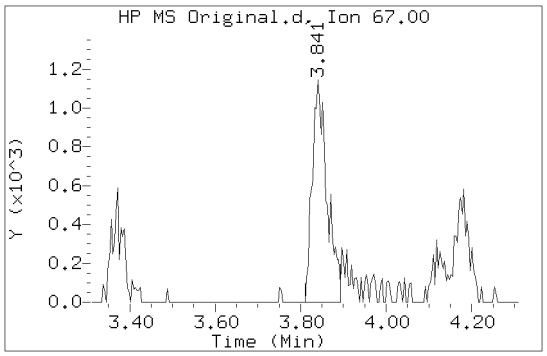
BEFORE
MASS
41
AREA
10013
HEIGHT
3544
27-Dec-2022
16:03
linh
pham



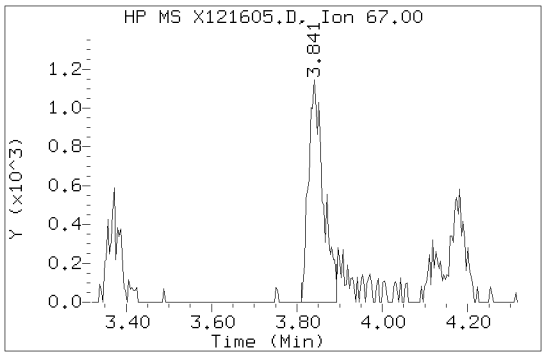
AFTER
MASS
41
AREA
6388
HEIGHT
3544
27-Dec-2022
16:07
linh
pham



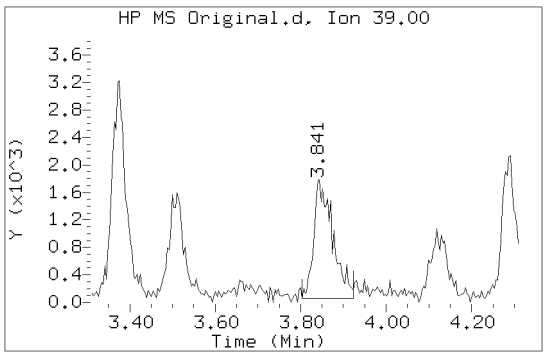
BEFORE
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:03
linh
pham



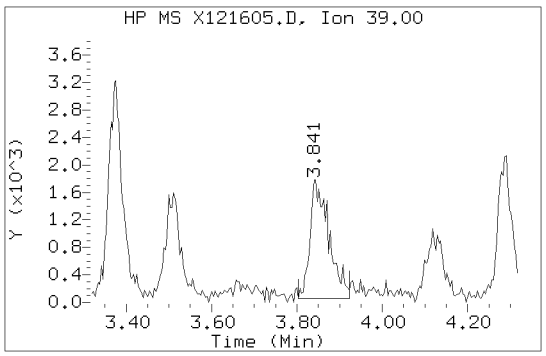
AFTER
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:03
linh
pham



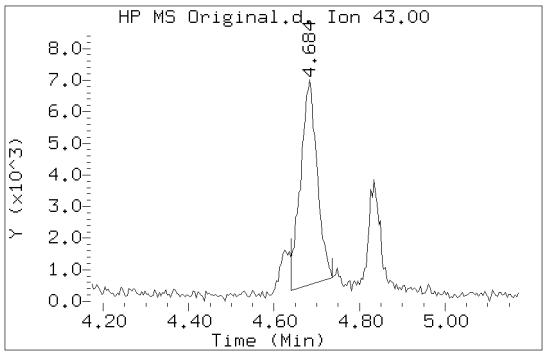
AFTER
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:07
linh
pham



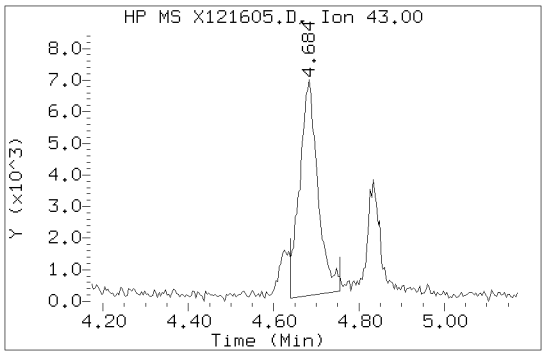
Isobutyl Alcohol (78-83-1)

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



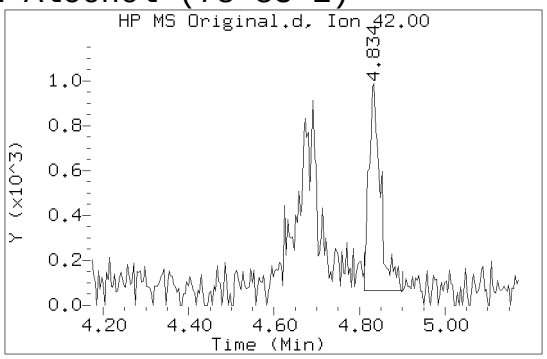
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Isobutyl Alcohol (78-83-1)

Reason Code:

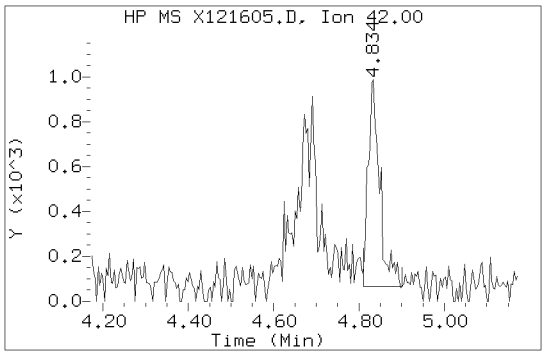
BEFORE

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:03
linh
pham



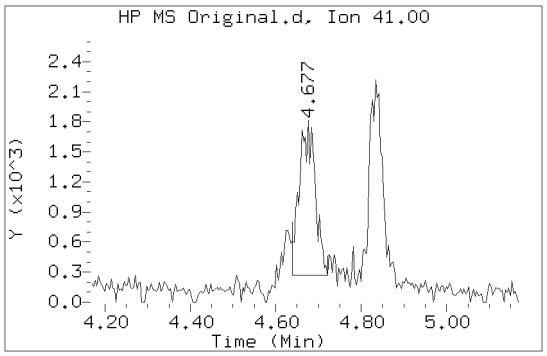
AFTER

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:07
linh
pham



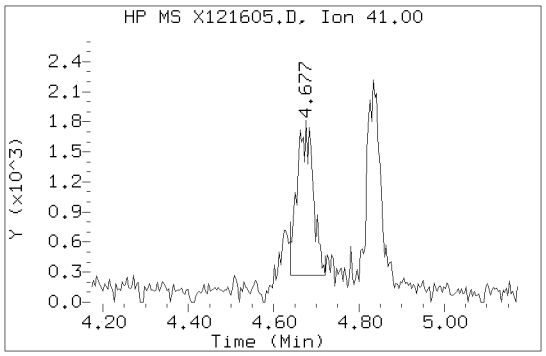
BEFORE

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

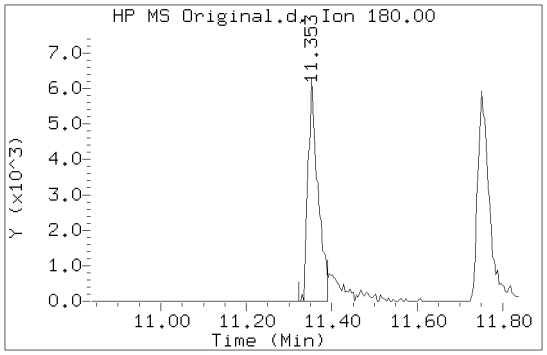


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

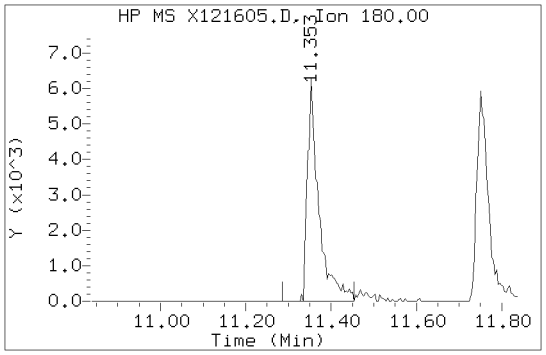
BEFORE

MASS
180
AREA
10131
HEIGHT
6269
27-Dec-2022
16:03
linh
pham



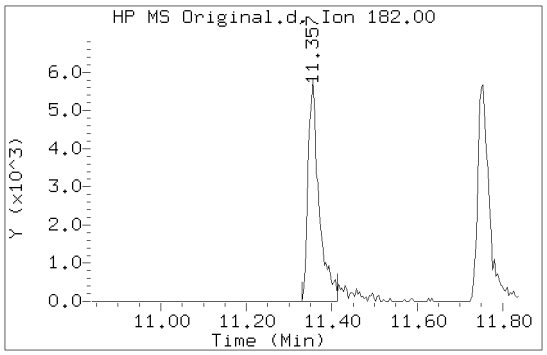
AFTER

MASS
180
AREA
11764
HEIGHT
6269
27-Dec-2022
16:07
linh
pham



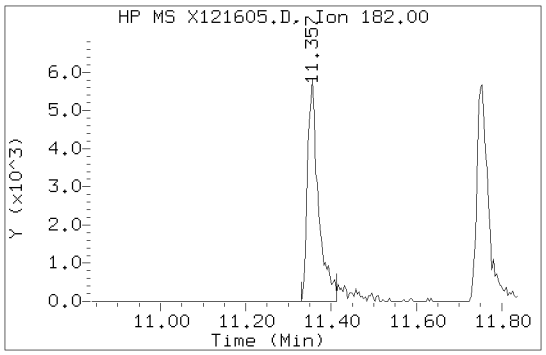
BEFORE

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

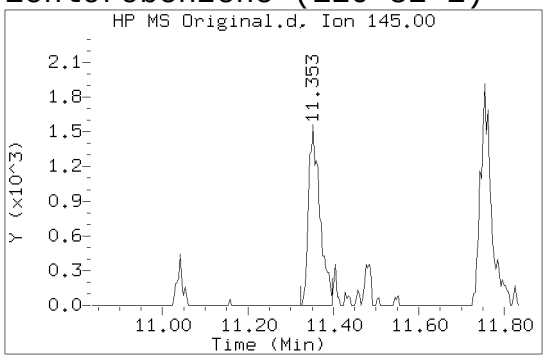


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

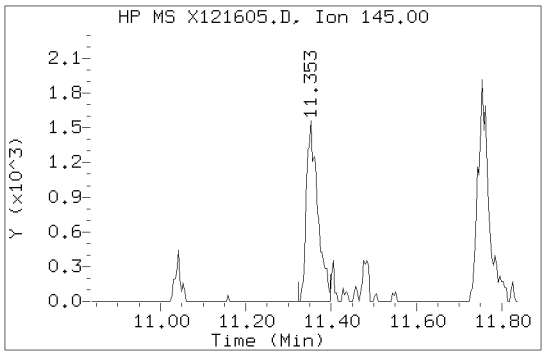
BEFORE

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

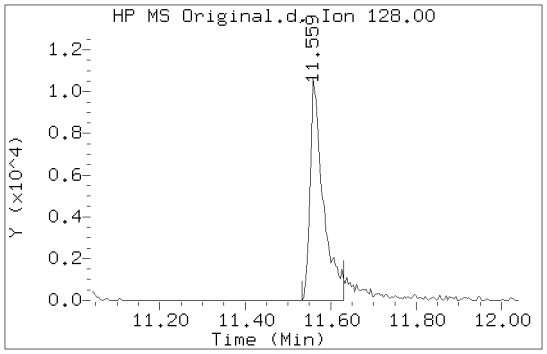


Reason Code:

Naphthalene (91-20-3)

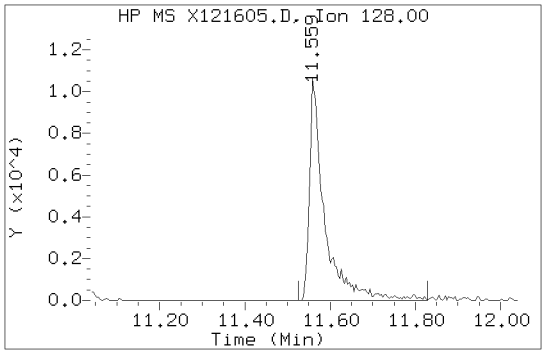
BEFORE

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

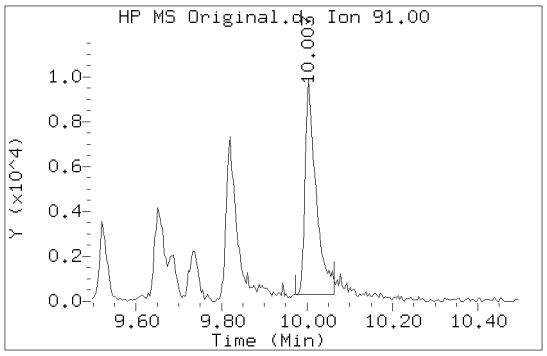


Reason Code:

n-Butylbenzene (104-51-8)

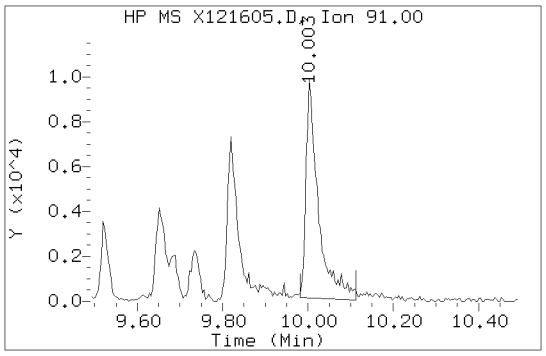
BEFORE

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:

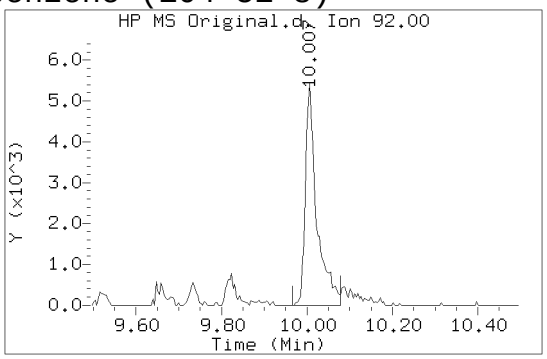
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butylbenzene (104-51-8)

Reason Code:

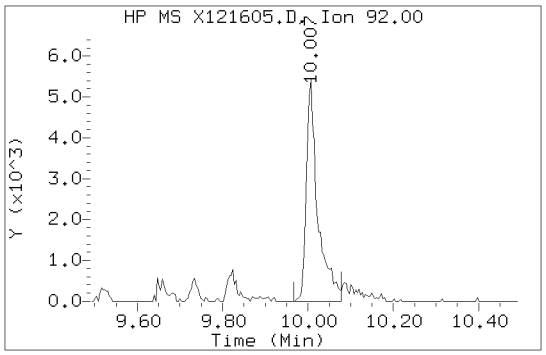
BEFORE

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:03
linh
pham



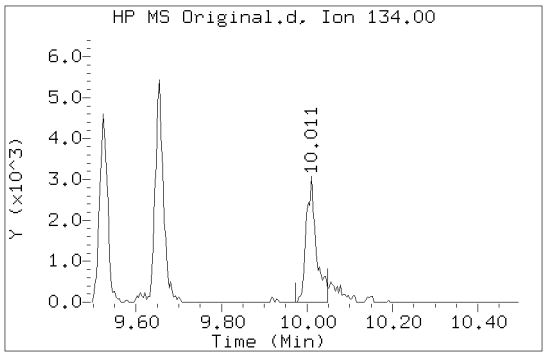
AFTER

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:07
linh
pham



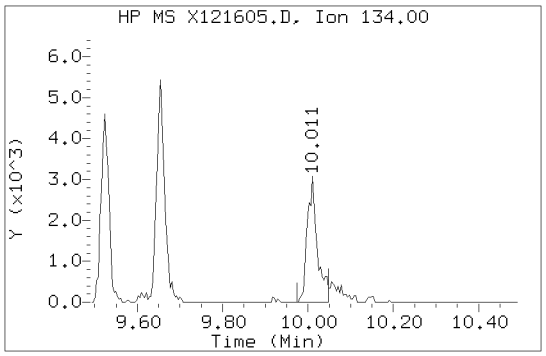
BEFORE

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

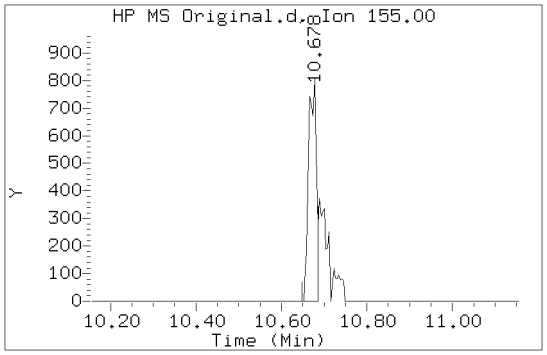


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

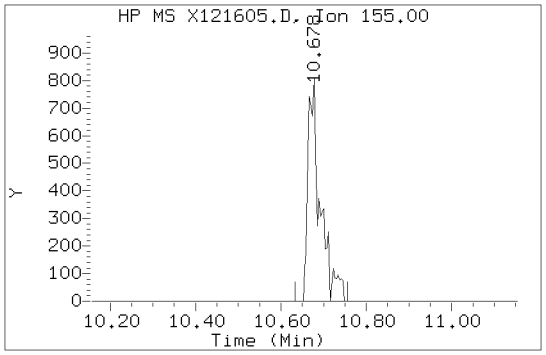
BEFORE

MASS
155
AREA
1026
HEIGHT
806
27-Dec-2022
16:03
linh
pham



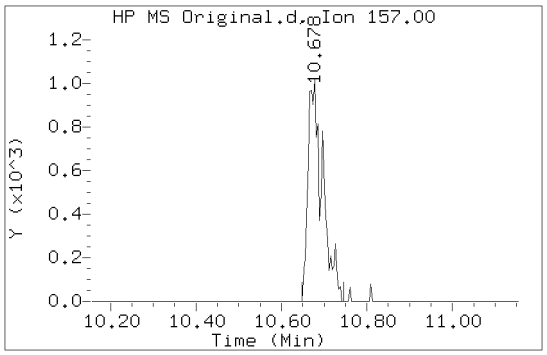
AFTER

MASS
155
AREA
1619
HEIGHT
806
27-Dec-2022
16:07
linh
pham



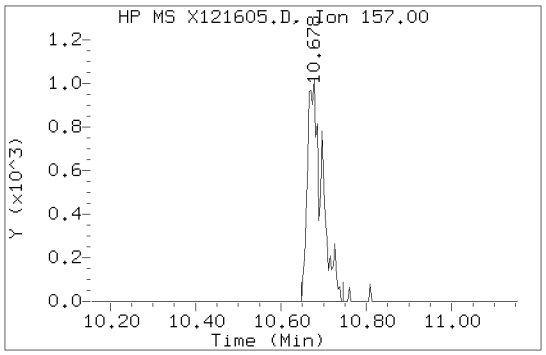
BEFORE

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



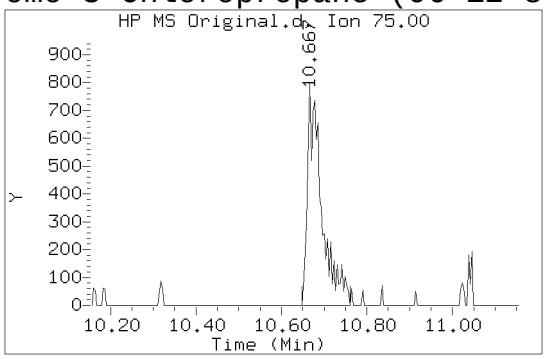
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

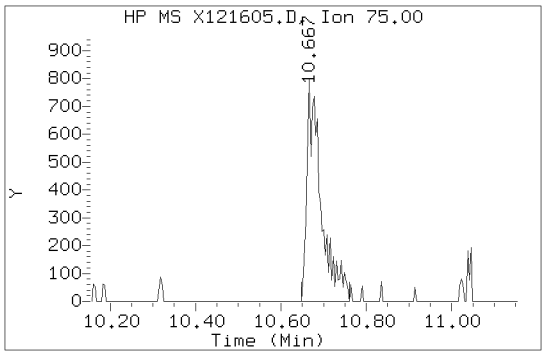
BEFORE

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

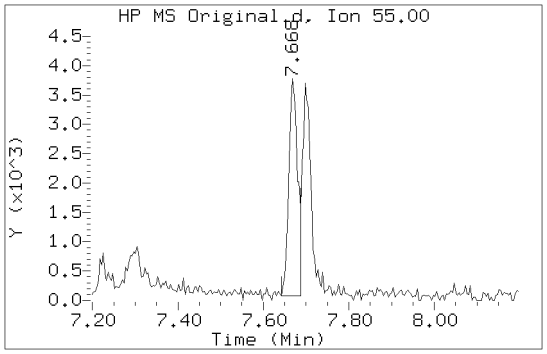


1-Chlorohexane (544-10-5)

Reason Code:

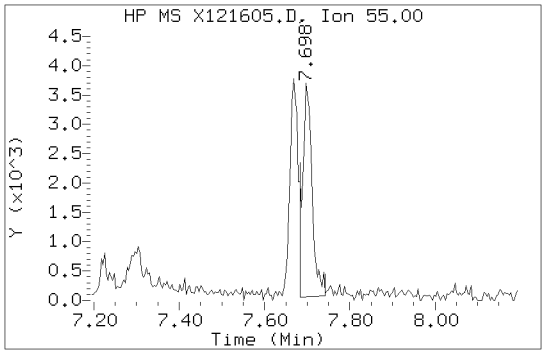
BEFORE

MASS
55
AREA
5357
HEIGHT
3703
27-Dec-2022
16:03
linh
pham



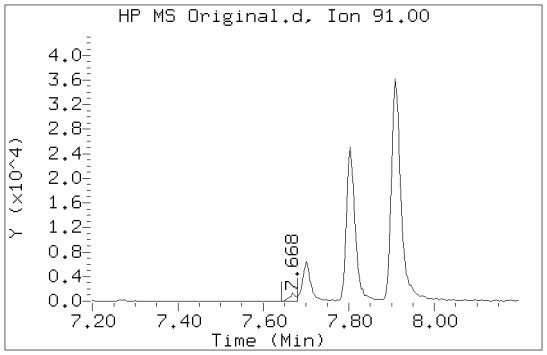
AFTER

MASS
55
AREA
5855
HEIGHT
3647
27-Dec-2022
16:07
linh
pham



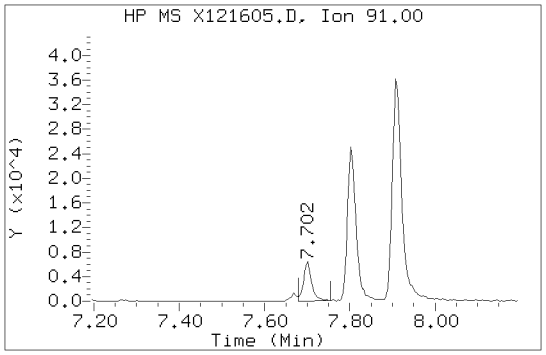
BEFORE

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

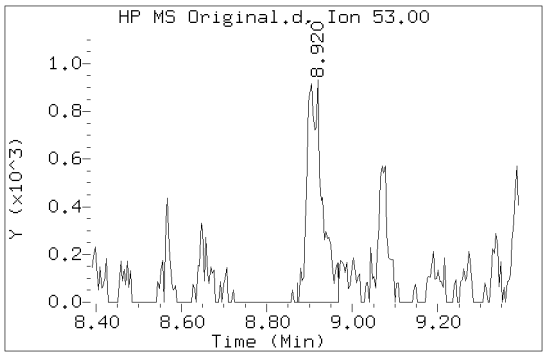


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

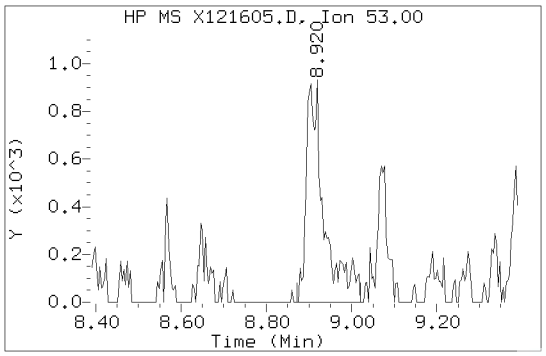
BEFORE

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



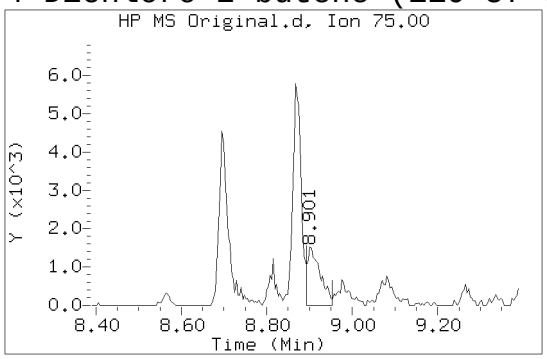
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

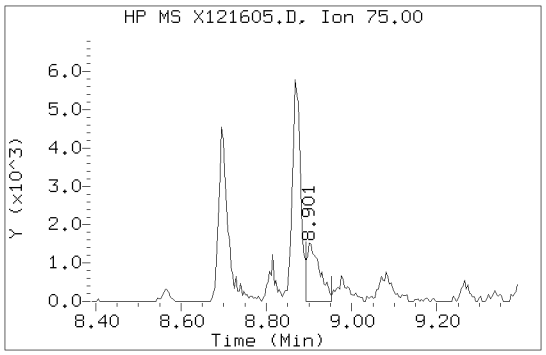
BEFORE

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

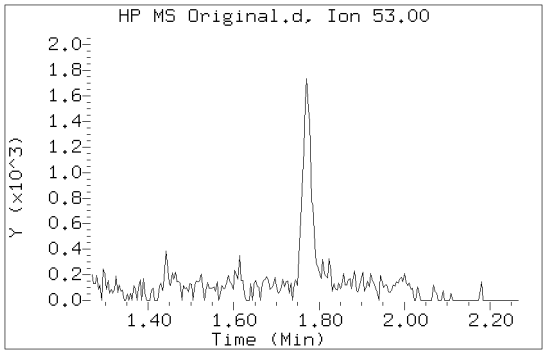


Chloroprene (126-99-8)

Reason Code:

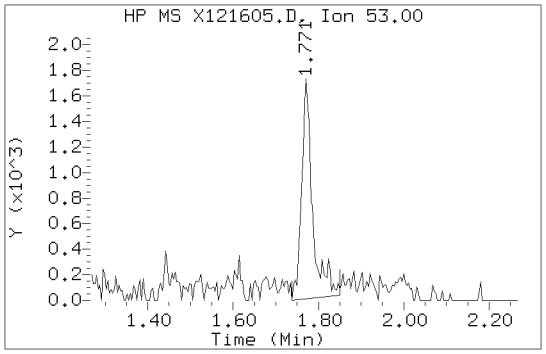
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



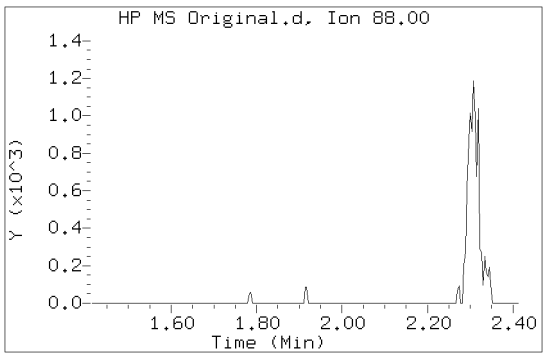
AFTER

MASS
53
AREA
3126
HEIGHT
1722
27-Dec-2022
16:07
linh
pham



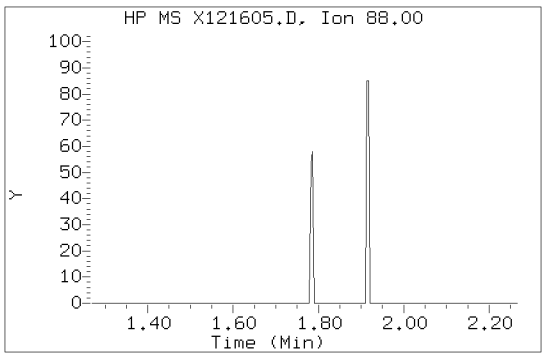
BEFORE

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

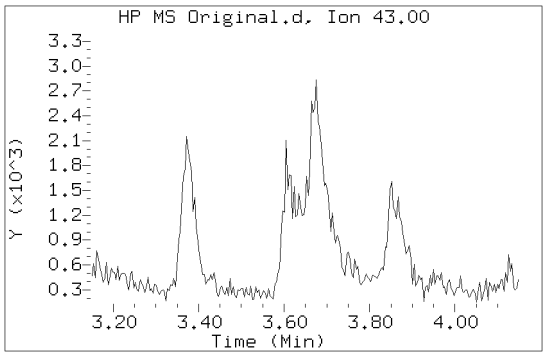


Ethyl Acetate (141-78-6)

Reason Code:

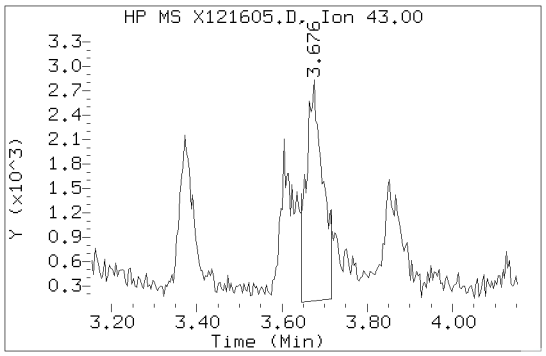
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

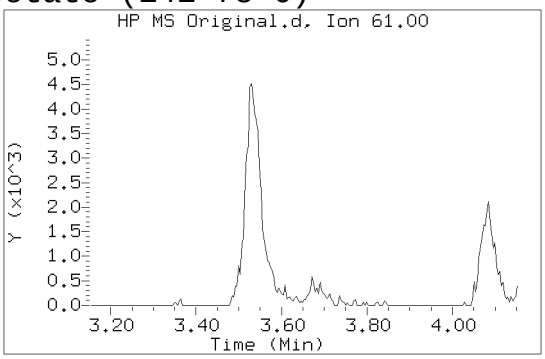
MASS
43
AREA
7422
HEIGHT
2716
27-Dec-2022
16:07
linh
pham



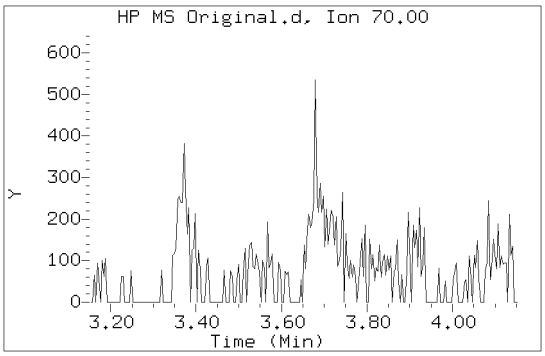
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

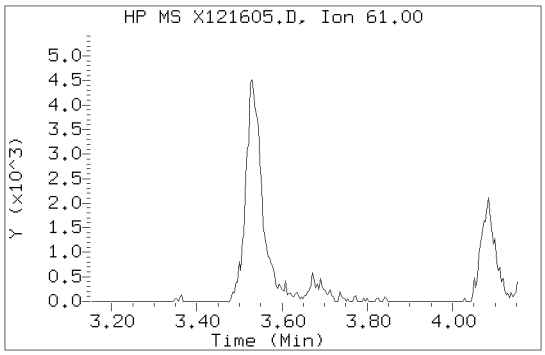


BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

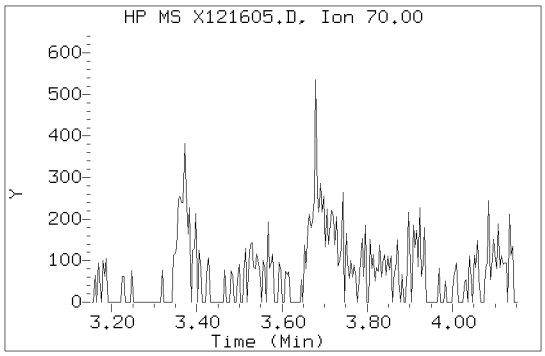


Reason Code:

AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

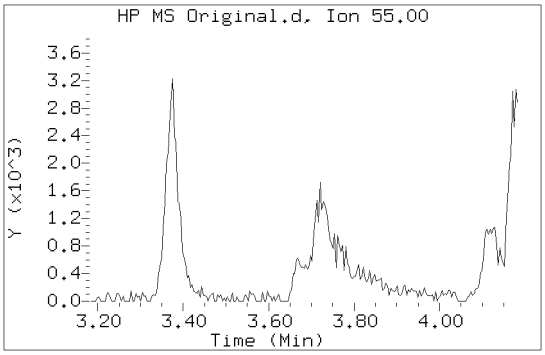


AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

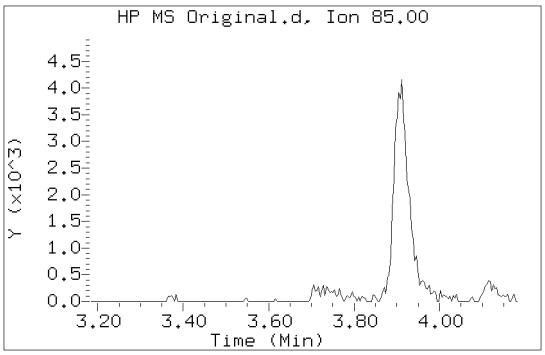


Methyl Acrylate (96-33-3)

BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

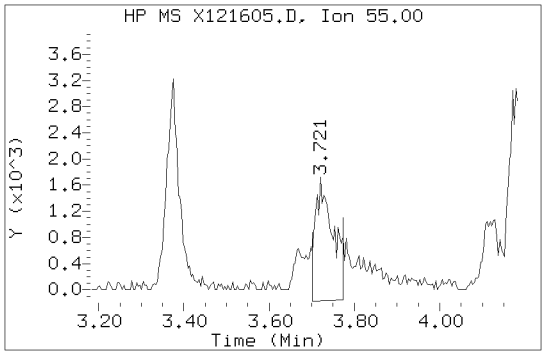


BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

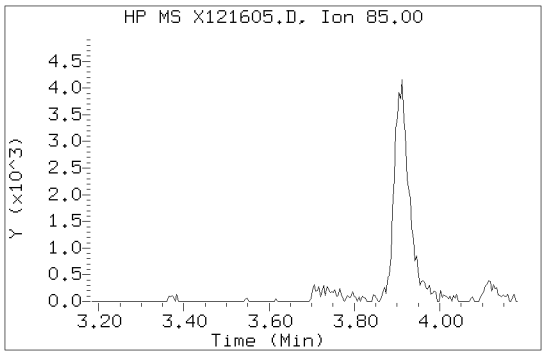


Reason Code:

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



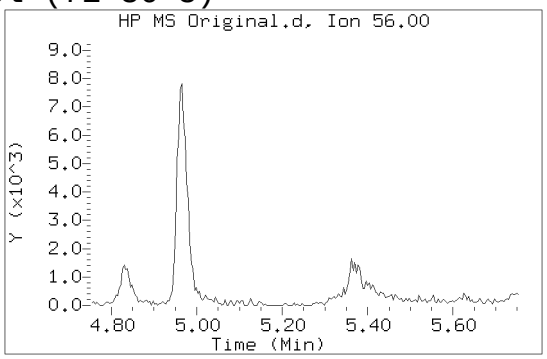
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

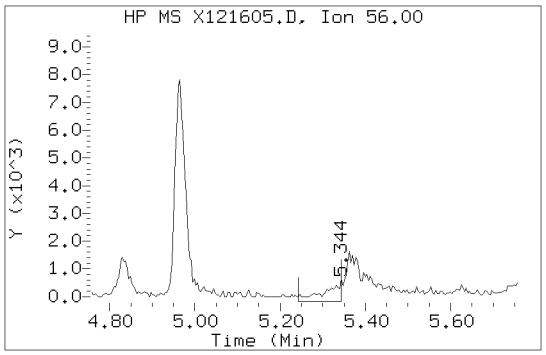
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



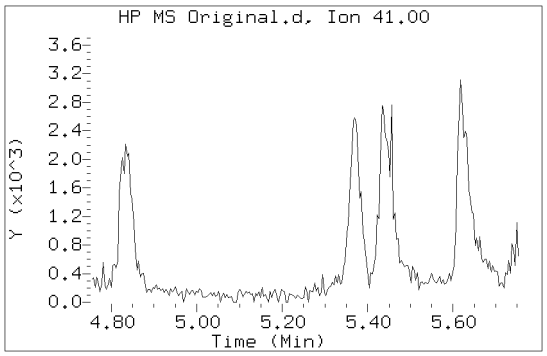
AFTER

MASS
56
AREA
2004
HEIGHT
808
27-Dec-2022
16:07
linh
pham



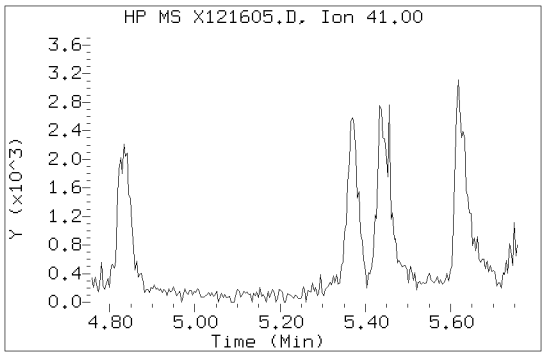
BEFORE

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

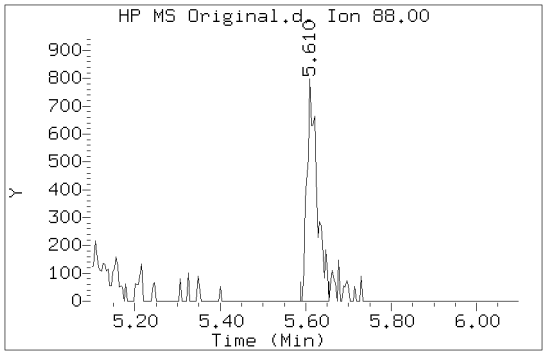


1,4-Dioxane ()

Reason Code:

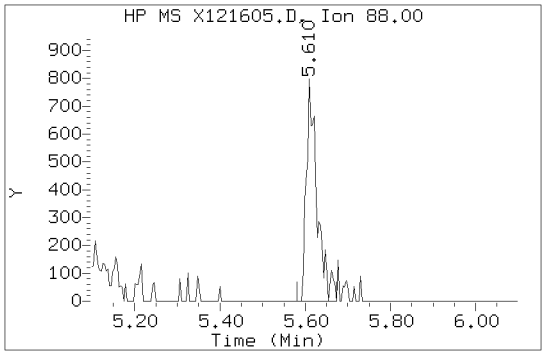
BEFORE

MASS
88
AREA
1335
HEIGHT
798
27-Dec-2022
16:03
linh
pham



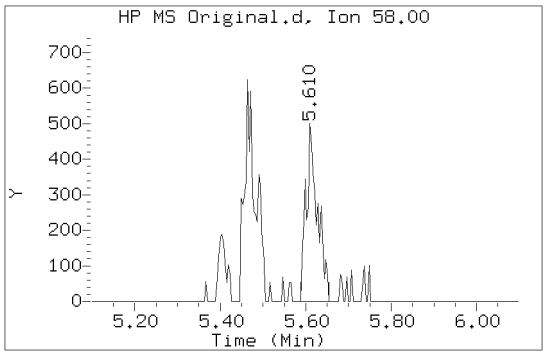
AFTER

MASS
88
AREA
1409
HEIGHT
798
27-Dec-2022
16:07
linh
pham



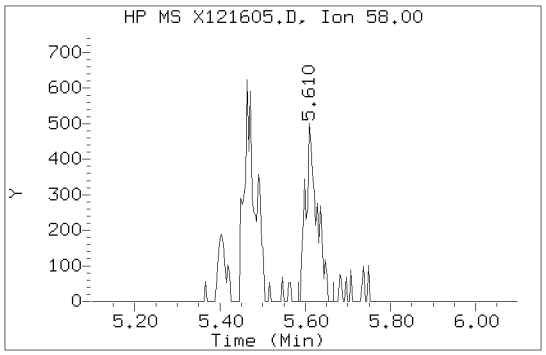
BEFORE

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

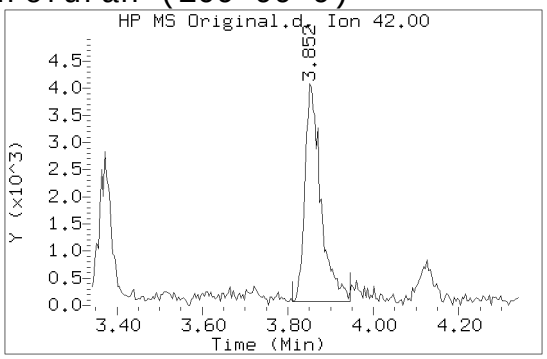


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

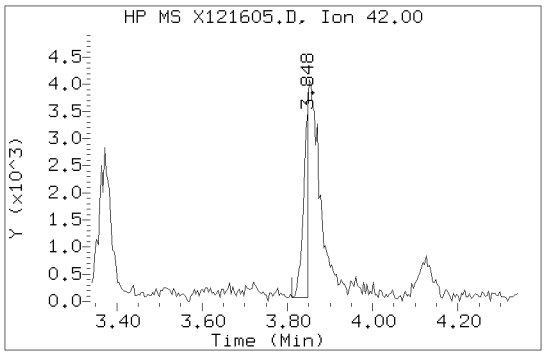
Tetrahydrofuran (109-99-9)

Reason Code:

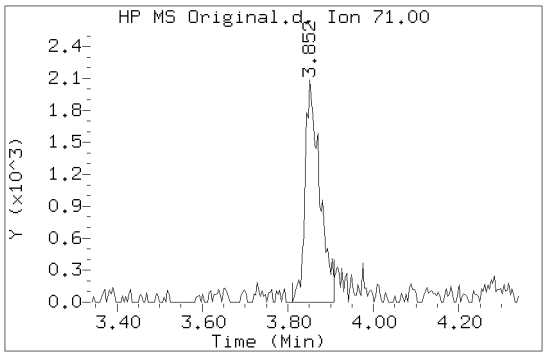
BEFORE
MASS
42
AREA
10469
HEIGHT
4012
27-Dec-2022
16:03
linh
pham



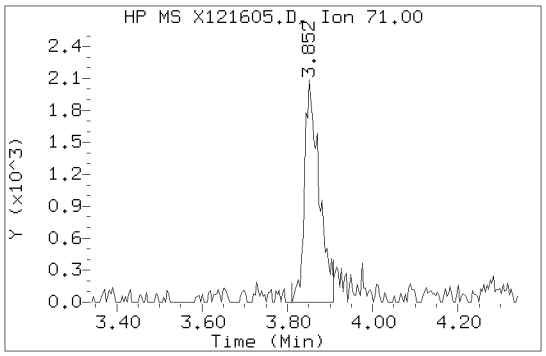
AFTER
MASS
42
AREA
2867
HEIGHT
3419
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
71
AREA
5020
HEIGHT
2086
27-Dec-2022
16:03
linh
pham



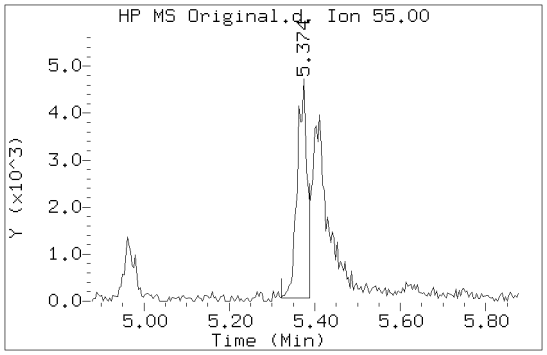
AFTER
MASS
71
AREA
5020
HEIGHT
2086
27-Dec-2022
16:07
linh
pham



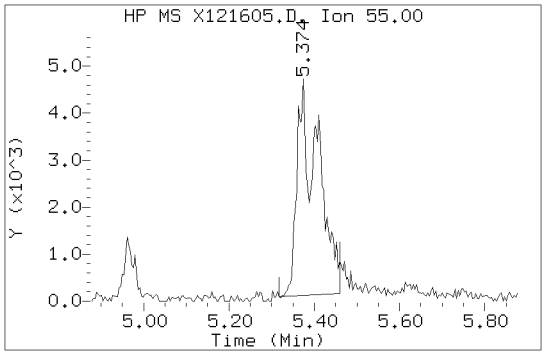
Methylcyclohexane (108-87-2)

Reason Code:

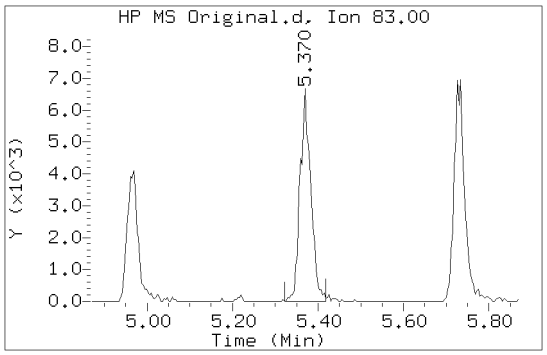
BEFORE
MASS
55
AREA
7676
HEIGHT
4656
27-Dec-2022
16:03
linh
pham



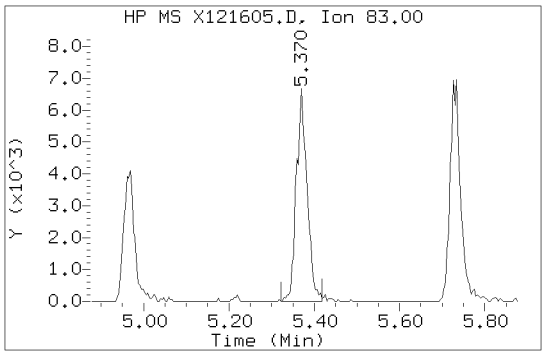
AFTER
MASS
55
AREA
16016
HEIGHT
4611
27-Dec-2022
16:07
linh
pham



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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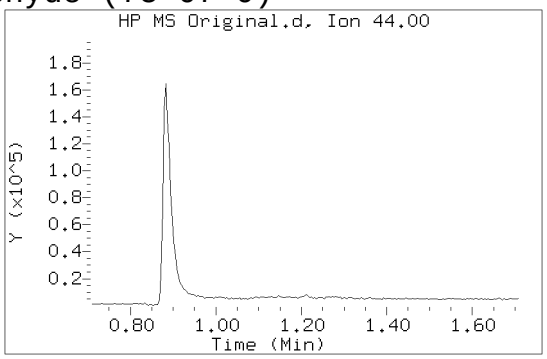
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

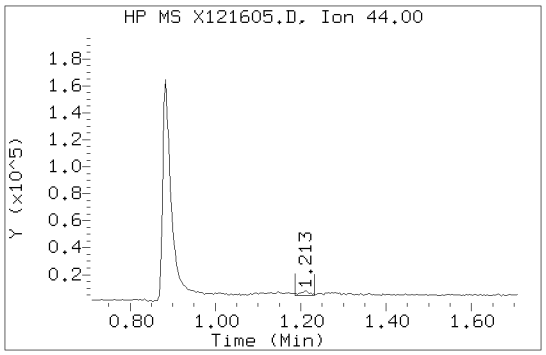
Acetaldehyde (75-07-0)

Reason Code:

BEFORE
MASS
44
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
44
AREA
5661
HEIGHT
3463
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
43
AREA
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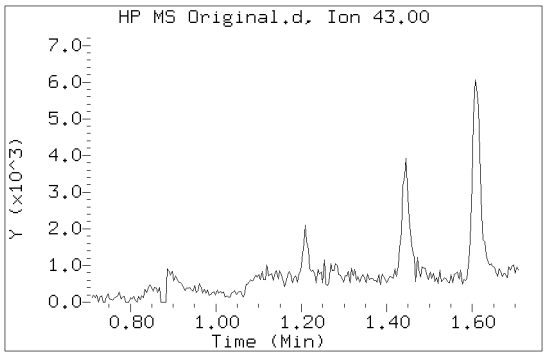
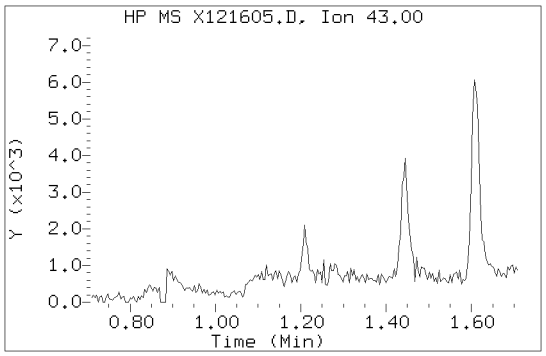
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
42
AREA
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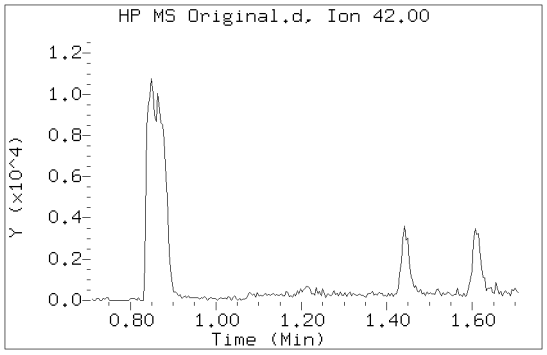
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
MASS
42
AREA
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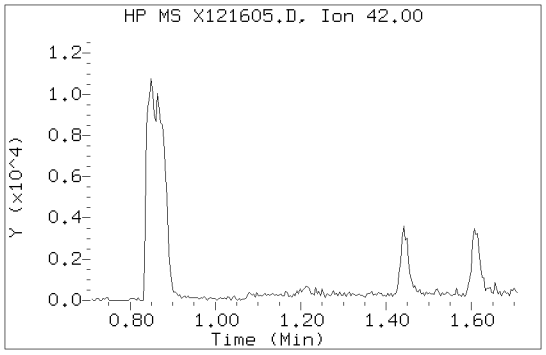
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
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

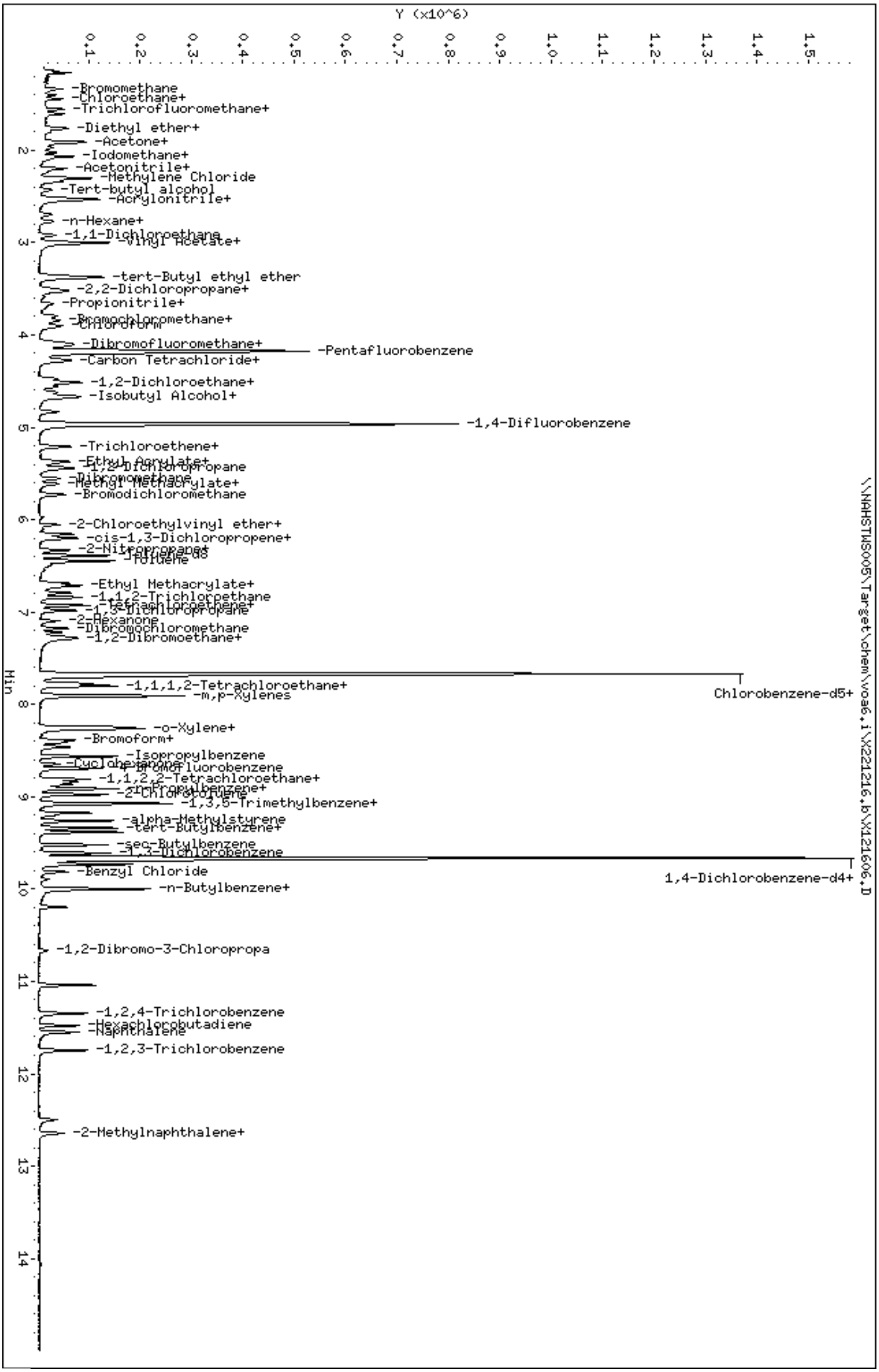
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.705	3.705	(0.887)	14950	5.00000	4.88(M)
	162 Butyl acrylate	55	8.260	8.260	(1.077)	38320	5.00000	4.48
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	15008	5.00000	5.11
	3 Chloromethane	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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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:

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27-Dec-2022
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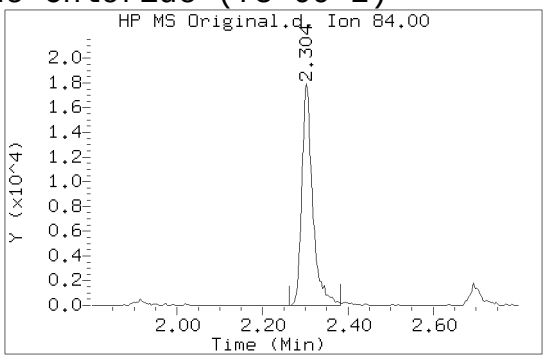

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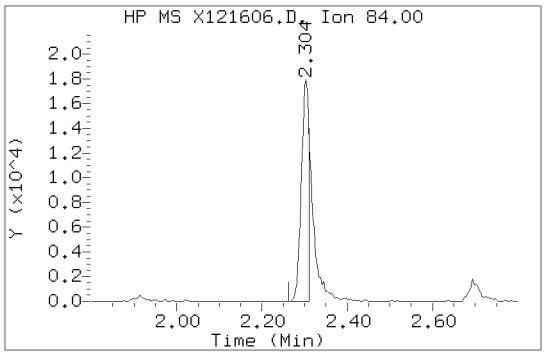

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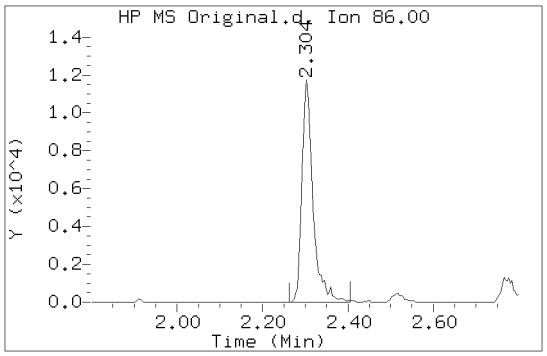

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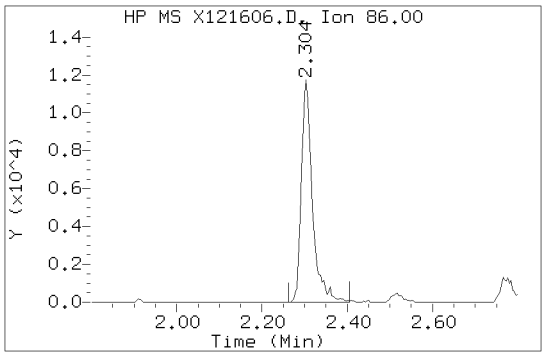

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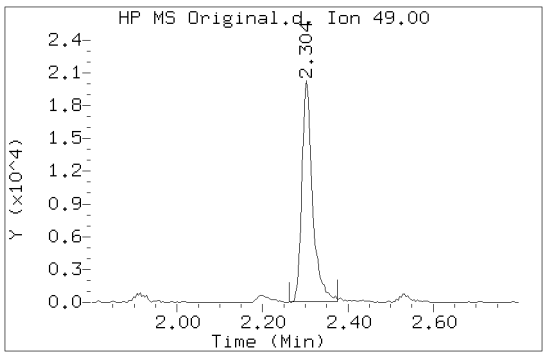

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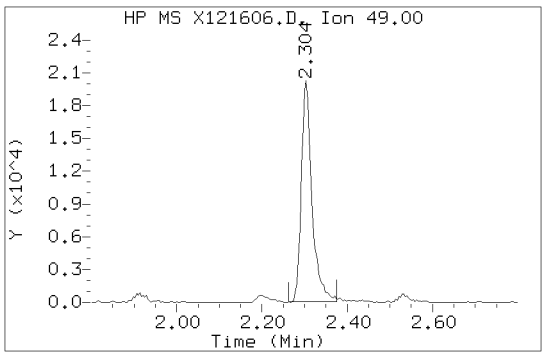

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

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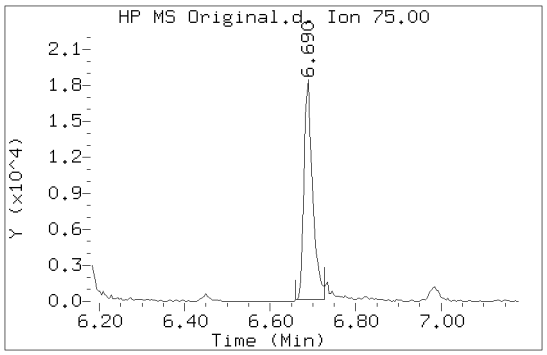

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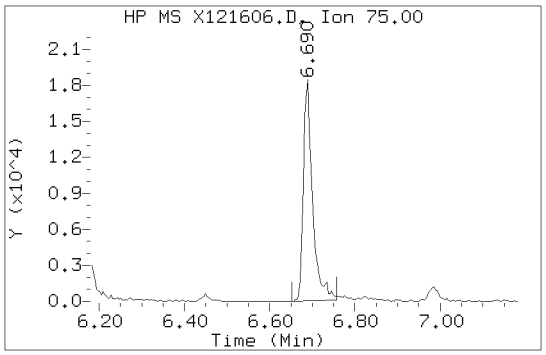

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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

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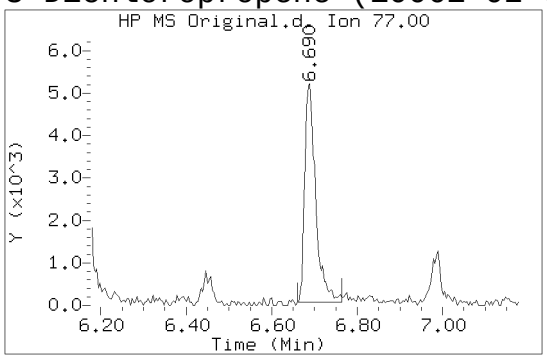

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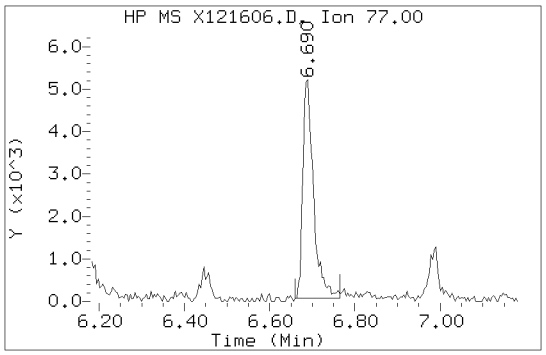

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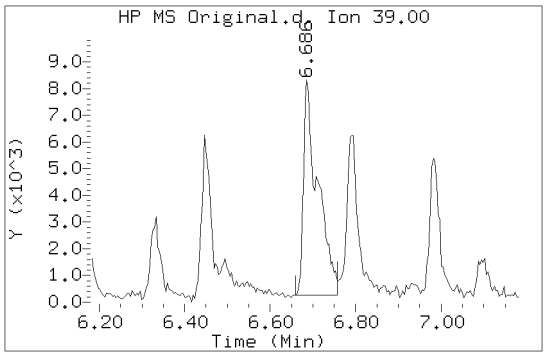

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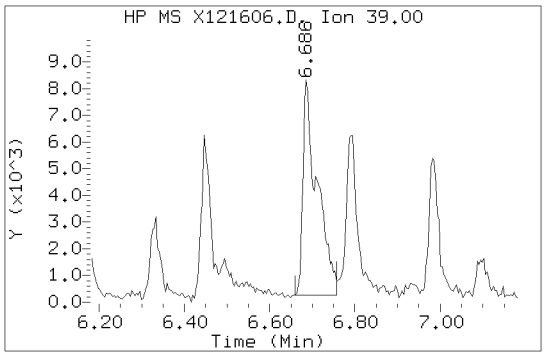

Methacrylonitrile (126-98-7)

Reason Code:

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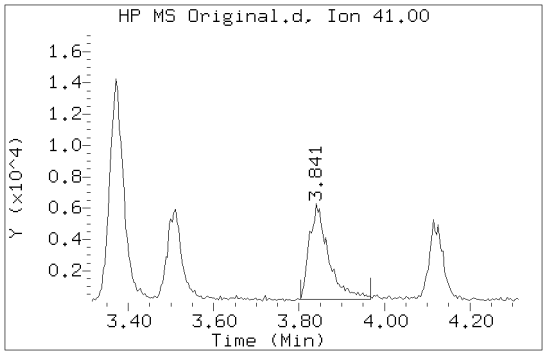

AFTER

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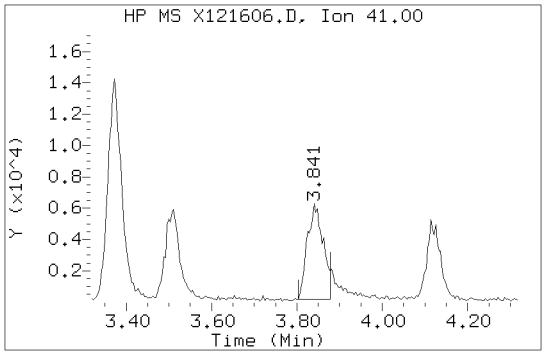

BEFORE

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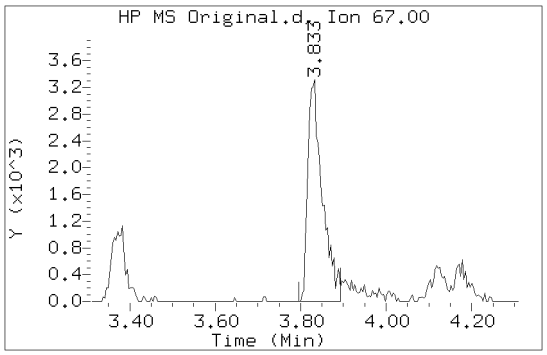

AFTER

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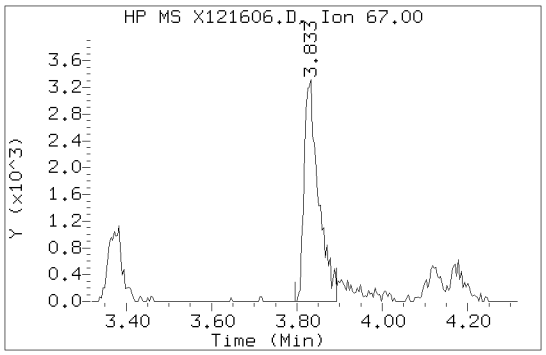

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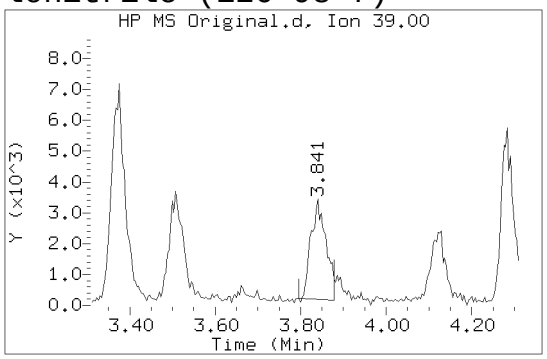
InstruID : voa6.i
LabSampID : VSTD005

Methacrylonitrile (126-98-7)

Reason Code:

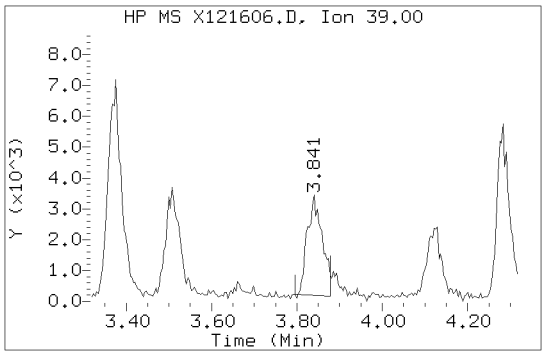
BEFORE

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

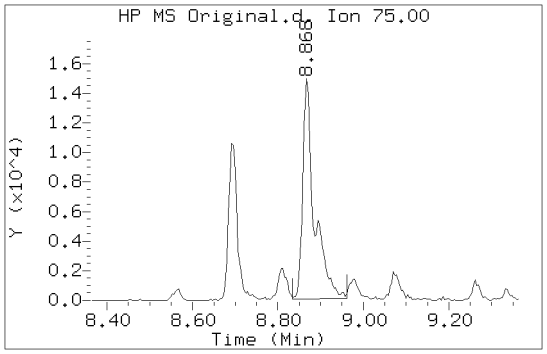


1,2,3-Trichloropropane (96-18-4)

Reason Code:

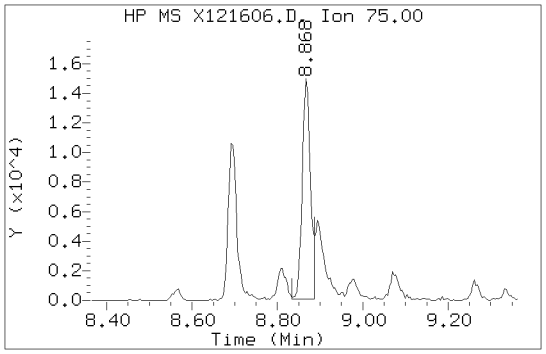
BEFORE

MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham



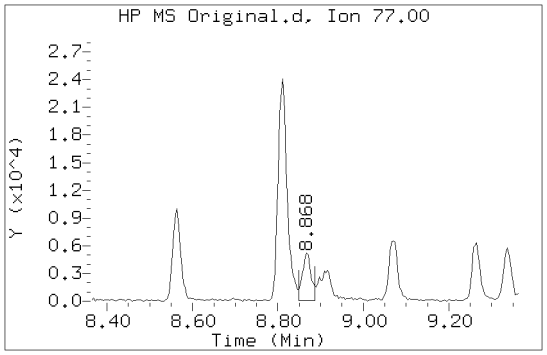
AFTER

MASS
75
AREA
20685
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



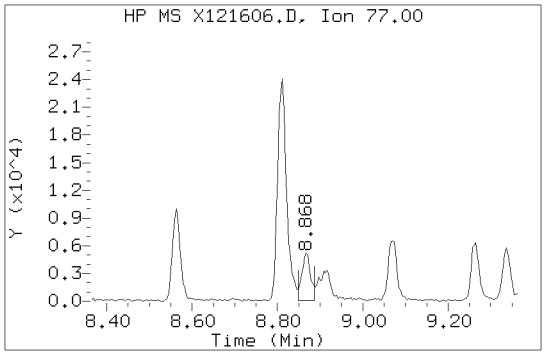
BEFORE

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

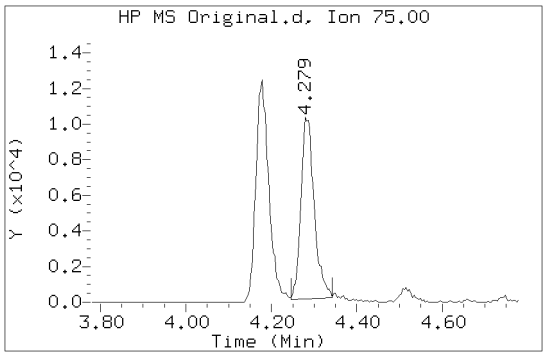


1,1-Dichloropropene (563-58-6)

Reason Code:

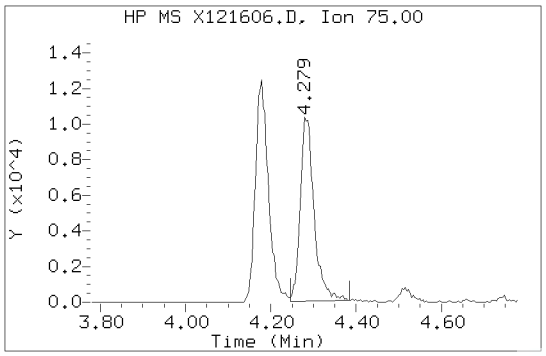
BEFORE

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



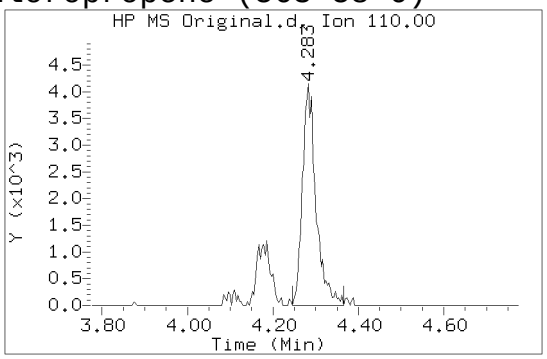
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

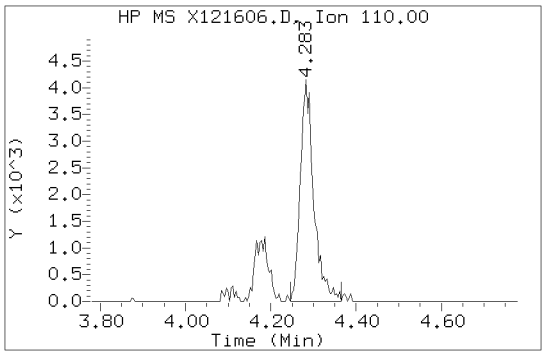
BEFORE

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:03
linh
pham



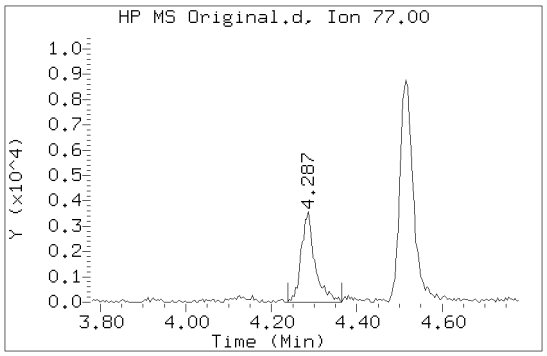
AFTER

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:07
linh
pham



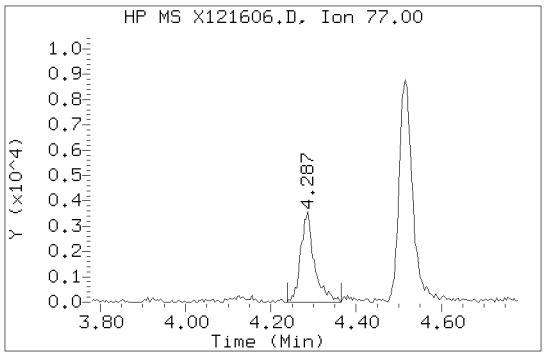
BEFORE

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

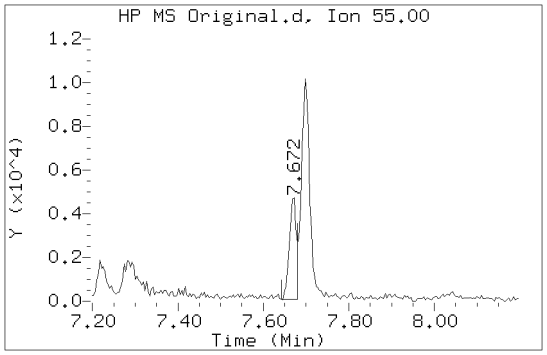


1-Chlorohexane (544-10-5)

Reason Code:

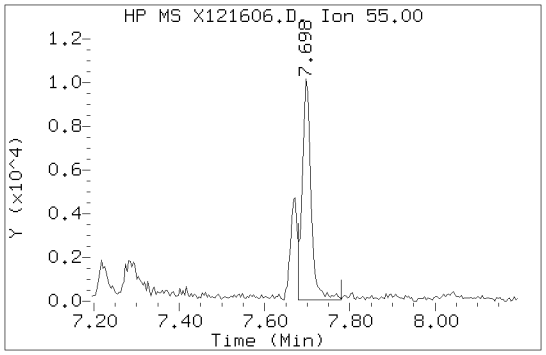
BEFORE

MASS
55
AREA
5371
HEIGHT
4660
27-Dec-2022
16:03
linh
pham



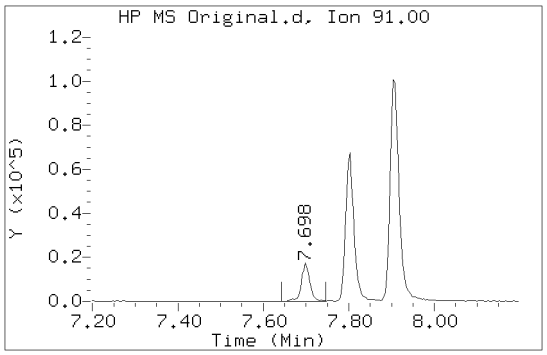
AFTER

MASS
55
AREA
15210
HEIGHT
10126
27-Dec-2022
16:07
linh
pham



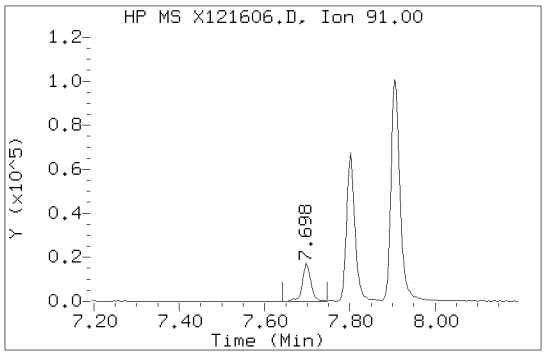
BEFORE

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



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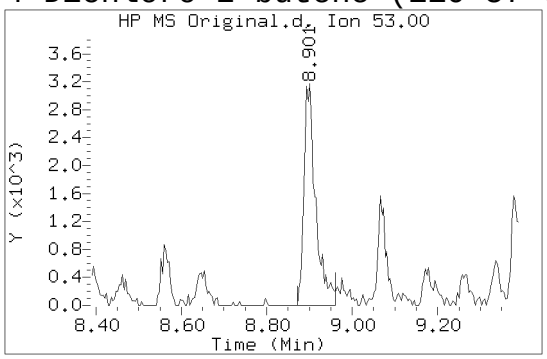
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

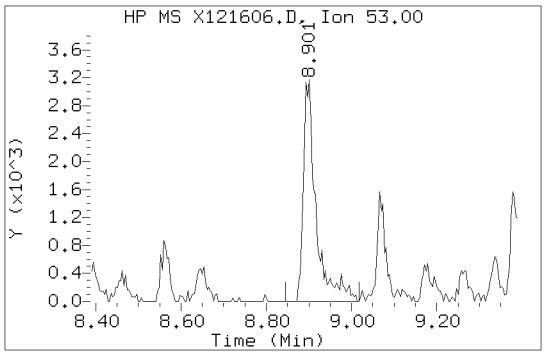
trans-1,4-Dichloro-2-butene (110-57-6)

BEFORE
MASS
53
AREA
6122
HEIGHT
3172
27-Dec-2022
16:03
linh
pham

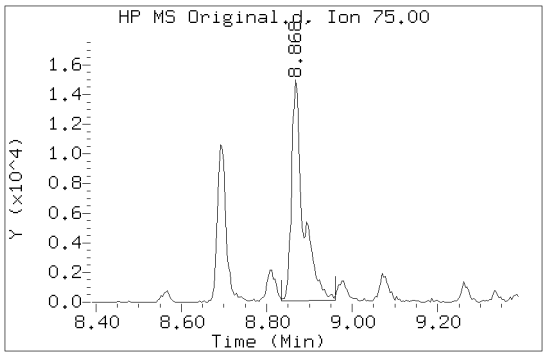


Reason Code:

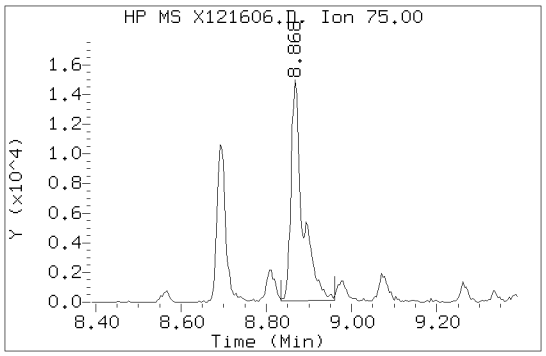
AFTER
MASS
53
AREA
6648
HEIGHT
3172
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham

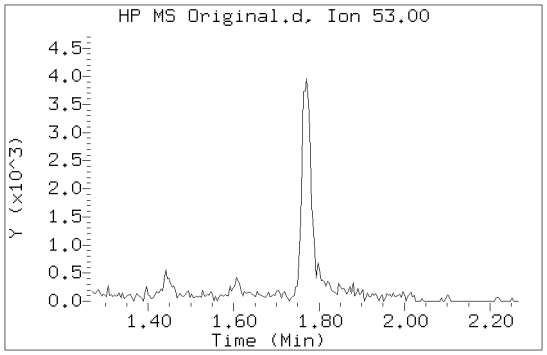


AFTER
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



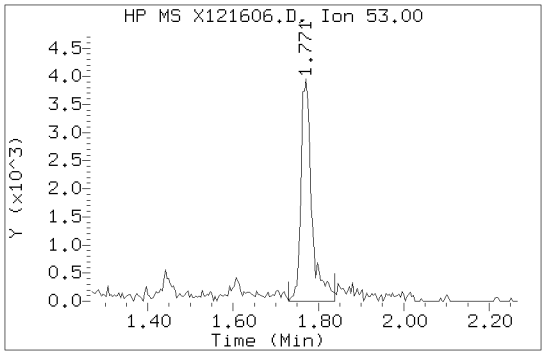
Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

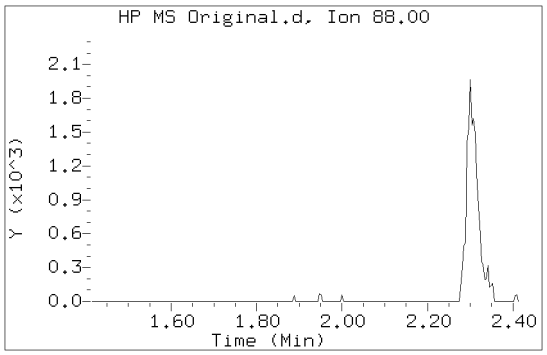


Reason Code:

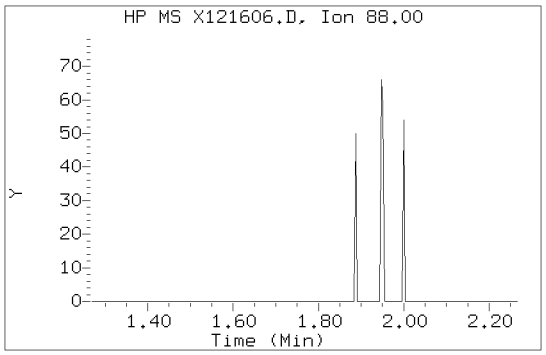
AFTER
MASS
53
AREA
7154
HEIGHT
3955
27-Dec-2022
16:07
linh
pham



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



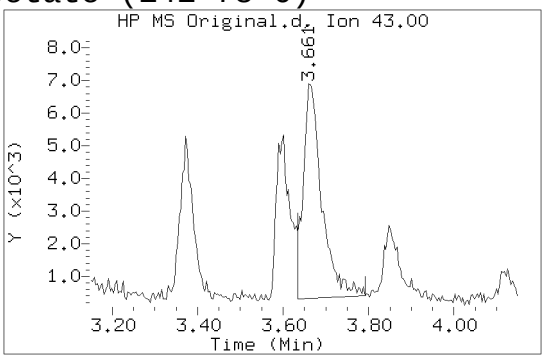
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

Reason Code:

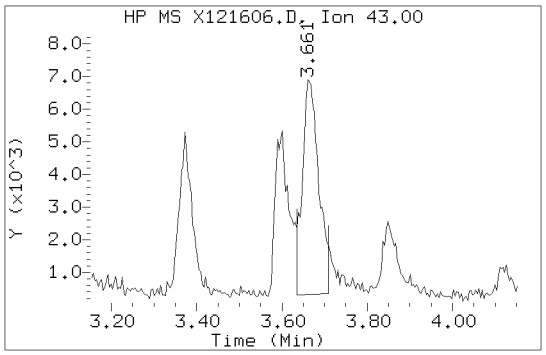
BEFORE

MASS
43
AREA
20113
HEIGHT
6576
27-Dec-2022
16:03
linh
pham



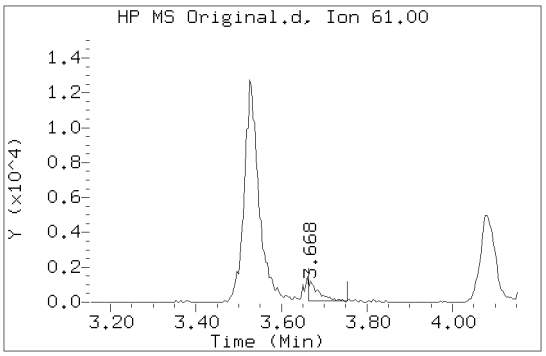
AFTER

MASS
43
AREA
18020
HEIGHT
6576
27-Dec-2022
16:07
linh
pham



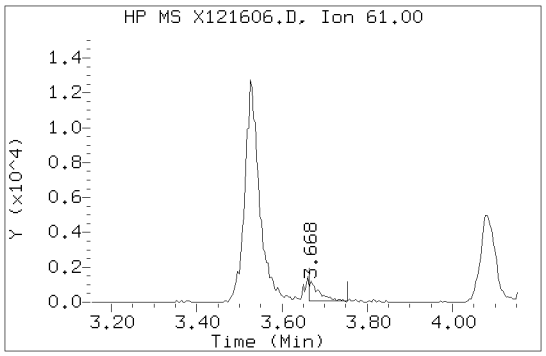
BEFORE

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:03
linh
pham



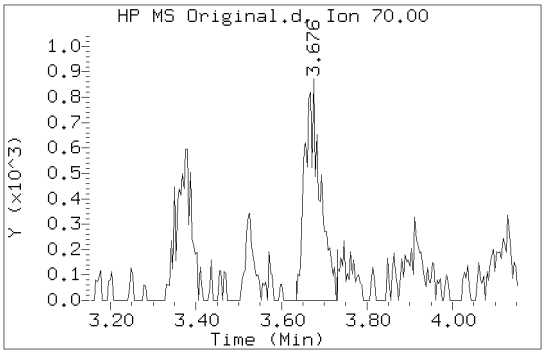
AFTER

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:07
linh
pham



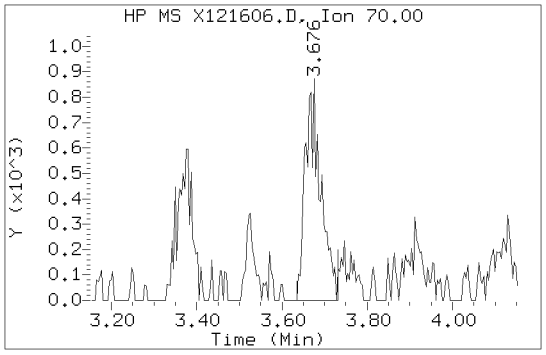
BEFORE

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

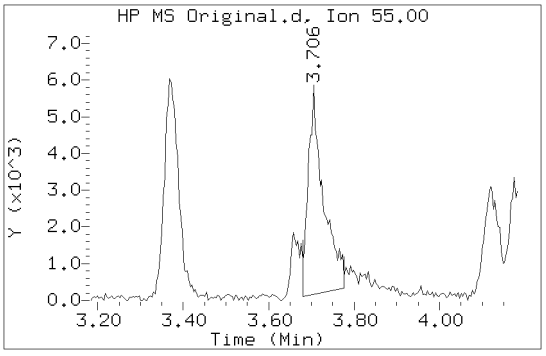


Methyl Acrylate (96-33-3)

Reason Code:

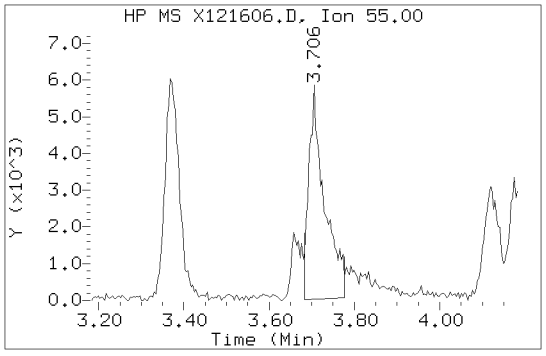
BEFORE

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



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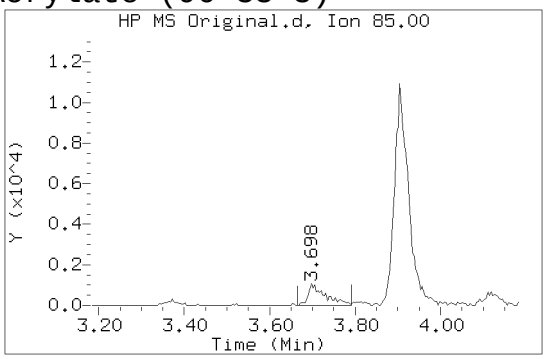
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methyl Acrylate (96-33-3)

Reason Code:

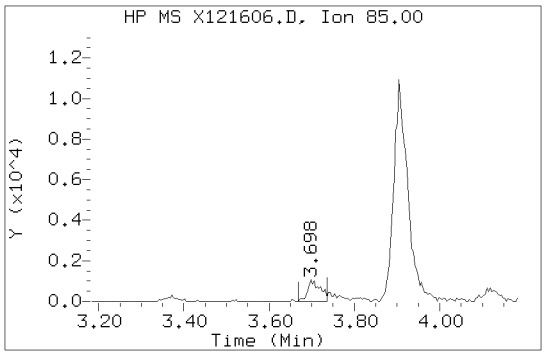
BEFORE

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

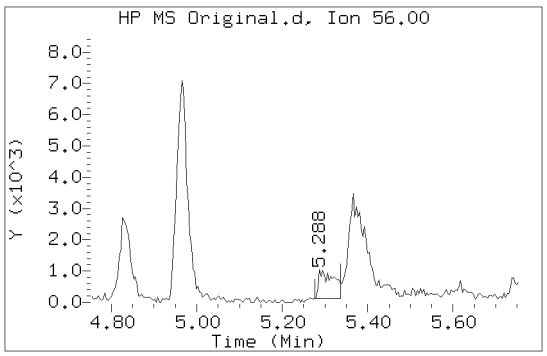


n-Butanol (71-36-3)

Reason Code:

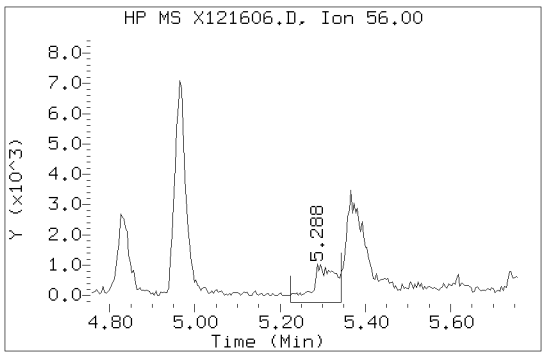
BEFORE

MASS
56
AREA
2243
HEIGHT
922
27-Dec-2022
16:03
linh
pham



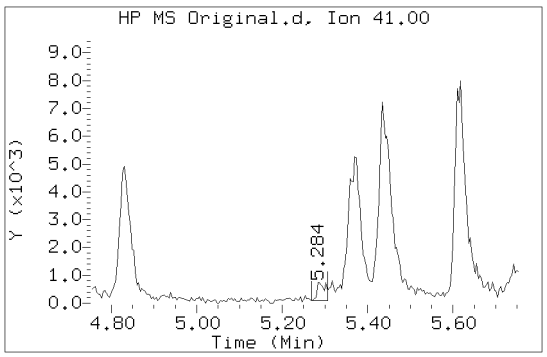
AFTER

MASS
56
AREA
4891
HEIGHT
1266
27-Dec-2022
16:07
linh
pham



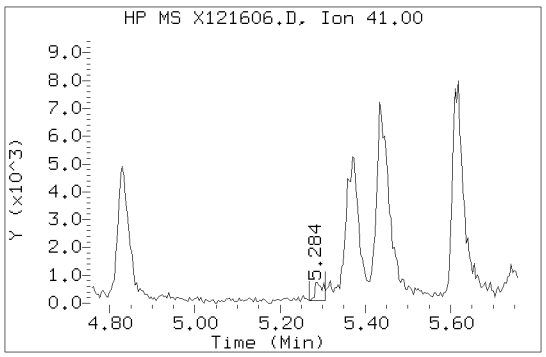
BEFORE

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

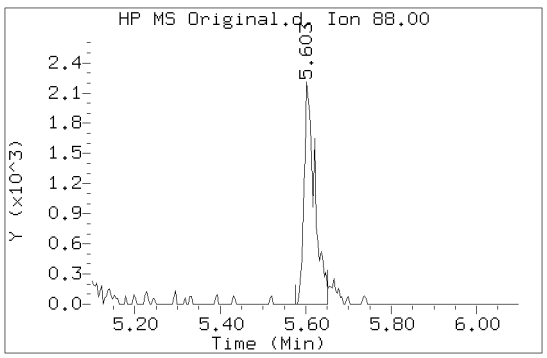


1,4-Dioxane ()

Reason Code:

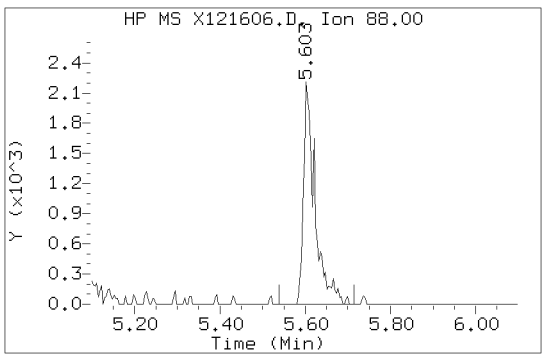
BEFORE

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



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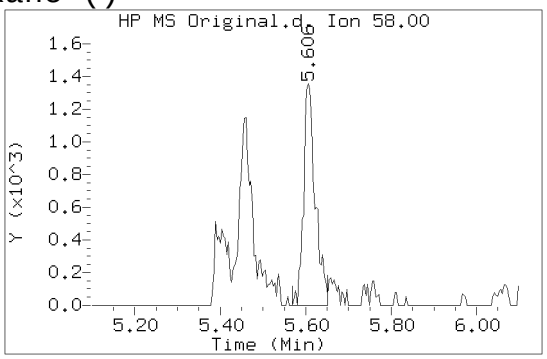
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

1,4-Dioxane ()

Reason Code:

BEFORE

MASS
58
AREA
2625
HEIGHT
1356
27-Dec-2022
16:03
linh
pham



AFTER

MASS
58
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2625
HEIGHT
1356
27-Dec-2022
16:07
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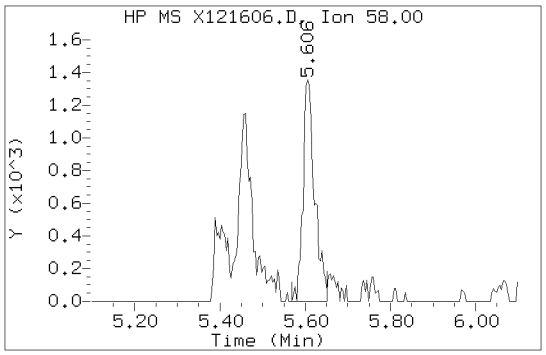

Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE

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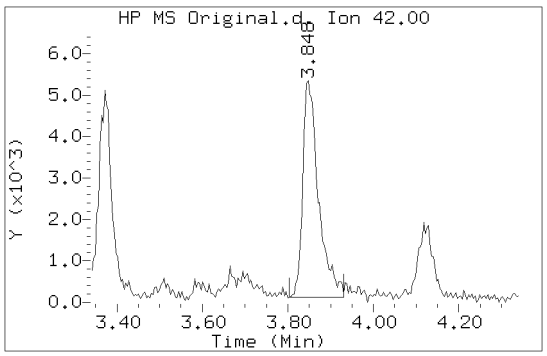

AFTER

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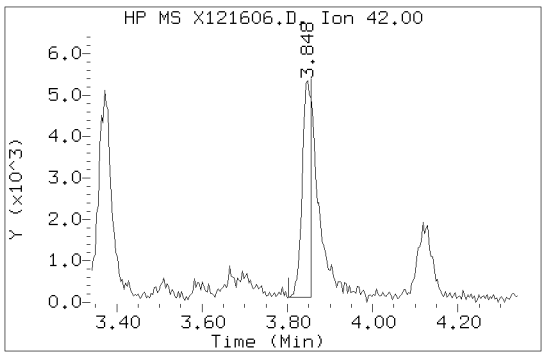

BEFORE

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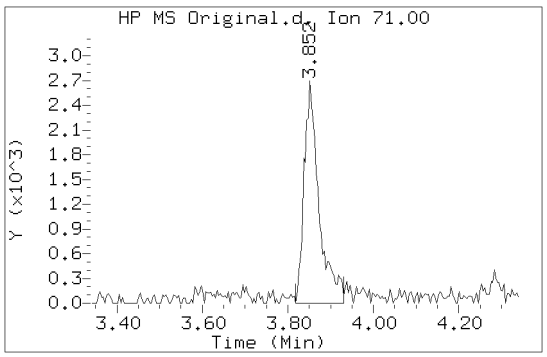

AFTER

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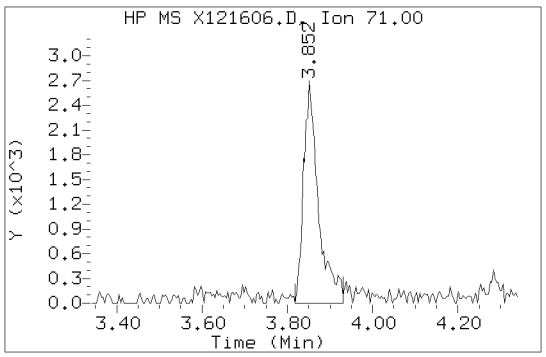

Methylcyclohexane (108-87-2)

Reason Code:

BEFORE

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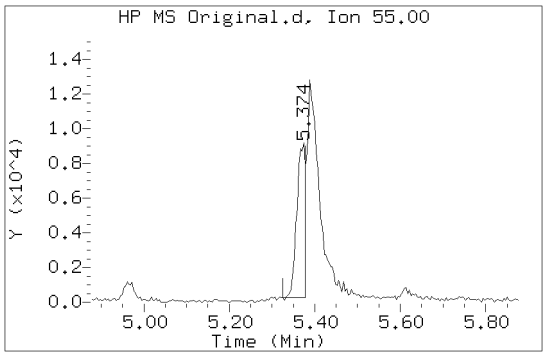

AFTER

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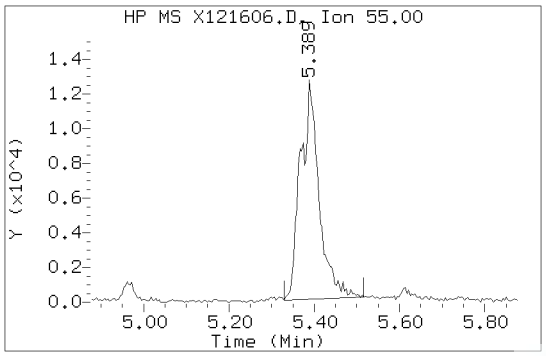

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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methylcyclohexane (108-87-2)

BEFORE

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HEIGHT
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27-Dec-2022
16:03
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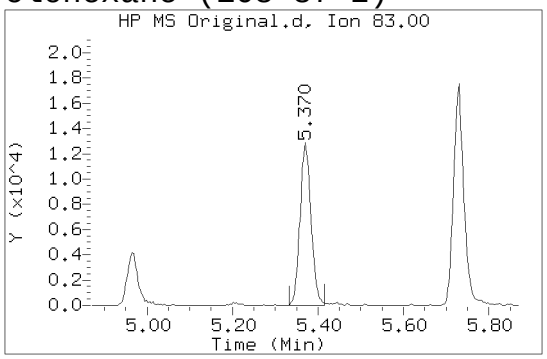
pham



Reason Code:

AFTER

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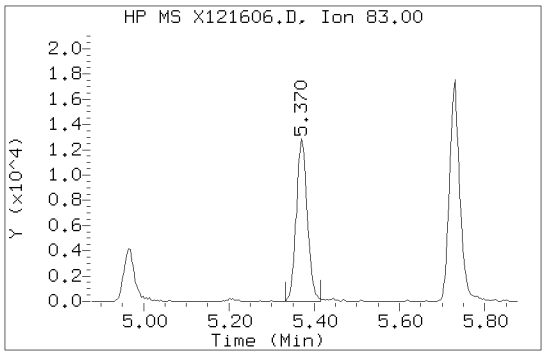

Acetaldehyde (75-07-0)

BEFORE

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27-Dec-2022
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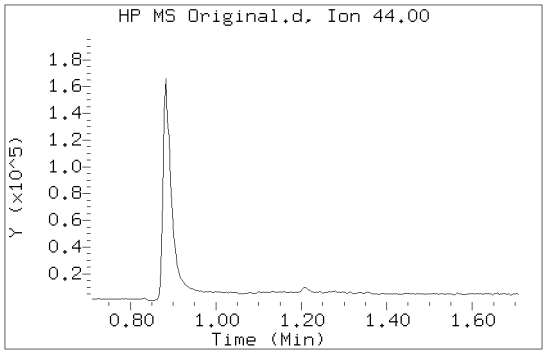

Reason Code:

AFTER

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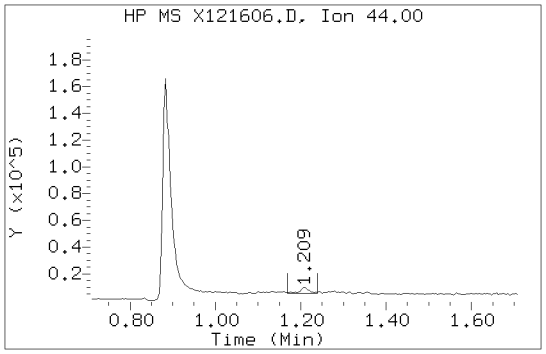

BEFORE

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16:03
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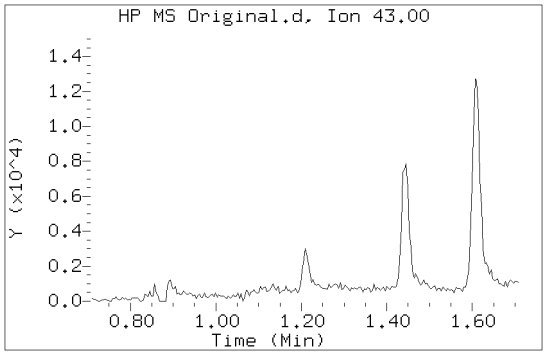

AFTER

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27-Dec-2022
16:07
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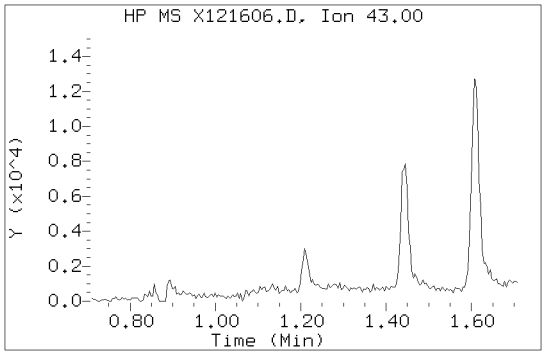

BEFORE

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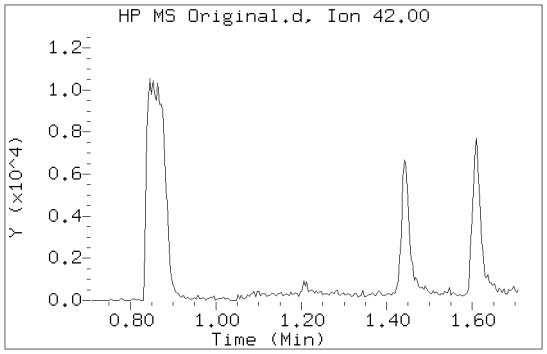

AFTER

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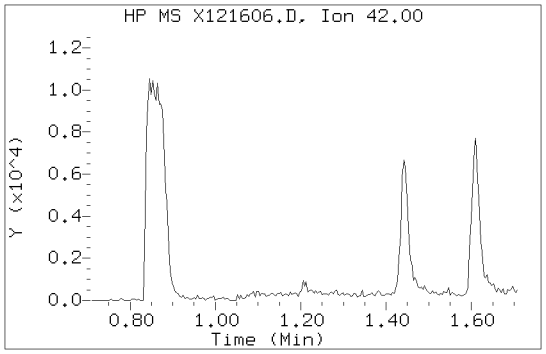

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Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

BEFORE

MASS
65
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27-Dec-2022
16:03
linh
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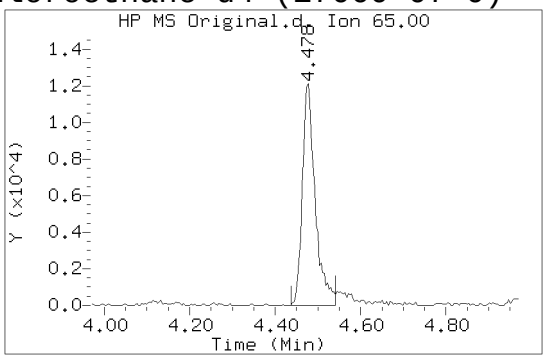

AFTER

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16:07
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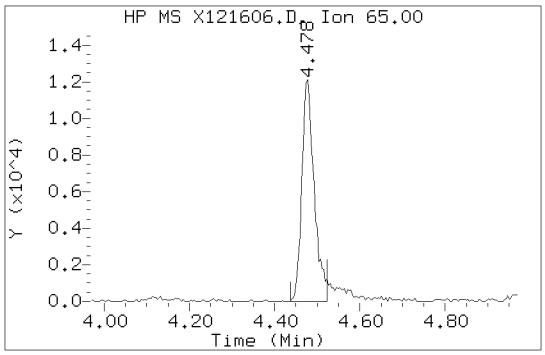

BEFORE

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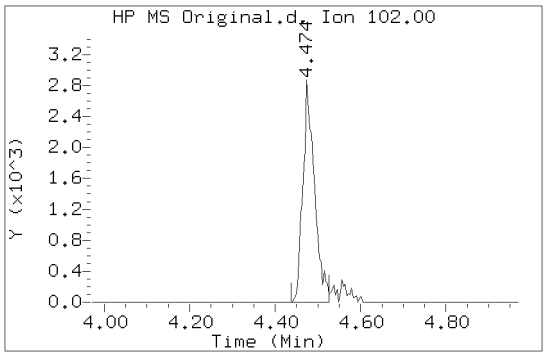

AFTER

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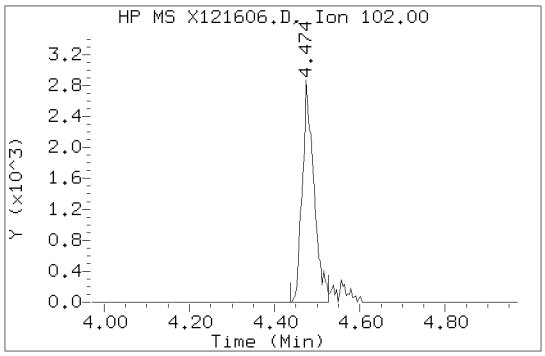

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121607.D Page 1
Report Date: 27-Dec-2022 16:07

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

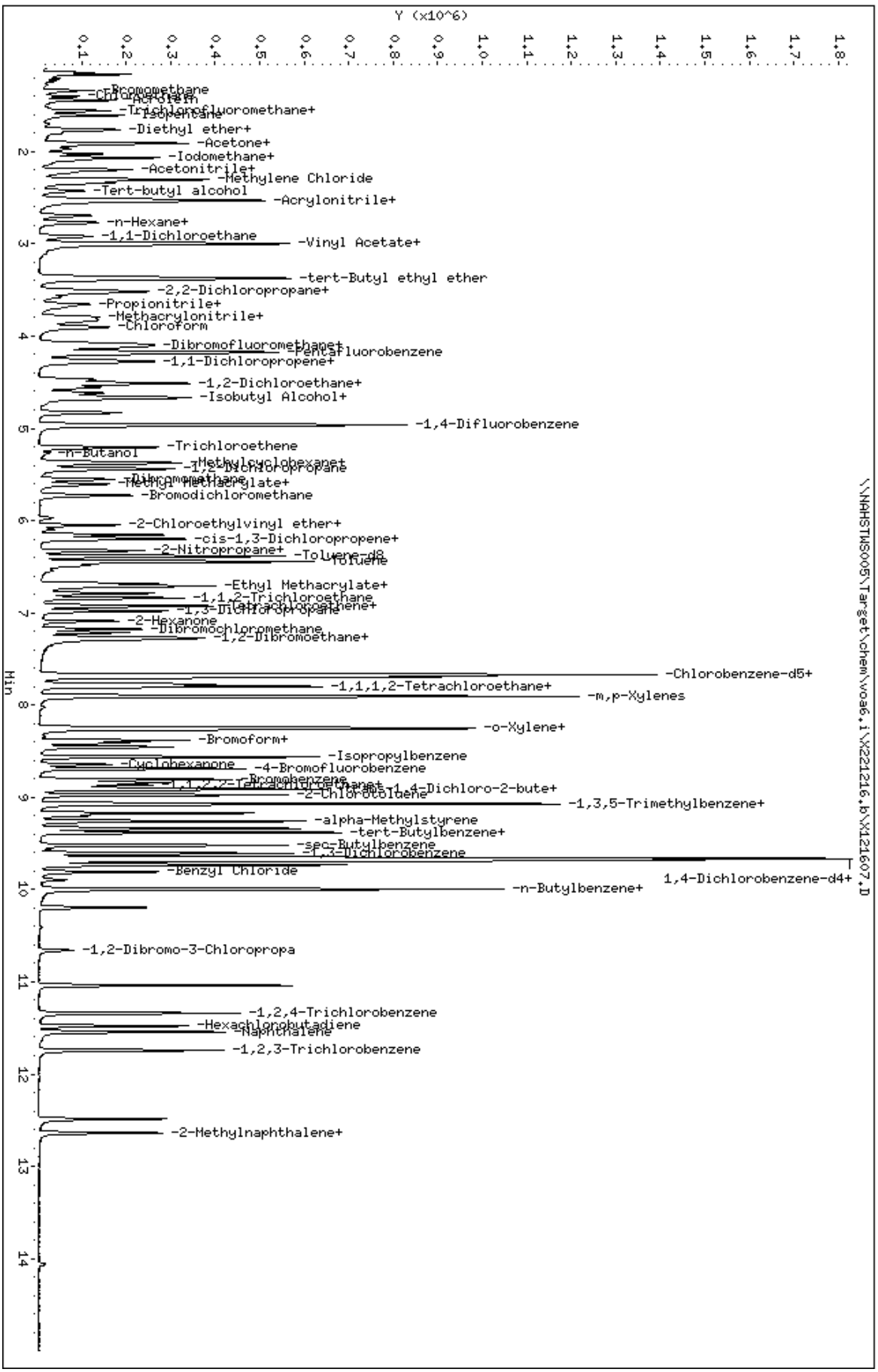
		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.690	3.690	(0.883)	57874	20.0000	18.55(M)
	162 Butyl acrylate	55	8.252	8.252	(1.076)	156518	20.0000	18.50
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	63382	20.0000	19.96
	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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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

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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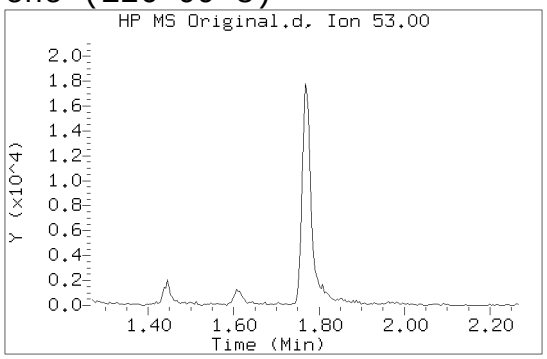
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
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AREA
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17627
27-Dec-2022
16:06
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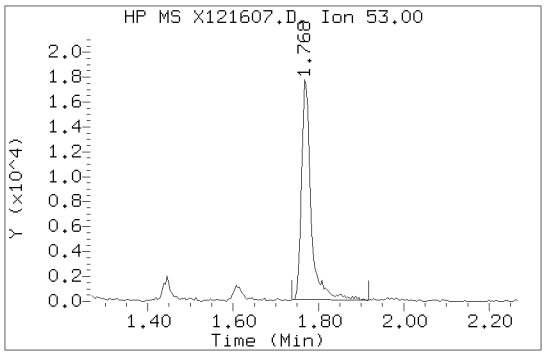

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27-Dec-2022
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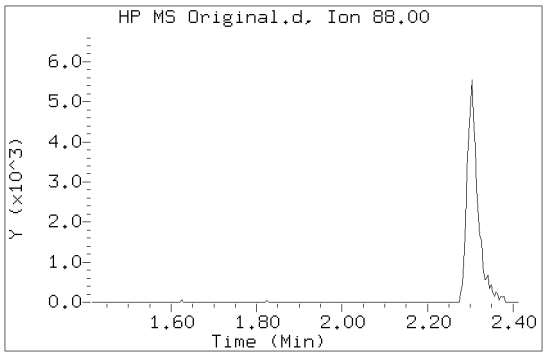

AFTER
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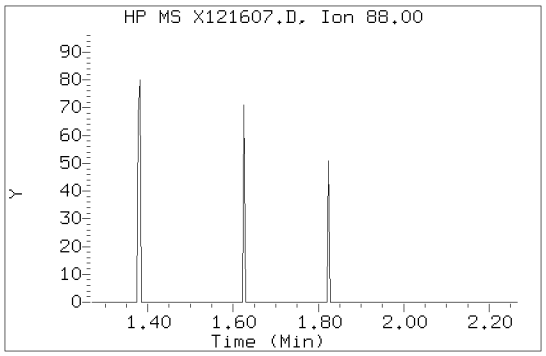

Methyl Acrylate (96-33-3)

Reason Code:

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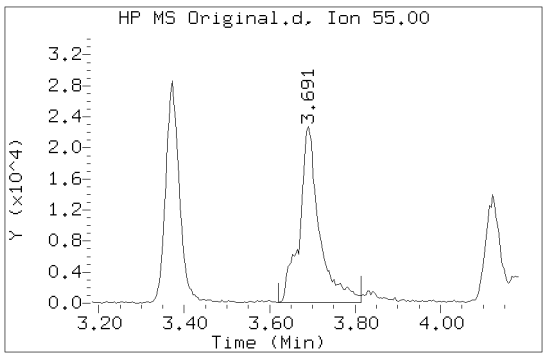

AFTER
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16:06
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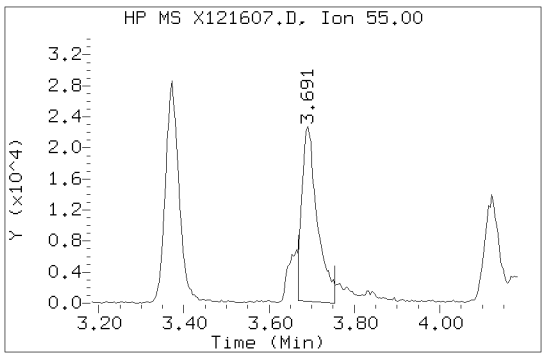

BEFORE
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16:03
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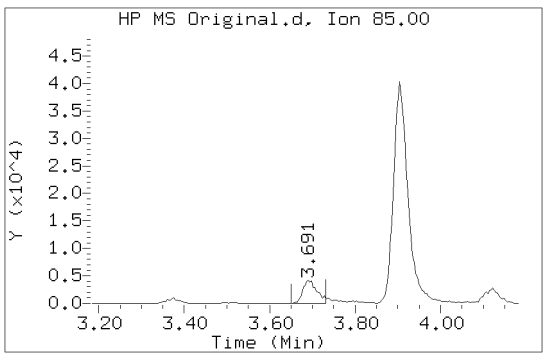
pham



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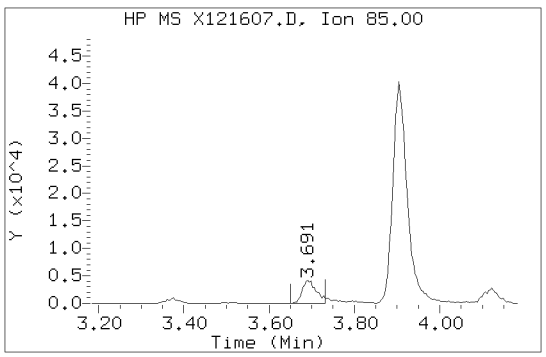

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Inj Date : 16-DEC-2022 13:43
InstruID : voa6.i
LabSampID : VSTD020

1,4-Dioxane ()

Reason Code:

BEFORE

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27-Dec-2022
16:03
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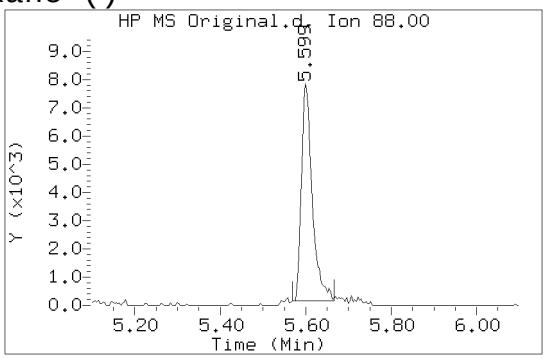

AFTER

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AREA
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7857
27-Dec-2022
16:06
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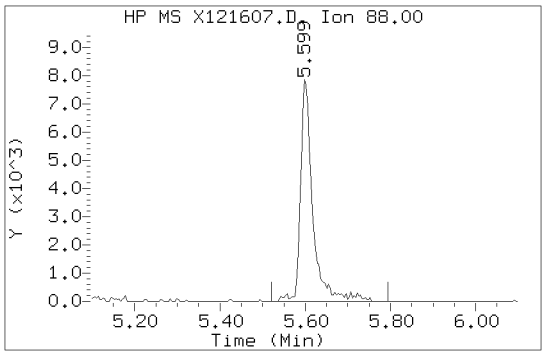

BEFORE

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27-Dec-2022
16:03
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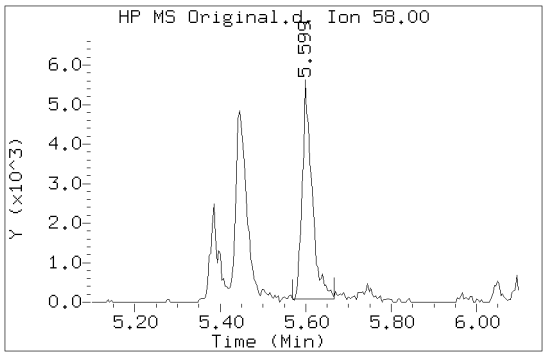

AFTER

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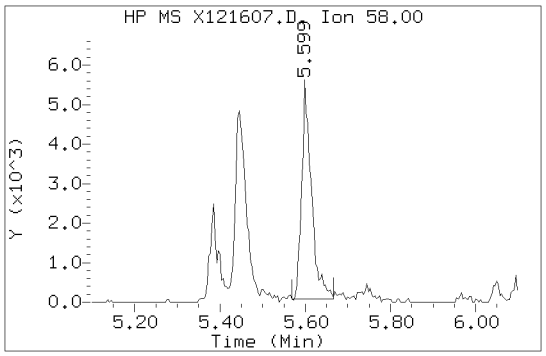

Cyclohexane (110-82-7)

Reason Code:

BEFORE

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16:03
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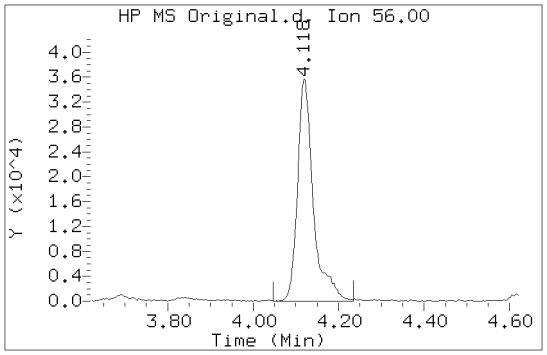

AFTER

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AREA
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16:06
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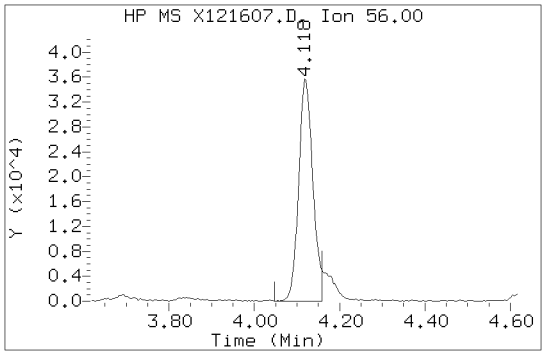

BEFORE

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27-Dec-2022
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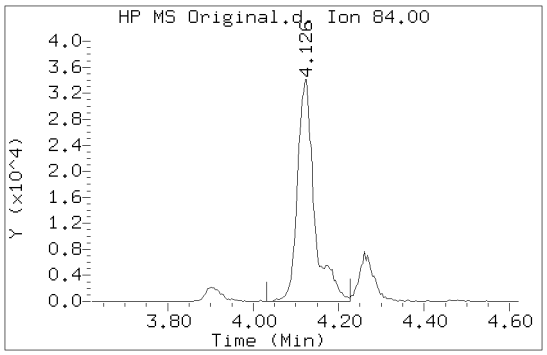

AFTER

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27-Dec-2022
16:06
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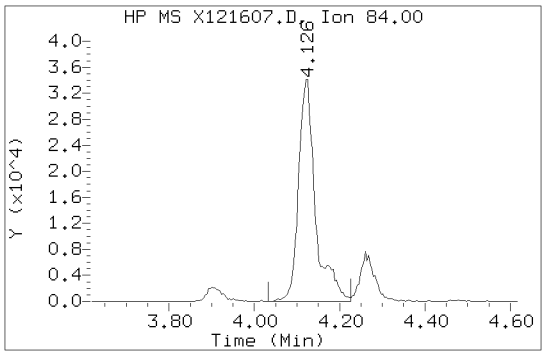

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Inj Date : 16-DEC-2022 13:43
InstruID : voa6.i
LabSampID : VSTD020

Cyclohexane (110-82-7)

Reason Code:

BEFORE

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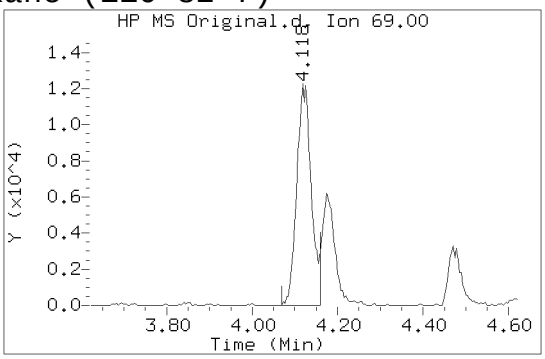

AFTER

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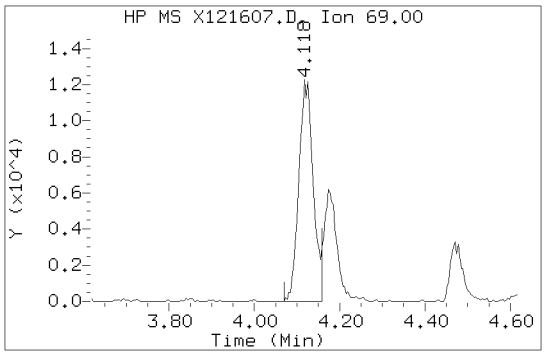

Acetaldehyde (75-07-0)

Reason Code:

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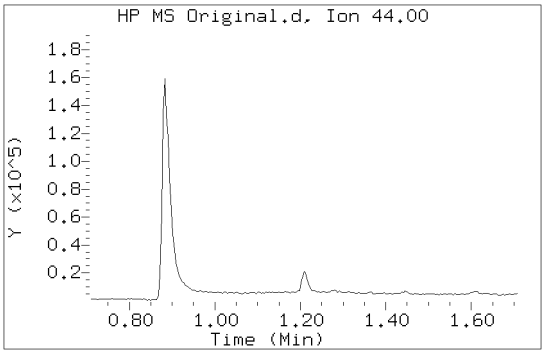

AFTER

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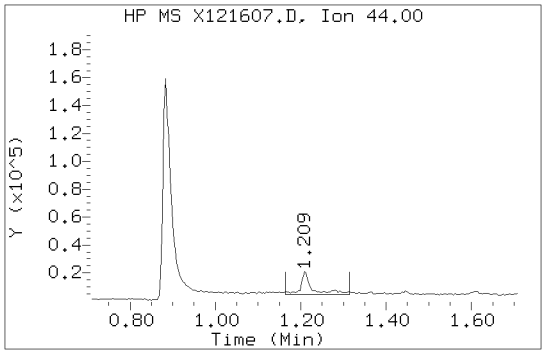

BEFORE

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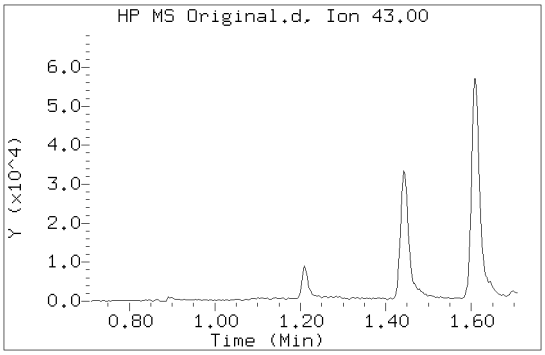

AFTER

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16:06
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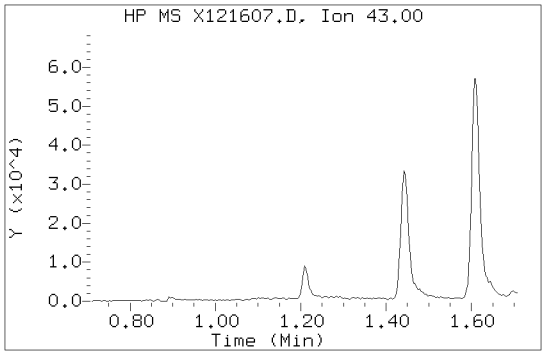

BEFORE

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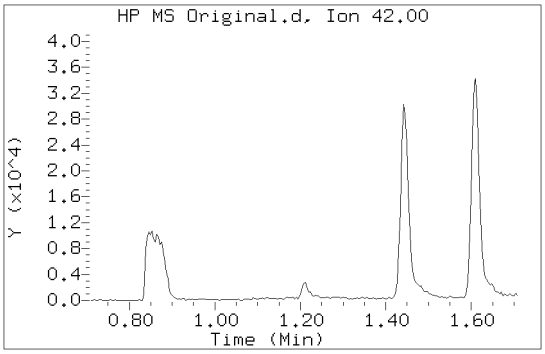

AFTER

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HEIGHT
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27-Dec-2022
16:06
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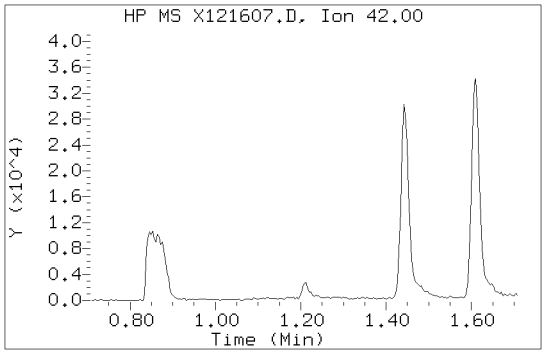


Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
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

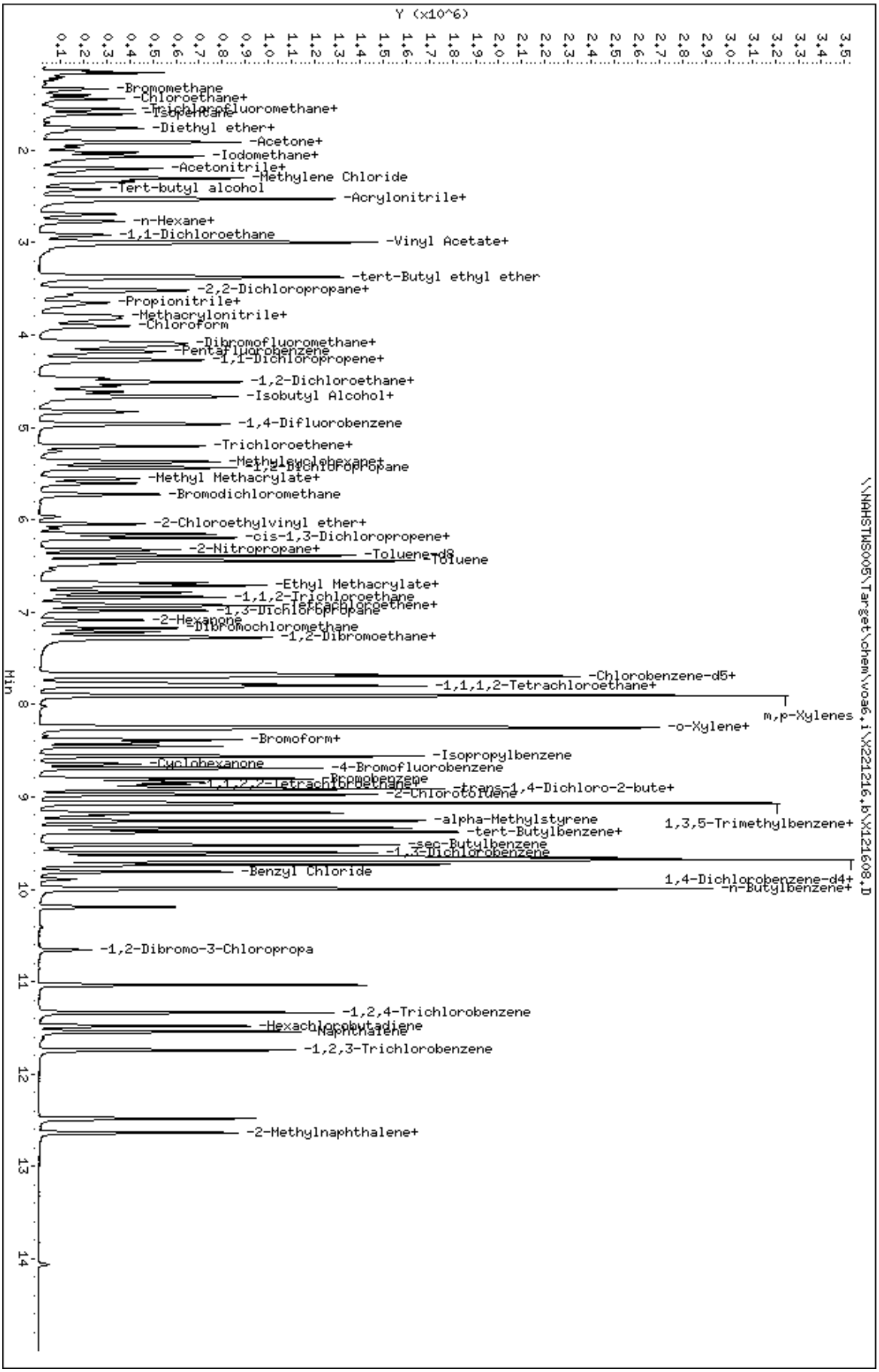
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	151068	50.0000	48.62(M)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	415774	50.0000	48.76
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	160392	50.0000	50.11
	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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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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27-Dec-2022
16:03
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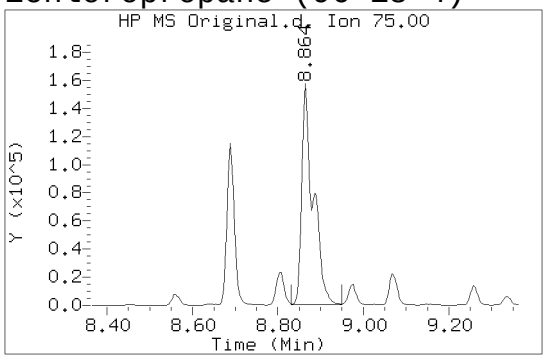

BEFORE

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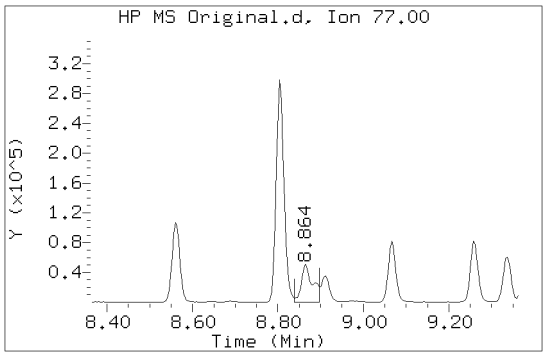

Reason Code:

AFTER

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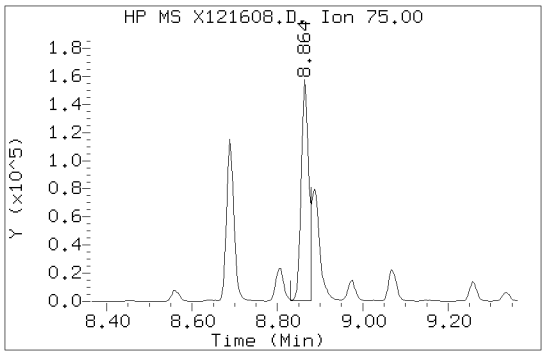

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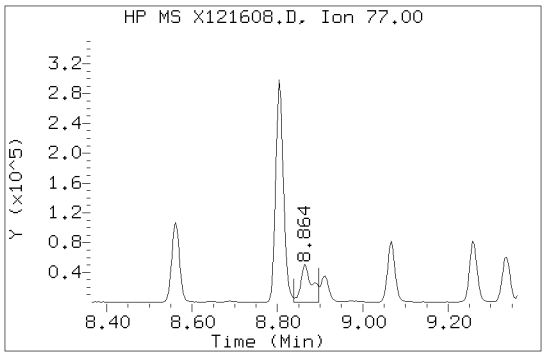

Chloroprene (126-99-8)

BEFORE

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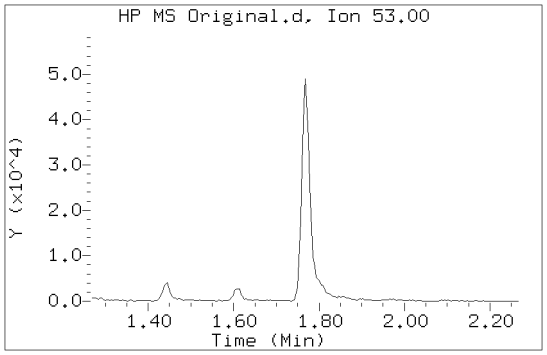

BEFORE

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16:03
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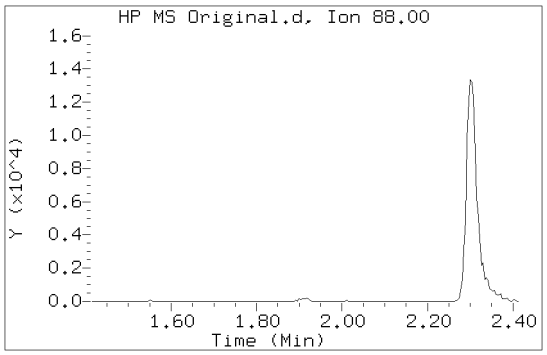

Reason Code:

AFTER

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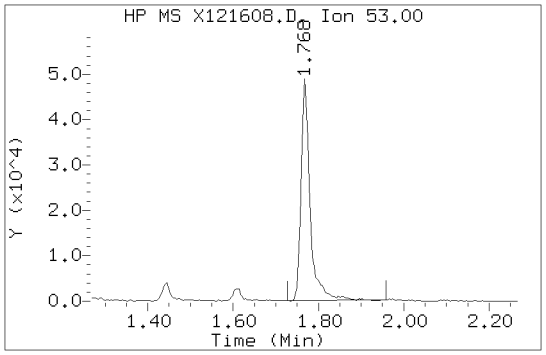

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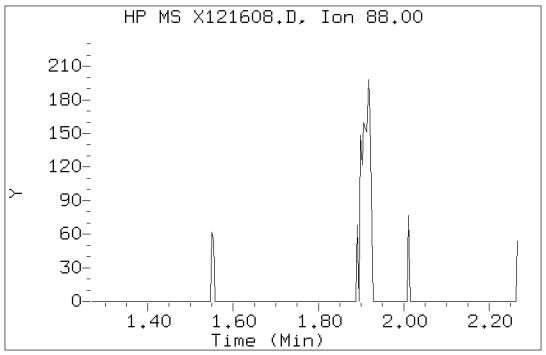

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Methyl Acrylate (96-33-3)

BEFORE

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16:03
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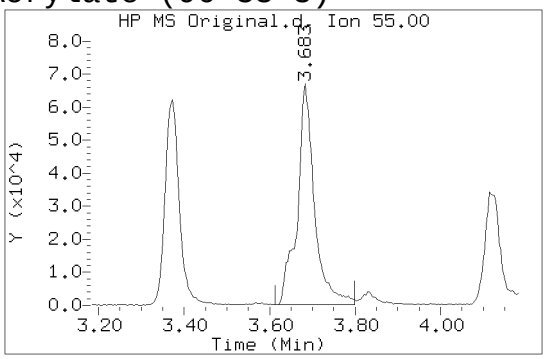

BEFORE

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27-Dec-2022
16:03
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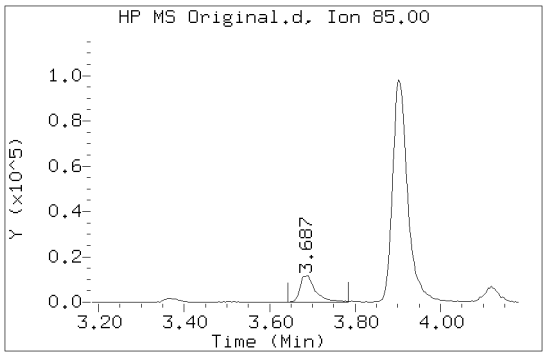

Reason Code:

AFTER

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16:06
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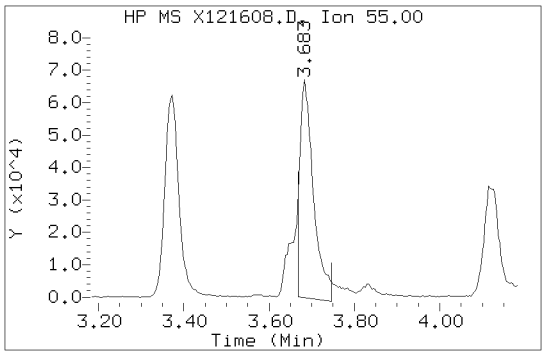

AFTER

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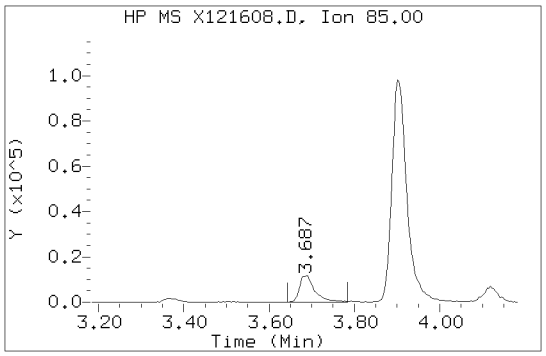

Acetaldehyde (75-07-0)

BEFORE

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HEIGHT
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27-Dec-2022
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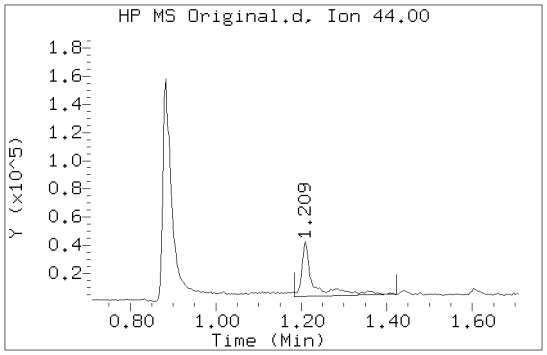

BEFORE

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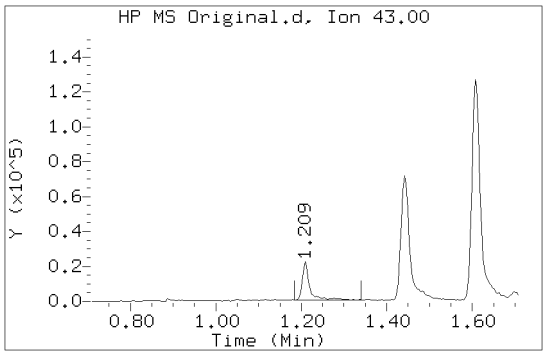

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AFTER

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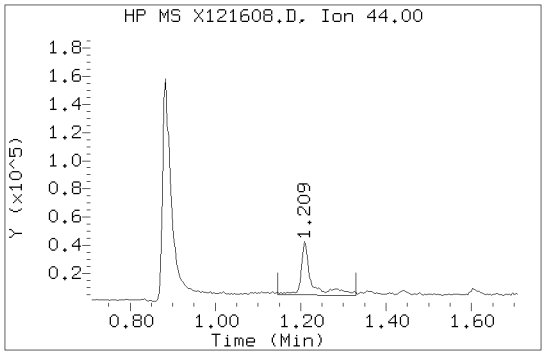

AFTER

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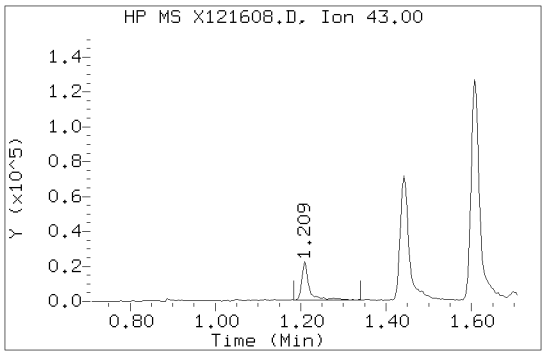

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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27-Dec-2022
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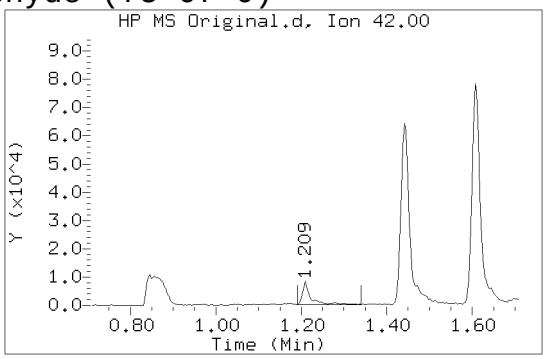

AFTER

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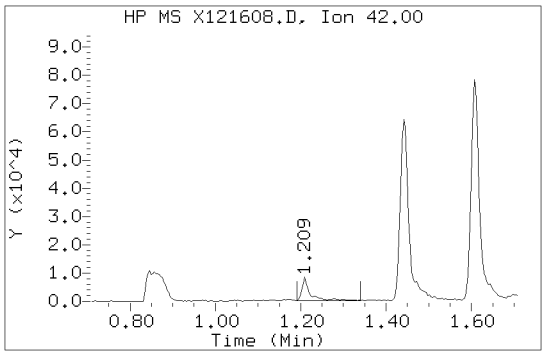

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D
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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

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	Compounds							
	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

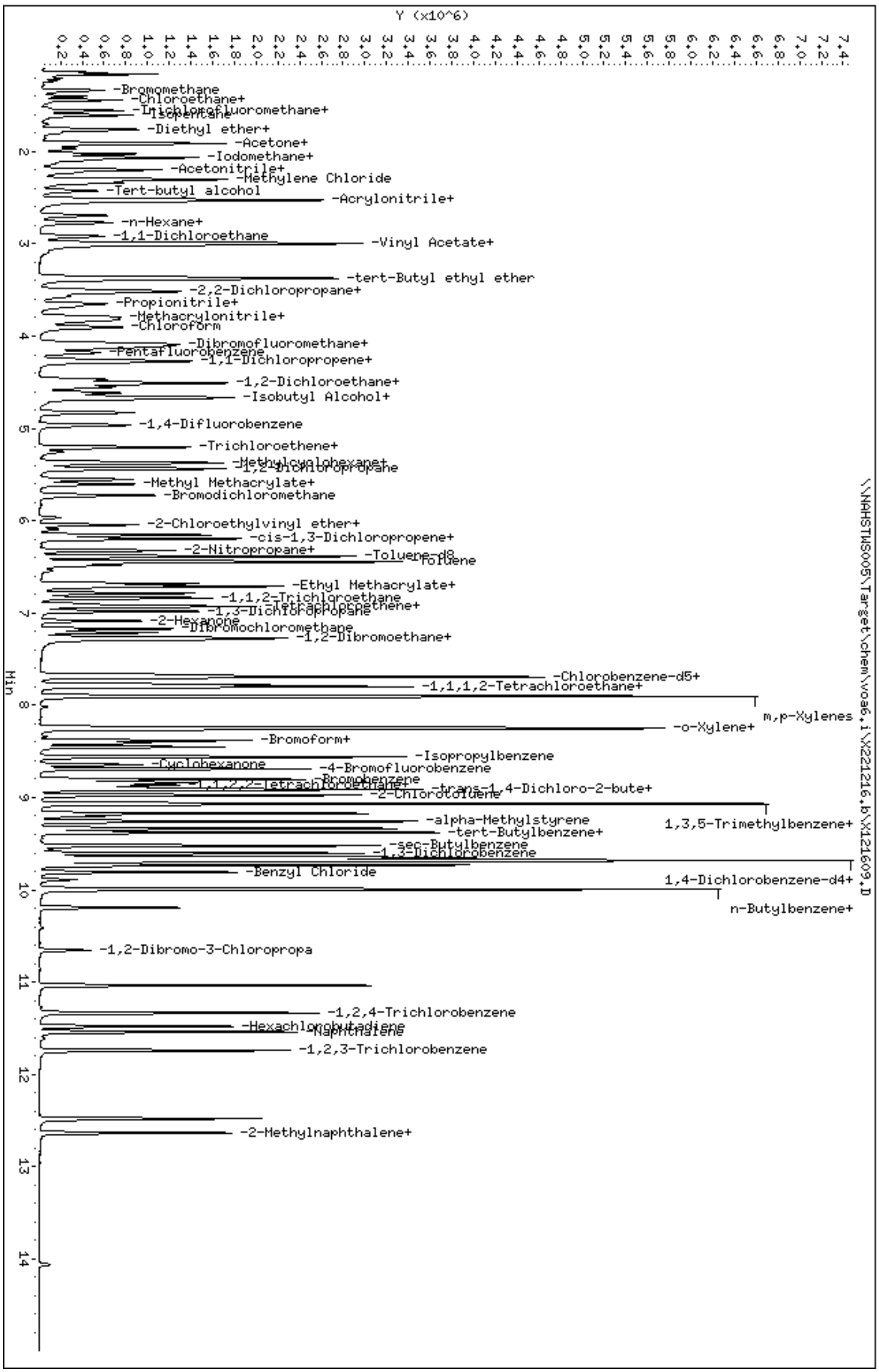
61 Ethylbenzene	106	7.799	7.799 (1.017)	612289	100.000	99.40
62 m,p-Xylenes	106	7.904	7.904 (1.031)	1556563	200.000	196.03

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.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	8.241	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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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

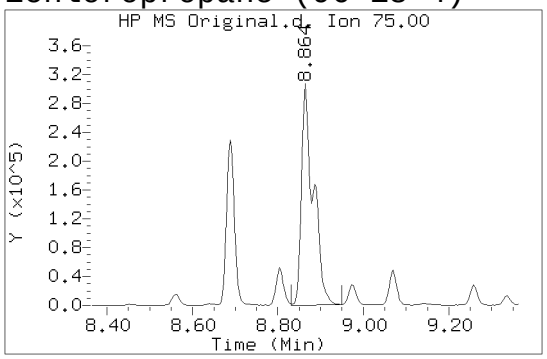
Instrument: voa6,i
Operator: PC
Column diameter: 0.18

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

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27-Dec-2022
16:03
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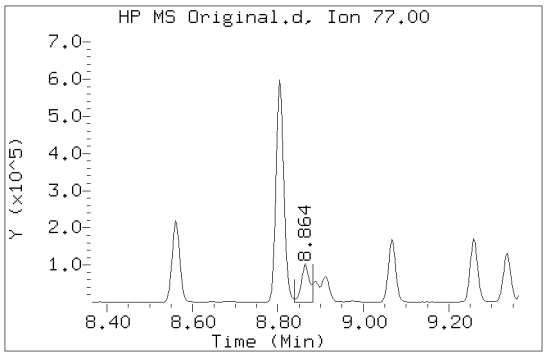

Reason Code:

AFTER

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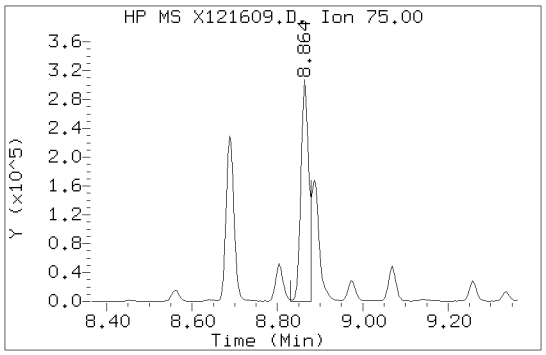

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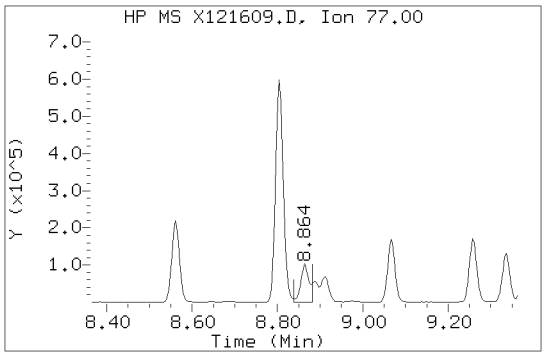

Chloroprene (126-99-8)

BEFORE

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16:03
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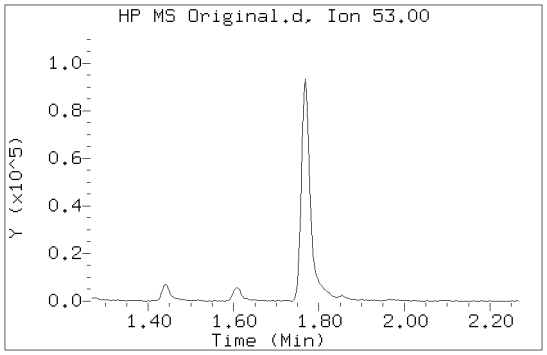

BEFORE

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88
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16:03
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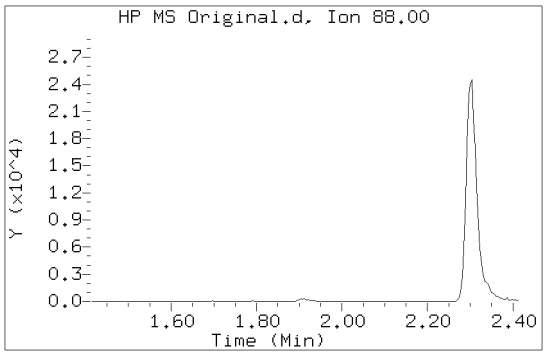

Reason Code:

AFTER

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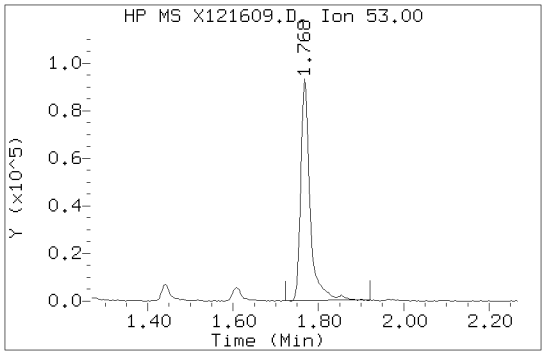

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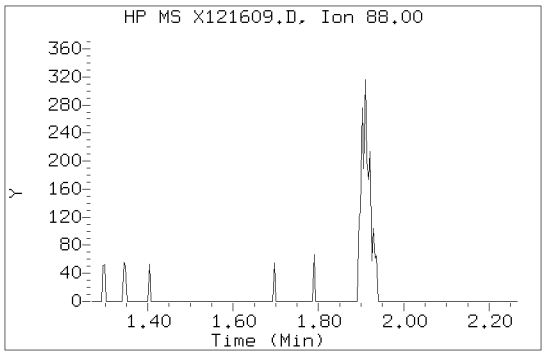

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Methyl Acrylate (96-33-3)

BEFORE

MASS
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AREA
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HEIGHT
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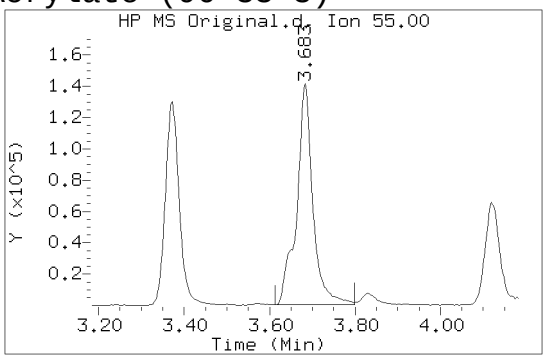
27-Dec-2022
16:03
linh
pham



BEFORE

MASS
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AREA
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HEIGHT
29192
27-Dec-2022
16:03
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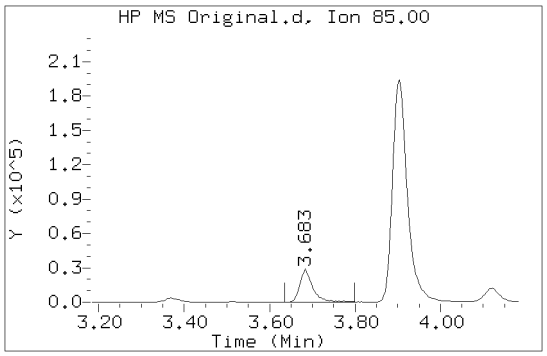

Reason Code:

AFTER

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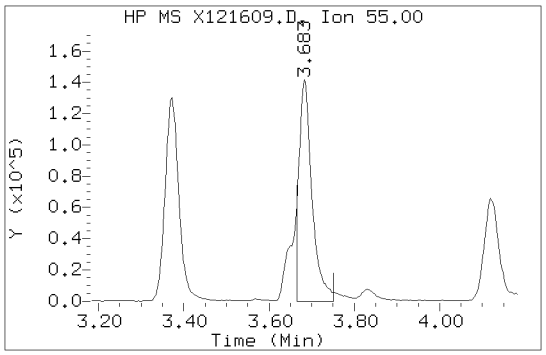
linh
pham



AFTER

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16:06
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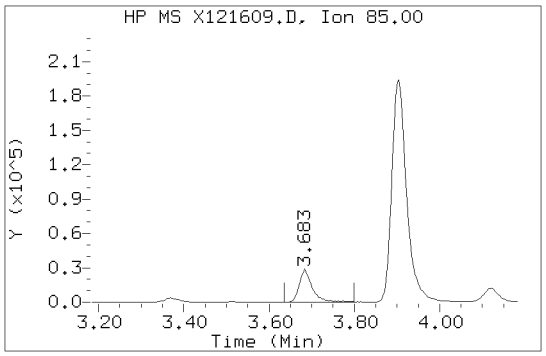

Acetaldehyde (75-07-0)

BEFORE

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AREA
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HEIGHT
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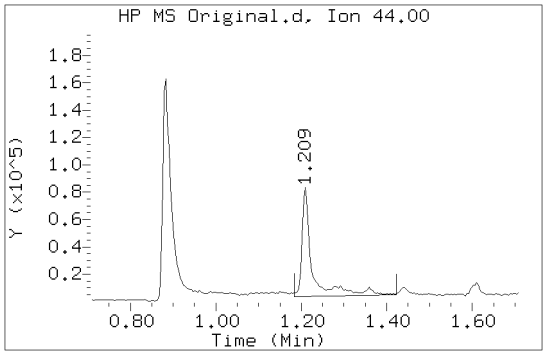
27-Dec-2022
16:03
linh
pham



BEFORE

MASS
43
AREA
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HEIGHT
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27-Dec-2022
16:03
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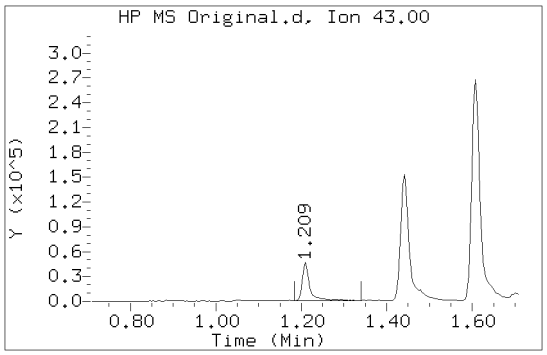

Reason Code:

AFTER

MASS
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AREA
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HEIGHT
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16:06
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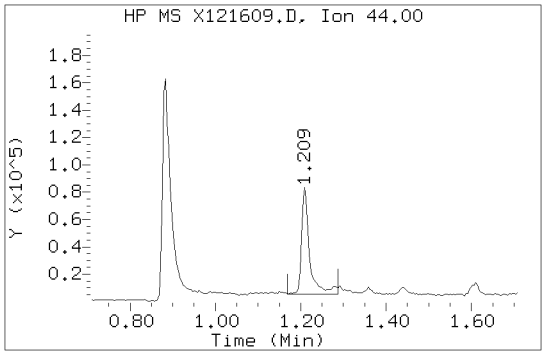

AFTER

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16:06
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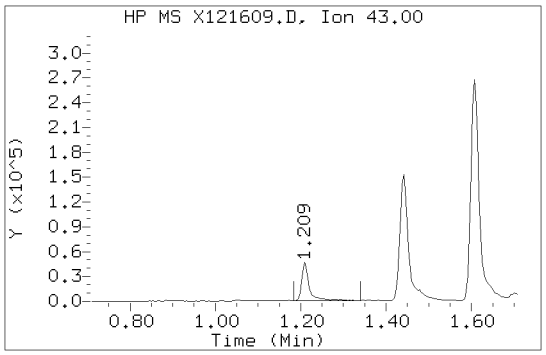

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
42
AREA
19613
HEIGHT
14674
27-Dec-2022
16:03
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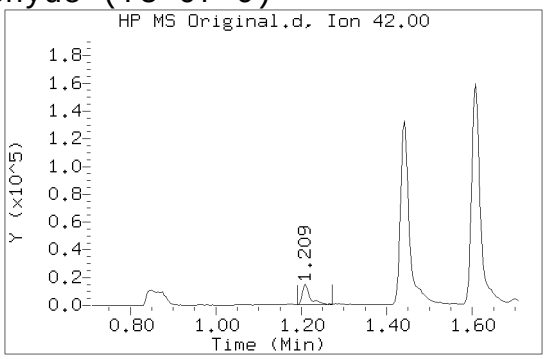

AFTER

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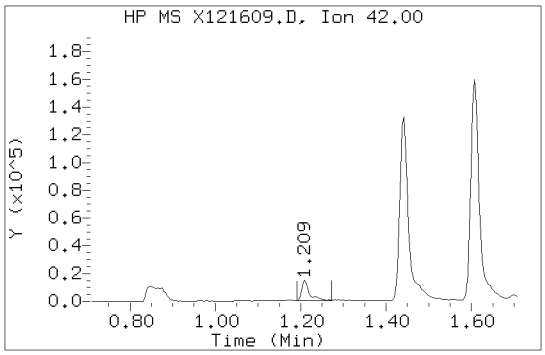

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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\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   :
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

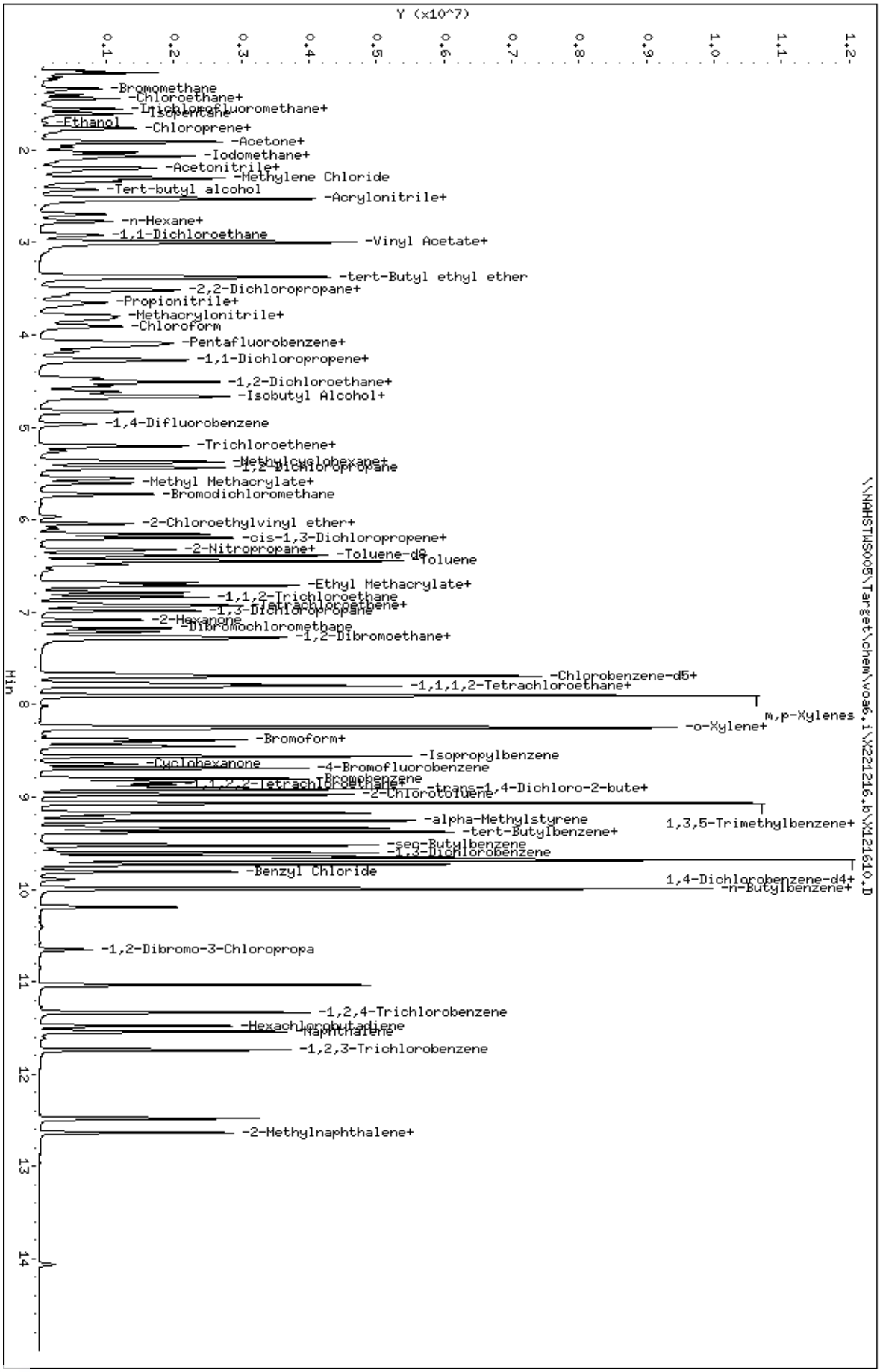
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.683	3.683	(0.882)	479571	150.000	157.93(M)
	162 Butyl acrylate	55	8.248	8.248	(1.076)	1470193	150.000	167.53
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	476130	150.000	151.40
	3 Chloromethane	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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Instrument: voa6.i
Operator: PC
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\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D
Y (x10^7)
Min
-Bromomethane
-Chloroethane+
-Trichlorofluoromethane+
-Isopentane
-Ethanol
-Chloroprene+
-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
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Chloroethylvinyl ether+
-cis-1,3-Dichloropropene+
-2-Nitropropane+
-Toluene-d8
-Toluene
-Ethyl Methacrylate+
-1,1,2-Trichloroethane
-Tetrachloroethene+
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-Bromoform+
-Isopropylbenzene
-Cyclohexanone
-4-Bromofluorobenzene
-Bromobenzene
-1,1,2,2-Tetrachloroethane
-trans-1,4-Dichloro-2-bute+
-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
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-2-Methylnaphthalene+

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Inj Date : 16-DEC-2022 14:46
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LabSampID : VSTD150

Methyl Acrylate (96-33-3)

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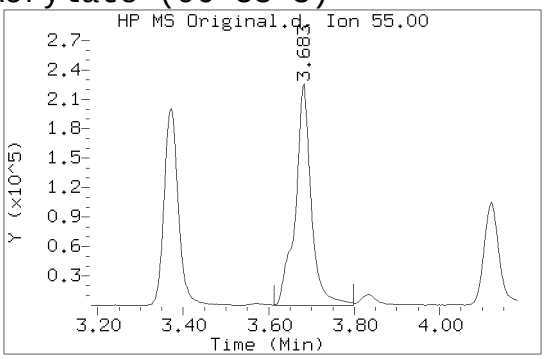

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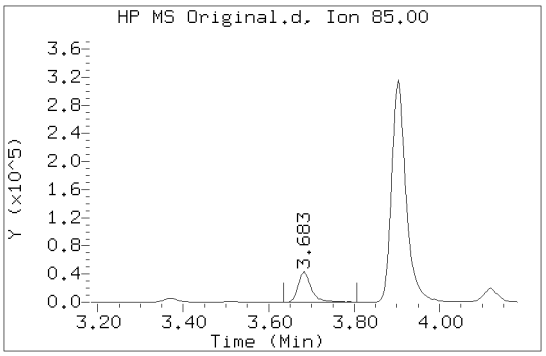

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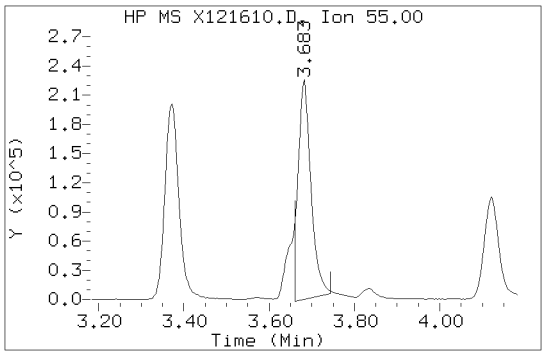

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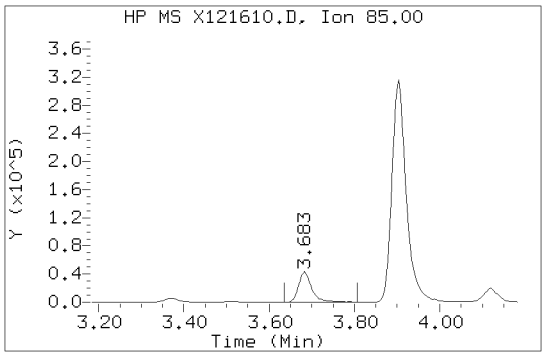

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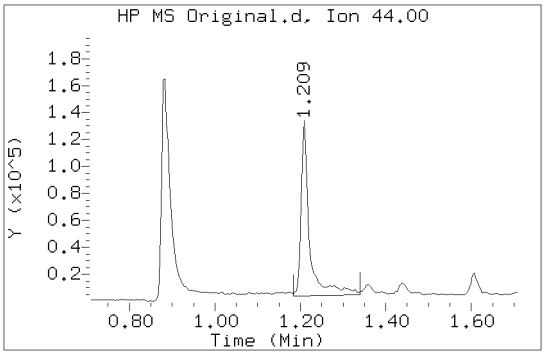

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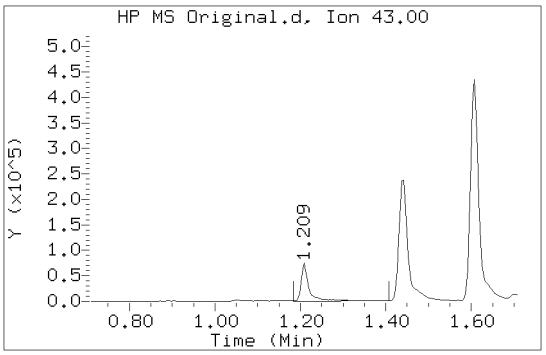

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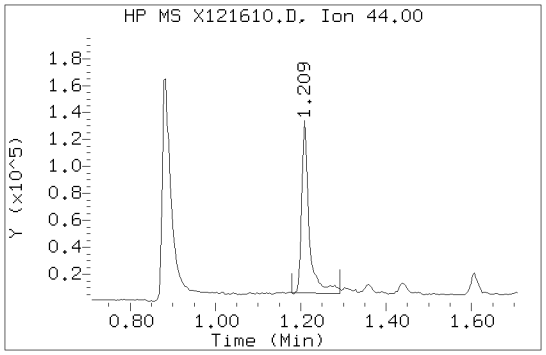

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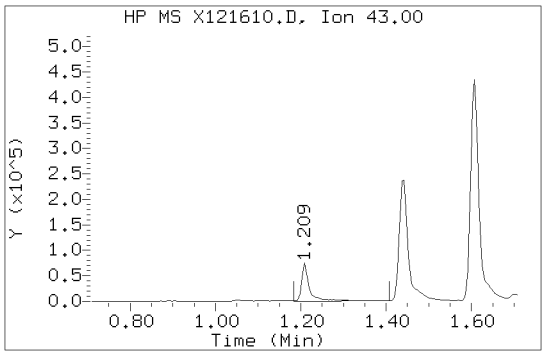

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Inj Date : 16-DEC-2022 14:46
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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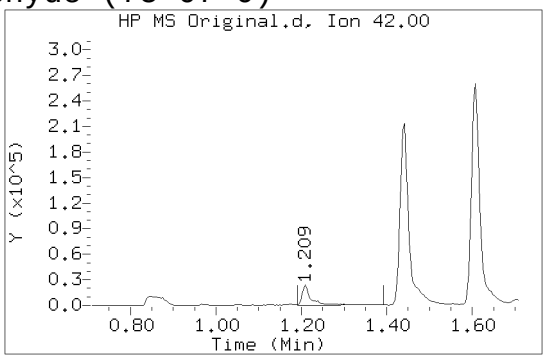

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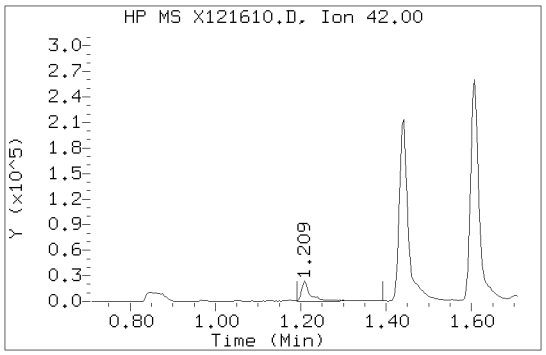

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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\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

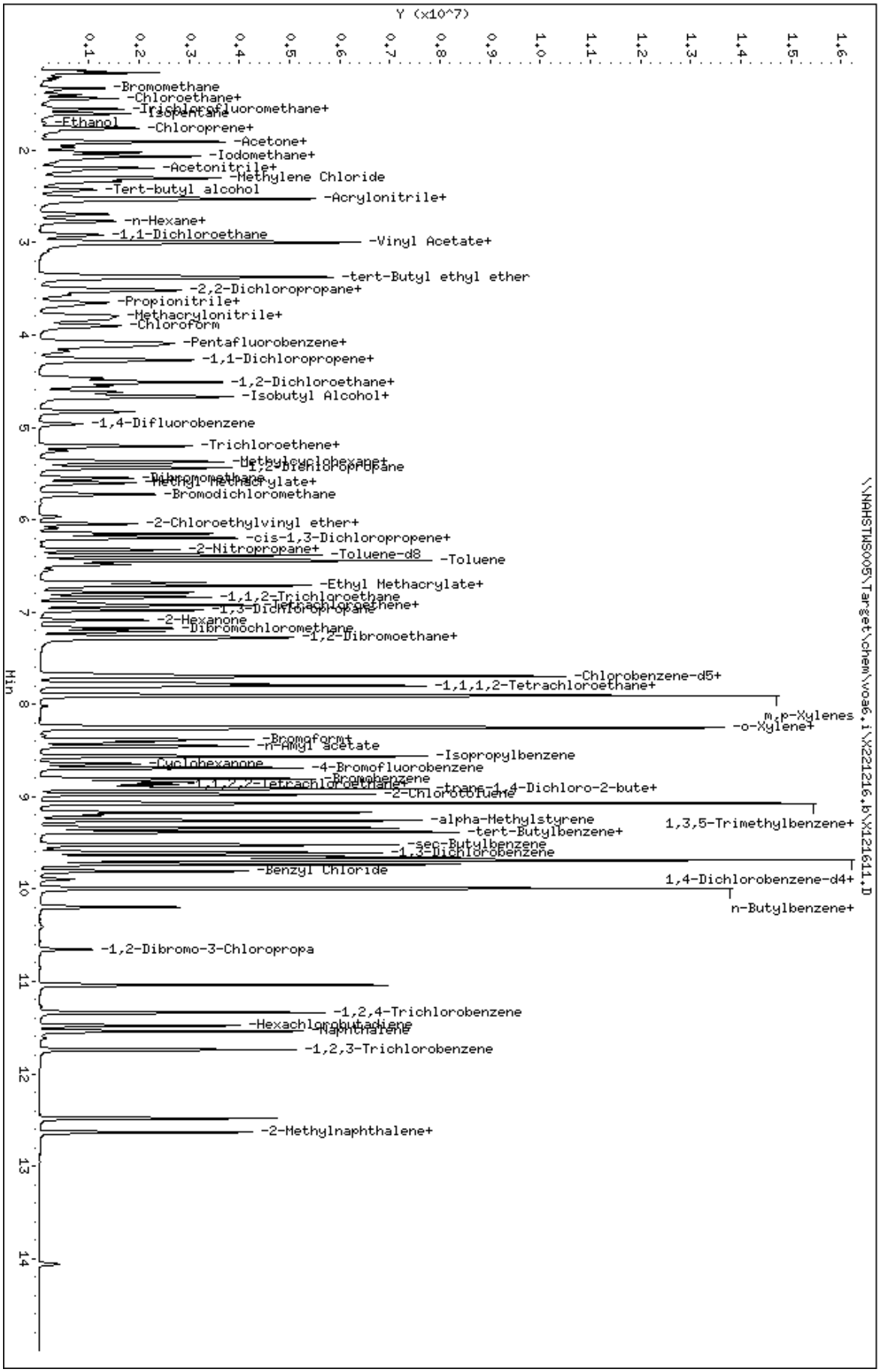
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.683	3.683	(0.882)	646827	200.000	211.32(AM)
	162 Butyl acrylate	55	8.252	8.252	(1.076)	2063916	200.000	228.52(A)
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	635808	200.000	200.44(A)
	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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Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

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

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27-Dec-2022
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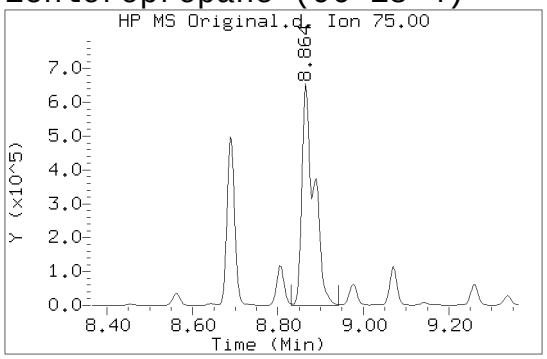

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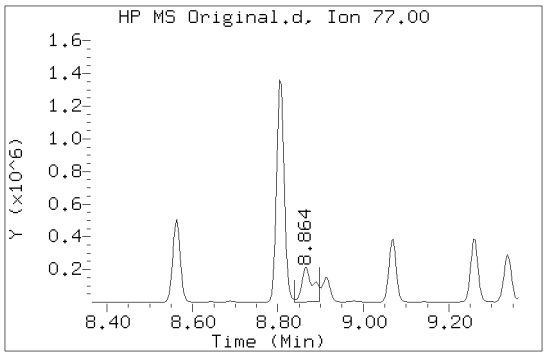

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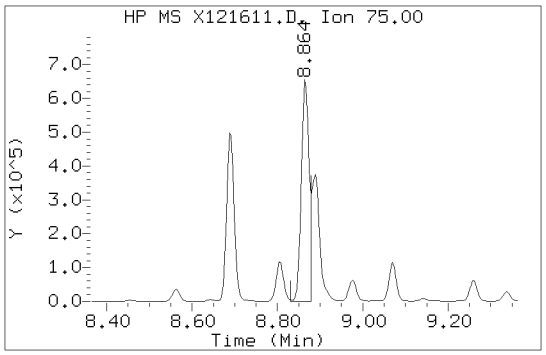

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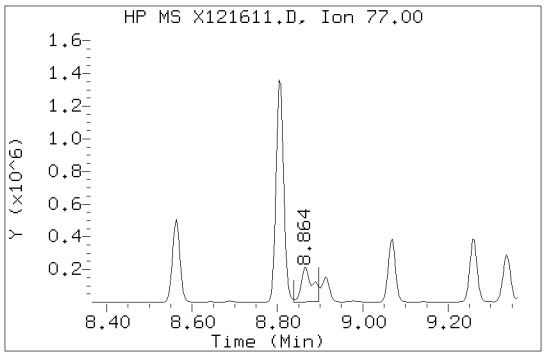

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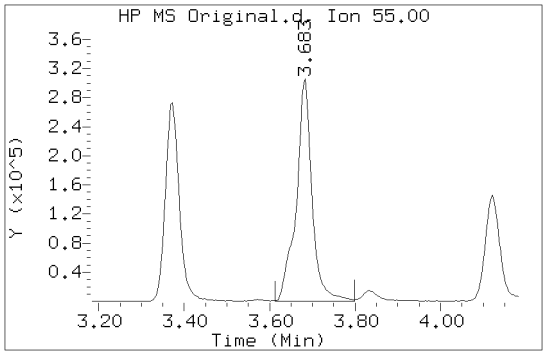

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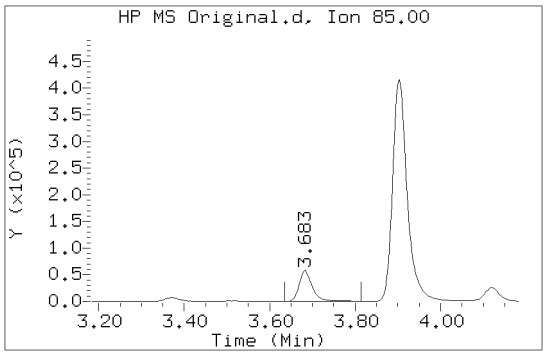

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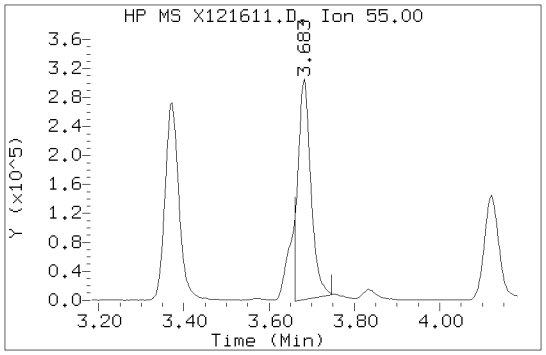

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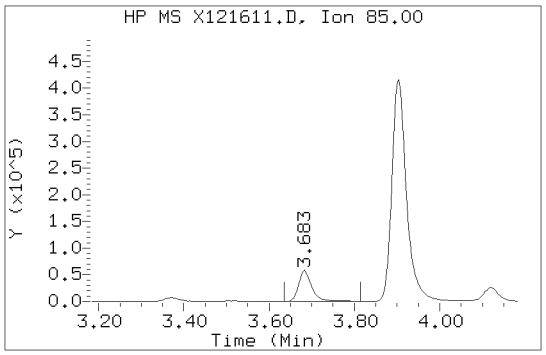

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InstruID : voa6.i
LabSampID : VSTD200

Acetaldehyde (75-07-0)

Reason Code:

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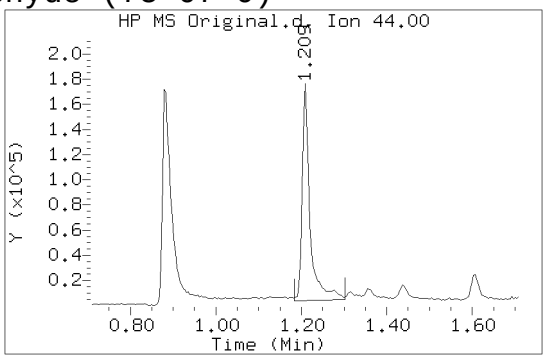

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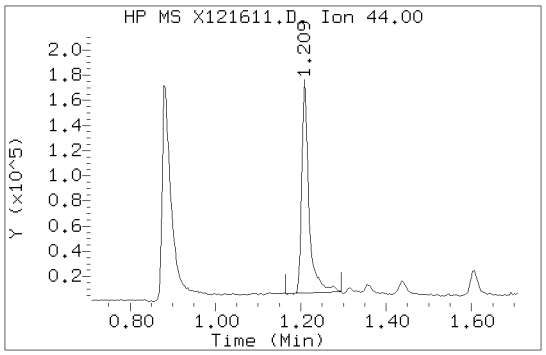

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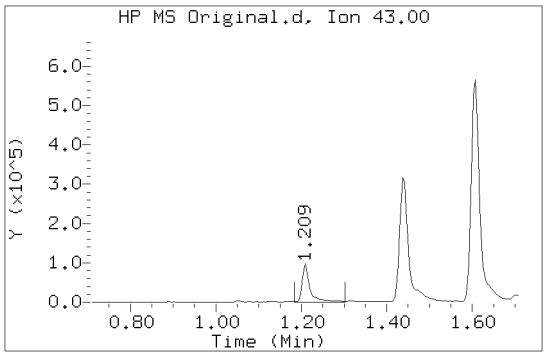

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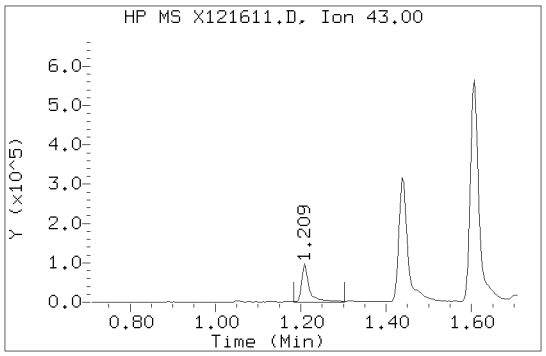

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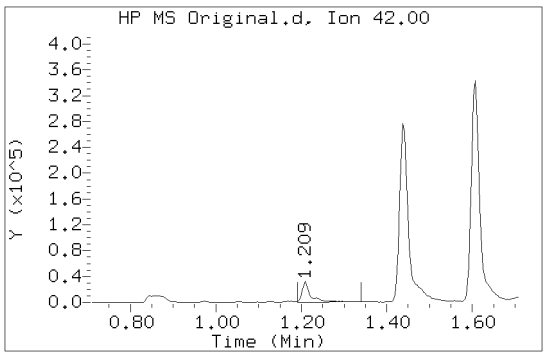

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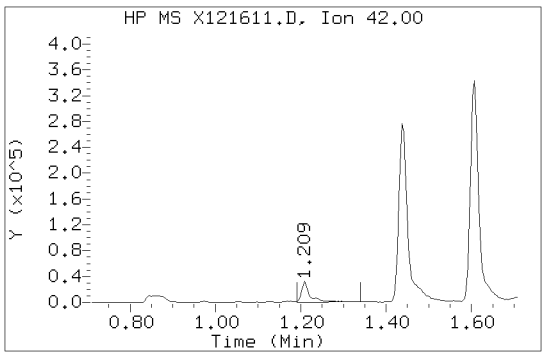

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Report Date: 13-Feb-2023 13:08

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
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Smp Info : CCV;CCV;2;;ICV
Misc Info : V6;WATER;0;1;
Comment   :
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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

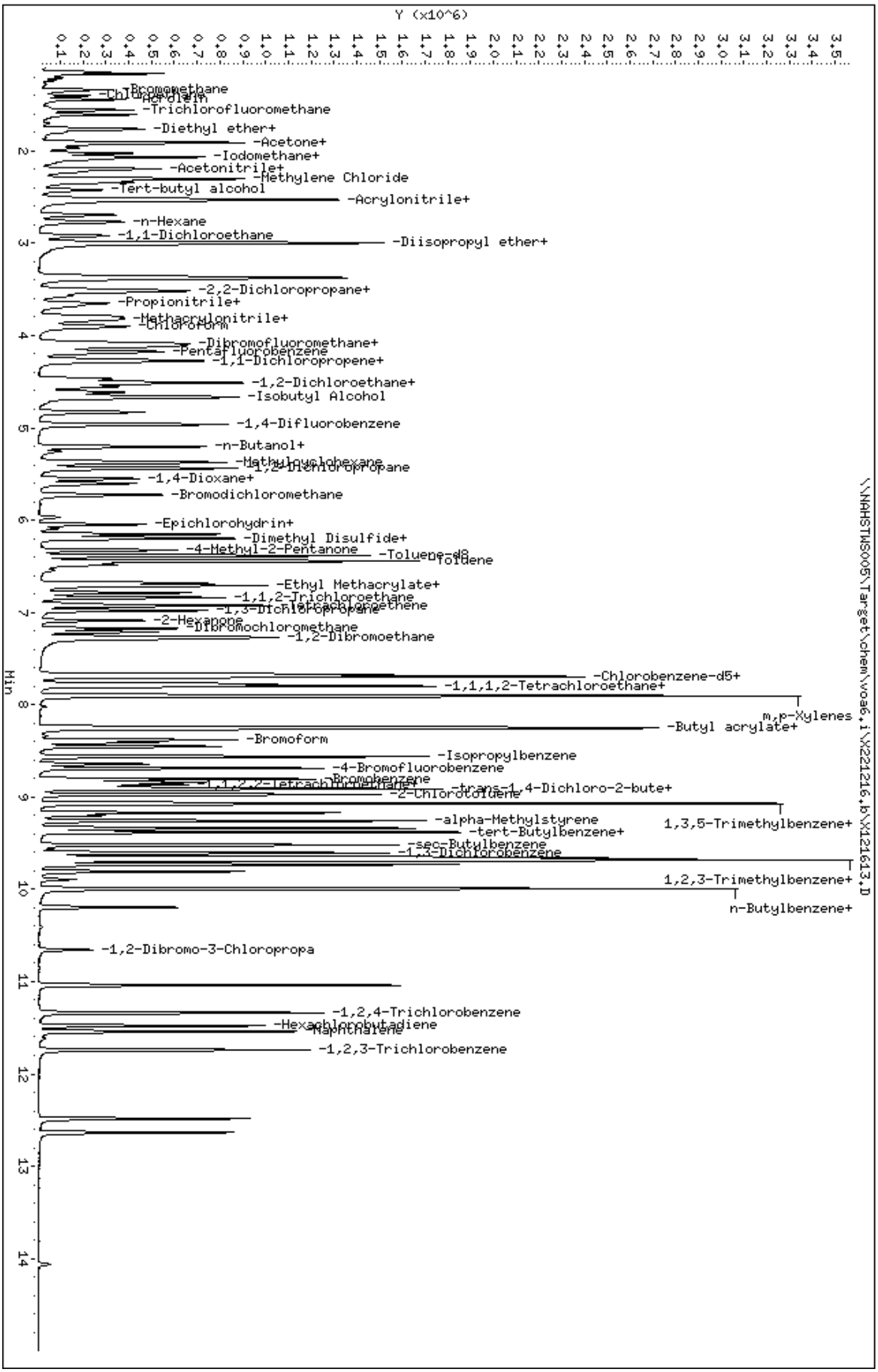
			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	417137	47.9449	47.94
	2	Dichlorodifluoromethane	85	0.972	0.969	(0.233)	166984	52.1924	52.19
	3	Chloromethane	50	1.077	1.077	(0.258)	207623	50.1741	50.17
	5	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

	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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Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 16-DEC-2022 15:49
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LabSampID : ICV

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

Reason Code:

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27-Dec-2022
16:04
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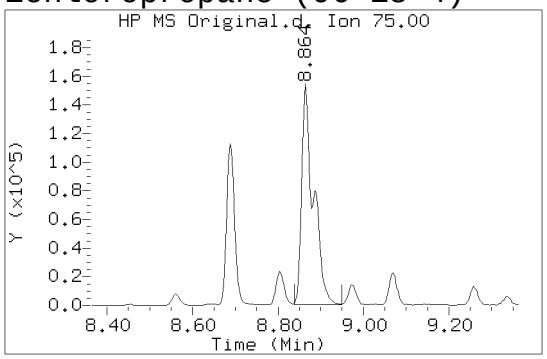

AFTER

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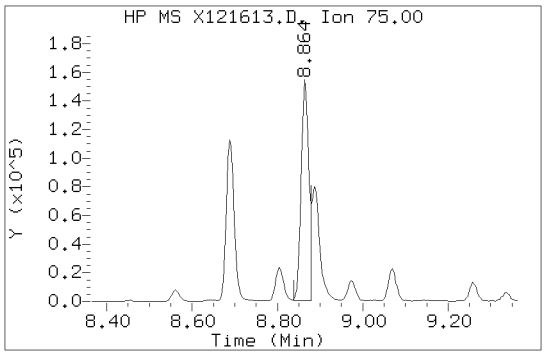

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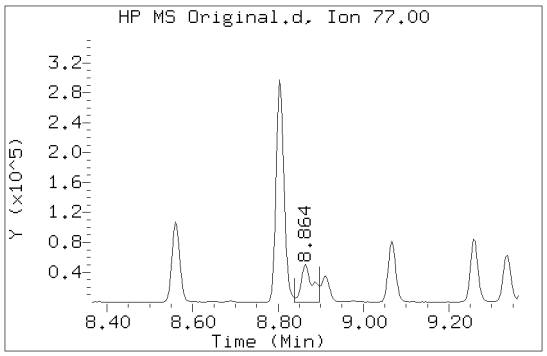

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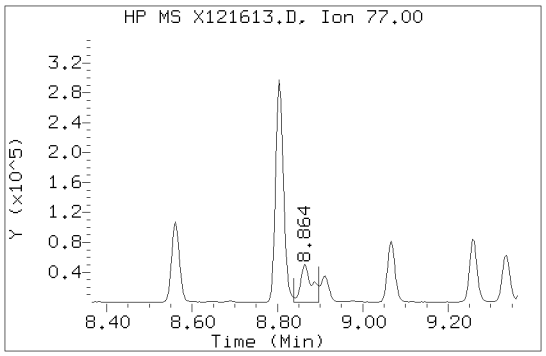

Chloroprene (126-99-8)

Reason Code:

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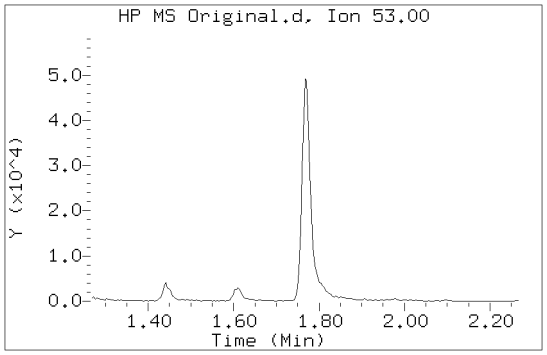

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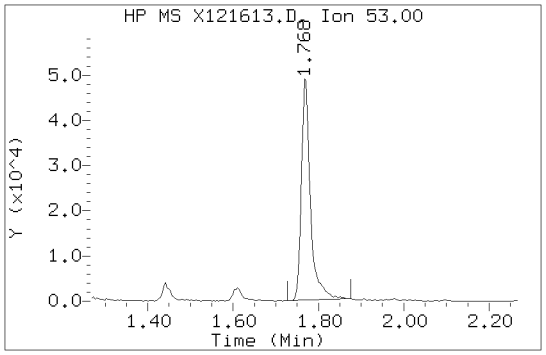

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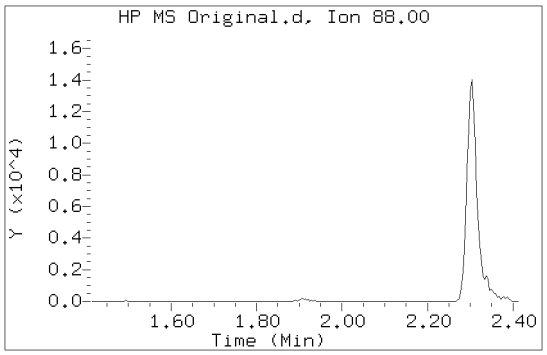

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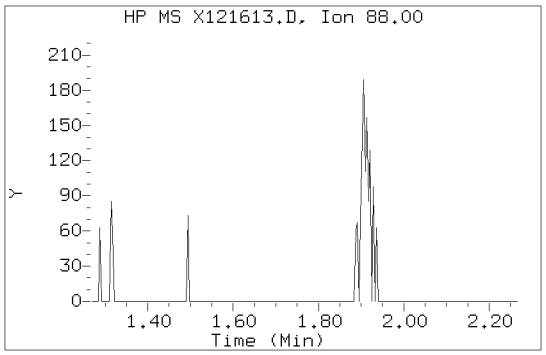

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InstruID : voa6.i
LabSampID : ICV

Acetaldehyde (75-07-0)

Reason Code:

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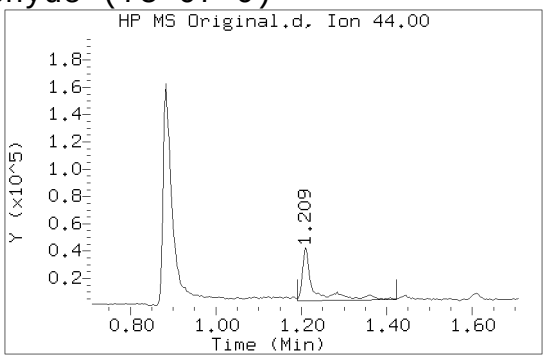

AFTER

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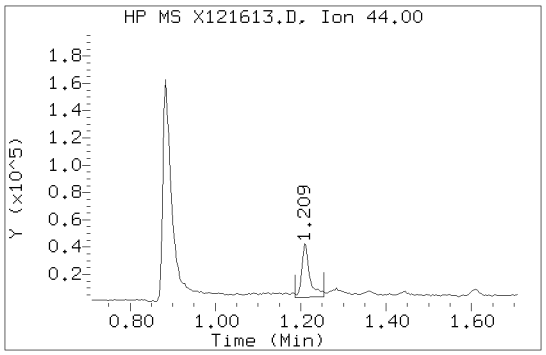

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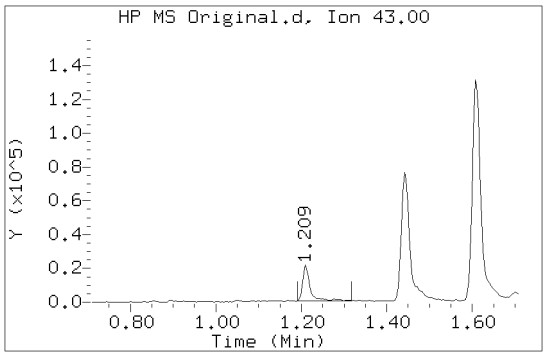

AFTER

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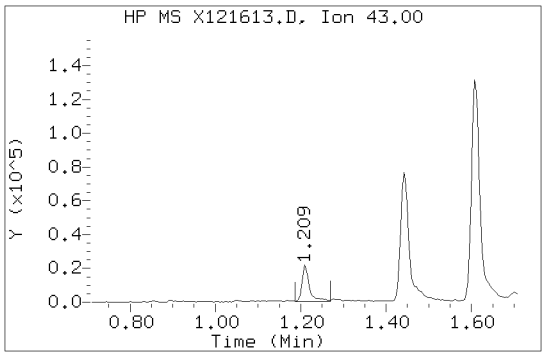

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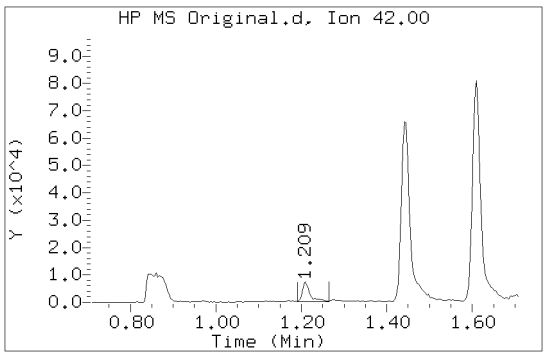

AFTER

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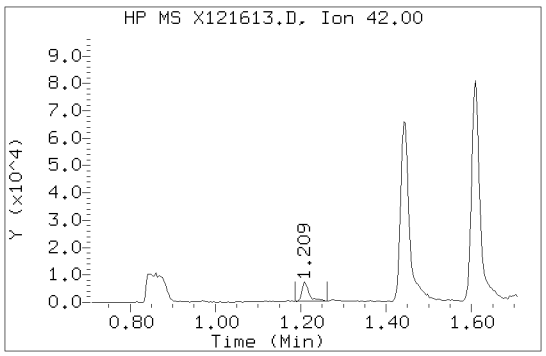

right solutions.
right partner.

Raw Data VOA6 427080

Volatiles by by EPA 8260

Workorder

HS23011397

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\X230201.b\X020101.D Page 1
Report Date: 01-Feb-2023 11:18

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020101.D
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Inj Date : 01-FEB-2023 10:36
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\X230201.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)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	129680			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	26048			15.00- 40.00	20.09
8.687	8.889	(0.000)	75	65704			30.00- 60.00	50.67
8.687	8.889	(0.000)	96	9946			5.00- 9.00	7.67
8.687	8.889	(0.000)	173	750			0.00- 2.00	0.70
8.687	8.889	(0.000)	174	107280			50.00- 0.00	82.73
8.687	8.889	(0.000)	175	8701			5.00- 9.00	8.11
8.687	8.889	(0.000)	176	107056			95.00- 101.00	99.79
8.687	8.889	(0.000)	177	7497			5.00- 9.00	7.00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.09
75	30.00 - 60.00% of mass 95	50.67
96	5.00 - 9.00% of mass 95	7.67
173	Less than 2.00% of mass 174	0.58 (0.70)
174	Greater than 50.00% of mass 95	82.73
175	5.00 - 9.00% of mass 174	6.71 (8.11)
176	95.00 - 101.00% of mass 174	82.55 (99.79)
177	5.00 - 9.00% of mass 176	5.78 (7.00)

Data File: X020101.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 112

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37.00	6902	66.10	261	96.00	9946	142.90	1114
38.10	5835	67.00	519	96.90	344	144.90	111
39.00	3254	68.00	13397	98.00	1270	145.80	131
40.00	1461	69.00	14815	102.60	135	146.80	98
41.00	1411	70.10	1910	104.00	822	147.90	332
42.00	1942	71.00	307	104.90	313	148.60	80
43.00	1587	72.00	928	105.80	786	149.70	111
43.90	1665	73.00	5099	106.80	373	152.70	58
44.90	1452	74.00	21056	108.80	305	153.80	102
46.00	142	75.00	65704	110.70	99	154.60	363
47.00	1345	76.00	5679	111.70	73	155.90	72
47.90	796	77.00	628	112.80	174	156.90	149
49.00	5399	77.80	719	114.80	103	158.80	167
50.00	26048	78.90	3534	115.70	326	160.80	146
51.00	8272	80.00	1197	116.90	910	169.80	94
52.10	295	80.90	3710	117.80	480	171.00	106
52.90	253	81.90	1055	118.70	603	171.90	59
53.80	199	82.90	392	123.80	171	172.80	750
55.00	3357	85.00	168	126.90	133	173.90	107280
56.00	2573	85.60	54	127.80	574	174.90	8701
57.00	4377	86.10	173	128.80	178	175.90	107056
58.10	510	86.90	4790	129.90	327	176.90	7497
59.20	82	88.00	5115	130.80	130	177.90	168
60.00	1078	89.30	86	135.00	275	186.20	187
61.00	5501	91.00	573	135.70	57		
62.00	6171	92.00	3459	136.50	123		
63.00	4820	92.90	4685	136.90	173		
64.10	335	94.00	14791	139.90	84		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020101.D

Date : 01-FEB-2023 10:36

Client ID: BFB

Instrument: voa6.i

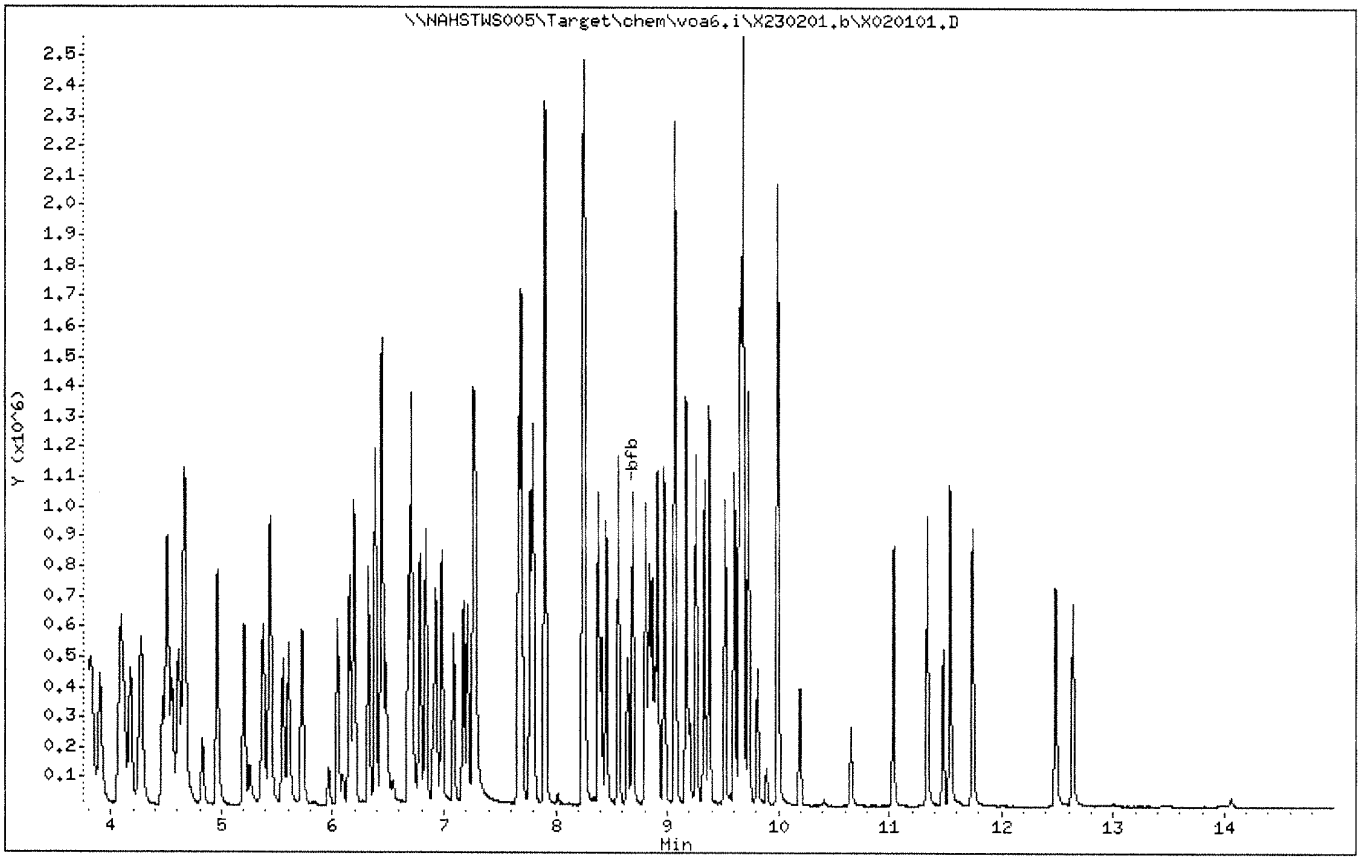
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



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Date : 01-FEB-2023 10:36

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

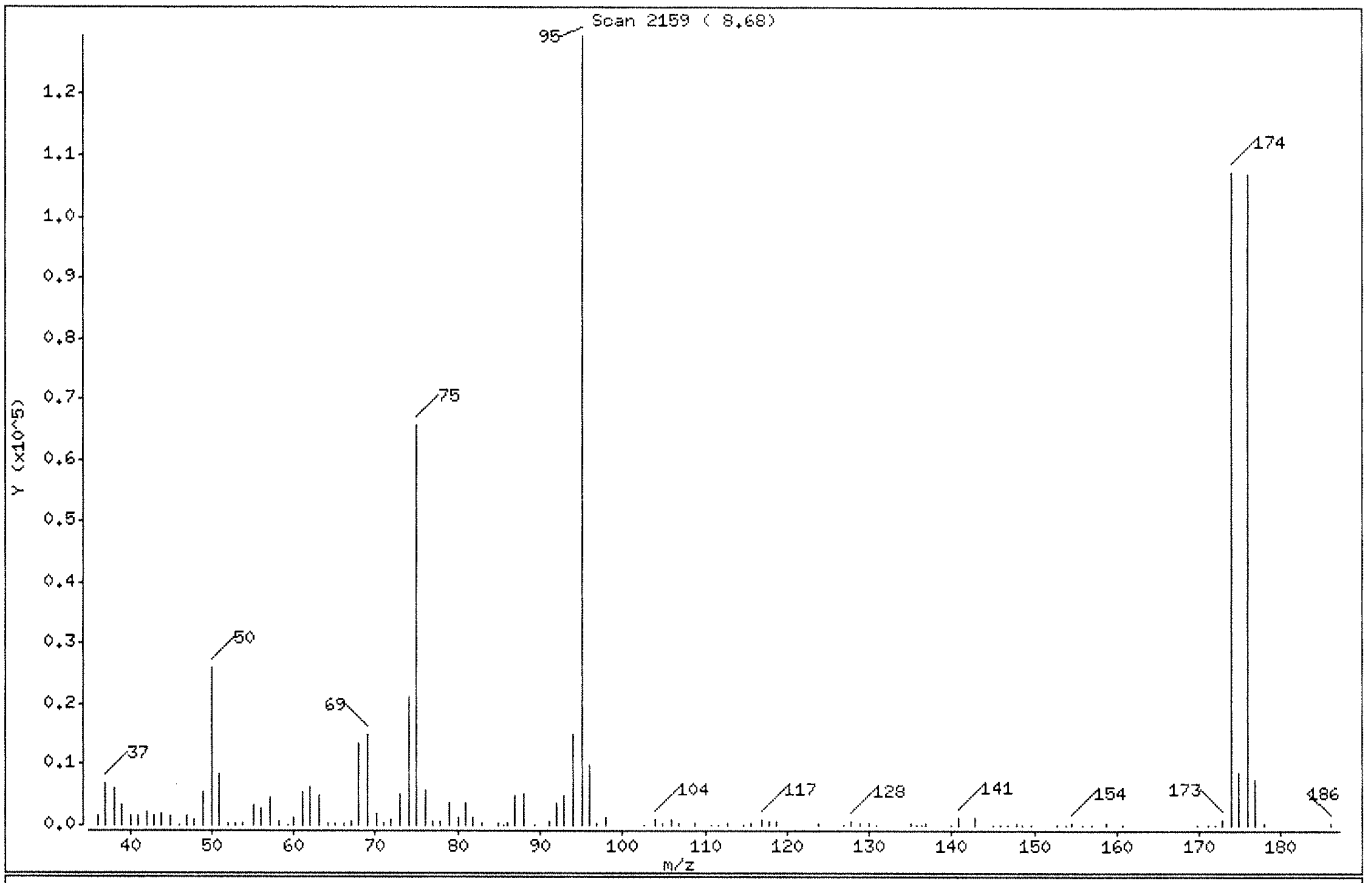
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.09
75	30.00 - 60.00% of mass 95	50.67
96	5.00 - 9.00% of mass 95	7.67
173	Less than 2.00% of mass 174	0.58 (0.70)
174	Greater than 50.00% of mass 95	82.73
175	5.00 - 9.00% of mass 174	6.71 (8.11)
176	95.00 - 101.00% of mass 174	82.55 (99.79)
177	5.00 - 9.00% of mass 176	5.78 (7.00)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020101.D

Date : 01-FEB-2023 10:36

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: X020101.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
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37.00	6902	66.10	261	96.00	9946	142.90	1114
38.10	5835	67.00	519	96.90	344	144.90	111
39.00	3254	68.00	13397	98.00	1270	145.80	131
40.00	1461	69.00	14815	102.60	135	146.80	98
41.00	1411	70.10	1910	104.00	822	147.90	332
42.00	1942	71.00	307	104.90	313	148.60	80
43.00	1587	72.00	928	105.80	786	149.70	111
43.90	1665	73.00	5099	106.80	373	152.70	58
44.90	1452	74.00	21056	108.80	305	153.80	102
46.00	142	75.00	65704	110.70	99	154.60	363
47.00	1345	76.00	5679	111.70	73	155.90	72
47.90	796	77.00	628	112.80	174	156.90	149
49.00	5399	77.80	719	114.80	103	158.80	167
50.00	26048	78.90	3534	115.70	326	160.80	146
51.00	8272	80.00	1197	116.90	910	169.80	94
52.10	295	80.90	3710	117.80	480	171.00	106
52.90	253	81.90	1055	118.70	603	171.90	59
53.80	199	82.90	392	123.80	171	172.80	750
55.00	3357	85.00	168	126.90	133	173.90	107280
56.00	2573	85.60	54	127.80	574	174.90	8701
57.00	4377	86.10	173	128.80	178	175.90	107056
58.10	510	86.90	4790	129.90	327	176.90	7497
59.20	82	88.00	5115	130.80	130	177.90	168
60.00	1078	89.30	86	135.00	275	186.20	187
61.00	5501	91.00	573	135.70	57		
62.00	6171	92.00	3459	136.50	123		
63.00	4820	92.90	4685	136.90	173		
64.10	335	94.00	14791	139.90	84		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020103.D Page 1
Report Date: 09-Feb-2023 17:19

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020103.D
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Inj Date : 01-FEB-2023 11:18
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 09-Feb-2023 17:19 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: 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)	598154	50.0000	
135	1,4-Dioxane	88	5.598	5.598	(1.340)	63536	1000.00	1162.01
140	1,3-Butadiene	54	1.164	1.164	(0.279)	221695	50.0000	54.00
25	Methacrylonitrile	41	3.814	3.814	(0.913)	216121	50.0000	51.02
12	Isobutyl Alcohol	43	4.672	4.672	(1.118)	733137	1000.00	1089.69
13	Acetonitrile	39	2.195	2.195	(0.525)	284762	500.000	523.07
14	Allyl Chloride	41	2.195	2.195	(0.525)	542046	50.0000	52.27
4	Propionitrile	54	3.645	3.645	(0.873)	311575	500.000	510.50
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	106849	50.0000	60.37
130	Ethyl Acetate	43	3.649	3.649	(0.873)	260320	50.0000	55.77
40	Methyl Methacrylate	41	5.602	5.602	(1.341)	230104	50.0000	56.41
49	Ethyl Methacrylate	69	6.708	6.708	(1.351)	225705	50.0000	55.31
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	72859	100.000	97.91
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	578759	50.0000	56.89
156	Diisopropyl ether	45	2.997	2.997	(0.717)	764264	50.0000	49.25
182	Epichlorohydrin	57	6.093	6.093	(1.227)	88985	200.000	228.95
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1140398	50.0000	51.58
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	559847	50.0000	133.16
3	Chloromethane	50	1.077	1.077	(0.258)	282924	50.0000	52.17
5	Vinyl Chloride	62	1.141	1.141	(0.273)	268762	50.0000	51.43

6 Bromomethane	94	1.336	1.336 (0.320)	175870	50.0000	44.69
7 Chloroethane	64	1.400	1.400 (0.335)	165892	50.0000	45.61

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020103.D Page 2
Report Date: 09-Feb-2023 17:19

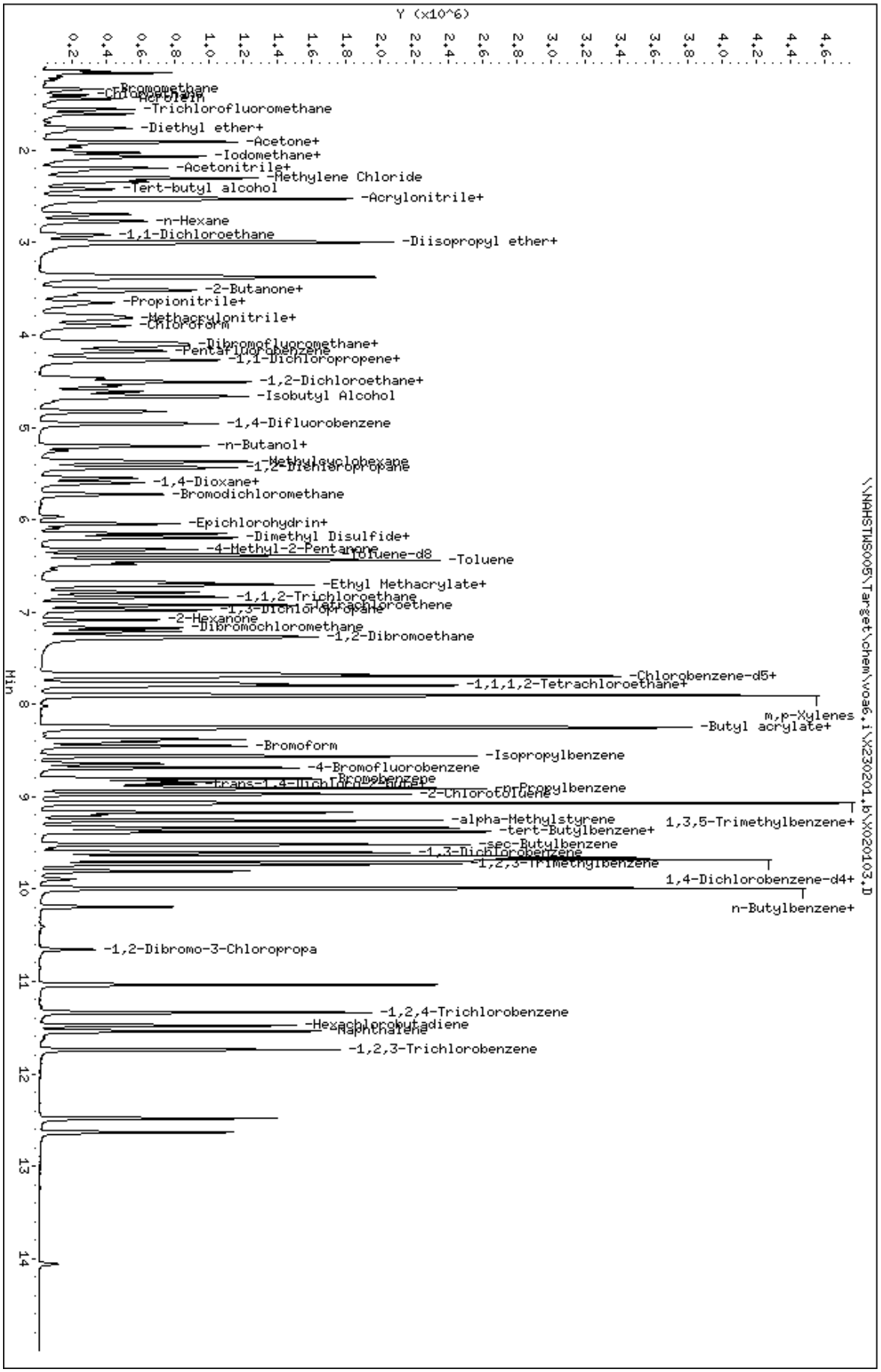
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	396204	50.0000	54.18
	9 Acrolein	56	1.445	1.445	(0.346)	38944	100.000	95.33
	10 Acetone	43	1.970	1.970	(0.472)	174405	100.000	103.91
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	218305	50.0000	48.08
	15 Iodomethane	142	2.026	2.026	(0.485)	623372	100.000	103.86
	16 Acrylonitrile	53	2.528	2.528	(0.605)	162912	100.000	105.80
	17 Methylene Chloride	84	2.299	2.299	(0.550)	290889	50.0000	46.71
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.606)	738880	50.0000	49.72
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	1208223	100.000	101.72
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	263242	50.0000	51.81
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	1454814	100.000	111.53
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	455152	50.0000	51.04
	24 2-Butanone	43	3.570	3.570	(0.855)	199315	100.000	111.59
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	439876	50.0000	58.10
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	303026	50.0000	49.00
	28 Chloroform	83	3.900	3.900	(0.934)	511465	50.0000	51.17
	29 Bromochloromethane	128	3.791	3.791	(0.908)	160762	50.0000	47.48
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	262100	50.0000	45.61
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	454210	50.0000	57.28
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	385149	50.0000	62.61
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	398417	50.0000	56.12
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	384065	50.0000	58.46
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	301345	50.0000	49.71
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	866437	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	1120575	50.0000	54.15
	38 Trichloroethene	130	5.201	5.201	(1.048)	327437	50.0000	55.79
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	416800	50.0000	53.67
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	308454	100.000	139.62
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	290913	50.0000	52.85
	44 Dibromomethane	93	5.550	5.550	(1.118)	192391	50.0000	51.42
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	500787	100.000	114.28
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	516930	50.0000	56.68
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	819811	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	981866	50.0000	48.46
	50 Toluene	91	6.445	6.445	(0.841)	1240150	50.0000	54.72
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	448433	50.0000	59.25
	52 2-Hexanone	43	7.083	7.083	(0.924)	354815	100.000	119.01
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	235682	50.0000	51.84
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	489958	50.0000	54.75
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	361574	50.0000	55.10
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	277133	50.0000	59.11
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	314179	50.0000	55.27
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	272368	50.0000	65.04
	59 Chlorobenzene	112	7.690	7.690	(1.003)	861060	50.0000	53.57
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	332551	50.0000	55.59
	61 Ethylbenzene	106	7.799	7.799	(1.017)	439333	50.0000	58.02
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	1106699	100.000	113.39
	63 o-Xylene	106	8.241	8.241	(1.075)	536888	50.0000	55.73
	64 Styrene	104	8.256	8.256	(1.077)	924068	50.0000	57.23
	66 Bromoform	173	8.410	8.410	(1.097)	248403	50.0000	54.64
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1365407	50.0000	62.04
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	390853	50.0000	53.41

$	69	4-Bromofluorobenzene	95	8.687	8.687 (1.133)	390918	50.0000	51.62
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662 (1.000)	459085	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	302970	50.0000	59.30(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1634178	50.0000	64.26
	74 Bromobenzene	156	8.803	8.803	(0.911)	414885	50.0000	55.08
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1193356	50.0000	63.52
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	995243	50.0000	59.64
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1164933	50.0000	61.23
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	993401	50.0000	64.60
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1212420	50.0000	61.33
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1398231	50.0000	68.34
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1260555	50.0000	68.75
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	738097	50.0000	59.04
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	770508	50.0000	56.48
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	1133135	50.0000	63.62
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	729403	50.0000	56.65
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	67872	50.0000	58.00
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	549976	50.0000	67.68
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	258260	50.0000	71.36
	92 Naphthalene	128	11.540	11.540	(1.194)	1146034	50.0000	61.99
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	487448	50.0000	62.63
M	94 1,2-Dichloroethylene (total)	96				566268	100.000	(a)
	141 Cyclohexane	56	4.118	4.118	(0.986)	371902	50.0000	61.38
	138 Freon TF	101	1.913	1.913	(0.458)	242462	50.0000	55.22
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	656048	50.0000	61.85
	146 Methyl Acetate	43	2.228	2.228	(0.533)	144889	50.0000	53.83
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	496913	1000.00	1199.74
	149 Isopropyl Alcohol	45	2.090	2.090	(0.500)	266728	1000.00	1233.10

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 : 01-FEB-2023 11:18
Client ID: CCV
Sample Info: CCV:CCV:2::
Purge Volume: 5.0
Column phase: DB624

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

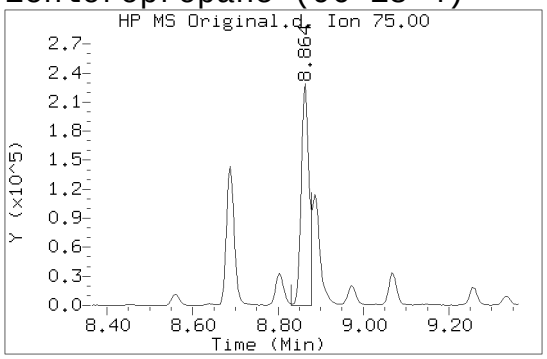
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020103.D
Inj Date : 01-FEB-2023 11:18
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

BEFORE

MASS
75
AREA
302970
HEIGHT
228932
09-Feb-2023
17:19
Kori
Bagsby



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09-Feb-2023
17:19
Kori
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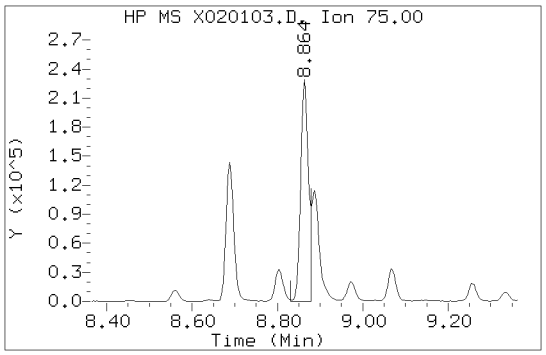

BEFORE

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09-Feb-2023
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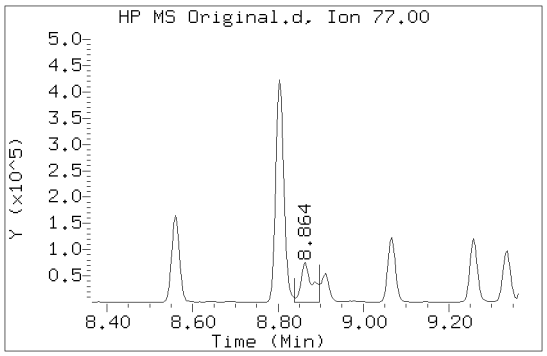
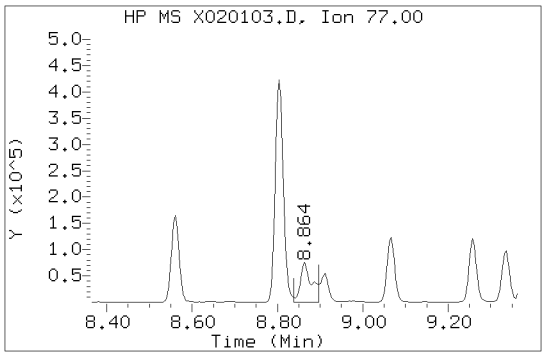


AFTER

MASS
77
AREA
144875
HEIGHT
75271
09-Feb-2023
17:19
Kori
Bagsby



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Report Date: 09-Feb-2023 17:19

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020104.D
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Inj Date : 01-FEB-2023 11:39
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Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
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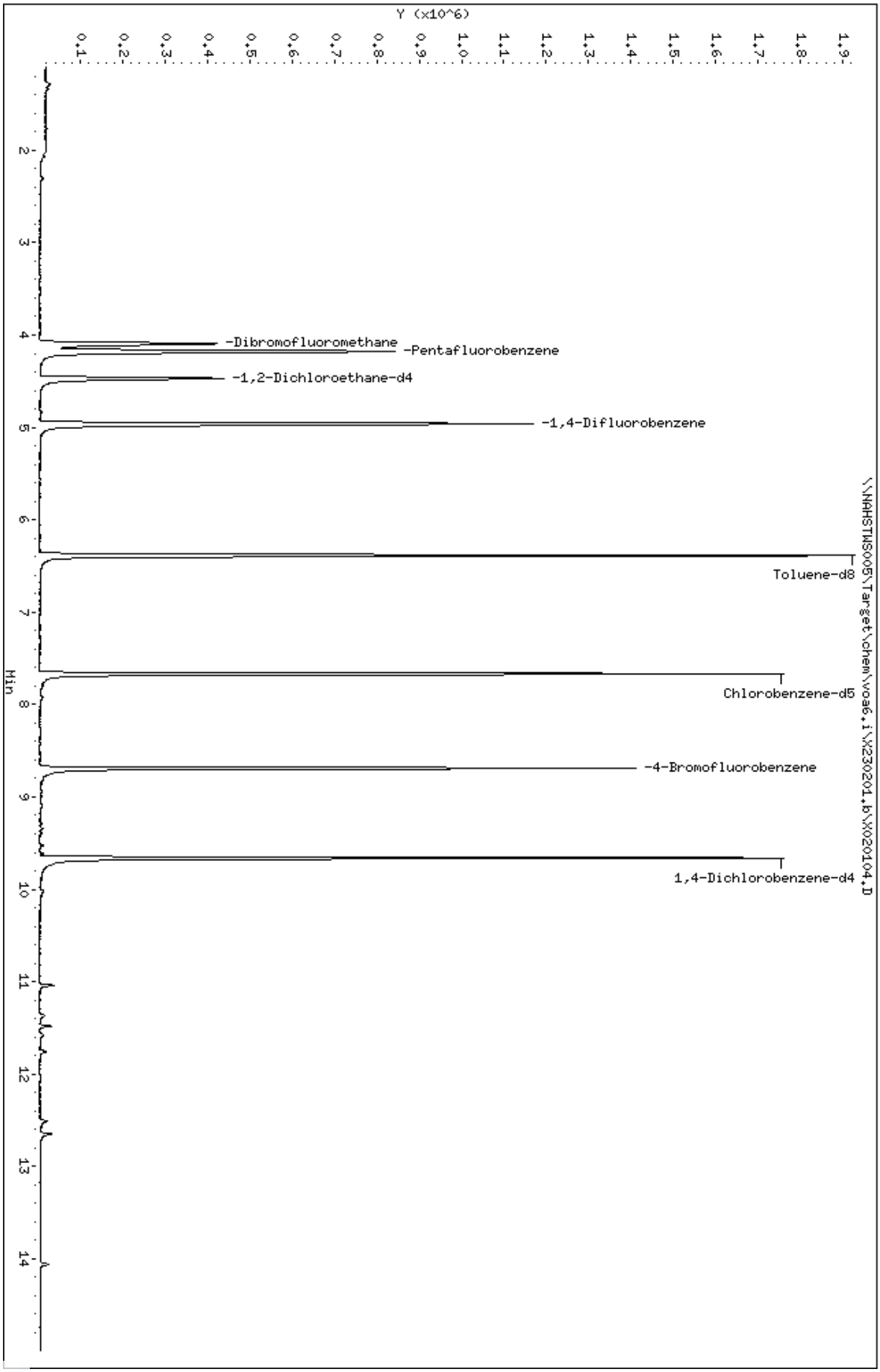
Meth Date : 09-Feb-2023 17:19 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7017

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	4.177	4.178	(1.000)	694183	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	303581	45.5301	45.53
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	346817	49.3001	49.30
* 36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	975624	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	867529	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1123996	52.4319	52.43
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	408637	50.9959	50.99
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	444798	50.0000	



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Client ID: CCB
Sample Info: CCB:CCB;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020104.D
Inj Date : 01-FEB-2023 11:39
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020105.D Page 1
Report Date: 09-Feb-2023 17:19

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020105.D
Lab Smp Id: VLCSW-230201 Client Smp ID: VLCSW-230201
Inj Date : 01-FEB-2023 12:00
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230201;VLCSW-230201;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 09-Feb-2023 17:19 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: 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)	602534	50.0000	
135	1,4-Dioxane	88	5.598	5.598	(1.340)	23410	425.034	425.03(a)
140	1,3-Butadiene	54	1.164	1.164	(0.279)	88950	21.5099	21.50
25	Methacrylonitrile	41	3.818	3.814	(0.914)	84024	19.6941	19.69
12	Isobutyl Alcohol	43	4.669	4.672	(1.118)	287213	423.794	423.79
13	Acetonitrile	39	2.198	2.195	(0.526)	115773	211.118	211.11
14	Allyl Chloride	41	2.198	2.195	(0.526)	214241	20.5127	20.51
4	Propionitrile	54	3.649	3.645	(0.873)	120852	196.571	196.57(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	37824	20.7954	20.79
130	Ethyl Acetate	43	3.653	3.649	(0.874)	101453	21.5780	21.57
40	Methyl Methacrylate	41	5.602	5.602	(1.341)	87216	21.2287	21.22
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	89167	21.1051	21.10
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	27873	35.2228	35.22
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	214071	20.5018	20.50
156	Diisopropyl ether	45	2.997	2.997	(0.717)	303593	19.4234	19.42
182	Epichlorohydrin	57	6.097	6.093	(1.229)	31969	81.0698	81.06
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	448318	19.7558	19.75
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	229697	54.4705	54.47
3	Chloromethane	50	1.074	1.077	(0.257)	112124	21.8695	21.86
5	Vinyl Chloride	62	1.141	1.141	(0.273)	107921	20.5038	20.50

6 Bromomethane	94	1.336	1.336 (0.320)	70522	18.8536	18.85
7 Chloroethane	64	1.400	1.400 (0.335)	66936	18.2709	18.27

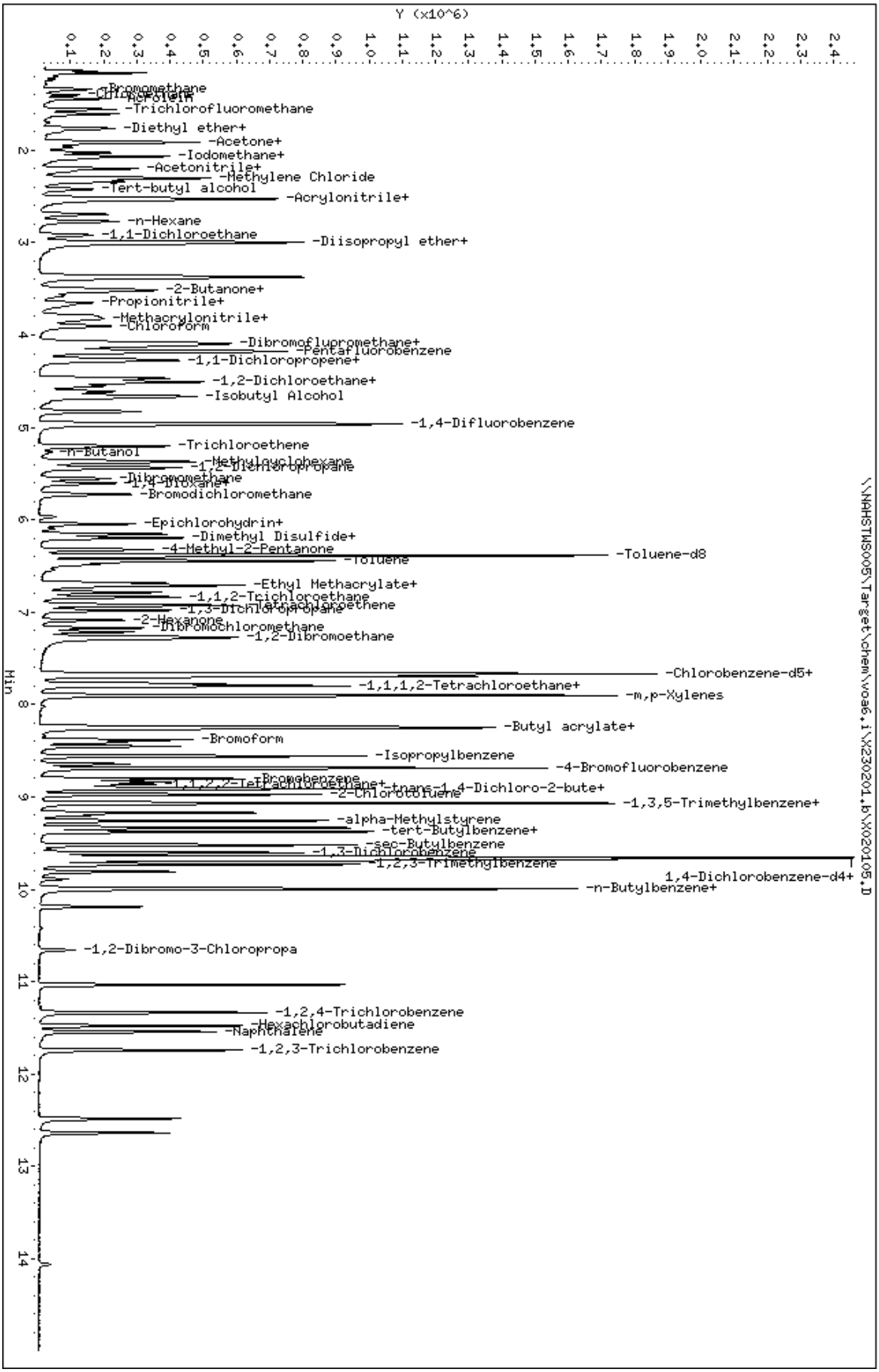
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	162588	22.0737	22.07
	9 Acrolein	56	1.441	1.445	(0.345)	15694	39.8325	39.83
	10 Acetone	43	1.970	1.970	(0.472)	70397	41.6188	41.61
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	89479	19.5670	19.56
	15 Iodomethane	142	2.026	2.026	(0.485)	218844	39.3534	39.35
	16 Acrylonitrile	53	2.532	2.528	(0.606)	65434	42.1891	42.18
	17 Methylene Chloride	84	2.300	2.299	(0.550)	120591	19.2250	19.22
	18 Methyl tert-butyl ether	73	2.528	2.532	(0.605)	298187	19.9213	19.92
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	488549	40.8331	40.83
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	102985	20.1222	20.12
	21 Vinyl Acetate	43	2.997	2.993	(0.717)	562939	42.8427	42.84
	22 1,1-Dichloroethane	63	2.922	2.918	(0.699)	181589	20.2167	20.21
	24 2-Butanone	43	3.578	3.570	(0.856)	70148	40.9586	40.95
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	174233	22.8462	22.84
	27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	121985	19.5850	19.58
	28 Chloroform	83	3.900	3.900	(0.934)	203782	20.2420	20.24
	29 Bromochloromethane	128	3.795	3.791	(0.908)	62154	18.2257	18.22
$	30 Dibromofluoromethane	113	4.091	4.095	(0.979)	272962	47.1708	47.17
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	179787	22.5086	22.50
	32 1,1-Dichloropropene	75	4.275	4.279	(0.862)	151081	23.7192	23.71
	33 1,2-Dichloroethane	62	4.553	4.552	(0.918)	165647	22.5341	22.53
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	155039	22.7938	22.79
$	35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.069)	314146	51.4365	51.43
*	36 1,4-Difluorobenzene	114	4.961	4.965	(1.000)	897186	50.0000	
	37 Benzene	78	4.508	4.507	(0.909)	441754	20.6190	20.61
	38 Trichloroethene	130	5.205	5.201	(1.049)	129894	21.3757	21.37
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	162256	20.1799	20.17
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	113563	49.6454	49.64
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	110443	19.3791	19.37
	44 Dibromomethane	93	5.550	5.550	(1.119)	74990	19.3590	19.35
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	183925	40.8409	40.84
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	194160	20.5615	20.56
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	842554	50.0000	
$	48 Toluene-d8	98	6.386	6.385	(0.833)	994101	47.7472	47.74
	50 Toluene	91	6.446	6.445	(0.841)	481070	20.6570	20.65
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	167901	21.4255	21.42
	52 2-Hexanone	43	7.087	7.083	(0.924)	135405	44.1922	44.19
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	89065	19.0633	19.06
	54 1,3-Dichloropropane	76	6.978	6.982	(0.910)	187483	20.3872	20.38
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	137136	20.3372	20.33
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	110009	22.8307	22.83
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	120146	20.5678	20.56
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	110753	25.5438	25.54
	59 Chlorobenzene	112	7.694	7.690	(1.003)	333167	20.1695	20.16
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	124528	20.2574	20.25
	61 Ethylbenzene	106	7.799	7.799	(1.017)	170607	21.9261	21.92
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	430939	42.9623	42.96
	63 o-Xylene	106	8.241	8.241	(1.075)	204579	20.6643	20.66
	64 Styrene	104	8.260	8.256	(1.077)	353089	21.2783	21.27
	66 Bromoform	173	8.410	8.410	(1.097)	92106	19.7165	19.71
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	519996	22.9902	22.99
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	149977	19.9677	19.96

$	69	4-Bromofluorobenzene	95	8.687	8.687 (1.133)	392046	50.3764	50.37
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662 (1.000)	471247	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	110711	21.1135	21.11(M)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	616908	23.6337	23.63
74	Bromobenzene	156	8.803	8.803	(0.911)	160400	20.7463	20.74
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	450447	23.3597	23.35
76	2-Chlorotoluene	91	8.972	8.972	(0.929)	384692	22.4585	22.45
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	448408	22.9637	22.96
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	378610	23.9863	23.98
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	453692	22.3607	22.36
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	531934	25.3281	25.32
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	476385	25.3133	25.31
83	1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	276660	21.5592	21.55
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	293092	20.9303	20.93
87	n-Butylbenzene	91	9.992	9.992	(1.034)	424625	24.3558	24.35
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	274285	20.7538	20.75
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	24674	20.6018	20.60
90	1,2,4-Trichlorobenzene	180	11.338	11.334	(1.173)	196694	23.5829	23.58
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	102726	27.9149	27.91
92	Naphthalene	128	11.544	11.540	(1.195)	404855	21.3342	21.33
93	1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	179284	22.4439	22.44
M 94	1,2-Dichloroethylene (total)	96				224970	39.7072	39.70
M 95	Xylenes (total)	106				635518	63.6266	63.62
141	Cyclohexane	56	4.118	4.118	(0.986)	151152	25.5207	25.52
138	Freon TF	101	1.910	1.913	(0.457)	97779	22.1071	22.10
147	Methylcyclohexane	55	5.377	5.377	(1.084)	254745	23.1960	23.19
146	Methyl Acetate	43	2.228	2.228	(0.533)	54716	20.1810	20.18
148	Tert-Butyl alcohol	59	2.423	2.423	(0.580)	188823	452.581	452.58
149	Isopropyl Alcohol	45	2.090	2.090	(0.500)	99232	455.424	455.42

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-230201;VLCSW-230201;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\X230201.b\X020105.D
Inj Date : 01-FEB-2023 12:00
InstruID : voa6.i
LabSampID : VLCSW-230201

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

Reason Code:

BEFORE

MASS
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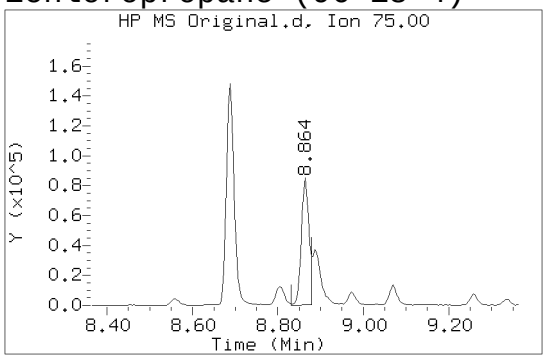
HEIGHT
85180
09-Feb-2023
17:18
Kori
Bagsby



AFTER

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09-Feb-2023
17:18
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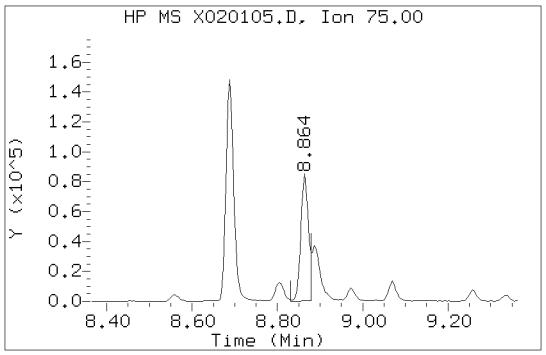

BEFORE

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09-Feb-2023
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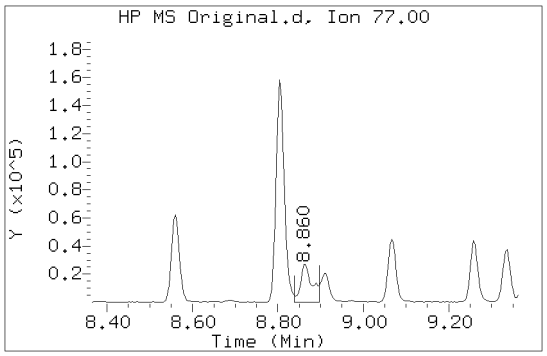

AFTER

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09-Feb-2023
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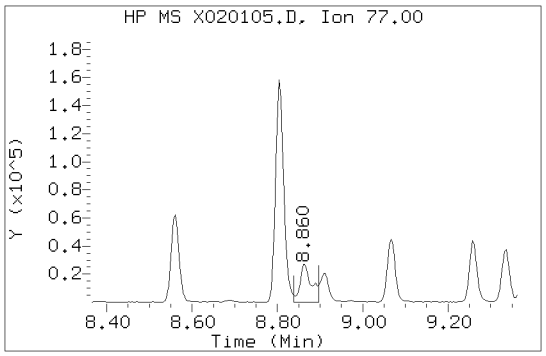

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Report Date: 09-Feb-2023 17:19

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020107.D
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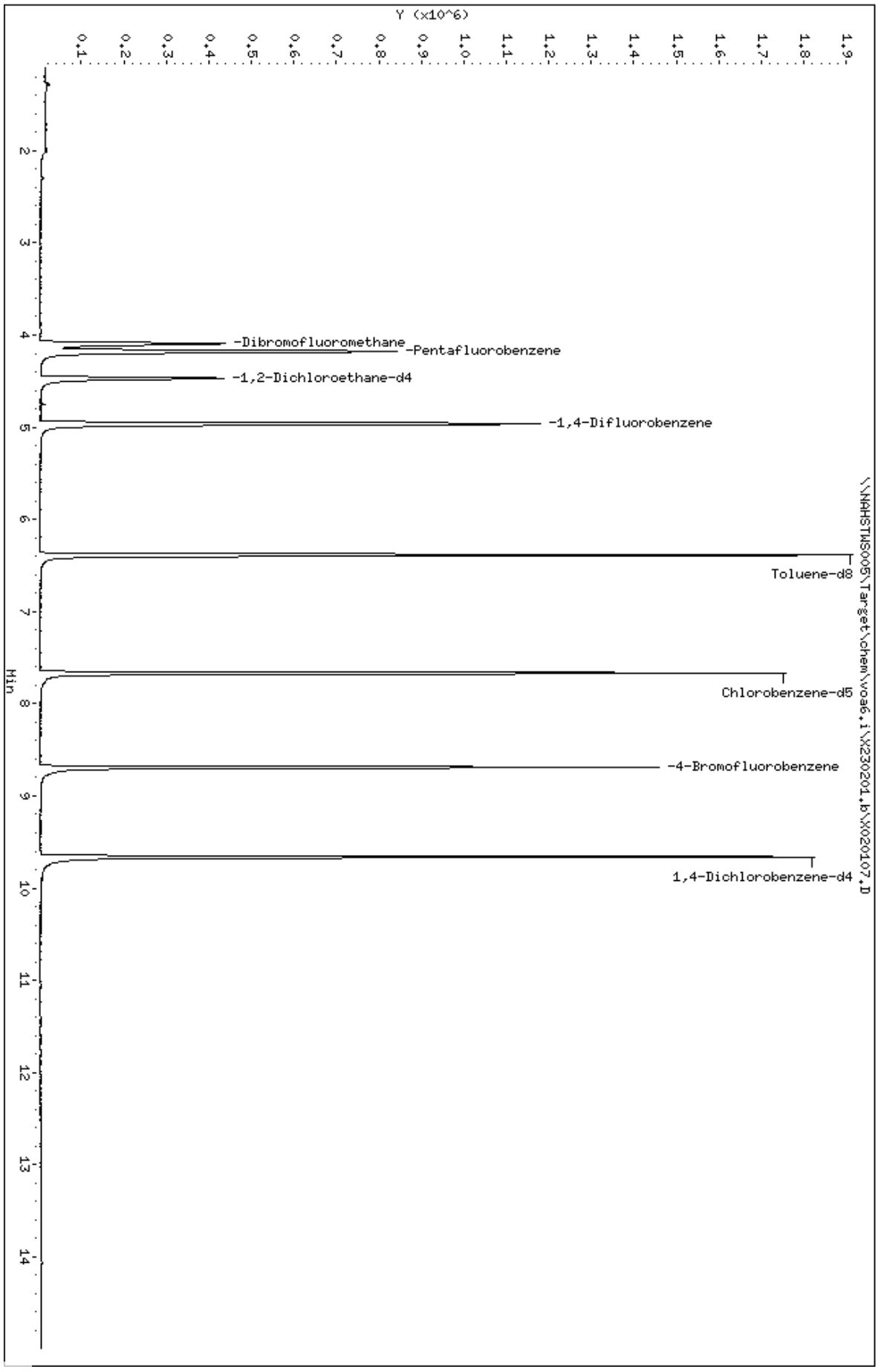
Inj Date : 01-FEB-2023 12:42
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230201;VBLKW-230201;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 09-Feb-2023 17:19 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: 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)	695936	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	309275	46.2699	46.26
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	351707	49.8662	49.86
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	984782	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	883477	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1131227	51.8166	51.81
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	415072	50.8640	50.86
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	457336	50.0000	



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Date : 01-FEB-2023 12:42
Client ID: VBLKW-230201
Sample Info: VBLKW-230201;VBLKW-230201;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\X230201.b\X020107.D
Inj Date : 01-FEB-2023 12:42
InstruID : voa6.i
LabSampID : VBLKW-230201

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020108.D Page 1
Report Date: 16-Feb-2023 14:17

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020108.D
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Inj Date : 01-FEB-2023 13:03
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-01;HS23011397-01;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 8
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	4.178	(1.000)	697078	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	305030	45.5575	45.55
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	349462	49.4689	49.46
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	979902	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	856319	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1128313	53.3223	53.32
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	408090	51.5935	51.59
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	438932	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020108.D

Date : 01-FEB-2023 13:03

Client ID: HS23011397-01

Instrument: voa6.i

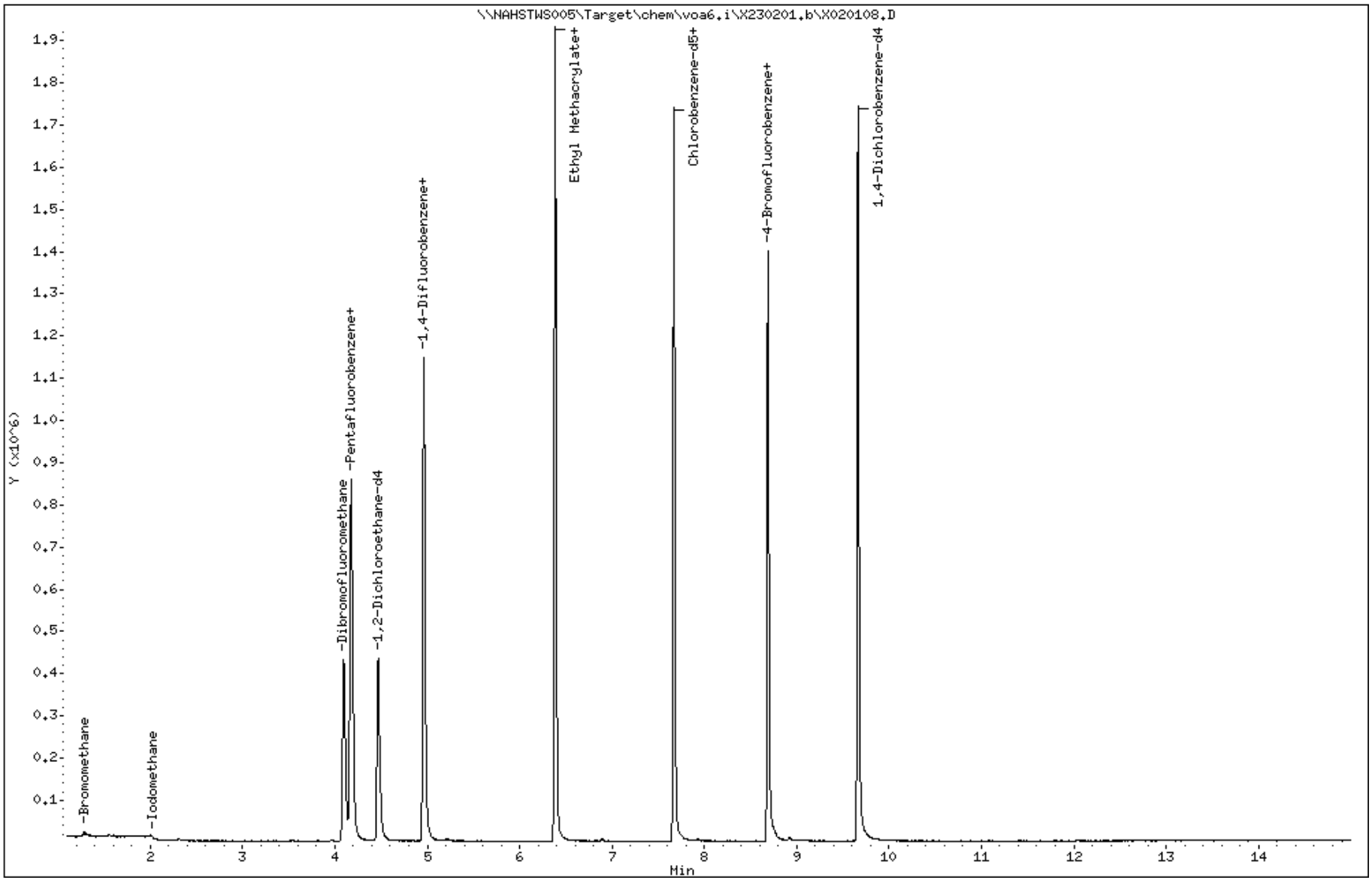
Sample Info: HS23011397-01;HS23011397-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 01-FEB-2023 13:03
InstruID : voa6.i
LabSampID : HS23011397-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020110.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020110.D
Lab Smp Id: HS23011397-02 Client Smp ID: HS23011397-02
Inj Date : 01-FEB-2023 13:45
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-02;HS23011397-02;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

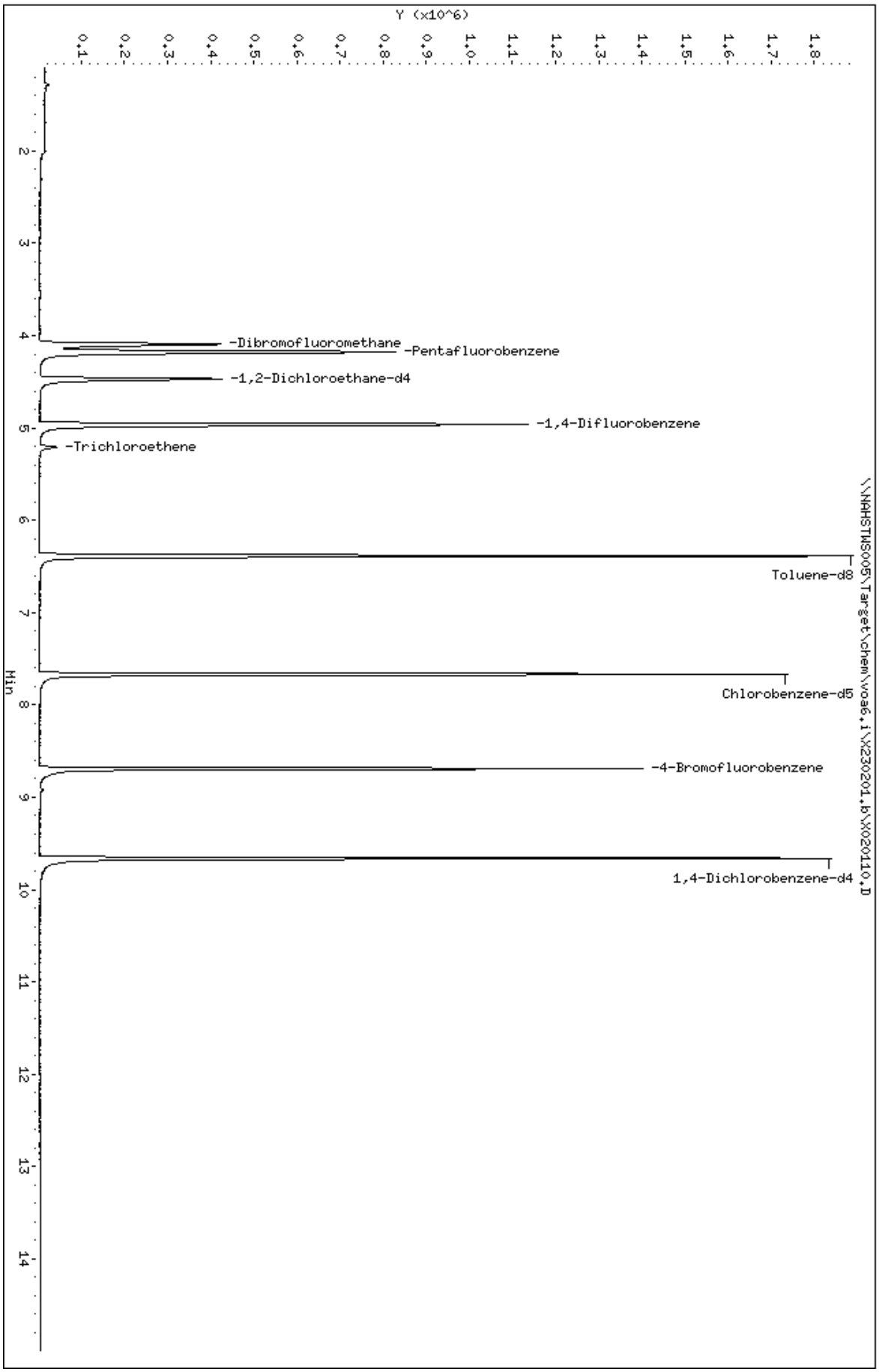
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.178	(1.000)	687481	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	302024	45.7389	45.73
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	340787	48.9173	48.91
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	968563	50.0000	
38 Trichloroethene	130	5.212	5.205	(1.050)	14613	2.22754	2.22(a)
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	852944	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1105831	52.4666	52.46
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	406689	51.6198	51.61
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	451962	50.0000	

QC Flag Legend

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



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Date : 01-FEB-2023 13:45
Client ID: HS23011397-02
Sample Info: HS23011397-02;HS23011397-02;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020110.D Page 2

Date : 01-FEB-2023 13:45

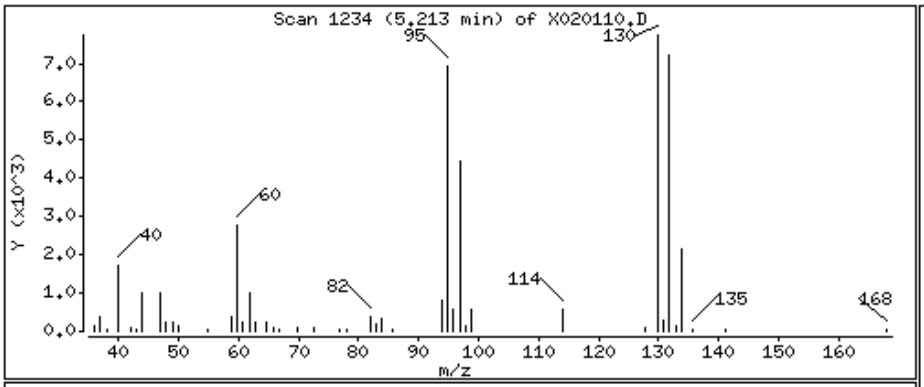
Client ID: HS23011397-02 Instrument: voa6.i

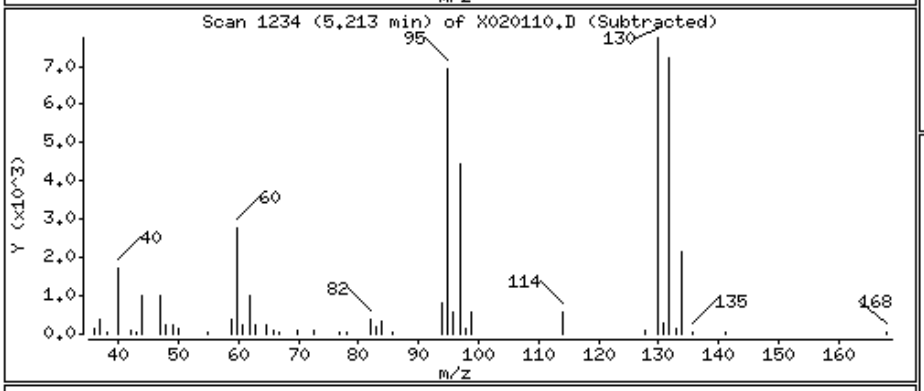
Sample Info: HS23011397-02;HS23011397-02;;;

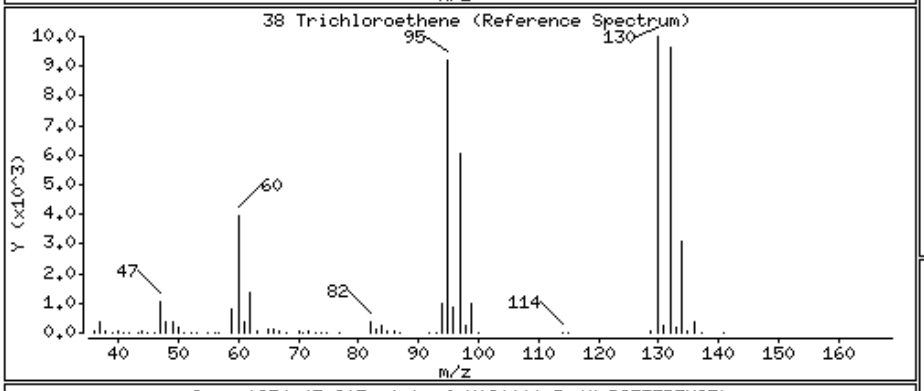
Purge Volume: 5.0 Operator: PC

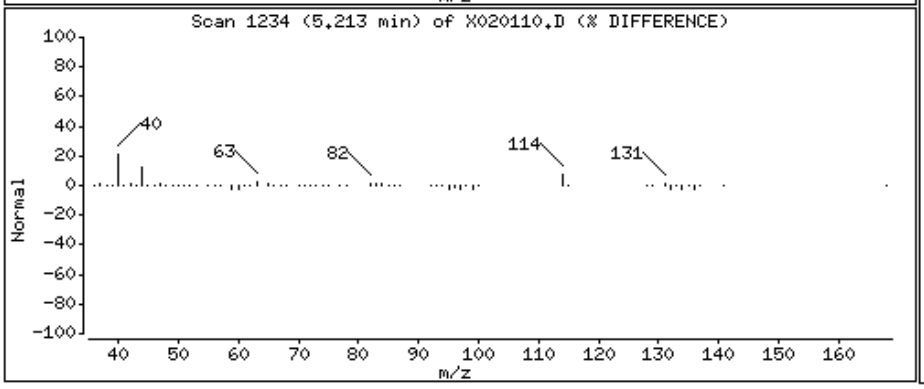
Column phase: DB624 Column diameter: 0.18

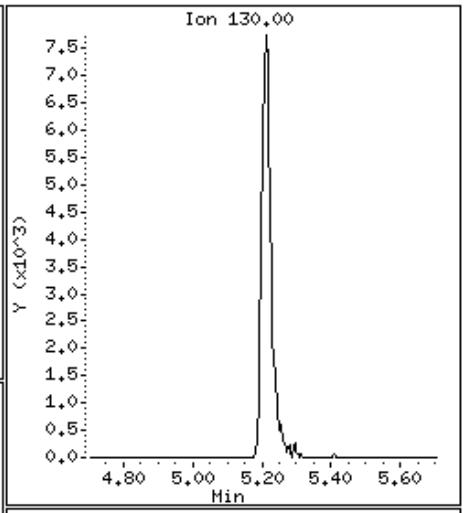
38 Trichloroethene Concentration: 2.22 ug/l

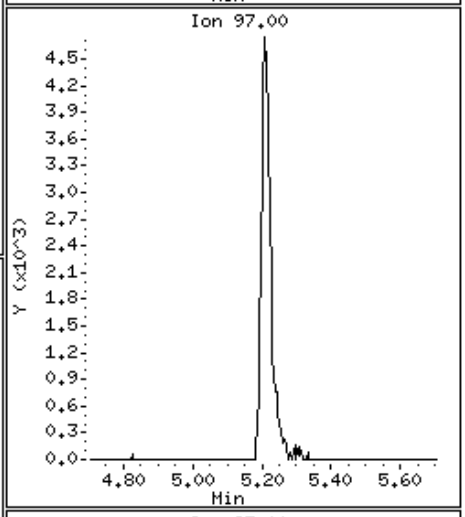


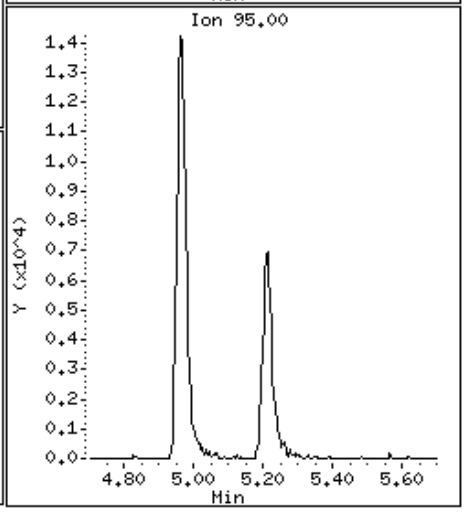












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Inj Date : 01-FEB-2023 13:45
InstruID : voa6.i
LabSampID : HS23011397-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020111.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020111.D
Lab Smp Id: HS23011397-04 Client Smp ID: HS23011397-04
Inj Date : 01-FEB-2023 14:06
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-04;HS23011397-04;;;
Misc Info : V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 11
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

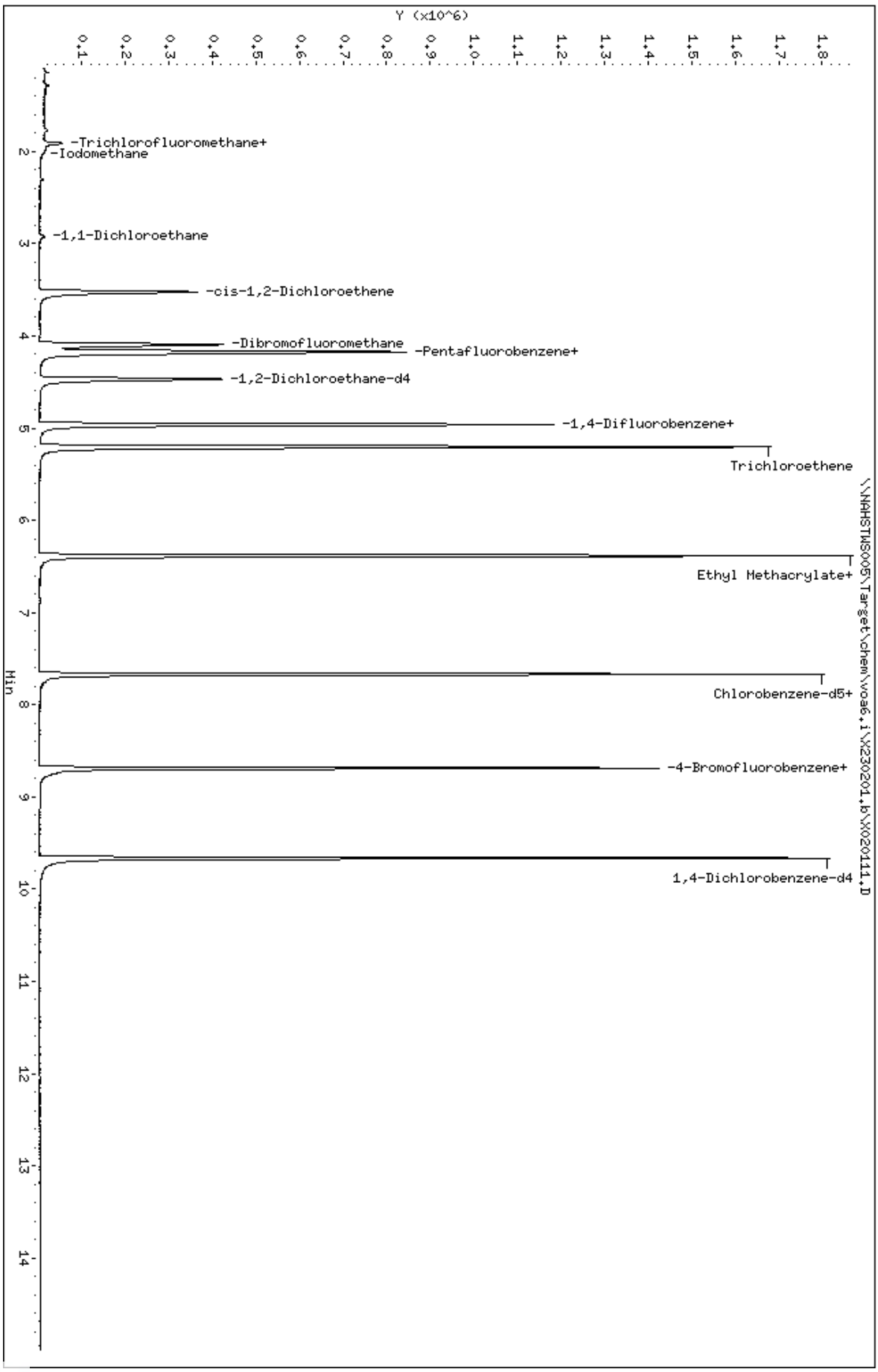
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	693546	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	302012	45.3357	45.33
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	340283	48.4206	48.42
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	974795	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	870145	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1117768	51.9846	51.98
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	410708	51.1001	51.10
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	460380	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	6275	1.03573	25.89(a)
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	8731	1.65872	41.46(a)
27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	201928	28.1657	704.14
38 Trichloroethene	130	5.205	5.205	(1.048)	565040	85.5816	2139.53

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020111.D
Date : 01-FEB-2023 14:06
Client ID: HS23011397-04
Sample Info: HS23011397-04;HS23011397-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020111.D Page 2

Date : 01-FEB-2023 14:06

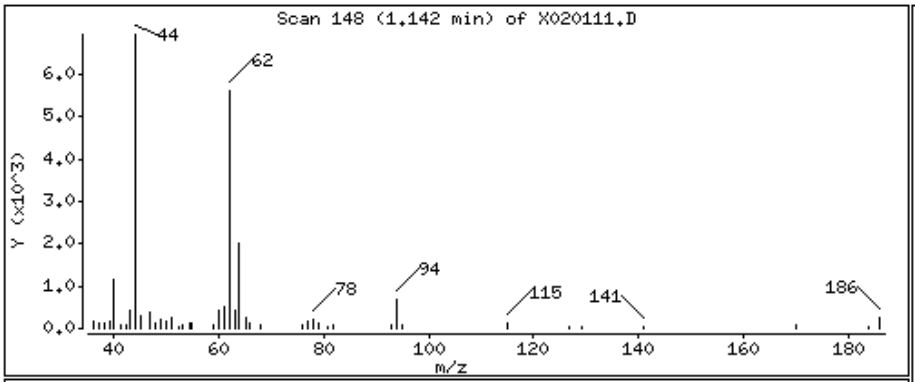
Client ID: HS23011397-04 Instrument: voa6.i

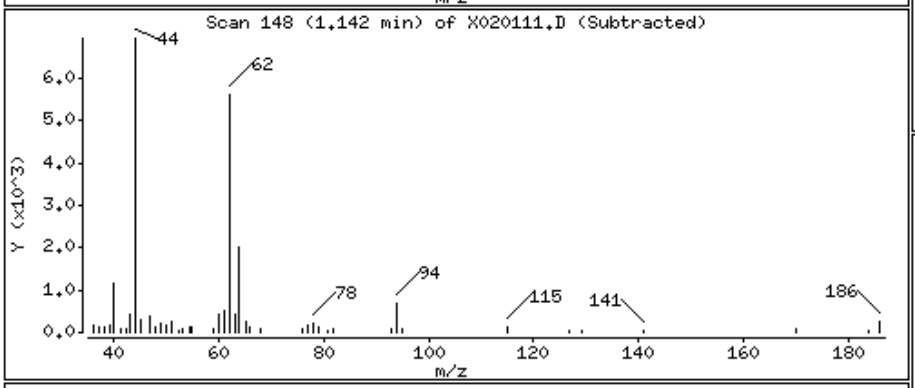
Sample Info: HS23011397-04;HS23011397-04;;;

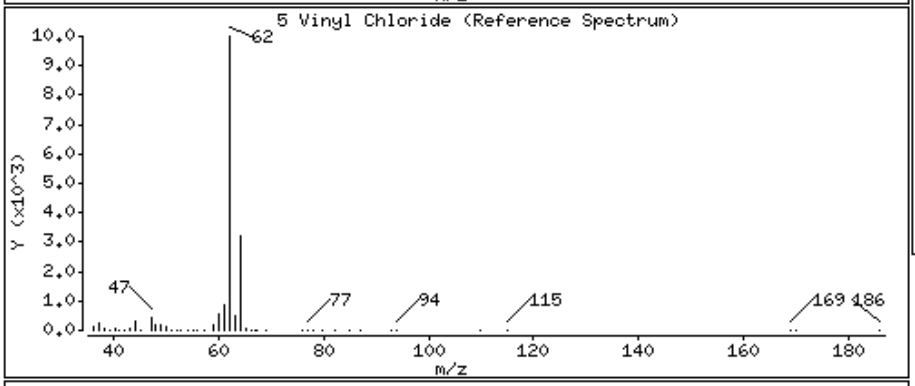
Purge Volume: 5.0 Operator: PC

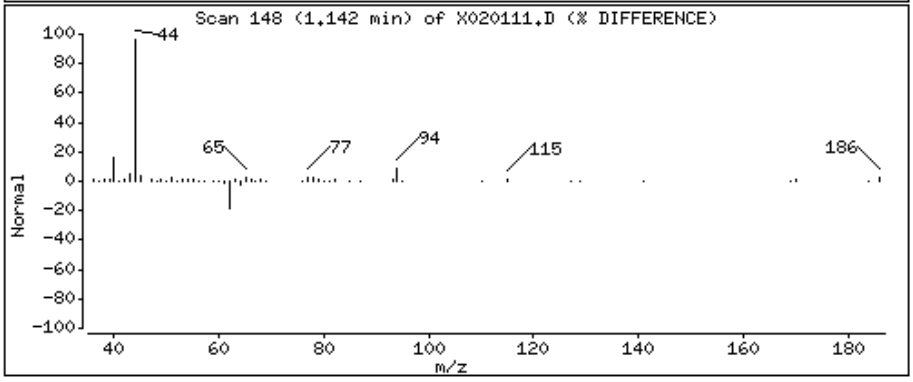
Column phase: DB624 Column diameter: 0.18

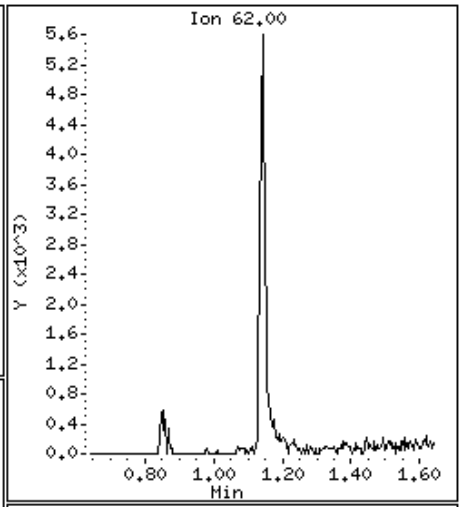
5 Vinyl Chloride Concentration: 25.89 ug/l

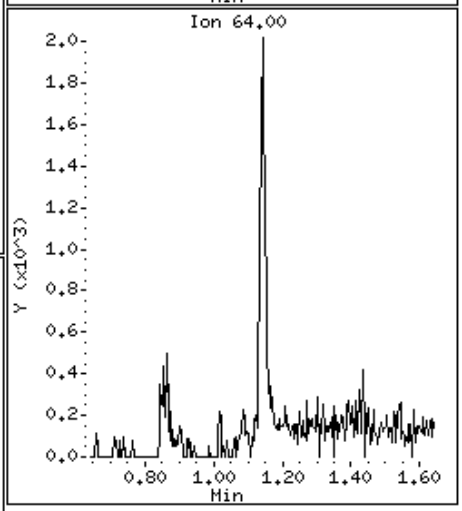












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020111.D Page 3

Date : 01-FEB-2023 14:06

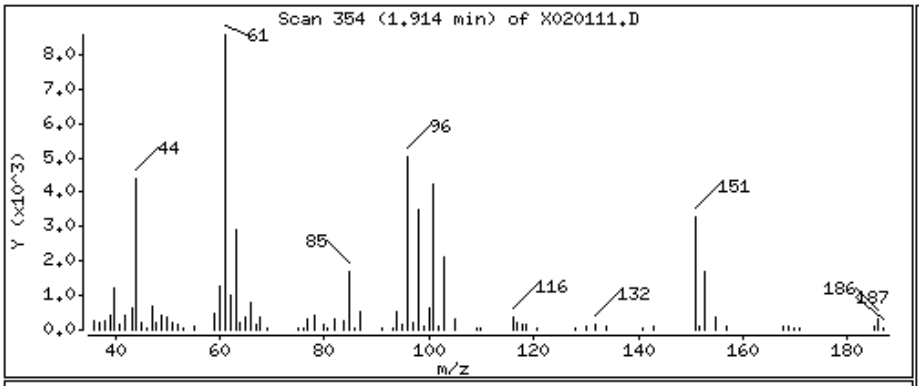
Client ID: HS23011397-04 Instrument: voa6.i

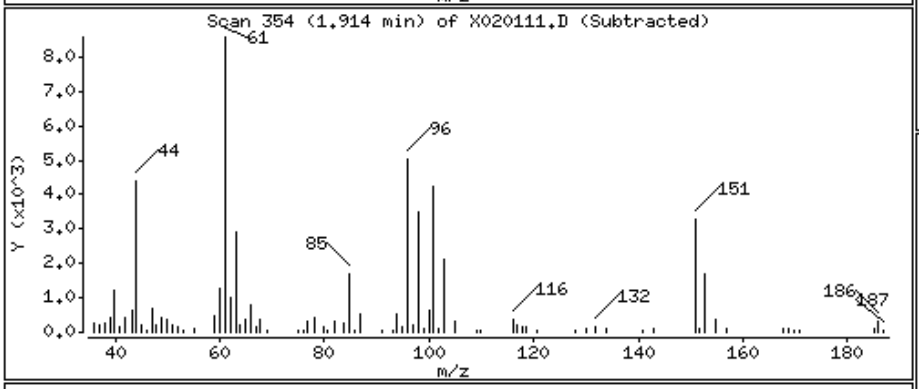
Sample Info: HS23011397-04;HS23011397-04;;;

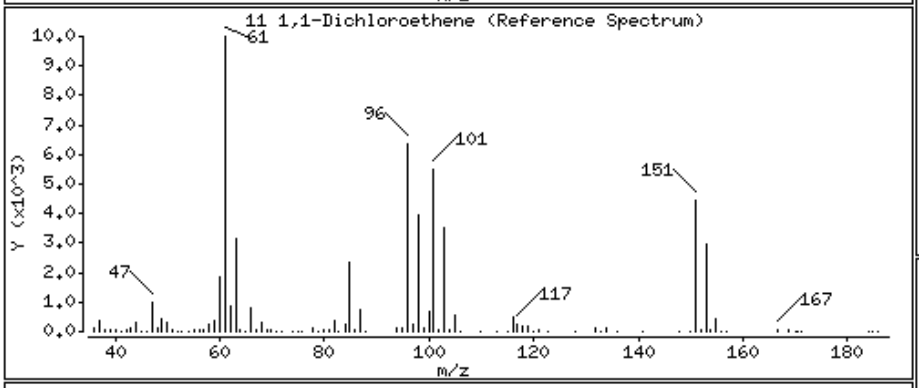
Purge Volume: 5.0 Operator: PC

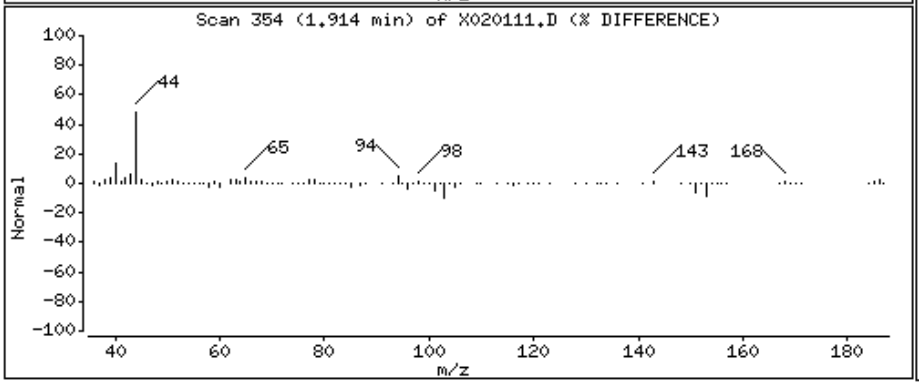
Column phase: DB624 Column diameter: 0.18

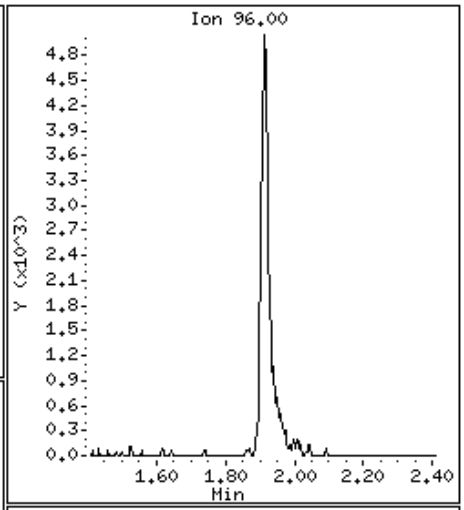
11 1,1-Dichloroethene Concentration: 41.46 ug/l

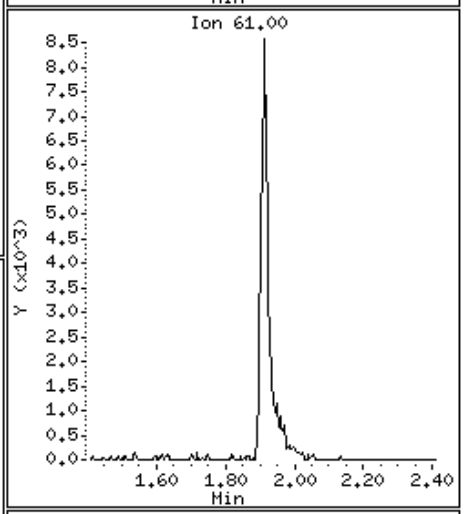


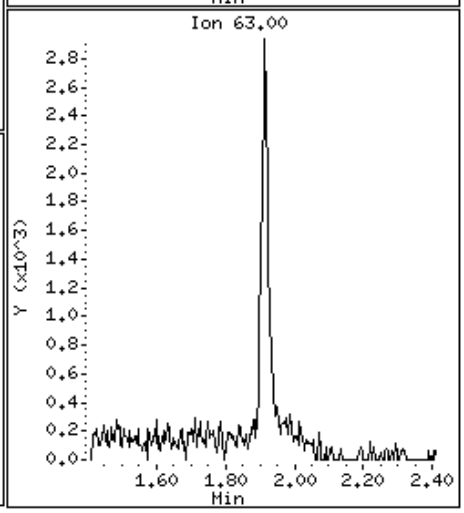












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020111.D Page 4

Date : 01-FEB-2023 14:06

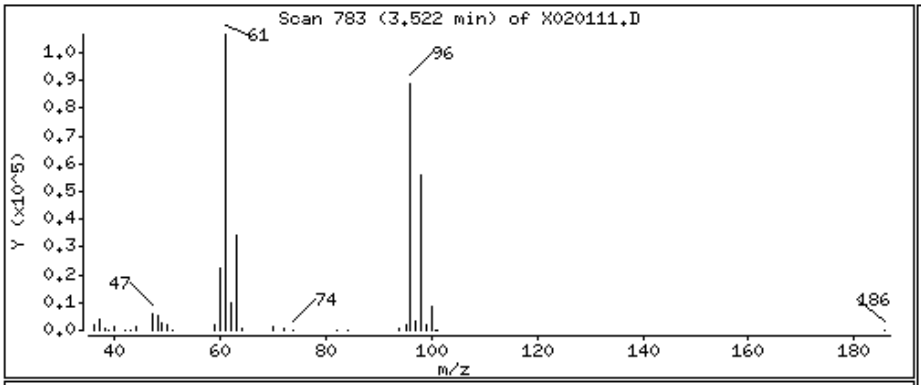
Client ID: HS23011397-04 Instrument: voa6.i

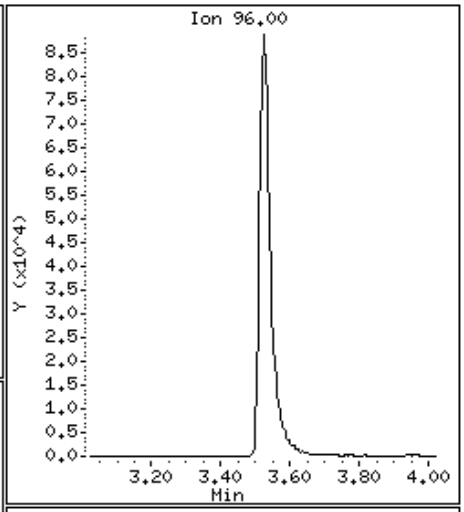
Sample Info: HS23011397-04;HS23011397-04;;;

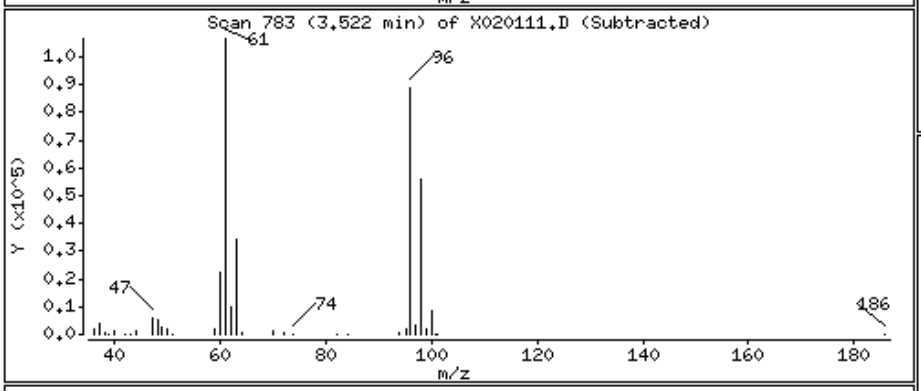
Purge Volume: 5.0 Operator: PC

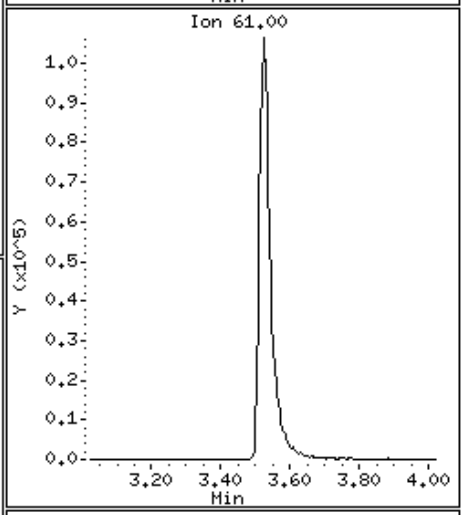
Column phase: DB624 Column diameter: 0.18

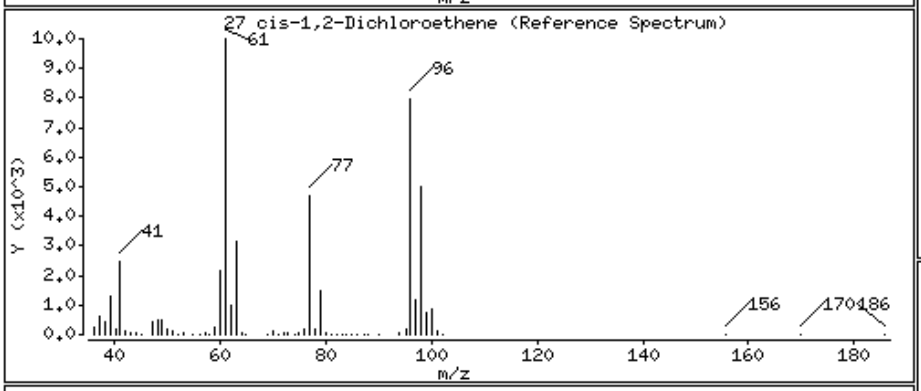
27 cis-1,2-Dichloroethene Concentration: 704.14 ug/l

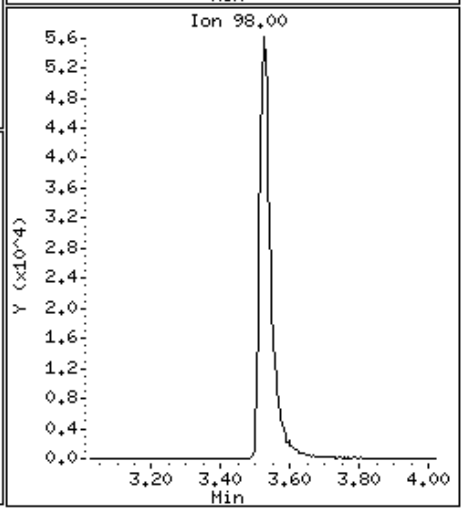


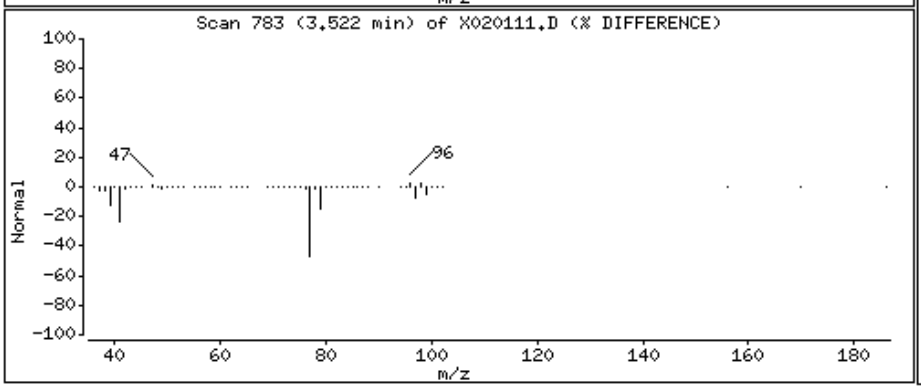












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020111.D Page 5

Date : 01-FEB-2023 14:06

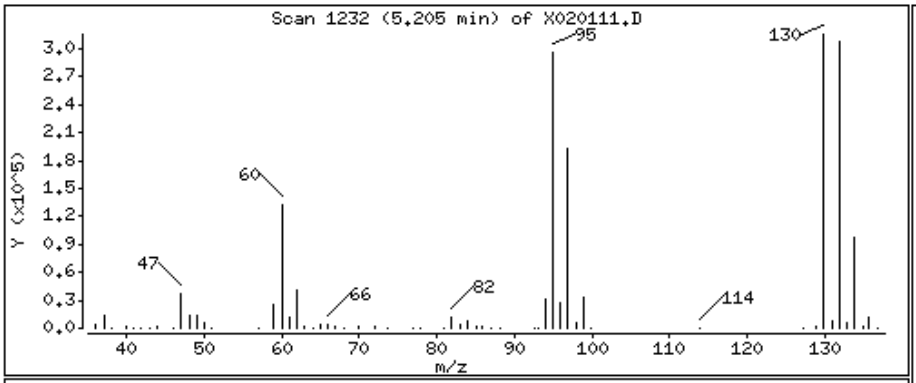
Client ID: HS23011397-04 Instrument: voa6.i

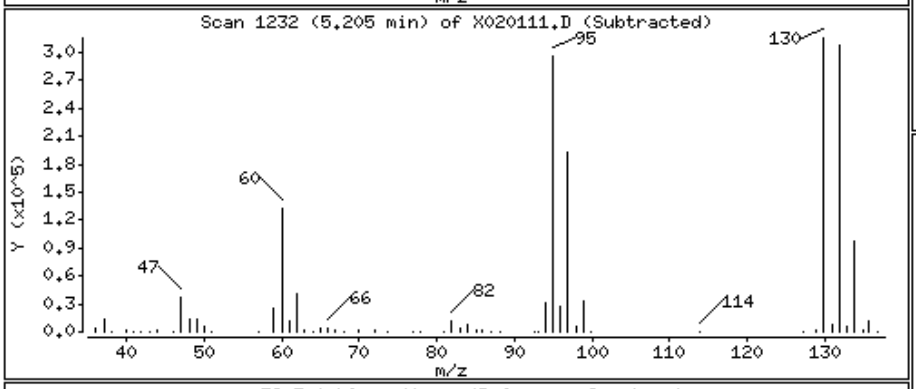
Sample Info: HS23011397-04;HS23011397-04;;;

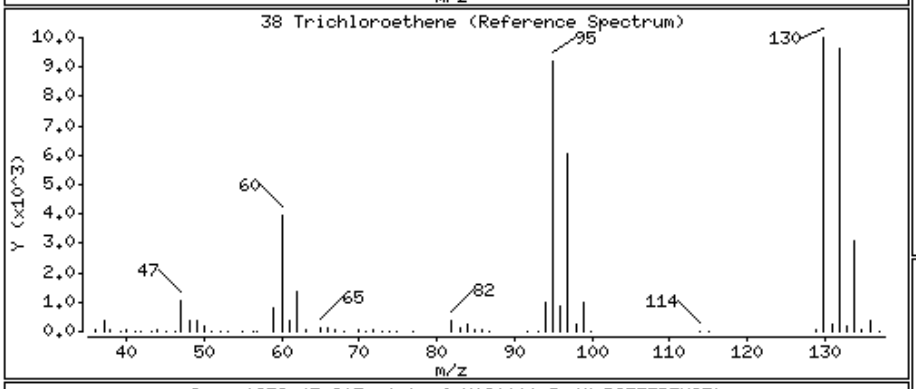
Purge Volume: 5.0 Operator: PC

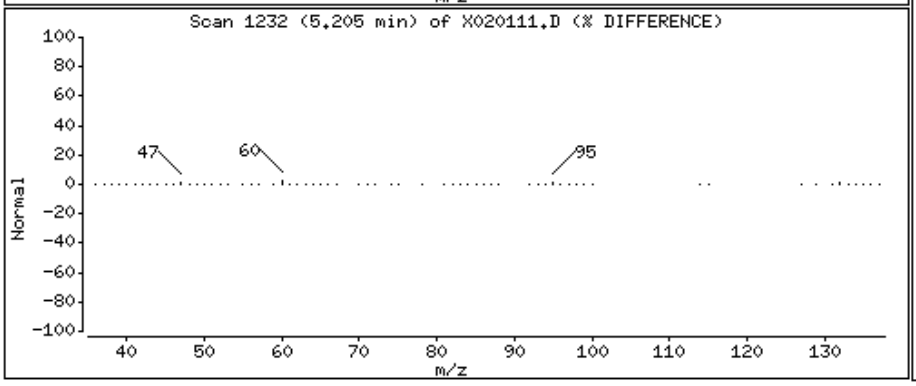
Column phase: DB624 Column diameter: 0.18

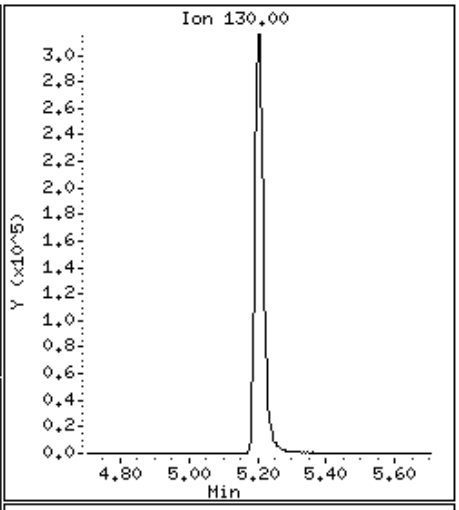
38 Trichloroethene Concentration: 2139.53 ug/l

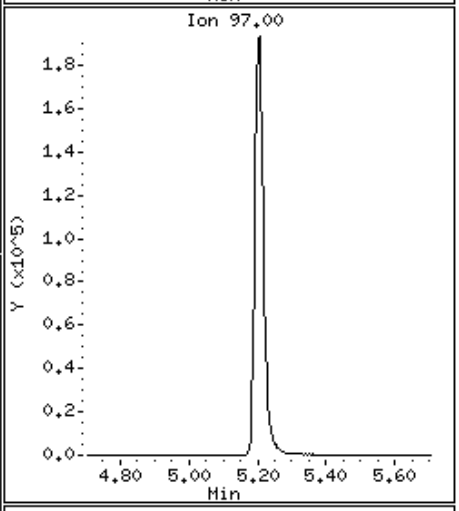


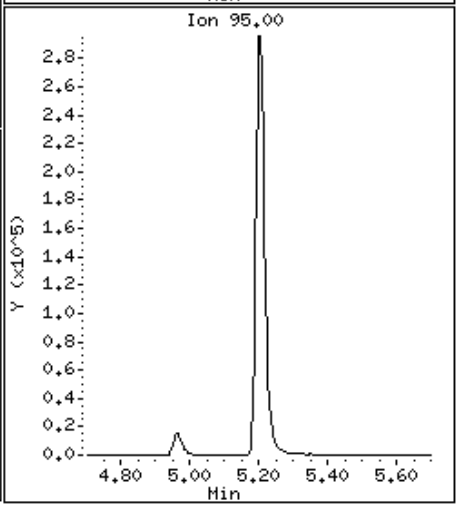












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Inj Date : 01-FEB-2023 14:06
InstruID : voa6.i
LabSampID : HS23011397-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020112.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020112.D
Lab Smp Id: HS23011397-03 Client Smp ID: HS23011397-03
Inj Date : 01-FEB-2023 14:27
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-03;HS23011397-03;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 12
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

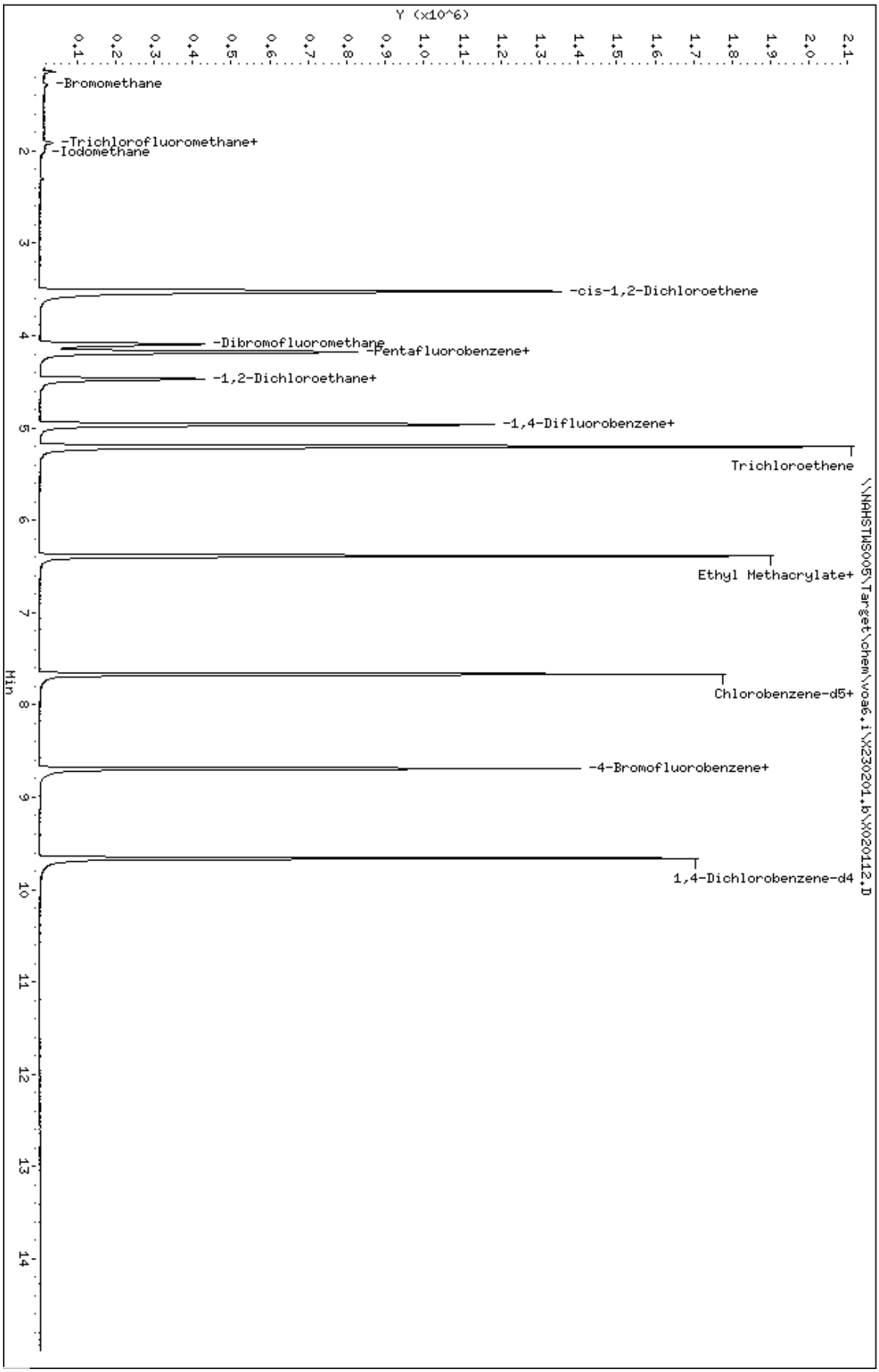
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	688317	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	310661	46.9943	46.99
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	350145	50.1924	50.19
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	978623	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	858779	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1120570	52.8047	52.80
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	403410	50.8567	50.85
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	439149	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	20374	3.38842	169.42(a)
27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	750143	105.428	5271.37
33 1,2-Dichloroethane	62	4.564	4.553	(0.920)	4744	0.59165	29.58(a)
38 Trichloroethene	130	5.201	5.205	(1.048)	713482	107.642	5382.10

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020112.D
Date : 01-FEB-2023 14:27
Client ID: HS23011397-03
Sample Info: HS23011397-03;HS23011397-03;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020112.D Page 2

Date : 01-FEB-2023 14:27

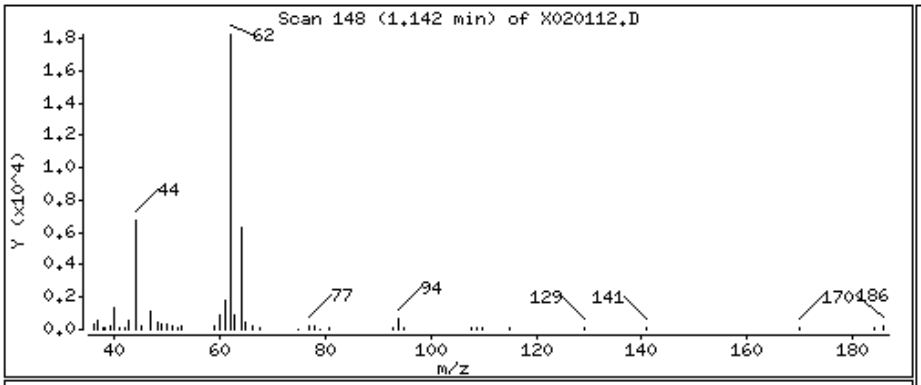
Client ID: HS23011397-03 Instrument: voa6.i

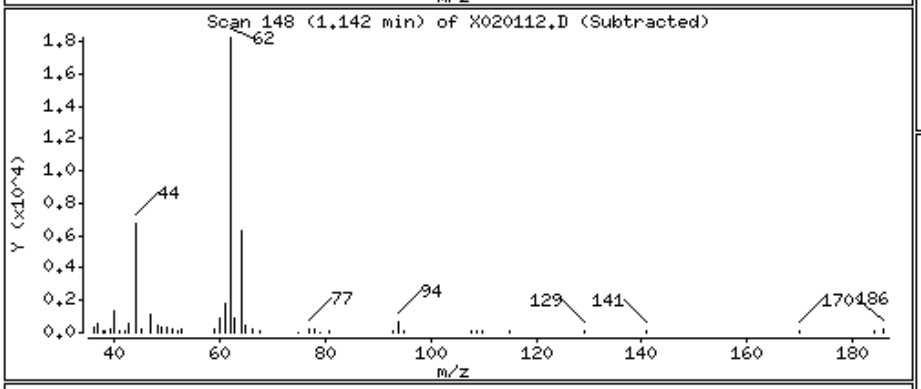
Sample Info: HS23011397-03;HS23011397-03;;;

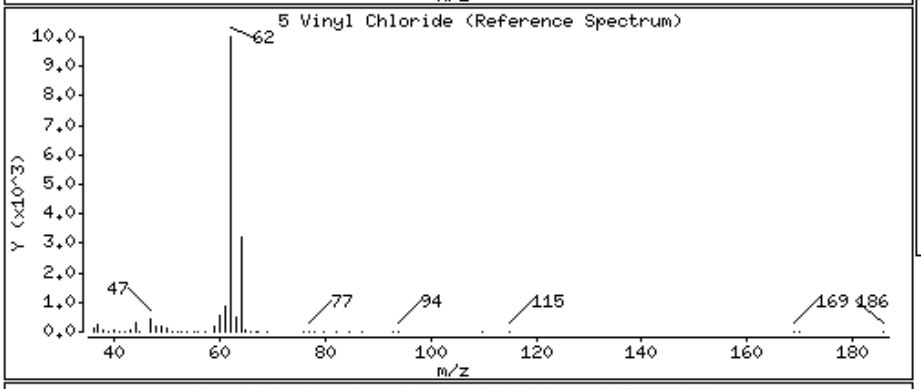
Purge Volume: 5.0 Operator: PC

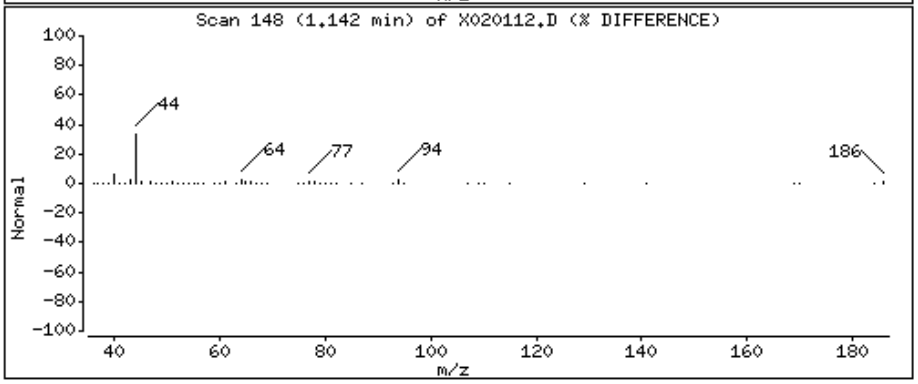
Column phase: DB624 Column diameter: 0.18

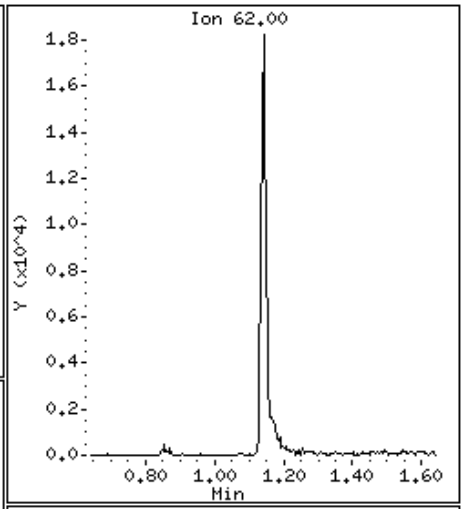
5 Vinyl Chloride Concentration: 169.42 ug/l

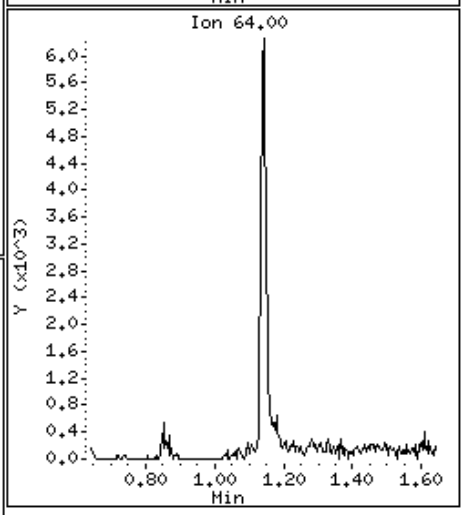












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020112.D Page 3

Date : 01-FEB-2023 14:27

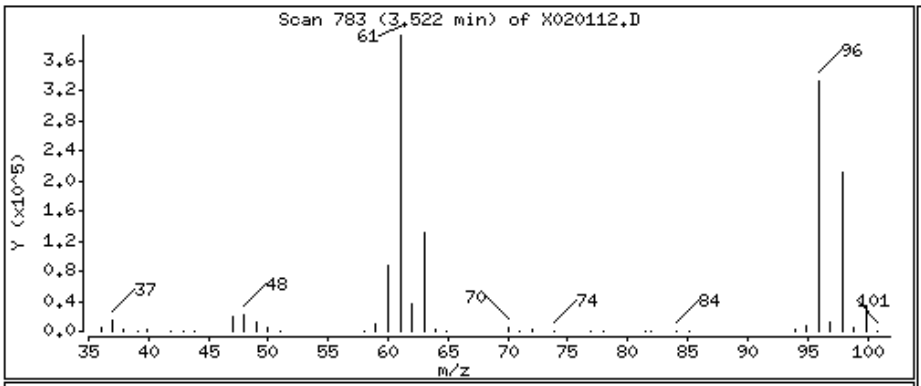
Client ID: HS23011397-03 Instrument: voa6.i

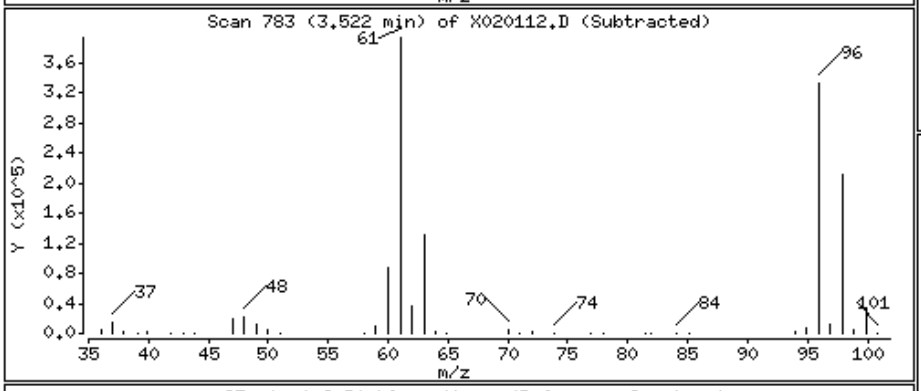
Sample Info: HS23011397-03;HS23011397-03;;;

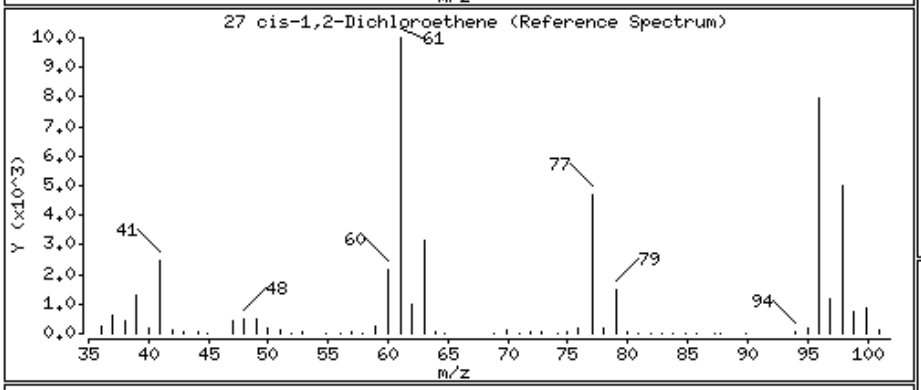
Purge Volume: 5.0 Operator: PC

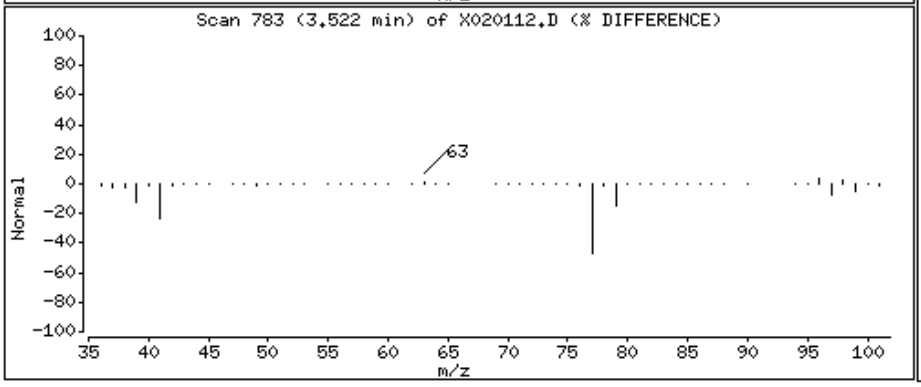
Column phase: DB624 Column diameter: 0.18

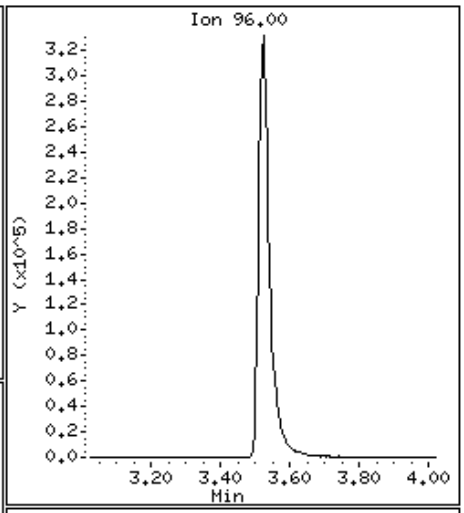
27 cis-1,2-Dichloroethene Concentration: 5271.37 ug/l

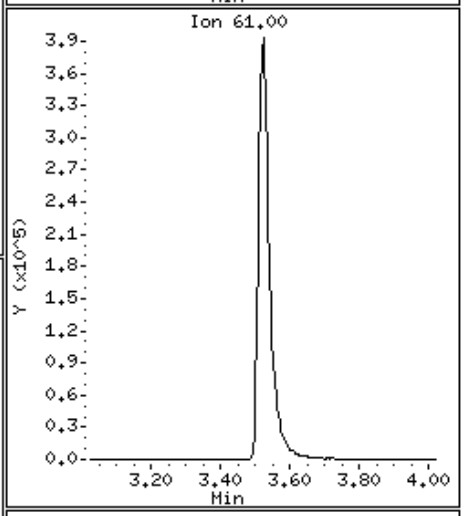


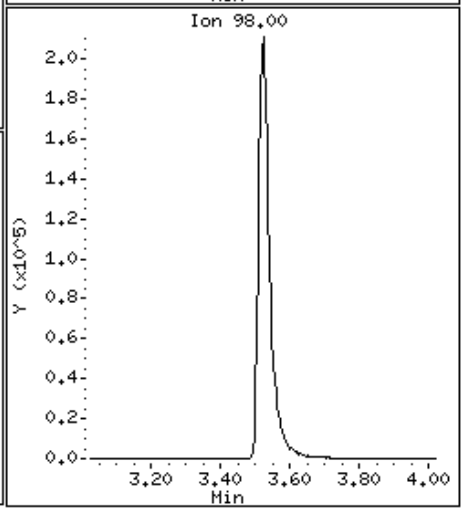












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020112.D Page 4

Date : 01-FEB-2023 14:27

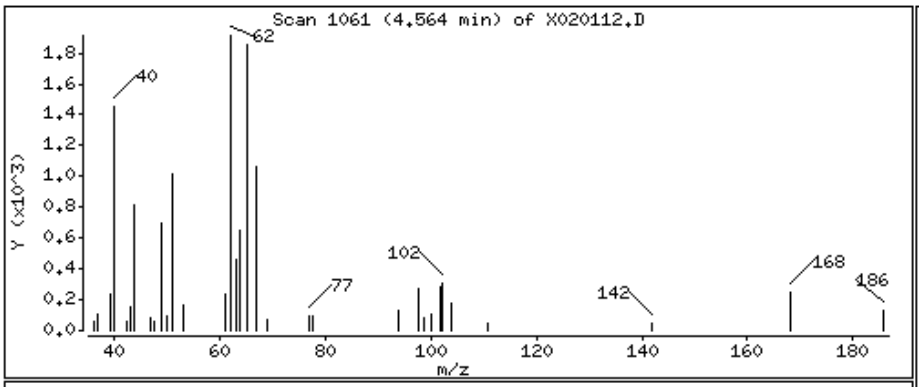
Client ID: HS23011397-03 Instrument: voa6.i

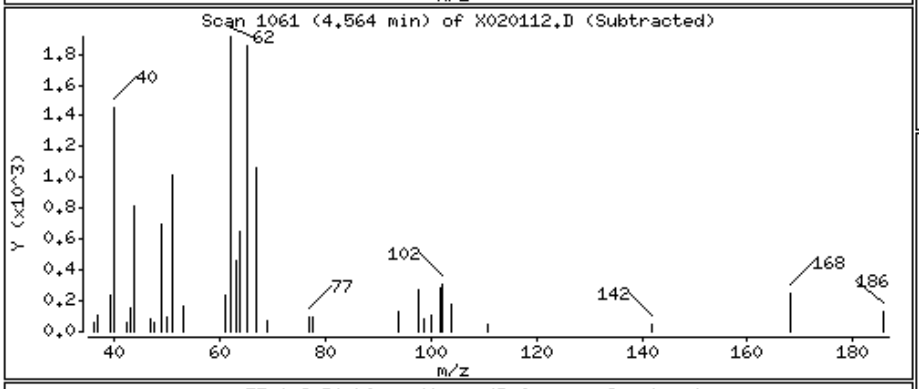
Sample Info: HS23011397-03;HS23011397-03;;;

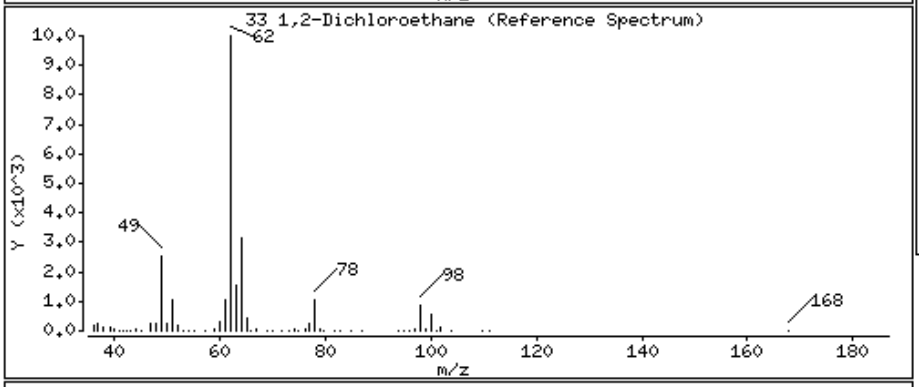
Purge Volume: 5.0 Operator: PC

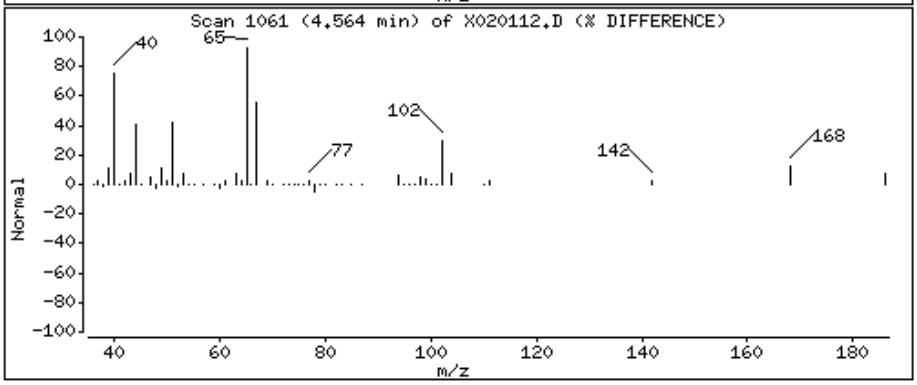
Column phase: DB624 Column diameter: 0.18

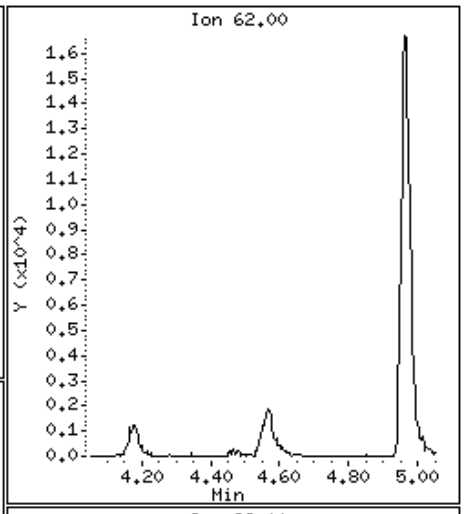
33 1,2-Dichloroethane Concentration: 29.58 ug/l

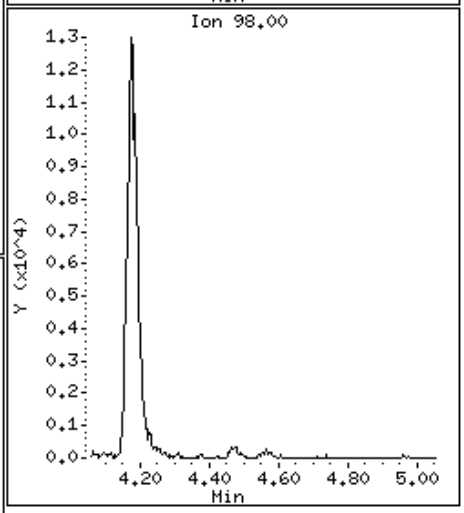












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020112.D Page 5

Date : 01-FEB-2023 14:27

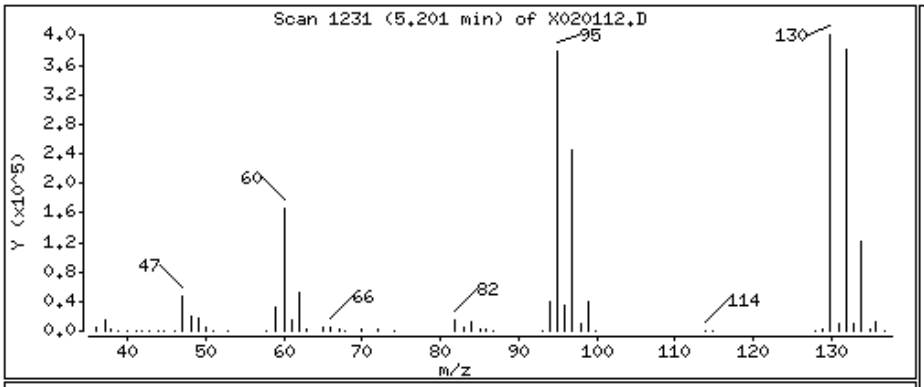
Client ID: HS23011397-03 Instrument: voa6.i

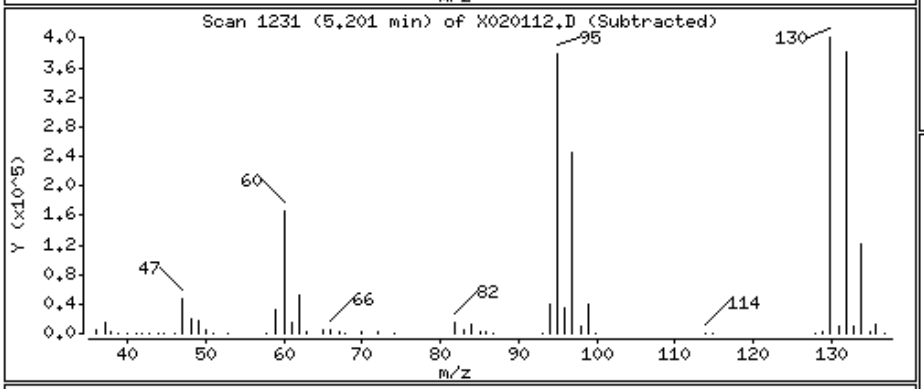
Sample Info: HS23011397-03;HS23011397-03;;;

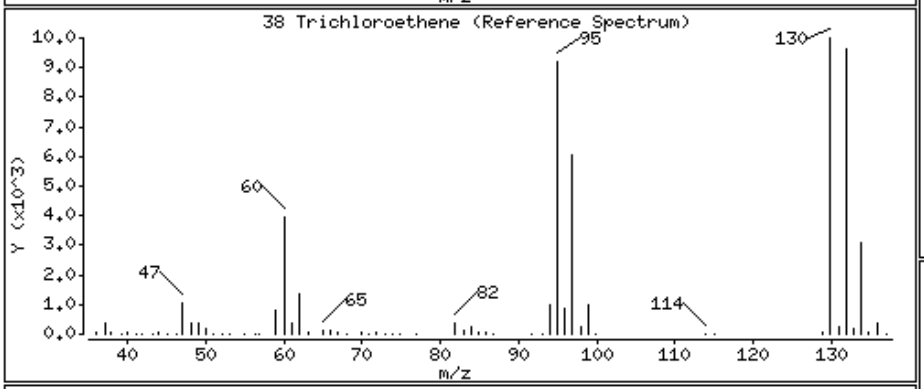
Purge Volume: 5.0 Operator: PC

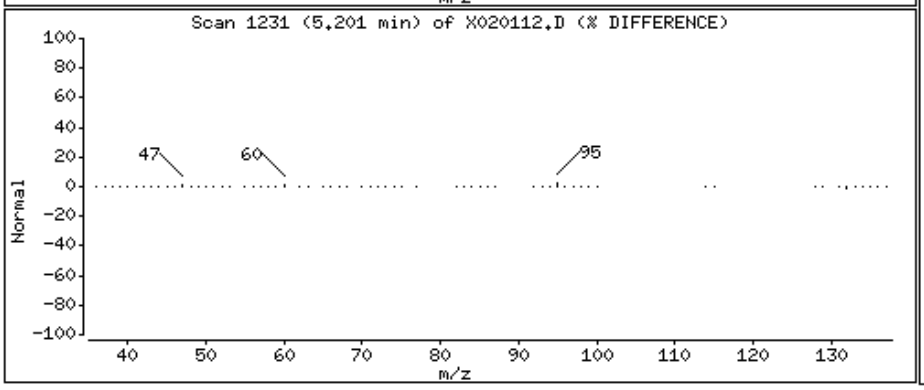
Column phase: DB624 Column diameter: 0.18

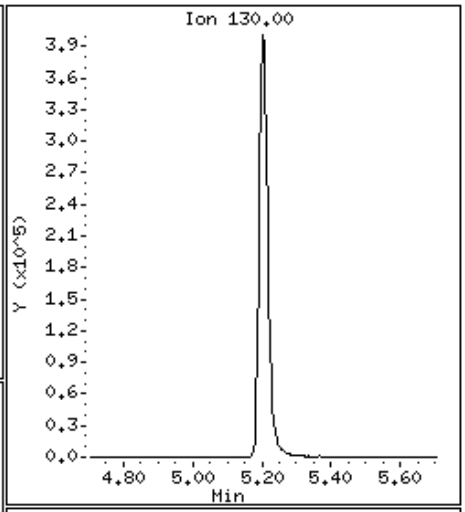
38 Trichloroethene Concentration: 5382.10 ug/l

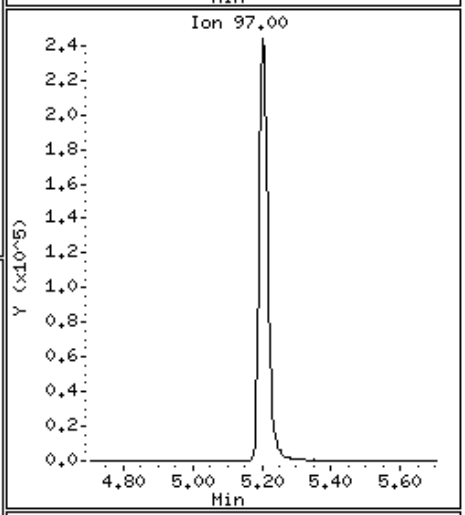


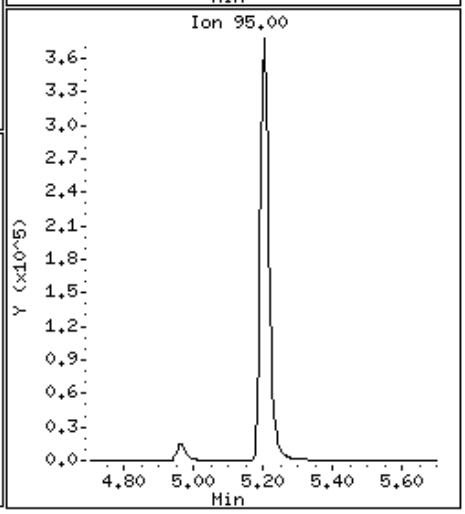












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Inj Date : 01-FEB-2023 14:27
InstruID : voa6.i
LabSampID : HS23011397-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020113.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020113.D
Lab Smp Id: HS23011397-02MS Client Smp ID: HS23011397-02MS
Inj Date : 01-FEB-2023 14:48
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-02MS;HS23011397-02MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: 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)	696603	50.0000	
135	1,4-Dioxane	88	5.598	5.595	(1.341)	25096	394.115	394.11(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	78786	16.4793	16.47
25	Methacrylonitrile	41	3.818	3.822	(0.915)	87321	17.7031	17.70
12	Isobutyl Alcohol	43	4.672	4.669	(1.119)	313711	400.384	400.38
13	Acetonitrile	39	2.194	2.195	(0.526)	132002	208.206	208.20
14	Allyl Chloride	41	2.194	2.195	(0.526)	239368	19.8236	19.82
4	Propionitrile	54	3.649	3.645	(0.874)	128796	181.202	181.20(a)
72	trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	40801	21.3848	21.38
130	Ethyl Acetate	43	3.653	3.649	(0.875)	104606	19.2442	19.24
40	Methyl Methacrylate	41	5.606	5.602	(1.343)	93310	19.6450	19.64
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	83888	18.1059	18.10
142	Tetrahydrofuran	42	3.848	3.840	(0.922)	31094	33.8759	33.87
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	239472	22.4161	22.41
156	Diisopropyl ether	45	2.997	2.997	(0.718)	346814	19.1923	19.19
182	Epichlorohydrin	57	6.097	6.089	(1.229)	29322	68.2140	68.21
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	516292	22.2370	22.23
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	60344	12.6811	12.68
3	Chloromethane	50	1.074	1.074	(0.257)	92216	16.1959	16.19
5	Vinyl Chloride	62	1.141	1.141	(0.273)	100699	16.5481	16.54

6 Bromomethane	94	1.336	1.336 (0.320)	74277	17.3329	17.33
7 Chloroethane	64	1.400	1.400 (0.335)	66870	15.7880	15.78

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020113.D Page 2
Report Date: 16-Feb-2023 14:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	174469	20.4881	20.48
9	Acrolein	56	1.441	1.441	(0.345)	18883	41.3396	41.33
10	Acetone	43	1.969	1.970	(0.472)	51642	26.3954	26.39
11	1,1-Dichloroethene	96	1.913	1.910	(0.458)	96688	18.2882	18.28
15	Iodomethane	142	2.022	2.022	(0.485)	211410	33.5016	33.50
16	Acrylonitrile	53	2.532	2.528	(0.607)	70886	39.5325	39.53
17	Methylene Chloride	84	2.299	2.300	(0.551)	122041	16.8288	16.82
18	Methyl tert-butyl ether	73	2.528	2.528	(0.606)	336427	19.4409	19.44
19	Carbon Disulfide	76	2.063	2.067	(0.494)	548687	39.6666	39.66
20	trans-1,2-Dichloroethene	96	2.528	2.525	(0.606)	115433	19.5087	19.50
21	Vinyl Acetate	43	2.997	2.993	(0.718)	590570	38.8762	38.87
22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	195494	18.8257	18.82
24	2-Butanone	43	3.578	3.574	(0.857)	66110	33.9473	33.94
26	2,2-Dichloropropane	77	3.506	3.507	(0.840)	193108	21.9018	21.90
27	cis-1,2-Dichloroethene	96	3.521	3.522	(0.844)	132013	18.3328	18.33
28	Chloroform	83	3.900	3.900	(0.934)	221918	19.0667	19.06
29	Bromochloromethane	128	3.795	3.788	(0.909)	69016	17.5050	17.50
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.981)	299760	44.7982	44.79
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	203825	22.0721	22.07
32	1,1-Dichloropropene	75	4.275	4.275	(0.862)	172369	24.6768	24.67
33	1,2-Dichloroethane	62	4.552	4.553	(0.918)	166566	20.6624	20.66
34	Carbon Tetrachloride	117	4.260	4.260	(0.859)	178695	23.9567	23.95
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	349959	49.5724	49.57
* 36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	983884	50.0000	
37	Benzene	78	4.507	4.508	(0.909)	479027	20.3885	20.38
38	Trichloroethene	130	5.205	5.205	(1.049)	161688	24.2632	24.26
39	Bromodichloromethane	83	5.726	5.722	(1.154)	174455	19.7852	19.78
42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	118998	19.0403	19.04
44	Dibromomethane	93	5.549	5.550	(1.119)	80468	18.9426	18.94
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	188345	39.8697	39.86
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	205120	19.8080	19.80
* 47	Chlorobenzene-d5	117	7.667	7.668	(1.000)	883819	50.0000	
$ 48	Toluene-d8	98	6.385	6.386	(0.833)	1138385	52.1243	52.12
50	Toluene	91	6.445	6.442	(0.841)	537849	22.0168	22.01
51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	173933	20.2394	20.23
52	2-Hexanone	43	7.086	7.083	(0.924)	130445	40.5857	40.58
53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	95582	19.5030	19.50
54	1,3-Dichloropropane	76	6.981	6.978	(0.911)	197605	20.4846	20.48
55	Dibromochloromethane	129	7.173	7.173	(0.935)	143680	20.3128	20.31
56	Tetrachloroethene	164	6.925	6.925	(0.903)	130643	25.8471	25.84
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	127153	20.7510	20.75
58	1-Chlorohexane	55	7.694	7.694	(1.551)	130454	27.4363	27.43
59	Chlorobenzene	112	7.694	7.694	(1.003)	366122	21.1297	21.12
60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	135502	21.0135	21.01
61	Ethylbenzene	106	7.799	7.799	(1.017)	193139	23.6629	23.66
62	m,p-Xylenes	106	7.904	7.900	(1.031)	484476	46.0446	46.04
63	o-Xylene	106	8.241	8.241	(1.075)	230137	22.1605	22.16
64	Styrene	104	8.260	8.256	(1.077)	383993	22.0603	22.06
66	Bromoform	173	8.410	8.410	(1.097)	96017	19.5941	19.59
67	Isopropylbenzene	105	8.560	8.560	(1.116)	607911	25.6222	25.62
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	153527	19.9783	19.97
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	425159	52.0784	52.07

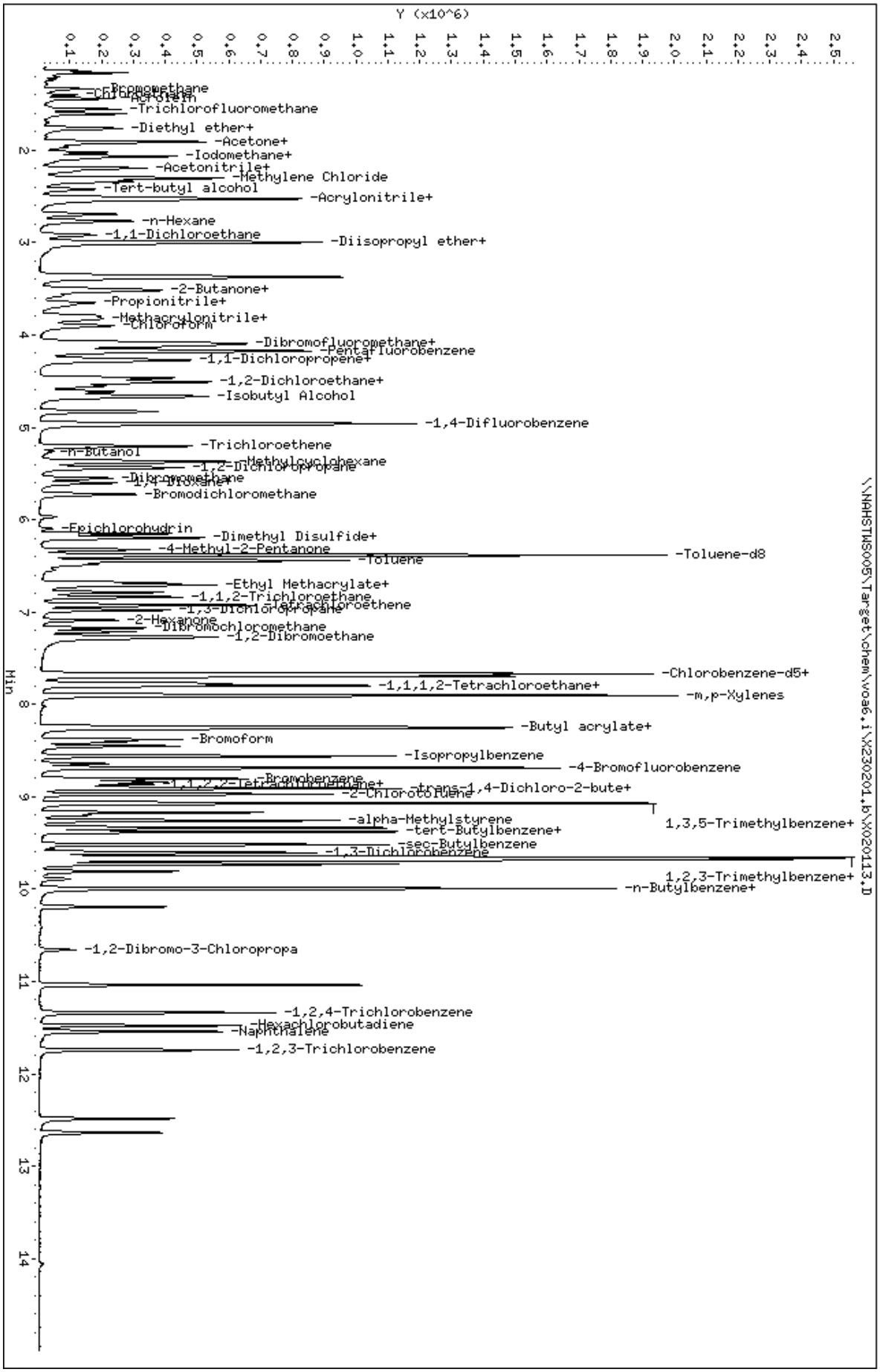
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662 (1.000)	482145	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863 (0.917)	113510	21.1580	21.15(M)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020113.D Page 3
Report Date: 16-Feb-2023 14:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	73 n-Propylbenzene	91	8.912	8.908	(0.922)	712142	26.6654	26.66
	74 Bromobenzene	156	8.807	8.803	(0.912)	172235	21.7735	21.77
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	512227	25.9632	25.96
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	427131	24.3725	24.37
	77 4-Chlorotoluene	91	9.069	9.070	(0.939)	492347	24.6439	24.64
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	440904	27.3015	27.30
	79 1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	506273	24.3882	24.38
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	631481	29.3884	29.38
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	549808	28.5543	28.55
	83 1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	302928	23.0726	23.07
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	317968	22.1935	22.19
	87 n-Butylbenzene	91	9.995	9.992	(1.035)	482764	26.8672	26.86
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	295687	21.8675	21.86
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	24051	19.6321	19.63
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	209929	24.6008	24.60
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	106170	28.1973	28.19
	92 Naphthalene	128	11.543	11.540	(1.195)	415520	21.4013	21.40
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	183254	22.4224	22.42
M	94 1,2-Dichloroethylene (total)	96				247446	37.8415	37.84
M	95 Xylenes (total)	106				714613	68.2051	68.20
	141 Cyclohexane	56	4.117	4.118	(0.987)	188462	27.4243	27.42
	138 Freon TF	101	1.909	1.913	(0.458)	110188	21.5484	21.54
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	295965	24.5746	24.57
	146 Methyl Acetate	43	2.228	2.228	(0.534)	59252	18.9028	18.90
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	194032	402.263	402.26
	149 Isopropyl Alcohol	45	2.089	2.090	(0.501)	104756	415.852	415.85

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

Page 1

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020113.D
Inj Date : 01-FEB-2023 14:48
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LabSampID : HS23011397-02MS

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

Reason Code:

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09-Feb-2023
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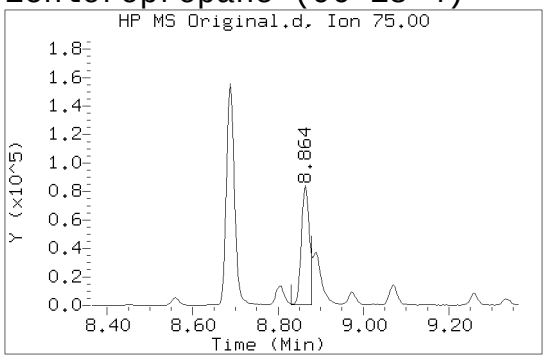

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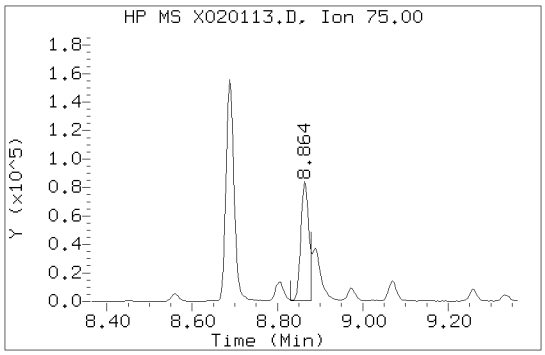

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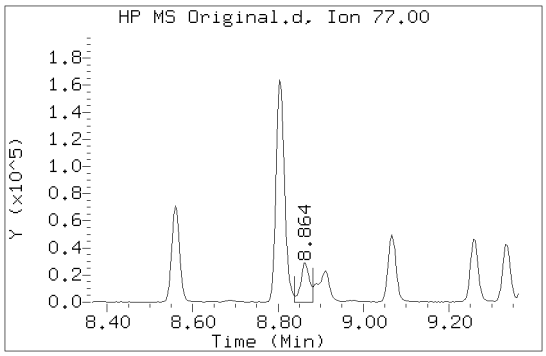

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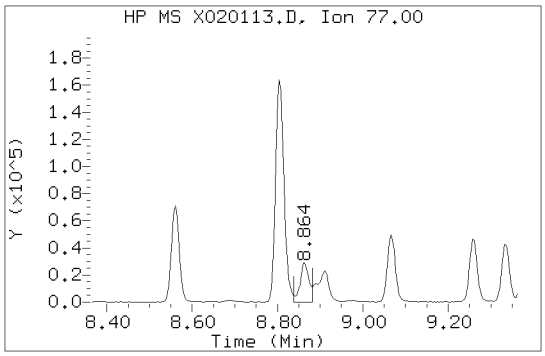

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020114.D Page 1
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ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020114.D
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Inj Date : 01-FEB-2023 15:09
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-02MSD;HS23011397-02MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 13 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: 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)	687487	50.0000	
135	1,4-Dioxane	88	5.598	5.595	(1.340)	24299	386.659	386.65(a)
140	1,3-Butadiene	54	1.160	1.160	(0.278)	73879	15.6578	15.65
25	Methacrylonitrile	41	3.821	3.822	(0.915)	83650	17.1837	17.18
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	302328	390.973	390.97
13	Acetonitrile	39	2.194	2.195	(0.525)	127186	203.270	203.27
14	Allyl Chloride	41	2.194	2.195	(0.525)	226446	19.0021	19.00
4	Propionitrile	54	3.649	3.645	(0.873)	120889	172.333	172.33(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	38077	20.2141	20.21
130	Ethyl Acetate	43	3.649	3.649	(0.873)	98042	18.2758	18.27
40	Methyl Methacrylate	41	5.606	5.602	(1.342)	85948	18.3349	18.33
49	Ethyl Methacrylate	69	6.708	6.708	(1.351)	78208	17.0314	17.03
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	29841	32.8546	32.85
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	231442	22.1245	22.12
156	Diisopropyl ether	45	2.997	2.997	(0.717)	333118	18.6788	18.67
182	Epichlorohydrin	57	6.097	6.089	(1.228)	26295	61.9588	61.95
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	486365	21.3928	21.39
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	57298	12.2155	12.21
3	Chloromethane	50	1.074	1.074	(0.257)	91118	16.2126	16.21
5	Vinyl Chloride	62	1.141	1.141	(0.273)	92739	15.4421	15.44

6 Bromomethane	94	1.336	1.336 (0.320)	67687	16.1397	16.13
7 Chloroethane	64	1.400	1.400 (0.335)	65050	15.5619	15.56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	166324	19.7906	19.79
	9 Acrolein	56	1.441	1.441	(0.345)	15923	35.7324	35.73
	10 Acetone	43	1.970	1.970	(0.472)	49970	25.8788	25.87
	11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	93239	17.8697	17.86
	15 Iodomethane	142	2.026	2.022	(0.485)	220081	35.1347	35.13
	16 Acrylonitrile	53	2.532	2.528	(0.606)	63013	35.6077	35.60
	17 Methylene Chloride	84	2.299	2.300	(0.550)	117617	16.4338	16.43
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	325161	19.0390	19.03
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	515481	37.7602	37.76
	20 trans-1,2-Dichloroethene	96	2.524	2.525	(0.604)	110267	18.8827	18.88
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	568444	37.9158	37.91
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	188846	18.4266	18.42
	24 2-Butanone	43	3.574	3.574	(0.856)	62780	32.7791	32.77
	26 2,2-Dichloropropane	77	3.503	3.507	(0.838)	183849	21.1282	21.12
	27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	126413	17.7879	17.78
	28 Chloroform	83	3.900	3.900	(0.934)	212216	18.4749	18.47
	29 Bromochloromethane	128	3.795	3.788	(0.908)	65205	16.7577	16.75
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	297227	45.0094	45.00
	31 1,1,1-Trichloroethane	97	4.076	4.080	(0.976)	196297	21.5387	21.53
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	164021	23.6923	23.69
	33 1,2-Dichloroethane	62	4.552	4.553	(0.917)	168391	21.0762	21.07
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	169063	22.8688	22.86
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	339829	48.7802	48.78
*	36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	975136	50.0000	
	37 Benzene	78	4.507	4.508	(0.908)	459492	19.7325	19.73
	38 Trichloroethene	130	5.205	5.205	(1.048)	152616	23.1073	23.10
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	166372	19.0377	19.03
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	115548	18.6542	18.65
	44 Dibromomethane	93	5.553	5.550	(1.119)	77859	18.4929	18.49
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	185092	39.6857	39.68
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	198293	19.3205	19.32
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	872582	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1123446	52.1028	52.10
	50 Toluene	91	6.445	6.442	(0.841)	509236	21.1140	21.11
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	168348	19.7653	19.76
	52 2-Hexanone	43	7.086	7.083	(0.924)	121768	38.3739	38.37
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	92917	19.2034	19.20
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	187457	19.6829	19.68
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	139727	20.0084	20.00
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	121526	24.3530	24.35
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	124567	20.5908	20.59
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	125971	26.7312	26.73
	59 Chlorobenzene	112	7.690	7.694	(1.003)	348571	20.3758	20.37
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	130775	20.5416	20.54
	61 Ethylbenzene	106	7.799	7.799	(1.017)	182650	22.6660	22.66
	62 m,p-Xylenes	106	7.904	7.900	(1.031)	460691	44.3479	44.34
	63 o-Xylene	106	8.241	8.241	(1.075)	218439	21.3050	21.30
	64 Styrene	104	8.260	8.256	(1.077)	367888	21.4072	21.40
	66 Bromoform	173	8.410	8.410	(1.097)	92835	19.1887	19.18
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	576299	24.6027	24.60
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	147226	19.5652	19.56
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	419272	52.0188	52.01

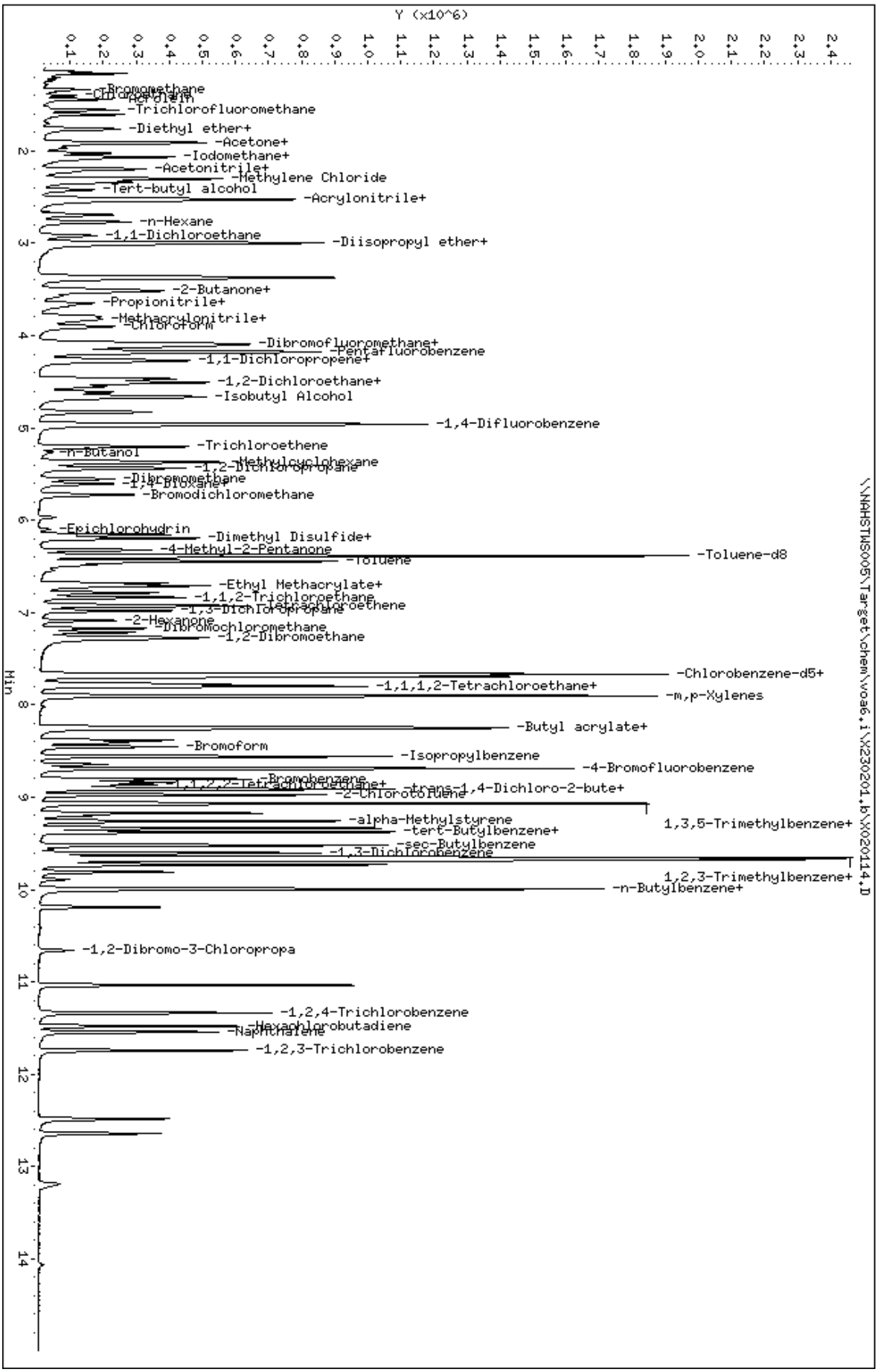
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662 (1.000)	472119	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863 (0.917)	108116	20.5805	20.58(M)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020114.D Page 3
Report Date: 16-Feb-2023 14:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	73 n-Propylbenzene	91	8.912	8.908	(0.922)	678676	25.9520	25.95
	74 Bromobenzene	156	8.803	8.803	(0.911)	164836	21.2806	21.28
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	489344	25.3300	25.33
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	410484	23.9200	23.92
	77 4-Chlorotoluene	91	9.069	9.070	(0.939)	471865	24.1203	24.12
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	418035	26.4351	26.43
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	487102	23.9630	23.96
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	591401	28.1076	28.10
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	517916	27.4692	27.46
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	292602	22.7594	22.75
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	302974	21.5960	21.59
	87 n-Butylbenzene	91	9.995	9.992	(1.035)	462056	26.3009	26.30
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	286231	21.6177	21.61
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	23765	19.8098	19.80
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	200680	24.0163	24.01
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	100600	27.2896	27.28
	92 Naphthalene	128	11.544	11.540	(1.195)	403241	21.2099	21.20
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	177294	22.1538	22.15
M	94 1,2-Dichloroethylene (total)	96				236680	36.6707	36.67
M	95 Xylenes (total)	106				679130	65.6529	65.65
	141 Cyclohexane	56	4.118	4.118	(0.986)	179721	26.5416	26.54
	138 Freon TF	101	1.913	1.913	(0.458)	105729	20.9506	20.95
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	280621	23.5095	23.50
	146 Methyl Acetate	43	2.228	2.228	(0.533)	55572	17.9639	17.96
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	186573	391.929	391.92
	149 Isopropyl Alcohol	45	2.089	2.090	(0.500)	100087	402.586	402.58

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\X230201.b\X020114.D
Date : 01-FEB-2023 15:09
Client ID: HS23011397-02HSD
Sample Info: HS23011397-02HSD;HS23011397-02HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

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

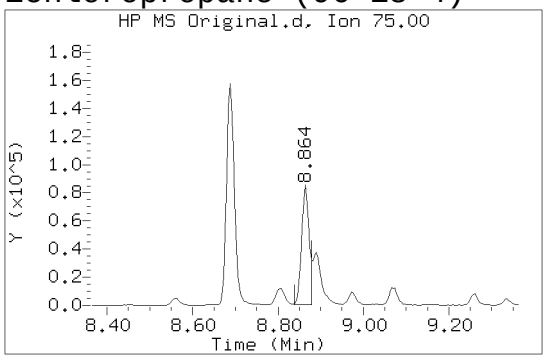
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020114.D
Inj Date : 01-FEB-2023 15:09
InstruID : voa6.i
LabSampID : HS23011397-02MSD

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

Reason Code:

BEFORE

MASS
75
AREA
108116
HEIGHT
85524
14-Feb-2023
12:16
linh
pham



AFTER

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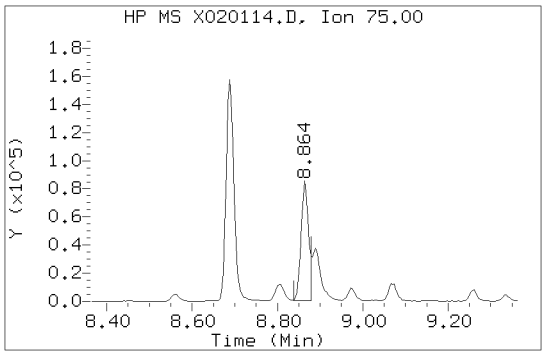
16-Feb-2023
14:17
linh
pham



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26411
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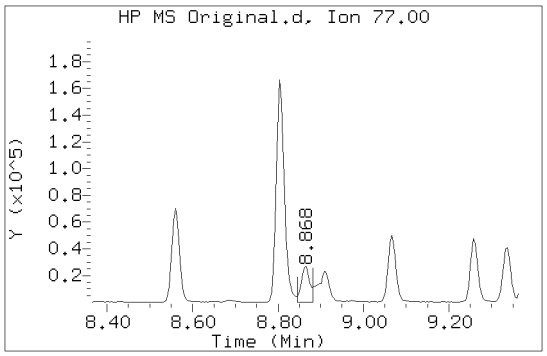
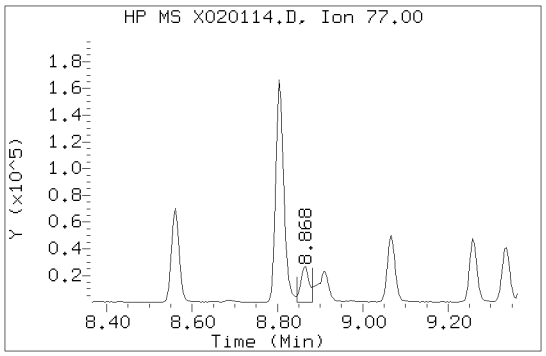


AFTER

MASS
77
AREA
38889
HEIGHT
26411
16-Feb-2023
14:17
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020117.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020117.D
Lab Smp Id: HS23011397-11 Client Smp ID: HS23011397-11
Inj Date : 01-FEB-2023 16:20
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-11;HS23011397-11;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 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: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

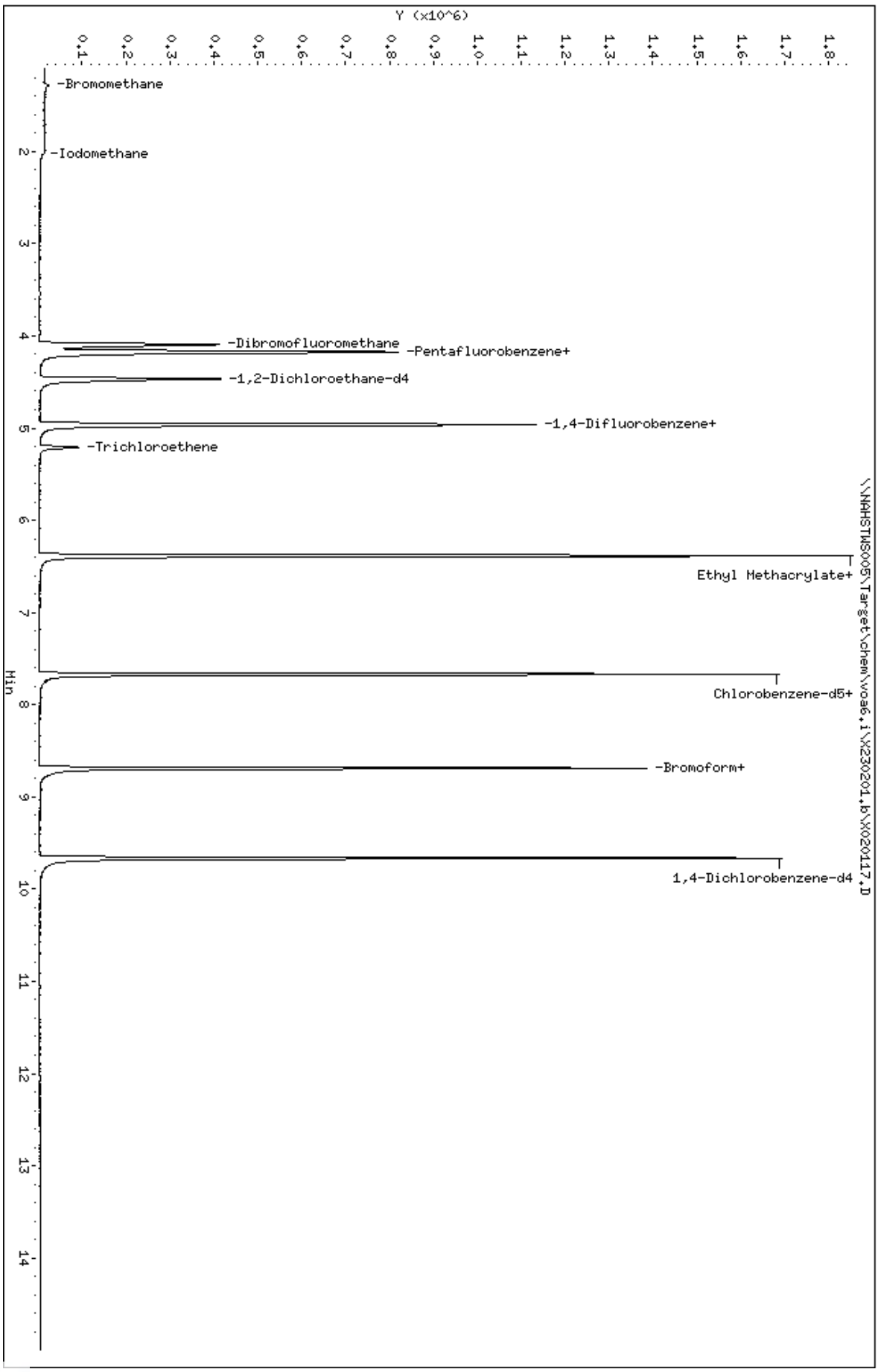
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.178	(1.000)	684847	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	294577	44.7793	44.77
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	341862	49.2585	49.25
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	956766	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	842090	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1099268	52.8275	52.82
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	398379	51.2173	51.21
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	437707	50.0000	
38 Trichloroethene	130	5.208	5.205	(1.050)	31798	4.90691	4.90(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020117.D
Date : 01-FEB-2023 16:20
Client ID: HS23011397-11
Sample Info: HS23011397-11;HS23011397-11;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020117.D Page 2

Date : 01-FEB-2023 16:20

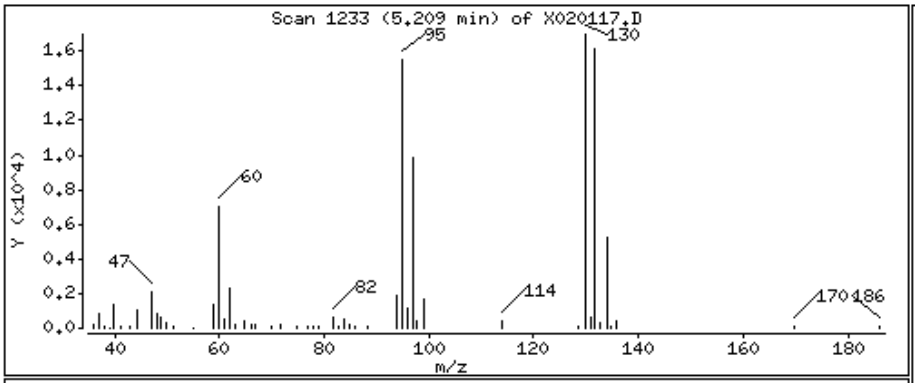
Client ID: HS23011397-11 Instrument: voa6.i

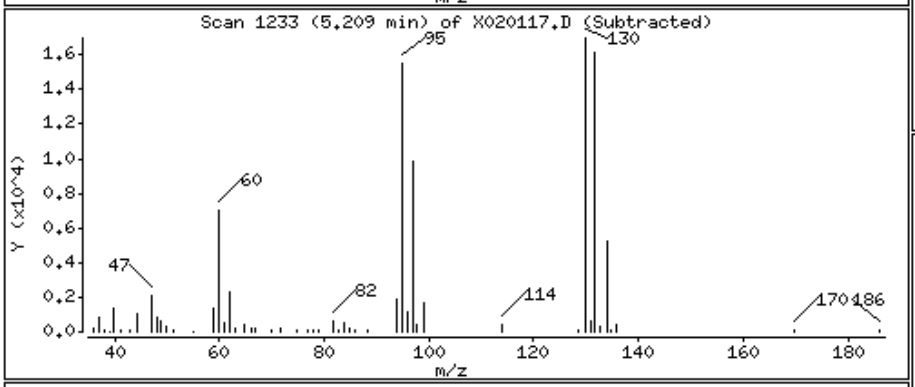
Sample Info: HS23011397-11;HS23011397-11;;;

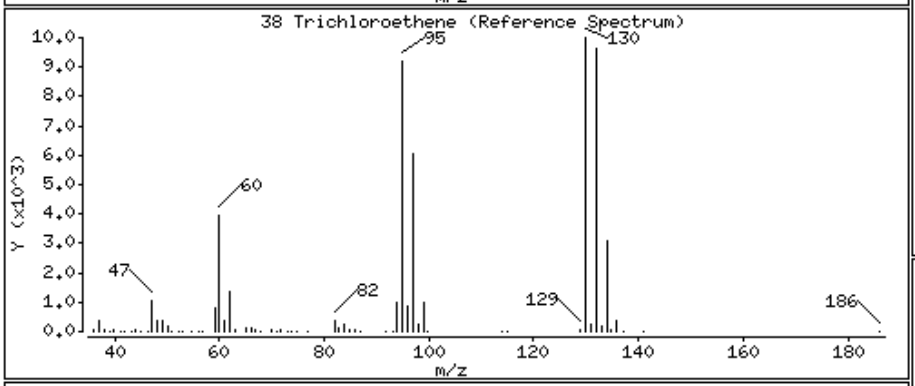
Purge Volume: 5.0 Operator: PC

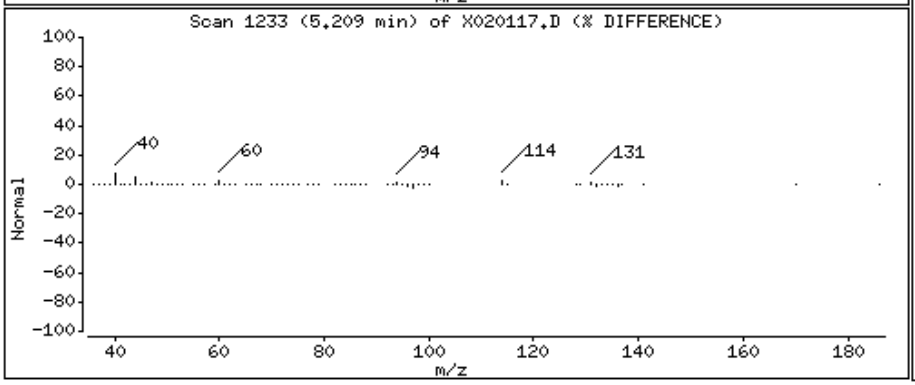
Column phase: DB624 Column diameter: 0.18

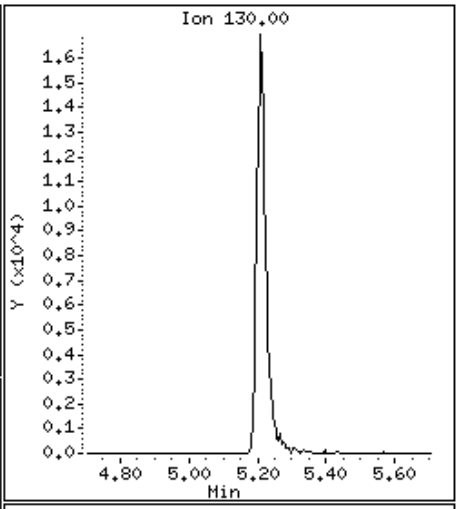
38 Trichloroethene Concentration: 4.90 ug/l

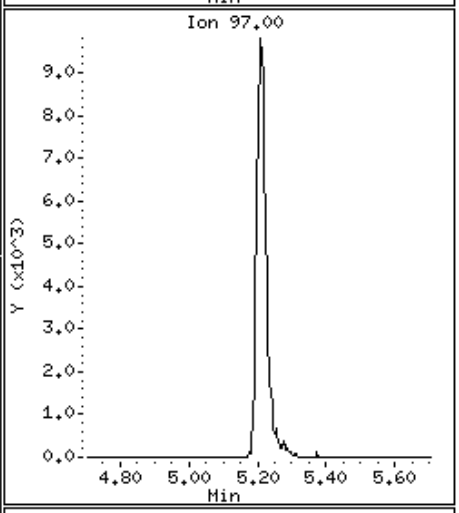


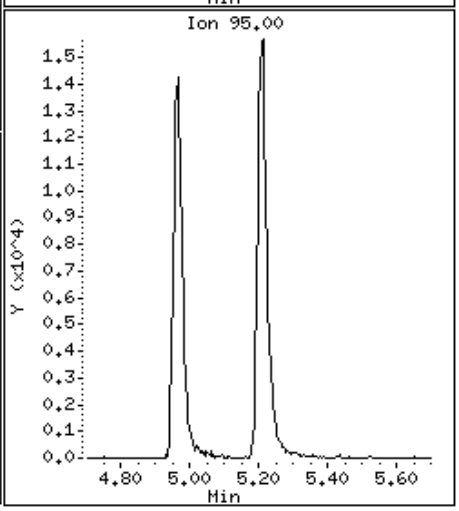












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020117.D
Inj Date : 01-FEB-2023 16:20
InstruID : voa6.i
LabSampID : HS23011397-11

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020118.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020118.D
Lab Smp Id: HS23011397-12 Client Smp ID: HS23011397-12
Inj Date : 01-FEB-2023 16:41
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-12;HS23011397-12;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 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: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

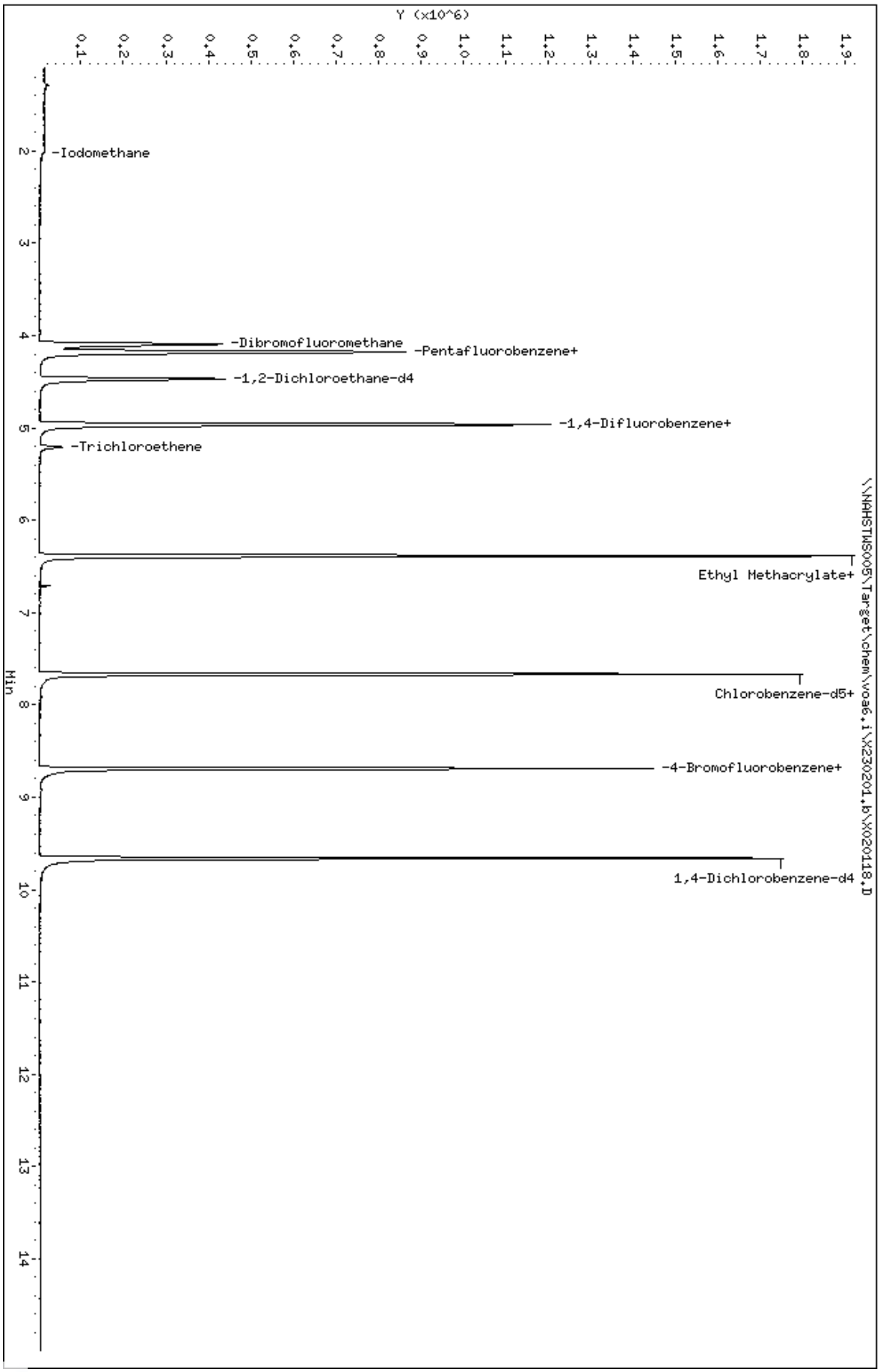
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.178	(1.000)	713763	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	309672	45.1683	45.16
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	352608	48.7514	48.75
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1003435	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	883726	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1154014	52.8455	52.84
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	414544	50.7851	50.78
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	453398	50.0000	
38 Trichloroethene	130	5.212	5.205	(1.050)	19035	2.80077	2.80(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020118.D
Date : 01-FEB-2023 16:41
Client ID: HS23011397-12
Sample Info: HS23011397-12;HS23011397-12;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020118.D Page 2

Date : 01-FEB-2023 16:41

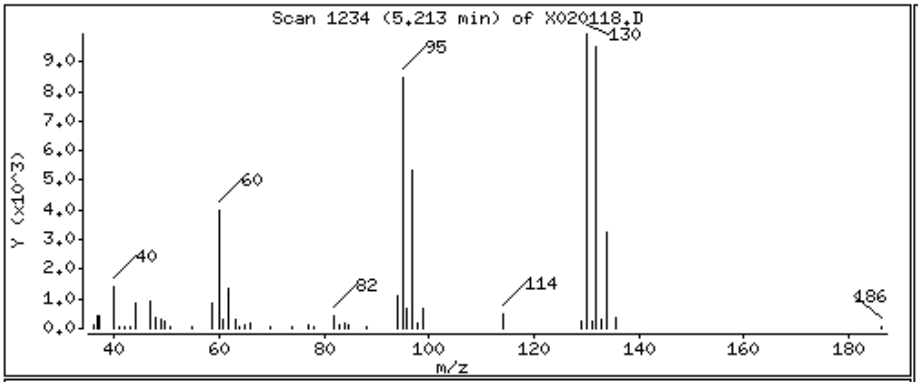
Client ID: HS23011397-12 Instrument: voa6.i

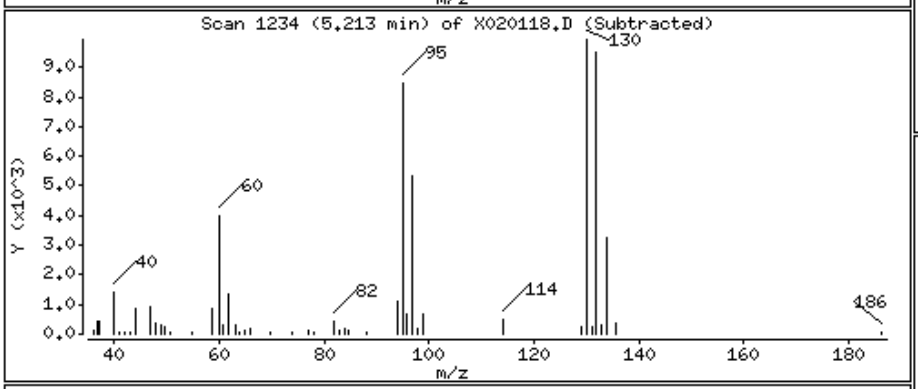
Sample Info: HS23011397-12;HS23011397-12;;;

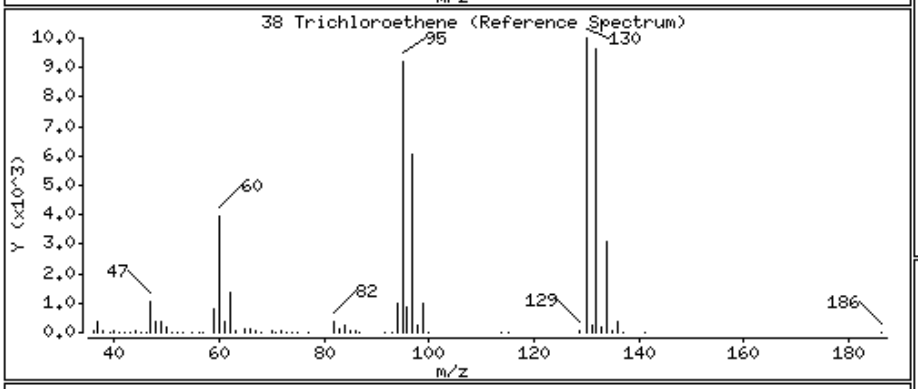
Purge Volume: 5.0 Operator: PC

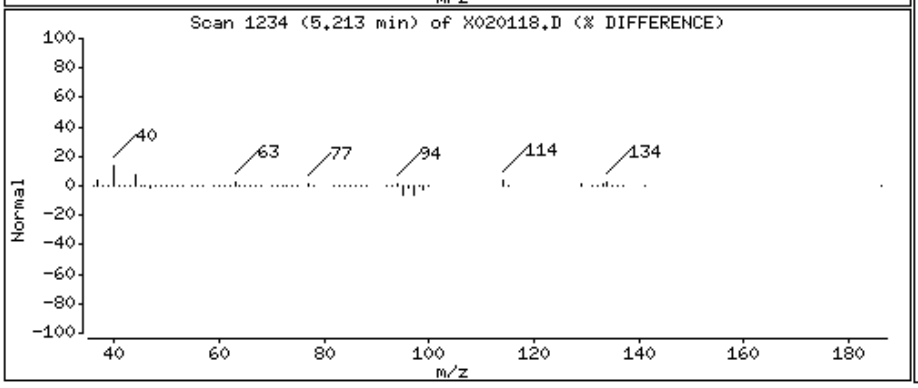
Column phase: DB624 Column diameter: 0.18

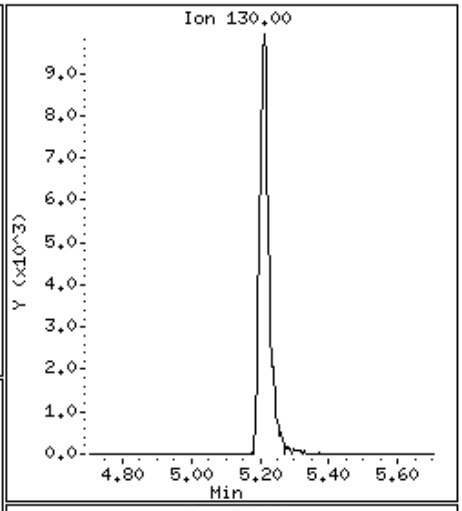
38 Trichloroethene Concentration: 2.80 ug/l

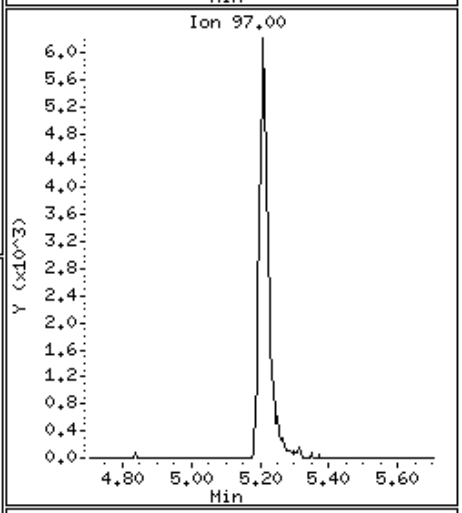


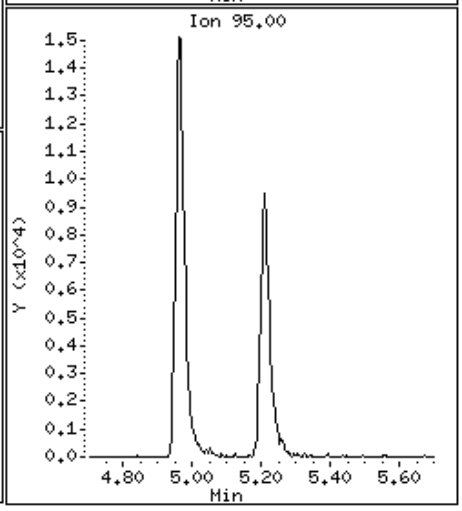












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020118.D
Inj Date : 01-FEB-2023 16:41
InstruID : voa6.i
LabSampID : HS23011397-12

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020119.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020119.D
Lab Smp Id: HS23011397-13 Client Smp ID: HS23011397-13
Inj Date : 01-FEB-2023 17:02
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-13;HS23011397-13;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

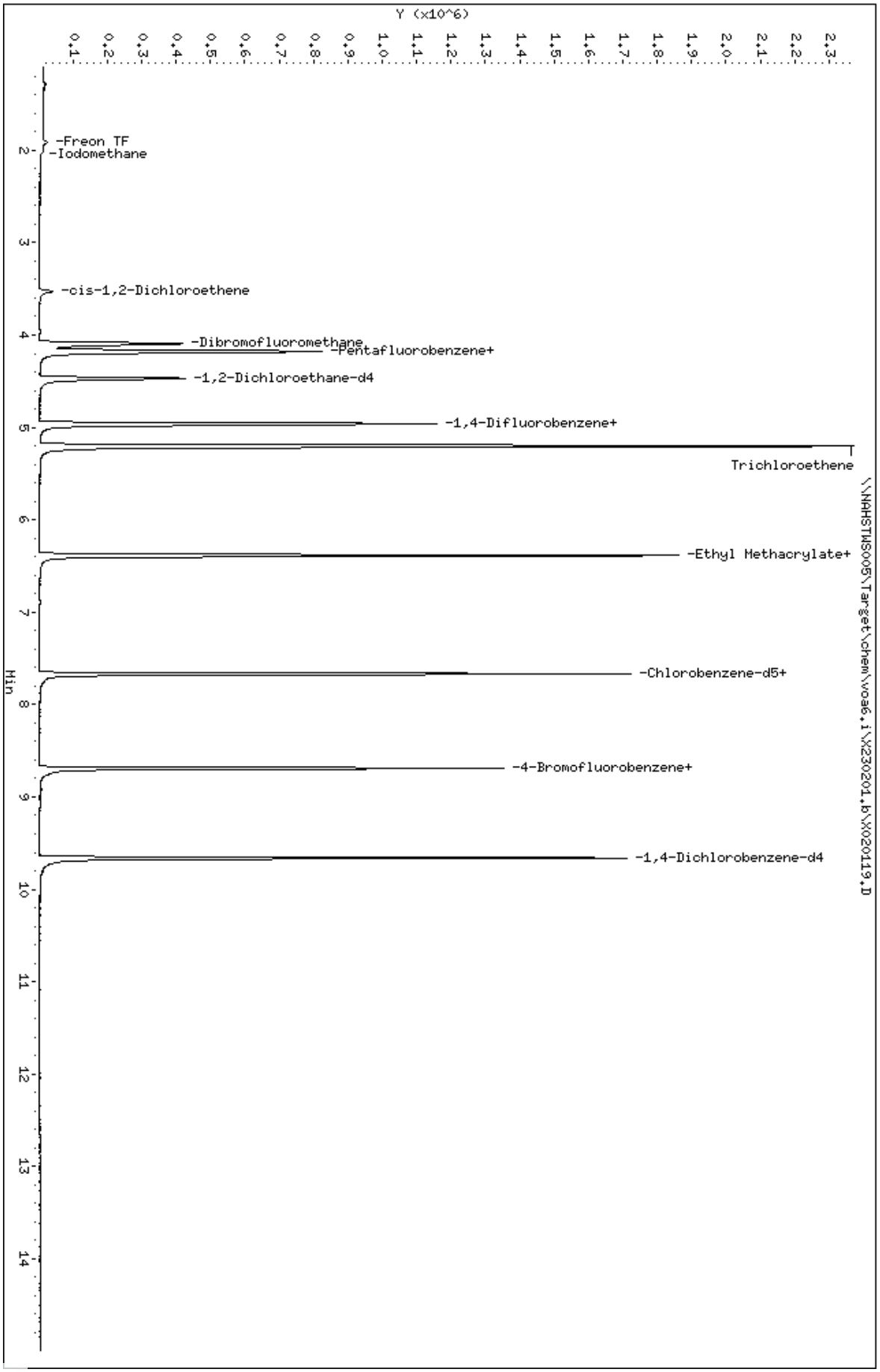
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	685874	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	301236	45.7264	45.72
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	345752	49.7417	49.74
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	964488	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	845191	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1101958	52.7625	52.76
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	397437	50.9091	50.90
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	438242	50.0000	
27 cis-1,2-Dichloroethene	96	3.533	3.522	(0.846)	23089	3.25656	3.25(a)
38 Trichloroethene	130	5.201	5.205	(1.048)	799749	122.425	122.42

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\%230201.b\%020119.D
Date : 01-FEB-2023 17:02
Client ID: HS23011397-13
Sample Info: HS23011397-13;HS23011397-13;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020119.D Page 2

Date : 01-FEB-2023 17:02

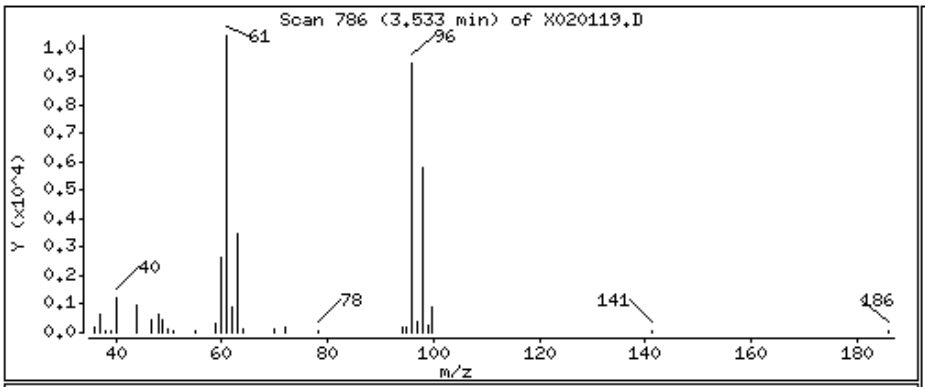
Client ID: HS23011397-13 Instrument: voa6.i

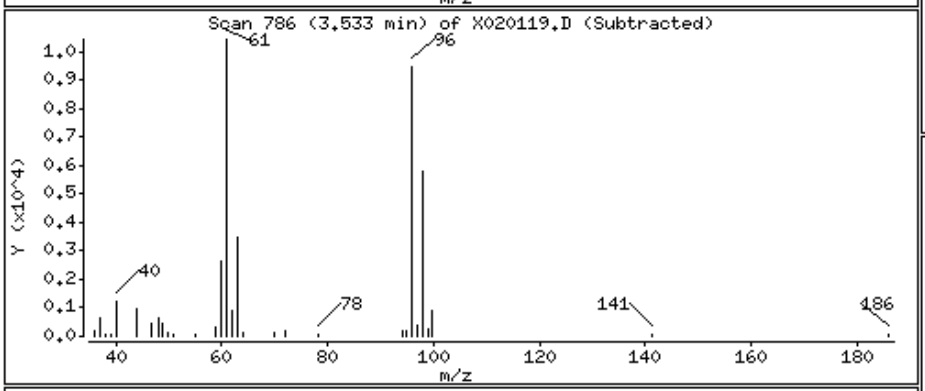
Sample Info: HS23011397-13;HS23011397-13;;;

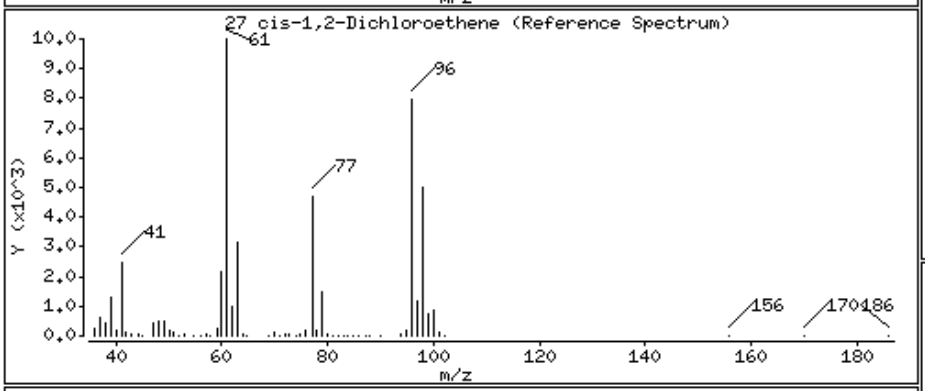
Purge Volume: 5.0 Operator: PC

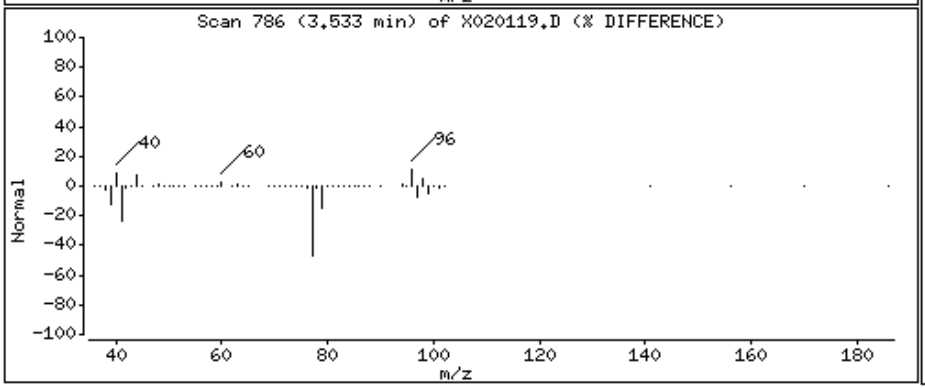
Column phase: DB624 Column diameter: 0.18

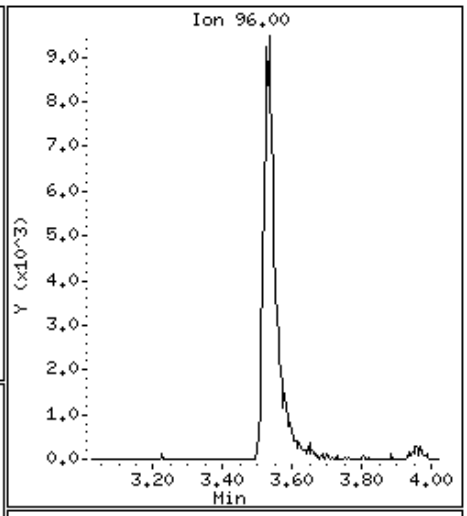
27 cis-1,2-Dichloroethene Concentration: 3.25 ug/l

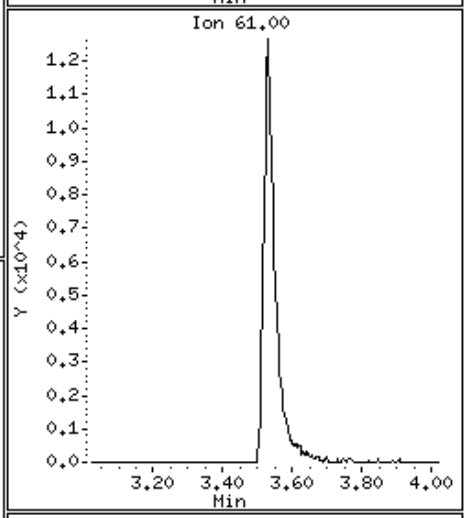


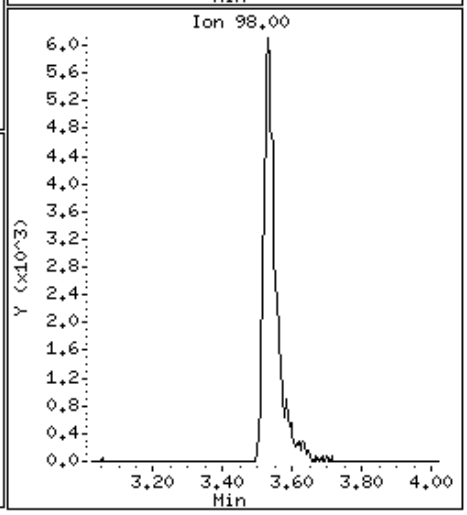












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020119.D Page 3

Date : 01-FEB-2023 17:02

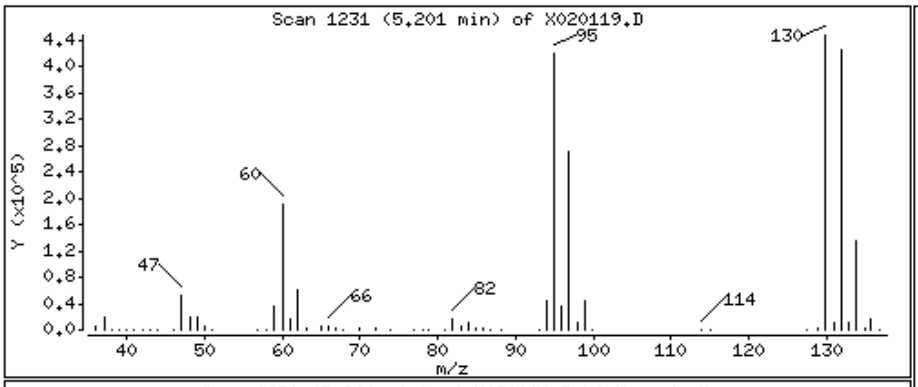
Client ID: HS23011397-13 Instrument: voa6.i

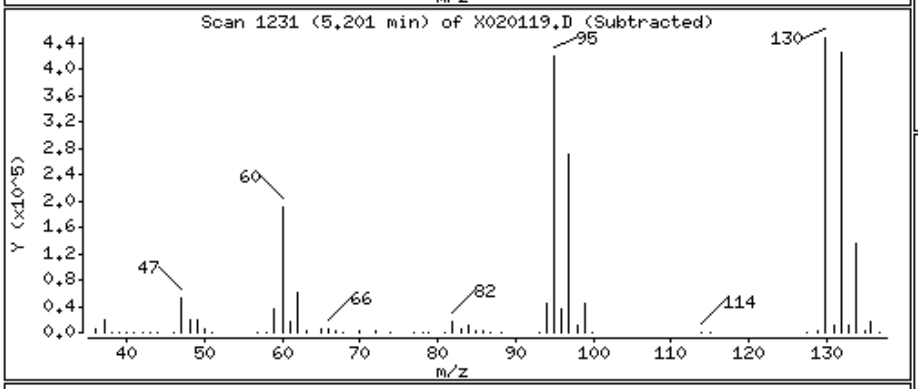
Sample Info: HS23011397-13;HS23011397-13;;;

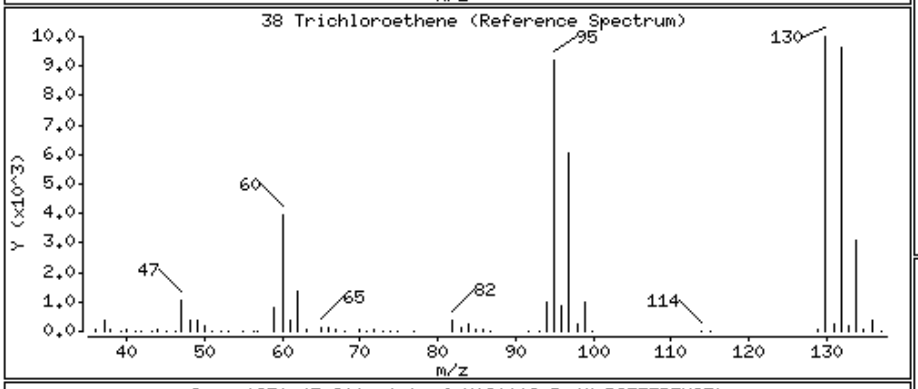
Purge Volume: 5.0 Operator: PC

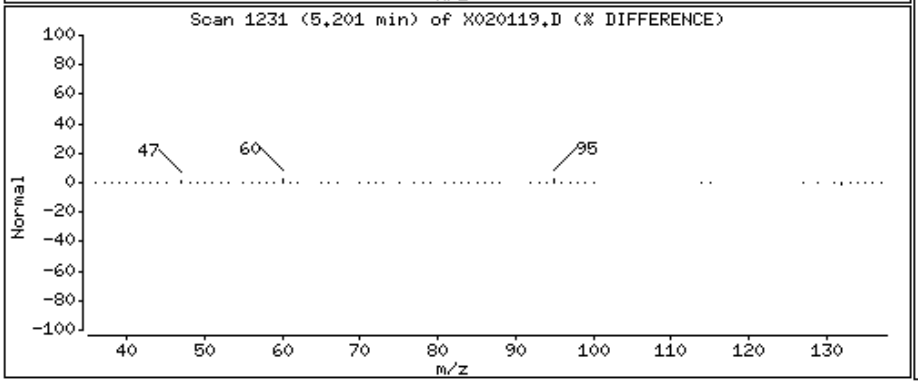
Column phase: DB624 Column diameter: 0.18

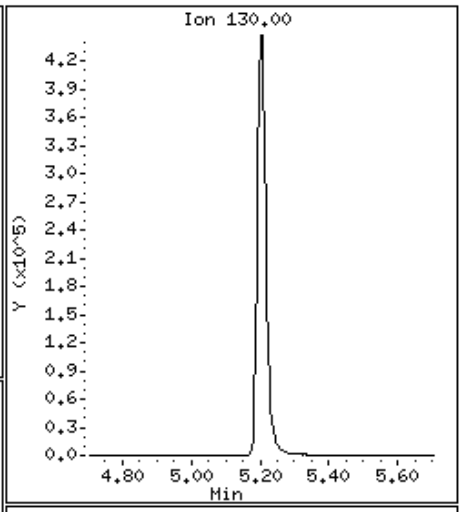
38 Trichloroethene Concentration: 122.42 ug/l

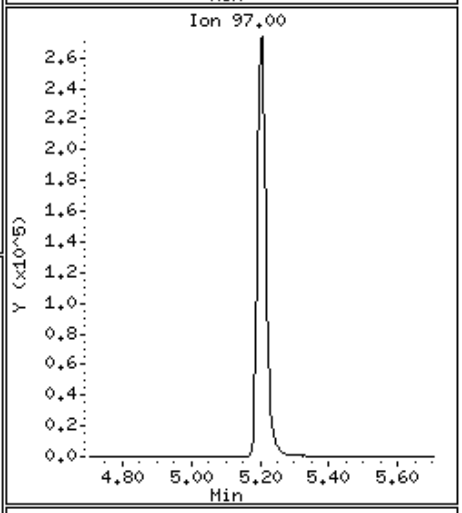


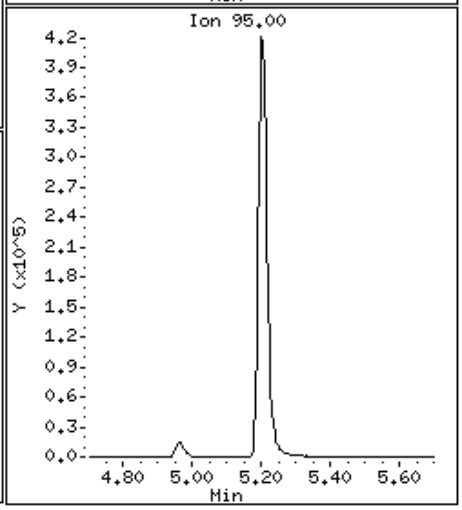












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020119.D
Inj Date : 01-FEB-2023 17:02
InstruID : voa6.i
LabSampID : HS23011397-13

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020120.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020120.D
Lab Smp Id: HS23011397-09 Client Smp ID: HS23011397-09
Inj Date : 01-FEB-2023 17:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-09;HS23011397-09;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 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: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

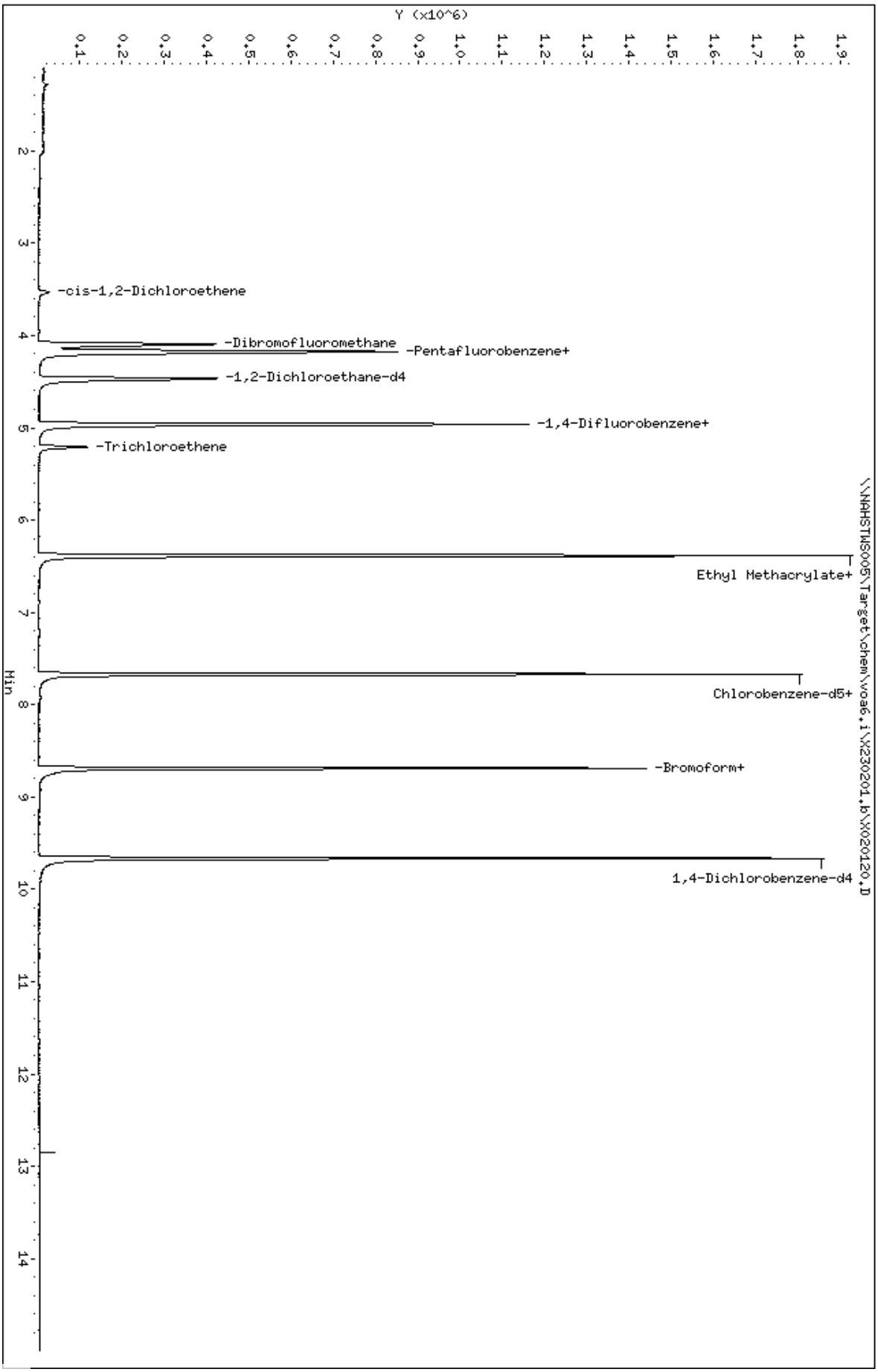
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	698642	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	304774	45.4169	45.41
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	347746	49.1177	49.11
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	974586	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	882363	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1131704	51.9039	51.90
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	415749	51.0111	51.01
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	456670	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	3136	0.51384	0.51(a)
27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	14480	2.00499	2.00(a)
38 Trichloroethene	130	5.208	5.205	(1.050)	40453	6.12837	6.12

QC Flag Legend

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



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Date : 01-FEB-2023 17:23
Client ID: HS23011397-09
Sample Info: HS23011397-09;HS23011397-09;;;
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\X230201.b\X020120.D Page 2

Date : 01-FEB-2023 17:23

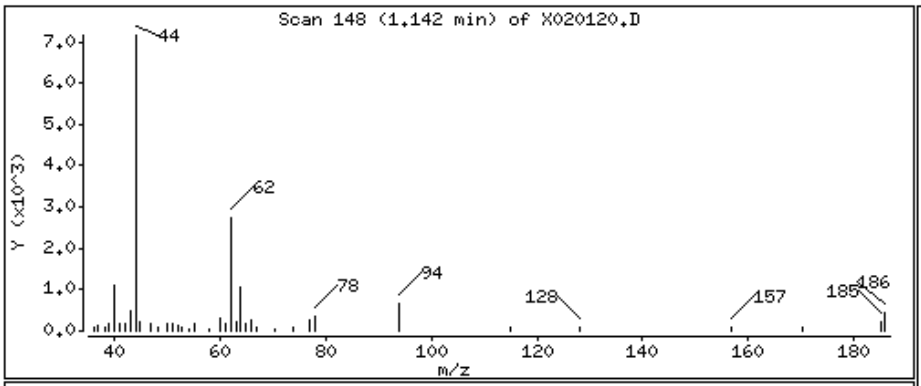
Client ID: HS23011397-09 Instrument: voa6.i

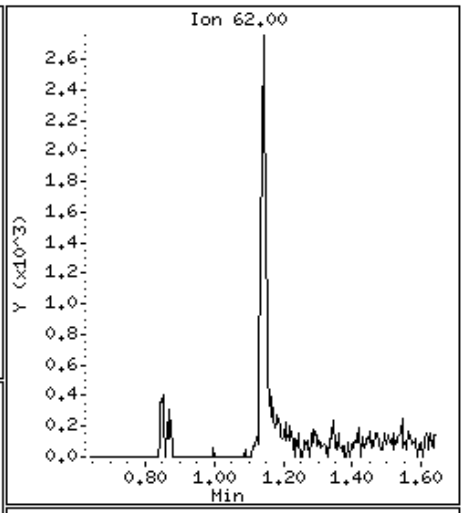
Sample Info: HS23011397-09;HS23011397-09;;;

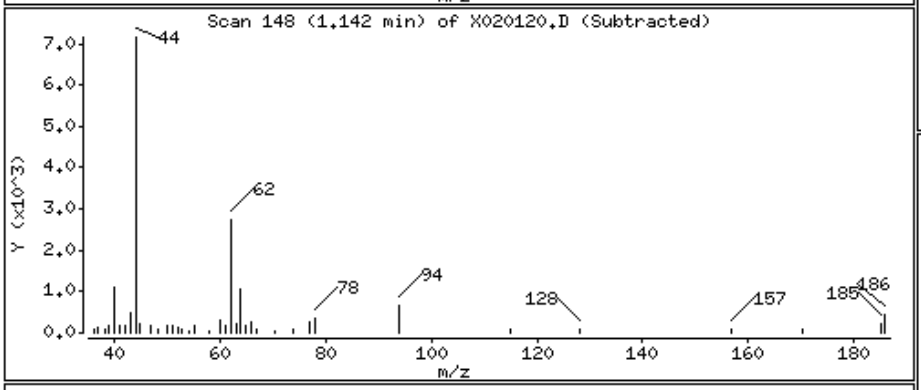
Purge Volume: 5.0 Operator: PC

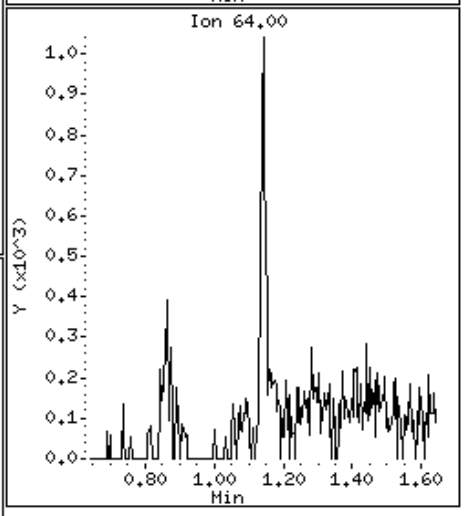
Column phase: DB624 Column diameter: 0.18

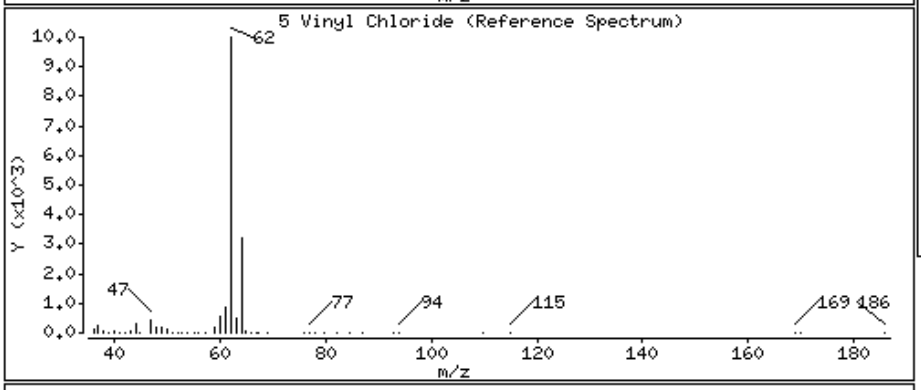
5 Vinyl Chloride Concentration: 0.51 ug/l

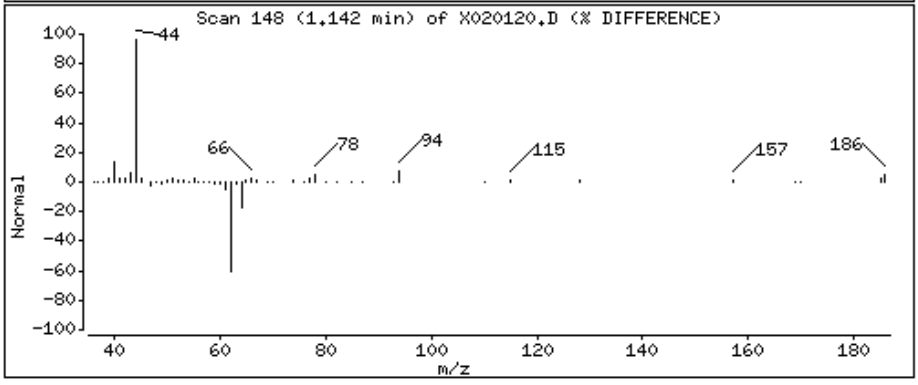












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020120.D

Date : 01-FEB-2023 17:23

Client ID: HS23011397-09

Instrument: voa6.i

Sample Info: HS23011397-09;HS23011397-09;;;

Purge Volume: 5.0

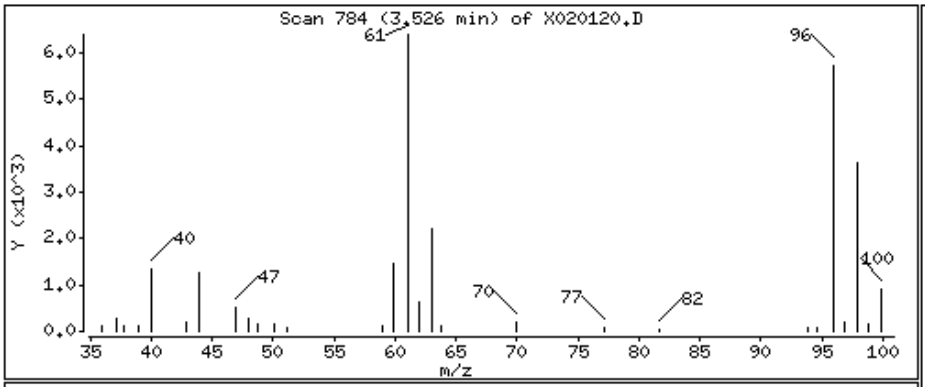
Operator: PC

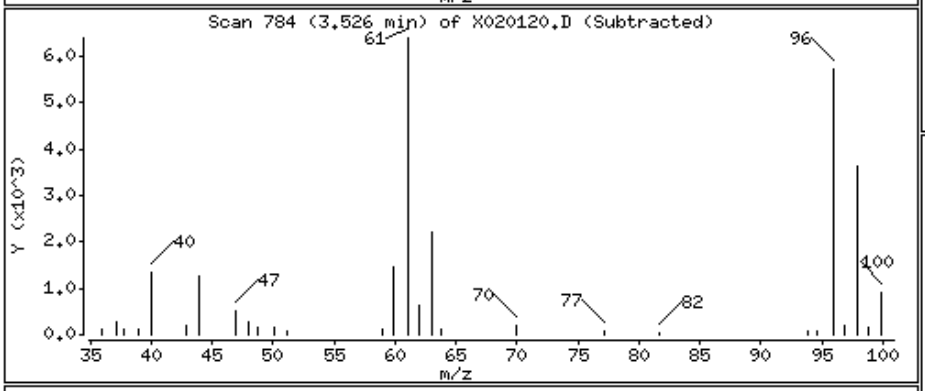
Column phase: DB624

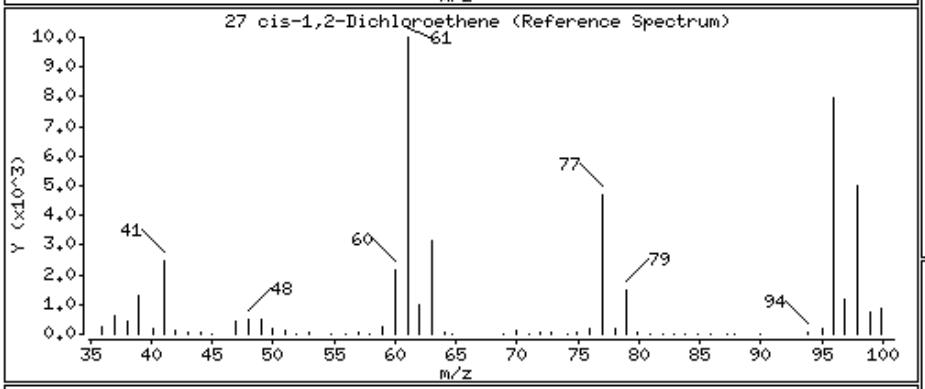
Column diameter: 0.18

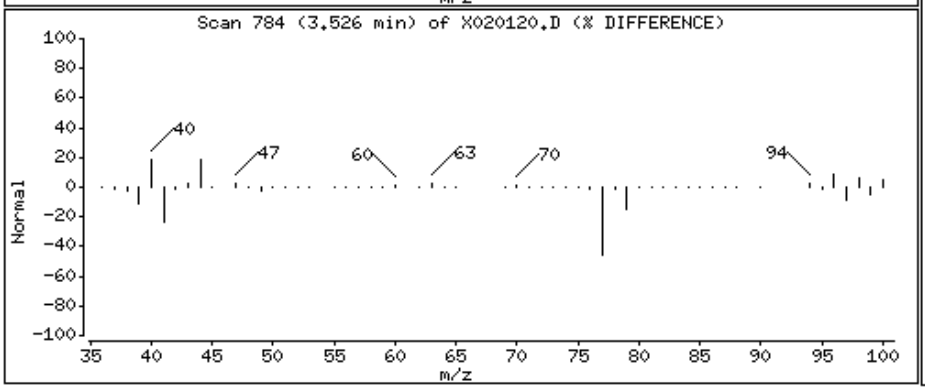
27 cis-1,2-Dichloroethene

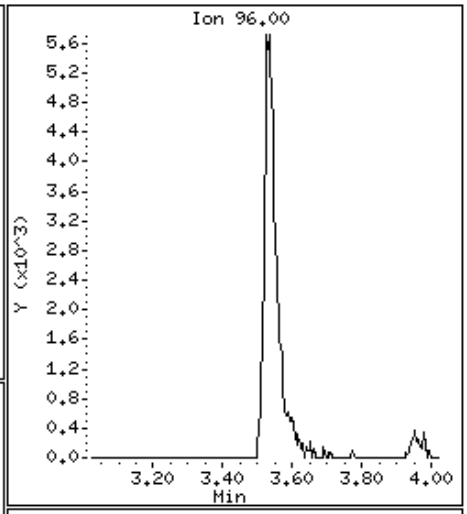
Concentration: 2.00 ug/l

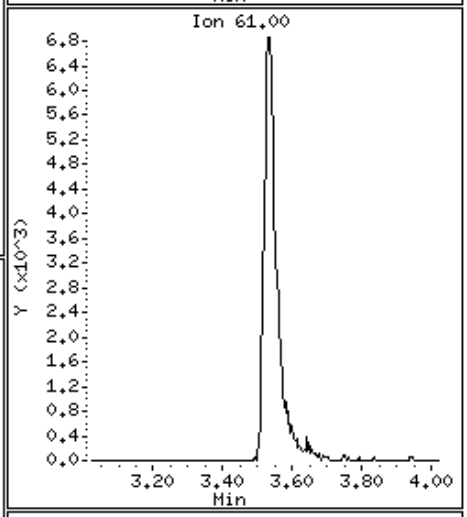


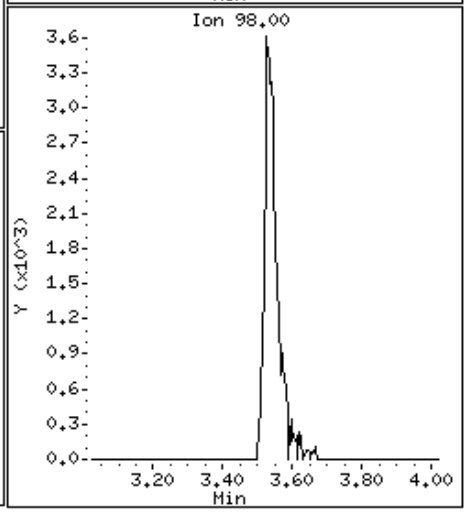












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020120.D Page 4

Date : 01-FEB-2023 17:23

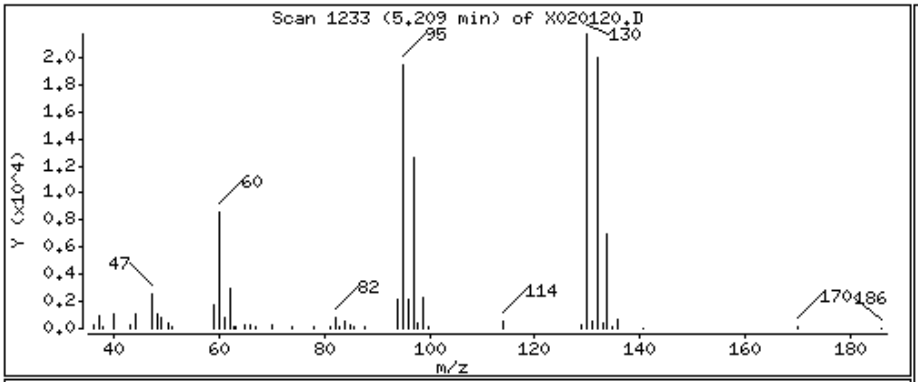
Client ID: HS23011397-09 Instrument: voa6.i

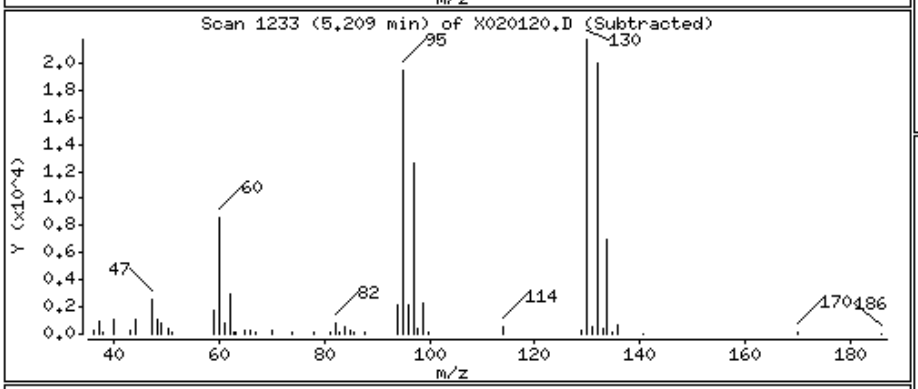
Sample Info: HS23011397-09;HS23011397-09;;;

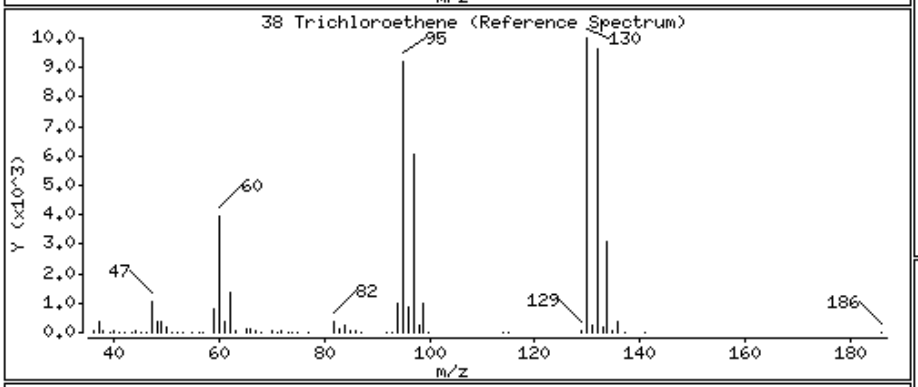
Purge Volume: 5.0 Operator: PC

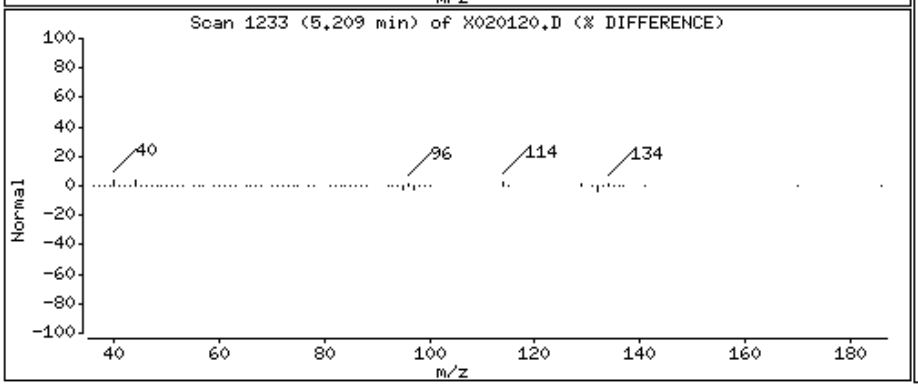
Column phase: DB624 Column diameter: 0.18

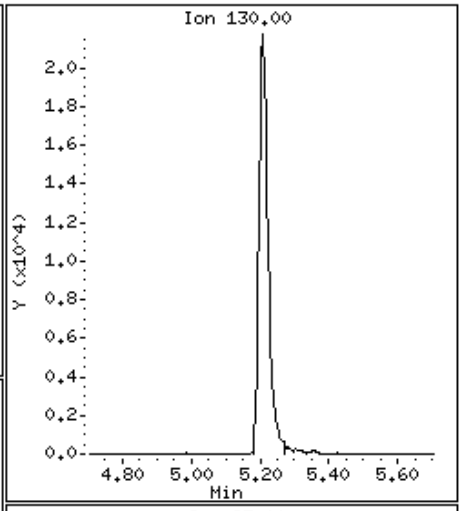
38 Trichloroethene Concentration: 6.12 ug/l

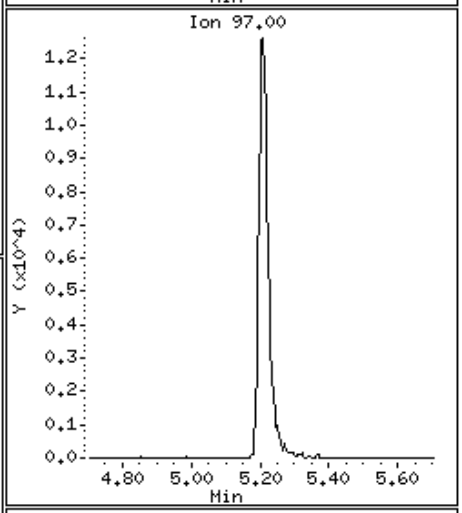


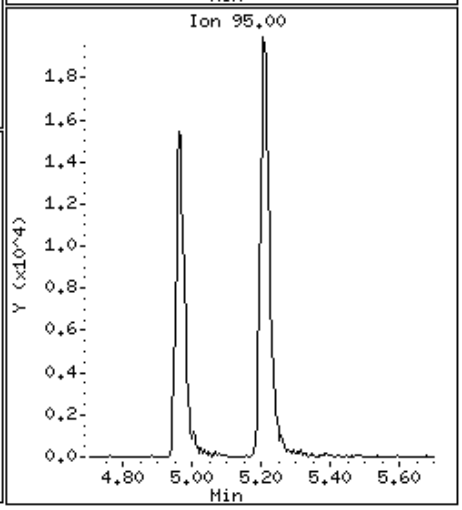












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Inj Date : 01-FEB-2023 17:23
InstruID : voa6.i
LabSampID : HS23011397-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020121.D Page 1
Report Date: 16-Feb-2023 14:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020121.D
Lab Smp Id: HS23011397-08 Client Smp ID: HS23011397-08
Inj Date : 01-FEB-2023 17:45
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-08;HS23011397-08;;;
Misc Info : V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 20
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

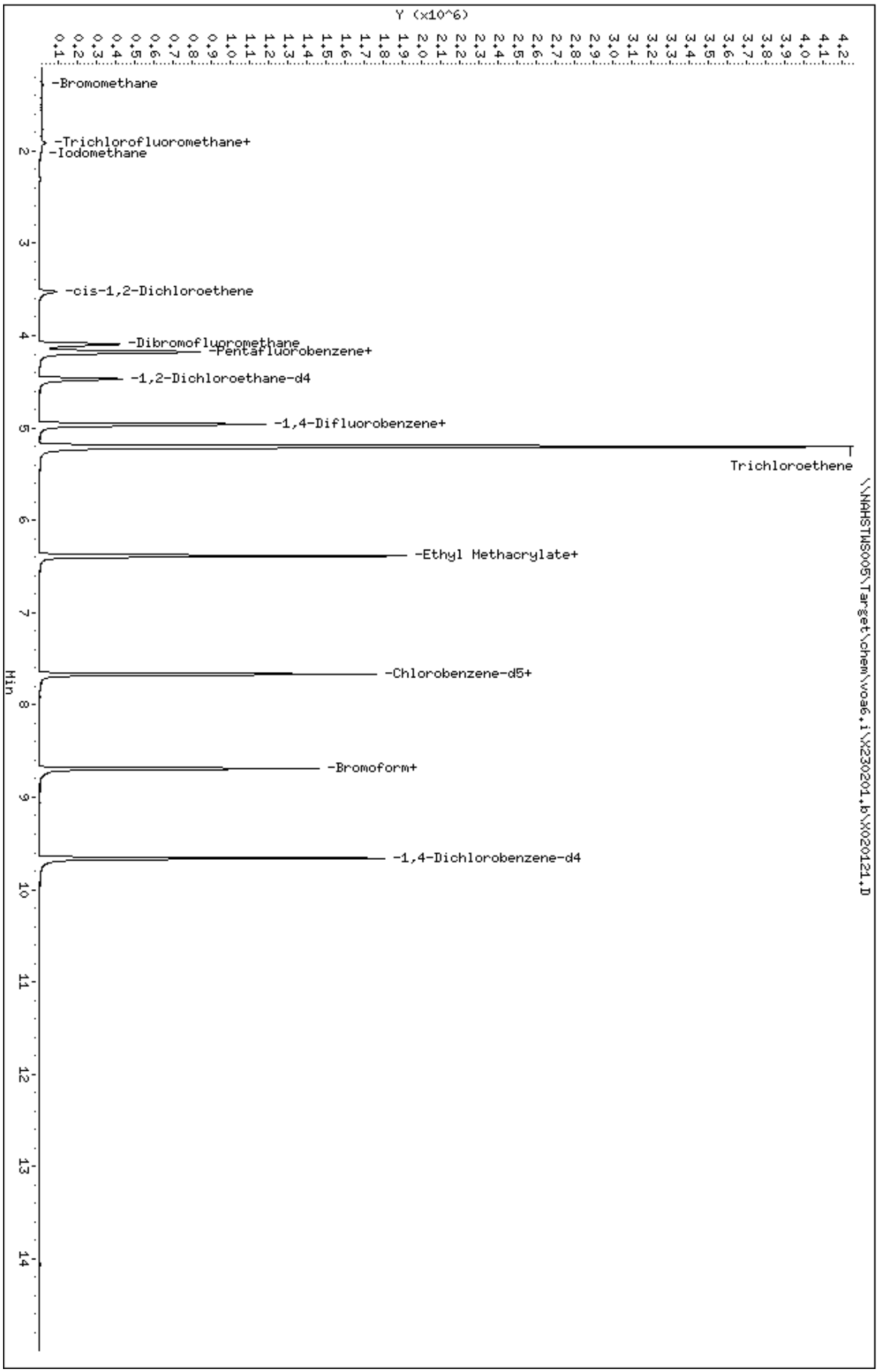
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	696321	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	305906	45.7387	45.73
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	352194	49.9074	49.90
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	985049	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	873648	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1128912	52.2924	52.29
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	416952	51.6682	51.66
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	455844	50.0000	
27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	52227	7.25578	72.55
38 Trichloroethene	130	5.201	5.205	(1.048)	1432119	214.652	2146.52(A)

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020124.D
Date : 01-FEB-2023 17:45
Client ID: HS23011397-08
Sample Info: HS23011397-08;HS23011397-08;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020121.D Page 2

Date : 01-FEB-2023 17:45

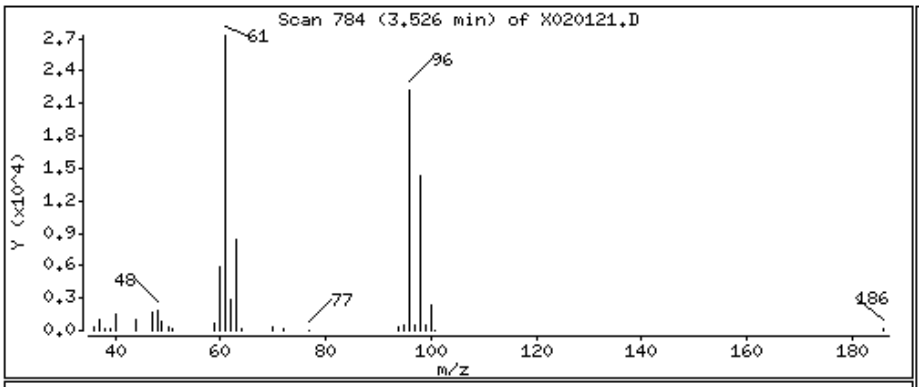
Client ID: HS23011397-08 Instrument: voa6.i

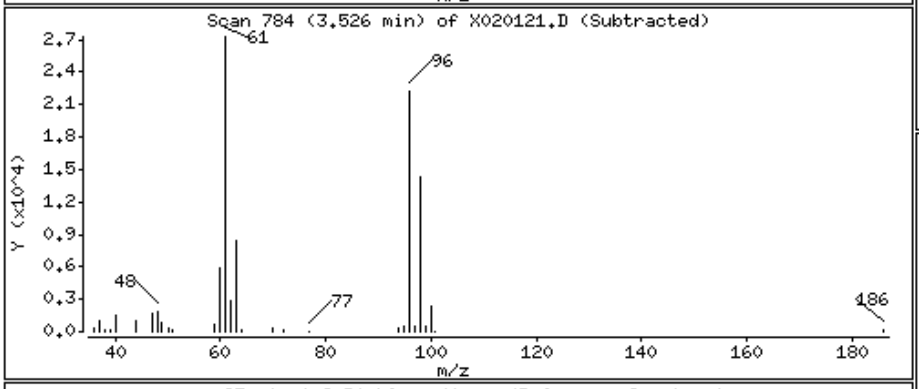
Sample Info: HS23011397-08;HS23011397-08;;;

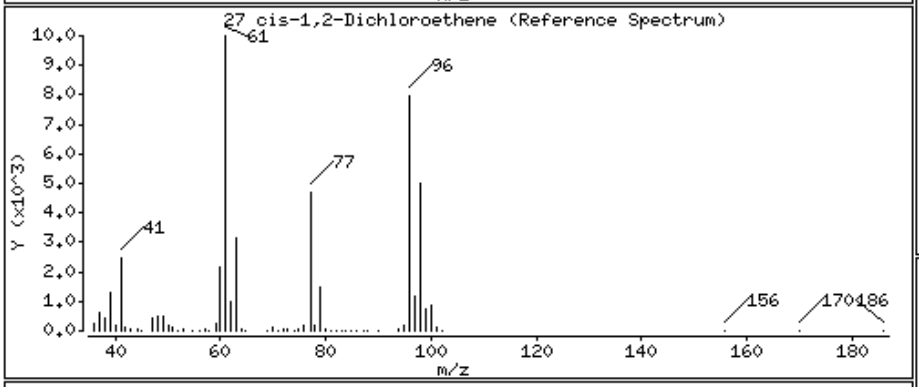
Purge Volume: 5.0 Operator: PC

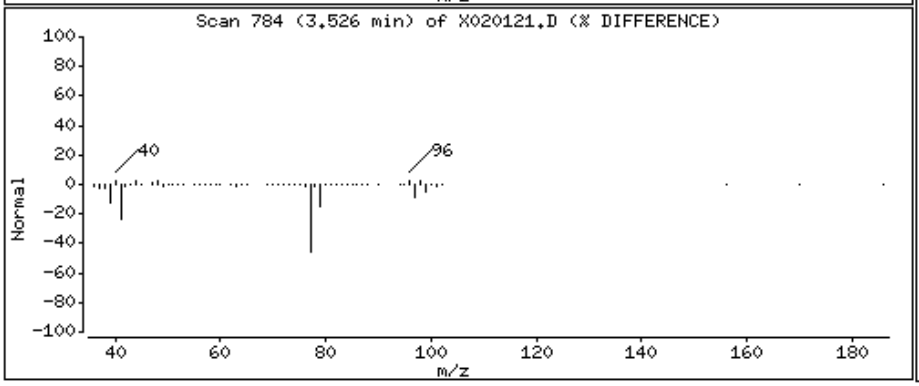
Column phase: DB624 Column diameter: 0.18

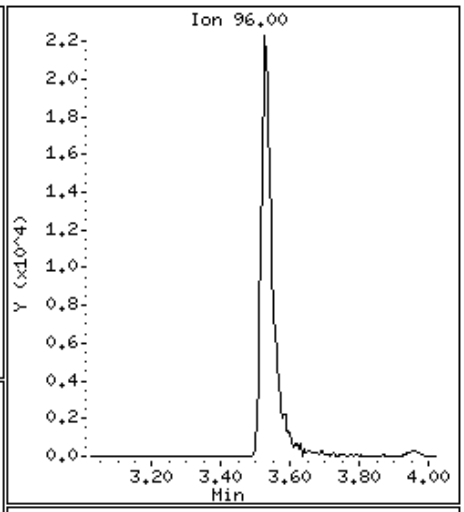
27 cis-1,2-Dichloroethene Concentration: 72.55 ug/l

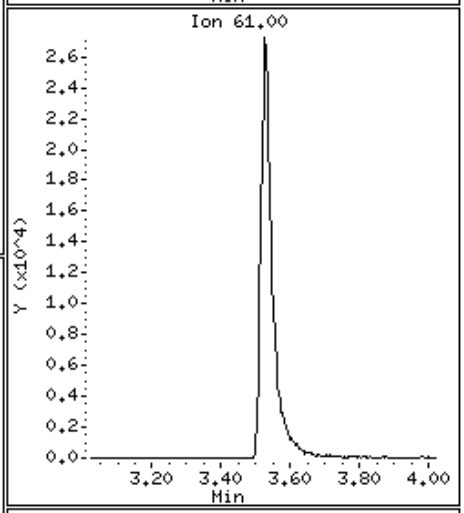


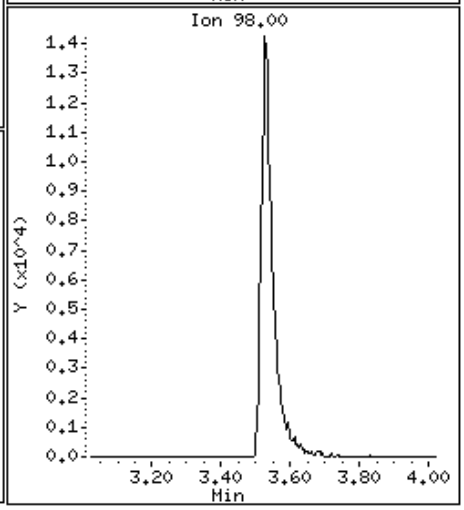












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020121.D Page 3

Date : 01-FEB-2023 17:45

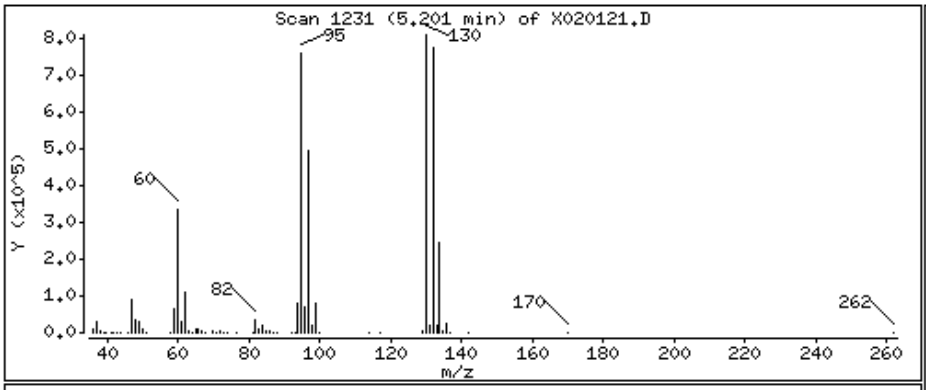
Client ID: HS23011397-08 Instrument: voa6.i

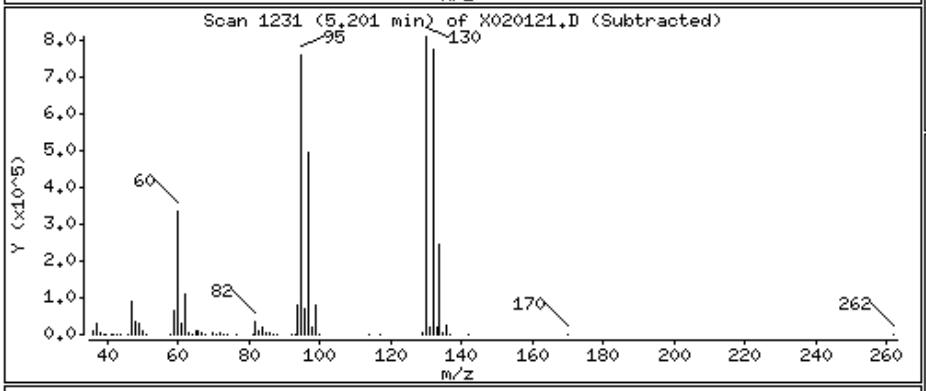
Sample Info: HS23011397-08;HS23011397-08;;;

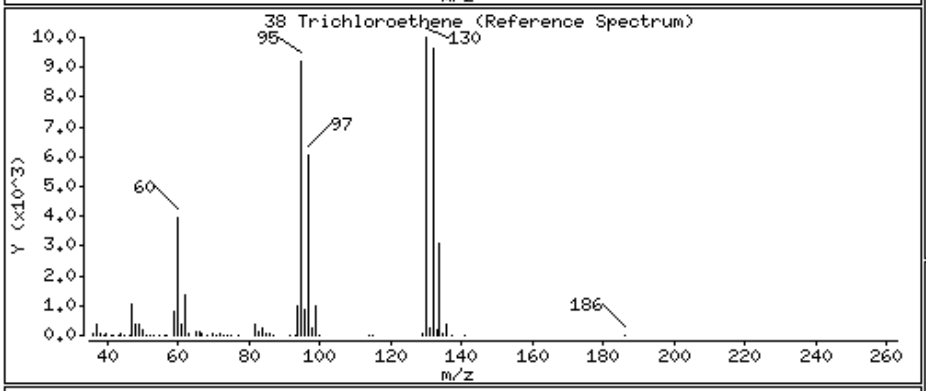
Purge Volume: 5.0 Operator: PC

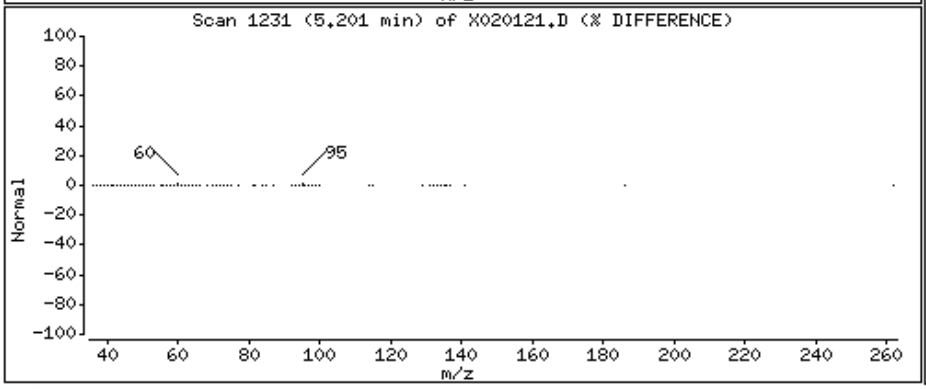
Column phase: DB624 Column diameter: 0.18

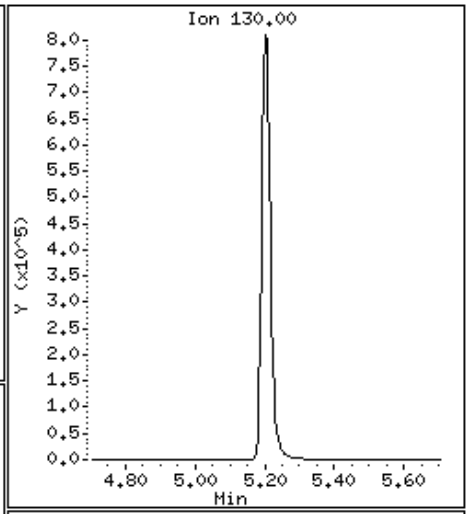
38 Trichloroethene Concentration: 2146.52 ug/l

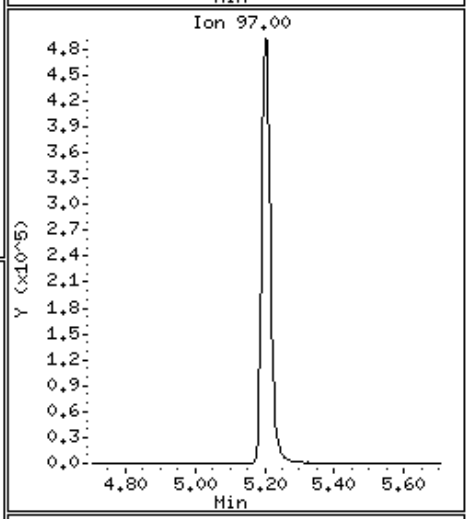


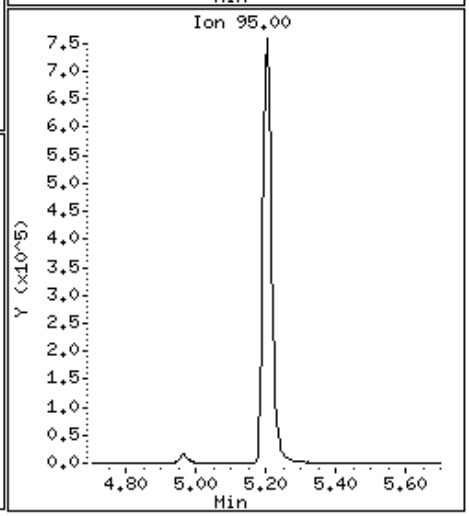












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Inj Date : 01-FEB-2023 17:45
InstruID : voa6.i
LabSampID : HS23011397-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020122.D Page 1
Report Date: 16-Feb-2023 14:17

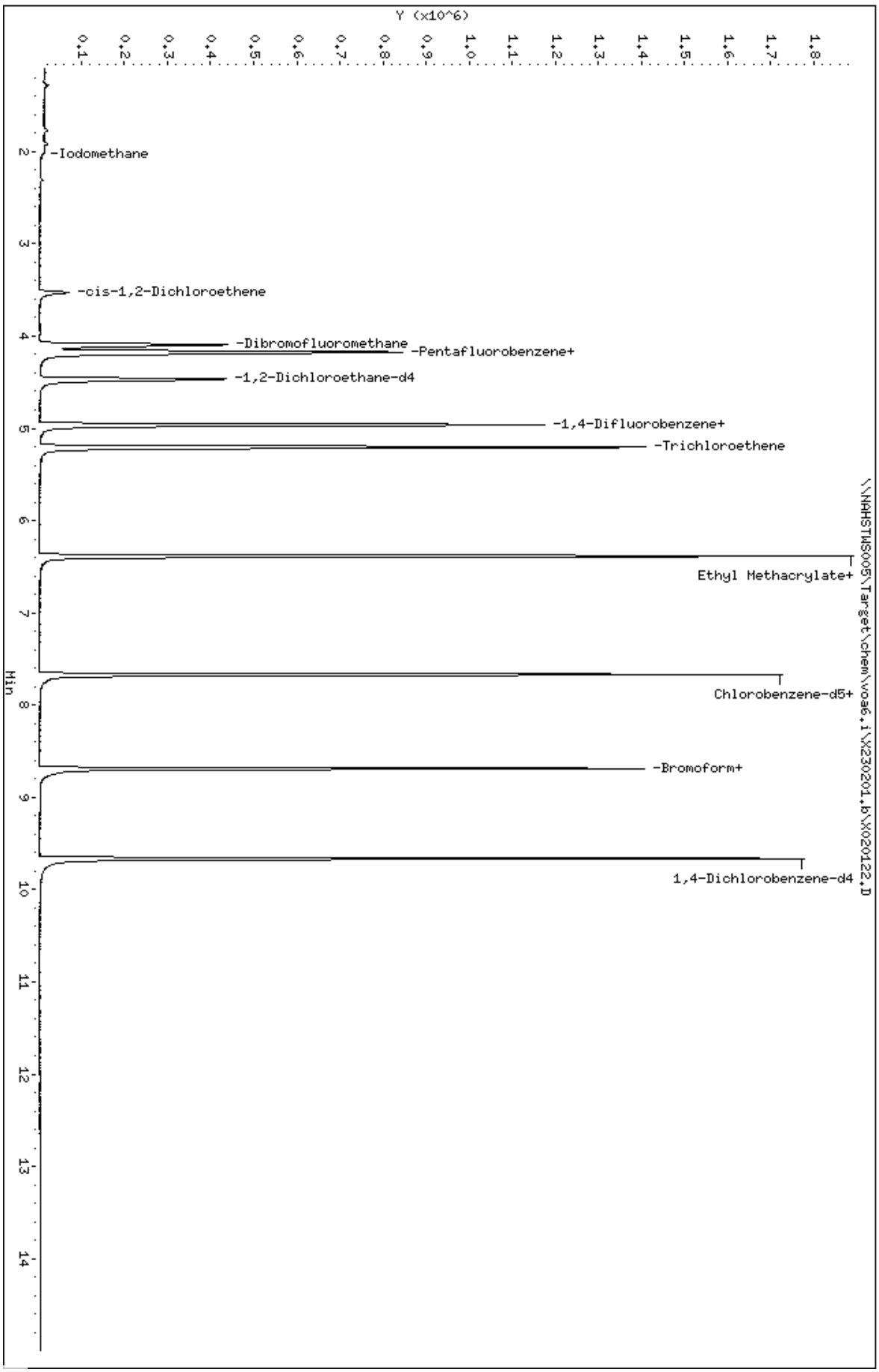
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020122.D
Lab Smp Id: HS23011397-10 Client Smp ID: HS23011397-10
Inj Date : 01-FEB-2023 18:06
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-10;HS23011397-10;;;
Misc Info : V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 21
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	698561	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	309593	46.1430	46.14
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	351790	49.6915	49.69
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	984370	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	868821	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1128402	52.5591	52.55
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	408474	50.8998	50.89
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	455112	50.0000	
27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	41119	5.69425	56.94
38 Trichloroethene	130	5.205	5.205	(1.048)	476012	71.3960	713.96



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Date : 01-FEB-2023 18:06
Client ID: HS23011397-10
Sample Info: HS23011397-10;HS23011397-10;;;
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\X230201.b\X020122.D Page 2

Date : 01-FEB-2023 18:06

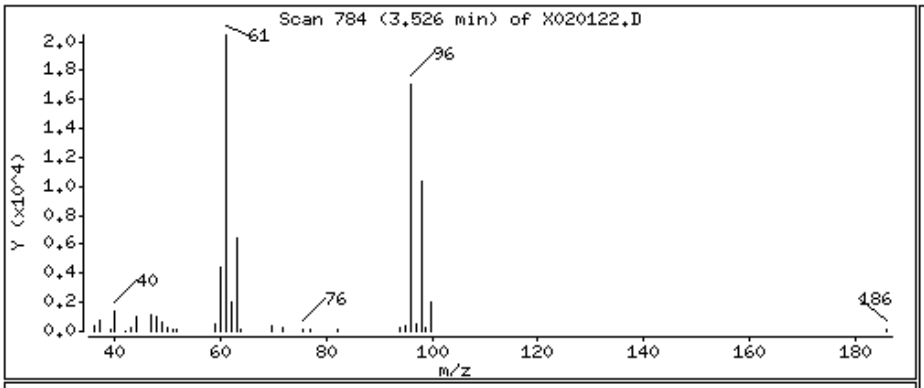
Client ID: HS23011397-10 Instrument: voa6.i

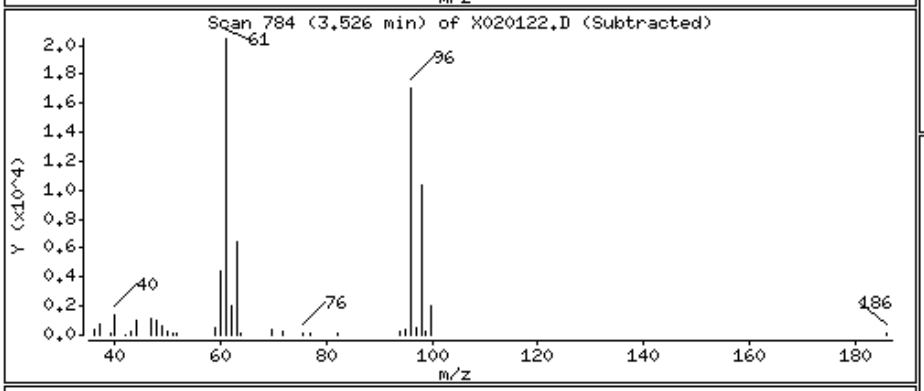
Sample Info: HS23011397-10;HS23011397-10;;;

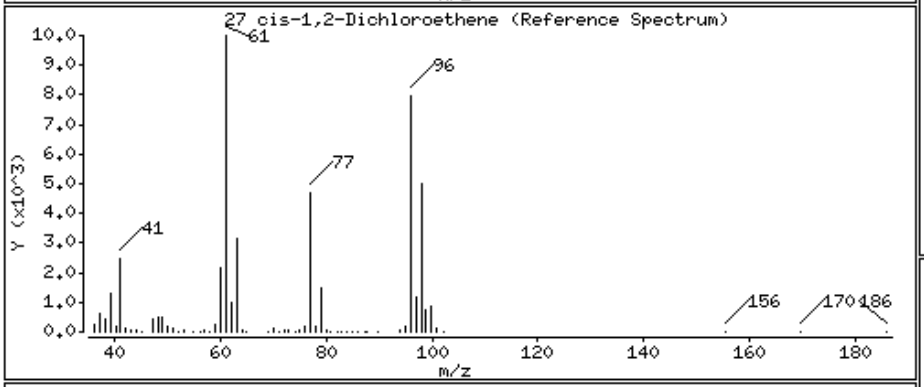
Purge Volume: 5.0 Operator: PC

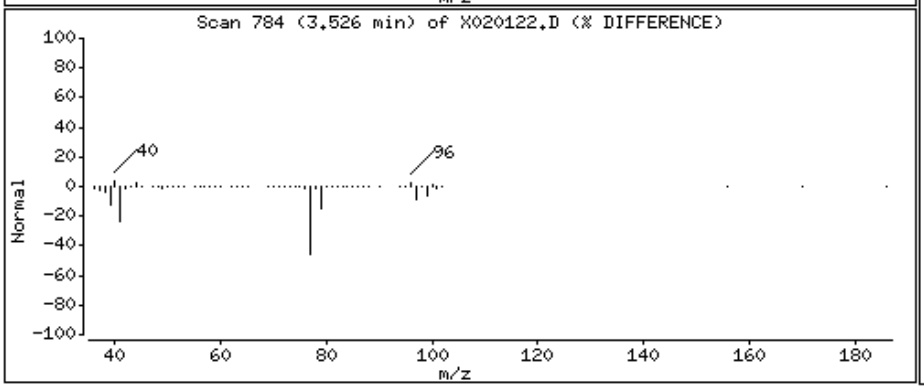
Column phase: DB624 Column diameter: 0.18

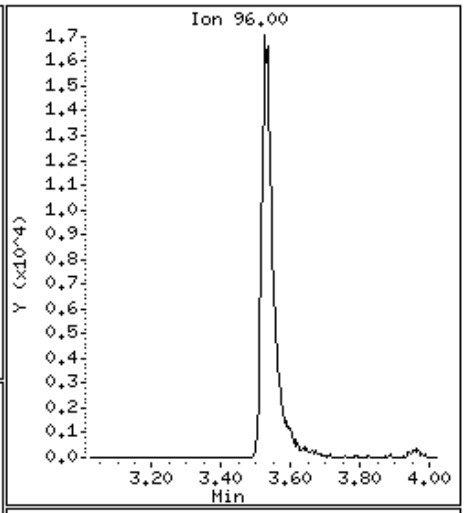
27 cis-1,2-Dichloroethene Concentration: 56.94 ug/l

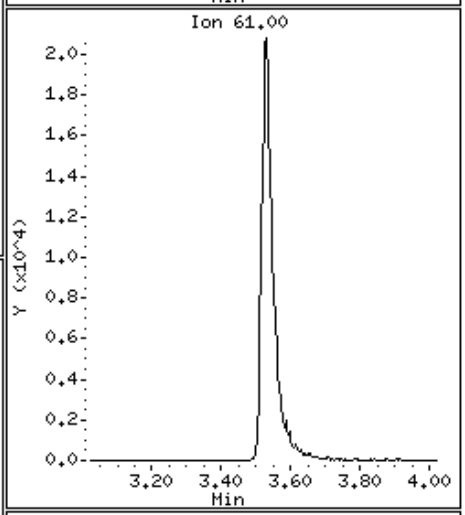


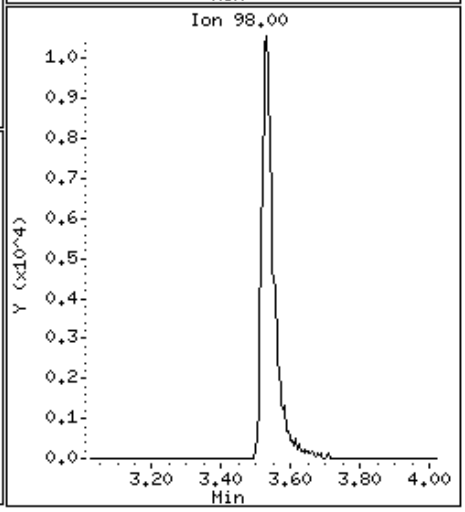












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020122.D Page 3

Date : 01-FEB-2023 18:06

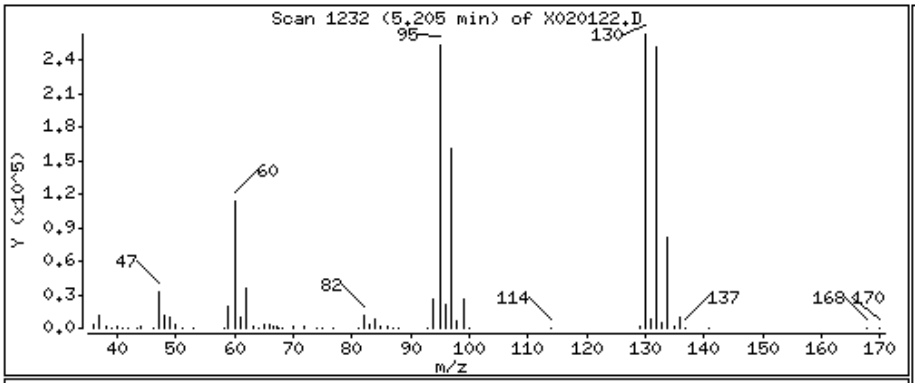
Client ID: HS23011397-10 Instrument: voa6.i

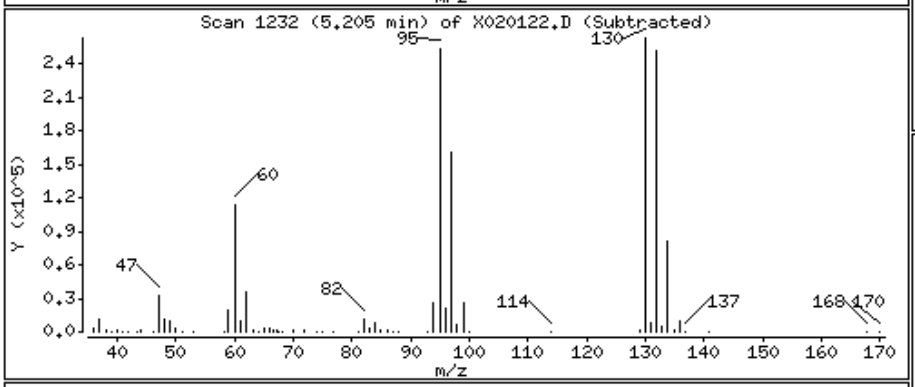
Sample Info: HS23011397-10;HS23011397-10;;;

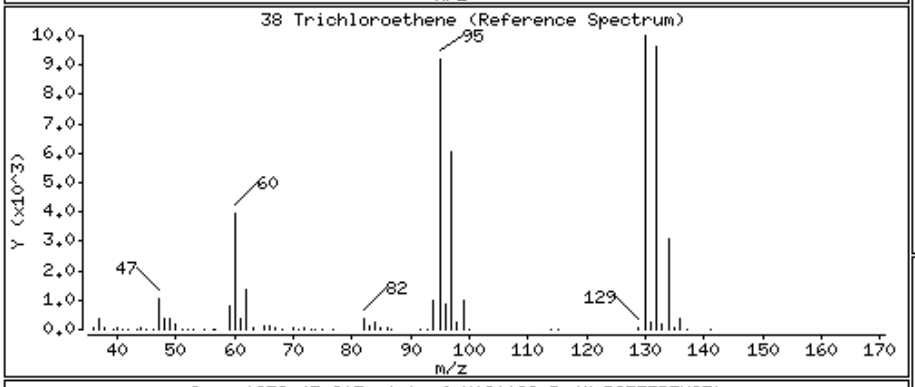
Purge Volume: 5.0 Operator: PC

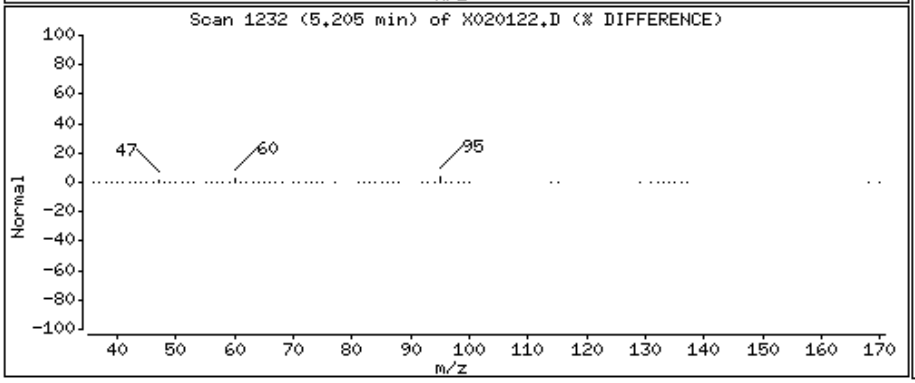
Column phase: DB624 Column diameter: 0.18

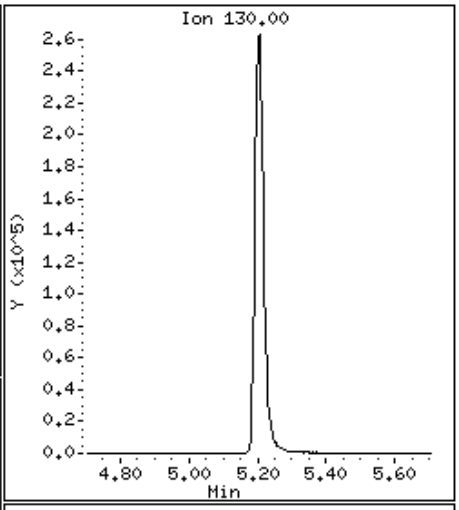
38 Trichloroethene Concentration: 713.96 ug/l

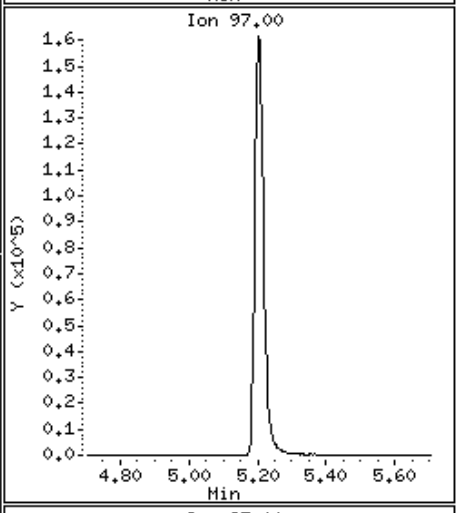


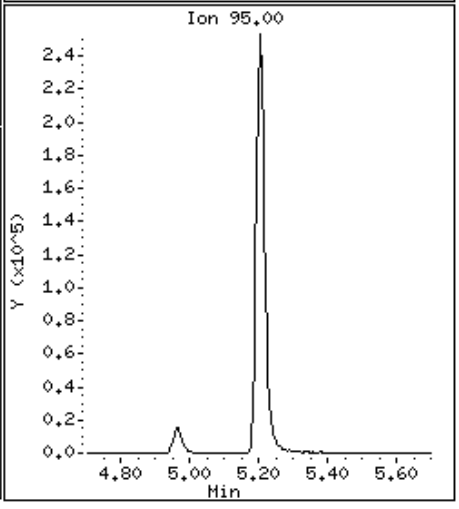












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Inj Date : 01-FEB-2023 18:06
InstruID : voa6.i
LabSampID : HS23011397-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020124.D Page 1
Report Date: 16-Feb-2023 14:18

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020124.D
Lab Smp Id: HS23011397-05 Client Smp ID: HS23011397-05
Inj Date : 01-FEB-2023 18:48
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-05;HS23011397-05;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 23
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

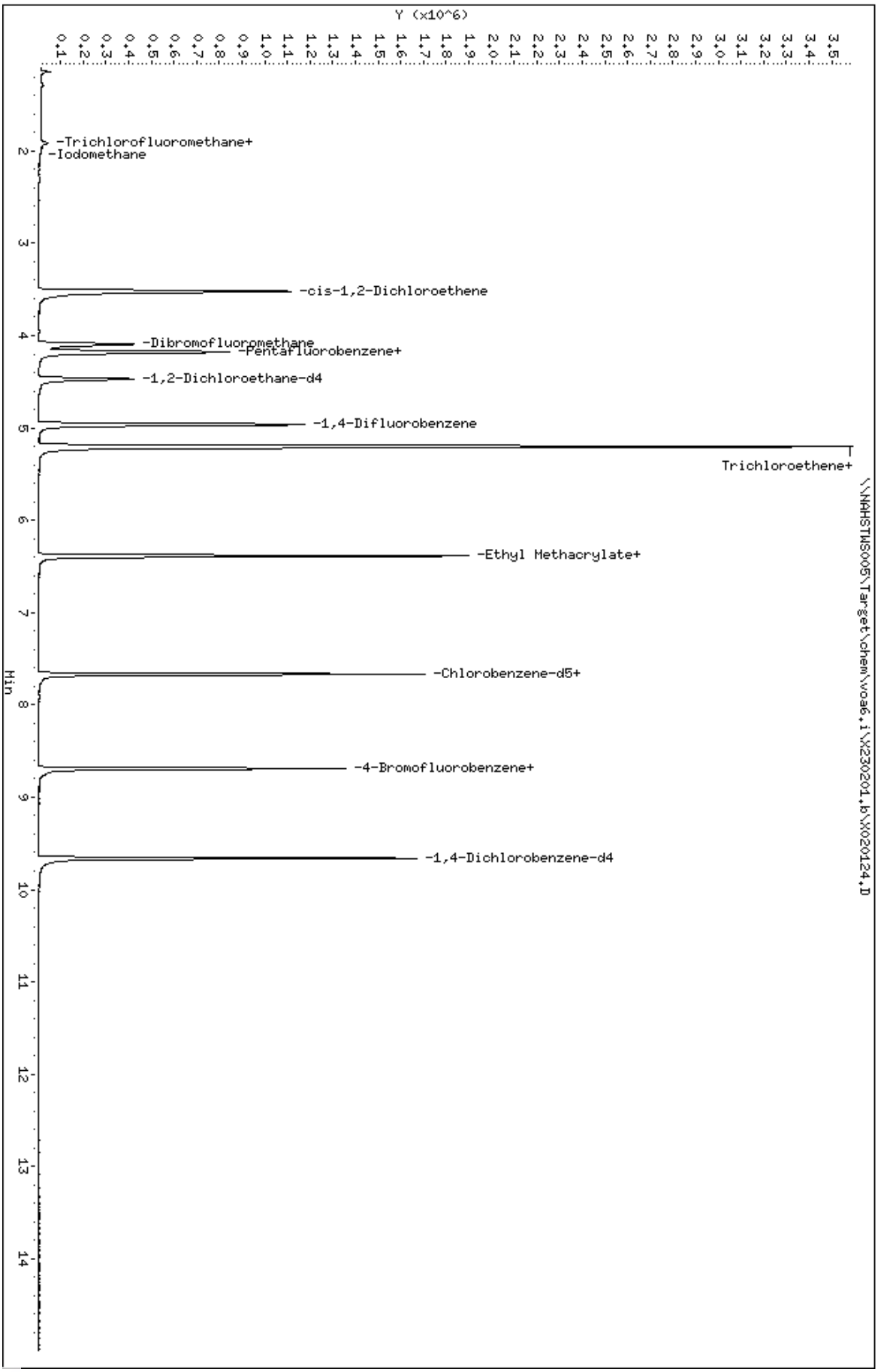
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	701091	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	299658	44.4952	44.49
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.071)	337125	47.4604	47.46
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	968860	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	841847	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1115944	53.6444	53.64
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	395969	50.9225	50.92
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	430754	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.274)	26355	4.30326	215.16(a)
27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	614082	84.7326	4236.62
38 Trichloroethene	130	5.201	5.205	(1.048)	1190857	181.473	9073.67

QC Flag Legend

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



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Date : 01-FEB-2023 18:48
Client ID: HS23011397-05
Sample Info: HS23011397-05;HS23011397-05;;;
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\X230201.b\X020124.D Page 2

Date : 01-FEB-2023 18:48

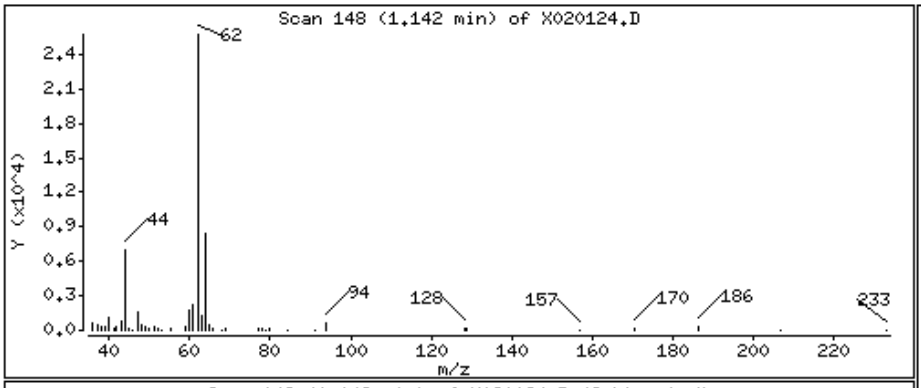
Client ID: HS23011397-05 Instrument: voa6.i

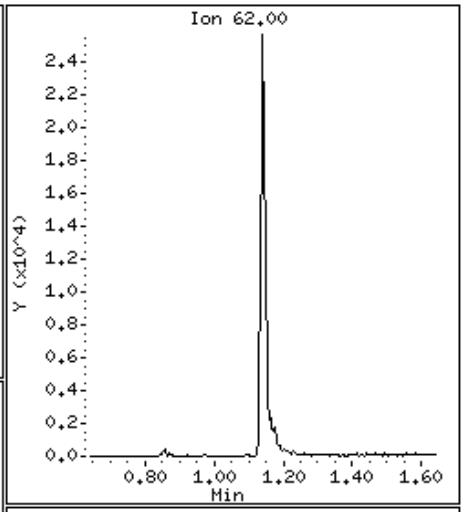
Sample Info: HS23011397-05;HS23011397-05;;;

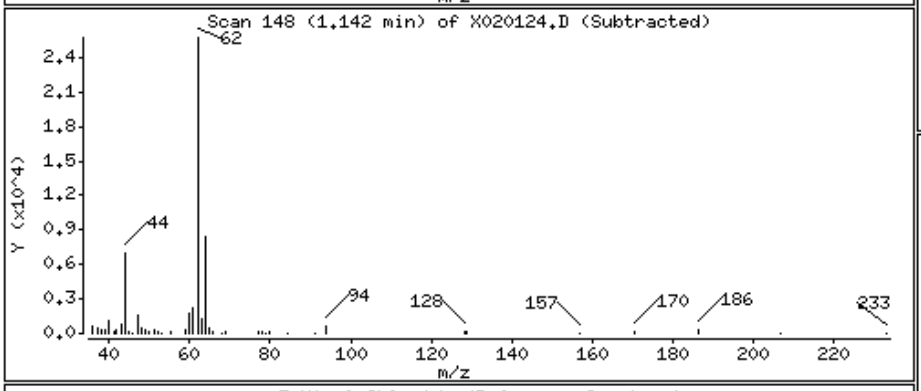
Purge Volume: 5.0 Operator: PC

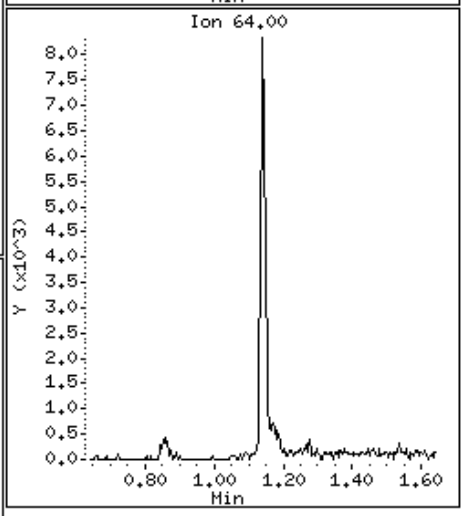
Column phase: DB624 Column diameter: 0.18

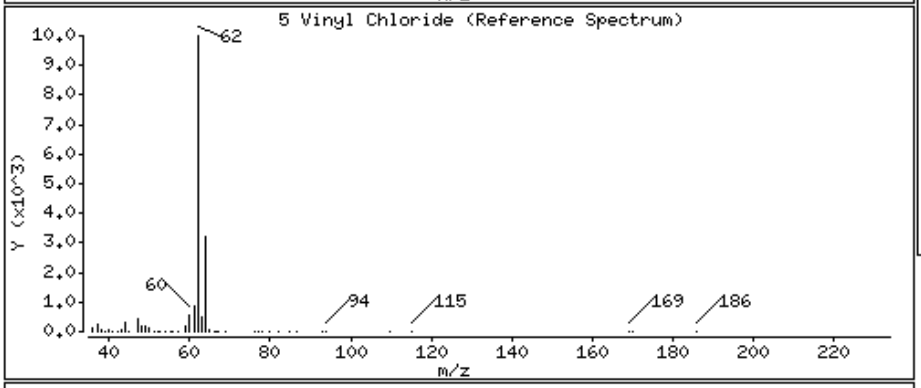
5 Vinyl Chloride Concentration: 215.16 ug/l

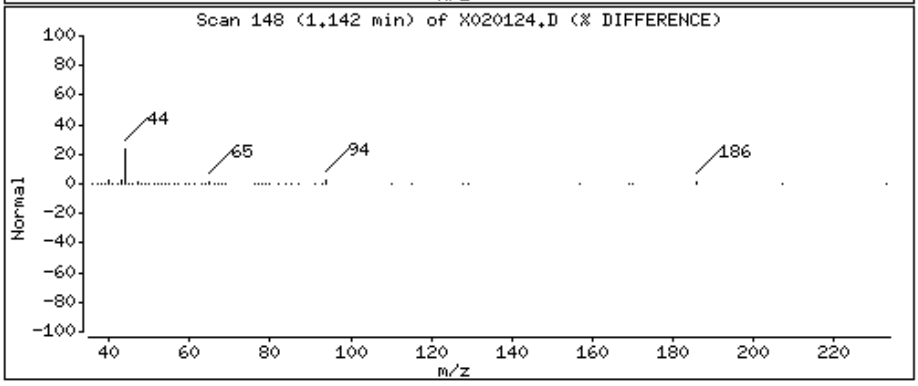












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020124.D Page 3

Date : 01-FEB-2023 18:48

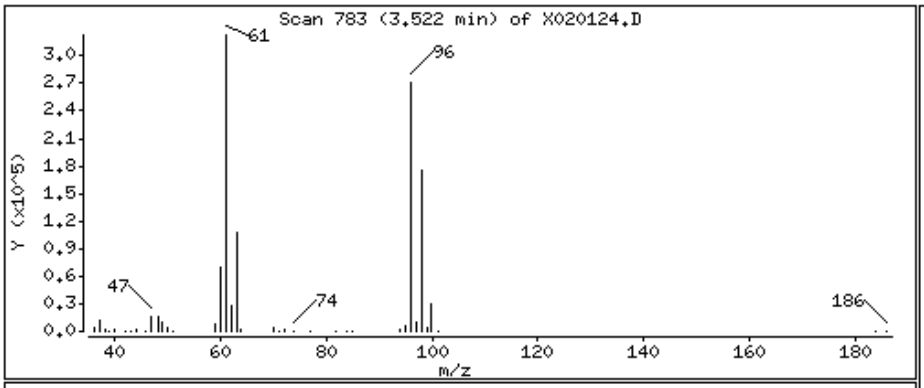
Client ID: HS23011397-05 Instrument: voa6.i

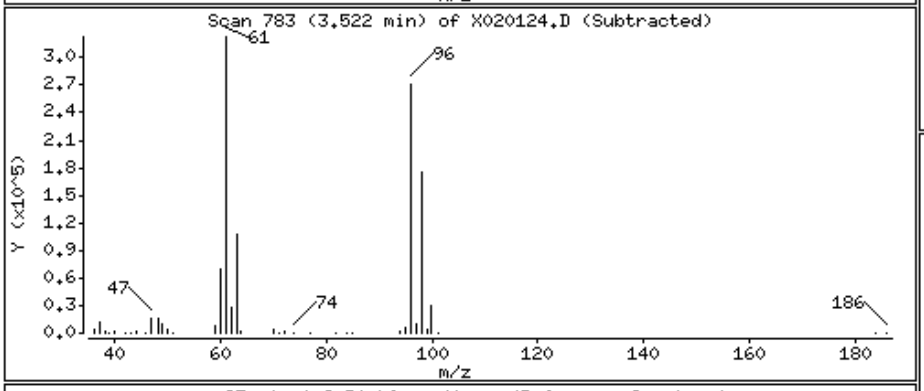
Sample Info: HS23011397-05;HS23011397-05;;;

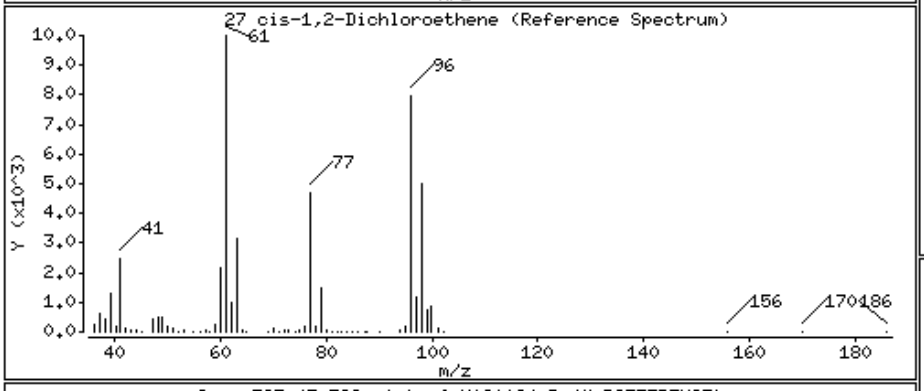
Purge Volume: 5.0 Operator: PC

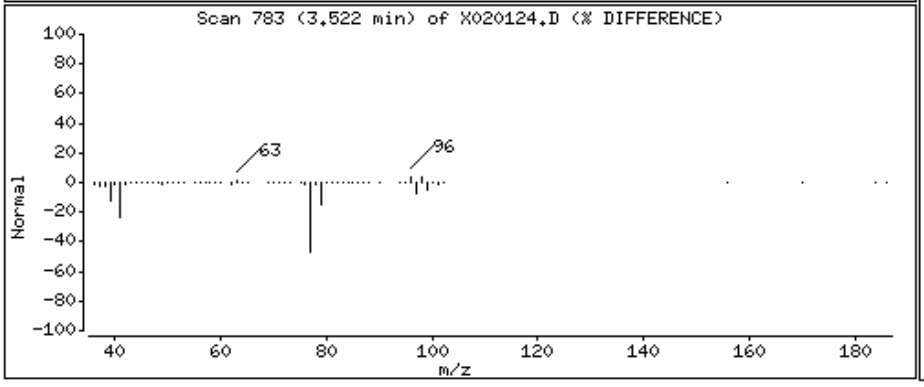
Column phase: DB624 Column diameter: 0.18

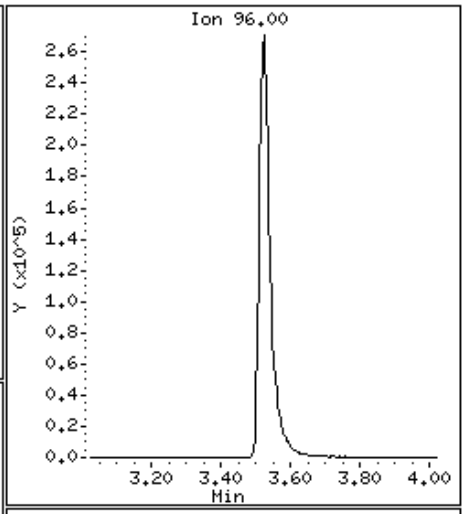
27 cis-1,2-Dichloroethene Concentration: 4236.62 ug/l

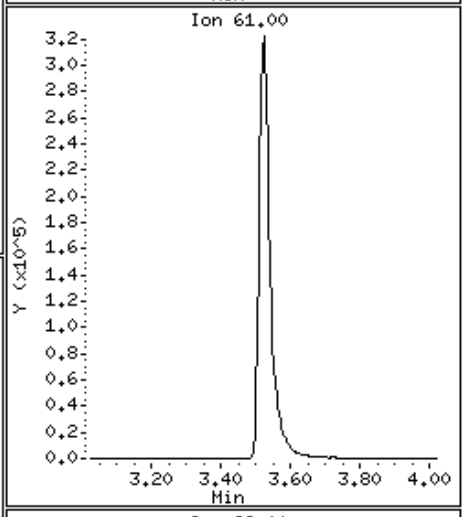


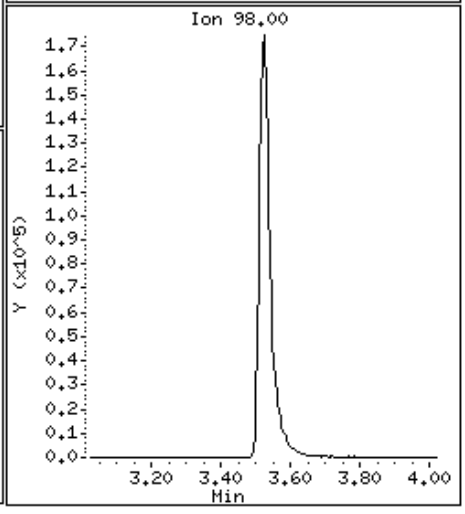












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020124.D Page 4

Date : 01-FEB-2023 18:48

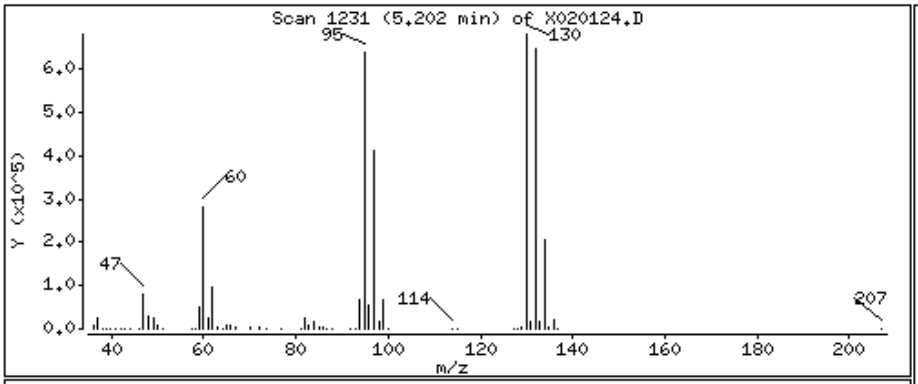
Client ID: HS23011397-05 Instrument: voa6.i

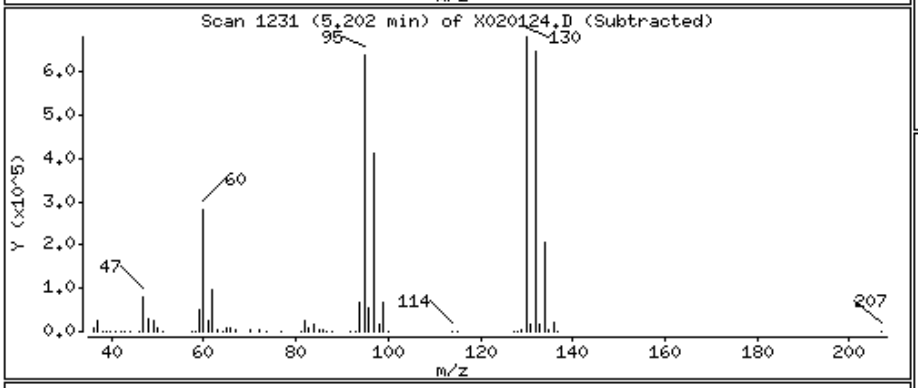
Sample Info: HS23011397-05;HS23011397-05;;;

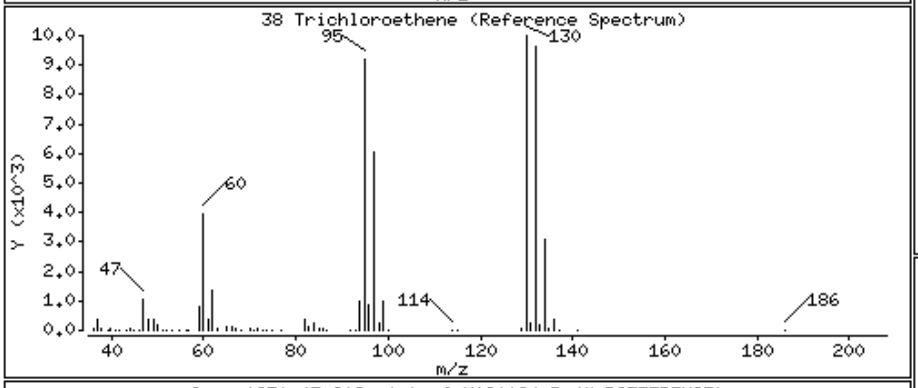
Purge Volume: 5.0 Operator: PC

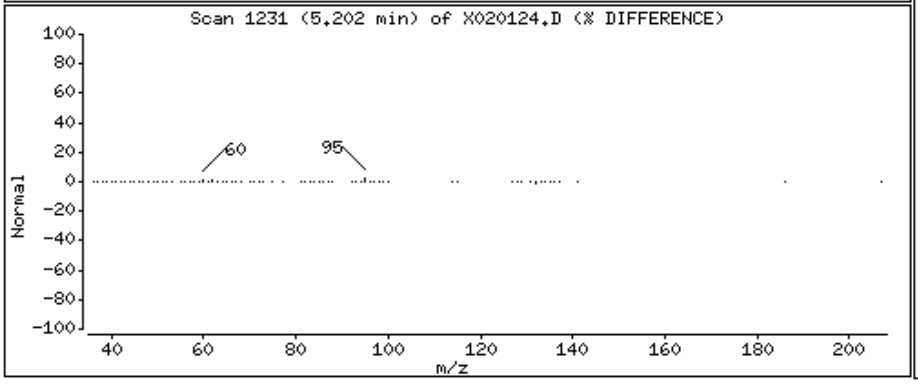
Column phase: DB624 Column diameter: 0.18

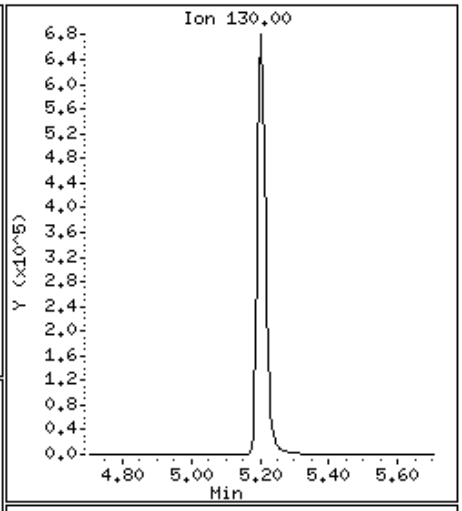
38 Trichloroethene Concentration: 9073.67 ug/l

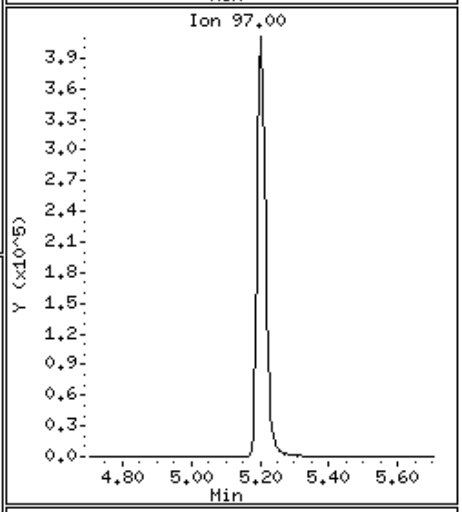


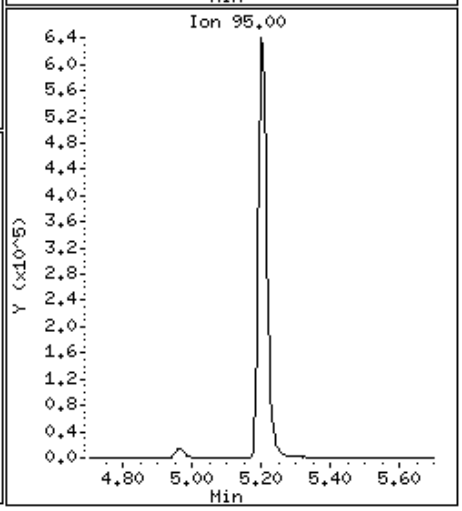












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Inj Date : 01-FEB-2023 18:48
InstruID : voa6.i
LabSampID : HS23011397-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020126.D Page 1
Report Date: 16-Feb-2023 14:18

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020126.D
Lab Smp Id: HS23011397-06 Client Smp ID: HS23011397-06
Inj Date : 01-FEB-2023 19:30
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-06;HS23011397-06;;;
Misc Info : V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 25
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

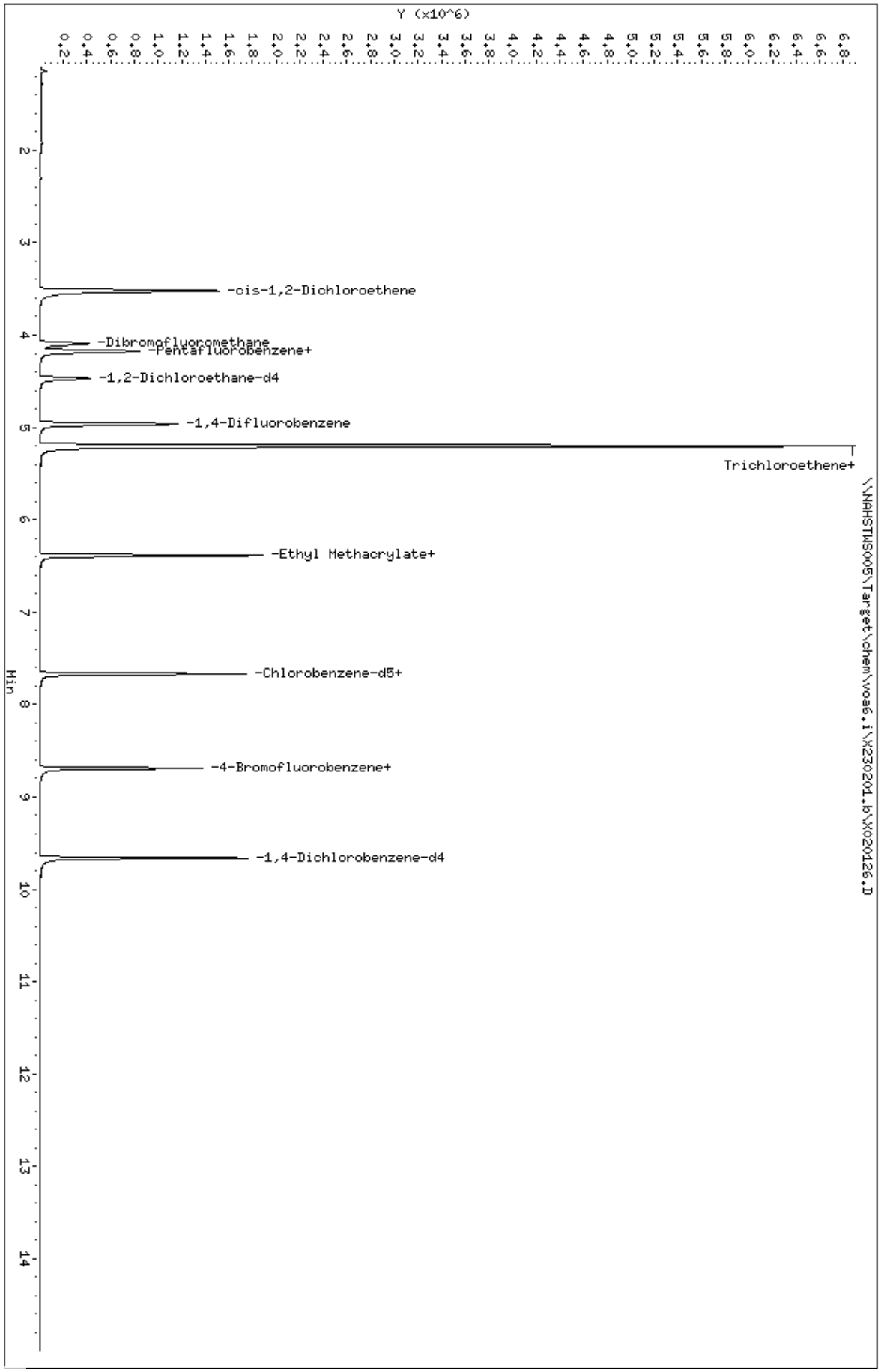
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	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)	689720	50.0000	
$ 30 Dibromofluoromethane	113	4.091	4.095	(0.979)	303887	45.8722	45.87
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	342603	49.0178	49.01
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	975493	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	860590	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1103265	51.8798	51.87
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	406241	51.1055	51.10
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	440690	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	25388	4.21371	1053.42(a)
27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	827372	116.045	29011.25
38 Trichloroethene	130	5.201	5.205	(1.048)	2262290	342.404	85600.94(A)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020126.D
Date : 01-FEB-2023 19:30
Client ID: HS230411397-06
Sample Info: HS230411397-06;HS230411397-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020126.D Page 2

Date : 01-FEB-2023 19:30

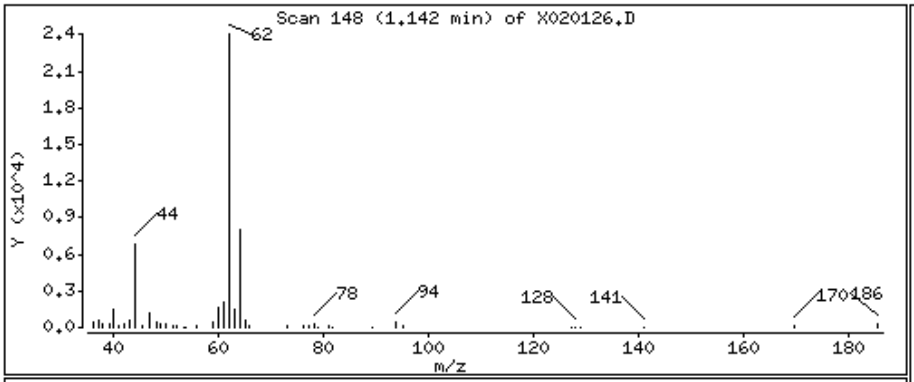
Client ID: HS23011397-06 Instrument: voa6.i

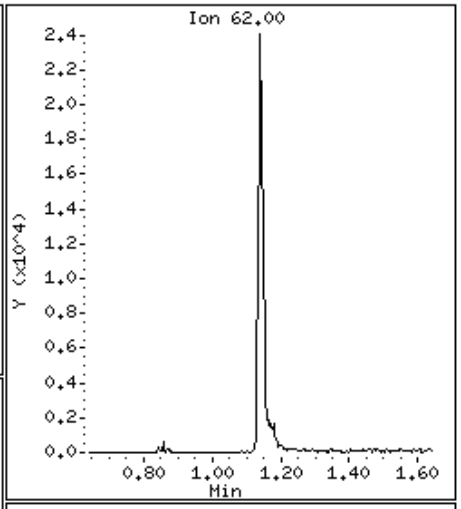
Sample Info: HS23011397-06;HS23011397-06;;;

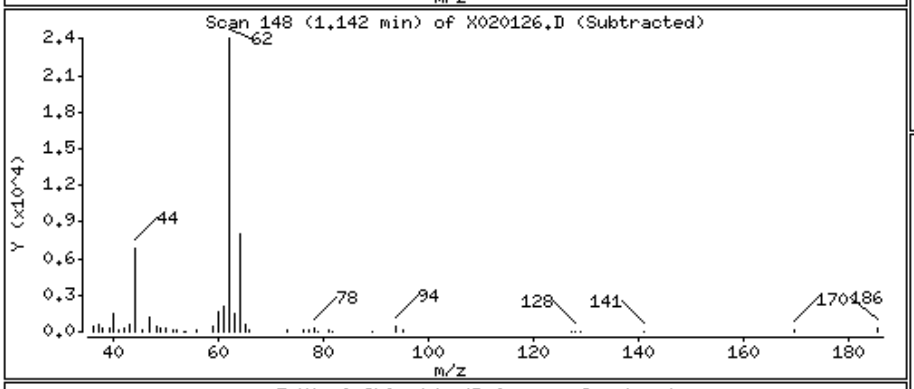
Purge Volume: 5.0 Operator: PC

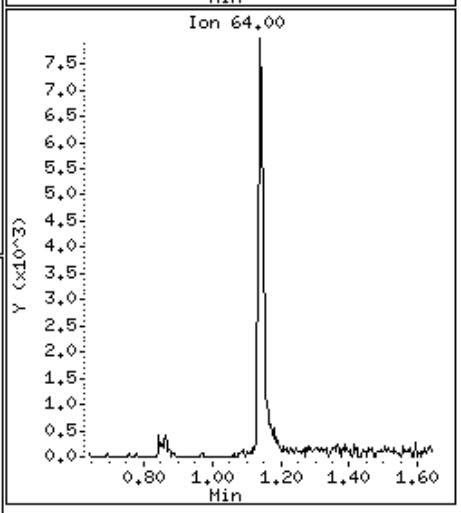
Column phase: DB624 Column diameter: 0.18

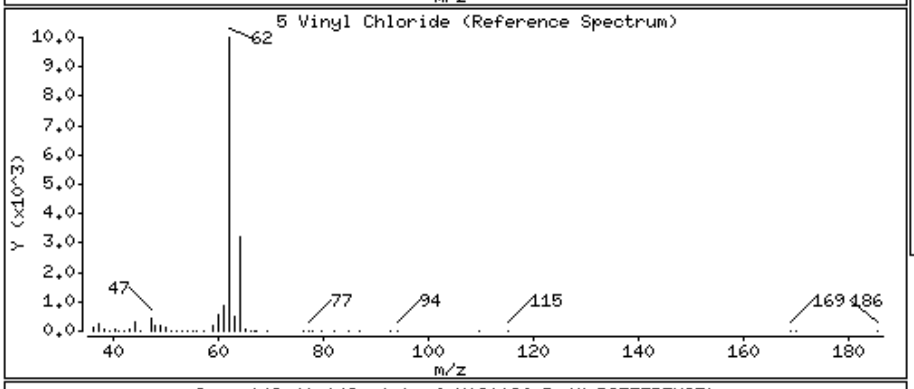
5 Vinyl Chloride Concentration: 1053.42 ug/l

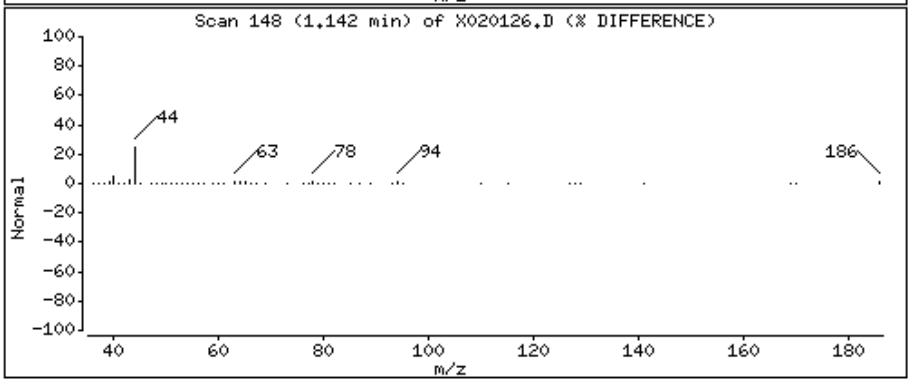












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020126.D Page 3

Date : 01-FEB-2023 19:30

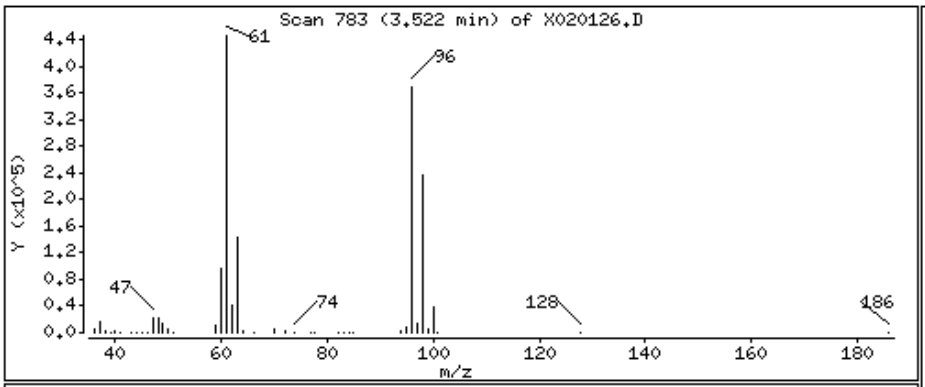
Client ID: HS23011397-06 Instrument: voa6.i

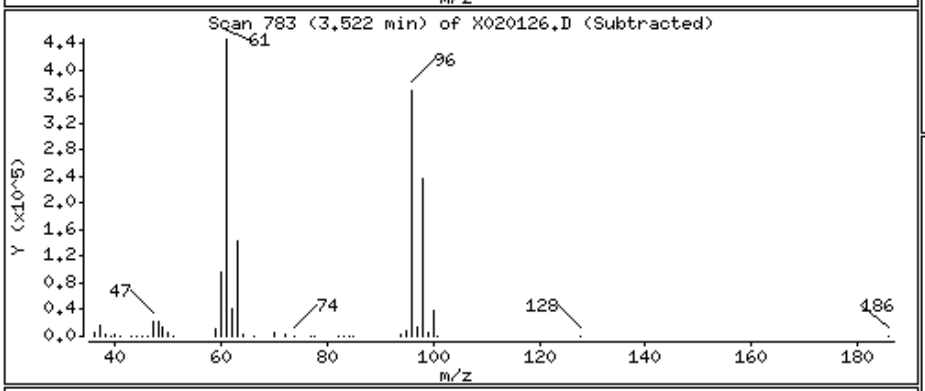
Sample Info: HS23011397-06;HS23011397-06;;;

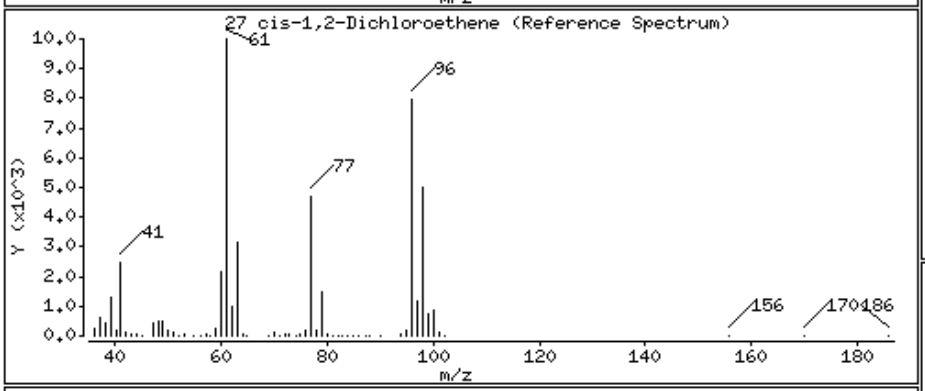
Purge Volume: 5.0 Operator: PC

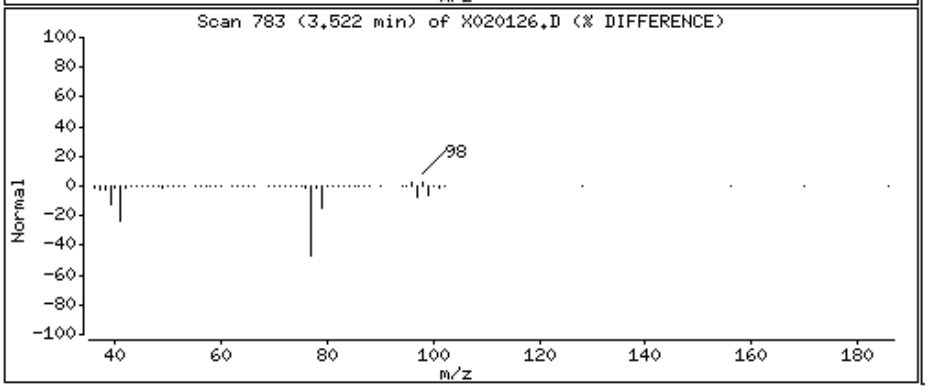
Column phase: DB624 Column diameter: 0.18

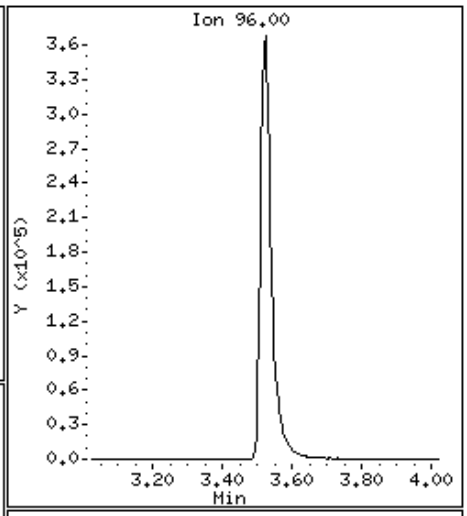
27 cis-1,2-Dichloroethene Concentration: 29011.25 ug/l

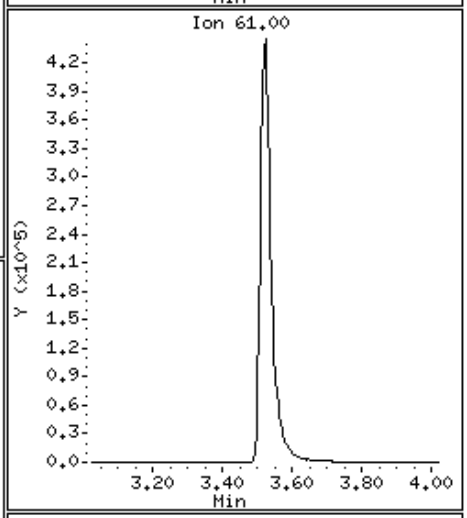


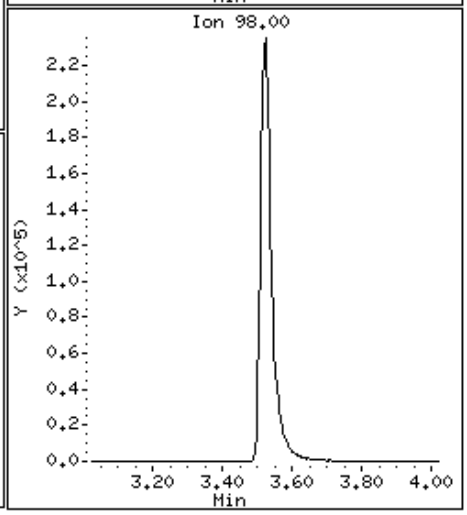












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020126.D Page 4

Date : 01-FEB-2023 19:30

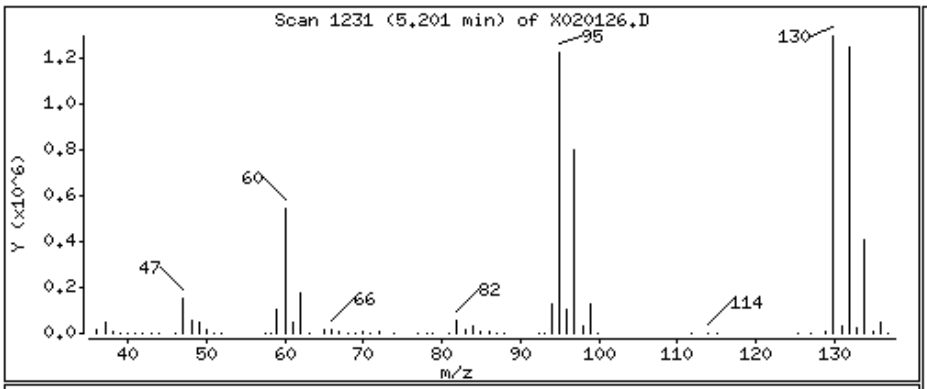
Client ID: HS23011397-06 Instrument: voa6.i

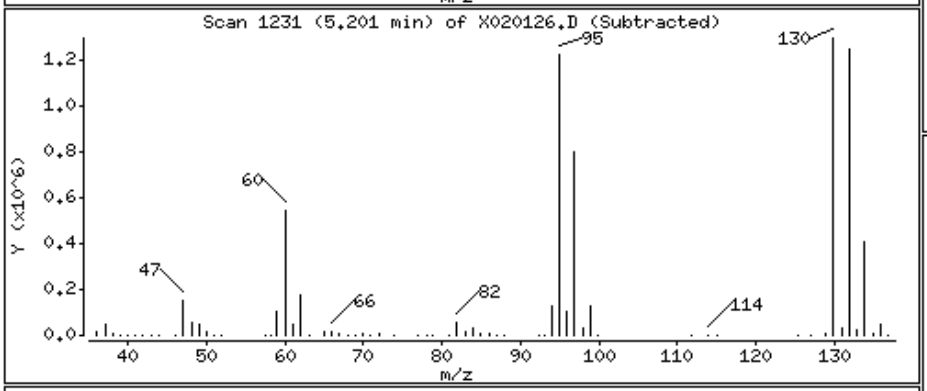
Sample Info: HS23011397-06;HS23011397-06;;;

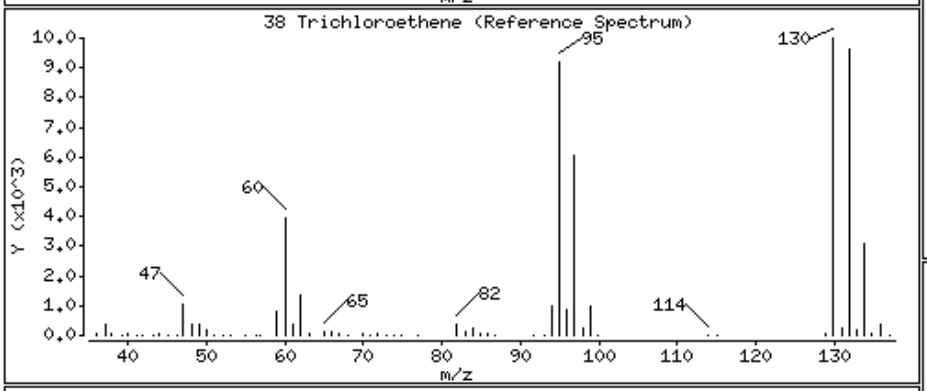
Purge Volume: 5.0 Operator: PC

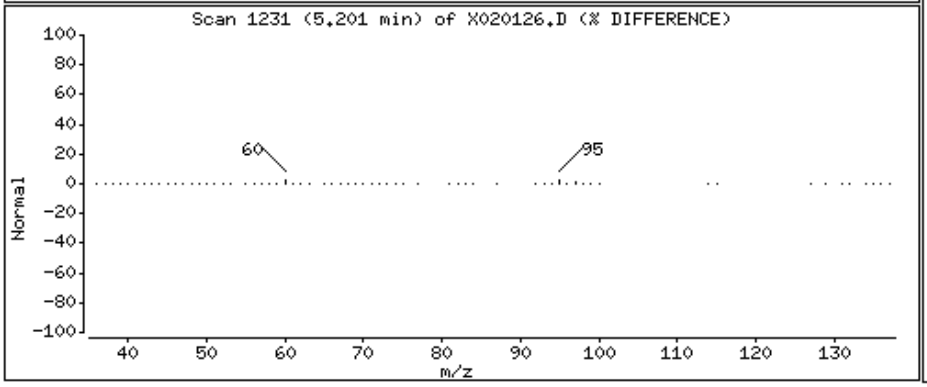
Column phase: DB624 Column diameter: 0.18

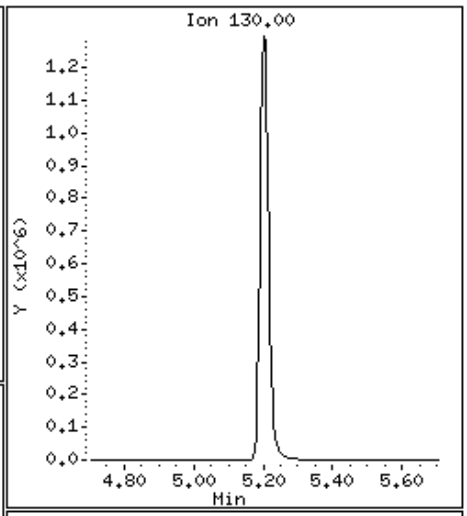
38 Trichloroethene Concentration: 85600.94 ug/l

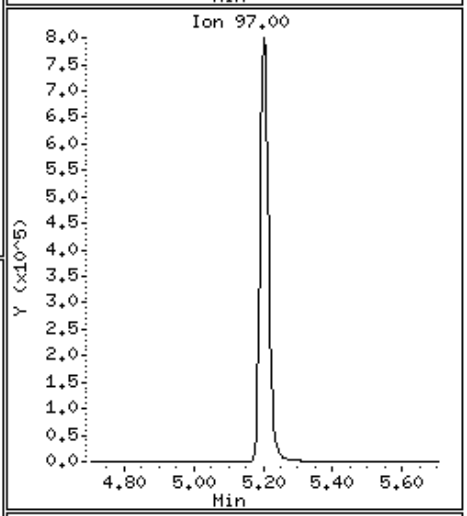


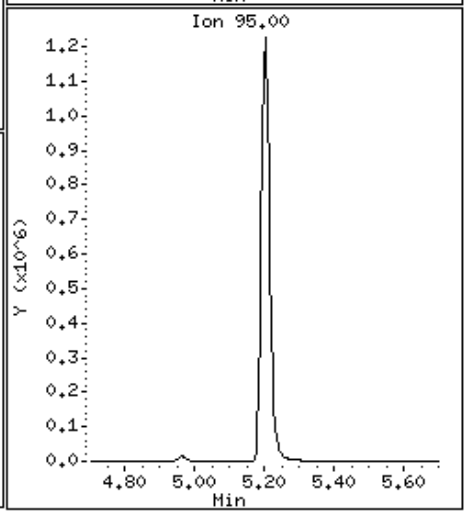












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Inj Date : 01-FEB-2023 19:30
InstruID : voa6.i
LabSampID : HS23011397-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020127.D Page 1
Report Date: 16-Feb-2023 14:18

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020127.D
Lab Smp Id: HS23011397-06 Client Smp ID: HS23011397-06
Inj Date : 01-FEB-2023 19:51
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-06;HS23011397-06;;;
Misc Info : V6;WATER;0;2500;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 26
Dil Factor: 2500.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

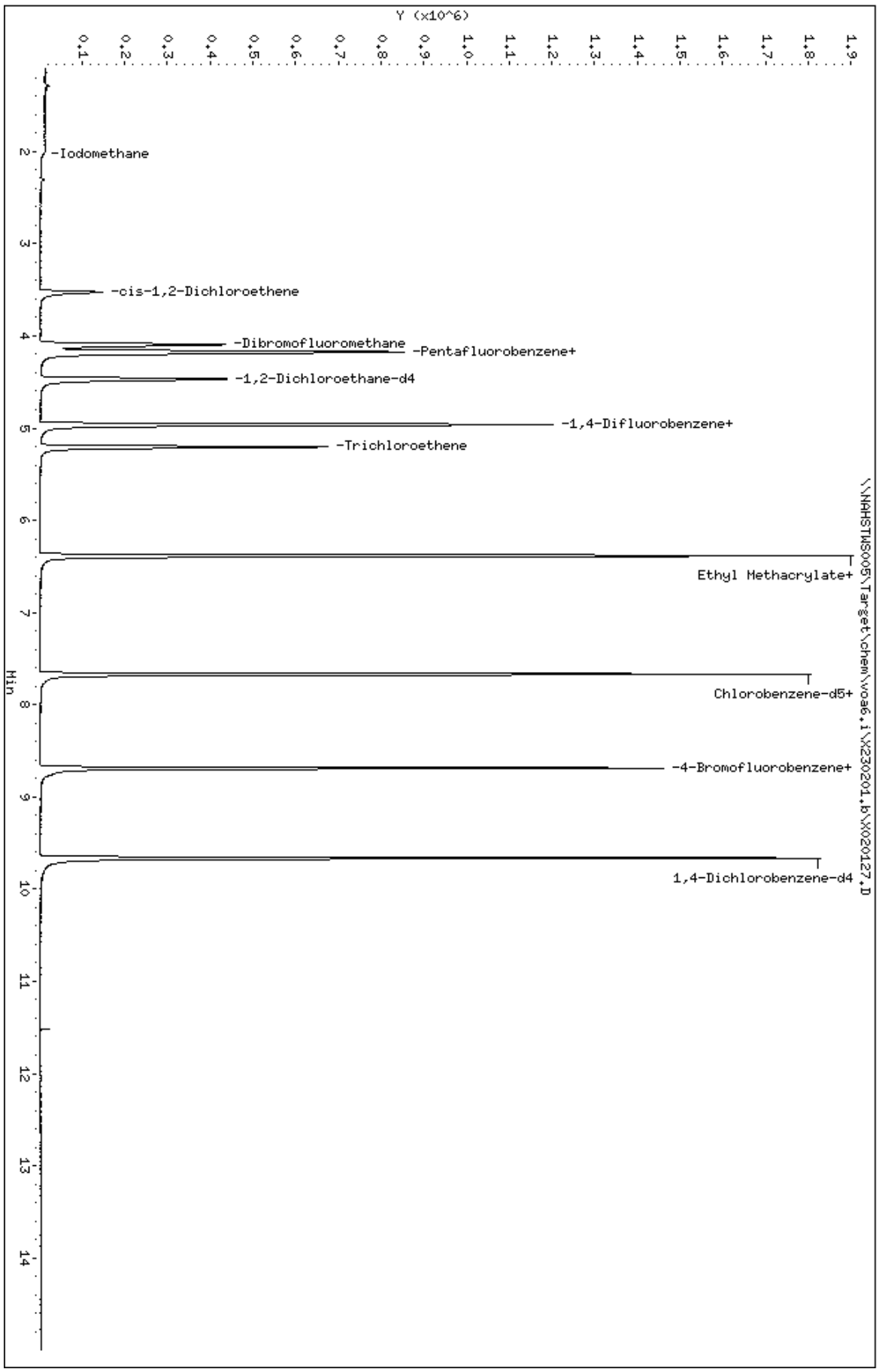
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	2500.000	Dilution Factor
Uf	5.000	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)	703808	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	311527	46.0849	46.08
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	351770	49.3202	49.32
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1002602	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	883535	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1145211	52.4537	52.45
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	417773	51.1912	51.19
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	468720	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	3302	0.53707	1342.67(a)
27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	83674	11.5010	28752.45
38 Trichloroethene	130	5.205	5.205	(1.048)	229783	33.8379	84594.81

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230201,b\X020127,D
Date : 01-FEB-2023 19:51
Client ID: HS23011397-06
Sample Info: HS23011397-06;HS23011397-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020127.D

Date : 01-FEB-2023 19:51

Client ID: HS23011397-06

Instrument: voa6.i

Sample Info: HS23011397-06;HS23011397-06;;;

Purge Volume: 5.0

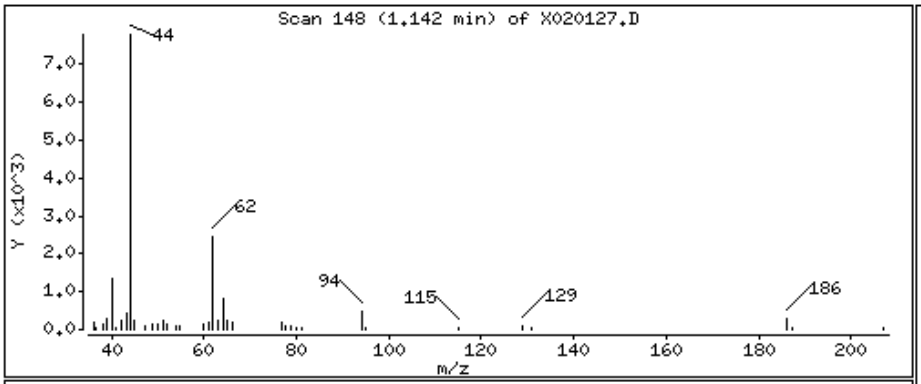
Operator: PC

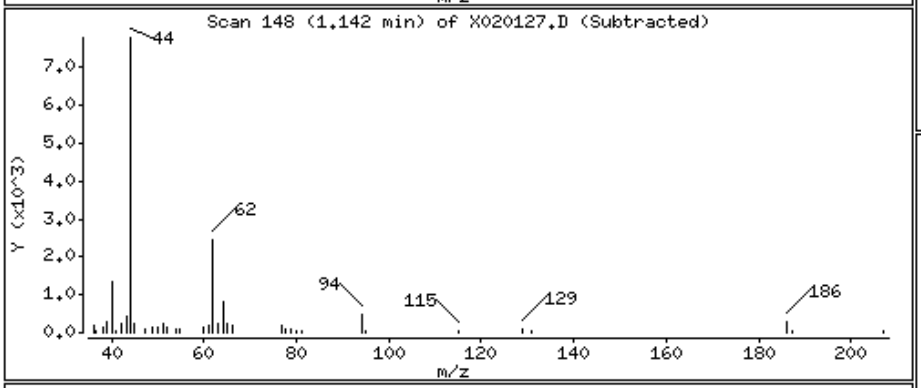
Column phase: DB624

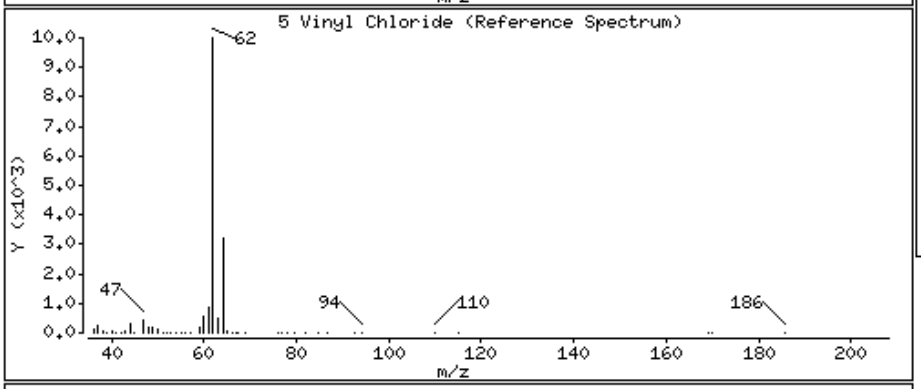
Column diameter: 0.18

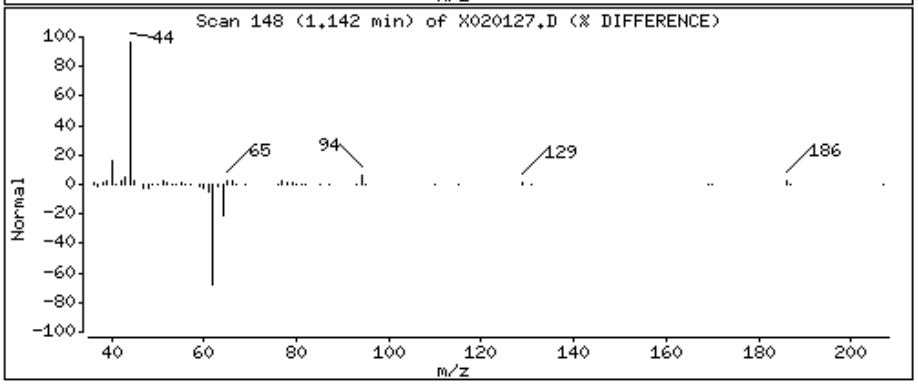
5 Vinyl Chloride

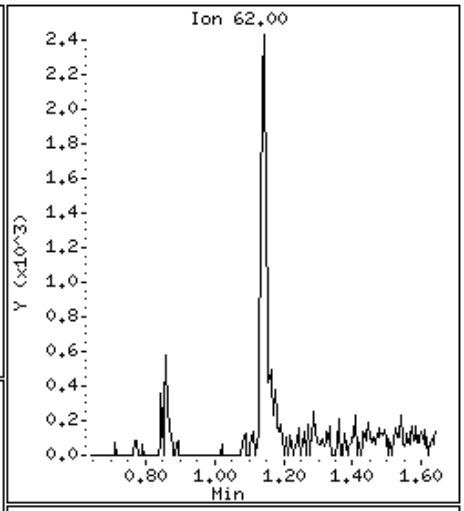
Concentration: 1342.67 ug/l

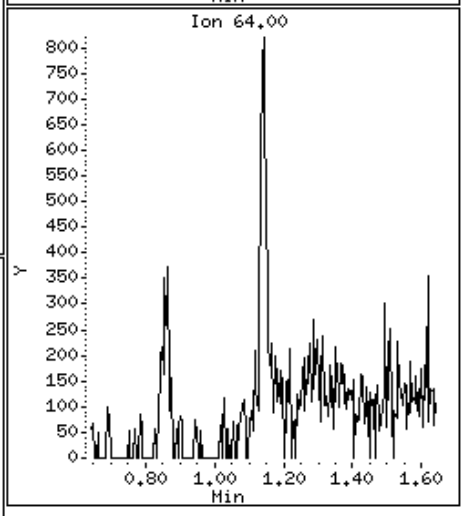












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020127.D Page 3

Date : 01-FEB-2023 19:51

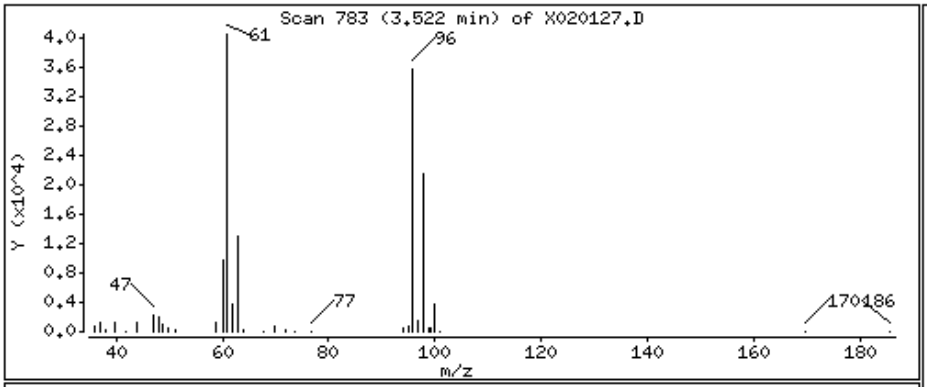
Client ID: HS23011397-06 Instrument: voa6.i

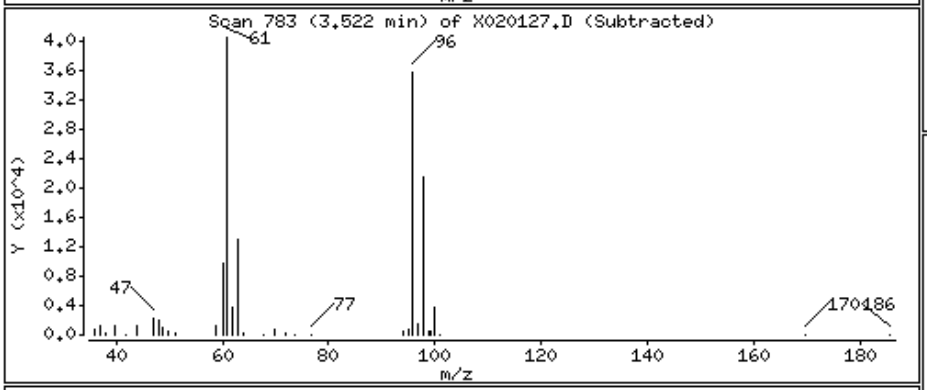
Sample Info: HS23011397-06;HS23011397-06;;;

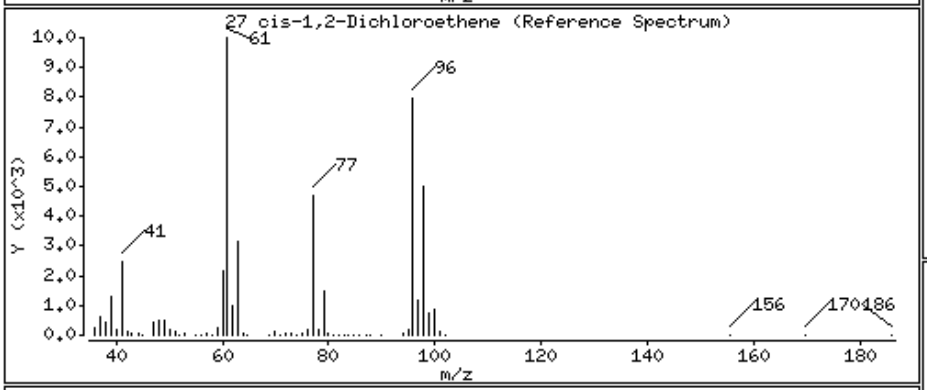
Purge Volume: 5.0 Operator: PC

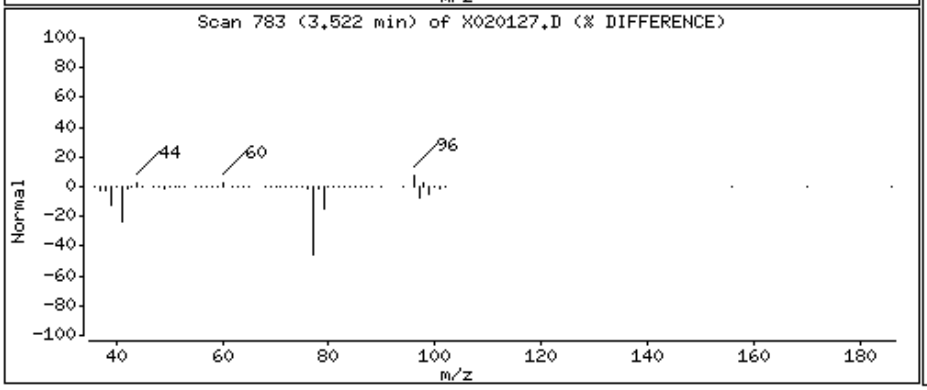
Column phase: DB624 Column diameter: 0.18

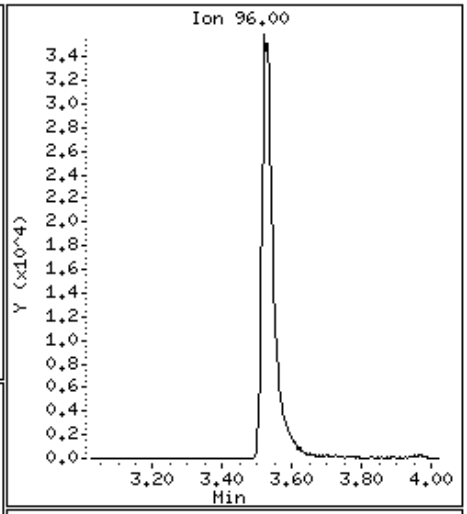
27 cis-1,2-Dichloroethene Concentration: 28752.45 ug/l

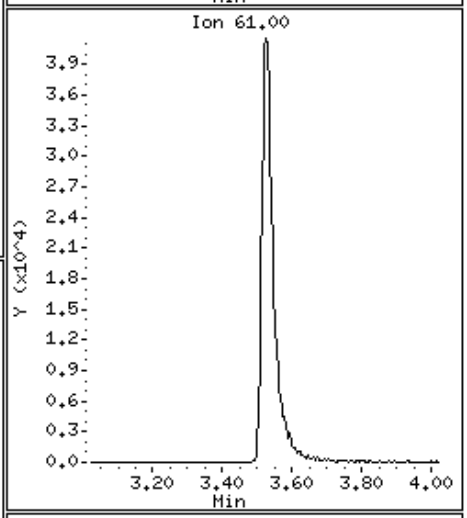


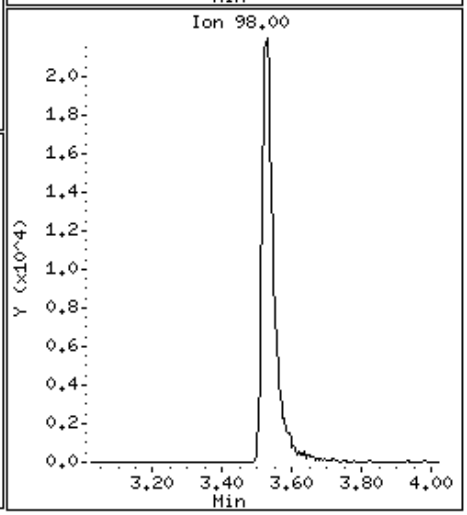












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020127.D Page 4

Date : 01-FEB-2023 19:51

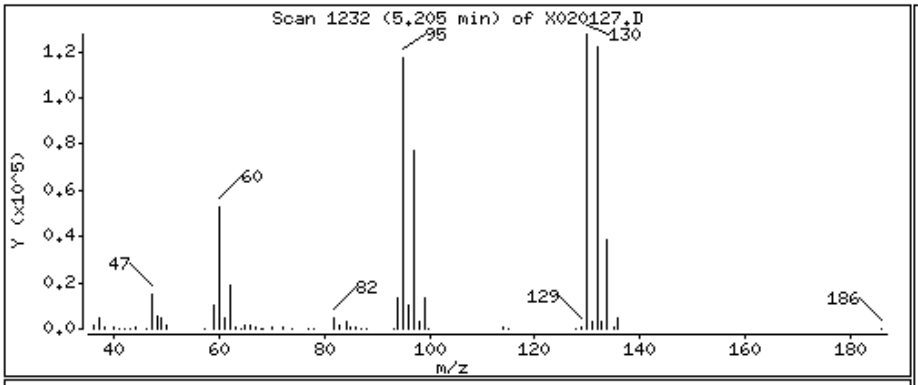
Client ID: HS23011397-06 Instrument: voa6.i

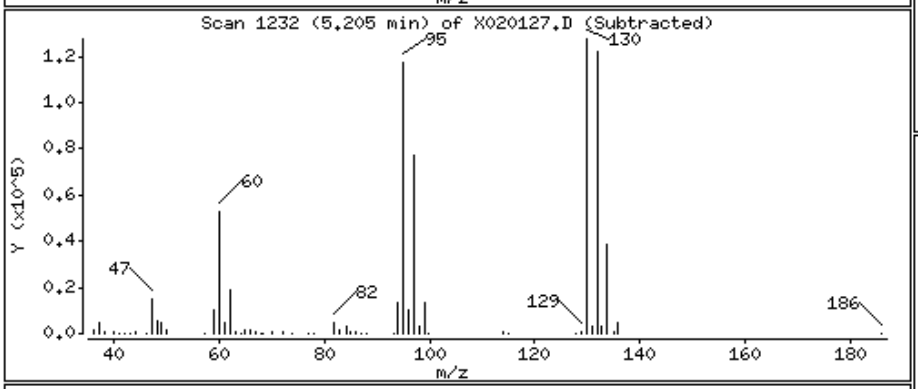
Sample Info: HS23011397-06;HS23011397-06;;;

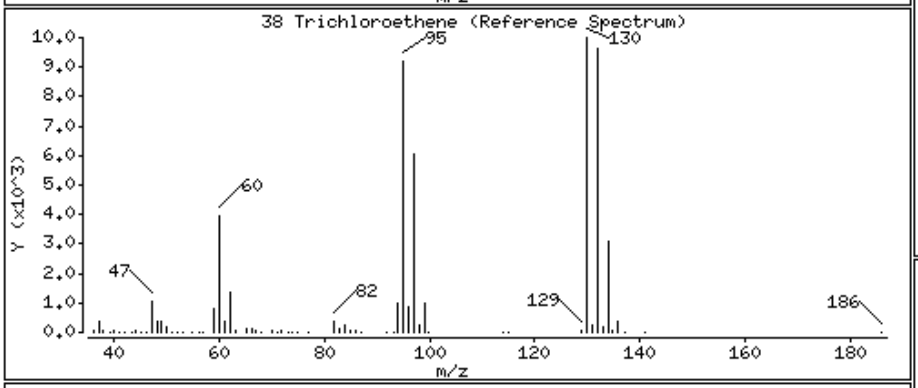
Purge Volume: 5.0 Operator: PC

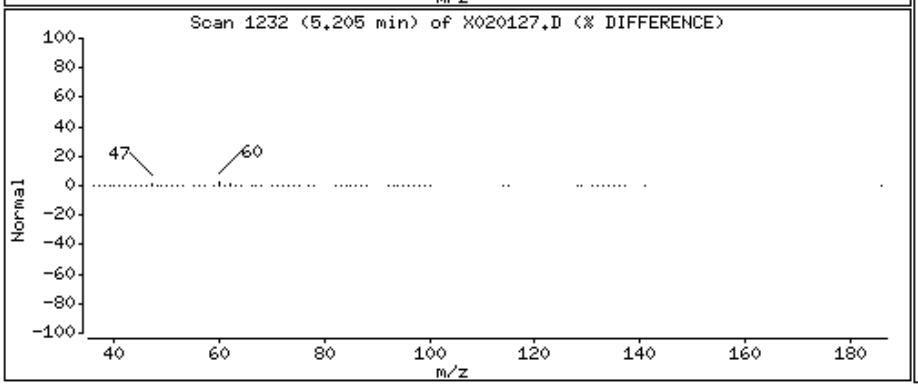
Column phase: DB624 Column diameter: 0.18

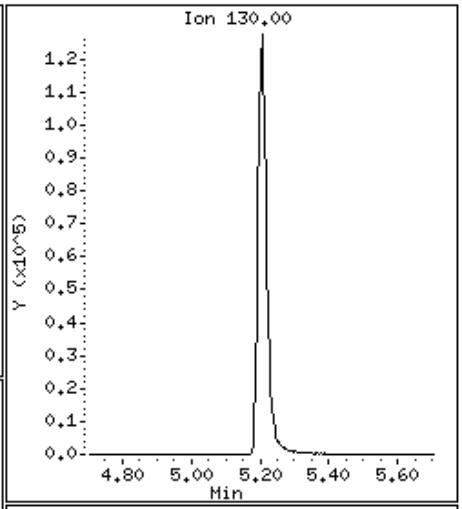
38 Trichloroethene Concentration: 84594.81 ug/l

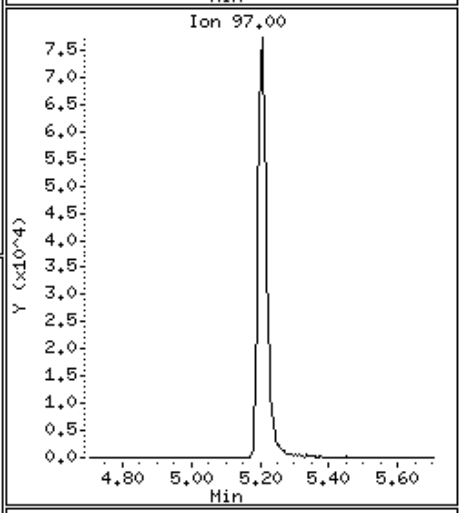


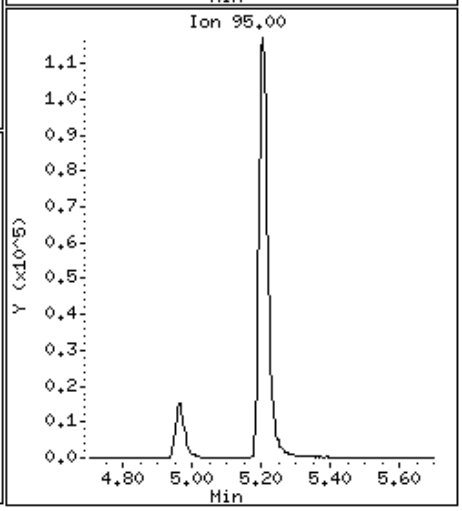












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Inj Date : 01-FEB-2023 19:51
InstruID : voa6.i
LabSampID : HS23011397-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020128.D Page 1
Report Date: 16-Feb-2023 14:18

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020128.D
Lab Smp Id: HS23011397-07 Client Smp ID: HS23011397-07
Inj Date : 01-FEB-2023 20:12
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-07;HS23011397-07;;;
Misc Info : V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 27
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

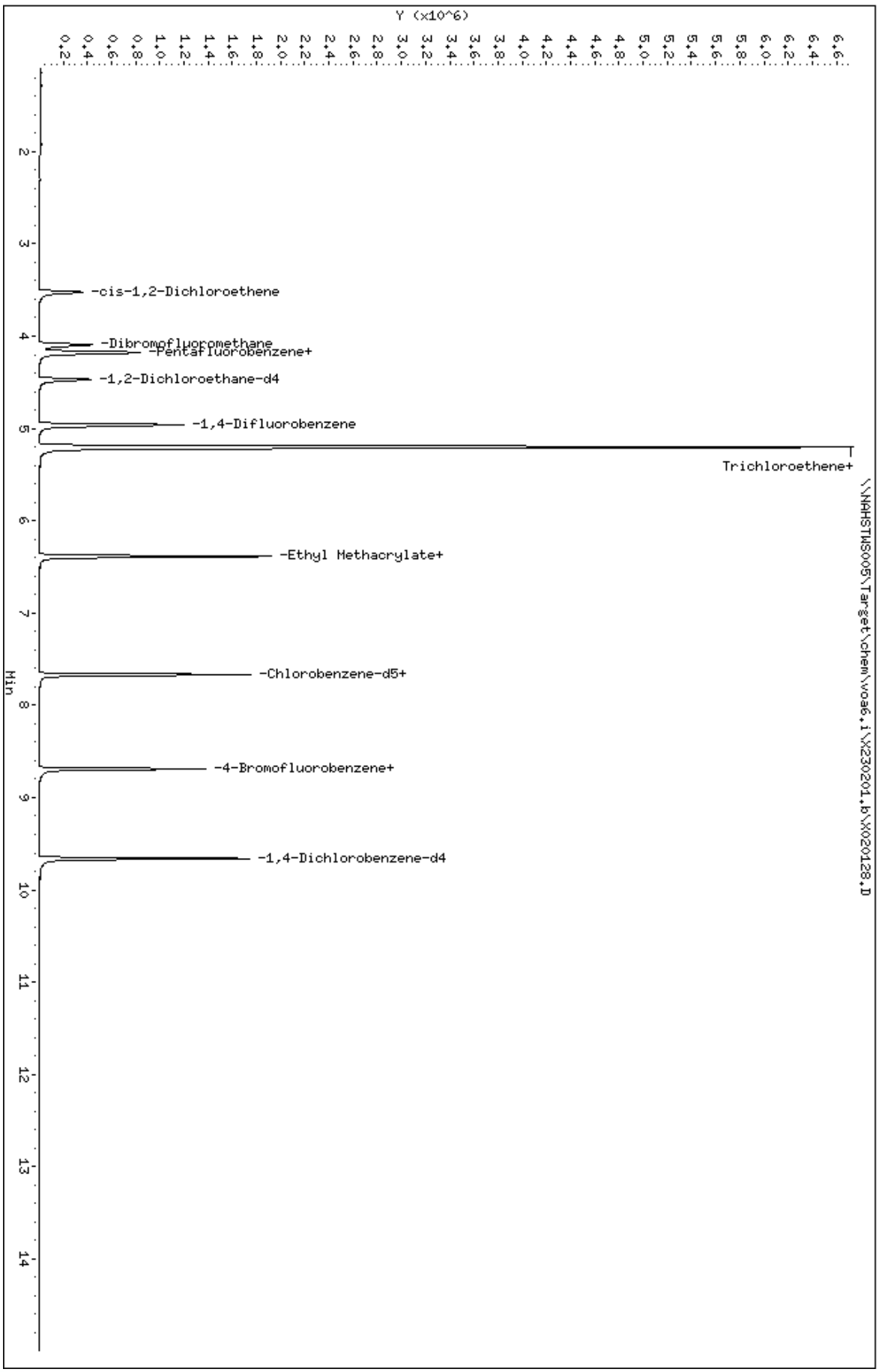
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	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)	705313	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	308562	45.5469	45.54
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	349150	48.8510	48.85
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	992631	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	854976	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1125215	53.2594	53.25
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	402878	51.0153	51.01
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	434773	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	4049	0.65717	164.29(a)
27 cis-1,2-Dichloroethene	96	3.521	3.522	(0.843)	206006	28.2551	7063.76
38 Trichloroethene	130	5.201	5.205	(1.048)	2235886	332.565	83141.19(A)

QC Flag Legend

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



Data File: \\NAHSTNS005\Target\chem\voa6,i\X230201,b\X020128.D
Date : 01-FEB-2023 20:12
Client ID: HS23011397-07
Sample Info: HS23011397-07;HS23011397-07;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020128.D

Date : 01-FEB-2023 20:12

Client ID: HS23011397-07

Instrument: voa6.i

Sample Info: HS23011397-07;HS23011397-07;;;

Purge Volume: 5.0

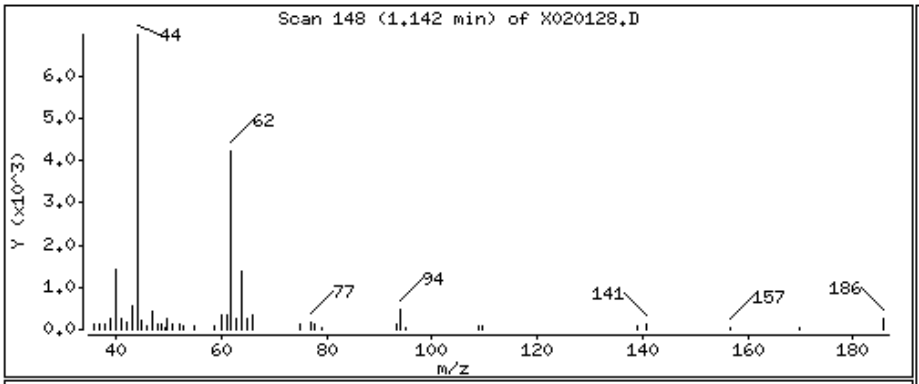
Operator: PC

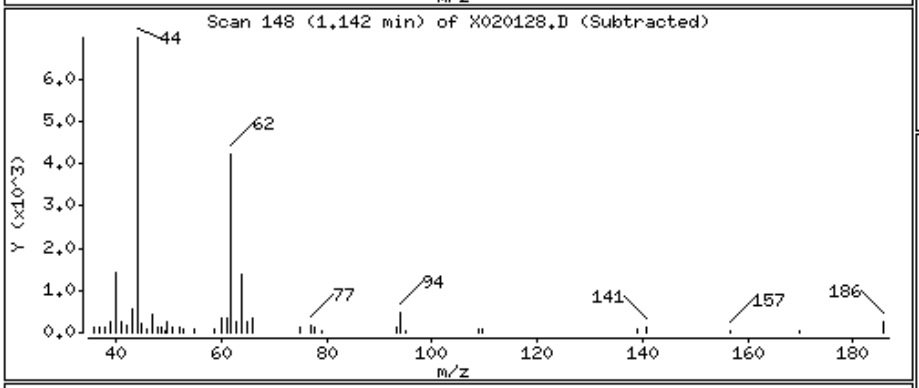
Column phase: DB624

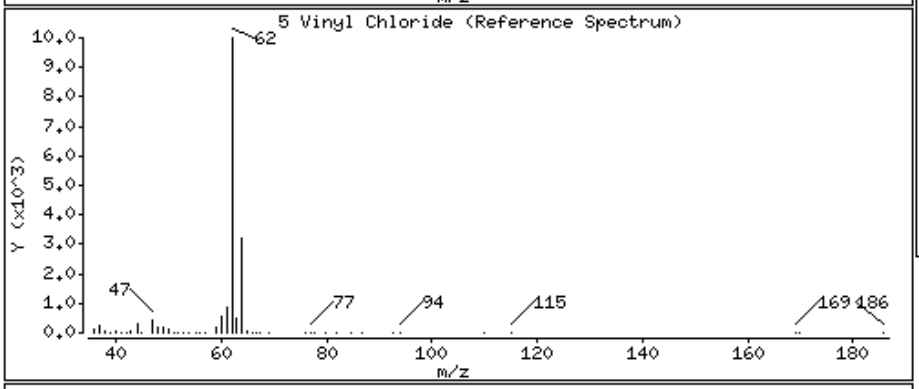
Column diameter: 0.18

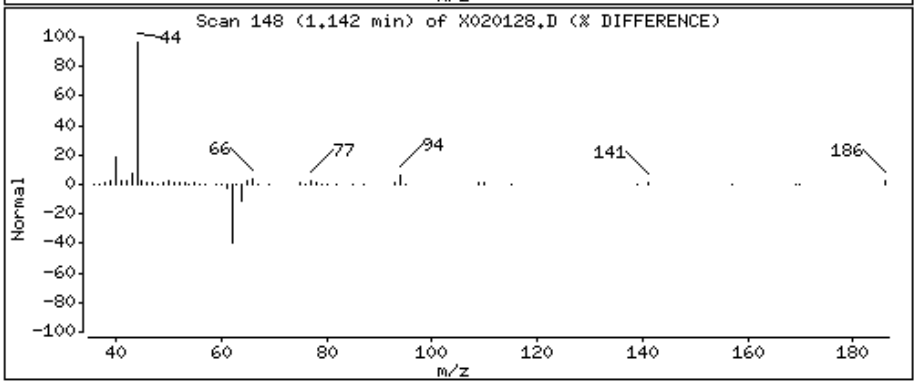
5 Vinyl Chloride

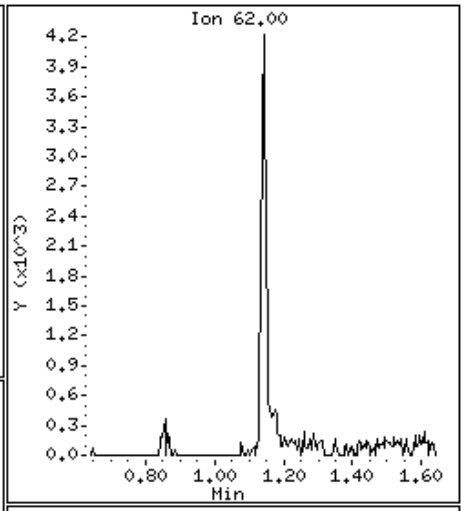
Concentration: 164.29 ug/l

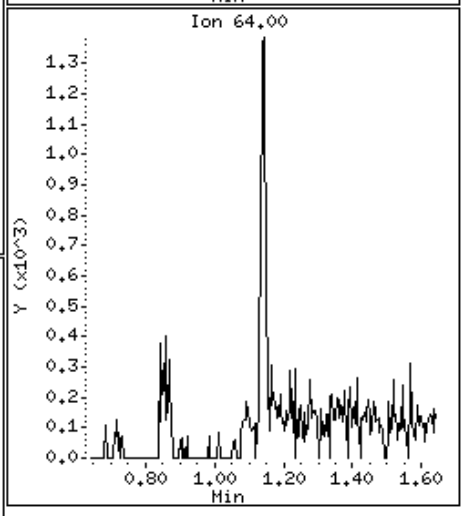












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020128.D Page 3

Date : 01-FEB-2023 20:12

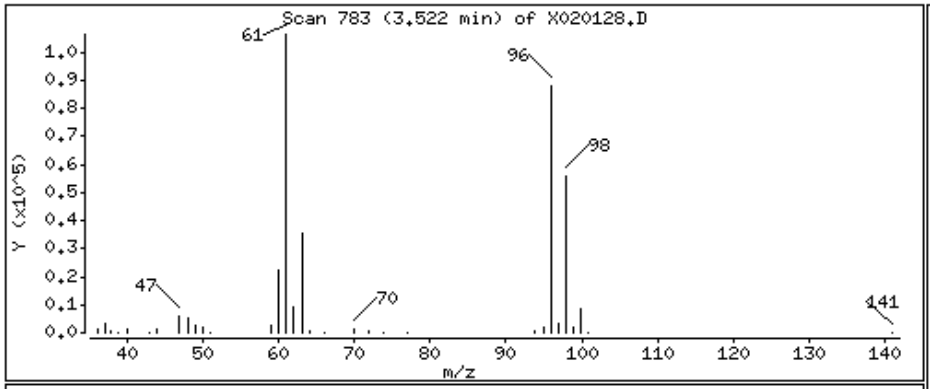
Client ID: HS23011397-07 Instrument: voa6.i

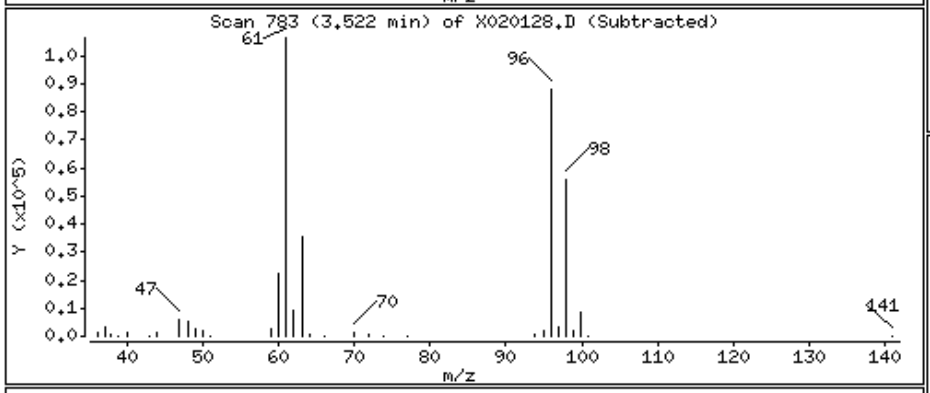
Sample Info: HS23011397-07;HS23011397-07;;;

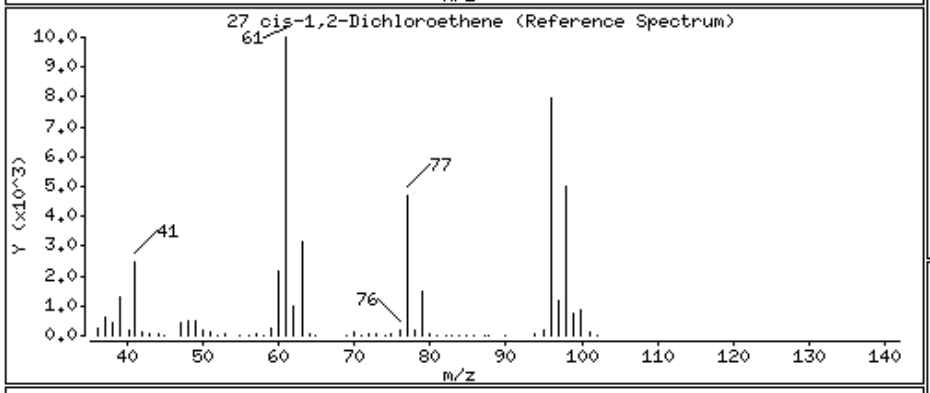
Purge Volume: 5.0 Operator: PC

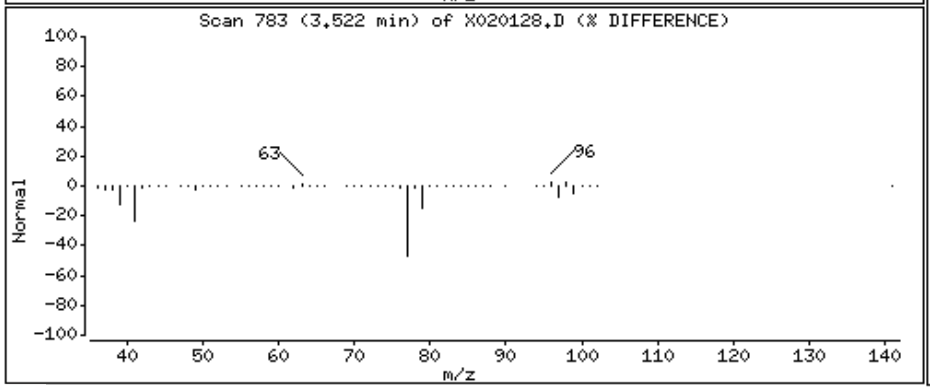
Column phase: DB624 Column diameter: 0.18

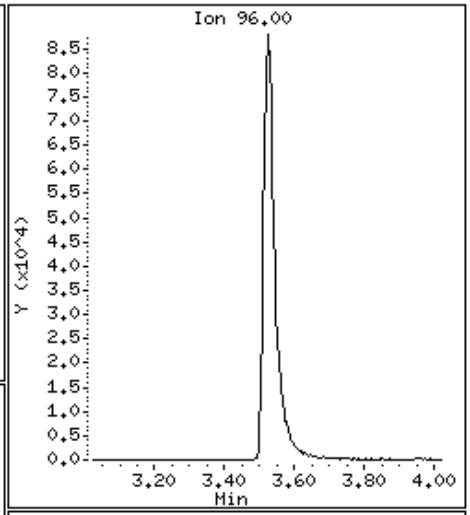
27 cis-1,2-Dichloroethene Concentration: 7063.76 ug/l

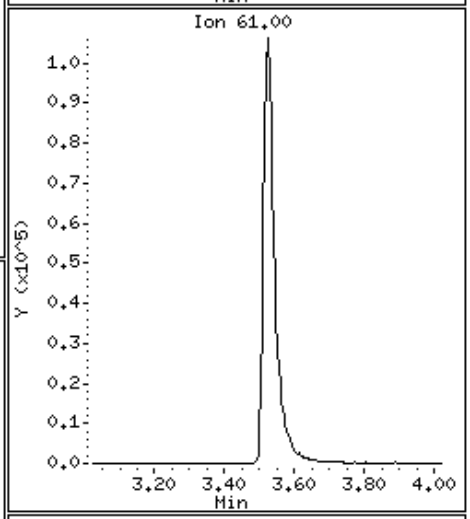


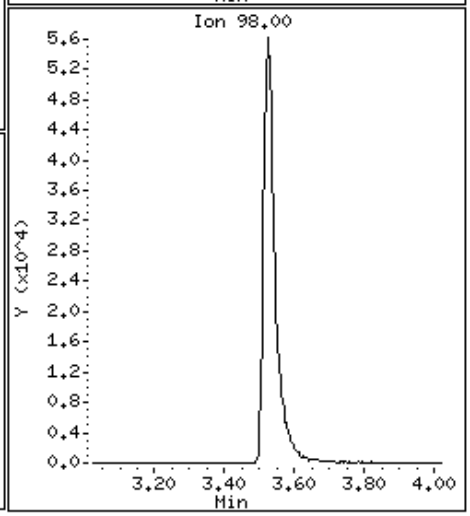












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020128.D Page 4

Date : 01-FEB-2023 20:12

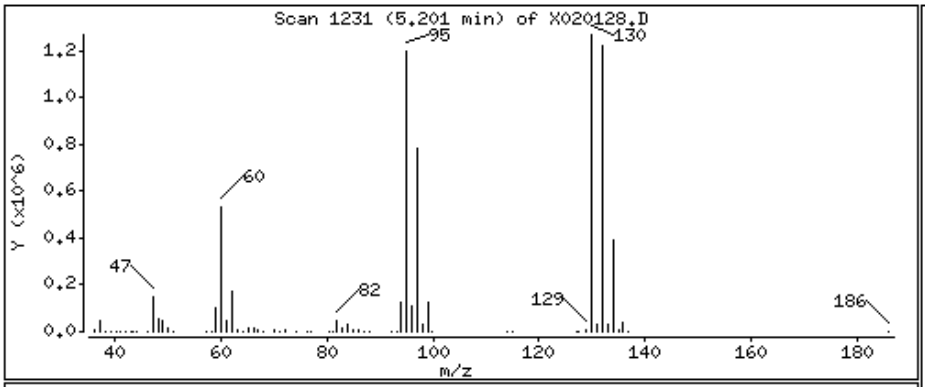
Client ID: HS23011397-07 Instrument: voa6.i

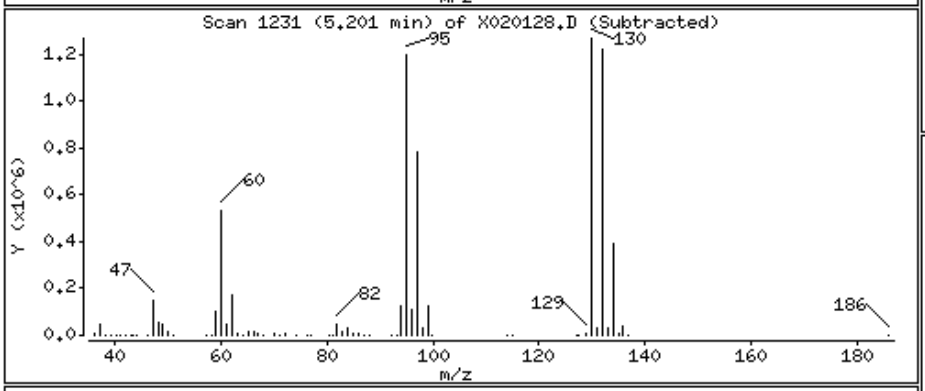
Sample Info: HS23011397-07;HS23011397-07;;;

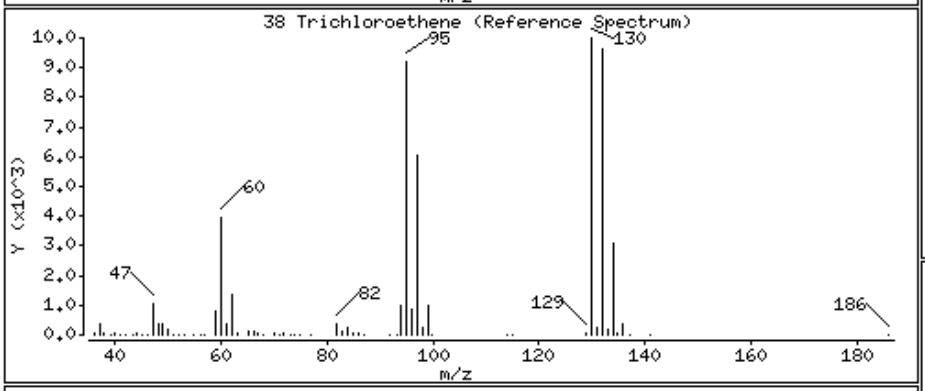
Purge Volume: 5.0 Operator: PC

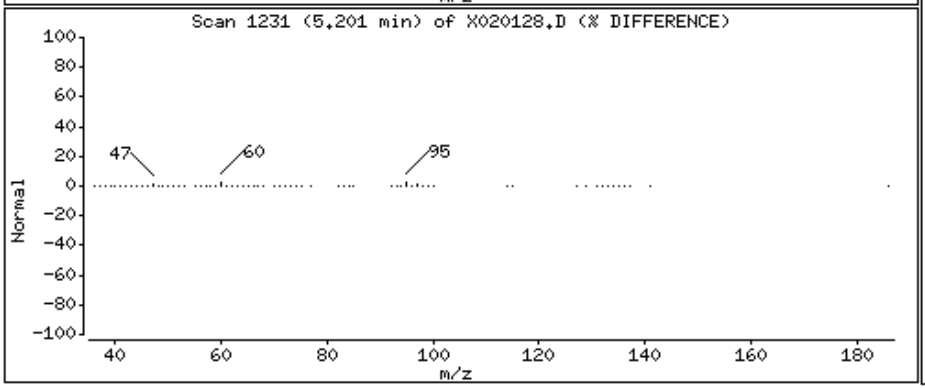
Column phase: DB624 Column diameter: 0.18

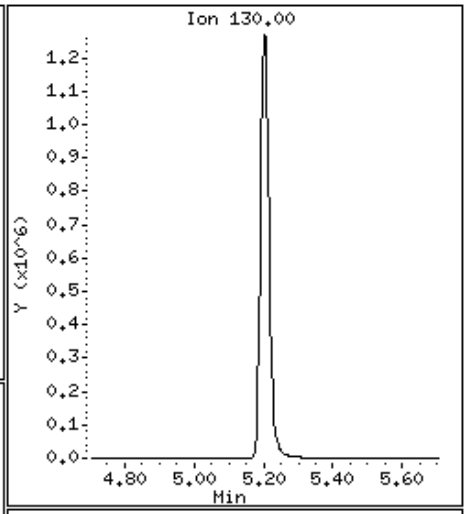
38 Trichloroethene Concentration: 83141.19 ug/l

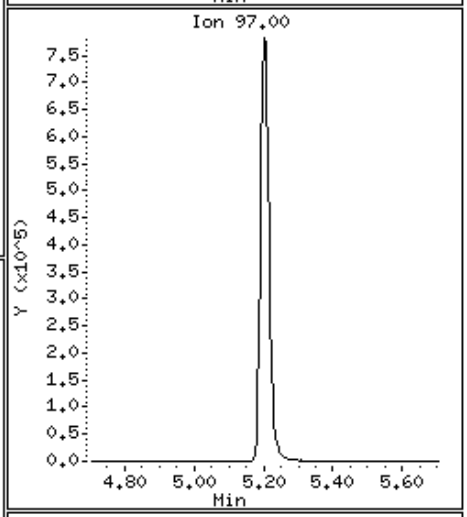


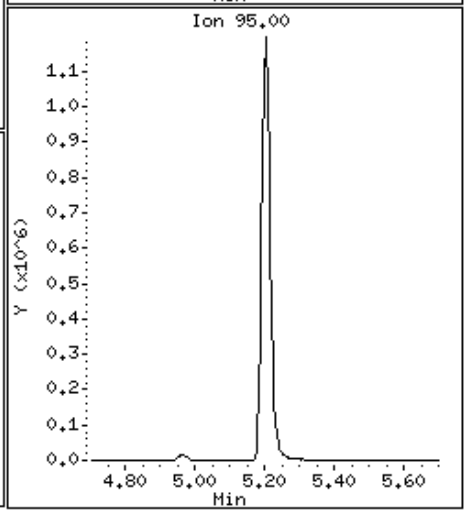












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Inj Date : 01-FEB-2023 20:12
InstruID : voa6.i
LabSampID : HS23011397-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020129.D Page 1
Report Date: 16-Feb-2023 14:18

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020129.D
Lab Smp Id: HS23011397-07 Client Smp ID: HS23011397-07
Inj Date : 01-FEB-2023 20:33
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-07;HS23011397-07;;;
Misc Info : V6;WATER;0;2500;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\8260W.m
Meth Date : 14-Feb-2023 13:00 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 28
Dil Factor: 2500.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

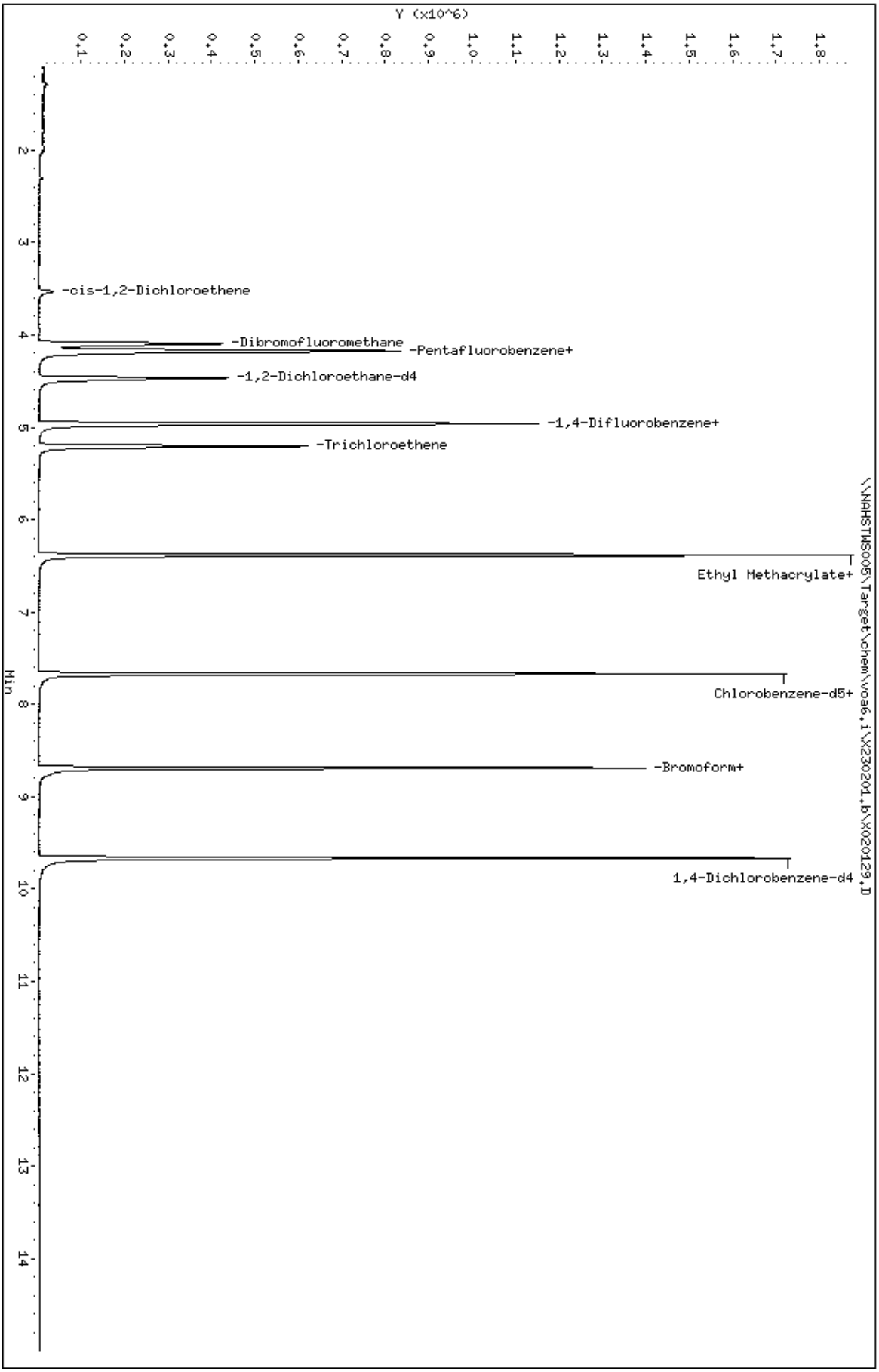
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	2500.000	Dilution Factor
Uf	5.000	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)	689403	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	303888	45.8935	45.89
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	348775	49.9188	49.91
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	970073	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	857635	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1117020	52.7076	52.70
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	403728	50.9645	50.96
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	443083	50.0000	
27 cis-1,2-Dichloroethene	96	3.529	3.522	(0.845)	19365	2.71733	6793.33(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	211436	32.1802	80450.53

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230201,b\X020129,D
Date : 01-FEB-2023 20:33
Client ID: HS23011397-07
Sample Info: HS23011397-07;HS23011397-07;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020129.D Page 2

Date : 01-FEB-2023 20:33

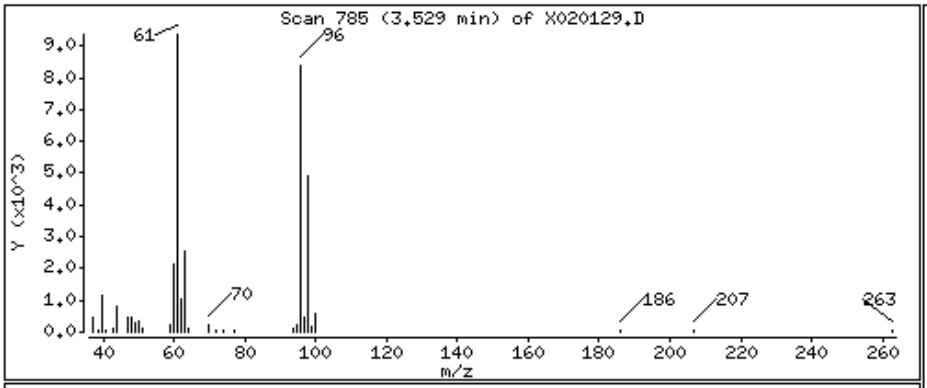
Client ID: HS23011397-07 Instrument: voa6.i

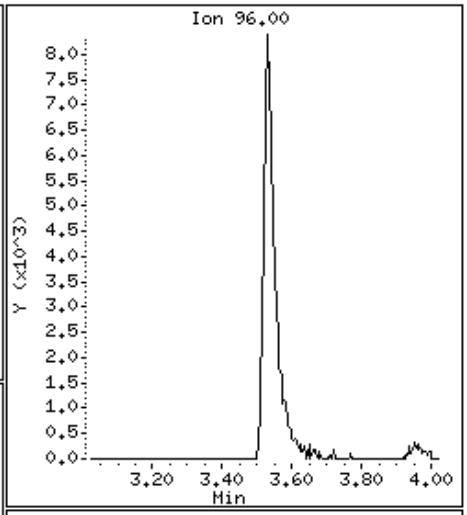
Sample Info: HS23011397-07;HS23011397-07;;;

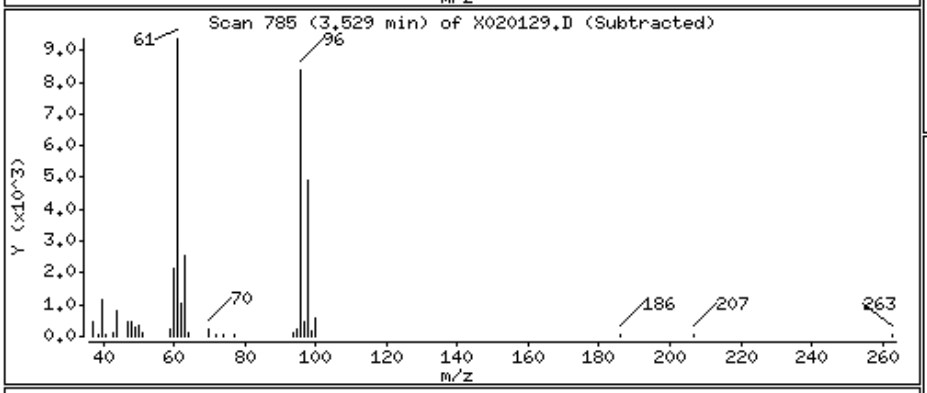
Purge Volume: 5.0 Operator: PC

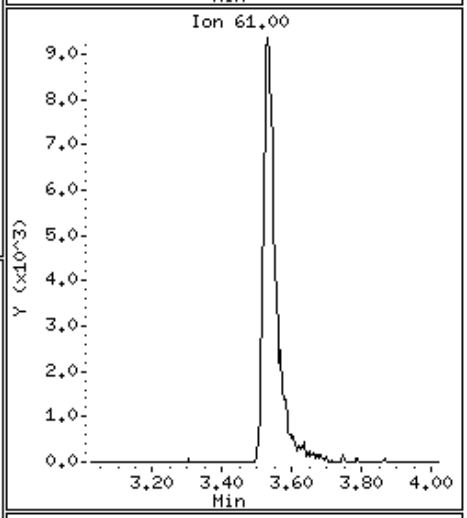
Column phase: DB624 Column diameter: 0.18

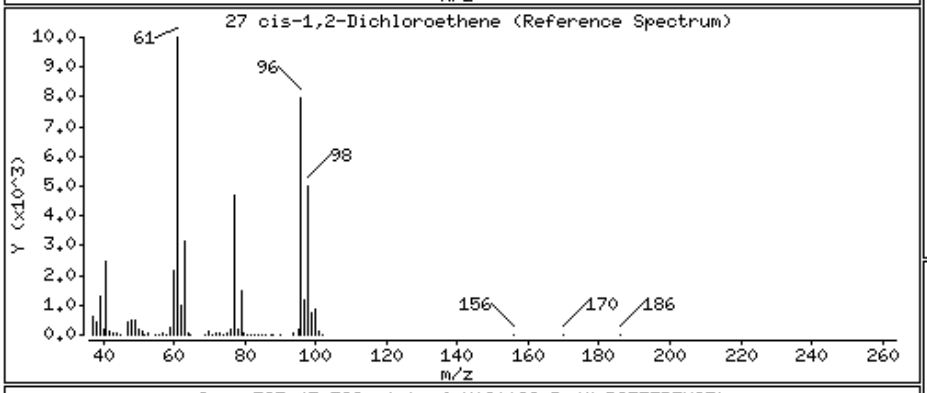
27 cis-1,2-Dichloroethene Concentration: 6793.33 ug/l

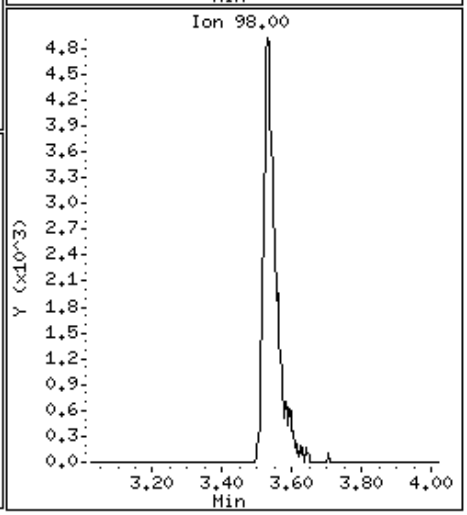


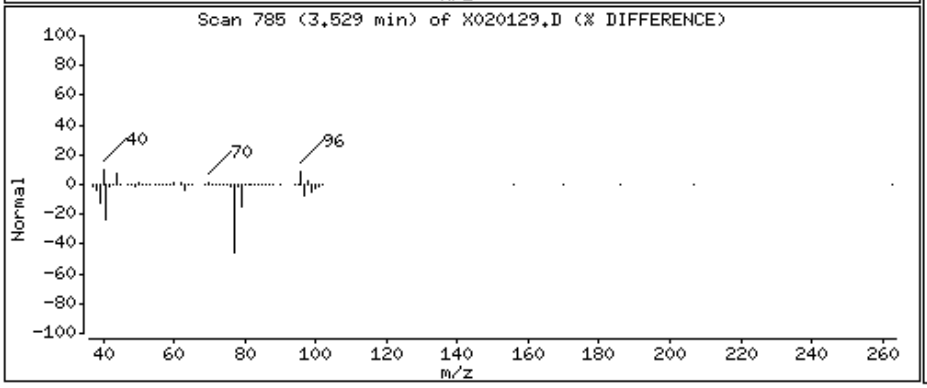












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020129.D Page 3

Date : 01-FEB-2023 20:33

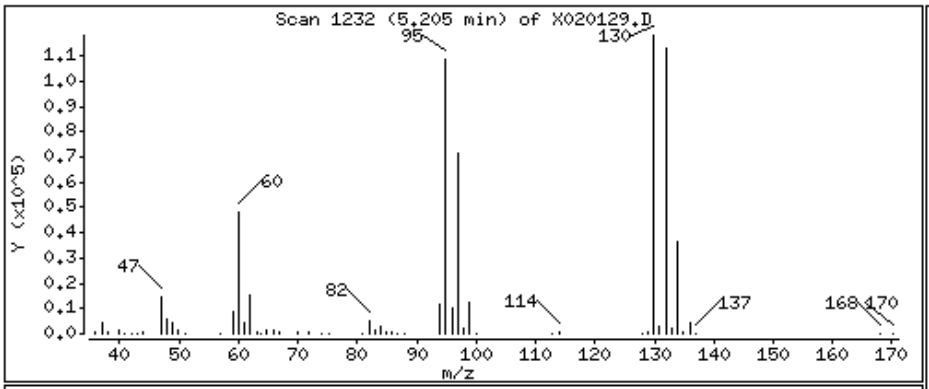
Client ID: HS23011397-07 Instrument: voa6.i

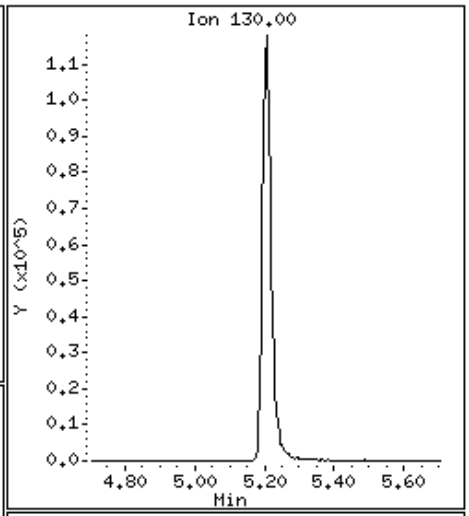
Sample Info: HS23011397-07;HS23011397-07;;;

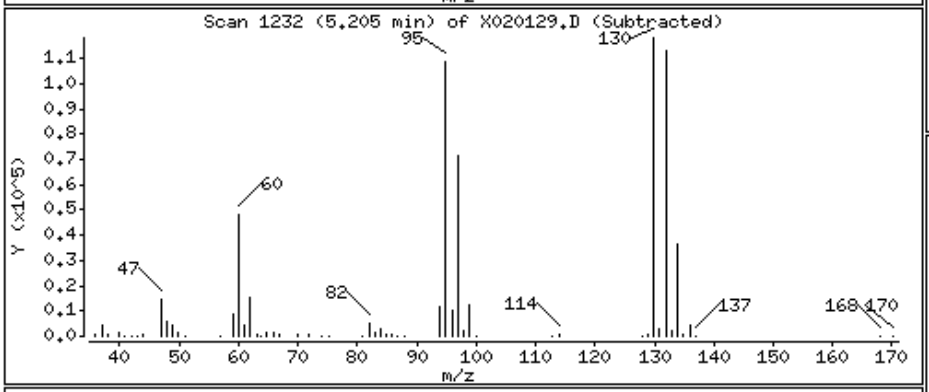
Purge Volume: 5.0 Operator: PC

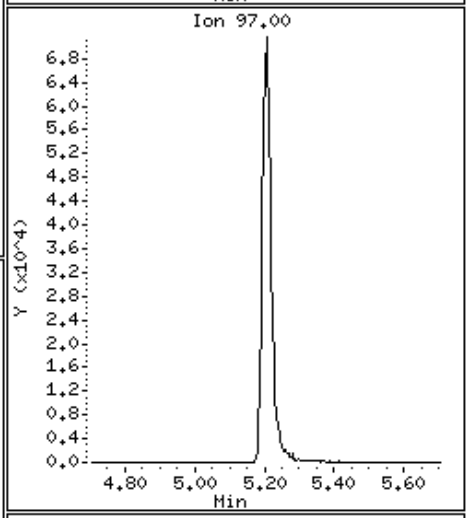
Column phase: DB624 Column diameter: 0.18

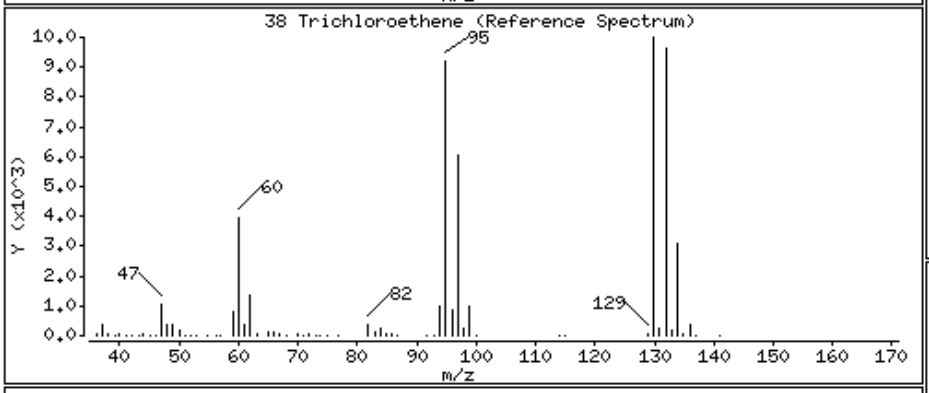
38 Trichloroethene Concentration: 80450.53 ug/l

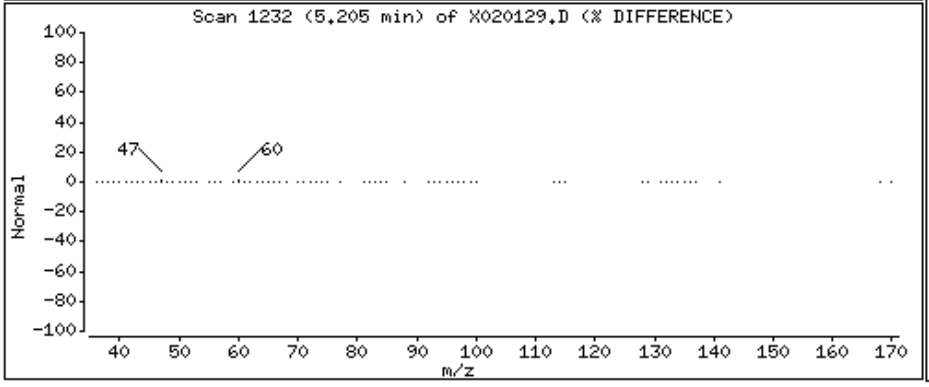


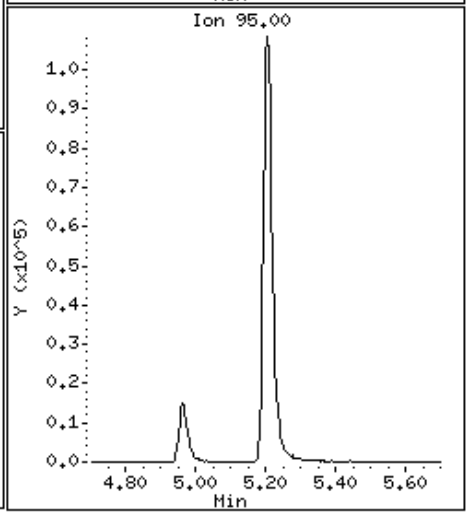












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InstruID : voa6.i
LabSampID : HS23011397-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020130.D Page 1
Report Date: 16-Feb-2023 14:18

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020130.D
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Inj Date : 01-FEB-2023 20:54
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 16-Feb-2023 14:18 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 29 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)	568208	50.0000	
135	1,4-Dioxane	88	5.595	5.595	(1.340)	60437	1000.00	1163.58
140	1,3-Butadiene	54	1.160	1.160	(0.278)	197879	50.0000	50.74
25	Methacrylonitrile	41	3.818	3.818	(0.915)	206167	50.0000	51.24
12	Isobutyl Alcohol	43	4.669	4.669	(1.119)	689702	1000.00	1079.16
13	Acetonitrile	39	2.195	2.195	(0.526)	268599	500.000	519.39
14	Allyl Chloride	41	2.195	2.195	(0.526)	503991	50.0000	51.17
4	Propionitrile	54	3.645	3.645	(0.873)	299827	500.000	517.14
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	94046	50.0000	53.49
130	Ethyl Acetate	43	3.645	3.645	(0.873)	245497	50.0000	55.36
40	Methyl Methacrylate	41	5.602	5.602	(1.342)	217670	50.0000	56.18
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	213466	50.0000	52.52
142	Tetrahydrofuran	42	3.840	3.840	(0.920)	69840	100.000	98.83
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	519725	50.0000	51.14
156	Diisopropyl ether	45	2.993	2.993	(0.717)	731123	50.0000	49.60
182	Epichlorohydrin	57	6.093	6.093	(1.228)	78363	200.000	202.70
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1124415	50.0000	50.91
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	528125	50.0000	132.24
3	Chloromethane	50	1.074	1.074	(0.257)	249015	50.0000	48.50
5	Vinyl Chloride	62	1.141	1.141	(0.274)	247315	50.0000	49.82

6 Bromomethane	94	1.336	1.336 (0.320)	167535	50.0000	44.81
7 Chloroethane	64	1.400	1.400 (0.335)	151174	50.0000	43.75

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020130.D Page 2
Report Date: 16-Feb-2023 14:18

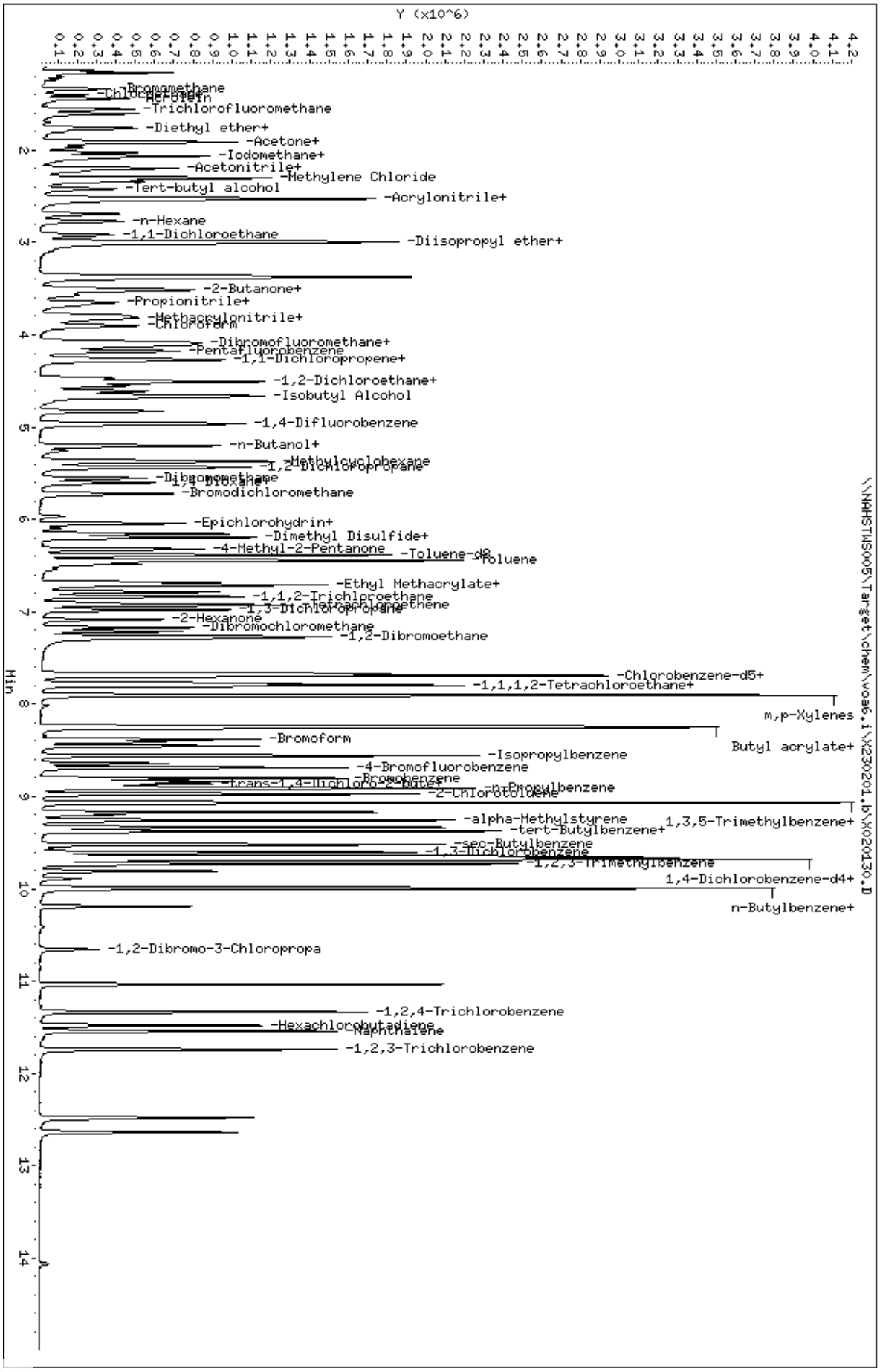
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	359256	50.0000	51.72
	9 Acrolein	56	1.441	1.441	(0.345)	37972	100.000	97.77
	10 Acetone	43	1.966	1.966	(0.471)	160466	100.000	100.64
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	199100	50.0000	46.16
	15 Iodomethane	142	2.026	2.026	(0.485)	533432	100.000	94.28
	16 Acrylonitrile	53	2.528	2.528	(0.606)	155947	100.000	106.62
	17 Methylene Chloride	84	2.300	2.300	(0.551)	280367	50.0000	47.39
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.607)	705860	50.0000	50.00
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	1091503	100.000	96.73
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	241784	50.0000	50.09
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	1229991	100.000	99.26
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	422782	50.0000	49.91
	24 2-Butanone	43	3.570	3.570	(0.855)	183851	100.000	108.45
	26 2,2-Dichloropropane	77	3.507	3.507	(0.840)	350620	50.0000	48.75
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	284933	50.0000	48.51
	28 Chloroform	83	3.900	3.900	(0.934)	486288	50.0000	51.22
	29 Bromochloromethane	128	3.788	3.788	(0.908)	154737	50.0000	48.11
$	30 Dibromofluoromethane	113	4.091	4.091	(0.980)	273276	50.0000	50.08
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	412937	50.0000	54.82
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	344386	50.0000	56.20
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	401267	50.0000	56.74
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	346572	50.0000	52.96
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	310795	50.0000	53.94
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	863055	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	1054311	50.0000	51.15
	38 Trichloroethene	130	5.205	5.205	(1.049)	312747	50.0000	53.50
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	396380	50.0000	51.24
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	285652	100.000	129.81
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	271227	50.0000	49.47
	44 Dibromomethane	93	5.550	5.550	(1.119)	185981	50.0000	49.91
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	465740	100.000	107.00
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	471126	50.0000	51.86
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	814334	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1030654	50.0000	51.21
	50 Toluene	91	6.446	6.446	(0.841)	1149245	50.0000	51.05
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	408778	50.0000	54.22
	52 2-Hexanone	43	7.083	7.083	(0.924)	329048	100.000	111.11
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	229011	50.0000	50.71
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	463399	50.0000	52.13
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	343024	50.0000	52.63
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	244730	50.0000	52.55
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	302574	50.0000	53.59
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	218668	50.0000	52.42
	59 Chlorobenzene	112	7.690	7.690	(1.003)	802322	50.0000	50.25
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	312892	50.0000	52.66
	61 Ethylbenzene	106	7.799	7.799	(1.017)	391873	50.0000	52.10
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	987284	100.000	101.83
	63 o-Xylene	106	8.237	8.237	(1.074)	486997	50.0000	50.89
	64 Styrene	104	8.256	8.256	(1.077)	859246	50.0000	53.57
	66 Bromoform	173	8.410	8.410	(1.097)	237691	50.0000	52.64
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1191065	50.0000	54.48
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	362562	50.0000	49.59

$	69	4-Bromofluorobenzene	95	8.687	8.687 (1.133)	400872	50.0000	53.29
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662 (1.000)	458624	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	287231	50.0000	56.28(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1397784	50.0000	55.02
	74 Bromobenzene	156	8.803	8.803	(0.911)	392138	50.0000	52.11
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1041126	50.0000	55.47
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	889489	50.0000	53.35
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1040072	50.0000	54.72
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	852054	50.0000	55.46
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1066924	50.0000	54.03
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1174946	50.0000	57.48
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1047413	50.0000	57.18
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	661551	50.0000	52.97
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	698096	50.0000	51.22
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	900823	50.0000	50.99
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	673705	50.0000	52.37
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	63303	50.0000	54.15
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	465975	50.0000	57.40
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	192243	50.0000	53.39
	92 Naphthalene	128	11.540	11.540	(1.194)	1040282	50.0000	56.32
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	427680	50.0000	55.01
M	94 1,2-Dichloroethylene (total)	96				526717	100.000	(a)
	141 Cyclohexane	56	4.118	4.118	(0.987)	305162	50.0000	53.19
	138 Freon TF	101	1.910	1.910	(0.458)	205380	50.0000	49.23
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	624229	50.0000	59.08
	146 Methyl Acetate	43	2.228	2.228	(0.534)	130899	50.0000	51.19
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	449946	1000.00	1143.60
	149 Isopropyl Alcohol	45	2.090	2.090	(0.501)	240832	1000.00	1172.06

QC Flag Legend

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



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Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230201.b\X020130.D
Inj Date : 01-FEB-2023 20:54
InstruID : voa6.i
LabSampID : CCV-END

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

Reason Code:

BEFORE

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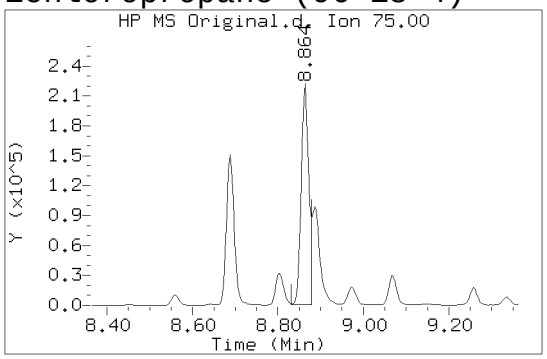
HEIGHT
221974
14-Feb-2023
12:16
linh
pham



AFTER

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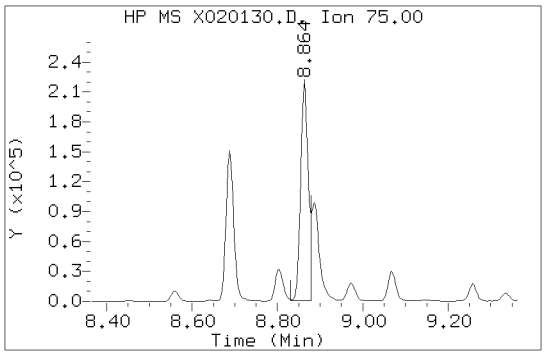

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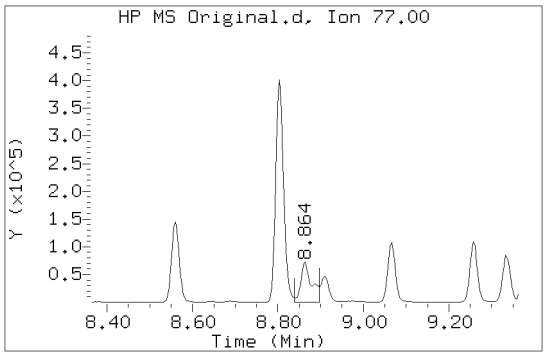

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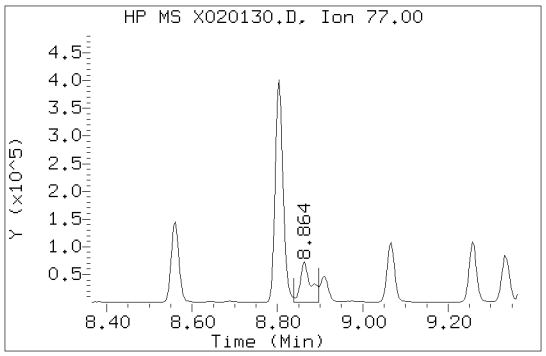

right solutions.
right partner.

Raw Data VOA6 427191

Volatiles by by EPA 8260

Workorder

HS23011397

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\X230202.b\X020201.D Page 1
Report Date: 02-Feb-2023 14:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D
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Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\bfb.m
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Cal Date : Cal File:
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Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	149696			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	26248			15.00- 40.00	17.53
8.687	8.889	(0.000)	75	70192			30.00- 60.00	46.89
8.687	8.889	(0.000)	96	10642			5.00- 9.00	7.11
8.687	8.889	(0.000)	173	627			0.00- 2.00	0.51
8.687	8.889	(0.000)	174	123608			50.00- 0.00	82.57
8.687	8.889	(0.000)	175	9737			5.00- 9.00	7.88
8.687	8.889	(0.000)	176	121272			95.00- 101.00	98.11
8.687	8.889	(0.000)	177	7731			5.00- 9.00	6.37

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.53
75	30.00 - 60.00% of mass 95	46.89
96	5.00 - 9.00% of mass 95	7.11
173	Less than 2.00% of mass 174	0.42 (0.51)
174	Greater than 50.00% of mass 95	82.57
175	5.00 - 9.00% of mass 174	6.50 (7.88)
176	95.00 - 101.00% of mass 174	81.01 (98.11)
177	5.00 - 9.00% of mass 176	5.16 (6.37)

Data File: X020201.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1573	65.20	107	96.90	424	139.00	168
37.10	6704	65.80	67	98.00	1181	140.00	301
38.00	5721	66.90	463	98.90	85	140.90	1086
39.00	3315	68.00	15484	102.80	97	141.90	228
40.00	1584	69.00	15803	103.90	845	142.90	1235
41.10	1132	70.10	1861	105.10	565	144.90	75
42.00	1681	71.00	218	105.90	711	145.70	246
42.90	1225	71.90	668	106.90	528	147.10	67
44.00	1645	73.00	6647	108.90	344	147.70	270
45.00	1341	74.00	22936	109.90	104	148.80	95
45.90	113	75.00	70192	110.60	99	149.80	127
47.00	1744	76.00	6753	112.10	130	152.70	249
47.90	1130	77.00	1133	112.90	181	153.60	75
49.00	5488	77.80	524	115.00	178	154.80	340
50.00	26248	78.90	4197	116.00	405	155.80	67
51.00	8107	79.90	1400	116.80	837	157.00	260
52.00	399	80.90	3850	117.80	532	158.80	107
53.00	192	81.90	882	118.90	826	160.90	353
54.00	224	83.10	267	120.10	140	171.20	94
55.00	2550	85.00	164	124.10	68	172.80	627
56.00	2638	86.00	148	125.80	63	173.90	123608
57.00	4162	87.00	6005	126.70	134	174.90	9737
57.90	346	87.90	5989	128.00	566	175.90	121272
58.80	124	91.00	592	129.00	327	176.90	7731
60.00	1563	91.90	3796	129.90	408	177.80	306
61.00	6378	93.00	6132	130.70	181	186.00	160
62.00	6235	94.00	15826	131.80	69	278.00	54
63.00	5087	95.00	149696	135.00	211		
64.10	453	96.00	10642	136.80	180		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D

Date : 02-FEB-2023 13:46

Client ID: BFB

Instrument: voa6.i

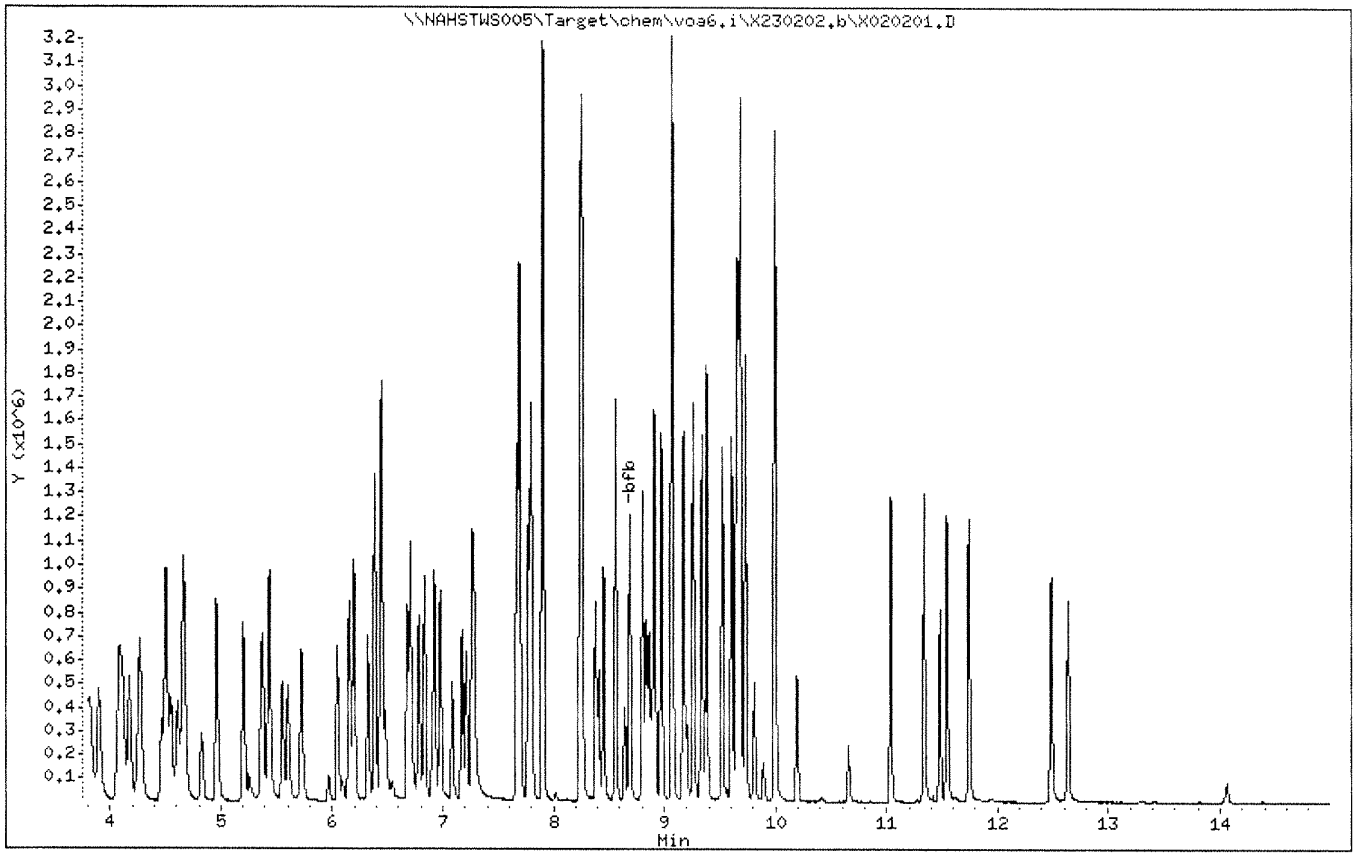
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D

Date : 02-FEB-2023 13:46

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

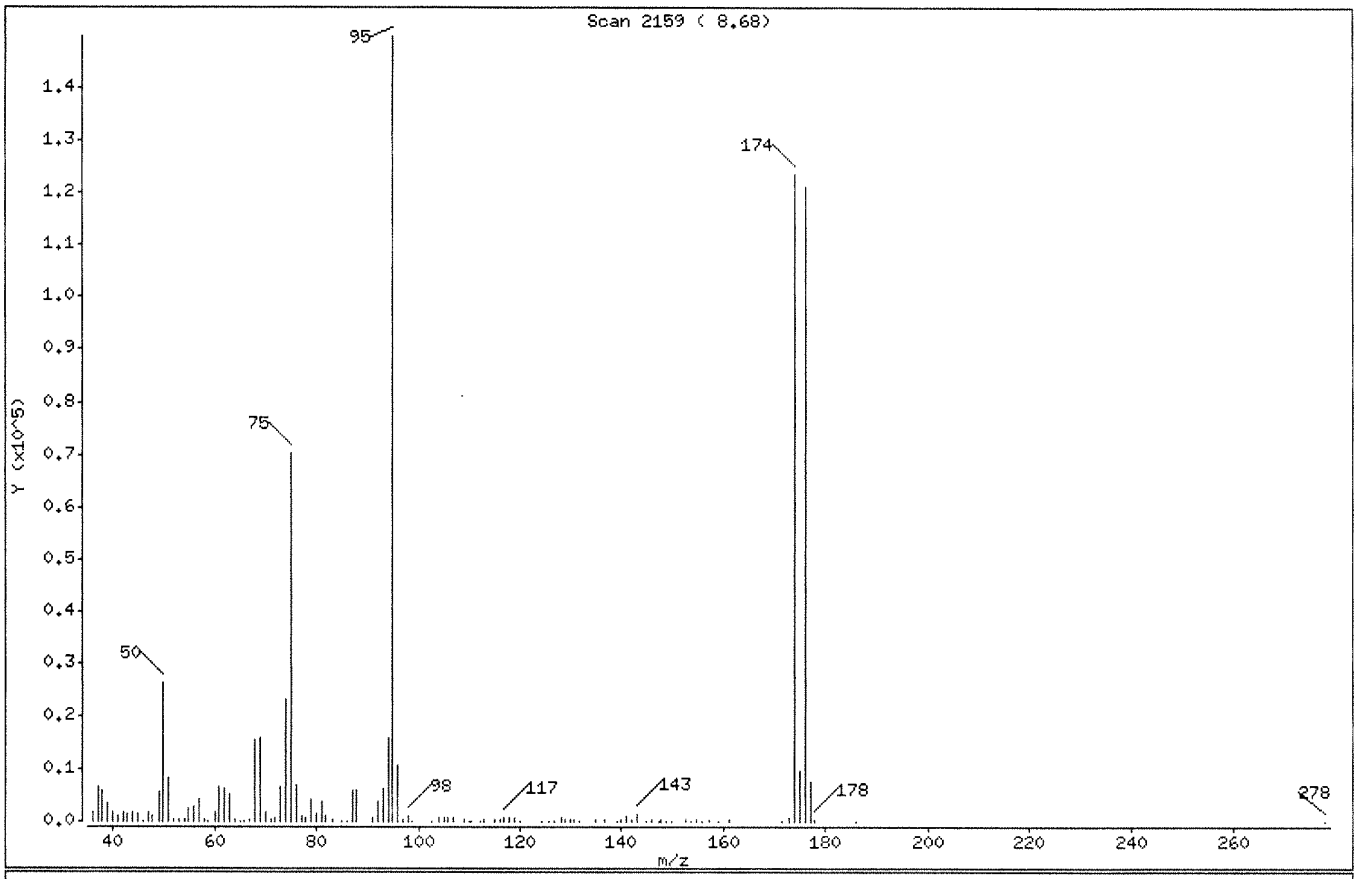
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.53
75	30.00 - 60.00% of mass 95	46.89
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173	Less than 2.00% of mass 174	0.42 (0.51)
174	Greater than 50.00% of mass 95	82.57
175	5.00 - 9.00% of mass 174	6.50 (7.88)
176	95.00 - 101.00% of mass 174	81.01 (98.11)
177	5.00 - 9.00% of mass 176	5.16 (6.37)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D

Date : 02-FEB-2023 13:46

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: X020201.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1573	65.20	107	96.90	424	139.00	168
37.10	6704	65.80	67	98.00	1181	140.00	301
38.00	5721	66.90	463	98.90	85	140.90	1086
39.00	3315	68.00	15484	102.80	97	141.90	228
40.00	1584	69.00	15803	103.90	845	142.90	1235
41.10	1132	70.10	1861	105.10	565	144.90	75
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42.90	1225	71.90	668	106.90	528	147.10	67
44.00	1645	73.00	6647	108.90	344	147.70	270
45.00	1341	74.00	22936	109.90	104	148.80	95
45.90	113	75.00	70192	110.60	99	149.80	127
47.00	1744	76.00	6753	112.10	130	152.70	249
47.90	1130	77.00	1133	112.90	181	153.60	75
49.00	5488	77.80	524	115.00	178	154.80	340
50.00	26248	78.90	4197	116.00	405	155.80	67
51.00	8107	79.90	1400	116.80	837	157.00	260
52.00	399	80.90	3850	117.80	532	158.80	107
53.00	192	81.90	882	118.90	826	160.90	353
54.00	224	83.10	267	120.10	140	171.20	94
55.00	2550	85.00	164	124.10	68	172.80	627
56.00	2638	86.00	148	125.80	63	173.90	123608
57.00	4162	87.00	6005	126.70	134	174.90	9737
57.90	346	87.90	5989	128.00	566	175.90	121272
58.80	124	91.00	592	129.00	327	176.90	7731
60.00	1563	91.90	3796	129.90	408	177.80	306
61.00	6378	93.00	6132	130.70	181	186.00	160
62.00	6235	94.00	15826	131.80	69	278.00	54
63.00	5087	95.00	149696	135.00	211		
64.10	453	96.00	10642	136.80	180		

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D
Inj Date : 02-FEB-2023 13:46
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020203.D Page 1
Report Date: 09-Feb-2023 15:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020203.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 02-FEB-2023 14:28
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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: 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)	583476	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	61218	1000.00	1147.78
140 1,3-Butadiene	54	1.164	1.164	(0.279)	174489	50.0000	43.57
25 Methacrylonitrile	41	3.818	3.818	(0.914)	215124	50.0000	52.06
12 Isobutyl Alcohol	43	4.669	4.669	(1.118)	732711	1000.00	1116.45
13 Acetonitrile	39	2.195	2.195	(0.525)	268674	500.000	505.94
14 Allyl Chloride	41	2.195	2.195	(0.525)	534010	50.0000	52.79
4 Propionitrile	54	3.645	3.645	(0.873)	311471	500.000	523.16
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	100273	50.0000	56.60
194 Acetaldehyde	44	1.209	1.209	(0.289)	50010	200.000	127.77(M)
23 Chloroprene	53	1.767	1.767	(0.423)	81327	50.0000	40.99(M)
130 Ethyl Acetate	43	3.645	3.645	(0.873)	250571	50.0000	55.03
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	222203	50.0000	55.85
49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	225205	50.0000	54.34
142 Tetrahydrofuran	42	3.836	3.836	(0.918)	70376	100.000	96.92
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	502238	50.0000	50.18
156 Diisopropyl ether	45	2.993	2.993	(0.716)	762866	50.0000	50.40
182 Epichlorohydrin	57	6.093	6.093	(1.228)	85347	200.000	216.34
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1104502	50.0000	50.78
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	442612	50.0000	108.00

3 Chloromethane	50	1.074	1.074 (0.257)	267981	50.0000	50.72
5 Vinyl Chloride	62	1.141	1.141 (0.273)	217447	50.0000	42.66

	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)	158975	50.0000	41.54
	7 Chloroethane	64	1.400	1.400	(0.335)	144524	50.0000	40.73
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	304014	50.0000	42.62
	9 Acrolein	56	1.441	1.441	(0.345)	33308	100.000	83.93
	10 Acetone	43	1.966	1.966	(0.471)	180136	100.000	110.03
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	181924	50.0000	41.08
	15 Iodomethane	142	2.026	2.026	(0.485)	565777	100.000	97.15
	16 Acrylonitrile	53	2.528	2.528	(0.605)	164065	100.000	109.23
	17 Methylene Chloride	84	2.299	2.299	(0.550)	273521	50.0000	45.02
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	729858	50.0000	50.35
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	1010500	100.000	87.21
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	230672	50.0000	46.54
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	1221898	100.000	96.03
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	412323	50.0000	47.40
	24 2-Butanone	43	3.574	3.574	(0.856)	196507	100.000	112.75
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	354294	50.0000	47.97
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	278317	50.0000	46.14
	28 Chloroform	83	3.900	3.900	(0.934)	473684	50.0000	48.58
	29 Bromochloromethane	128	3.791	3.791	(0.908)	150403	50.0000	45.54
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	262527	50.0000	46.84
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	374944	50.0000	48.47
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	313038	50.0000	50.10
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	382055	50.0000	52.98
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	304392	50.0000	45.62
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	298019	50.0000	50.39
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	880046	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	1024596	50.0000	48.75
	38 Trichloroethene	130	5.205	5.205	(1.049)	296779	50.0000	49.79
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	394491	50.0000	50.01
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	299069	100.000	133.28
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	275402	50.0000	49.26
	44 Dibromomethane	93	5.550	5.550	(1.119)	184545	50.0000	48.56
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	488667	100.000	111.41
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	488013	50.0000	52.68
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	820599	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	992628	50.0000	48.95
	50 Toluene	91	6.442	6.442	(0.840)	1114427	50.0000	49.13
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	422801	50.0000	55.00
	52 2-Hexanone	43	7.083	7.083	(0.924)	358355	100.000	120.08
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	228761	50.0000	50.27
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	467165	50.0000	52.15
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	339959	50.0000	51.76
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	222295	50.0000	47.36
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	302512	50.0000	53.17
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	201027	50.0000	47.26
	59 Chlorobenzene	112	7.690	7.690	(1.003)	788115	50.0000	48.98
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	307471	50.0000	51.35
	61 Ethylbenzene	106	7.799	7.799	(1.017)	373840	50.0000	49.33
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	955643	100.000	97.82
	63 o-Xylene	106	8.241	8.241	(1.075)	477399	50.0000	49.51
	64 Styrene	104	8.256	8.256	(1.077)	850913	50.0000	52.65
	66 Bromoform	173	8.410	8.410	(1.097)	237420	50.0000	52.18

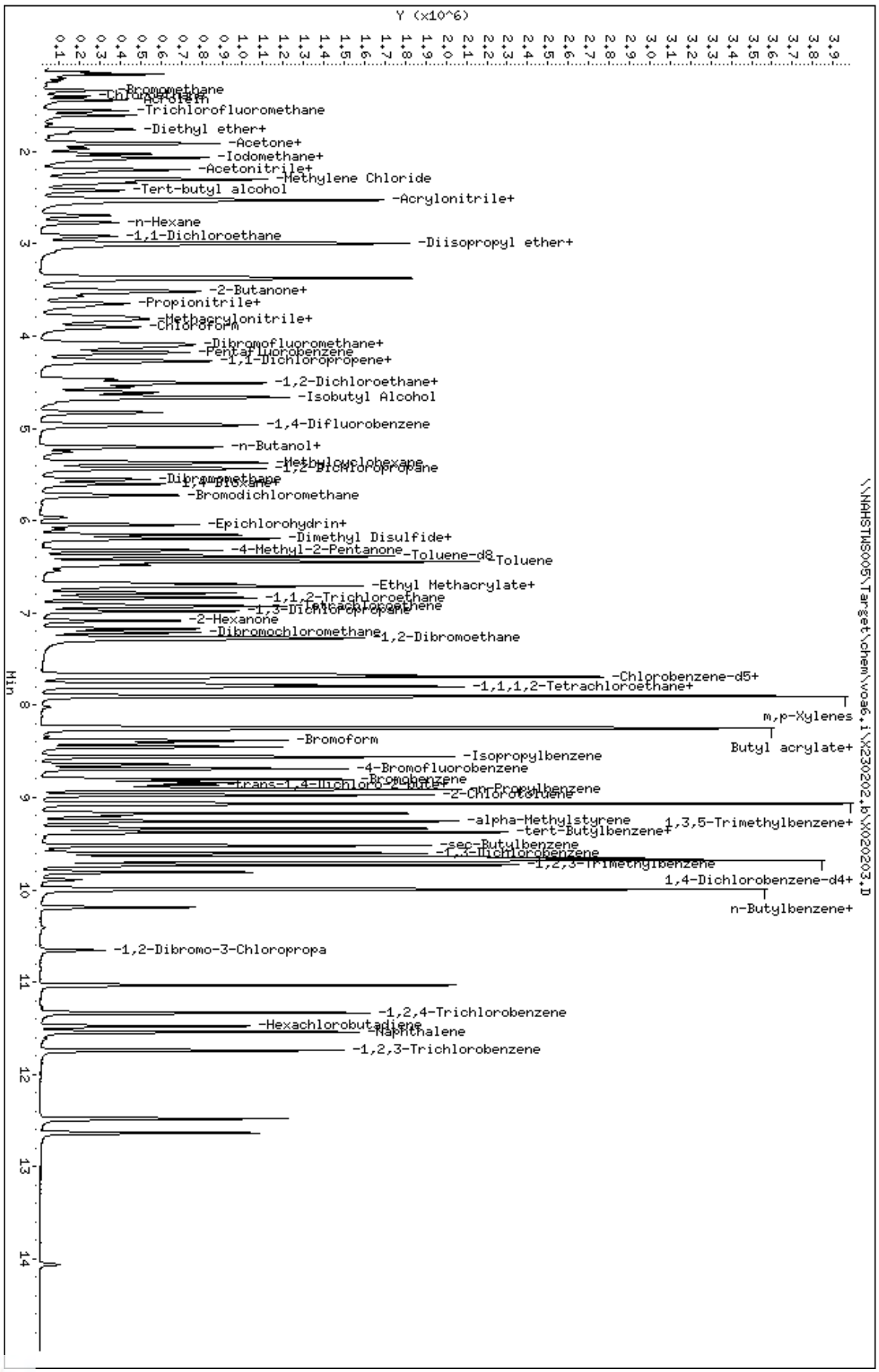
67	Isopropylbenzene	105	8.560	8.560 (1.116)	1106230	50.0000	50.21
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	365279	50.0000	50.74

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020203.D Page 3
Report Date: 09-Feb-2023 15:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	388063	50.0000	51.19
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	451653	50.0000	
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	293290	50.0000	58.35(M)
73 n-Propylbenzene	91	8.912	8.912	(0.922)	1310228	50.0000	52.37
74 Bromobenzene	156	8.803	8.803	(0.911)	382706	50.0000	51.64
75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	987073	50.0000	53.40
76 2-Chlorotoluene	91	8.972	8.972	(0.929)	868149	50.0000	52.88
77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1017565	50.0000	54.37
78 tert-Butylbenzene	119	9.336	9.336	(0.966)	780094	50.0000	51.56
79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1022536	50.0000	52.58
81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1069575	50.0000	53.13
82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	975729	50.0000	54.09
83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	648426	50.0000	52.72
84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	680507	50.0000	50.70
87 n-Butylbenzene	91	9.992	9.992	(1.034)	841682	50.0000	48.47
88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	651006	50.0000	51.39
89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	65090	50.0000	56.54
90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	460295	50.0000	57.58
91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	173812	50.0000	49.07
92 Naphthalene	128	11.540	11.540	(1.194)	1060839	50.0000	58.32
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	429378	50.0000	56.08
M 94 1,2-Dichloroethylene (total)	96				508989	100.000	(a)
141 Cyclohexane	56	4.121	4.121	(0.987)	259718	50.0000	44.30
138 Freon TF	101	1.910	1.910	(0.457)	171329	50.0000	40.00(M)
147 Methylcyclohexane	55	5.377	5.377	(1.084)	605612	50.0000	56.21
146 Methyl Acetate	43	2.228	2.228	(0.533)	143247	50.0000	54.55
148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	475143	1000.00	1176.04
149 Isopropyl Alcohol	45	2.086	2.086	(0.499)	255946	1000.00	1213.02

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\X230202.b\X020203.D
Date : 02-FEB-2023 14:28
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020203.D
Inj Date : 02-FEB-2023 14:28
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

BEFORE

MASS
75
AREA
293290
HEIGHT
217713
09-Feb-2023
15:23
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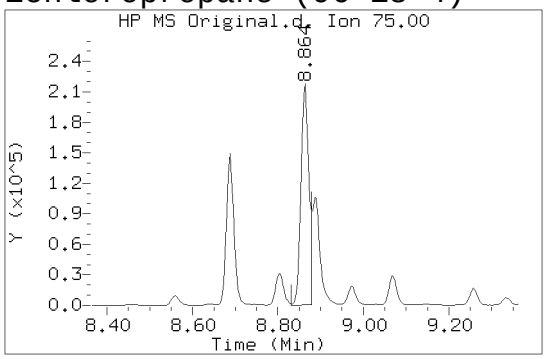

AFTER

MASS
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HEIGHT
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09-Feb-2023
15:23
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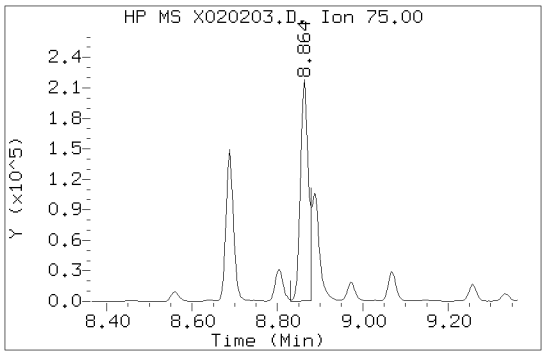
Bagsby



BEFORE

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09-Feb-2023
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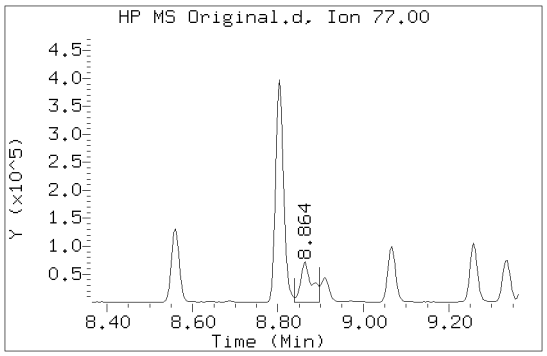

AFTER

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137802
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09-Feb-2023
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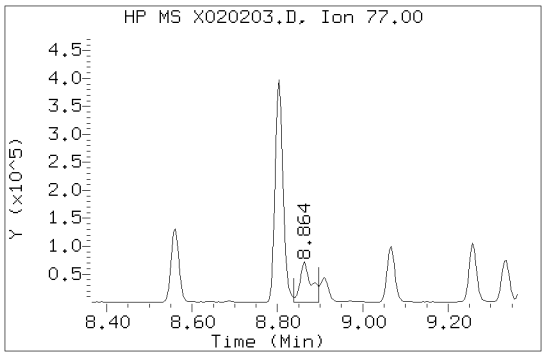
Kori
Bagsby



Chloroprene (126-99-8)

Reason Code:

BEFORE

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09-Feb-2023
15:23
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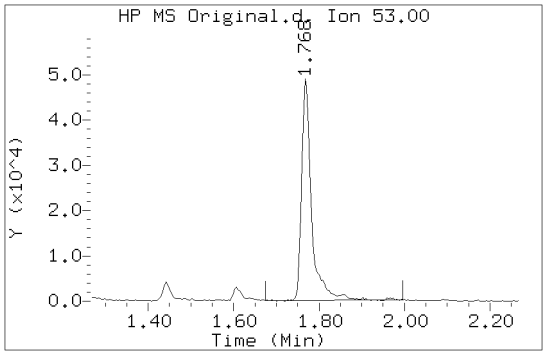
Bagsby



AFTER

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09-Feb-2023
15:23
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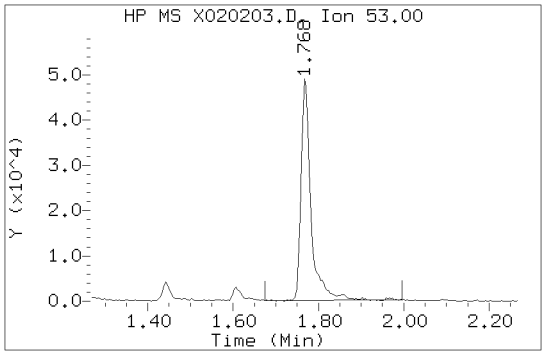
Bagsby



BEFORE

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0
09-Feb-2023
15:23
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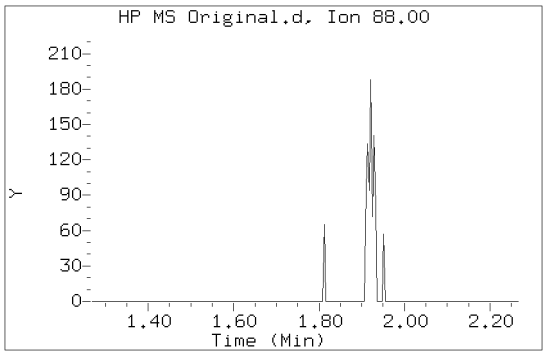
Bagsby



AFTER

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AREA
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HEIGHT
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09-Feb-2023
15:23
Kori
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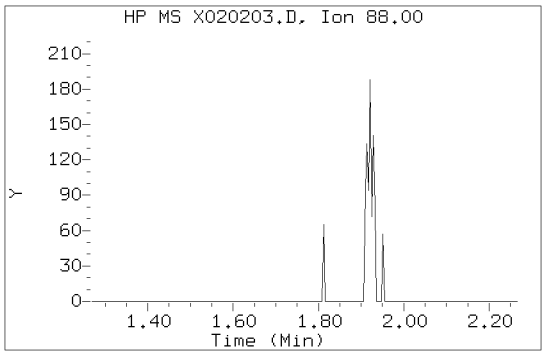

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Inj Date : 02-FEB-2023 14:28
InstruID : voa6.i
LabSampID : CCV

Freon TF (76-13-1)

Reason Code:

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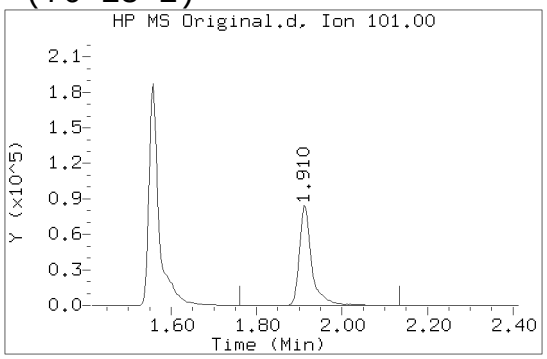
09-Feb-2023
15:23
Kori
Bagsby



AFTER
MASS
101
AREA
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HEIGHT
84555
09-Feb-2023
15:23
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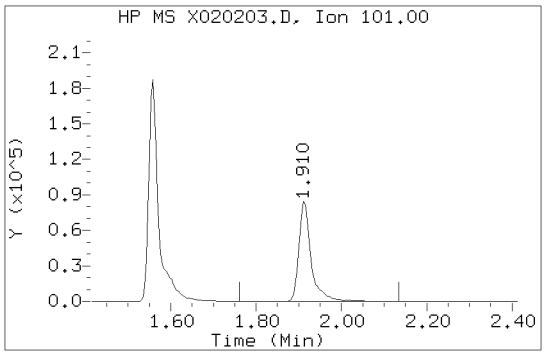

BEFORE
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09-Feb-2023
15:23
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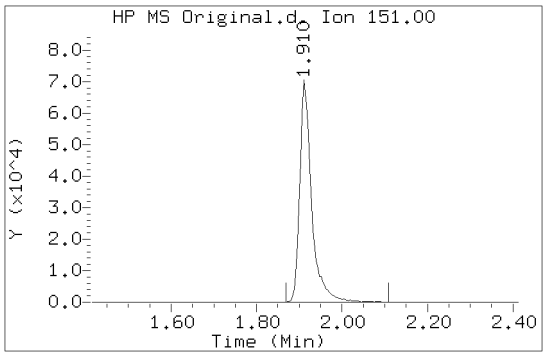

AFTER
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AREA
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HEIGHT
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09-Feb-2023
15:23
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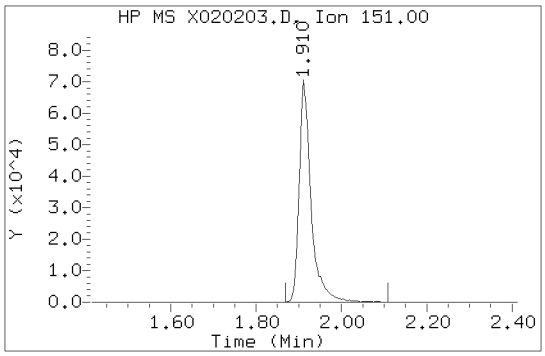

Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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44
AREA
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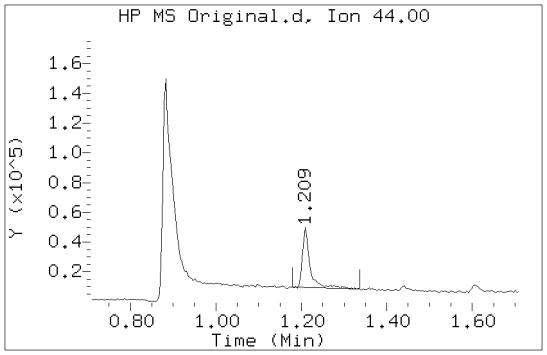
HEIGHT
40232
09-Feb-2023
15:23
Kori
Bagsby



AFTER
MASS
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AREA
50010
HEIGHT
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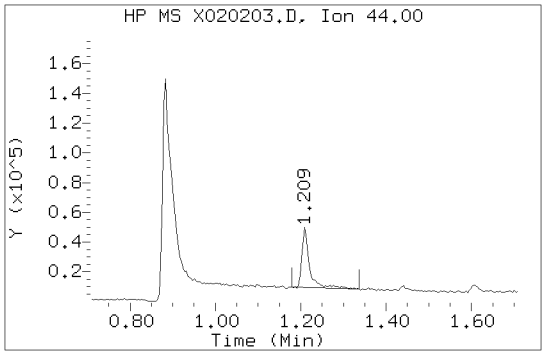
09-Feb-2023
15:23
Kori
Bagsby



BEFORE
MASS
43
AREA
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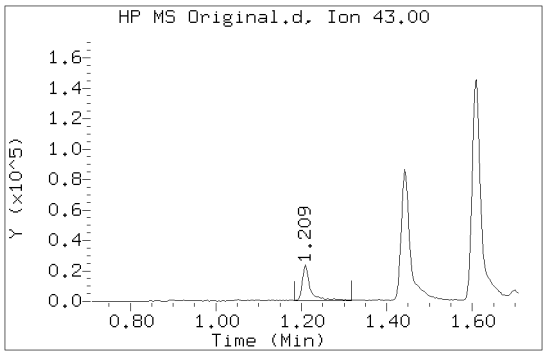
HEIGHT
23297
09-Feb-2023
15:23
Kori
Bagsby



AFTER
MASS
43
AREA
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HEIGHT
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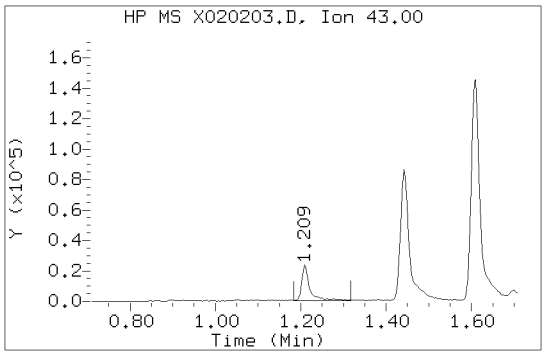
09-Feb-2023
15:23
Kori
Bagsby



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Inj Date : 02-FEB-2023 14:28
InstruID : voa6.i
LabSampID : CCV

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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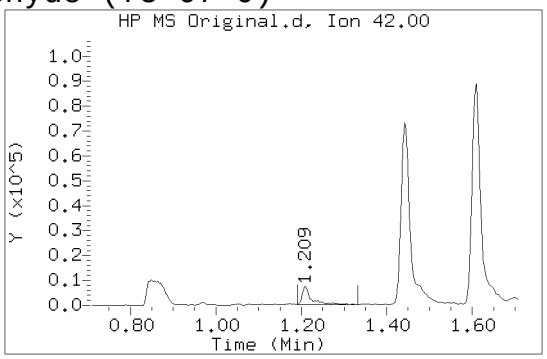
09-Feb-2023
15:23
Kori
Bagsby



AFTER

MASS
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7459
09-Feb-2023
15:23
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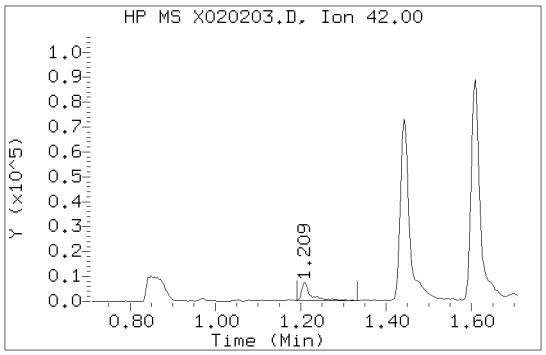
Bagsby



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020204.D Page 1
Report Date: 09-Feb-2023 15:23

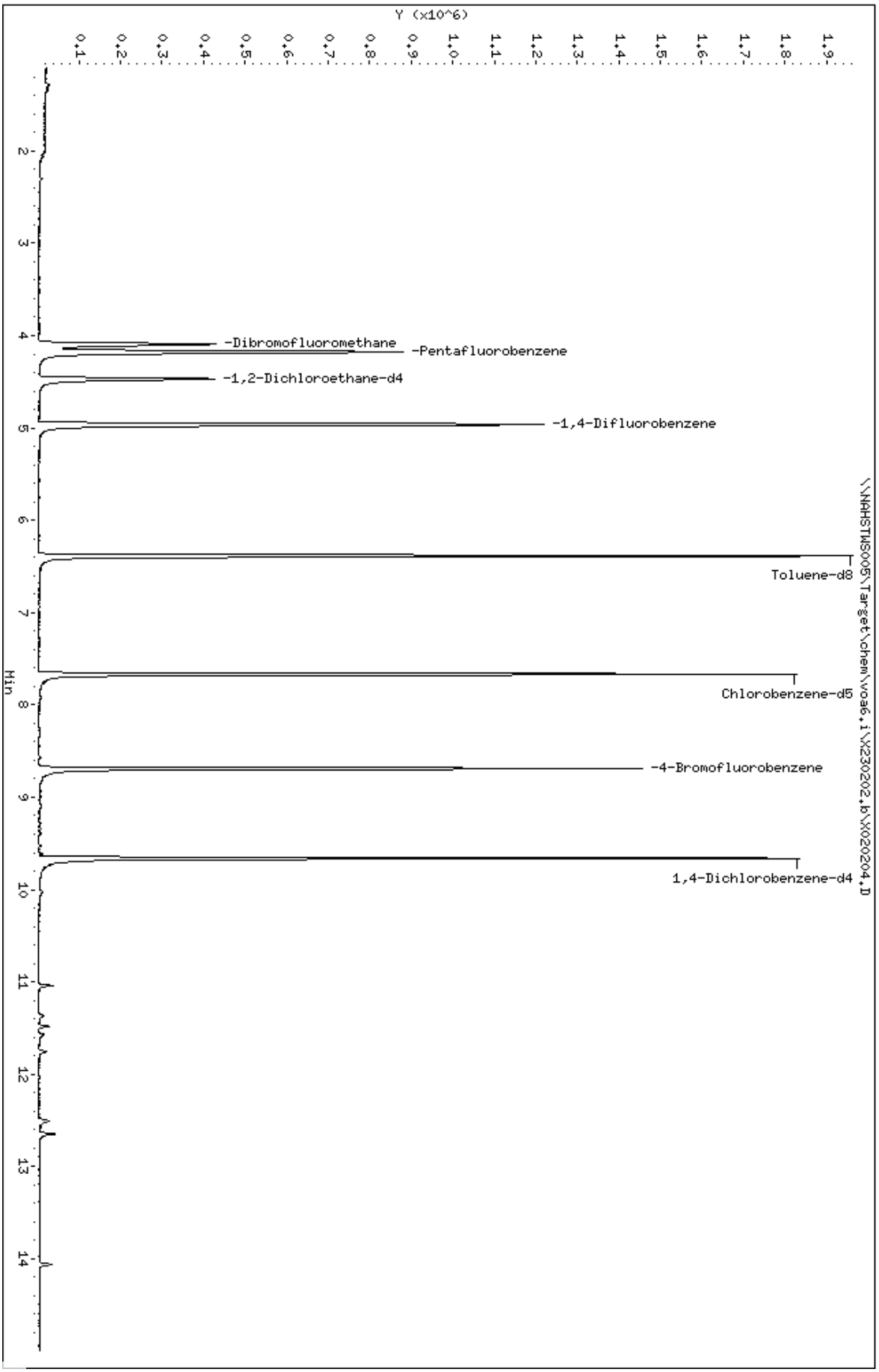
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020204.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 02-FEB-2023 14:49
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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	4.178	(1.000)	730612	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	308376	43.9374	43.93
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	347934	47.0055	47.00
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1012385	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	908237	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1180130	52.5830	52.58
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	424856	50.6439	50.64
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	456862	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020204.D
Date : 02-FEB-2023 14:49
Client ID: CCB
Sample Info: CCB;CCB;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020204.D
Inj Date : 02-FEB-2023 14:49
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020205.D Page 1
Report Date: 09-Feb-2023 15:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020205.D
Lab Smp Id: VLCSW-230202 Client Smp ID: VLCSW-230202
Inj Date : 02-FEB-2023 15:10
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230202;VLCSW-230202;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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: 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)	594963	50.0000	
135	1,4-Dioxane	88	5.598	5.598	(1.340)	24592	452.177	452.17(a)
140	1,3-Butadiene	54	1.160	1.164	(0.278)	86267	21.1266	21.12
25	Methacrylonitrile	41	3.818	3.818	(0.914)	87366	20.7380	20.73
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	293271	438.240	438.23
13	Acetonitrile	39	2.195	2.195	(0.525)	115189	212.726	212.72
14	Allyl Chloride	41	2.195	2.195	(0.525)	220376	21.3686	21.36
4	Propionitrile	54	3.653	3.645	(0.874)	123490	203.418	203.41(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	39678	22.3095	22.30
194	Acetaldehyde	44	1.209	1.209	(0.289)	87720	236.565	236.56
23	Chloroprene	53	1.771	1.767	(0.424)	40311	19.9268	19.92(M)
130	Ethyl Acetate	43	3.656	3.645	(0.875)	108810	23.4373	23.43
40	Methyl Methacrylate	41	5.606	5.602	(1.342)	88361	21.7811	21.78
49	Ethyl Methacrylate	69	6.708	6.708	(1.351)	90634	22.0542	22.05
142	Tetrahydrofuran	42	3.840	3.836	(0.919)	27154	34.7084	34.70
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	239643	23.3661	23.36
156	Diisopropyl ether	45	2.997	2.993	(0.717)	311315	20.1709	20.17
182	Epichlorohydrin	57	6.097	6.093	(1.228)	35375	91.8801	91.88
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	470299	21.0994	21.09
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	227060	54.5299	54.52

3 Chloromethane	50	1.074	1.074 (0.257)	120708	23.6437	23.64
5 Vinyl Chloride	62	1.141	1.141 (0.273)	104505	20.1074	20.10

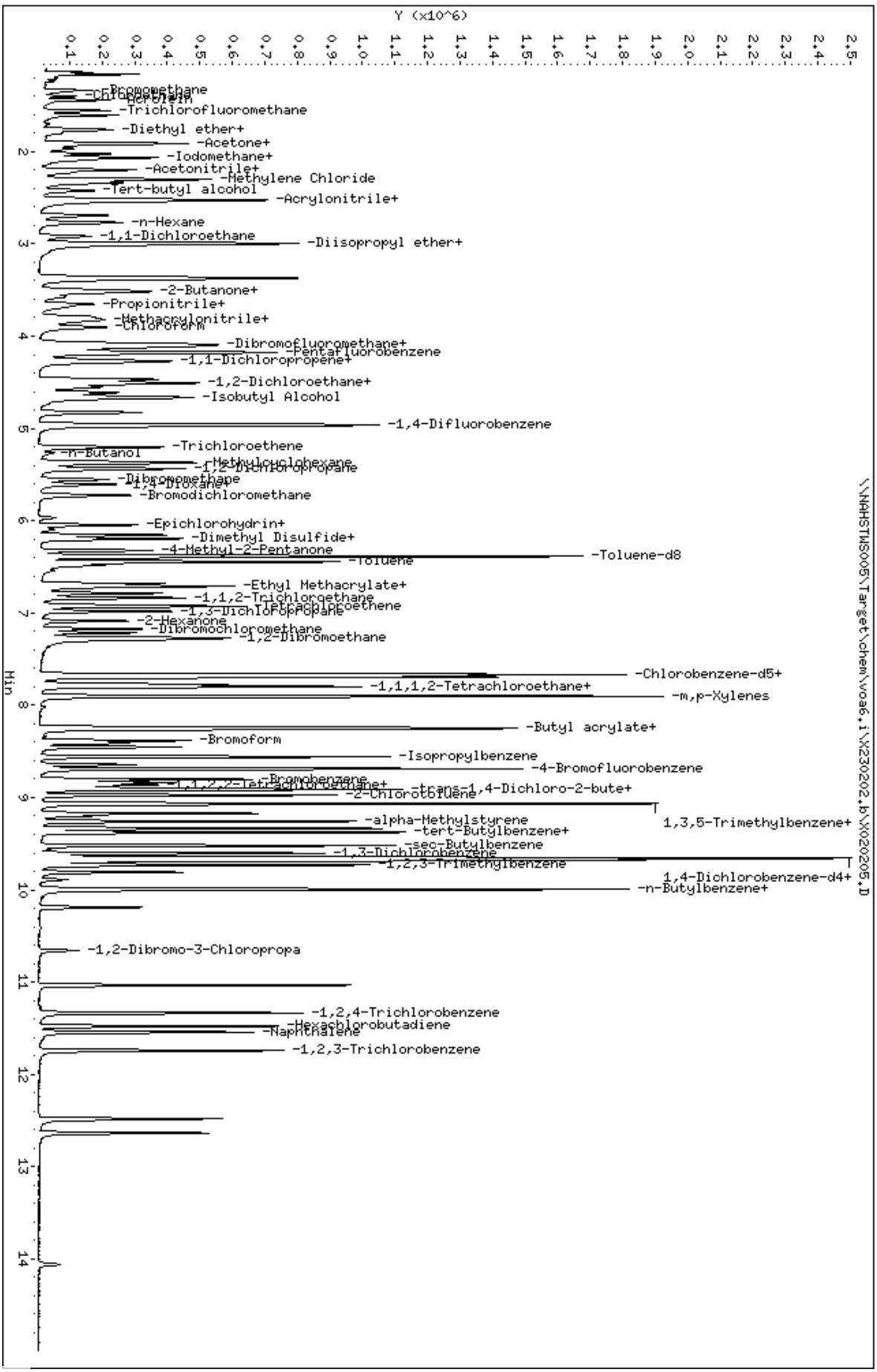
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	71935	19.4178	19.41
	7 Chloroethane	64	1.400	1.400	(0.335)	64477	17.8236	17.82
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	154853	21.2911	21.29
	9 Acrolein	56	1.441	1.441	(0.345)	16111	41.2994	41.29
	10 Acetone	43	1.970	1.966	(0.472)	75792	45.3817	45.38
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	84464	18.7053	18.70
	15 Iodomethane	142	2.026	2.026	(0.485)	222991	40.4860	40.48
	16 Acrylonitrile	53	2.532	2.528	(0.606)	66029	43.1145	43.11
	17 Methylene Chloride	84	2.299	2.299	(0.550)	120639	19.4774	19.47
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	301513	20.3998	20.39
	19 Carbon Disulfide	76	2.063	2.067	(0.494)	466440	39.4813	39.48
	20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	103777	20.5350	20.53
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	578196	44.5638	44.56
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	177259	19.9858	19.98
	24 2-Butanone	43	3.574	3.574	(0.856)	76905	45.1417	45.14
	26 2,2-Dichloropropane	77	3.503	3.507	(0.838)	174926	23.2290	23.22
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	118520	19.2708	19.27
	28 Chloroform	83	3.904	3.900	(0.935)	200779	20.1975	20.19
	29 Bromochloromethane	128	3.791	3.791	(0.908)	62299	18.5007	18.50
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	258273	45.1934	45.19
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	177716	22.5324	22.53
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	156883	25.3212	25.32
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	166375	23.2682	23.26
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	155136	23.4481	23.44
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	305949	50.7356	50.73
*	36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	872700	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	442781	21.2468	21.24
	38 Trichloroethene	130	5.205	5.205	(1.048)	131469	22.2419	22.24
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	162465	20.7728	20.77
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	119749	53.8185	53.81
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	113989	20.5625	20.56
	44 Dibromomethane	93	5.553	5.550	(1.119)	75882	20.1389	20.13
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	199713	45.3525	45.35
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	198763	21.6395	21.63
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	823868	50.0000	
$	48 Toluene-d8	98	6.382	6.386	(0.832)	979100	48.0933	48.09
	50 Toluene	91	6.445	6.442	(0.841)	504336	22.1472	22.14
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	173578	22.7714	22.77
	52 2-Hexanone	43	7.086	7.083	(0.924)	145894	48.6955	48.69
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	94630	20.7138	20.71
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	194962	21.6813	21.68
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	138469	21.0007	21.00
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	116973	24.8266	24.82
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	124710	21.8333	21.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	119162	28.2543	28.25
	59 Chlorobenzene	112	7.694	7.690	(1.003)	353547	21.8887	21.88
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	131209	21.8284	21.82
	61 Ethylbenzene	106	7.799	7.799	(1.017)	180425	23.7138	23.71
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	461222	47.0243	47.02
	63 o-Xylene	106	8.241	8.241	(1.075)	222271	22.9605	22.96
	64 Styrene	104	8.260	8.256	(1.077)	378989	23.3572	23.35
	66 Bromoform	173	8.410	8.410	(1.097)	97153	21.2686	21.26

67	Isopropylbenzene	105	8.560	8.560 (1.116)	574786	25.9890	25.98
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	156473	21.2095	21.20

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	386427	50.7801	50.78
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	462872	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	116712	22.6606	22.66(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	693479	27.0478	27.04
	74 Bromobenzene	156	8.803	8.803	(0.911)	169211	22.2819	22.28
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	504775	26.6508	26.65
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	423017	25.1428	25.14
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	493524	25.7314	25.73
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	422004	27.2192	27.21
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	514275	25.8052	25.80
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	597762	28.9775	28.97
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	530388	28.6927	28.69
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	310849	24.6618	24.66
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	320708	23.3168	23.31
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	483146	27.9327	27.93
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	306509	23.6117	23.61
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	27762	23.5862	23.58
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	234647	28.6423	28.64
	91 Hexachlorobutadiene	225	11.476	11.480	(1.188)	123867	34.2291	34.22
	92 Naphthalene	128	11.544	11.540	(1.195)	480316	25.7687	25.76
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	214272	27.3093	27.30
M	94 1,2-Dichloroethylene (total)	96				222297	39.8058	39.80
M	95 Xylenes (total)	106				683493	69.9848	69.98
	141 Cyclohexane	56	4.118	4.121	(0.986)	162532	27.6791	27.67
	138 Freon TF	101	1.910	1.910	(0.457)	99600	22.8053	22.80
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	266715	24.9673	24.96
	146 Methyl Acetate	43	2.228	2.228	(0.533)	54090	20.2040	20.20
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	201447	488.983	488.98
	149 Isopropyl Alcohol	45	2.090	2.086	(0.500)	107268	498.570	498.56

QC Flag Legend

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



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Sample Info: VLCSW-230202;VLCSW-230202;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\X230202.b\X020205.D
Inj Date : 02-FEB-2023 15:10
InstruID : voa6.i
LabSampID : VLCSW-230202

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

Reason Code:

BEFORE

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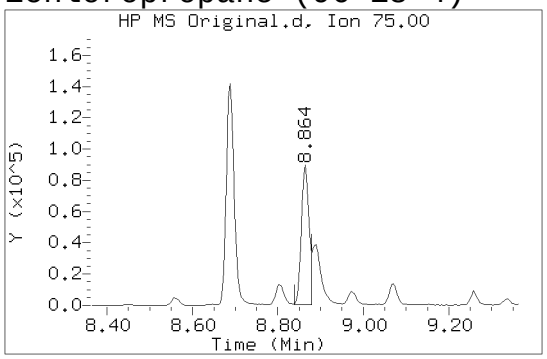
AREA
116712
HEIGHT
89632
09-Feb-2023
15:23
Kori
Bagsby



AFTER

MASS
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AREA
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09-Feb-2023
15:23
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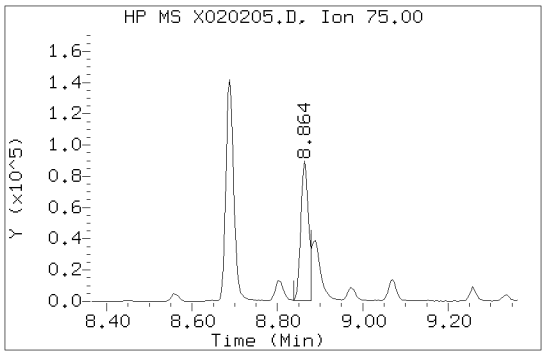

BEFORE

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09-Feb-2023
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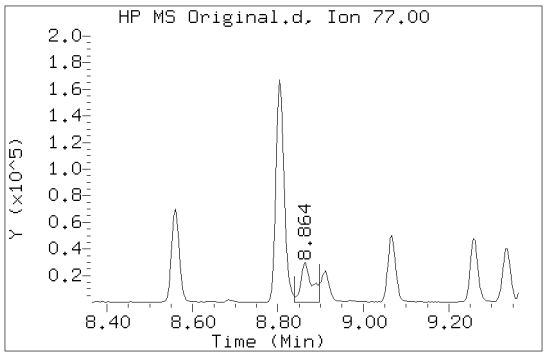

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09-Feb-2023
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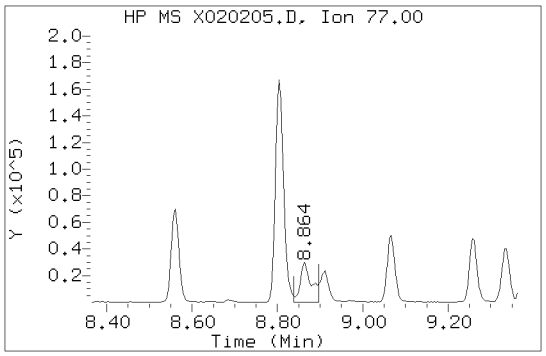

Chloroprene (126-99-8)

Reason Code:

BEFORE

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HEIGHT
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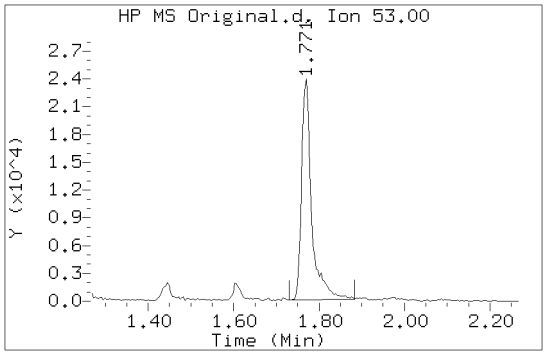
09-Feb-2023
15:23
Kori
Bagsby



AFTER

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40311
HEIGHT
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09-Feb-2023
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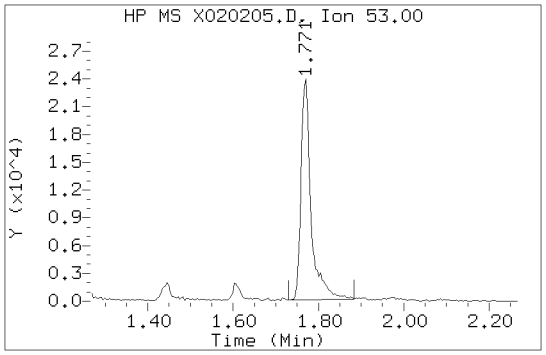
Bagsby



BEFORE

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09-Feb-2023
15:23
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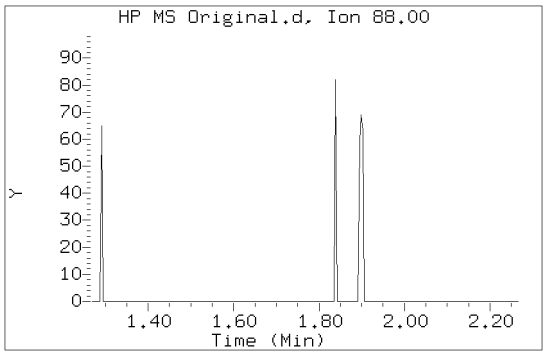
Bagsby



AFTER

MASS
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HEIGHT
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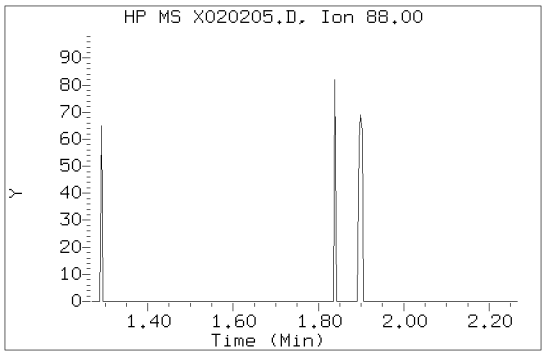
09-Feb-2023
15:23
Kori
Bagsby



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020208.D Page 1
Report Date: 09-Feb-2023 15:28

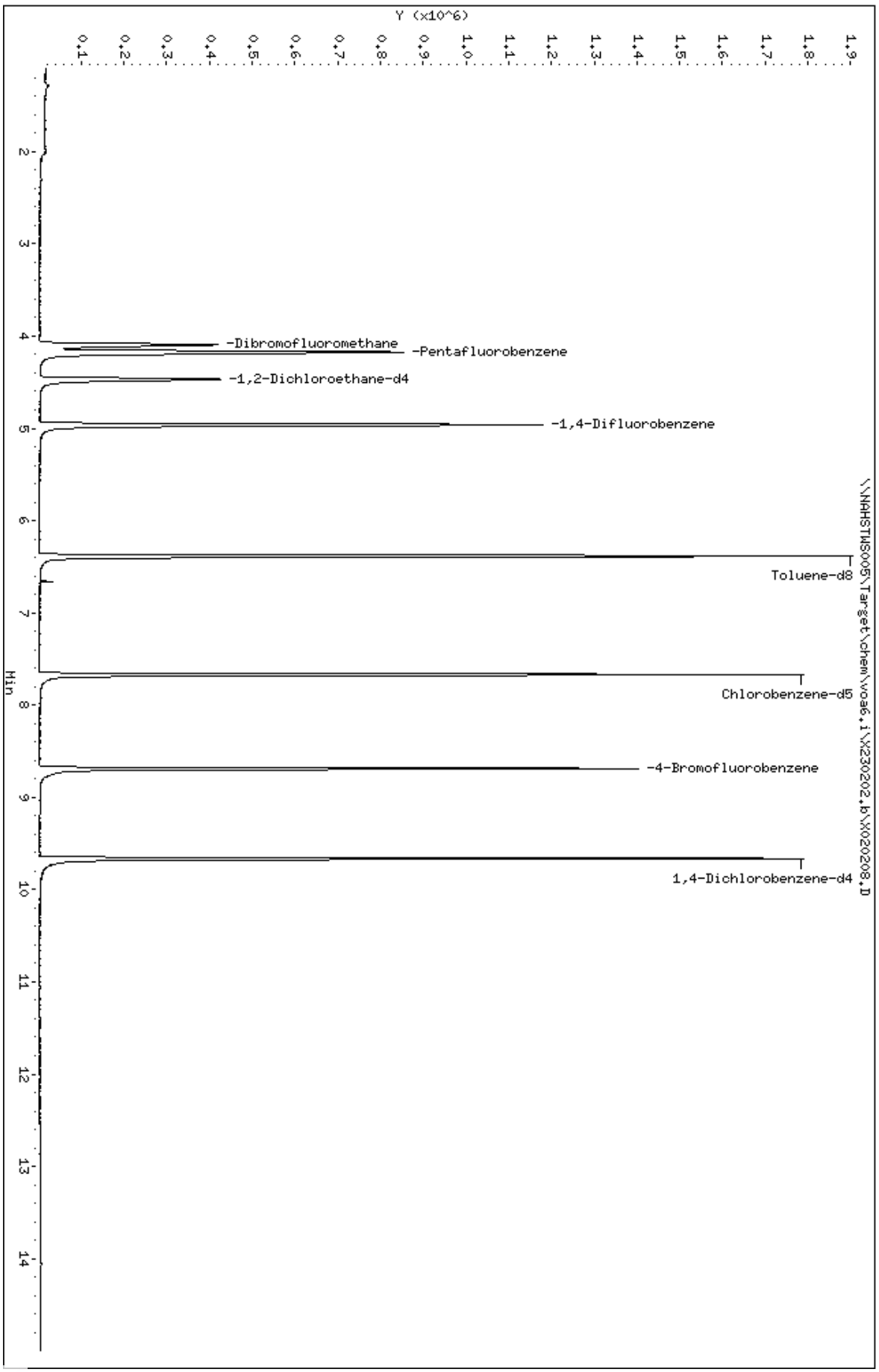
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020208.D
Lab Smp Id: VBLKW-230202 Client Smp ID: VBLKW-230202
Inj Date : 02-FEB-2023 16:13
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230202;VBLKW-230202;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 8 QC Sample: BLANK
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	4.174	4.174	(1.000)	709559	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	306011	44.8977	44.89
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	346070	48.1344	48.13
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	999005	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	876582	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1144704	52.8464	52.84
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	416641	51.4572	51.45
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	449203	50.0000	



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Date : 02-FEB-2023 16:13
Client ID: VBLKW-230202
Sample Info: VBLKW-230202;VBLKW-230202;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\X230202.b\X020208.D
Inj Date : 02-FEB-2023 16:13
InstruID : voa6.i
LabSampID : VBLKW-230202

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020217.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020217.D
Lab Smp Id: HS23011294-08MS Client Smp ID: HS23011294-08MS
Inj Date : 02-FEB-2023 19:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-08MS;HS23011294-08MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.174	(1.000)	708429	50.0000	
135	1,4-Dioxane	88	5.602	5.598	(1.341)	24851	383.753	383.75(a)
140	1,3-Butadiene	54	1.160	1.164	(0.278)	73715	15.1612	15.16
25	Methacrylonitrile	41	3.822	3.818	(0.915)	89179	17.7779	17.77
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	307933	386.449	386.44
13	Acetonitrile	39	2.195	2.195	(0.525)	123389	191.372	191.37
14	Allyl Chloride	41	2.195	2.195	(0.525)	233001	18.9742	18.97
4	Propionitrile	54	3.649	3.645	(0.873)	134255	185.730	185.72(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	39450	20.2648	20.26
194	Acetaldehyde	44	1.209	1.209	(0.289)	87439	194.247	194.24
23	Chloroprene	53	1.767	1.767	(0.423)	42672	17.7154	17.71(M)
130	Ethyl Acetate	43	3.649	3.649	(0.873)	100782	18.2312	18.23
40	Methyl Methacrylate	41	5.606	5.602	(1.342)	88596	18.3411	18.34
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	87248	18.6225	18.62
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	32622	35.0475	35.04
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	224178	20.5753	20.57
156	Diisopropyl ether	45	2.997	2.997	(0.717)	336183	18.2934	18.29
182	Epichlorohydrin	57	6.097	6.093	(1.229)	20820	48.6430	48.64
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	500253	21.1260	21.12
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	55828	11.5717	11.57

3 Chloromethane	50	1.074	1.074 (0.257)	95793	16.4959	16.49
5 Vinyl Chloride	62	1.141	1.141 (0.273)	94303	15.2384	15.23

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020217.D Page 2
Report Date: 13-Feb-2023 14:53

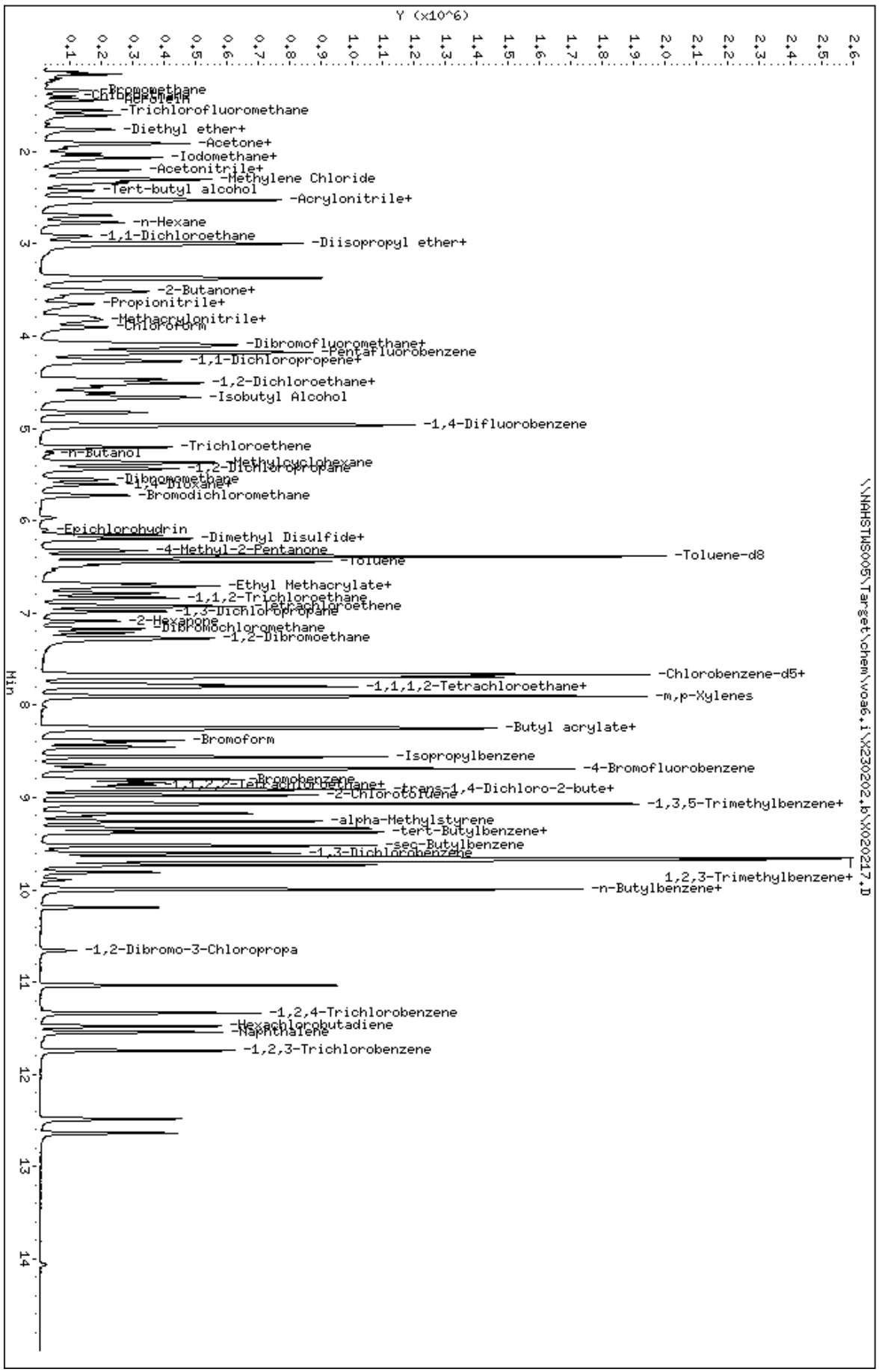
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
6	Bromomethane	94	1.336	1.336	(0.320)	70530	16.3007	16.30
7	Chloroethane	64	1.400	1.400	(0.335)	63204	14.6733	14.67
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	162865	18.8062	18.80
9	Acrolein	56	1.441	1.441	(0.345)	17735	38.3940	38.39
10	Acetone	43	1.970	1.970	(0.472)	48951	24.6000	24.60
11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	88194	16.4031	16.40
15	Iodomethane	142	2.026	2.026	(0.485)	194526	30.6595	30.65
16	Acrylonitrile	53	2.532	2.528	(0.606)	70030	38.4031	38.40
17	Methylene Chloride	84	2.300	2.300	(0.550)	118931	16.1262	16.12
18	Methyl tert-butyl ether	73	2.532	2.532	(0.606)	327355	18.6009	18.60
19	Carbon Disulfide	76	2.063	2.067	(0.494)	504447	35.8596	35.85
20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	111768	18.5740	18.57
21	Vinyl Acetate	43	2.993	2.993	(0.716)	554223	35.8745	35.87
22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	186405	17.6508	17.65
24	2-Butanone	43	3.578	3.570	(0.856)	67497	34.0691	34.06
26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	175533	19.5762	19.57
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	122612	16.7431	16.74
28	Chloroform	83	3.904	3.900	(0.935)	206478	17.4440	17.44
29	Bromochloromethane	128	3.792	3.791	(0.908)	62625	15.6188	15.61
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.980)	293441	43.1156	43.11
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	197182	20.9963	20.99
32	1,1-Dichloropropene	75	4.275	4.275	(0.862)	168092	23.7978	23.79
33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	164589	20.1910	20.19
34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	170417	22.5938	22.59
$ 35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	342035	47.6518	47.65
* 36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	994906	50.0000	
37	Benzene	78	4.508	4.507	(0.909)	469783	19.7736	19.77
38	Trichloroethene	130	5.205	5.205	(1.049)	143642	21.3164	21.31
39	Bromodichloromethane	83	5.726	5.722	(1.154)	164471	18.4462	18.44
42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	115634	18.2971	18.29
44	Dibromomethane	93	5.550	5.553	(1.119)	74891	17.4345	17.43
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.825)	199430	41.3752	41.37
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	193998	18.5264	18.52
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	901784	50.0000	
$ 48	Toluene-d8	98	6.386	6.386	(0.833)	1153170	51.7494	51.74
50	Toluene	91	6.446	6.446	(0.841)	524393	21.0384	21.03
51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	166592	19.1705	19.17
52	2-Hexanone	43	7.087	7.083	(0.924)	129621	39.5259	39.52
53	1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	91395	18.2772	18.27
54	1,3-Dichloropropane	76	6.982	6.978	(0.911)	193337	19.6429	19.64
55	Dibromochloromethane	129	7.173	7.173	(0.935)	137861	19.1019	19.10
56	Tetrachloroethene	164	6.925	6.925	(0.903)	123210	23.8909	23.89
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	124597	19.9288	19.92
58	1-Chlorohexane	55	7.694	7.694	(1.551)	126119	26.2308	26.23
59	Chlorobenzene	112	7.694	7.694	(1.003)	352600	19.9439	19.94
60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	131543	19.9931	19.99
61	Ethylbenzene	106	7.799	7.795	(1.017)	187672	22.5351	22.53
62	m,p-Xylenes	106	7.904	7.900	(1.031)	473258	44.0824	44.08
63	o-Xylene	106	8.241	8.241	(1.075)	224700	21.2059	21.20
64	Styrene	104	8.260	8.256	(1.077)	375201	21.1258	21.12
66	Bromoform	173	8.410	8.410	(1.097)	93733	18.7470	18.74
67	Isopropylbenzene	105	8.560	8.560	(1.116)	590482	24.3918	24.39

	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	152287	19.4305	19.43
$	69	4-Bromofluorobenzene	95	8.687	8.687 (1.133)	435042	52.2272	52.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	491734	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	112855	20.6257	20.62(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	691934	25.4035	25.40
	74 Bromobenzene	156	8.803	8.803	(0.911)	167031	20.7038	20.70
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	499047	24.8018	24.80
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	417759	23.3729	23.37
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	482406	23.6755	23.67
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	433998	26.3498	26.34
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	496696	23.4603	23.46
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	605534	27.6313	27.63
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	525432	26.7562	26.75
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	294969	22.0283	22.02
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	307479	21.0429	21.04
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	452118	24.8162	24.81
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	284576	20.6354	20.63
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	25952	20.7654	20.76
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.173)	199654	22.9404	22.94
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	99660	25.9618	25.96
	92 Naphthalene	128	11.544	11.540	(1.195)	429341	21.6819	21.68
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	183659	22.0337	22.03
M	94 1,2-Dichloroethylene (total)	96				234380	35.3170	35.31
M	95 Xylenes (total)	106				697958	65.2883	65.28
	141 Cyclohexane	56	4.121	4.118	(0.987)	183976	26.3751	26.37
	138 Freon TF	101	1.913	1.913	(0.458)	102856	19.7788	19.77
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	293793	24.1240	24.12
	146 Methyl Acetate	43	2.228	2.225	(0.533)	56470	17.7146	17.71
	148 Tert-Butyl alcohol	59	2.427	2.419	(0.581)	197904	403.442	403.44
	149 Isopropyl Alcohol	45	2.090	2.086	(0.500)	106810	416.928	416.92

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: HS230111294-08MS;HS230111294-08MS;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\X230202.b\X020217.D
Inj Date : 02-FEB-2023 19:23
InstruID : voa6.i
LabSampID : HS23011294-08MS

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

Reason Code:

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HEIGHT
90651
09-Feb-2023
15:23
Kori
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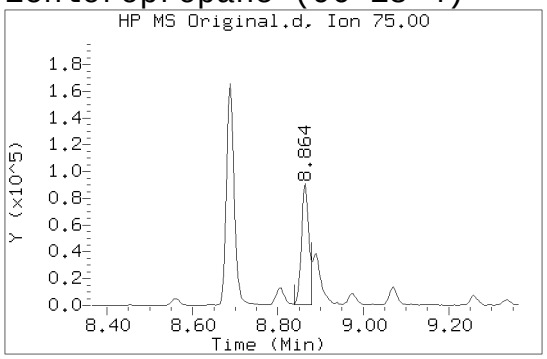

AFTER
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13-Feb-2023
14:52
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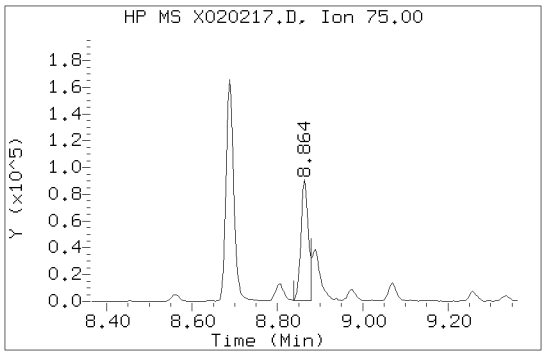

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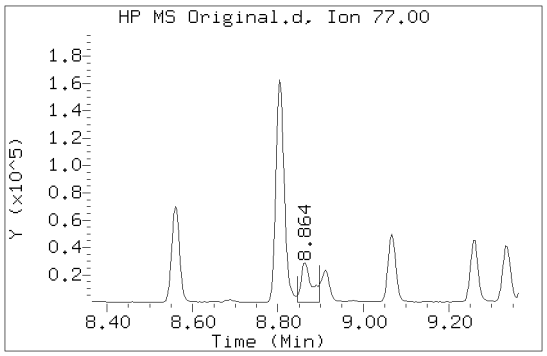

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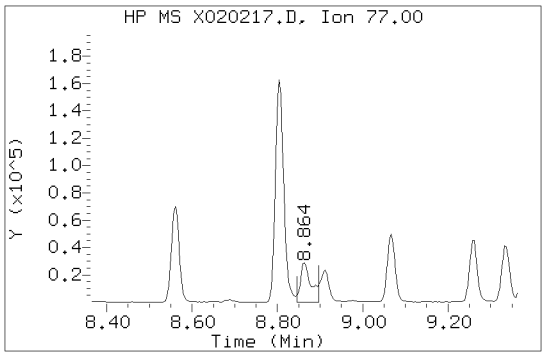

Chloroprene (126-99-8)

Reason Code:

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09-Feb-2023
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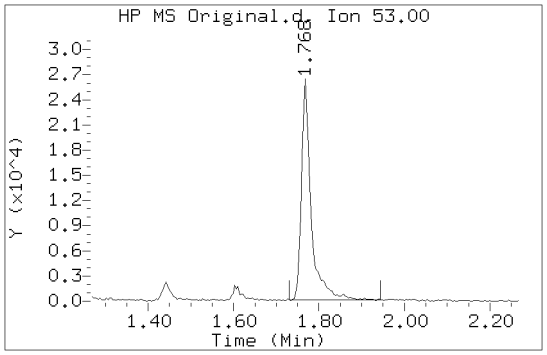

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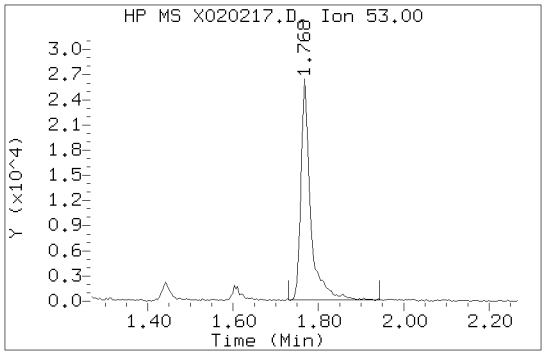

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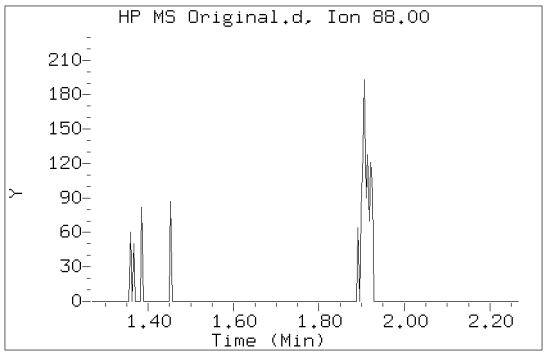

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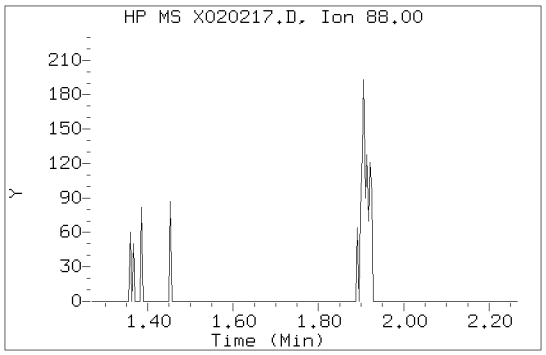
Bags



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Report Date: 14-Feb-2023 11:00

ALS Laboratory Group

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Inj Date : 02-FEB-2023 19:44
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-08MSD;HS23011294-08MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 13-Feb-2023 14:53 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.174	(1.000)	712554	50.0000	
135	1,4-Dioxane	88	5.602	5.598	(1.341)	24829	381.194	381.19(a)
140	1,3-Butadiene	54	1.160	1.164	(0.278)	69336	14.1780	14.17
25	Methacrylonitrile	41	3.818	3.818	(0.914)	87643	17.3706	17.37
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	292650	365.143	365.14
13	Acetonitrile	39	2.194	2.195	(0.525)	118953	183.424	183.42
14	Allyl Chloride	41	2.194	2.195	(0.525)	231115	18.7117	18.71
4	Propionitrile	54	3.649	3.645	(0.873)	130251	179.147	179.14(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	38038	19.4910	19.49
194	Acetaldehyde	44	1.209	1.209	(0.289)	85168	187.370	187.37
23	Chloroprene	53	1.767	1.767	(0.423)	42481	17.5340	17.53(M)
130	Ethyl Acetate	43	3.653	3.649	(0.874)	100150	18.0120	18.01
40	Methyl Methacrylate	41	5.606	5.602	(1.342)	89452	18.4111	18.41
49	Ethyl Methacrylate	69	6.712	6.708	(1.353)	83095	17.6304	17.63
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	31005	32.9430	32.94
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	219916	20.2218	20.22
156	Diisopropyl ether	45	2.997	2.997	(0.717)	337966	18.2840	18.28
182	Epichlorohydrin	57	6.097	6.093	(1.229)	19435	45.3167	45.31
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	494570	20.9250	20.92
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	52801	10.9044	10.90

3 Chloromethane	50	1.074	1.074 (0.257)	92555	15.9331	15.93
5 Vinyl Chloride	62	1.141	1.141 (0.273)	91691	14.7305	14.73

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020218.D Page 2
Report Date: 14-Feb-2023 11:00

	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)	66976	15.4883	15.48
	7 Chloroethane	64	1.400	1.400	(0.335)	61292	14.1471	14.14
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	157793	18.1150	18.11
	9 Acrolein	56	1.441	1.441	(0.345)	16902	36.5269	36.52
	10 Acetone	43	1.970	1.970	(0.472)	50962	25.4636	25.46
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	85788	15.8633	15.86
	15 Iodomethane	142	2.022	2.026	(0.484)	214690	33.2864	33.28
	16 Acrylonitrile	53	2.532	2.528	(0.606)	69967	38.1465	38.14
	17 Methylene Chloride	84	2.299	2.300	(0.550)	114130	15.3856	15.38
	18 Methyl tert-butyl ether	73	2.528	2.532	(0.605)	320998	18.1341	18.13
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	484349	34.2315	34.23
	20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	105773	17.4759	17.47
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	547809	35.2540	35.25
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	178597	16.8135	16.81
	24 2-Butanone	43	3.578	3.570	(0.856)	66662	33.5075	33.50
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	167311	18.5512	18.55
	27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	120098	16.3048	16.30
	28 Chloroform	83	3.904	3.900	(0.935)	203146	17.0632	17.06
	29 Bromochloromethane	128	3.791	3.791	(0.908)	60953	15.1138	15.11
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	295054	43.1015	43.10
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	189115	20.0207	20.02
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	160857	22.6378	22.63
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	161237	19.6619	19.66
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	162812	21.4569	21.45
$	35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.069)	342861	47.4912	47.49
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1000871	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	457092	19.1247	19.12
	38 Trichloroethene	130	5.205	5.205	(1.049)	136470	20.1314	20.13
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	161890	18.0485	18.04
	42 1,2-Dichloropropane	63	5.437	5.433	(1.096)	114998	18.0880	18.08
	44 Dibromomethane	93	5.550	5.553	(1.119)	74938	17.3414	17.34
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	190891	39.5054	39.50
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	194406	18.4548	18.45
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	904027	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1162118	52.0216	52.02
	50 Toluene	91	6.445	6.446	(0.841)	510049	20.4121	20.41
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	166298	19.0226	19.02
	52 2-Hexanone	43	7.086	7.083	(0.924)	132372	40.2646	40.26
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	93302	18.6122	18.61
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	191052	19.3626	19.36
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	136848	18.9145	18.91
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	118869	22.9920	22.99
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	122788	19.5907	19.59
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	121704	25.1616	25.16
	59 Chlorobenzene	112	7.694	7.694	(1.003)	346334	19.5409	19.54
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	127318	19.3029	19.30
	61 Ethylbenzene	106	7.799	7.795	(1.017)	180484	21.6182	21.61
	62 m,p-Xylenes	106	7.904	7.900	(1.031)	458205	42.5744	42.57
	63 o-Xylene	106	8.241	8.241	(1.075)	216130	20.3465	20.34
	64 Styrene	104	8.260	8.256	(1.077)	365978	20.5553	20.55
	66 Bromoform	173	8.410	8.410	(1.097)	91342	18.2234	18.22
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	574957	23.6916	23.69

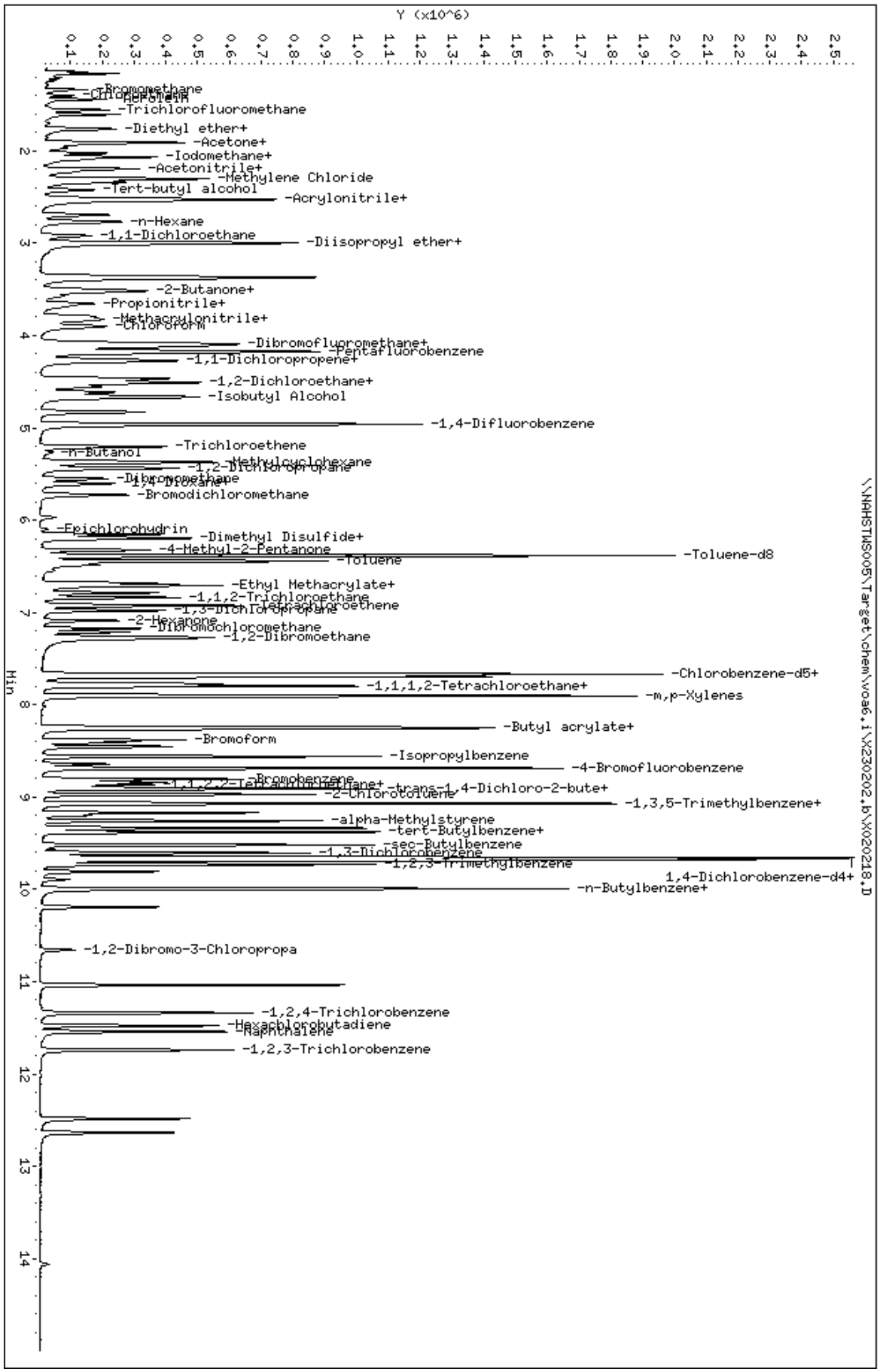
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	150651	19.2577	19.25
$	69 4-Bromofluorobenzene	95	8.687	8.687 (1.133)	441506	52.8709	52.87

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020218.D Page 3
Report Date: 14-Feb-2023 11:00

	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)	490817	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	111841	20.4785	20.47(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	670838	24.6750	24.67
	74 Bromobenzene	156	8.803	8.803	(0.911)	162224	20.1456	20.14
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	483759	24.0870	24.08
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	400488	22.4485	22.44
	77 4-Chlorotoluene	91	9.069	9.070	(0.939)	460698	22.6523	22.65
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	420910	25.6029	25.60
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	481457	22.7830	22.78
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	586923	26.8321	26.83
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	514550	26.2510	26.25
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	290321	21.7217	21.72
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	302775	20.7597	20.75
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	451206	24.8126	24.81
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	286124	20.7864	20.78
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	25171	20.1807	20.18
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	199516	22.9674	22.96
	91 Hexachlorobutadiene	225	11.480	11.476	(1.188)	99088	25.8615	25.86
	92 Naphthalene	128	11.544	11.540	(1.195)	426811	21.5944	21.59
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	180695	21.7186	21.71
M	94 1,2-Dichloroethylene (total)	96				225871	33.7808	33.78
M	95 Xylenes (total)	106				674335	62.9209	62.92
	141 Cyclohexane	56	4.121	4.118	(0.987)	179412	25.6103	25.61
	138 Freon TF	101	1.910	1.913	(0.457)	98869	18.9021	18.90
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	285909	23.3367	23.33
	146 Methyl Acetate	43	2.232	2.225	(0.534)	56914	17.7505	17.75
	148 Tert-Butyl alcohol	59	2.423	2.419	(0.580)	194949	395.117	395.11
	149 Isopropyl Alcohol	45	2.093	2.086	(0.501)	105102	407.886	407.88

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
Column diameter: 0.18

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Inj Date : 02-FEB-2023 19:44
InstruID : voa6.i
LabSampID : HS23011294-08MSD

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

Reason Code:

BEFORE

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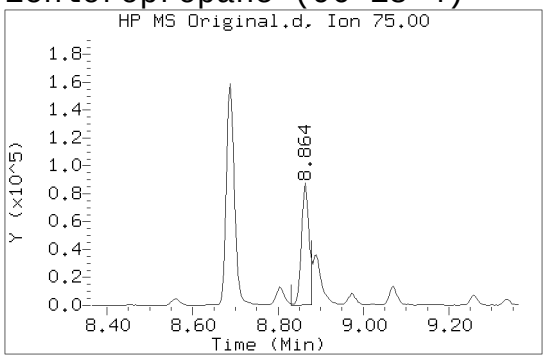
HEIGHT
87365
13-Feb-2023
14:52
linh
pham



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14-Feb-2023
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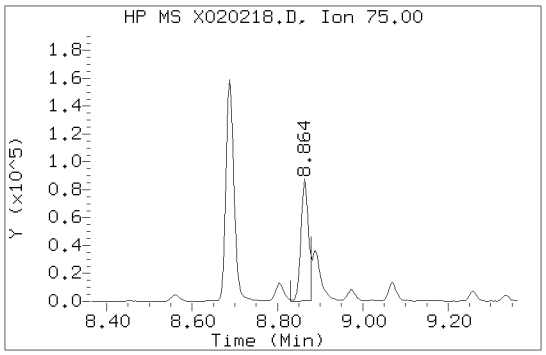

BEFORE

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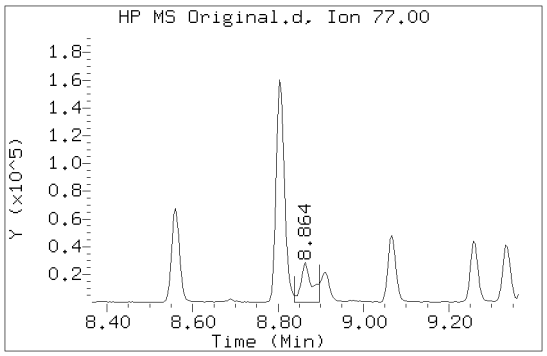
HEIGHT
28803
13-Feb-2023
14:52
linh
pham



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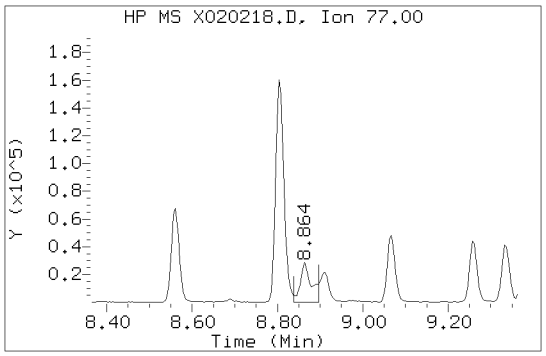

Chloroprene (126-99-8)

Reason Code:

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13-Feb-2023
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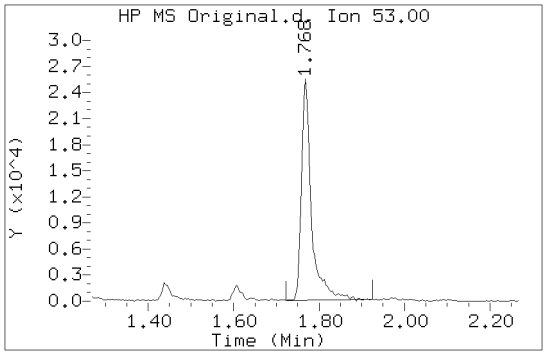

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14-Feb-2023
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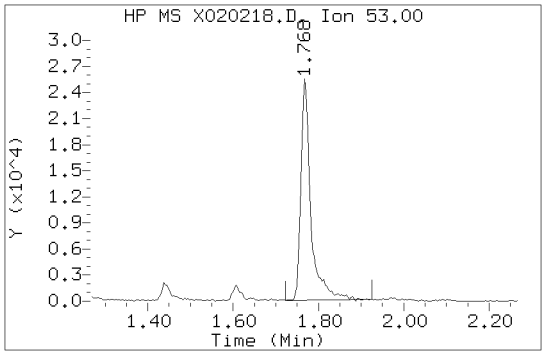

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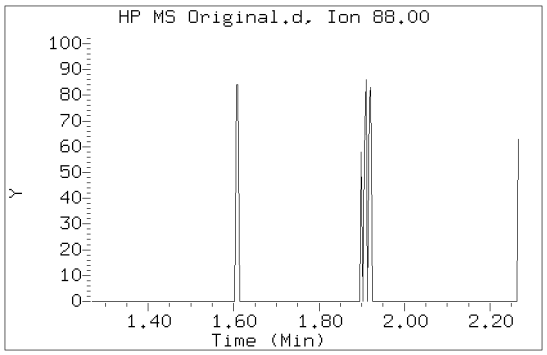

AFTER

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14-Feb-2023
11:00
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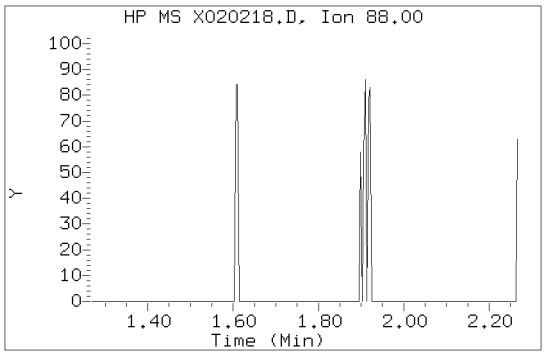


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020221.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020221.D
Lab Smp Id: HS23011397-08 Client Smp ID: HS23011397-08
Inj Date : 02-FEB-2023 20:47
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-08;HS23011397-08;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 20
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

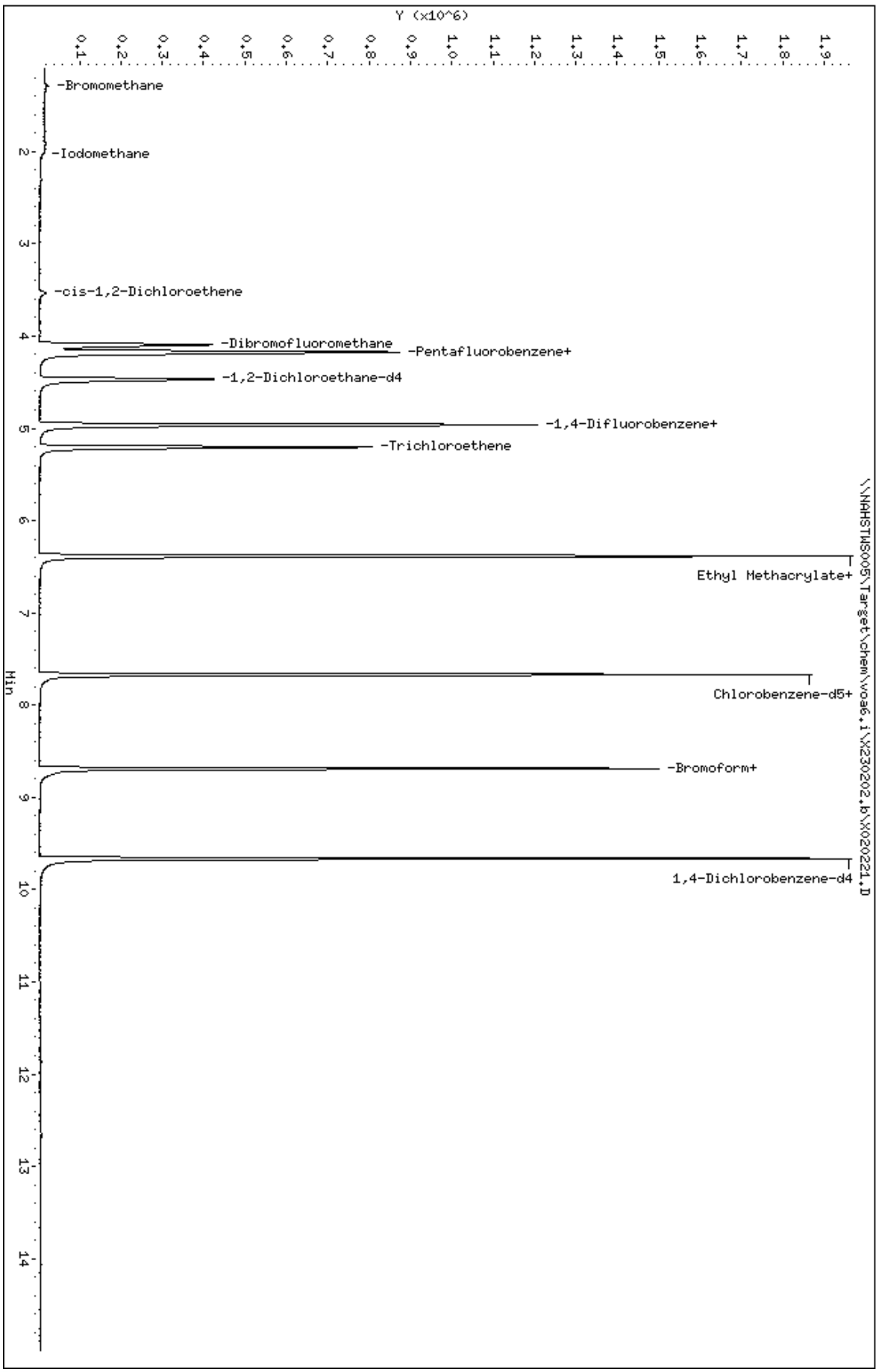
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	731638	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	307204	43.7082	43.70
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	351642	47.4374	47.43
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1018731	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	913025	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1172833	51.9838	51.98
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	443525	52.5896	52.58
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	486581	50.0000	
27 cis-1,2-Dichloroethene	96	3.533	3.522	(0.846)	9619	1.27184	63.59(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	278425	40.3518	2017.59

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020221.D
Date : 02-FEB-2023 20:47
Client ID: HS23011397-08
Sample Info: HS23011397-08;HS23011397-08;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020221.D Page 2

Date : 02-FEB-2023 20:47

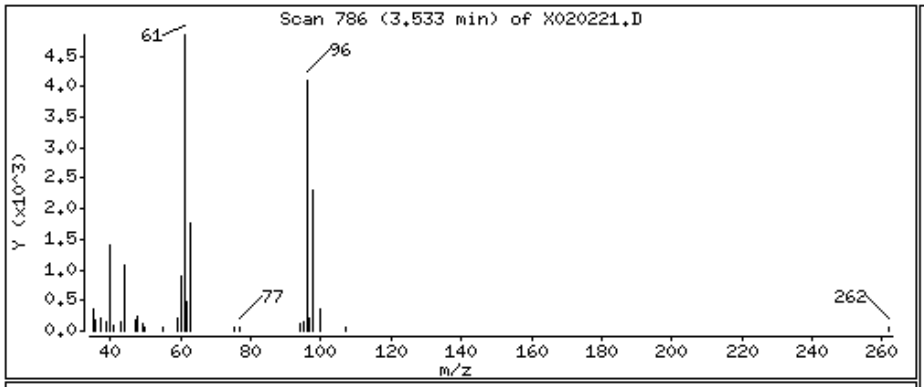
Client ID: HS23011397-08 Instrument: voa6.i

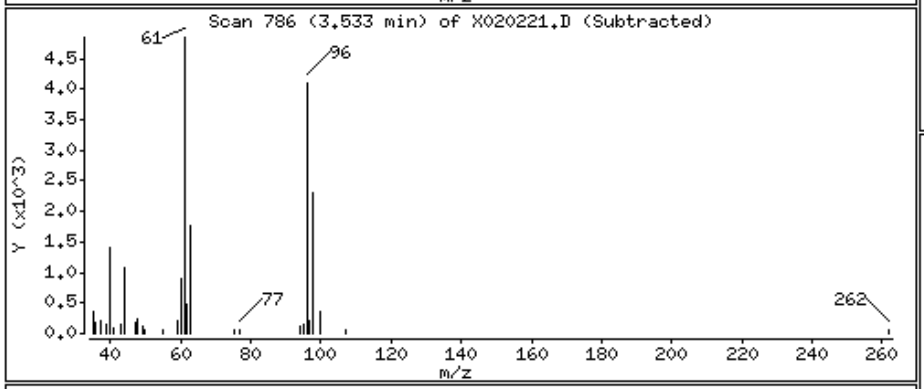
Sample Info: HS23011397-08;HS23011397-08;;;

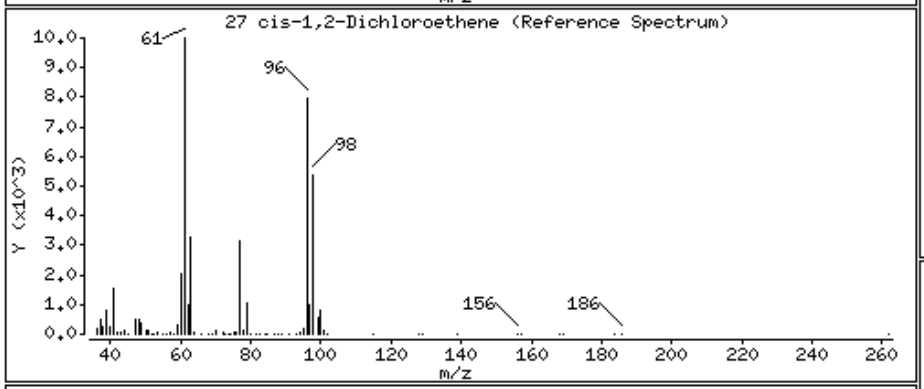
Purge Volume: 5.0 Operator: PC

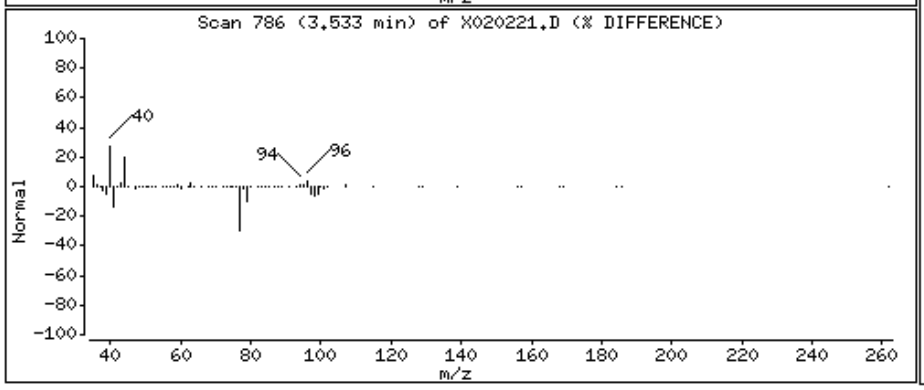
Column phase: DB624 Column diameter: 0.18

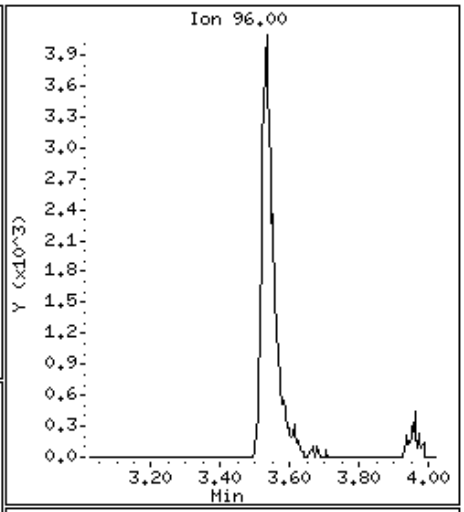
27 cis-1,2-Dichloroethene Concentration: 63.59 ug/l

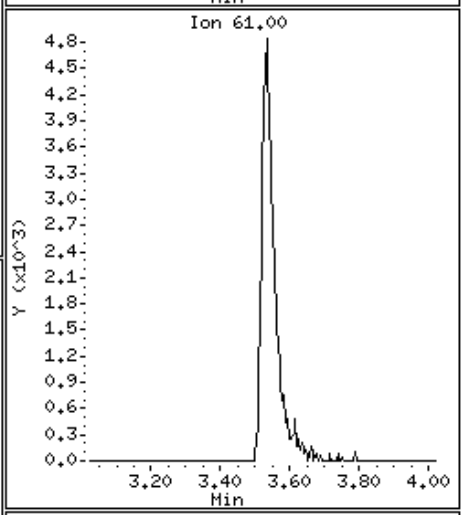


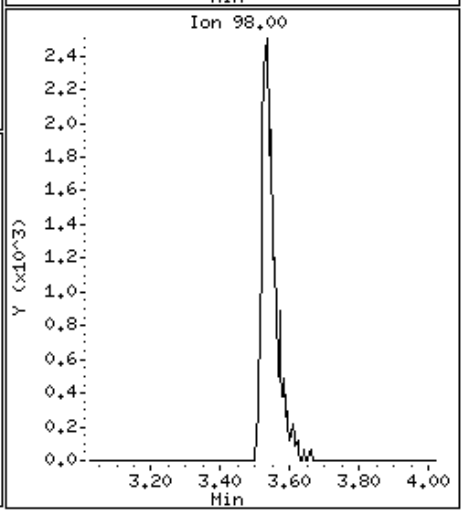












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020221.D Page 3

Date : 02-FEB-2023 20:47

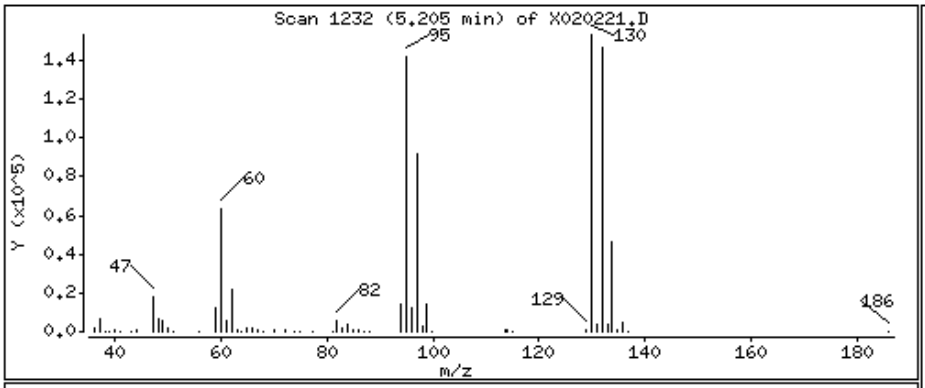
Client ID: HS23011397-08 Instrument: voa6.i

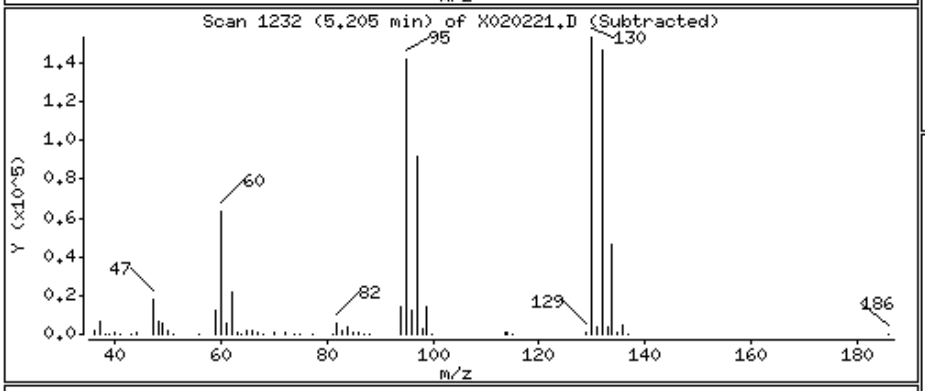
Sample Info: HS23011397-08;HS23011397-08;;;

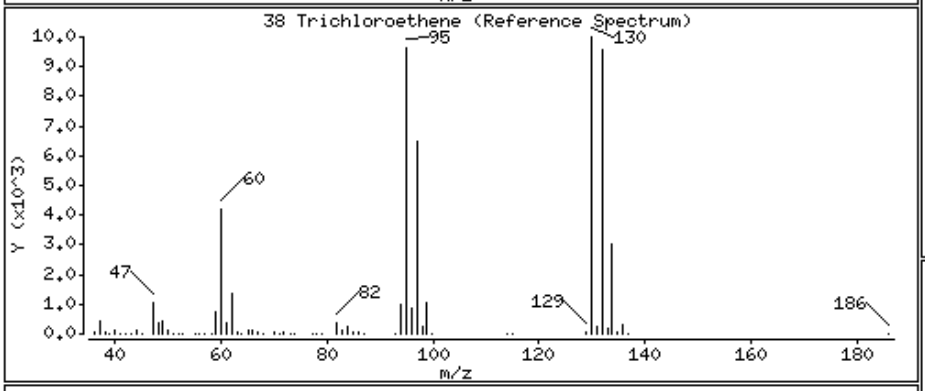
Purge Volume: 5.0 Operator: PC

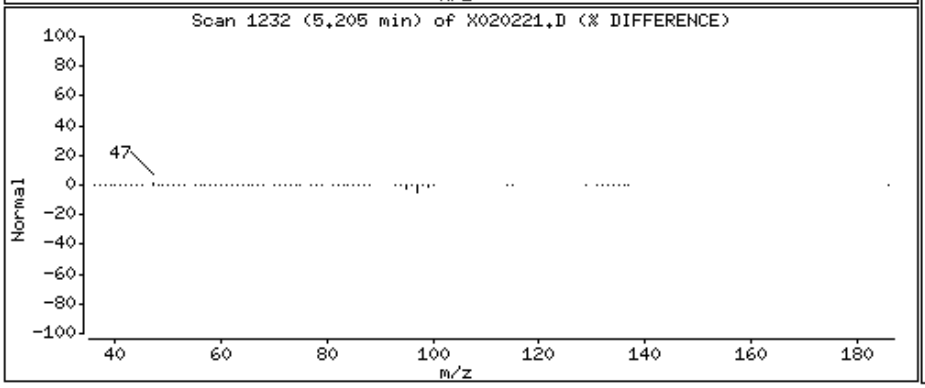
Column phase: DB624 Column diameter: 0.18

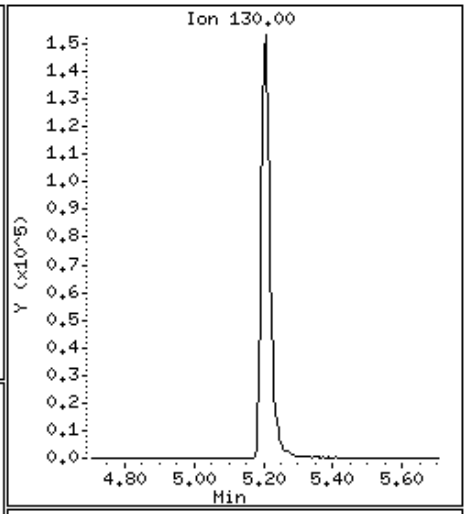
38 Trichloroethene Concentration: 2017.59 ug/l

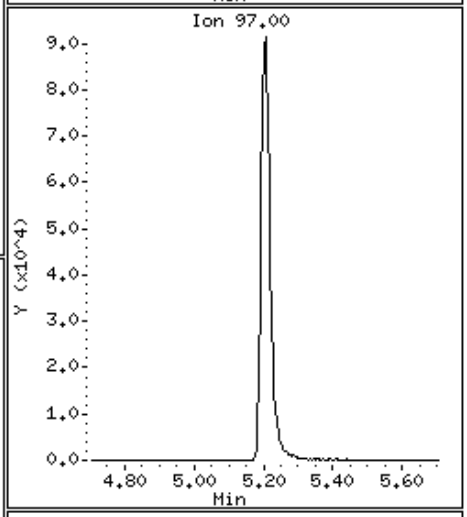


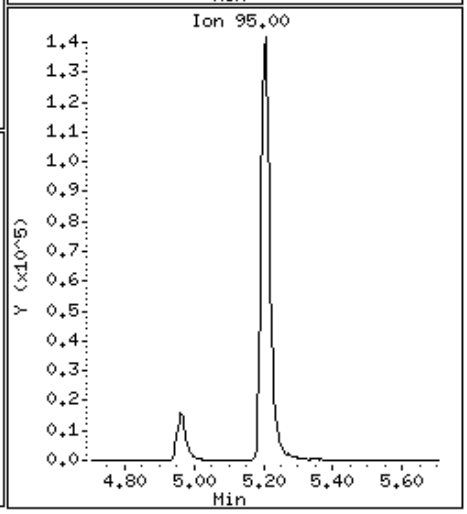












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Inj Date : 02-FEB-2023 20:47
InstruID : voa6.i
LabSampID : HS23011397-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020222.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020222.D
Lab Smp Id: HS23011397-10 Client Smp ID: HS23011397-10
Inj Date : 02-FEB-2023 21:08
Operator : PC Inst ID: voa6.i
Smp Info : HS23011397-10;HS23011397-10;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

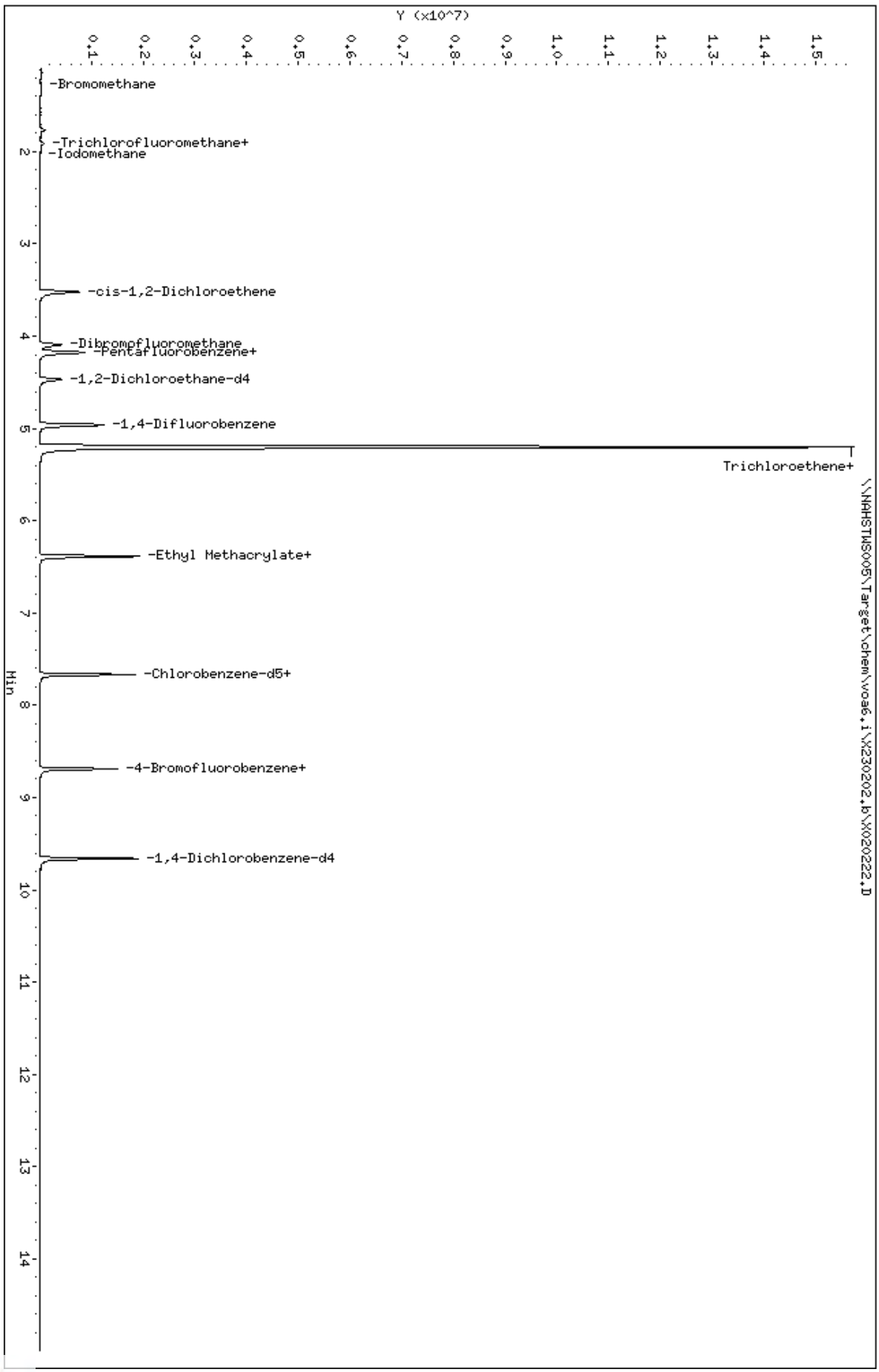
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	723284	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	306914	44.1730	44.17
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	345029	47.0849	47.08
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1014812	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	913366	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1151987	51.0408	51.04
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	436573	51.7470	51.74
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	481008	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.274)	22683	3.59005	3.59(a)
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	6520	1.18774	1.18(a)
27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	429219	57.4075	57.40
38 Trichloroethene	130	5.201	5.205	(1.048)	5254228	764.430	764.43(A)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020222.D
Date : 02-FEB-2023 21:08
Client ID: HS230411397-10
Sample Info: HS230411397-10;HS230411397-10;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020222.D Page 2

Date : 02-FEB-2023 21:08

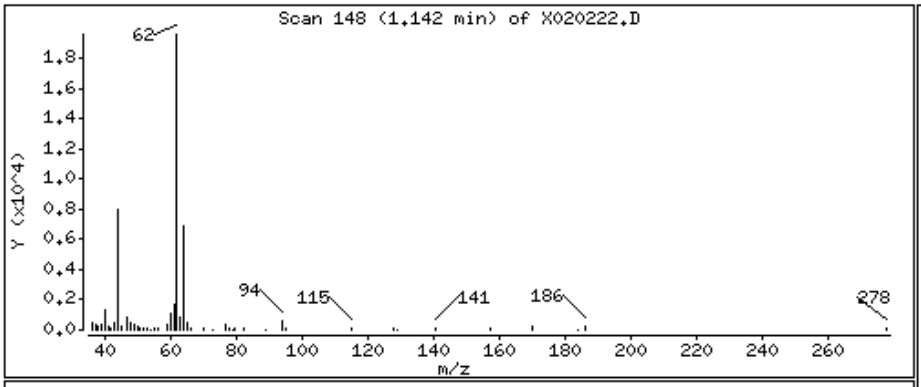
Client ID: HS23011397-10 Instrument: voa6.i

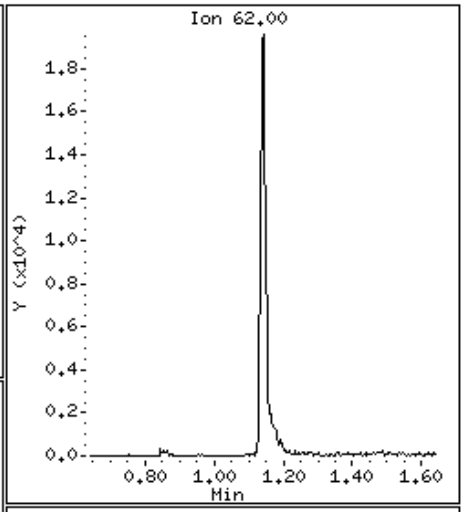
Sample Info: HS23011397-10;HS23011397-10;;;

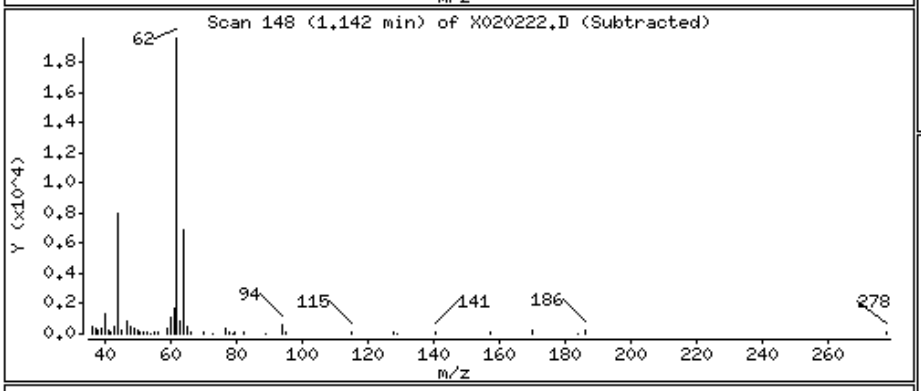
Purge Volume: 5.0 Operator: PC

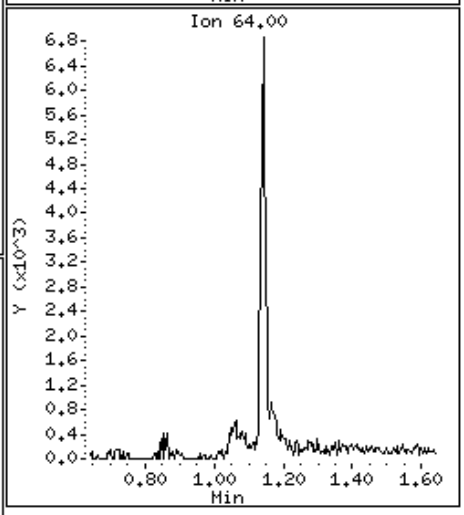
Column phase: DB624 Column diameter: 0.18

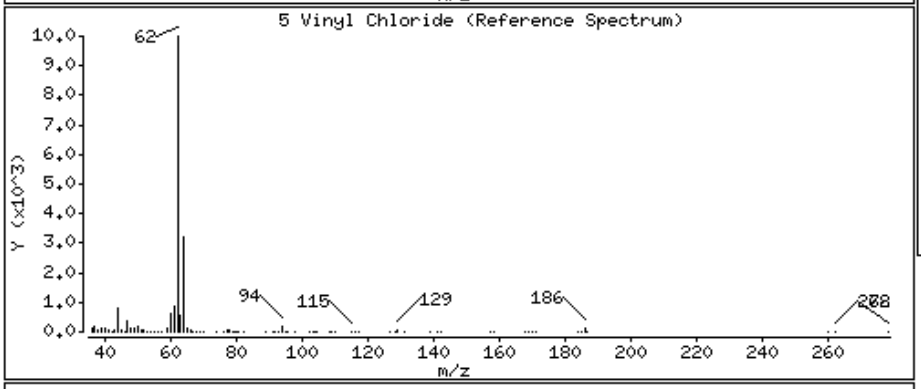
5 Vinyl Chloride Concentration: 3.59 ug/l

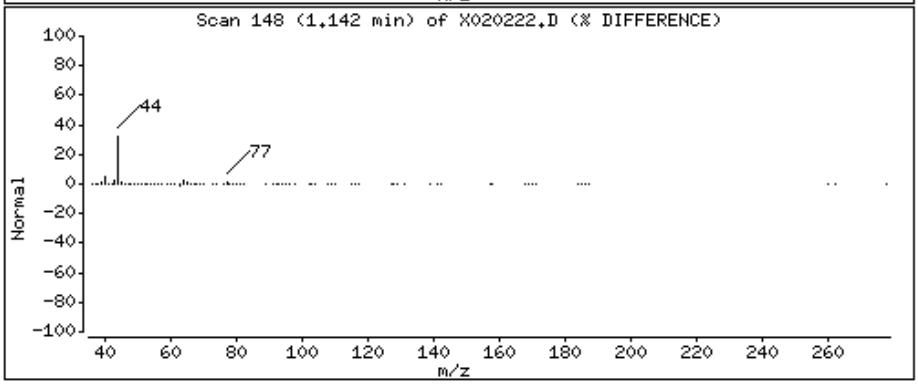












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020222.D Page 3

Date : 02-FEB-2023 21:08

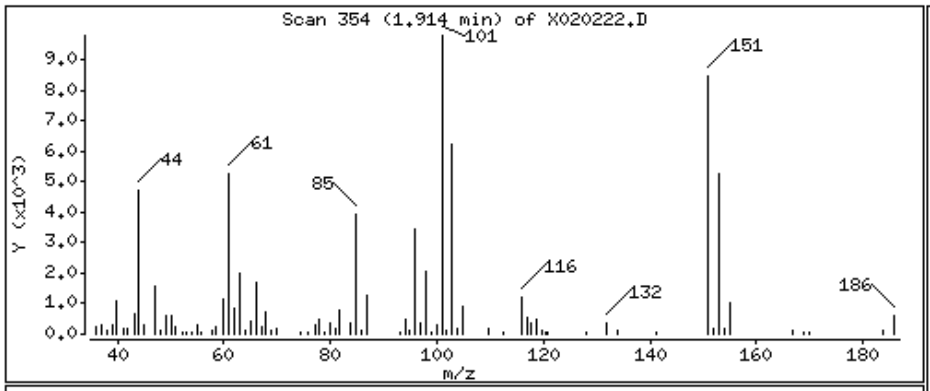
Client ID: HS23011397-10 Instrument: voa6.i

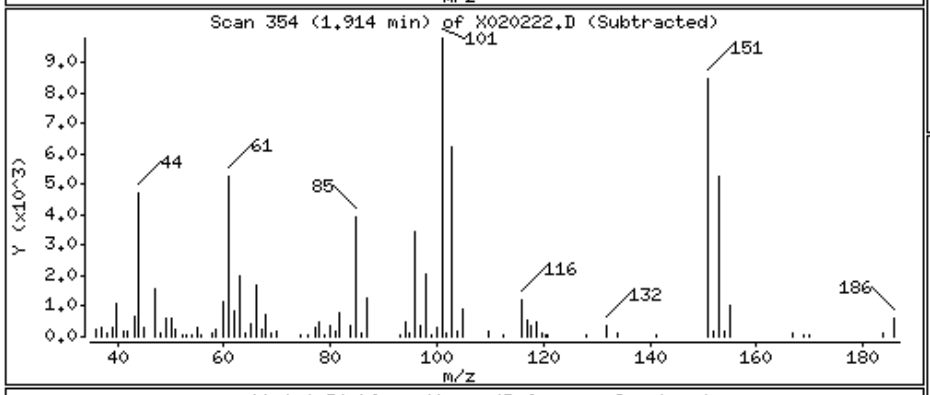
Sample Info: HS23011397-10;HS23011397-10;;;

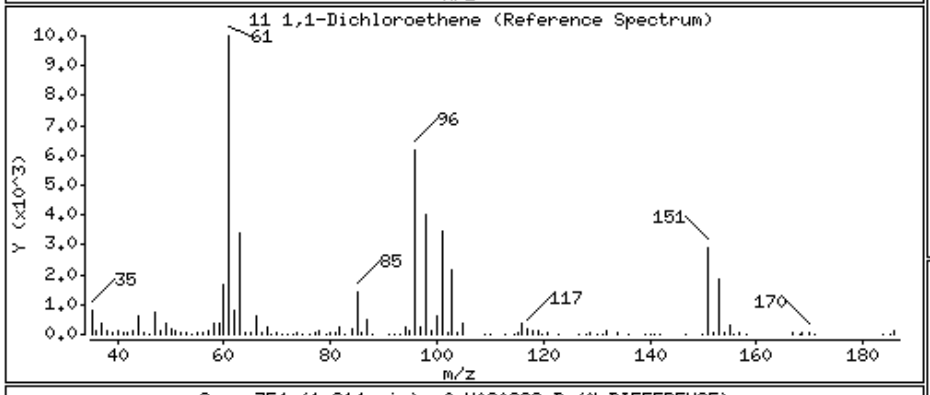
Purge Volume: 5.0 Operator: PC

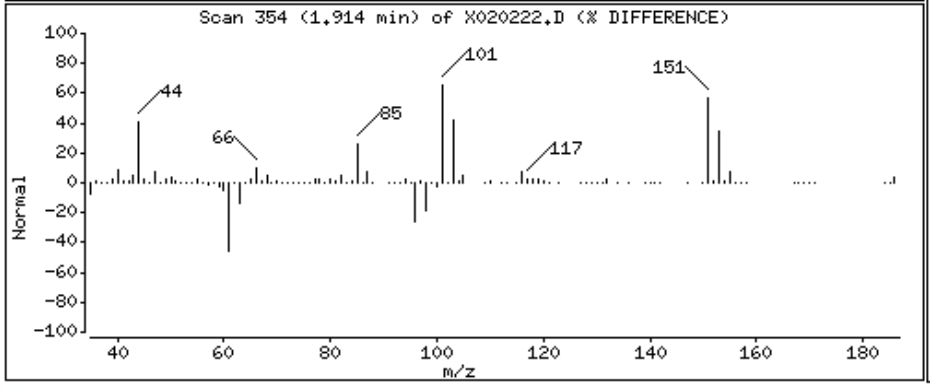
Column phase: DB624 Column diameter: 0.18

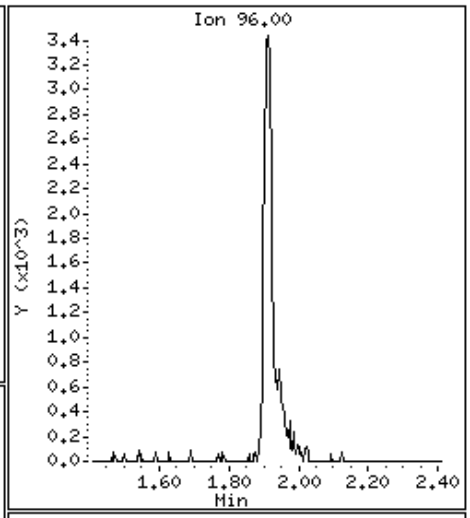
11 1,1-Dichloroethene Concentration: 1.18 ug/l

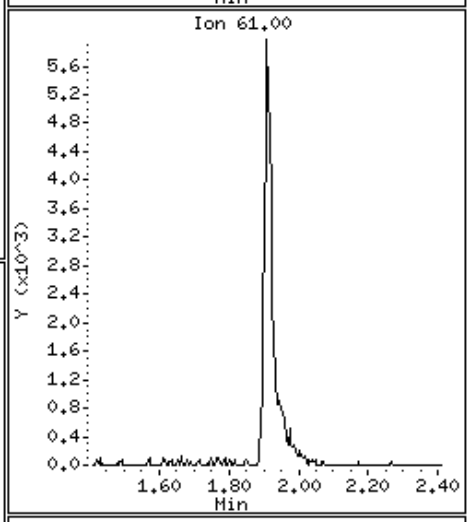


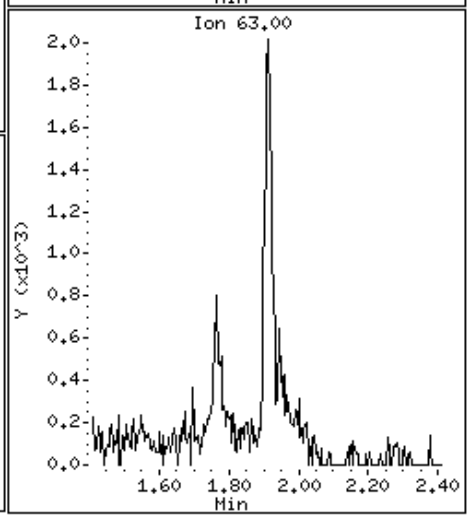












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020222.D Page 4

Date : 02-FEB-2023 21:08

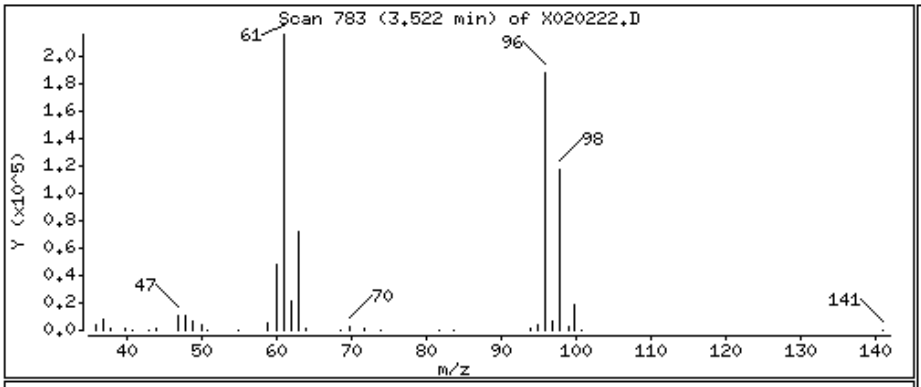
Client ID: HS23011397-10 Instrument: voa6.i

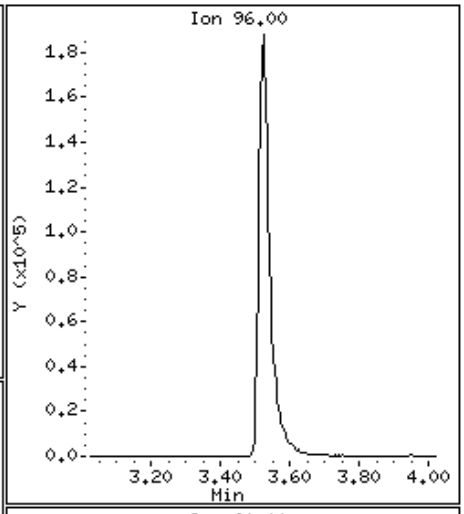
Sample Info: HS23011397-10;HS23011397-10;;;

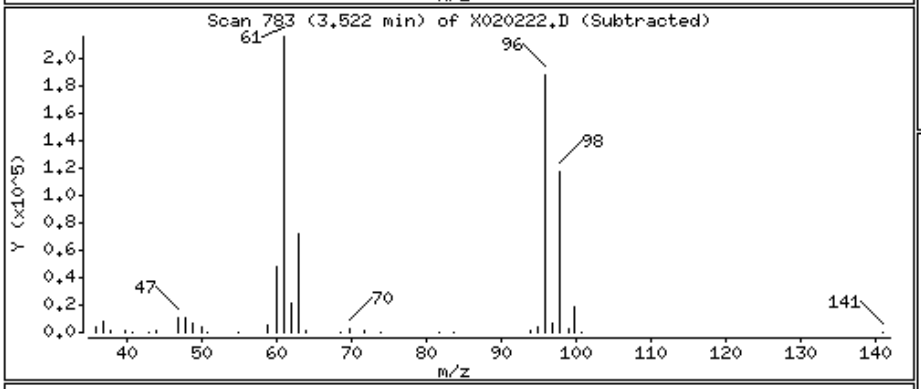
Purge Volume: 5.0 Operator: PC

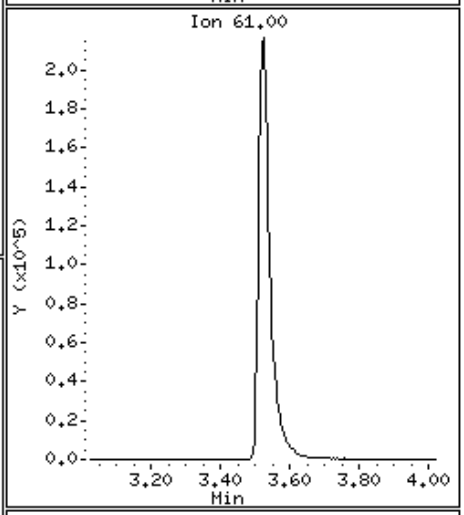
Column phase: DB624 Column diameter: 0.18

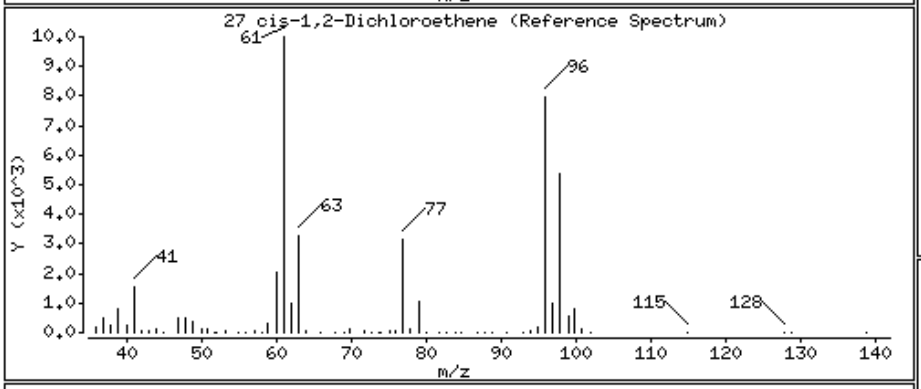
27 cis-1,2-Dichloroethene Concentration: 57.40 ug/l

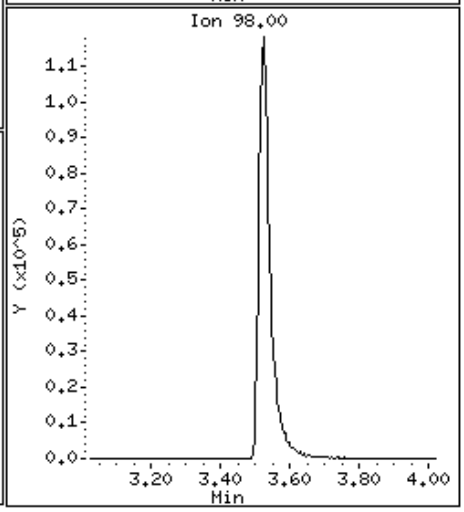


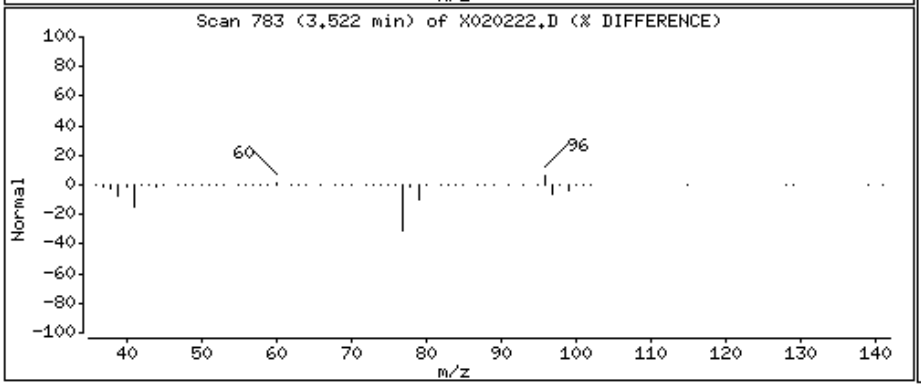












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020222.D Page 5

Date : 02-FEB-2023 21:08

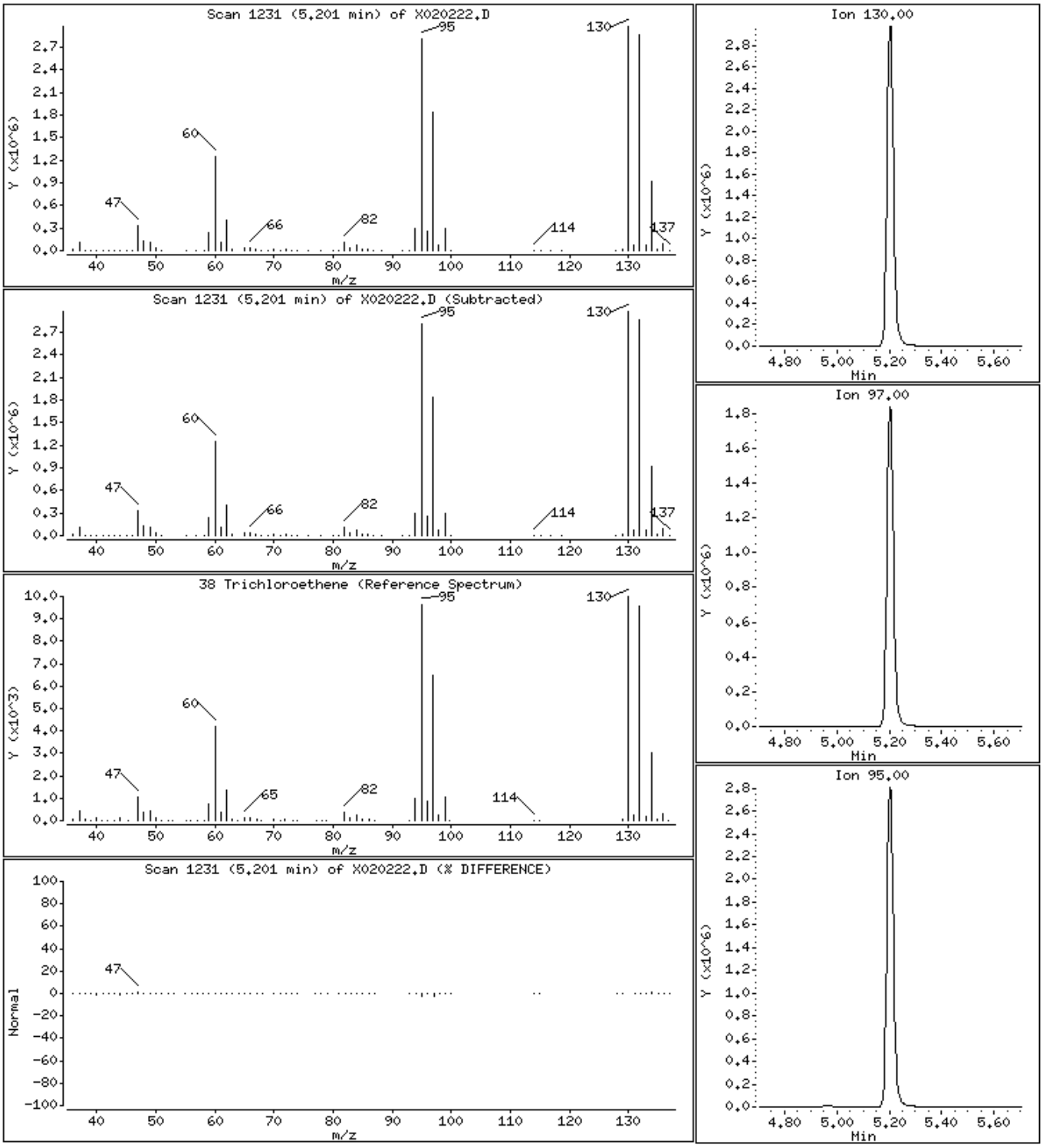
Client ID: HS23011397-10 Instrument: voa6.i

Sample Info: HS23011397-10;HS23011397-10;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 764.43 ug/l



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InstruID : voa6.i
LabSampID : HS23011397-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 03-FEB-2023 00:17
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 13-Feb-2023 14:53 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
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	4.174	4.174	(1.000)	569105	50.0000	
135	1,4-Dioxane	88	5.598	5.598	(1.341)	62378	1000.00	1199.06
140	1,3-Butadiene	54	1.164	1.164	(0.279)	177352	50.0000	45.40
25	Methacrylonitrile	41	3.818	3.818	(0.915)	219421	50.0000	54.45
12	Isobutyl Alcohol	43	4.669	4.669	(1.119)	704358	1000.00	1100.35
13	Acetonitrile	39	2.195	2.195	(0.526)	268092	500.000	517.59
14	Allyl Chloride	41	2.195	2.195	(0.526)	531779	50.0000	53.90
4	Propionitrile	54	3.645	3.645	(0.873)	311781	500.000	536.91
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	97480	50.0000	55.74
194	Acetaldehyde	44	1.209	1.209	(0.290)	86149	200.000	243.50
23	Chloroprene	53	1.767	1.767	(0.423)	83828	50.0000	43.32(M)
130	Ethyl Acetate	43	3.649	3.649	(0.874)	242641	50.0000	54.63
40	Methyl Methacrylate	41	5.602	5.602	(1.342)	222224	50.0000	57.26
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	233855	50.0000	58.31
142	Tetrahydrofuran	42	3.840	3.840	(0.920)	71265	100.000	100.75
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	522224	50.0000	52.61
156	Diisopropyl ether	45	2.997	2.997	(0.718)	745621	50.0000	50.50
182	Epichlorohydrin	57	6.093	6.093	(1.228)	85668	200.000	224.30
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1141388	50.0000	52.91
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	478489	50.0000	119.66

3 Chloromethane	50	1.074	1.074 (0.257)	256773	50.0000	49.87
5 Vinyl Chloride	62	1.141	1.141 (0.273)	223809	50.0000	45.01

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D Page 2
Report Date: 13-Feb-2023 14:53

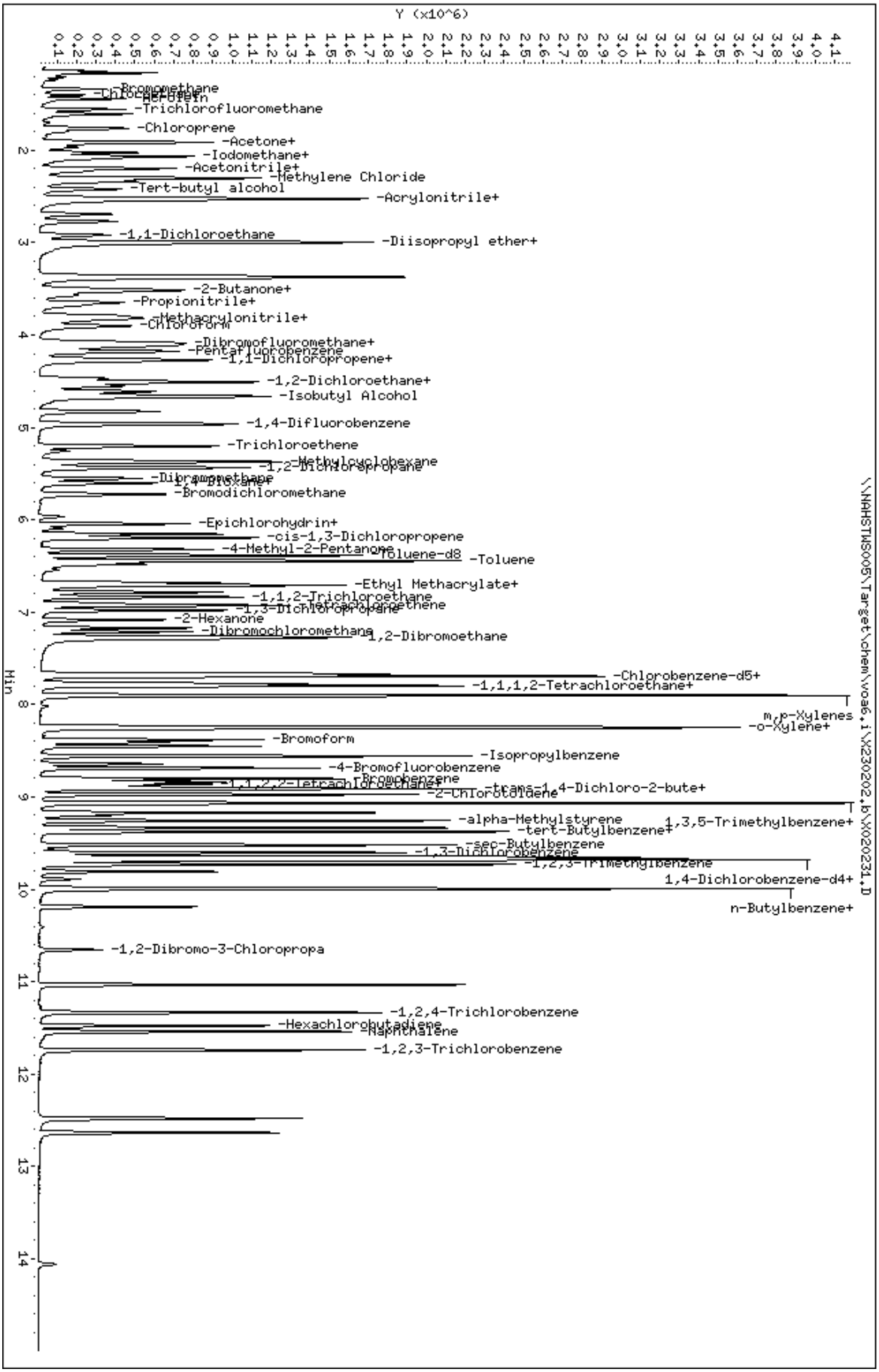
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	156126	50.0000	41.81
	7 Chloroethane	64	1.400	1.400	(0.335)	144919	50.0000	41.88
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	325815	50.0000	46.83
	9 Acrolein	56	1.441	1.441	(0.345)	35410	100.000	91.23
	10 Acetone	43	1.970	1.970	(0.472)	135692	100.000	84.96
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	184967	50.0000	42.82
	15 Iodomethane	142	2.026	2.026	(0.485)	525668	100.000	92.87
	16 Acrylonitrile	53	2.528	2.528	(0.606)	162234	100.000	110.74
	17 Methylene Chloride	84	2.300	2.300	(0.551)	271847	50.0000	45.88
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.607)	715511	50.0000	50.60
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	1005464	100.000	88.97
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	234404	50.0000	48.49
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	1070003	100.000	86.21
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	403232	50.0000	47.52
	24 2-Butanone	43	3.570	3.570	(0.855)	177921	100.000	104.88
	26 2,2-Dichloropropane	77	3.507	3.507	(0.840)	327243	50.0000	45.43
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	276138	50.0000	46.93
	28 Chloroform	83	3.900	3.900	(0.934)	463612	50.0000	48.75
	29 Bromochloromethane	128	3.791	3.791	(0.908)	146884	50.0000	45.60
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	244891	50.0000	44.79
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	384485	50.0000	50.96
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	329184	50.0000	54.44
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	379183	50.0000	54.34
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	320059	50.0000	49.57
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	282644	50.0000	49.00
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	851640	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	1033467	50.0000	50.81
	38 Trichloroethene	130	5.205	5.205	(1.049)	312492	50.0000	54.17
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	379233	50.0000	49.68
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	291291	100.000	134.15
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	267962	50.0000	49.53
	44 Dibromomethane	93	5.553	5.553	(1.119)	179463	50.0000	48.80
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	491794	100.000	113.57
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	460458	50.0000	51.37
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	810096	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	951602	50.0000	47.53
	50 Toluene	91	6.446	6.446	(0.841)	1132994	50.0000	50.59
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	403429	50.0000	54.23
	52 2-Hexanone	43	7.083	7.083	(0.924)	339399	100.000	115.20
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	228416	50.0000	50.84
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	459727	50.0000	51.99
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	336297	50.0000	51.87
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	239249	50.0000	51.64
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	301619	50.0000	53.70
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	215569	50.0000	52.37
	59 Chlorobenzene	112	7.694	7.694	(1.003)	797627	50.0000	50.22
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	307617	50.0000	52.04
	61 Ethylbenzene	106	7.795	7.795	(1.017)	392484	50.0000	52.46
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	984611	100.000	102.09
	63 o-Xylene	106	8.241	8.241	(1.075)	491043	50.0000	51.58
	64 Styrene	104	8.256	8.256	(1.077)	858394	50.0000	53.80
	66 Bromoform	173	8.410	8.410	(1.097)	237924	50.0000	52.97

67 Isopropylbenzene	105	8.560	8.560 (1.116)	1189128	50.0000	54.68
68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	363674	50.0000	50.93

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	379320	50.0000	50.69
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	447952	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	296926	50.0000	59.57(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1394504	50.0000	56.20
	74 Bromobenzene	156	8.803	8.803	(0.911)	385565	50.0000	52.46
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1049139	50.0000	57.23
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	904464	50.0000	55.54
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1050391	50.0000	56.58
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	859557	50.0000	57.28
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1075676	50.0000	55.77
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1174576	50.0000	58.83
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1063252	50.0000	59.43
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	670659	50.0000	54.98
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	702753	50.0000	52.79
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	911890	50.0000	52.78
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	675931	50.0000	53.80
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	67457	50.0000	59.08
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	491572	50.0000	62.00
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	195200	50.0000	55.48
	92 Naphthalene	128	11.540	11.540	(1.194)	1136449	50.0000	63.00
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	472539	50.0000	62.23
M	94 1,2-Dichloroethylene (total)	96				510542	100.000	(a)
	141 Cyclohexane	56	4.118	4.118	(0.987)	288278	50.0000	50.24
	138 Freon TF	101	1.913	1.913	(0.458)	185744	50.0000	44.46
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	639466	50.0000	61.34
	146 Methyl Acetate	43	2.225	2.225	(0.533)	140629	50.0000	54.91
	148 Tert-Butyl alcohol	59	2.419	2.419	(0.580)	486677	1000.00	1235.01
	149 Isopropyl Alcohol	45	2.086	2.086	(0.500)	261660	1000.00	1271.42

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-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

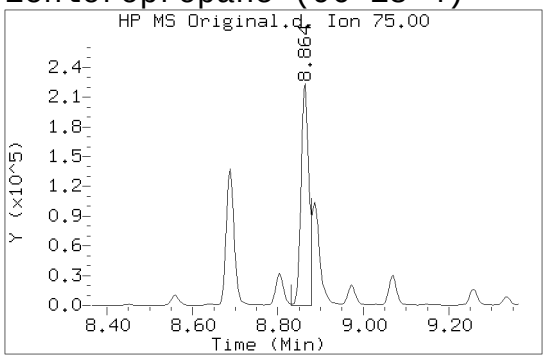
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D
Inj Date : 03-FEB-2023 00:17
InstruID : voa6.i
LabSampID : CCV-END

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

Reason Code:

BEFORE

MASS
75
AREA
296926
HEIGHT
223315
09-Feb-2023
15:23
Kori
Bagsby



AFTER

MASS
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AREA
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HEIGHT
223315
13-Feb-2023
14:52
Kori
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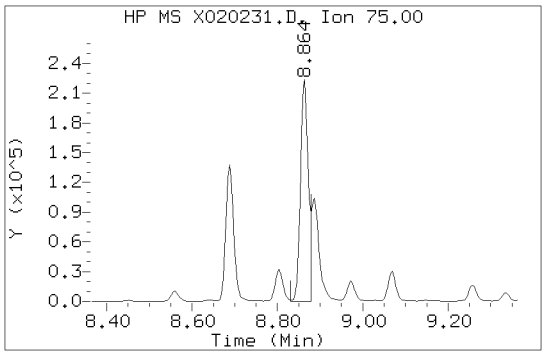

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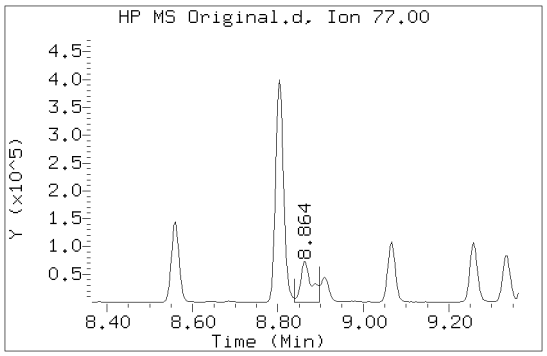

AFTER

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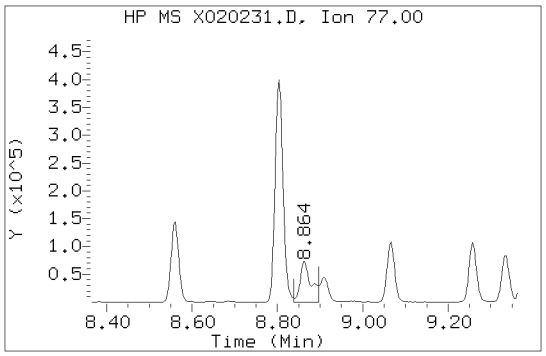

Chloroprene (126-99-8)

Reason Code:

BEFORE

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AREA
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HEIGHT
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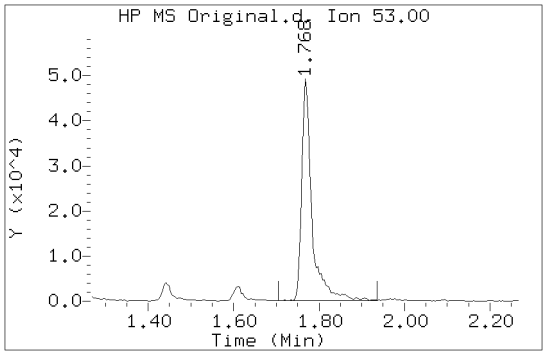
09-Feb-2023
15:23
Kori
Bagsby



AFTER

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HEIGHT
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13-Feb-2023
14:52
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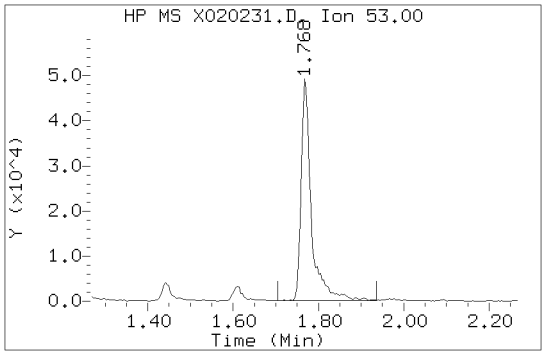
Bags



BEFORE

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09-Feb-2023
15:23
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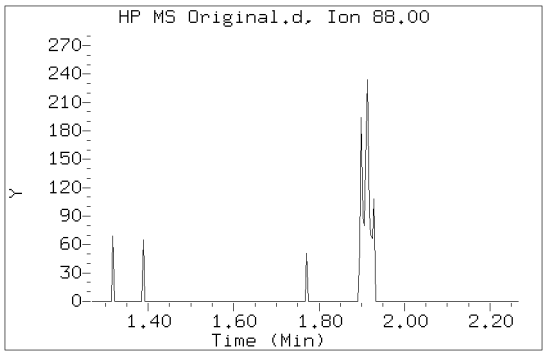
Bagsby



AFTER

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13-Feb-2023
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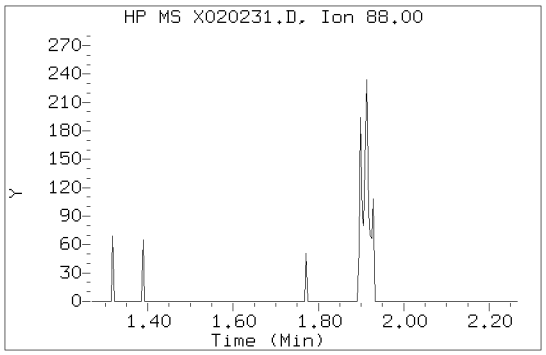
Kori
Bags



HS23011397-GCSEMI-RSK-175

ALS WO# HS23011397

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Semi-Volatiles by RSK-175

Workorder

HS23011397

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
HS23011397

Semi-Volatiles by RSK-175

HS23011397-06		Collected	Received	Matrix	Basis
16PM06-230121		01/21/23 12:30	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.0711		0.00720	0.0500	0.0500	50	01/30/23 12:48	FID-4_427362	021
Ethene	mg/L	0.548		0.0117	0.0500	0.0500	50	01/30/23 12:48	FID-4_427362	021
Methane	mg/L	0.865		0.00535	0.0250	0.0250	50	01/30/23 12:48	FID-4_427362	021

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Semi-Volatiles by RSK-175

HS23011397-09	Collected	Received	Matrix	Basis
16RW05-230123	01/23/23 10:30	01/24/23 09:50	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.936		0.0576	0.400	0.400	400	01/30/23 13:07	FID-4_427362	023
Ethene	mg/L	1.35		0.0936	0.400	0.400	400	01/30/23 13:07	FID-4_427362	023
Methane	mg/L	4.54		0.0428	0.200	0.200	400	01/30/23 13:07	FID-4_427362	023

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Semi-Volatiles by RSK-175

MBLK-230130

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

MBLK-230130

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	01/30/23 09:35	FID-4_427362	002
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	01/30/23 09:35	FID-4_427362	002
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	01/30/23 09:35	FID-4_427362	002

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Semi-Volatiles by RSK-175

Workorder

HS23011397

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
HS23011397

		HS23011136-04		HS23011136-04MS				HS23011136-04MSD						
Sample Matrix	Aqueous	**Run Date**	01/30/23	01/30/23				01/30/23						
Units	ug/L	**Run Time**	11:20	11:28				11:37						
		Data File	012.D	013.D				014.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	31.59	18.04	175	*	29.48	18.04	163	*	30	6.90	
Ethene	75-125	1	0	47.29	16.80	282	*	41	16.80	244	*	30	14.3	
Methane	75-125	1	5190	4867	9.647	-	*	4812	9.647	-3910	*	30	1.10	

- %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

HS23011397

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Semi-Volatiles by RSK-175

FID-4_427362		QC ID	LCS-230130			
QC Matrix Aqueous	Units	Run Date	01/30/23			
	mg/L	Run Time	09:43			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
Ethane	75-125	0.01804	0.0194	107		
Ethene	75-125	0.0168	0.0171	102		
Methane	75-125	0.009647	0.00938	97		

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

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Form 4

Method Blank Summary

Semi-Volatiles by RSK-175

Workorder

HS23011397

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

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Phone (281) 530-5656 Fax (281) 530-5887
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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011397

Semi-Volatiles by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230130	002.D	01/30/23 09:35	FID-4_427362
LCS-230130	LCS	LCS-230130	003.D	01/30/23 09:43	FID-4_427362
BatchQC	MS	HS23011136-04MS	013.D	01/30/23 11:28	FID-4_427362
BatchQC	MSD	HS23011136-04MSD	014.D	01/30/23 11:37	FID-4_427362
16PM06-230121	SAMP	HS23011397-06	021.D	01/30/23 12:48	FID-4_427362
16RW05-230123	SAMP	HS23011397-09	023.D	01/30/23 13:07	FID-4_427362

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Form 6

Initial Calibration Data

Semi-Volatiles by RSK-175

Workorder

HS23011397

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Initial Calibration Data

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

Workorder HS23011397

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

HS23011397

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 HS23011397

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

HS23011397

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 HS23011397

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 0925
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	927	927	0.010	4.90924	20.0	Averaged	
Ethene	586	623	623	0.010	-6.38230	20.0	Averaged	
Ethane	719	810	810	0.010	-12.60421	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 1112
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	882	882	0.010	9.57660	20.0	Averaged	
Ethene	586	604	604	0.010	-3.09964	20.0	Averaged	
Ethane	719	839	839	0.010	-16.59443	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 1255
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	952	952	0.010	2.40014	20.0	Averaged	
Ethene	586	575	575	0.010	1.90539	20.0	Averaged	
Ethane	719	765	765	0.010	-6.28765	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011397

RunID FID-4_427362

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 30-JAN-2023 1430
Lab File ID 033.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	900	900	0.010	7.73730	20.0	Averaged	
Ethene	586	615	615	0.010	-4.97400	20.0	Averaged	
Ethane	719	779	779	0.010	-8.33668	20.0	Averaged	

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Analysis Run Log

Semi-Volatiles by RSK-175

Workorder

HS23011397

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
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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
HS23011397

Semi-Volatiles by RSK-175

RUNID
FID-4_427362

Run ID FID-4_427362 **Start Date** 01/30/23 **EndDate** 01/30/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
RSK-CCV	CCV	RSK-CCV	001.D	01/30/23 09:25	1
MBLK-230130	MBLK	MBLK-230130	002.D	01/30/23 09:35	1
LCS-230130	LCS	LCS-230130	003.D	01/30/23 09:43	1
RSK-CCV	CCV	RSK-CCV	011.D	01/30/23 11:12	1
BatchQC	MS	HS23011136-04MS	013.D	01/30/23 11:28	1
BatchQC	MSD	HS23011136-04MSD	014.D	01/30/23 11:37	1
16PM06-230121	SAMP	HS23011397-06	021.D	01/30/23 12:48	50
RSK-CCV	CCV	RSK-CCV	022.D	01/30/23 12:55	1
16RW05-230123	SAMP	HS23011397-09	023.D	01/30/23 13:07	400
RSK-CCV	CCV	RSK-CCV	033.D	01/30/23 14:30	1

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Raw Data FID-4 322102

Semi-Volatiles by RSK-175

Workorder

HS23011397

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
Phone (281) 530-5656 Fax (281) 530-5887
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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

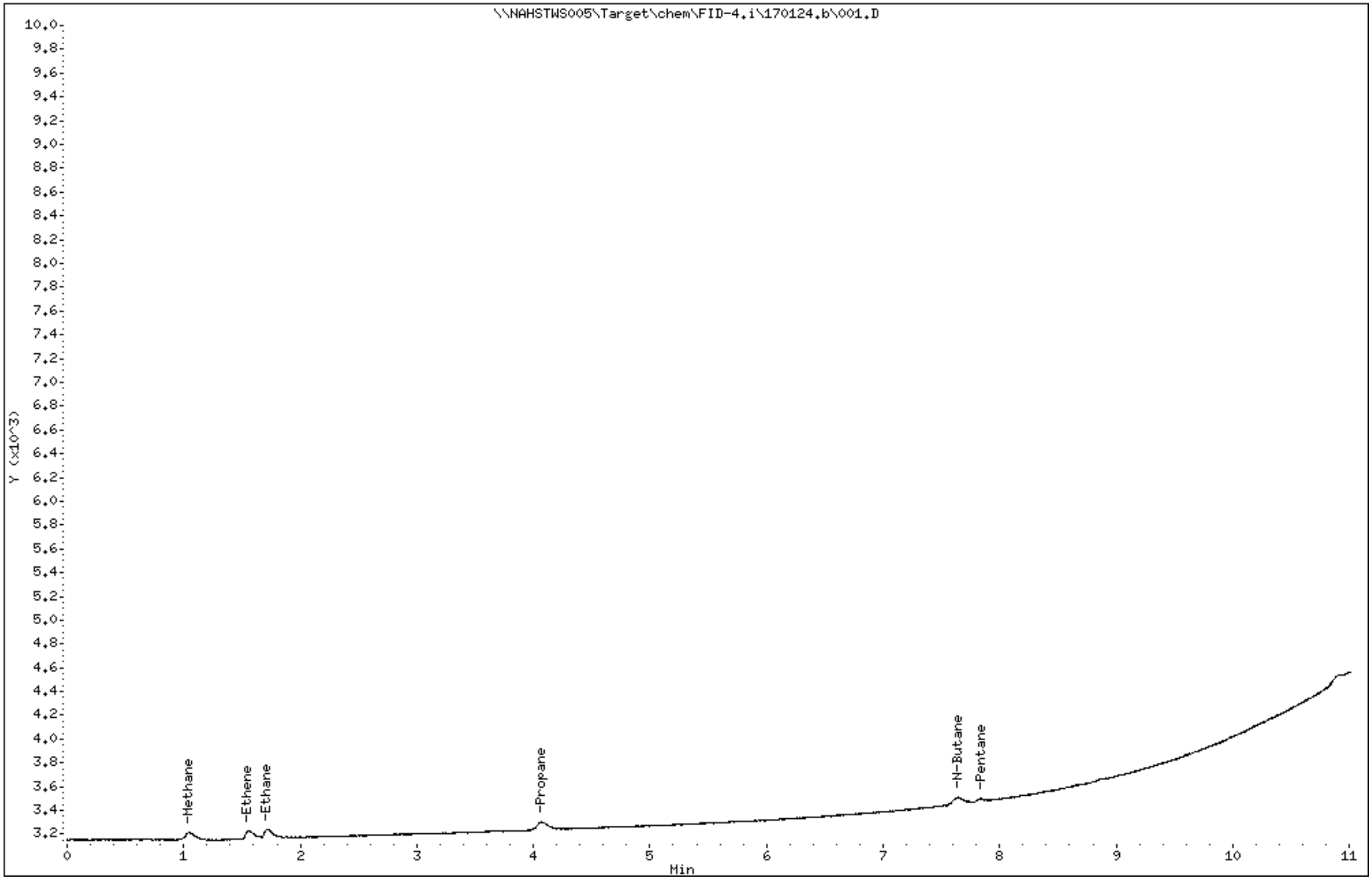
Instrument: FID-4.i

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

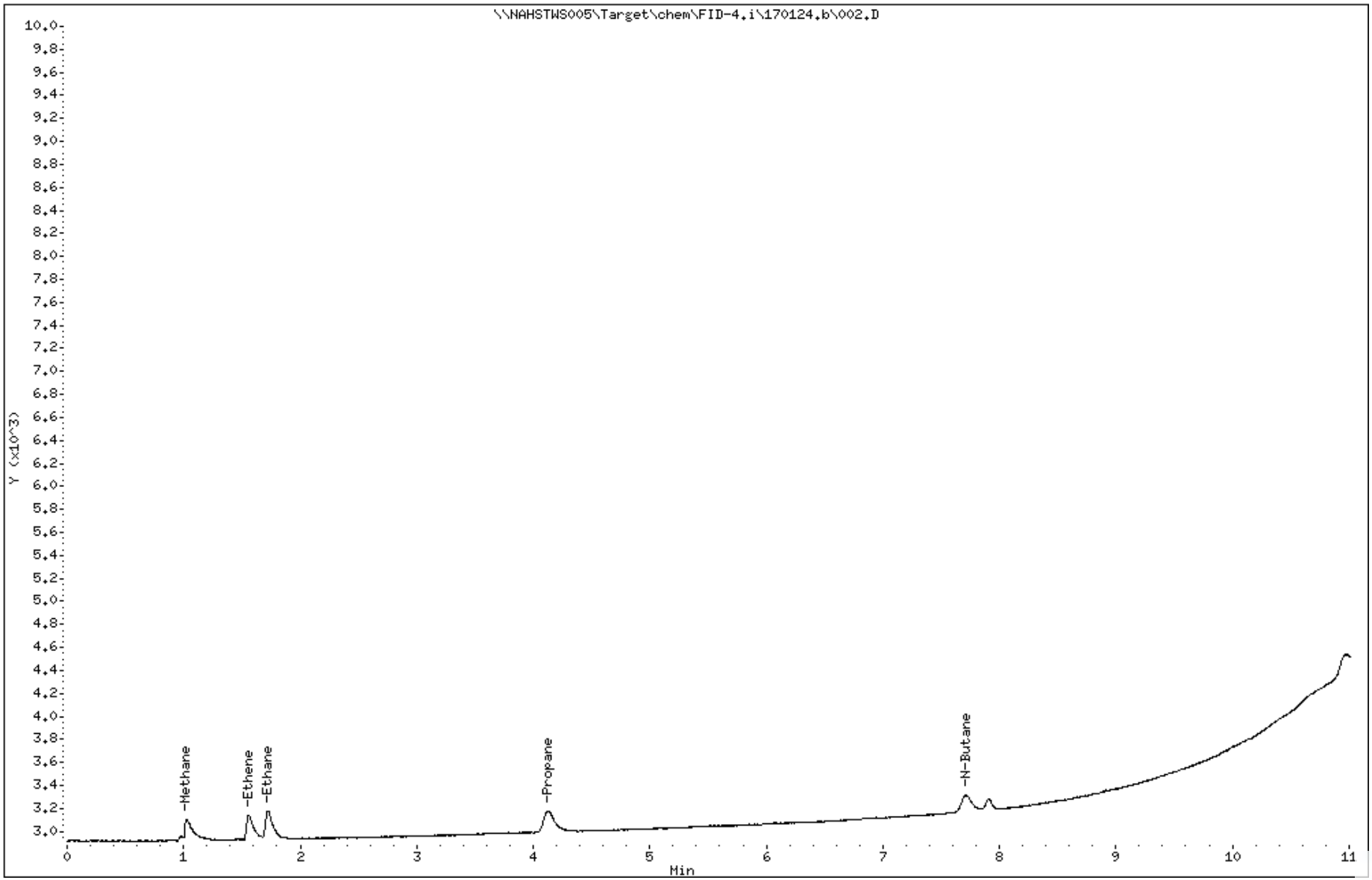
Instrument: FID-4.i

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

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

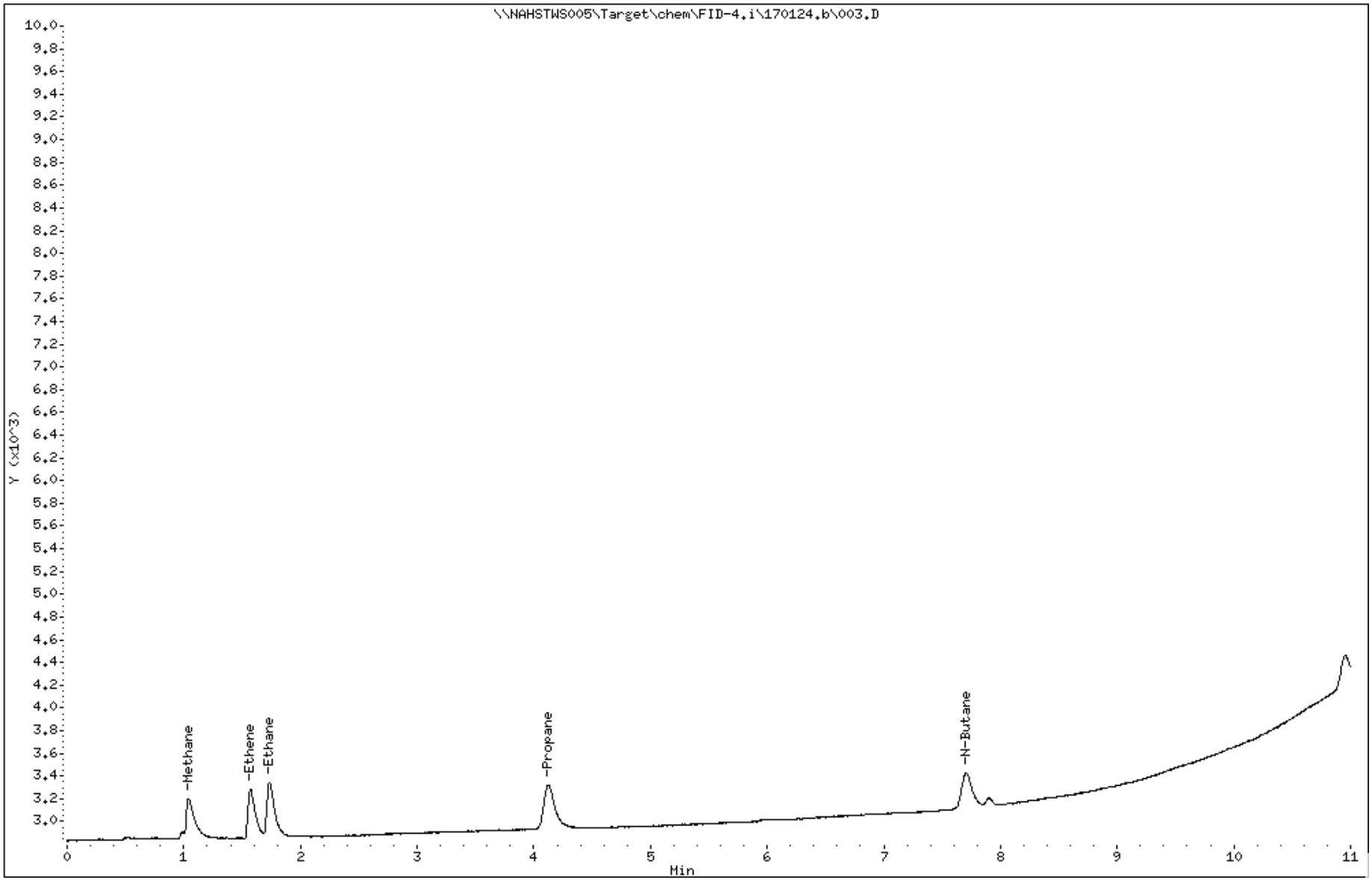
Instrument: FID-4.i

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

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

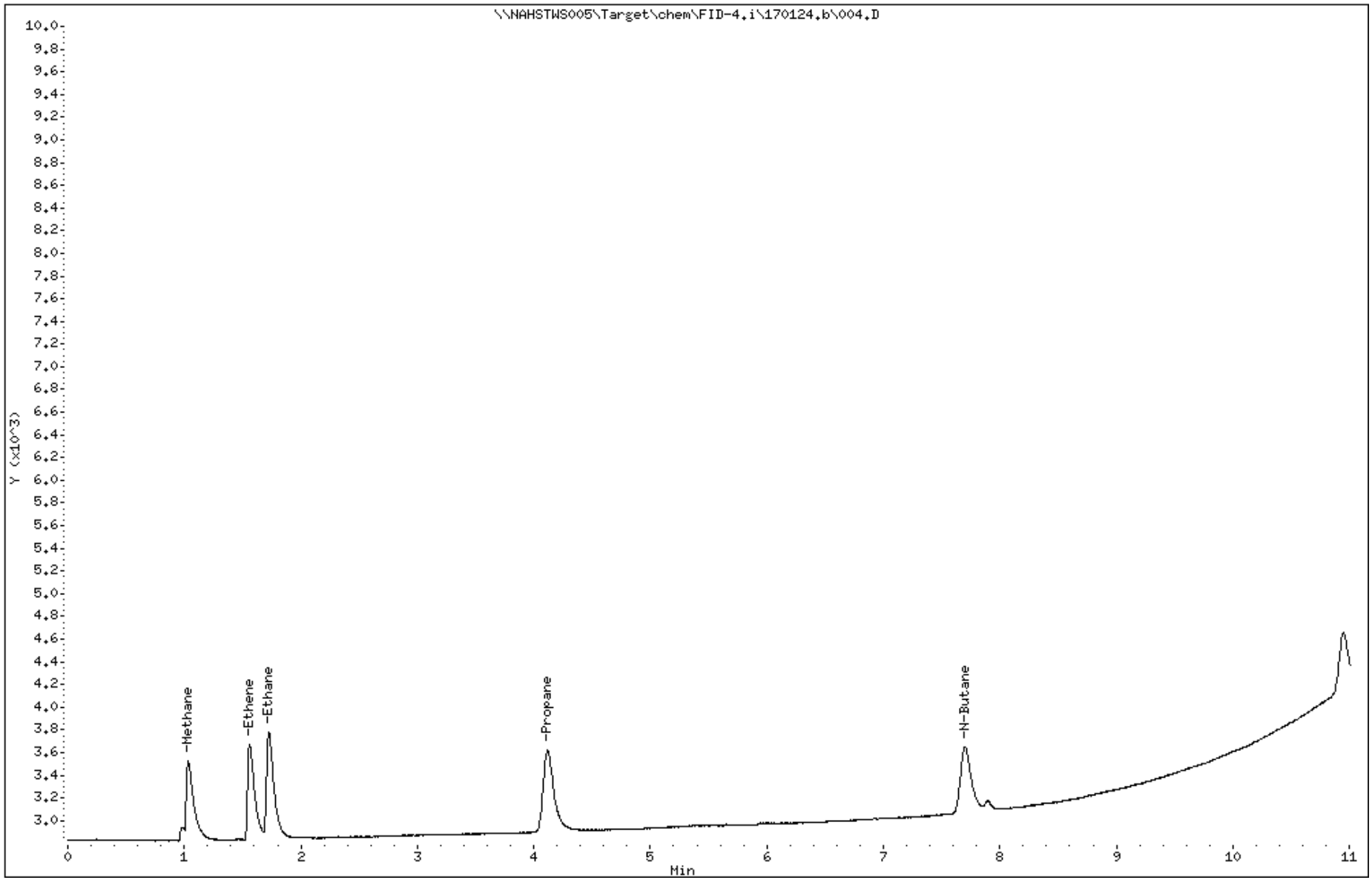
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



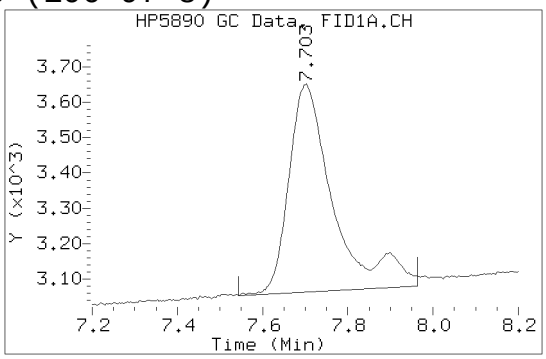
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

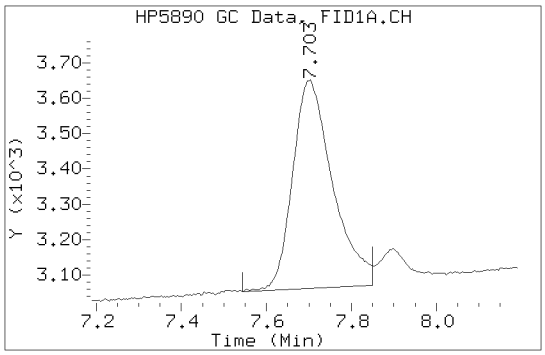
BEFORE

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



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

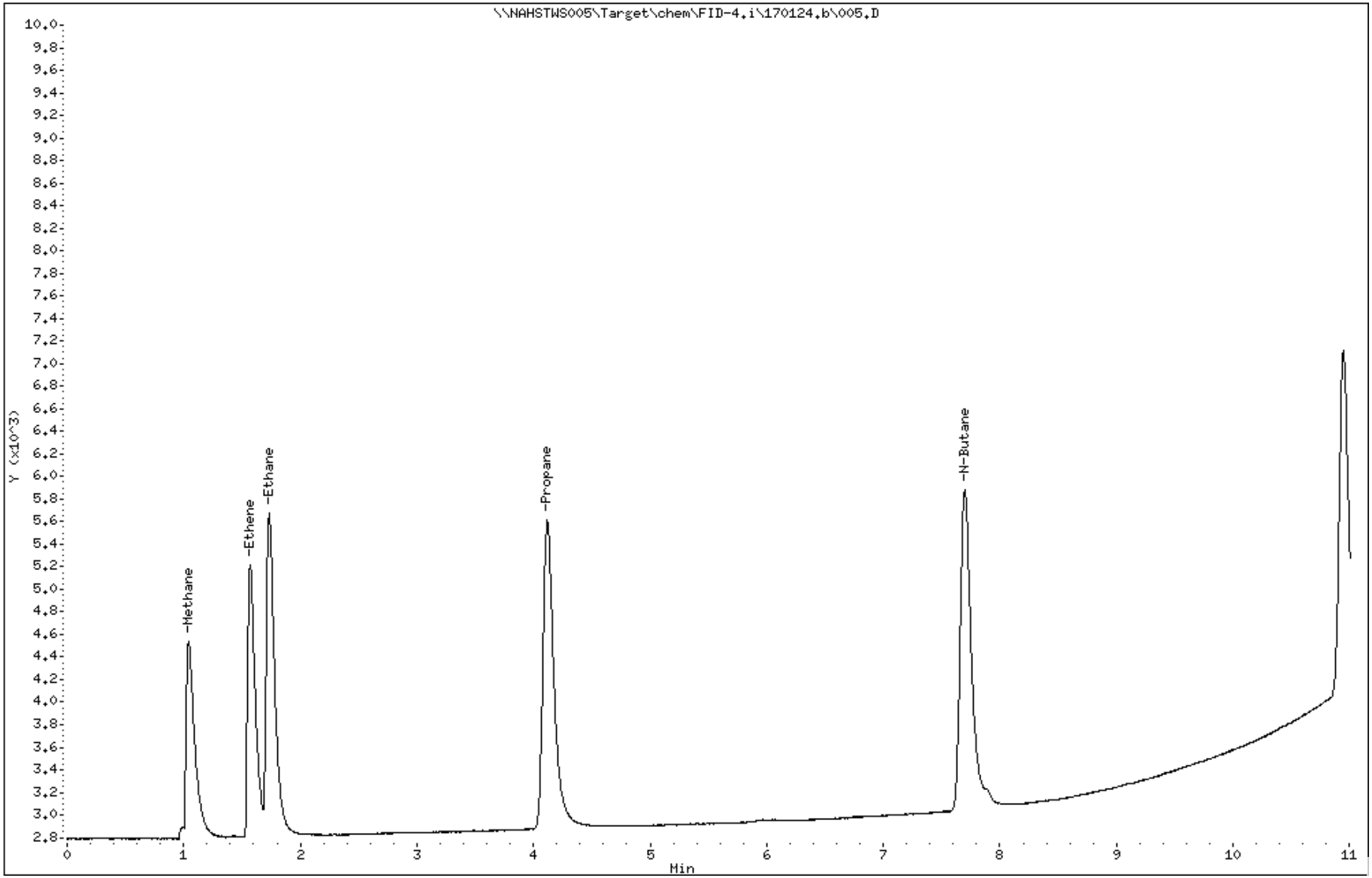
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



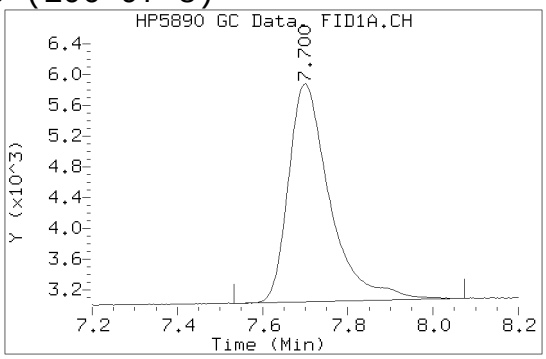
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

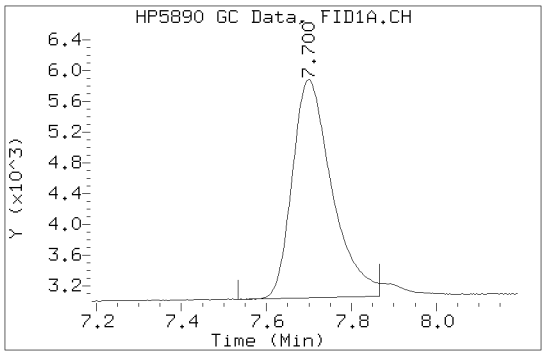
BEFORE

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



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

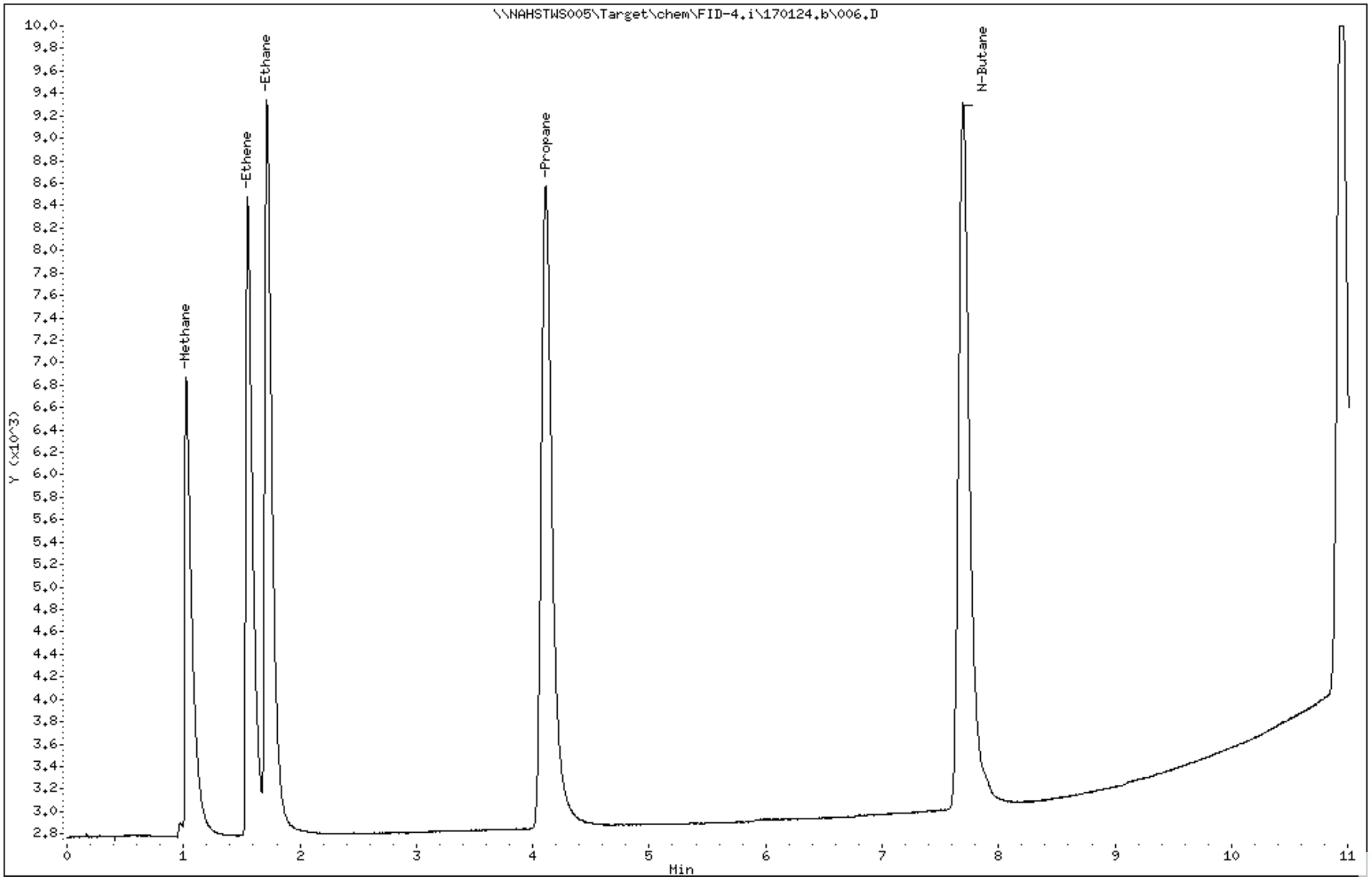
Instrument: FID-4.i

Sample Info: ICAL6;ICAL6;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

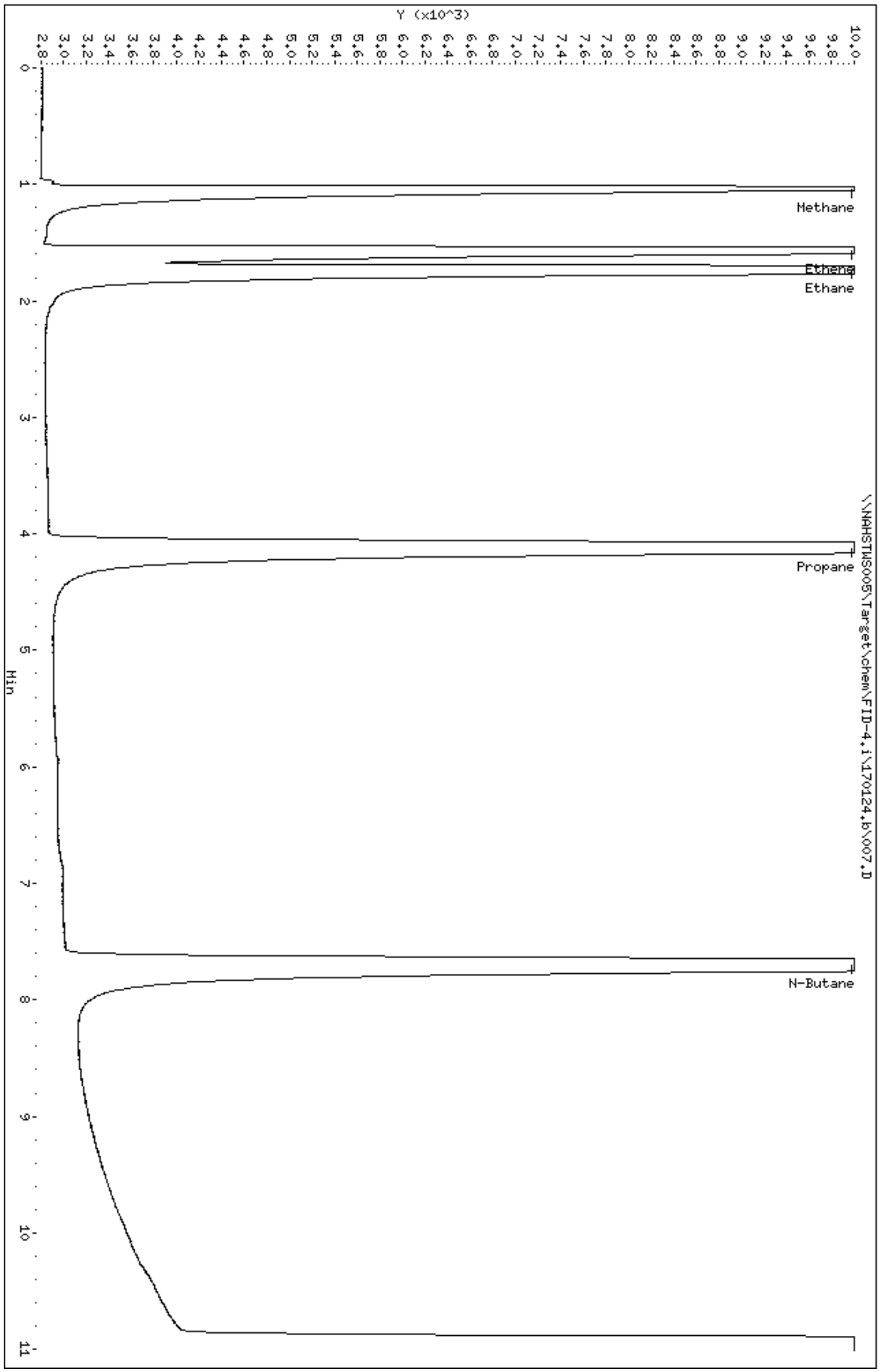
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	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.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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

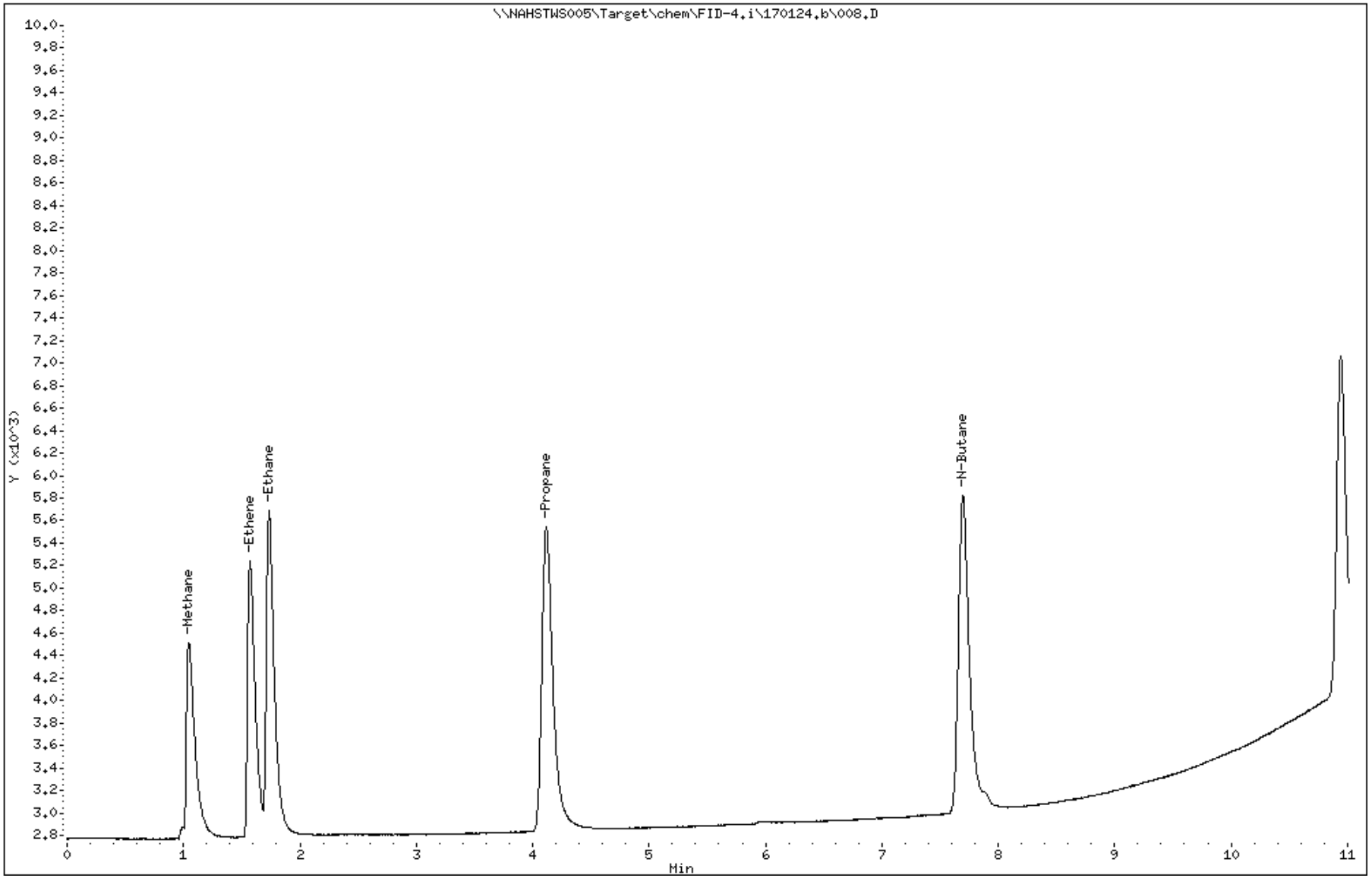
Instrument: FID-4.i

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 427362

Semi-Volatiles by RSK-175

Workorder

HS23011397

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

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230130.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 09:25
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad 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: 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	0.430	0.430	0.000	8944	9.64700	9.173
2 Ethene	0.650	0.650	0.000	10500	16.8500	17.925
3 Ethane	0.720	0.720	0.000	14618	18.0430	20.317

Data File: \\nahstws005\Target\chem\FID-4.i\230130.b\001.D

Date : 30-JAN-2023 09:25

Client ID: RSK-CCV

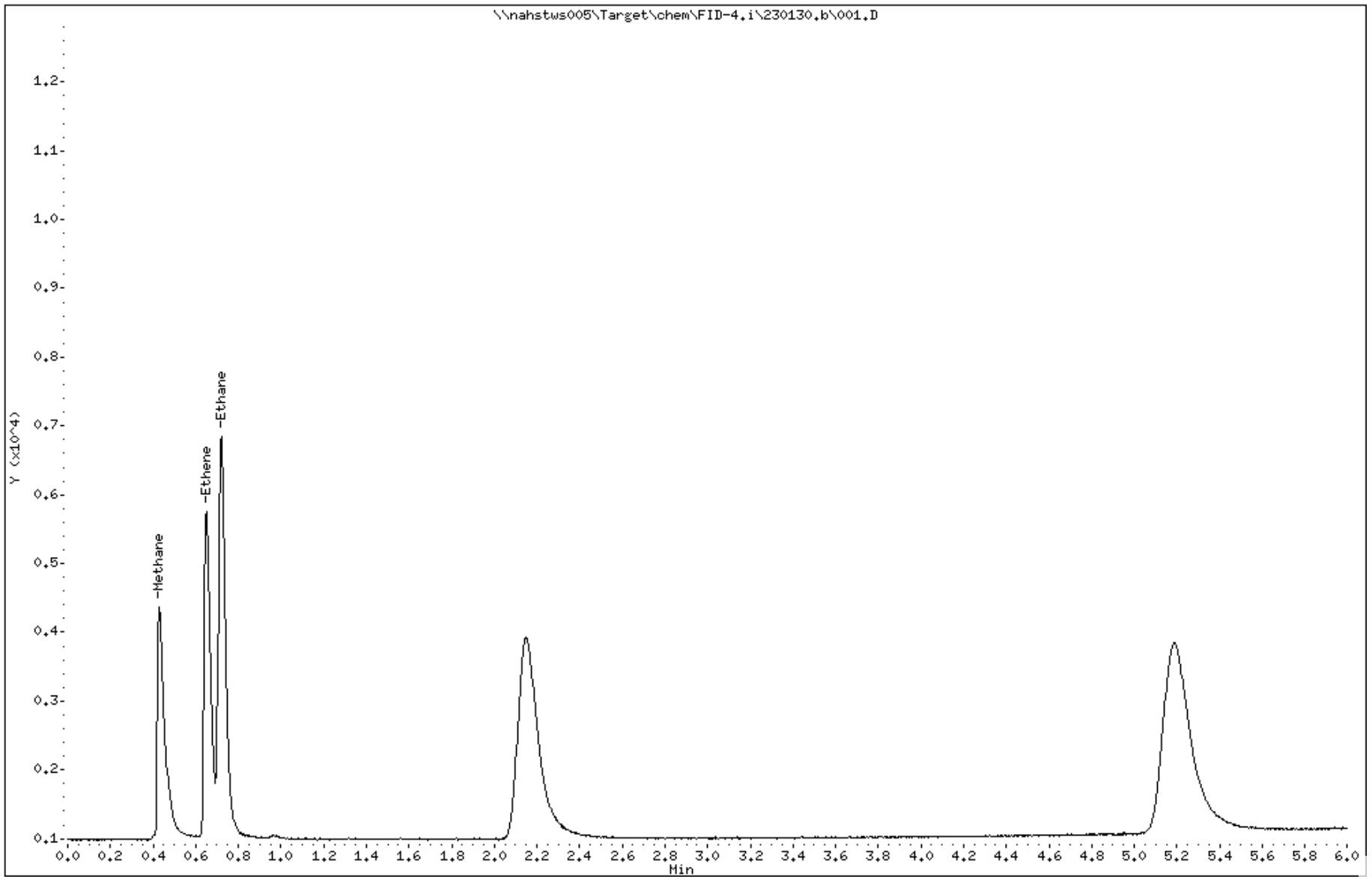
Instrument: FID-4.i

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\230130.b\001.D
Inj Date : 30-JAN-2023 09:25
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\002.D
Lab Smp Id: MBLK-230130 Client Smp ID: MBLK-230130
Inj Date : 30-JAN-2023 09:35
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230130;MBLK-230130;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 09:34 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\230130.b\002.D

Date : 30-JAN-2023 09:35

Client ID: MBLK-230130

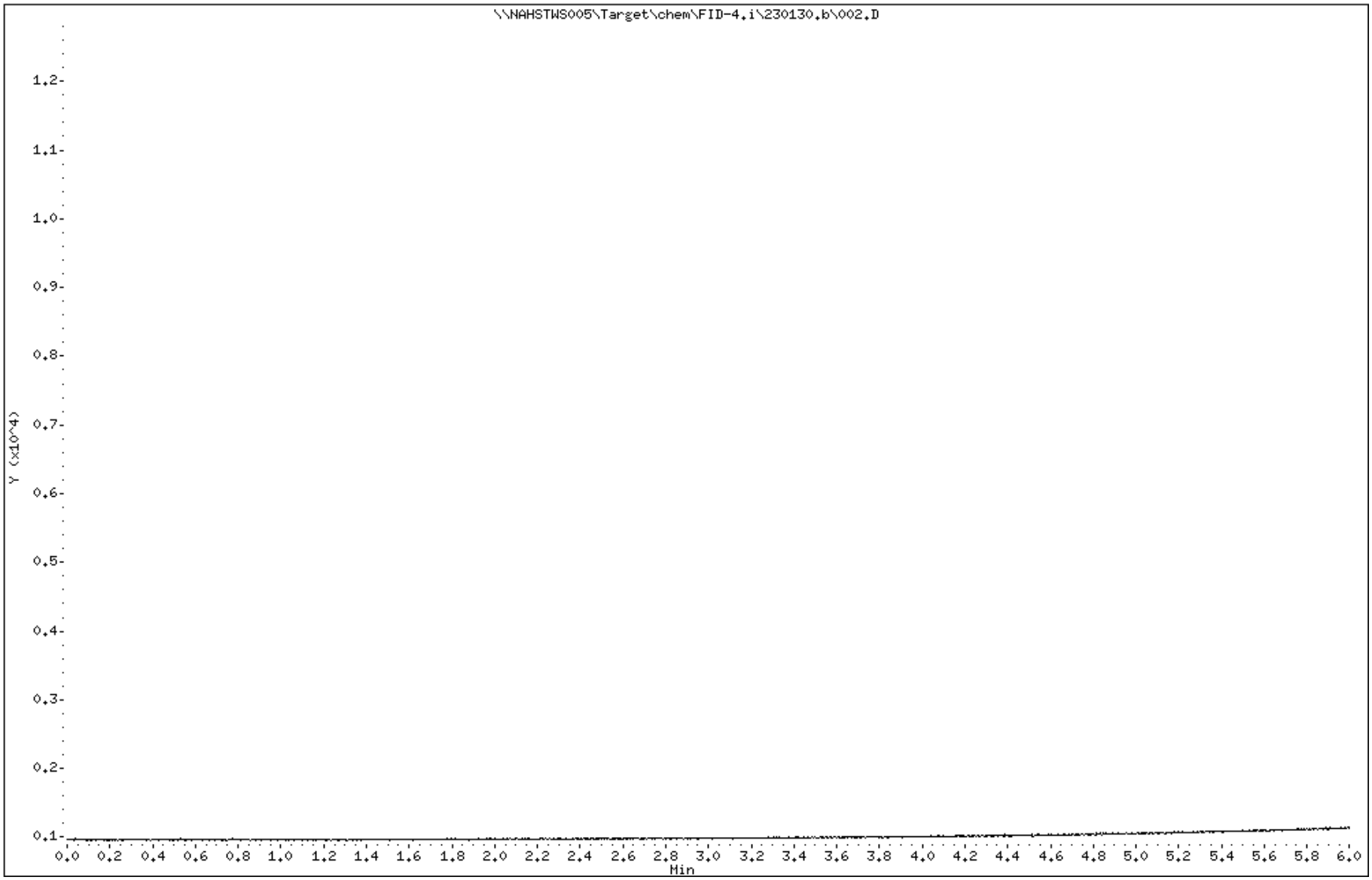
Instrument: FID-4.i

Sample Info: MBLK-230130;MBLK-230130;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\002.D
Inj Date : 30-JAN-2023 09:35
InstruID : FID-4.i
LabSampID : MBLK-230130

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\003.D
Lab Smp Id: LCS-230130 Client Smp ID: LCS-230130
Inj Date : 30-JAN-2023 09:43
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-230130;LCS-230130;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 09:34 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	0.433	0.430	0.003	9149	9.38366	9.383
2 Ethene	0.650	0.650	0.000	10022	17.1094	17.109
3 Ethane	0.723	0.720	0.003	13952	19.3915	19.391

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\003.D

Date : 30-JAN-2023 09:43

Client ID: LCS-230130

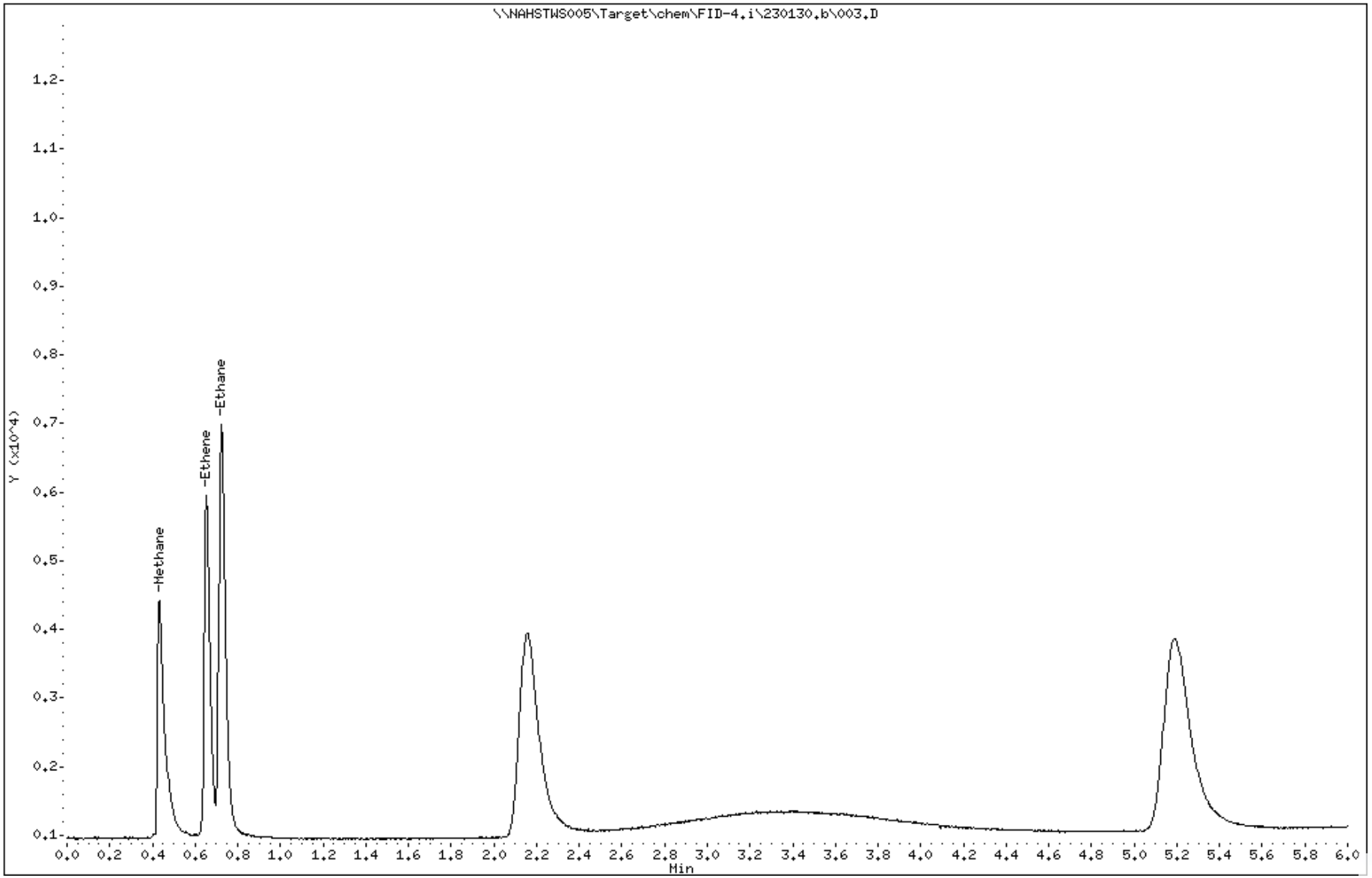
Instrument: FID-4.i

Sample Info: LCS-230130;LCS-230130;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\003.D
Inj Date : 30-JAN-2023 09:43
InstruID : FID-4.i
LabSampID : LCS-230130

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\005.D
Lab Smp Id: HS23011397-06 Client Smp ID: HS23011397-06
Inj Date : 30-JAN-2023 10:02
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011397-06;HS23011397-06
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 09:34 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	0.430	0.430	0.000	824199	845.339	845.338(A)
2 Ethene	0.650	0.650	0.000	295984	505.299	505.298(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\005.D

Date : 30-JAN-2023 10:02

Client ID: HS23011397-06

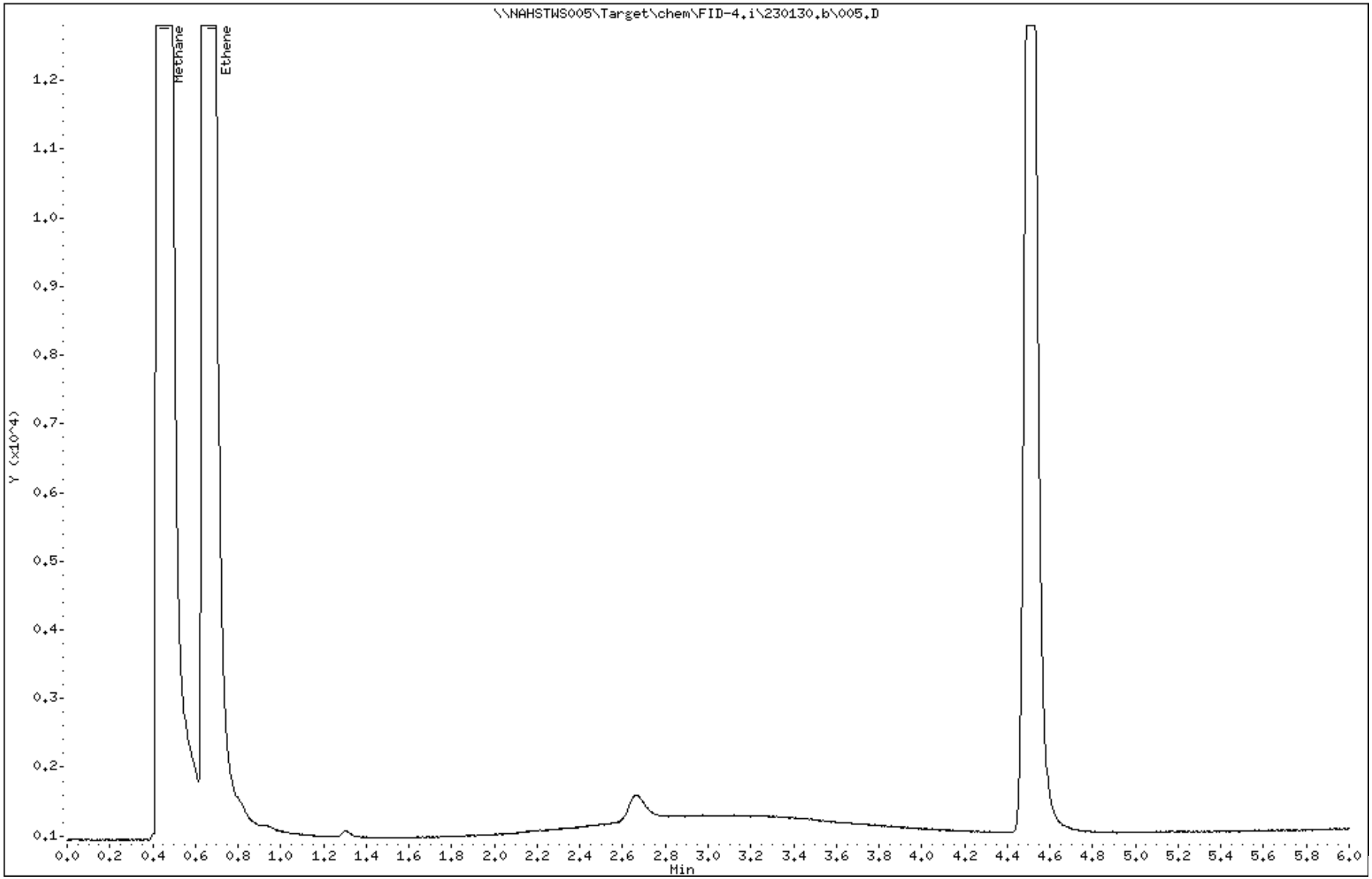
Instrument: FID-4.i

Sample Info: HS23011397-06;HS23011397-06

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\005.D
Inj Date : 30-JAN-2023 10:02
InstruID : FID-4.i
LabSampID : HS23011397-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\006.D Page 1
Report Date: 30-Jan-2023 10:57

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\006.D
Lab Smp Id: HS23011397-09 Client Smp ID: HS23011397-09
Inj Date : 30-JAN-2023 10:14
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011397-09;HS23011397-09
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 09:34 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: 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	0.430	0.006	5023233	5152.07	5152.074(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\006.D

Date : 30-JAN-2023 10:14

Client ID: HS23011397-09

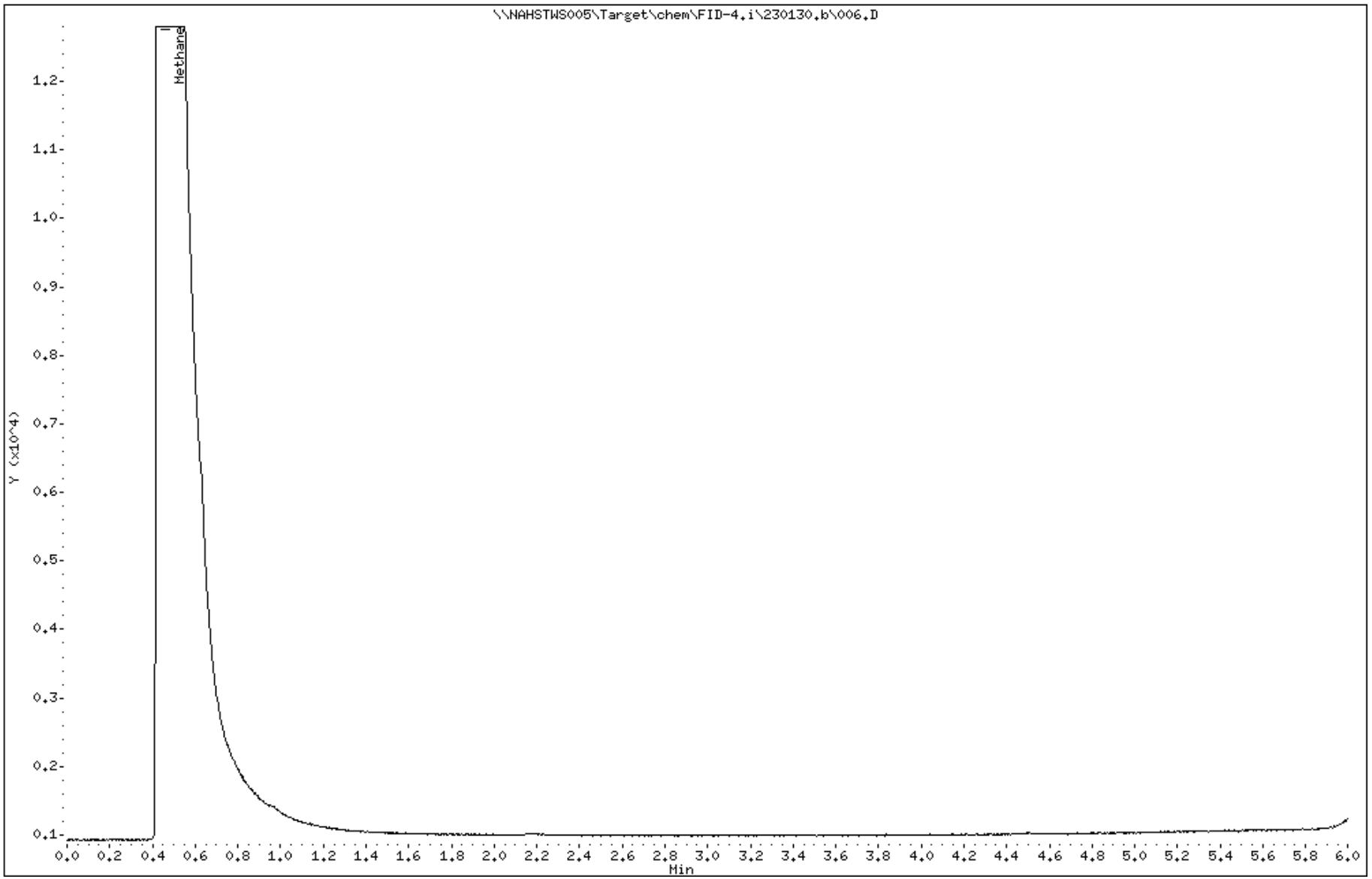
Instrument: FID-4.i

Sample Info: HS23011397-09;HS23011397-09

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\006.D
Inj Date : 30-JAN-2023 10:14
InstruID : FID-4.i
LabSampID : HS23011397-09

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 11:12
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 11:26 purvi.lad 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: 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	0.430	0.430	0.000	8505	9.64700	8.723
2 Ethene	0.650	0.650	0.000	10176	16.8500	17.372
3 Ethane	0.720	0.720	0.000	15136	18.0430	21.037

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\011.D

Date : 30-JAN-2023 11:12

Client ID: RSK-CCV

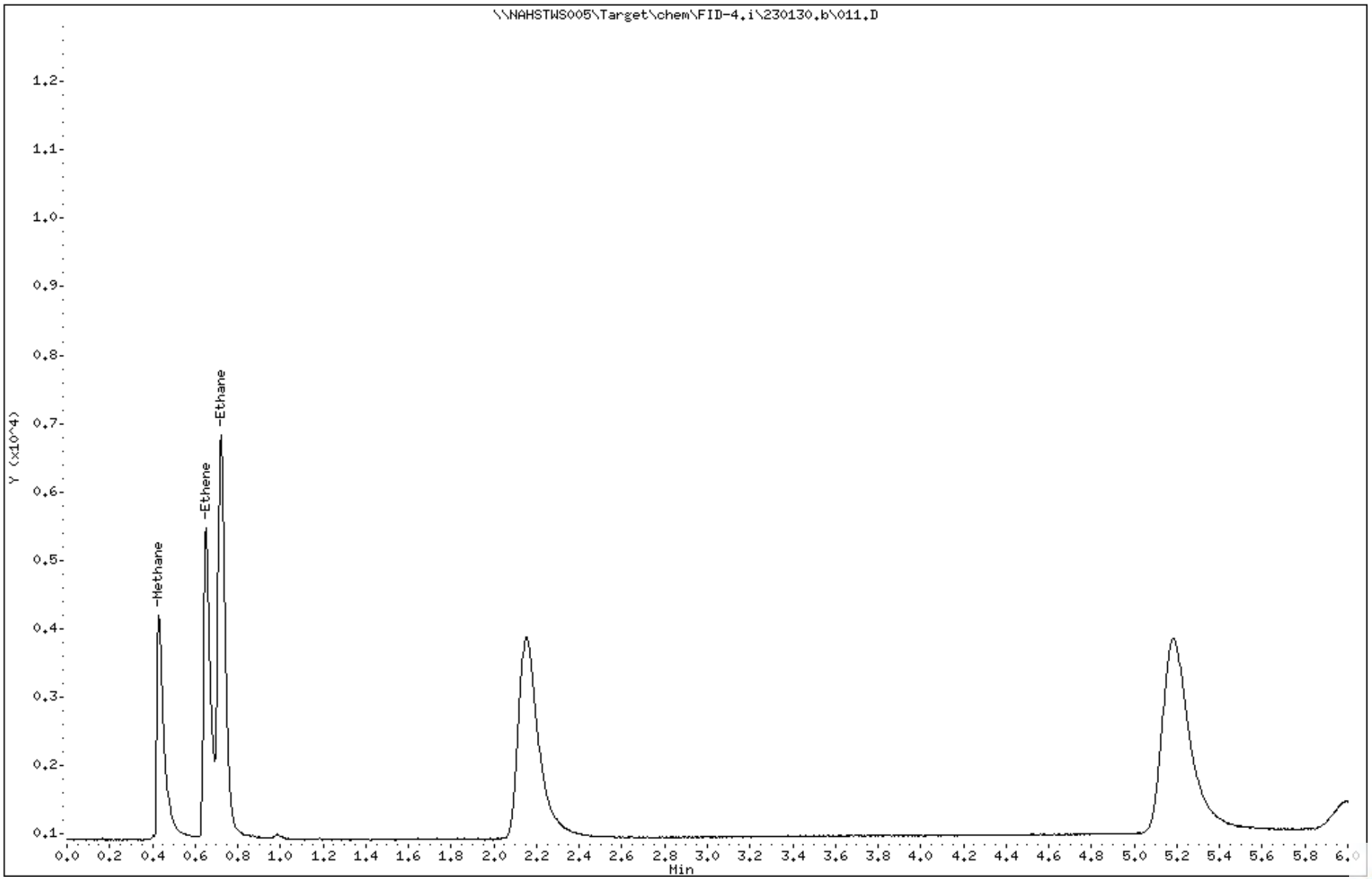
Instrument: FID-4.i

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\230130.b\011.D
Inj Date : 30-JAN-2023 11:12
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\013.D
Lab Smp Id: HS23011136-04MS Client Smp ID: HS23011136-04MS
Inj Date : 30-JAN-2023 11:28
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011136-04MS;HS23011136-04MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13 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	0.436	0.430	0.006	4744960	4866.66	4866.663(ARM)
2 Ethene	0.646	0.650	-0.004	27702	47.2924	47.292(RM)
3 Ethane	0.726	0.720	0.006	22730	31.5918	31.591(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\230130.b\013.D

Date : 30-JAN-2023 11:28

Client ID: HS23011136-04MS

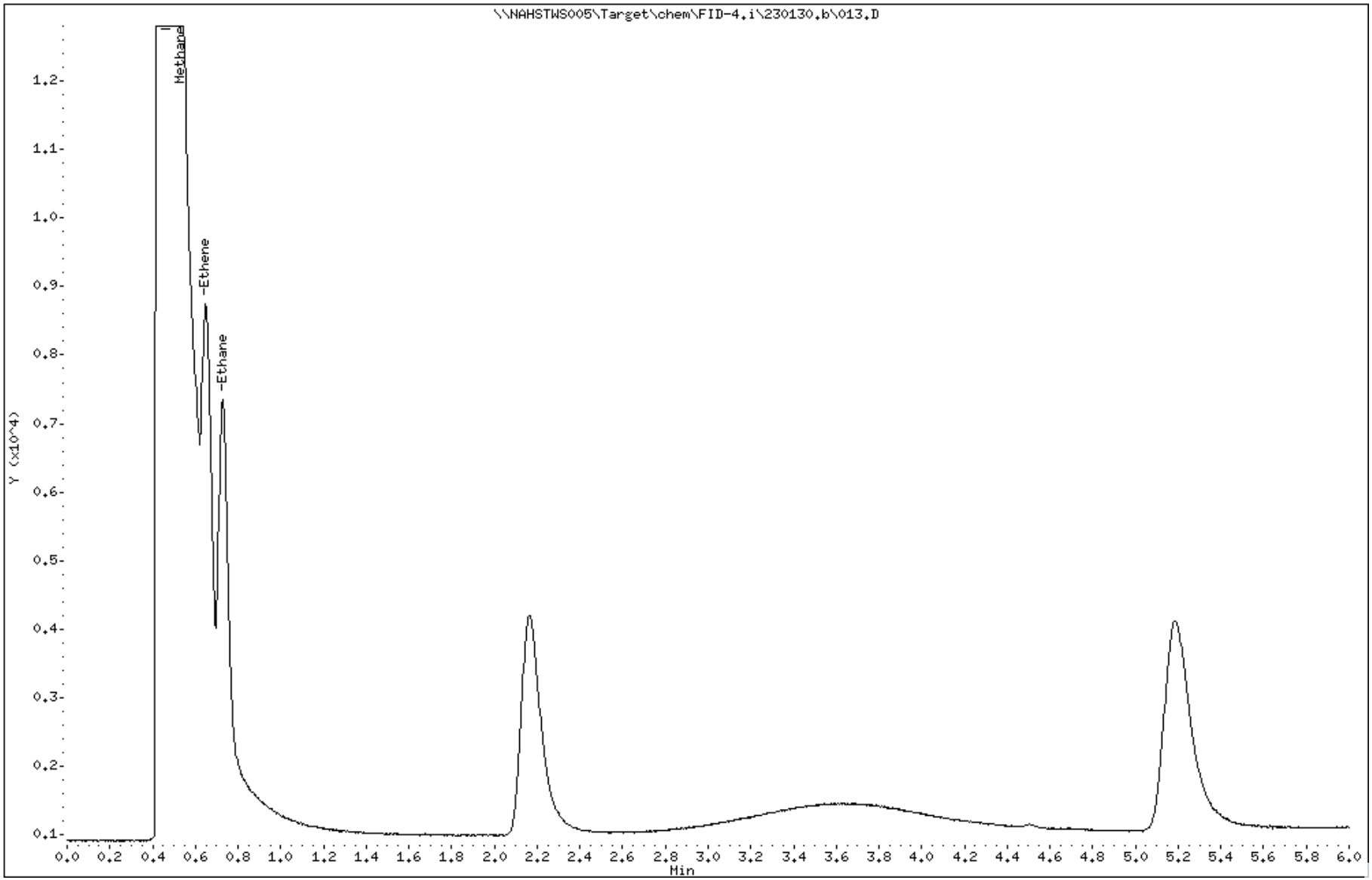
Instrument: FID-4.i

Sample Info: HS23011136-04MS;HS23011136-04MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

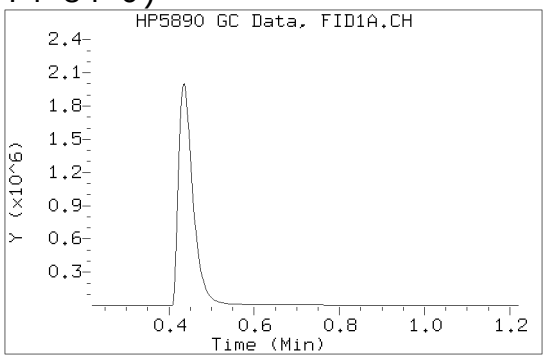


Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\013.D
Inj Date : 30-JAN-2023 11:28
InstruID : FID-4.i
LabSampID : HS23011136-04MS

Ethane (74-84-0)

BEFORE

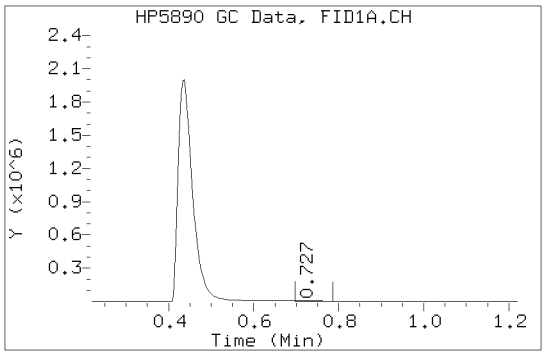
MASS
44
AREA
36147
HEIGHT
6418
30-Jan-2023
11:35
ALSHS
Server



AFTER

MASS
44
AREA
22730
HEIGHT
6448
06-Feb-2023
12:14
ALSHS
Ser

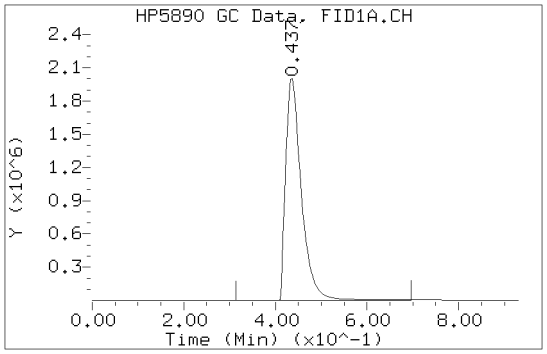
Reason Code:



Methane (74-82-8)

BEFORE

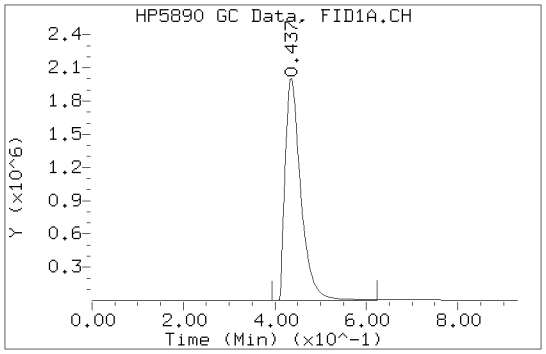
MASS
100
AREA
0
HEIGHT
0
30-Jan-2023
11:35
ALSHS
Server



AFTER

MASS
100
AREA
4744960
HEIGHT
2000494
06-Feb-2023
12:14
ALSHS
Ser

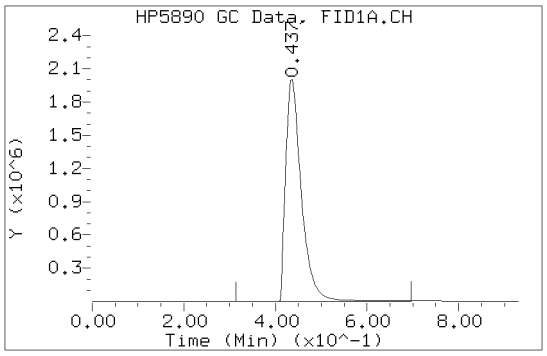
Reason Code:



Ethene (74-85-1)

BEFORE

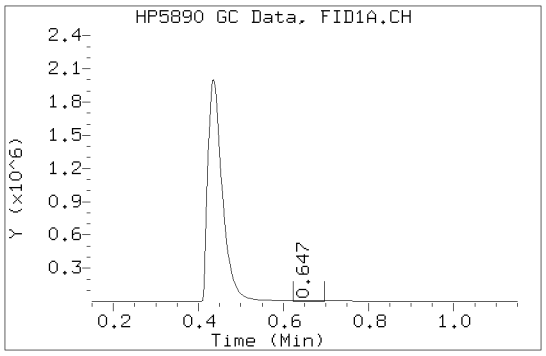
MASS
100
AREA
0
HEIGHT
0
30-Jan-2023
11:35
ALSHS
Server



AFTER

MASS
100
AREA
27702
HEIGHT
7852
06-Feb-2023
12:14
ALSHS
Ser

Reason Code:



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\014.D Page 1
Report Date: 06-Feb-2023 12:14

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\014.D
Lab Smp Id: HS23011136-04MSD Client Smp ID: HS23011136-04MSD
Inj Date : 30-JAN-2023 11:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011136-04MSD;HS23011136-04MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 14 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	0.430	0.430	0.000	4691938	4812.28	4812.281(AR)
2 Ethene	0.636	0.650	-0.014	24015	40.9980	40.997(R)
3 Ethane	0.716	0.720	-0.004	21212	29.4820	29.482(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\230130.b\014.D

Date : 30-JAN-2023 11:37

Client ID: HS23011136-04MSD

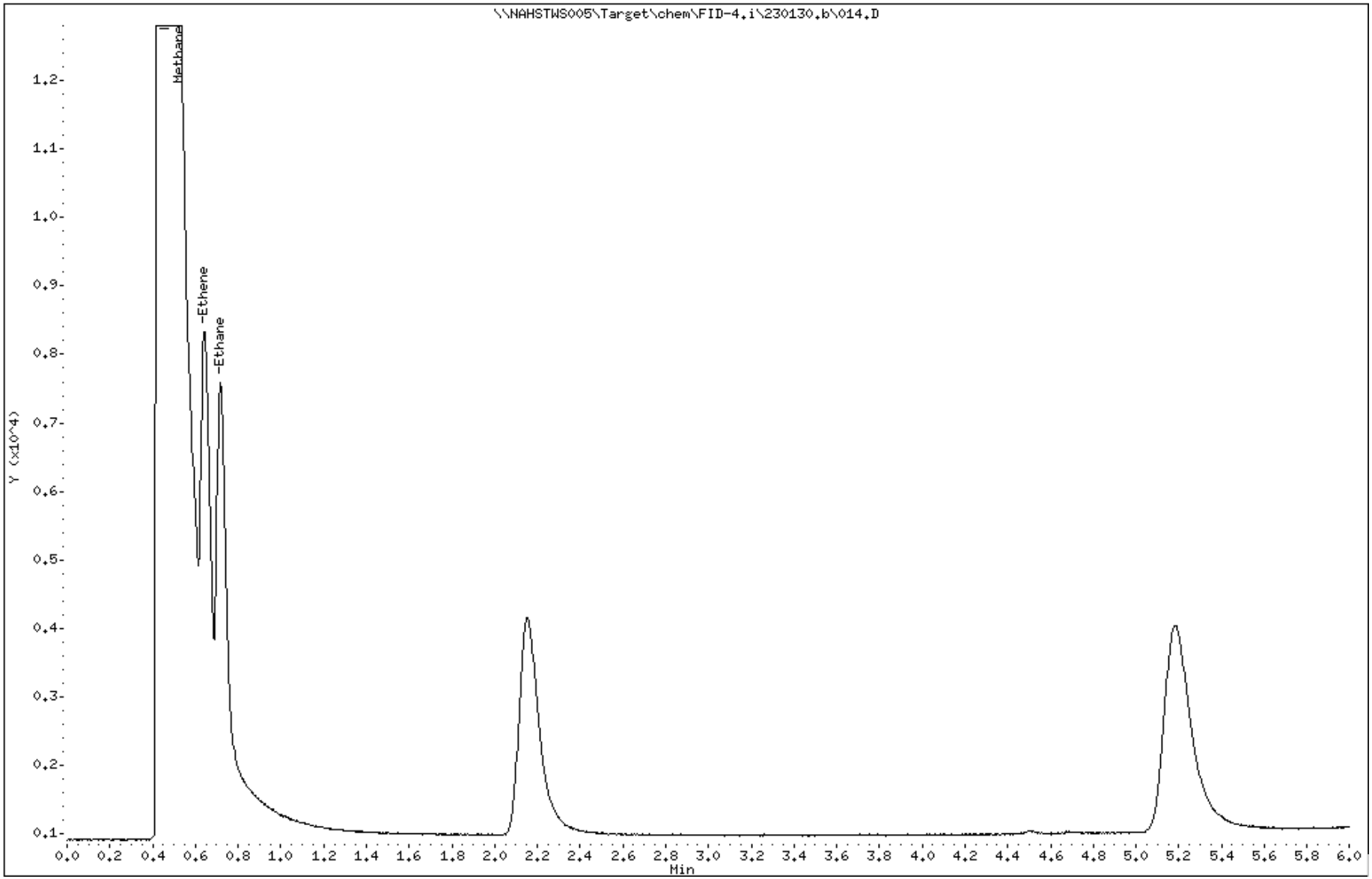
Instrument: FID-4.i

Sample Info: HS23011136-04MSD;HS23011136-04MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



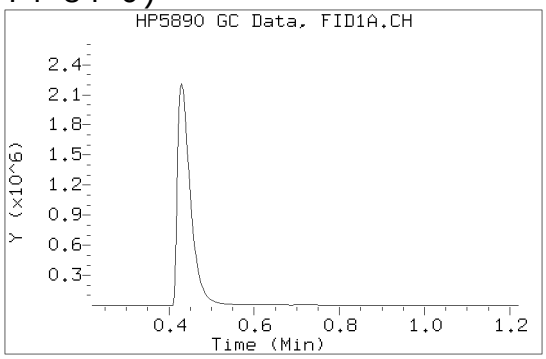
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\014.D
Inj Date : 30-JAN-2023 11:37
InstruID : FID-4.i
LabSampID : HS23011136-04MSD

Ethane (74-84-0)

Reason Code:

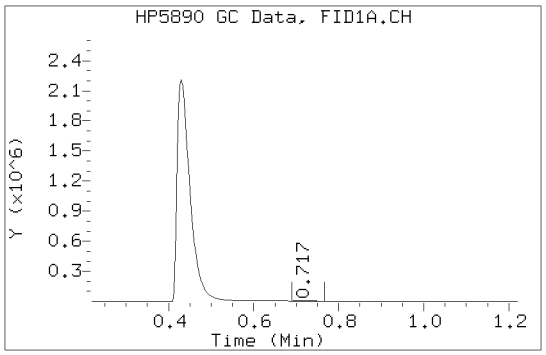
BEFORE

MASS
44
AREA
35857
HEIGHT
6673
30-Jan-2023
11:45
ALSHS
Server



AFTER

MASS
44
AREA
21212
HEIGHT
6673
06-Feb-2023
12:14
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\021.D Page 1
Report Date: 16-Feb-2023 13:26

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\021.D
Lab Smp Id: HS23011397-06 Client Smp ID: HS23011397-06
Inj Date : 30-JAN-2023 12:48
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011397-06;HS23011397-06
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 21
Dil Factor: 50.00000
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	0.450	0.423	0.027	16877	17.3099	865.493
2 Ethene	0.670	0.643	0.027	6416	10.9533	547.664(M)
3 Ethane	0.740	0.716	0.024	1023	1.42184	71.092(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\021.D

Page 1

Date : 30-JAN-2023 12:48

Client ID: HS23011397-06

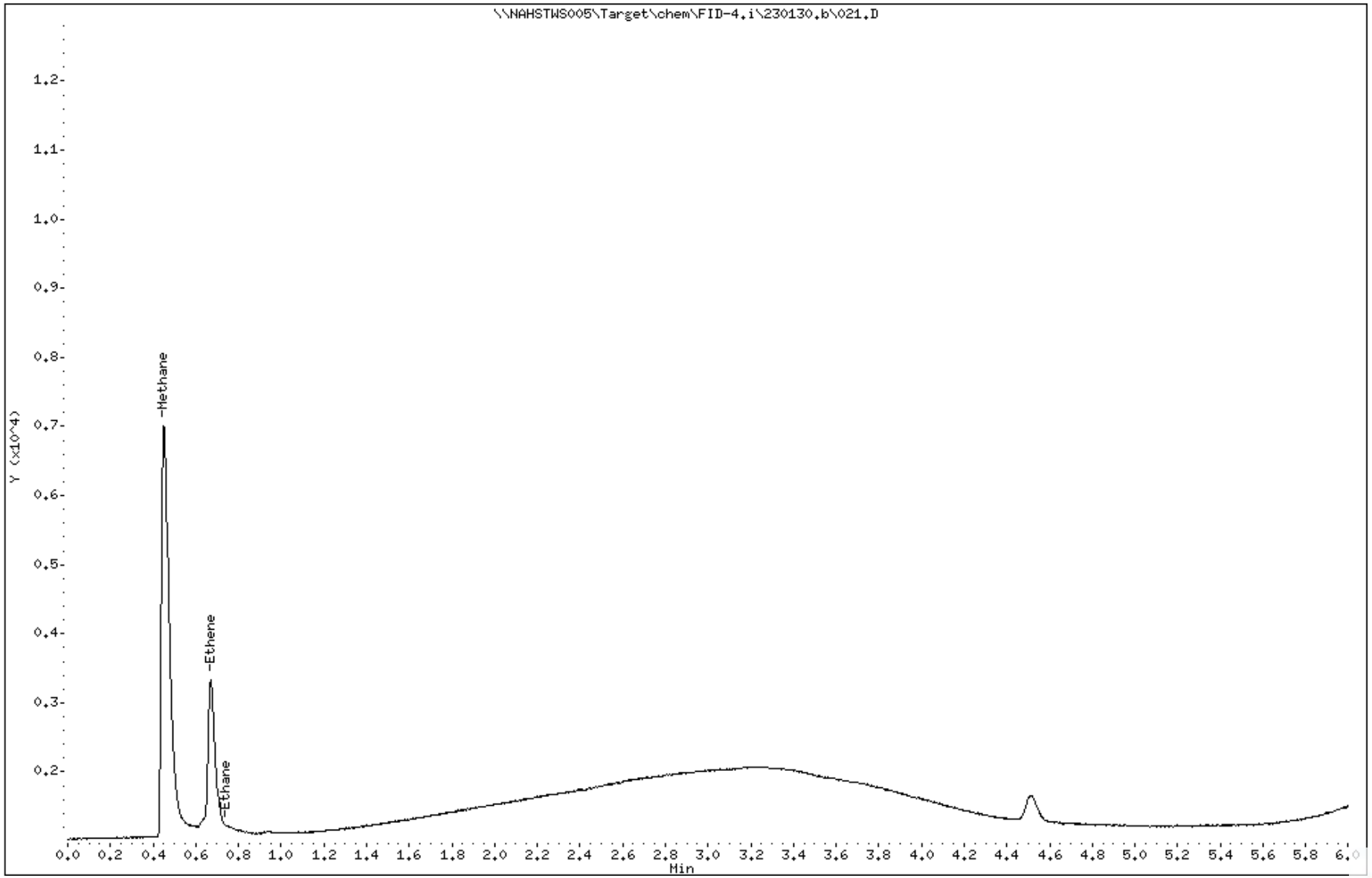
Instrument: FID-4.i

Sample Info: HS23011397-06;HS23011397-06

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



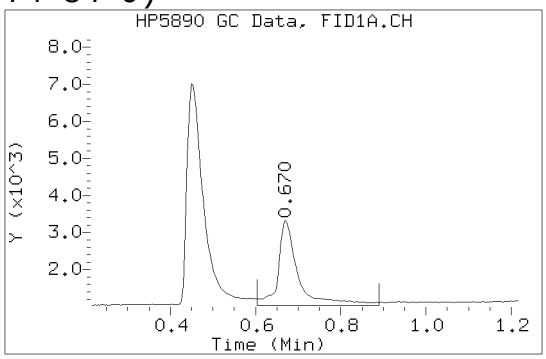
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\021.D
Inj Date : 30-JAN-2023 12:48
InstruID : FID-4.i
LabSampID : HS23011397-06

Ethane (74-84-0)

Reason Code:

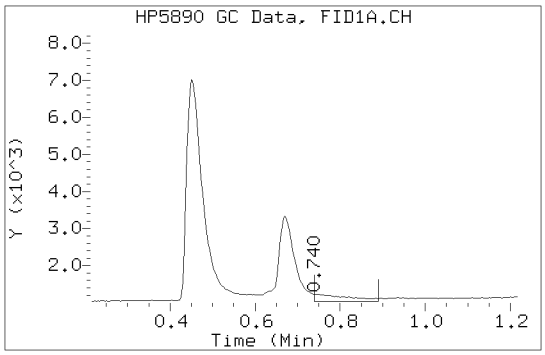
BEFORE

MASS
44
AREA
7371
HEIGHT
2300
30-Jan-2023
12:56
ALSHS
Server



AFTER

MASS
44
AREA
1023
HEIGHT
187
16-Feb-2023
13:26
ALSHS
Ser

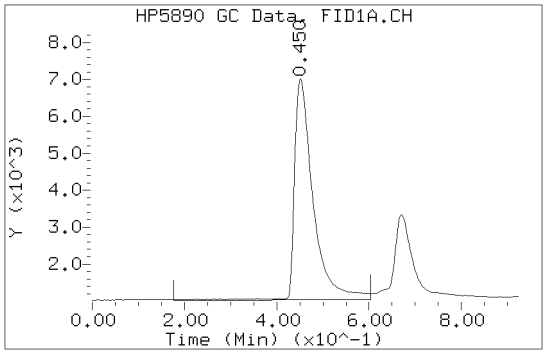


Ethene (74-85-1)

Reason Code:

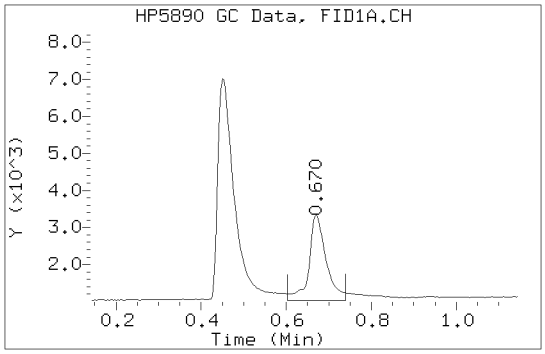
BEFORE

MASS
100
AREA
0
HEIGHT
0
30-Jan-2023
12:56
ALSHS
Server



AFTER

MASS
100
AREA
6416
HEIGHT
2299
16-Feb-2023
13:26
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 12:55
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 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	0.433	0.433	0.000	9180	9.64700	9.415
2 Ethene	0.660	0.660	0.000	9682	16.8500	16.528(M)
3 Ethane	0.730	0.730	0.000	13798	18.0430	19.177(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\022.D

Date : 30-JAN-2023 12:55

Client ID: RSK-CCV

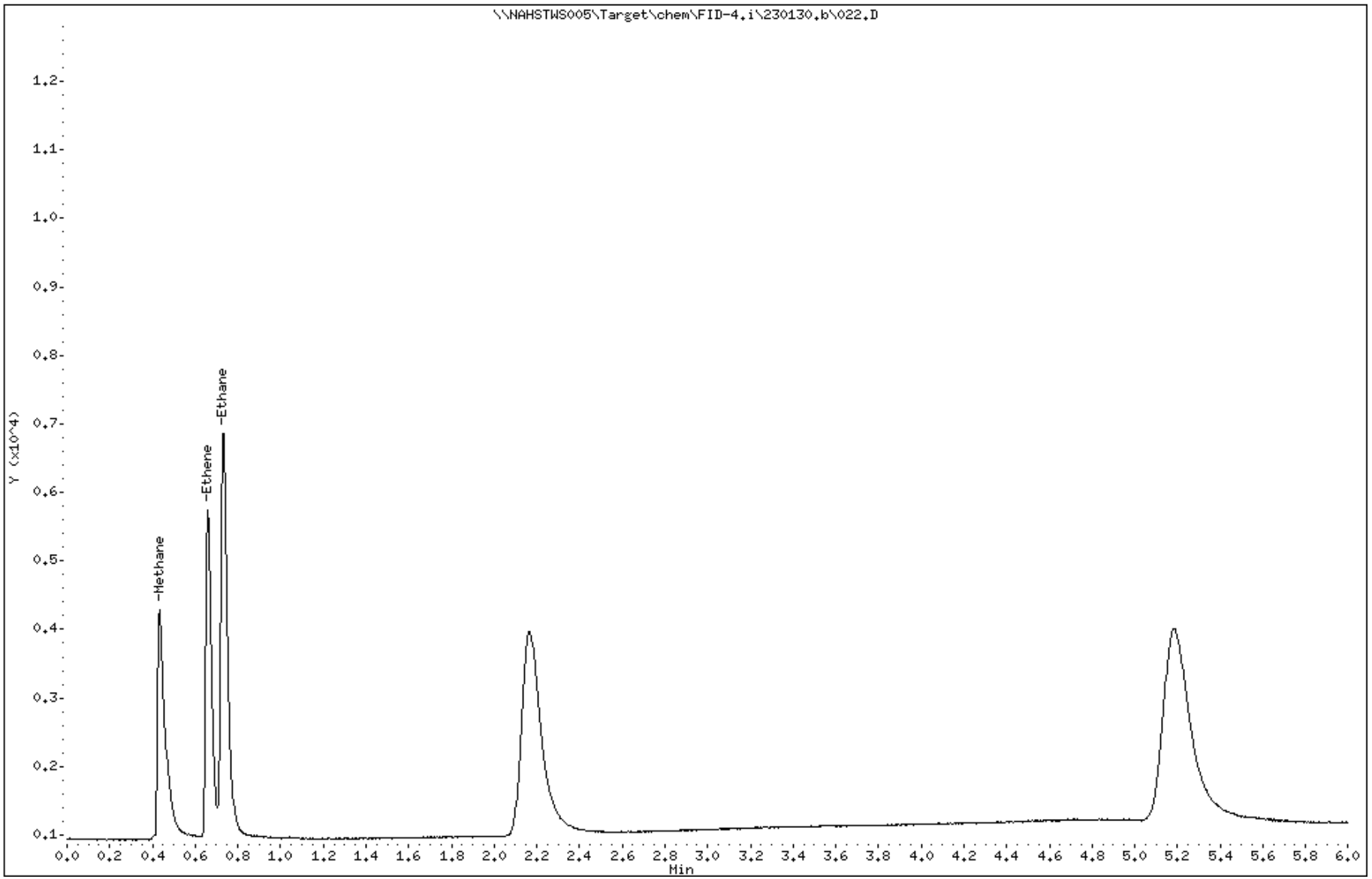
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

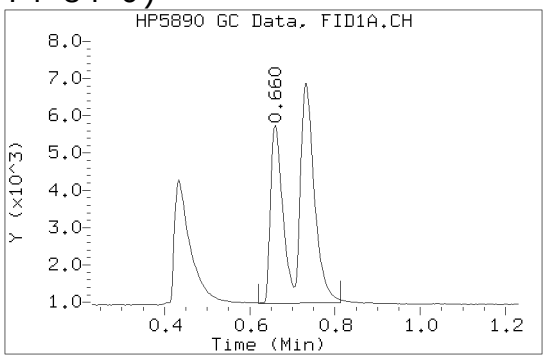


Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\022.D
Inj Date : 30-JAN-2023 12:55
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

BEFORE

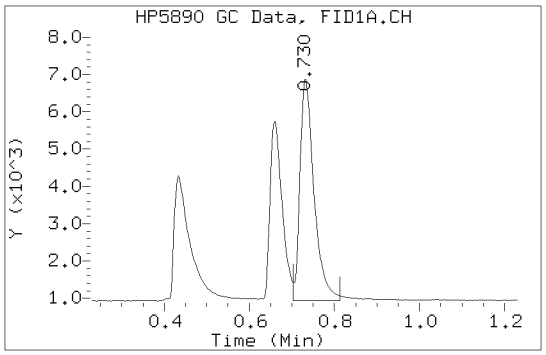
MASS
44
AREA
22792
HEIGHT
4768
30-Jan-2023
13:02
ALSHS
Server



AFTER

MASS
44
AREA
13798
HEIGHT
5930
06-Feb-2023
12:15
ALSHS
Ser

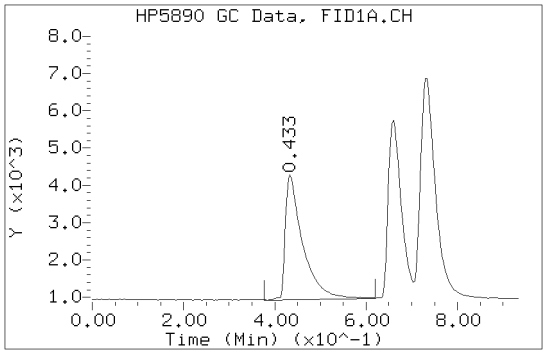
Reason Code:



Ethene (74-85-1)

BEFORE

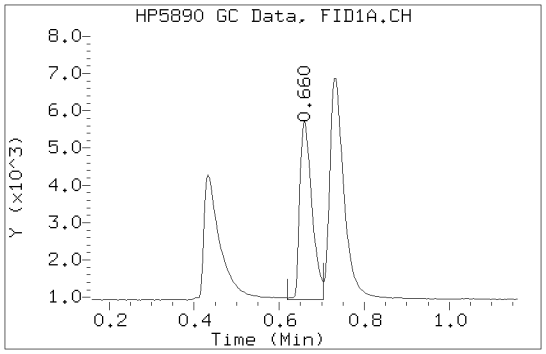
MASS
100
AREA
157
HEIGHT
23
30-Jan-2023
13:02
ALSHS
Server



AFTER

MASS
100
AREA
9682
HEIGHT
4816
06-Feb-2023
12:15
ALSHS
Ser

Reason Code:



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\023.D
Lab Smp Id: HS23011397-09 Client Smp ID: HS23011397-09
Inj Date : 30-JAN-2023 13:07
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011397-09;HS23011397-09
Misc Info : ;1;0;400
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 23
Dil Factor: 400.00000
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	0.463	0.423	0.040	11070	11.3539	4541.574
2 Ethene	0.676	0.643	0.033	1977	3.37510	1350.039(M)
3 Ethane	0.753	0.716	0.037	1684	2.34055	936.219(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\023.D

Date : 30-JAN-2023 13:07

Client ID: HS23011397-09

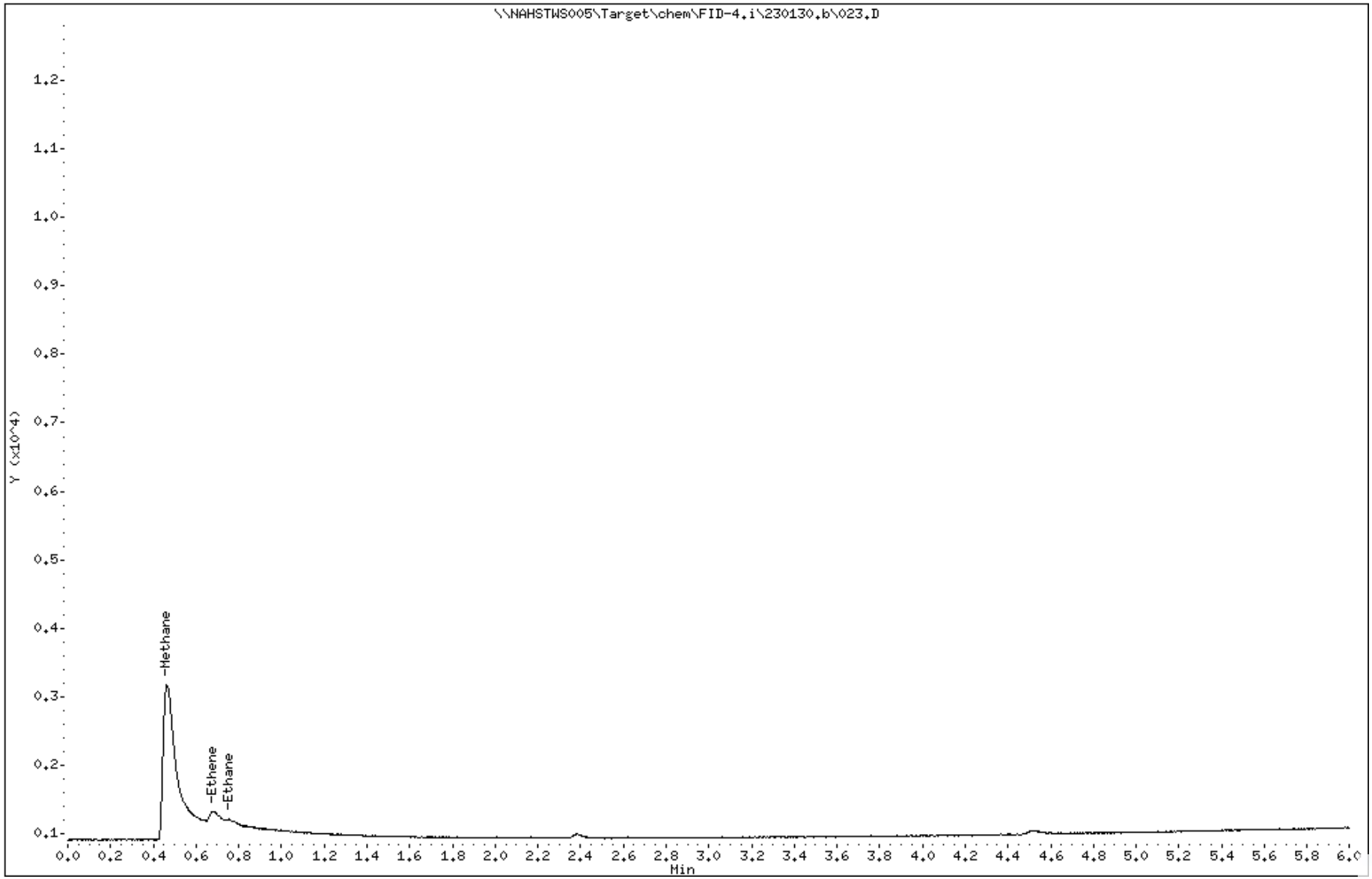
Instrument: FID-4.i

Sample Info: HS23011397-09;HS23011397-09

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

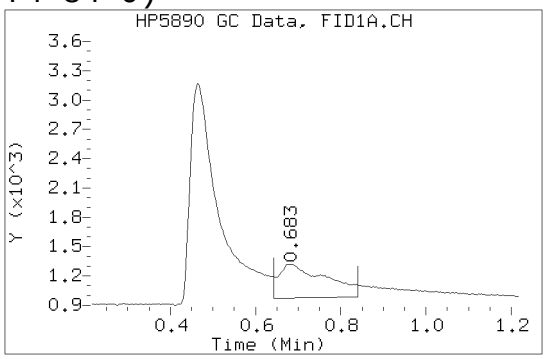


Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\023.D
Inj Date : 30-JAN-2023 13:07
InstruID : FID-4.i
LabSampID : HS23011397-09

Ethane (74-84-0)

BEFORE

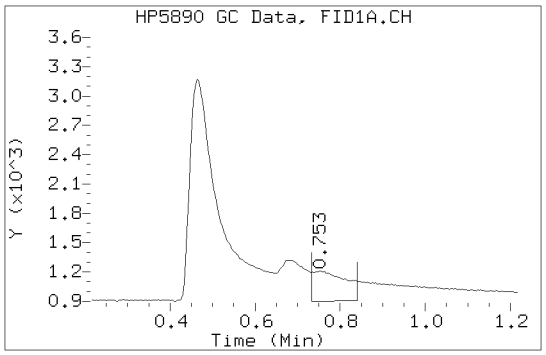
MASS
44
AREA
2671
HEIGHT
348
30-Jan-2023
13:16
ALSHS
Server



AFTER

MASS
44
AREA
1684
HEIGHT
314
16-Feb-2023
13:26
ALSHS
Ser

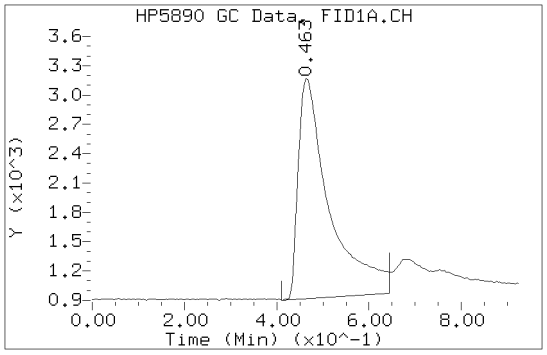
Reason Code:



Ethene (74-85-1)

BEFORE

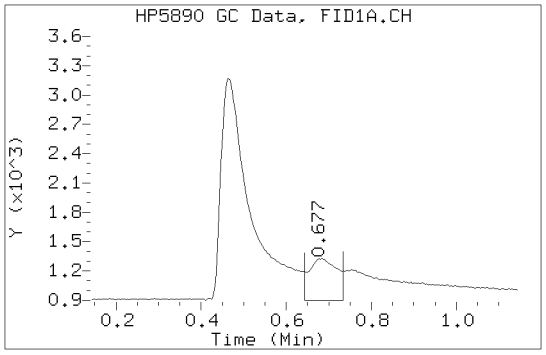
MASS
100
AREA
132
HEIGHT
22
30-Jan-2023
13:16
ALSHS
Server



AFTER

MASS
100
AREA
1977
HEIGHT
421
16-Feb-2023
13:26
ALSHS
Ser

Reason Code:



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D Page 1
Report Date: 06-Feb-2023 12:16

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 30-JAN-2023 14:30
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\230130.b\RSKNI3.m
Meth Date : 30-Jan-2023 14:38 purvi.lad Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	0.423	0.423	0.000	8678	9.64700	8.900
2 Ethene	0.643	0.643	0.000	10361	16.8500	17.688
3 Ethane	0.716	0.716	0.000	14064	18.0430	19.547(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D

Date : 30-JAN-2023 14:30

Client ID: RSK-CCV

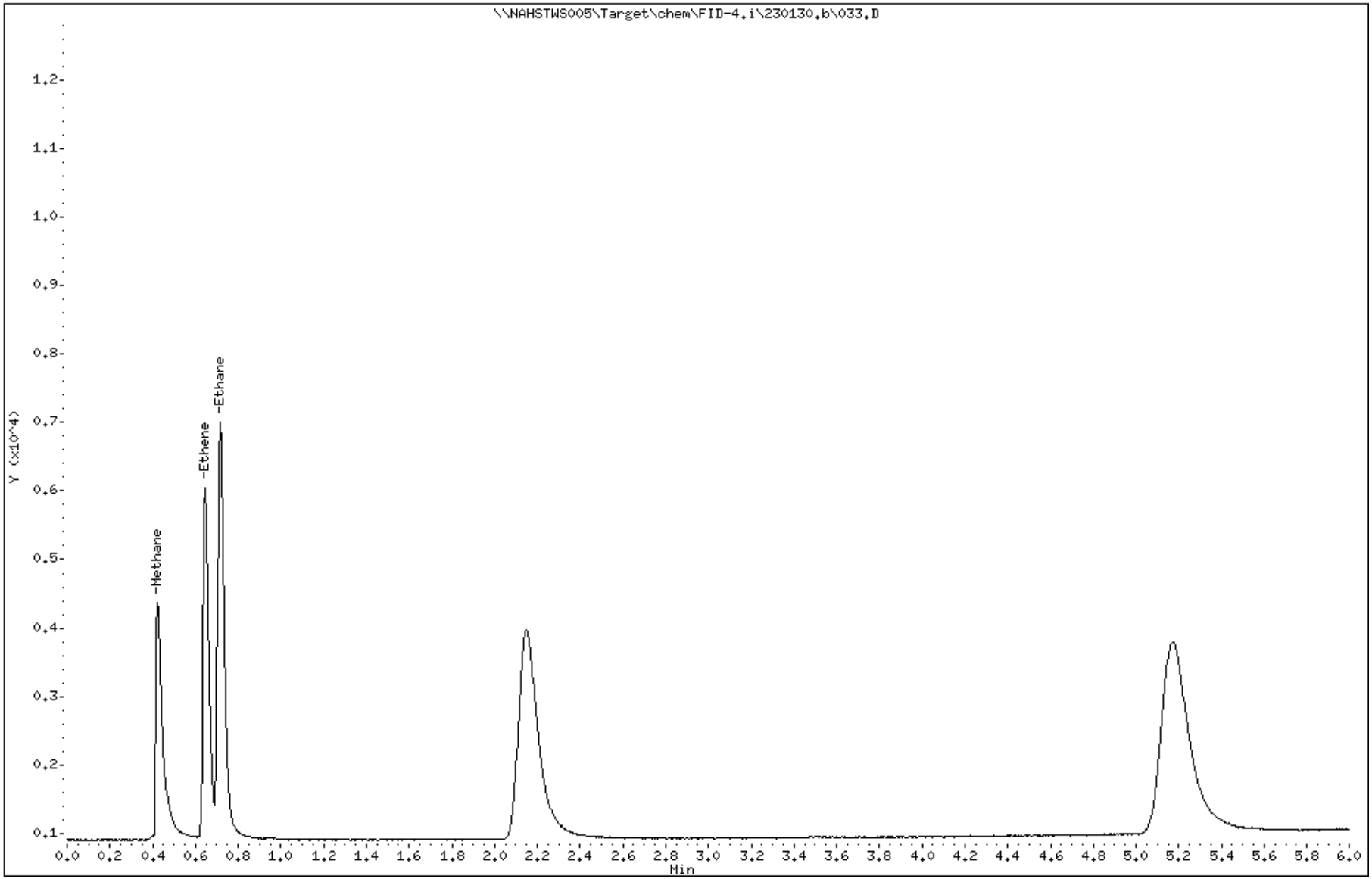
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



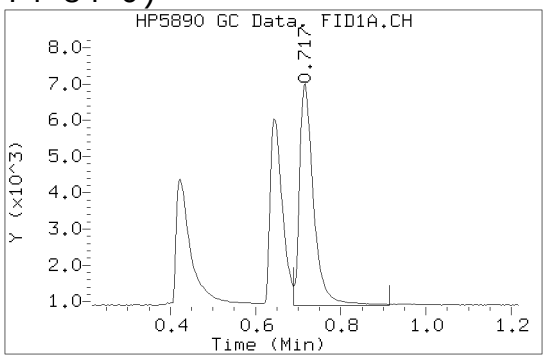
Data File : \\NAHSTWS005\Target\chem\FID-4.i\230130.b\033.D
Inj Date : 30-JAN-2023 14:30
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

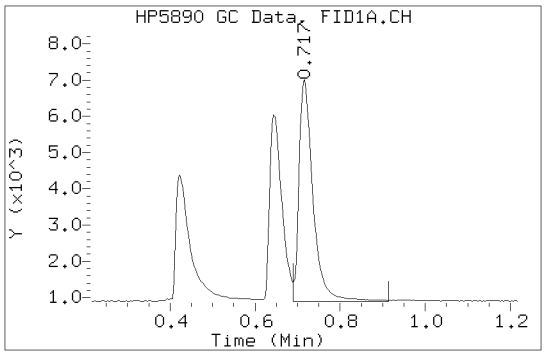
BEFORE

MASS
44
AREA
14064
HEIGHT
6114
06-Feb-2023
12:16
purvi
lad



AFTER

MASS
44
AREA
14064
HEIGHT
6114
06-Feb-2023
12:16
purvi
lad



HS23011397 Wet Chemistry

ALS WO# HS23011397

C:\TOC-L\Data\2022_12_22_002_CAL.tlx

HS2301139?

	Type	Analysis	Sample Nam	Sample ID	Origin	Manual Diluti	Result	Notes	Status
1	Standard	NPOC	CAL	3100606518	12_22_2022.2	1.000			Completed
2	Unknown	NPOC	ICV	3100606203	12_22_2022.c	1.000	NPOC:10.7		Completed
3	Unknown	NPOC	ICB		12_22_2022.c	1.000	NPOC:0.34		Completed

C:\TOC-L\Data\2022_12_22_002_CAL.tlx

	Date / Time	Vial
1	12/22/2022	1, 2, 3, 4, 5,
2	12/22/2022	8
3	12/22/2022	1

TOC-Control L Report

2022_12_22_002_CAL.tlx

Instr.Information

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

Cal. Curve

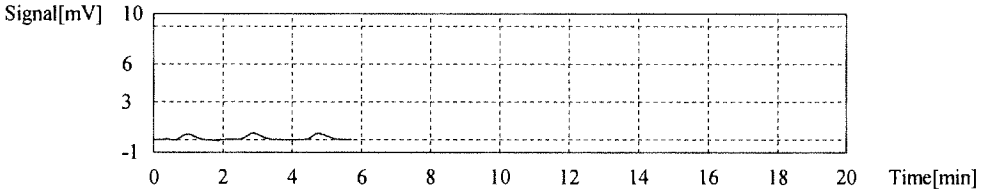
Sample Name:	CAL
Sample ID:	3100606518
Cal. Curve:	12_22_2022.2022_12_22_13_06_45.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.350	50uL	1.000	*******		12/22/2022 12:15:57 PM
2	1.448	50uL	1.000	*******		12/22/2022 12:18:06 PM
3	1.380	50uL	1.000	*******		12/22/2022 12:20:13 PM

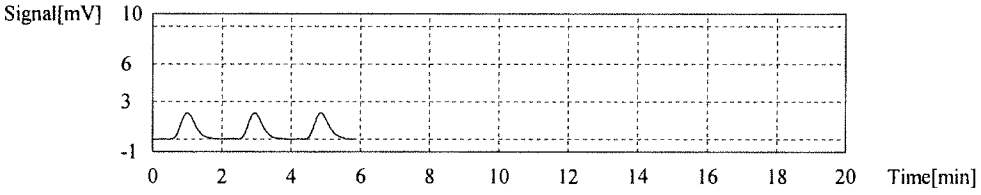
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	1.393



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	6.297	50uL	1.000	*******		12/22/2022 12:28:55 PM
2	5.988	50uL	1.000	*******		12/22/2022 12:31:02 PM
3	6.247	50uL	1.000	*******		12/22/2022 12:33:14 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	6.177



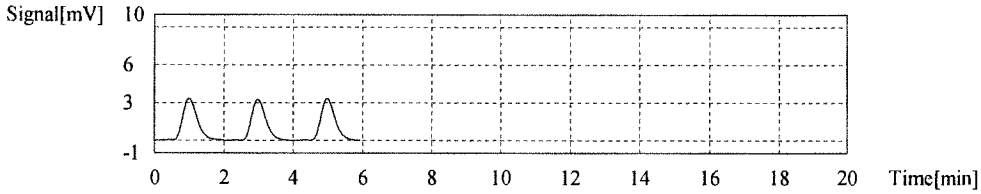
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	9.406	50uL	1.000	*******		12/22/2022 12:41:58 PM
2	9.448	50uL	1.000	*******		12/22/2022 12:44:11 PM
3	9.385	50uL	1.000	*******		12/22/2022 12:46:20 PM

TOC-Control L Report

2022_12_22_002_CAL.tlx

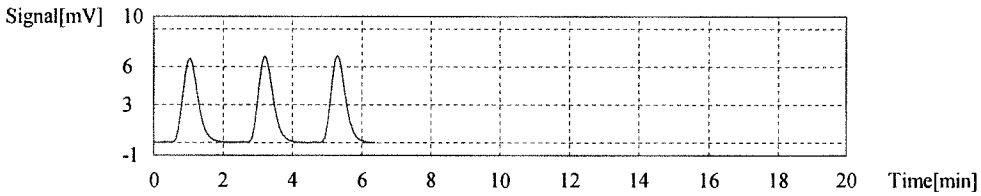
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 9.413



Conc: 5.000mg/L

No.	Area	Inj. Vol	Aut. Dil	Rem.	Ex.	Date / Time
1	20.41	50uL	1.000	*******		12/22/2022 12:55:16 PM
2	20.23	50uL	1.000	*******		12/22/2022 12:57:35 PM
3	20.36	50uL	1.000	*******		12/22/2022 12:59:53 PM

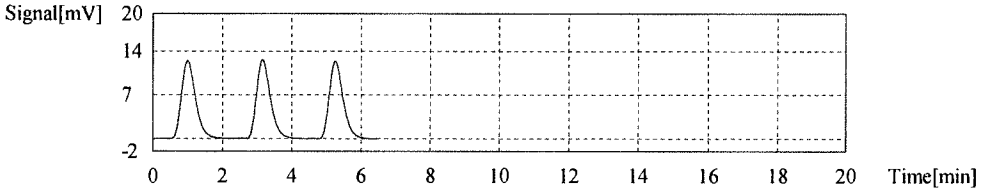
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 20.33



Conc: 10.00mg/L

No.	Area	Inj. Vol	Aut. Dil	Rem.	Ex.	Date / Time
1	35.65	50uL	1.000	*******		12/22/2022 1:08:48 PM
2	35.20	50uL	1.000	*******		12/22/2022 1:11:07 PM
3	35.02	50uL	1.000	*******		12/22/2022 1:13:30 PM

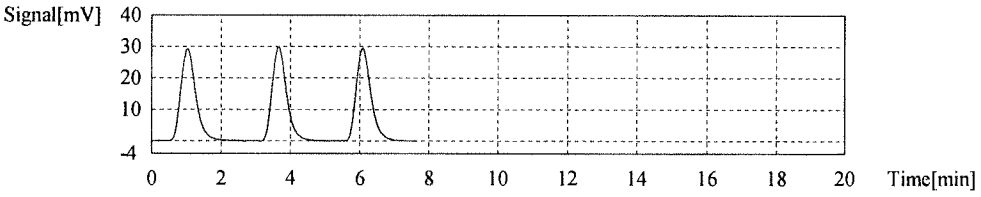
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 35.29



Conc: 25.00mg/L

No.	Area	Inj. Vol	Aut. Dil	Rem.	Ex.	Date / Time
1	88.49	50uL	1.000	*******		12/22/2022 1:22:53 PM
2	87.55	50uL	1.000	*******		12/22/2022 1:25:34 PM
3	87.85	50uL	1.000	*******		12/22/2022 1:28:20 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 87.96



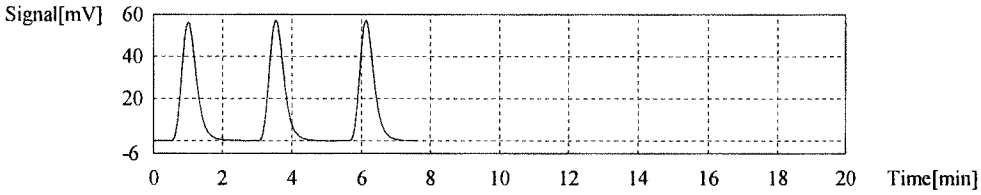
Conc: 50.00mg/L

TOC-Control L Report

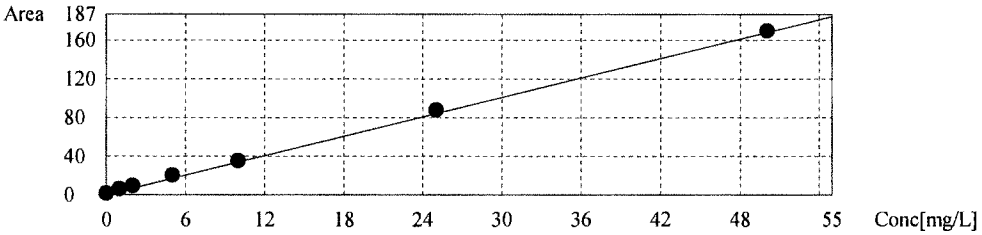
2022_12_22_002_CAL.tlx

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	169.8	50uL	1.000	*******		12/22/2022 1:37:37 PM
2	171.3	50uL	1.000	*******		12/22/2022 1:40:28 PM
3	168.9	50uL	1.000	*******		12/22/2022 1:43:09 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 170.0



Slope: 3.361
Intercept 0.000
r^2 0.9998
r 0.9999
RSE(%) N/A
Zero Shift Yes



Sample

Sample Name: ICV
Sample ID: 3100606203
Origin: 12_22_2022.cal
Status Completed
Chk. Result

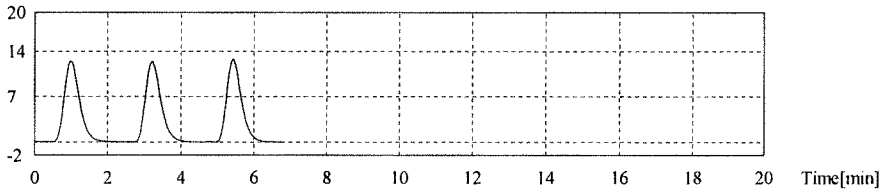
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.41	10.83mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 1:52:08 PM
2	36.34	10.81mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 1:54:34 PM
3	36.03	10.72mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 1:57:10 PM

Mean Area 36.26
Mean Conc. 10.79mg/L



Sample

TOC-Control L Report

2022_12_22_002_CAL.tlx

Sample Name: ICB
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

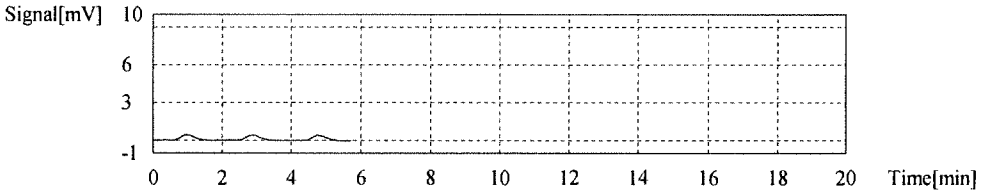
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3481mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.237	0.3681mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 2:06:02 PM
2	1.118	0.3327mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 2:08:10 PM
3	1.155	0.3437mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	12/22/2022 2:10:18 PM

Mean Area 1.170
Mean Conc. 0.3481mg/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	321100711	12_22_2022	1.000	NPOC:25.79mg/L	
2	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.09327mg/	
3	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.06803mg/	
4	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:11.05mg/L	
5	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:11.18mg/L	
6	Unknown	NPOC	HS23011389-04		12_22_2022	1.000	NPOC:2.056mg/L	
7	Unknown	NPOC	HS23011389-05		12_22_2022	1.000	NPOC:0.6773mg/L	
8	Unknown	NPOC	HS23011136-01		12_22_2022	1.000	NPOC:6.477mg/L	
9	Unknown	NPOC	HS23011136-02		12_22_2022	1.000	NPOC:19.93mg/L	
10	Unknown	NPOC	HS23011136-03		12_22_2022	1.000	NPOC:91.46mg/L	
11	Unknown	NPOC	HS23011136-04		12_22_2022	1.000	NPOC:166.0mg/L	
12	Unknown	NPOC	HS23011136-04MS		12_22_2022	1.000	NPOC:177.1mg/L	
13	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.87mg/L	
14	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.2545mg/L	
15	Unknown	NPOC	HS23011136-05		12_22_2022	1.000	NPOC:1555mg/L	
16	Unknown	NPOC	HS23011136-06		12_22_2022	1.000	NPOC:1483mg/L	
17	Unknown	NPOC	HS23011271-01		12_22_2022	1.000	NPOC:5.974mg/L	
18	Unknown	NPOC	HS23011271-02		12_22_2022	1.000	NPOC:5.235mg/L	
19	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.54mg/L	
20	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.2016mg/L	
21	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.1783mg/L	
22	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:11.29mg/L	
23	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:11.14mg/L	
24	Unknown	NPOC	HS23011271-03		12_22_2022	1.000	NPOC:4.907mg/L	
25	Unknown	NPOC	HS23011271-03MS		12_22_2022	1.000	NPOC:15.53mg/L	
26	Unknown	NPOC	HS23011294-01		12_22_2022	1.000	NPOC:4.995mg/L	
27	Unknown	NPOC	HS23011304-02		12_22_2022	1.000	NPOC:0.5531mg/L	
28	Unknown	NPOC	HS23011397-10		12_22_2022	1.000	NPOC:1.679mg/L	
29	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.28mg/L	
30	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.1365mg/L	
31	Unknown	NPOC	MBLK-01302023		12_22_2022	1.000	NPOC:0.04622mg/	
32	Unknown	NPOC	LCS-01302023	3100606203	12_22_2022	1.000	NPOC:10.88mg/L	
33	Unknown	NPOC	LCSD-01302023		12_22_2022	1.000	NPOC:11.08mg/L	
34	Unknown	NPOC	HS23011351-01		12_22_2022	1.000	NPOC:5.602mg/L	
35	Unknown	NPOC	HS23011351-01MS		12_22_2022	1.000	NPOC:16.02mg/L	
36	Unknown	NPOC	HS23011251-01		12_22_2022	1.000	NPOC:43.33mg/L	
37	Unknown	NPOC	HS23011408-01		12_22_2022	1.000	NPOC:25.62mg/L	
38	Unknown	NPOC	HS23011405-01		12_22_2022	1.000	NPOC:32.06mg/L	
39	Unknown	NPOC	HS23011261-01		12_22_2022	1.000	NPOC:6.841mg/L	
40	Unknown	NPOC	HS23011261-02		12_22_2022	1.000	NPOC:12.37mg/L	
41	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:26.36mg/L	
42	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.4125mg/L	
43	Unknown	NPOC	HS23011447-01		12_22_2022	1.000	NPOC:9.126mg/L	
44	Unknown	NPOC	HS23011353-01		12_22_2022	1.000	NPOC:6.311mg/L	
45	Unknown	NPOC	CCV	321100711	12_22_2022	1.000	NPOC:25.88mg/L	
46	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.4115mg/L	

C:\TOC-L\Data\2023_01_30_001.tlx

	Status	Date / Time	Vial
1	Completed	1/30/2023 3:18:06 P	1
2	Completed	1/30/2023 3:31:03 P	2
3	Completed	1/30/2023 3:43:56 P	3
4	Completed	1/30/2023 3:58:00 P	4
5	Completed	1/30/2023 4:11:50 P	5
6	Completed	1/30/2023 4:24:55 P	6
7	Completed	1/30/2023 4:37:58 P	7
8	Completed	1/30/2023 4:52:00 P	8
9	Completed	1/30/2023 5:06:32 P	9
10	Completed	1/30/2023 5:20:59 P	10
11	Completed	1/30/2023 5:35:59 P	11
12	Completed	1/30/2023 5:51:05 P	12
13	Completed	1/30/2023 6:05:50 P	1
14	Completed	1/30/2023 6:18:53 P	2
15	Completed	1/30/2023 6:38:36 P	13
16	Completed	1/30/2023 6:57:33 P	14
17	Completed	1/30/2023 7:11:05 P	15
18	Completed	1/30/2023 7:24:52 P	16
19	Completed	1/30/2023 7:39:27 P	1
20	Completed	1/30/2023 7:52:20 P	2
21	Completed	1/30/2023 8:05:16 P	3
22	Completed	1/30/2023 8:19:44 P	4
23	Completed	1/30/2023 8:33:45 P	5
24	Completed	1/30/2023 8:47:31 P	17
25	Completed	1/30/2023 9:01:48 P	18
26	Completed	1/30/2023 9:15:21 P	19
27	Completed	1/30/2023 9:28:18 P	20
28	Completed	1/30/2023 9:41:23 P	21
29	Completed	1/30/2023 9:56:03 P	23
30	Completed	1/30/2023 10:08:56 P	24
31	Completed	1/30/2023 10:21:56 P	3
32	Completed	1/30/2023 10:36:00 P	4
33	Completed	1/30/2023 10:50:17 P	5
34	Completed	1/30/2023 11:04:26 P	25
35	Completed	1/30/2023 11:18:54 P	26
36	Completed	1/30/2023 11:33:41 P	27
37	Completed	1/30/2023 11:48:32 P	28
38	Completed	1/31/2023 12:03:06 A	29
39	Completed	1/31/2023 12:17:14 A	30
40	Completed	1/31/2023 12:33:10 A	31
41	Completed	1/31/2023 12:48:27 A	23
42	Completed	1/31/2023 1:01:20 A	24
43	Completed	1/31/2023 1:15:58 A	32
44	Completed	1/31/2023 1:30:19 A	33
45	Completed	1/31/2023 1:45:47 A	23
46	Completed	1/31/2023 1:58:40 A	24

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: 321100711
Origin: 12_22_2022.cal
Status: Completed
Chk. Result

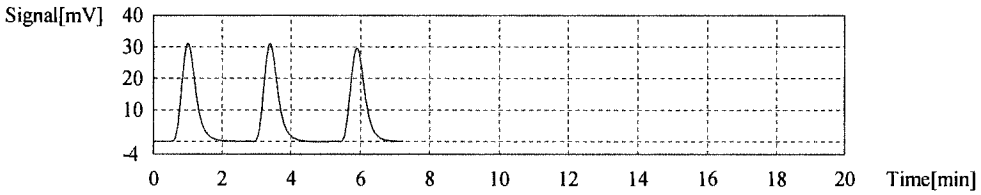
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.94	26.76mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:34:07 PM
2	89.02	26.49mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:36:52 PM
3	88.60	26.36mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:39:27 PM

Mean Area: 89.19
Mean Conc.: 26.54mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022.cal
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2016mg/L

1. Det

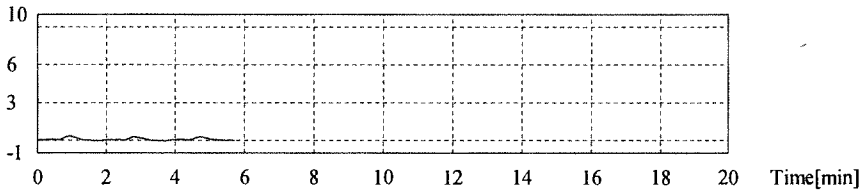
Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6359	0.1892mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:48:06 PM
2	0.6281	0.1869mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:50:13 PM
3	0.7681	0.2286mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 7:52:20 PM

TOC-Control L Report

2023_01_30_001.tlx

Mean Area 0.6774
Mean Conc. 0.2016mg/L



Sample

Sample Name: MBLK-01302023
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

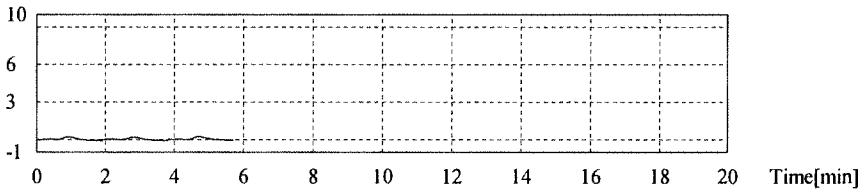
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1783mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5521	0.1643mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:00:59 PM
2	0.5938	0.1767mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:03:06 PM
3	0.6513	0.1938mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:05:16 PM

Mean Area 0.5991
Mean Conc. 0.1783mg/L



Sample

Sample Name: LCS-01302023
Sample ID: 3100606203
Origin: 12_22_2022.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.29mg/L

1. Det

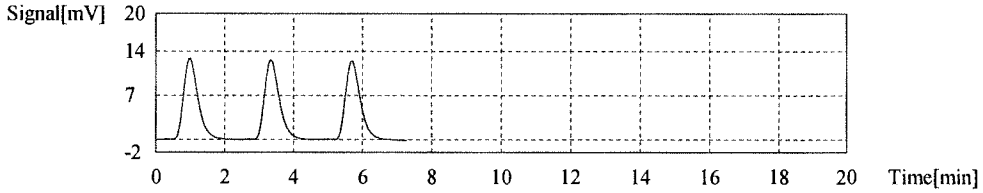
Anal.: NPOC

TOC-Control L Report

2023_01_30_001.tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.98	11.30mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:14:22 PM
2	38.02	11.31mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:16:56 PM
3	37.78	11.24mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:19:44 PM

Mean Area 37.93
Mean Conc. 11.29mg/L



Sample

Sample Name: LCSD-01302023
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

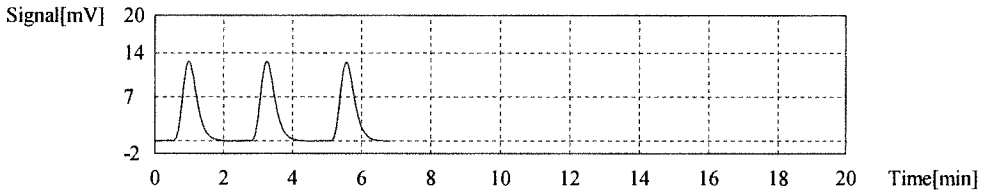
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.24	11.08mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:28:45 PM
2	37.70	11.22mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:31:17 PM
3	37.34	11.11mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:33:45 PM

Mean Area 37.43
Mean Conc. 11.14mg/L



Sample

Sample Name: HS23011271-03
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.907mg/L

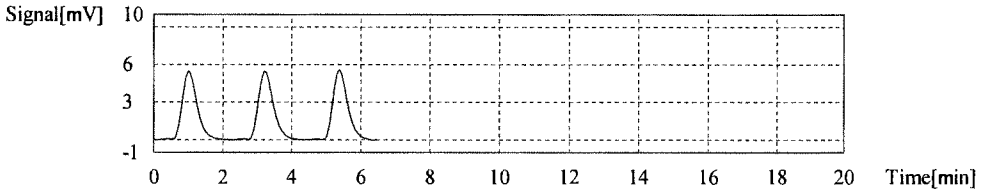
1. Det

TOC-Control L Report

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.47	4.901mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:42:48 PM
2	16.60	4.939mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:45:12 PM
3	16.40	4.880mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:47:31 PM

Mean Area 16.49
Mean Conc. 4.907mg/L



Sample

Sample Name: HS23011271-03MS
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

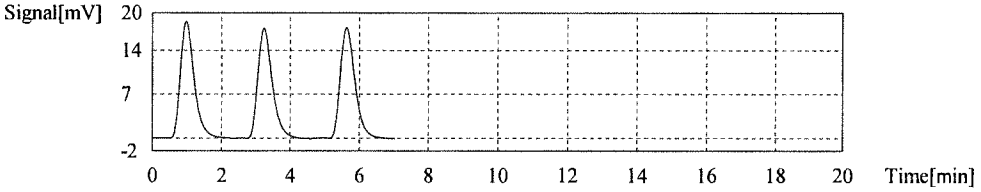
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.05	15.49mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:56:31 PM
2	52.04	15.48mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 8:59:09 PM
3	52.45	15.61mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:01:48 PM

Mean Area 52.18
Mean Conc. 15.53mg/L



Sample

Sample Name: HS23011397-10
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.679mg/L

TOC-Control L Report

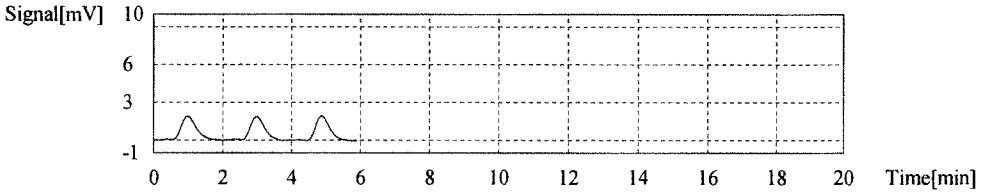
2023_01_30_001.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.710	1.699mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:37:02 PM
2	5.521	1.643mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:39:09 PM
3	5.697	1.695mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:41:23 PM

Mean Area 5.643
Mean Conc. 1.679mg/L



Sample

Sample Name: CCV
Sample ID: 321100711
Origin: 12_22_2022.cal
Status Completed
Chk. Result

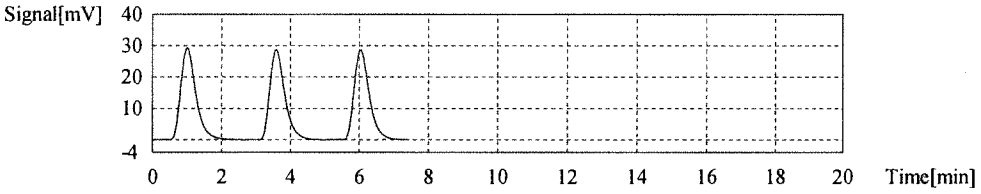
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.83	26.43mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:50:44 PM
2	88.05	26.20mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:53:25 PM
3	88.12	26.22mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 9:56:03 PM

Mean Area 88.33
Mean Conc. 26.28mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022.cal
Status Completed
Chk. Result

TOC-Control L Report

2023_01_30_001.tlx

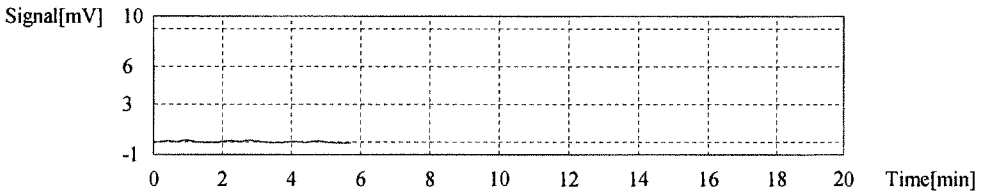
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1365mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4610	0.1372mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 10:04:42 PM
2	0.6250	0.1860mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 10:06:49 PM
3	0.2898	0.08623mg/L	50uL	1.000		12_22_2022.2022_12_22_13_06_45.cal	1/30/2023 10:08:56 PM

Mean Area 0.4586
Mean Conc. 0.1365mg/L



HS23011397-E2300095 Perchlorate Level IV Report

ALS WO# HS23011397

February 03, 2023 Service Request No:E2300095

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

Laboratory Results for: HS23011397

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 31, 2023
For your reference, these analyses have been assigned our service request number **E2300095.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston 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.:**	E2300095
Project:	HS23011397	**Date Received:**	01/31/23
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

Twelve samples were received for analysis at ALS Environmental in Houston on 01/31/23.

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:

EQ2300049: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

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

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

Client: ALS Environmental - US **Service Request:**E2300095
Project: HS23011397

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300095-001	16WW44-230121	1/21/2023	0845
E2300095-002	16PM14-230121	1/21/2023	0945
E2300095-003	16PM09-230121	1/21/2023	1040
E2300095-004	16PM03-230121	1/21/2023	1140
E2300095-005	16PM06-230121	1/21/2023	1230
E2300095-006	16PM02-230121	1/21/2023	1325
E2300095-007	16RW01-230123	1/23/2023	0925
E2300095-008	16RW05-230123	1/23/2023	1030
E2300095-009	16WW26-230123	1/23/2023	1125
E2300095-010	16WW25-230123	1/23/2023	1245
E2300095-011	16WW29-230123	1/23/2023	1345
E2300095-012	16WW30-230123	1/23/2023	1435

Service Request Summary

Folder #: **E2300095**
Client Name: ALS Environmental - US
Project Name: HS23011397
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: 01/31/23
Internal Due Date: 2/7/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011397
EDD: EQUIS
EFWEDD_LHAAP

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300095-001	16WW44-230121	Ground Water	01/21/23 0845	**IV**
E2300095-002	16PM14-230121	Ground Water	01/21/23 0945	**IV**
E2300095-003	16PM09-230121	Ground Water	01/21/23 1040	**IV**
E2300095-004	16PM03-230121	Ground Water	01/21/23 1140	**IV**
E2300095-005	16PM06-230121	Ground Water	01/21/23 1230	**IV**
E2300095-006	16PM02-230121	Ground Water	01/21/23 1325	**IV**
E2300095-007	16RW01-230123	Ground Water	01/23/23 0925	**IV**
E2300095-008	16RW05-230123	Ground Water	01/23/23 1030	**IV**
E2300095-009	16WW26-230123	Ground Water	01/23/23 1125	**IV**
E2300095-010	16WW25-230123	Ground Water	01/23/23 1245	**IV**
E2300095-011	16WW29-230123	Ground Water	01/23/23 1345	**IV**
E2300095-012	16WW30-230123	Ground Water	01/23/23 1435	**IV**

Service Request Summary

Folder #: **E2300095**
Client Name: ALS Environmental - US
Project Name: HS23011397
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: 01/31/23
Internal Due Date: 2/7/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011397
EDD: EQUIS
EFWEDD_LHAAP

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	12	IV Due 2/14

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:** 20853

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:	HS23011397
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23011397-02**	**16WW44-230121**	**Groundwater**	**21 Jan 2023 08:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
2.	**HS23011397-03**	**16PM14-230121**	**Groundwater**	**21 Jan 2023 09:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
3.	**HS23011397-04**	**16PM09-230121**	**Groundwater**	**21 Jan 2023 10:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
4.	**HS23011397-05**	**16PM03-230121**	**Groundwater**	**21 Jan 2023 11:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
5.	**HS23011397-06**	**16PM06-230121**	**Groundwater**	**21 Jan 2023 12:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
6.	**HS23011397-07**	**16PM02-230121**	**Groundwater**	**21 Jan 2023 13:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
7.	**HS23011397-08**	**16RW01-230123**	**Groundwater**	**23 Jan 2023 09:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
8.	**HS23011397-09**	**16RW05-230123**	**Groundwater**	**23 Jan 2023 10:30**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 20853**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
9.	**HS23011397-10**	**16WW26-230123**	**Groundwater**	**23 Jan 2023 11:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
10.	**HS23011397-11**	**16WW25-230123**	**Groundwater**	**23 Jan 2023 12:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
11.	**HS23011397-12**	**16WW29-230123**	**Groundwater**	**23 Jan 2023 13:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023
12.	**HS23011397-13**	**16WW30-230123**	**Groundwater**	**23 Jan 2023 14:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			07 Feb 2023

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 1-31-23 0800

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

ALS Environmental

Cooler Receipt Form

Project Chemist JG

Client/Project ALS-HI

Thermometer ID IR31

Date/Time Received: 1-31-23 Initials: CG

Date/Time Logged in: 1-31-23 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

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		1-31-23	0800	CG	0.9	☒
						☐
						☐
						☐

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

ALS Environmental - Houston HRMS

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SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
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Phone (713)266-1599 Fax (713)266-0130
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Preparation Information Benchsheet

Prep Run#: 413929 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/2/23 09:20

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300095-001	16WW44-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300095-002	16PM14-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300095-003	16PM09-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300095-004	16PM03-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300095-005	16PM06-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300095-006	16PM02-230121	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300095-007	16RW01-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300095-008	16RW05-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300095-009	16WW26-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300095-010	16WW25-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300095-011	16WW29-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300095-012	16WW30-230123	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300098-001	RSA-095-OVB-05	.02	6850/ClO4 DOD			Water	10mL	
14	E2300098-002	RSA-095-OVB-06	.01	6850/ClO4 DOD			Water	10mL	
15	E2300098-003	RSA-FD-02-260123	.01	6850/ClO4 DOD			Water	10mL	
16	E2300098-004	RSA-095-OVB-07	.01	6850/ClO4 DOD			Water	10mL	
17	EQ2300049-01	MB		6850/ClO4			Liquid	10mL	
18	EQ2300049-02	LCS		6850/ClO4			Liquid	10mL	
19	EQ2300049-03	DLCS		6850/ClO4			Liquid	10mL	
20	EQ2300049-04	RSA-095-OVB-05 MS	.02	6850/ClO4 DOD			Liquid	10mL	
21	EQ2300049-05	RSA-095-OVB-05 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
22	R2300537-012	2301180933 600L-SB-28	.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

EQ2300049-01 100.00µL EQ2300049-01 100.00µL EQ2300049-02 100.00µL EQ2300049-02 100.00µL EQ2300049-03 100.00µL EQ2300049-03 100.00µL
EQ2300049-04 100.00µL EQ2300049-05 100.00µL R2300537-012 100.00µL

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

EQ2300049-02 1.00µL EQ2300049-02 1.00µL EQ2300049-03 1.00µL EQ2300049-03 1.00µL EQ2300049-04 1.00µL EQ2300049-05 1.00µL

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 Luer-Lok Syringes Luer-Lok Syringes (221305) 6850 Pipette Tips 50-1000 uL 6850 Pipette Tips (221929)

Preparation Information Benchsheet

Prep Run#: 413929
Team: Semivoa GCMS/XMI

Prep WorkFlow: GenExt28Day
Prep Method: Method

Status: Prepped
Prep Date/Time: 2/2/23 09:20

Preparation Steps

Step: Preparation
Started: 2/2/23 09:20
Finished: 2/2/23 10:31
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 02/02/23

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 0845
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW44-230121	**Units:**	µg/L
Lab Code:	E2300095-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 19:52	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 0945
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM14-230121	**Units:**	µg/L
Lab Code:	E2300095-002	**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	2/ 2/23	2/2/23 19:58	413929	793492	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1040
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM09-230121	**Units:**	µg/L
Lab Code:	E2300095-003	**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	2/ 2/23	2/2/23 20:04	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1140
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM03-230121	**Units:**	µg/L
Lab Code:	E2300095-004	**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	**285**		2.00	1.00	0.500	20	2/ 2/23	2/2/23 20:09	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1230
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM06-230121	**Units:**	µg/L
Lab Code:	E2300095-005	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0360**	J	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:15	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/21/23 1325
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16PM02-230121	**Units:**	µg/L
Lab Code:	E2300095-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:26	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 0925
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW01-230123	**Units:**	µg/L
Lab Code:	E2300095-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:32	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1030
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW05-230123	**Units:**	µg/L
Lab Code:	E2300095-008	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:38	413929	793492	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1125
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW26-230123	**Units:**	µg/L
Lab Code:	E2300095-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:43	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1245
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW25-230123	**Units:**	µg/L
Lab Code:	E2300095-010	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:49	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1345
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW29-230123	**Units:**	µg/L
Lab Code:	E2300095-011	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 20:55	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	1/23/23 1435
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW30-230123	**Units:**	µg/L
Lab Code:	E2300095-012	**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	2/ 2/23	2/2/23 21:00	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300049-01	**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	2/ 2/23	2/2/23 15:41	413929	793492	

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: HS23011397
Sample Matrix: Ground Water

Service Request: E2300095
Date Analyzed: 2/ 2/23

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: 413929

	Lab Control Sample EQ2300049-02			Duplicate Lab Control Sample EQ2300049-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0908	0.100	91	0.0882	0.100	88	84 - 119	3	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:**	E2300095
Project:	HS23011397	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300049-02	**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	**0.0908**	J	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 15:47	413929	793492	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300049-03	**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	**0.0882**	J	0.100	0.0500	0.0250	1	2/ 2/23	2/2/23 15:53	413929	793492	

Initial Calibration

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230201-793296

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XMI
2nd Review: Kneir

ICAL Date: 2/1/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300002

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	PERCHLORATE1		20230201-003	Perchlorate6850c.lcm	1x	☒	227245	2/1/2023 11:50
2	PERCHLORATE2		20230201-004	Perchlorate6850c.lcm	1x	☒	227246	2/1/2023 11:55
3	PERCHLORATE3		20230201-005	Perchlorate6850c.lcm	1x	☒	227247	2/1/2023 12:01
4	PERCHLORATE4		20230201-006	Perchlorate6850c.lcm	1x	☒	227248	2/1/2023 12:07
5	PERCHLORATE5		20230201-007	Perchlorate6850c.lcm	1x	☒	227249	2/1/2023 12:13
6	PERCHLORATE6		20230201-008	Perchlorate6850c.lcm	1x	☒	227250	2/1/2023 12:19
7	PERCHLORATE7		20230201-009	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 12:25
8	PERCHLORATE8		20230201-010	Perchlorate6850c.lcm	1x	☒	227252	2/1/2023 12:30
9	PERCHLORATE9		20230201-011	Perchlorate6850c.lcm	1x	☒	227253	2/1/2023 12:36
10	PERCHLORATE10		20230201-012	Perchlorate6850c.lcm	1x	☒	227254	2/1/2023 12:42
11	PERCHLORATEICV		20230201-013	Perchlorate6850c.lcm	1x	☒	227256	2/1/2023 12:48
12	LODV		20230201-014	Perchlorate6850c.lcm	1x	☒	225199	2/1/2023 12:54
13	ICS		20230201-015	Perchlorate6850c.lcm	1x	☒	32103024	2/1/2023 13:00
14	PERCHLORATE7		20230201-016	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 15:24
15	EQ2300047-01		20230201-017	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:30
16	EQ2300047-02		20230201-018	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:36
17	EQ2300047-03		20230201-019	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:41
18	R2300589-005		20230201-020	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:48
19	R2300589-010		20230201-021	Perchlorate6850c.lcm	1x	☒	DNU-BAD PEAK SHAPE	2/1/2023 15:54
20	R2300648-018		20230201-022	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:00
21	R2300648-025		20230201-023	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:06
22	PERCHLORATE7		20230201-024	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 16:17
23	E2300092-001		20230201-025	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:23
24	E2300092-002		20230201-026	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:29
25	E2300092-003		20230201-027	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:35
26	E2300092-004		20230201-028	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:41
27	E2300094-001		20230201-029	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:47
28	E2300094-002		20230201-030	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:52
29	E2300094-003		20230201-031	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:58
30	E2300094-004		20230201-032	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:04
31	E2300094-005		20230201-033	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:10
32	PERCHLORATE7		20230201-034	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 17:16
33	E2300096-001		20230201-035	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:21
34	E2300096-002		20230201-036	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:27
35	E2300096-003		20230201-037	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:33
36	E2300096-004		20230201-038	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:39
37	E2300096-005		20230201-039	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:45
38	E2300096-006		20230201-040	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:51
39	E2300096-007		20230201-041	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:56
40	PERCHLORATE7		20230201-042	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 18:02

Initial Calibration - Detailed Report

Calibration ID: EC2300002 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300002-01	PERCHLORATE1	20230201-003	02/01/2023 11:50
02	EC2300002-02	PERCHLORATE2	20230201-004	02/01/2023 11:55
03	EC2300002-03	PERCHLORATE3	20230201-005	02/01/2023 12:01
04	EC2300002-04	PERCHLORATE4	20230201-006	02/01/2023 12:07
05	EC2300002-05	PERCHLORATE5	20230201-007	02/01/2023 12:13
06	EC2300002-06	PERCHLORATE6	20230201-008	02/01/2023 12:19
07	EC2300002-07	PERCHLORATE7	20230201-009	02/01/2023 12:25
08	EC2300002-08	PERCHLORATE8	20230201-010	02/01/2023 12:30
09	EC2300002-09	PERCHLORATE9	20230201-011	02/01/2023 12:36
10	EC2300002-10	PERCHLORATE10	20230201-012	02/01/2023 12:42

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

Perchlorate **Average RF** **RSD = 4.86** **Average RF = 0.1385**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1253	02	0.5000	0.13	03	0.7000	0.1346	04	1.0000	0.1399
05	2.0000	0.1406	06	5.0000	0.1404	07	10.0000	0.1416	08	20.0000	0.1407
09	30.0000	0.1447	10	50.0000	0.1477						

Analyte

Perchlorate RSE = 4.86

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.0904	-9.6	02	0.5000	0.469	-6.1	03	0.7000	0.680	-2.8
04	1.0000	1.01	0.9	05	2.0000	2.03	1.5	06	5.0000	5.07	1.3
07	10.0000	10.2	2.2	08	20.0000	20.3	1.5	09	30.0000	31.3	4.5
10	50.0000	53.3	6.6								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300002	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230201-013	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300002-11	T	Average RF	10	10.538	ng/mL	5.4	<= 15

Insight Report

Printed at 2/1/2023 2:06:14 PM

Method File: I:\LCMS01\DATA\02012023\20230201.lcm
Project File: I:\LCMS01\DATA\02012023\20230201.damlp

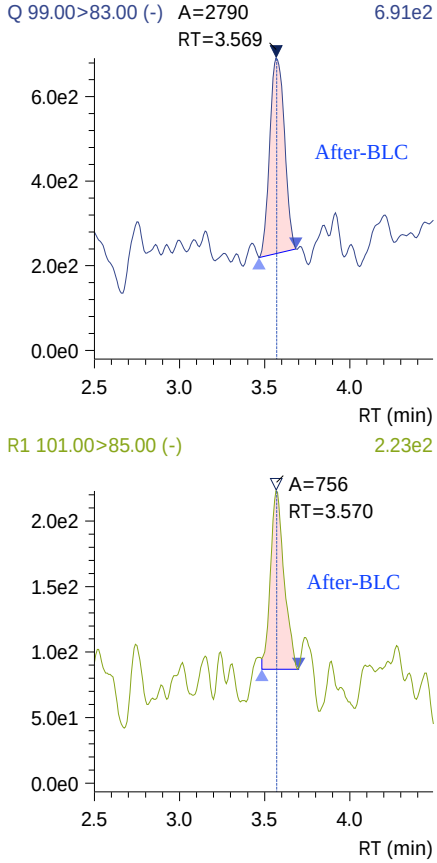
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 2/1/2023 11:50:11 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-003.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	M	3.569	2790	222693	0.0904	ng/mL	101.00 >85.00	27.11	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.568	222693	222693	1.0000	ng/mL	----	----	

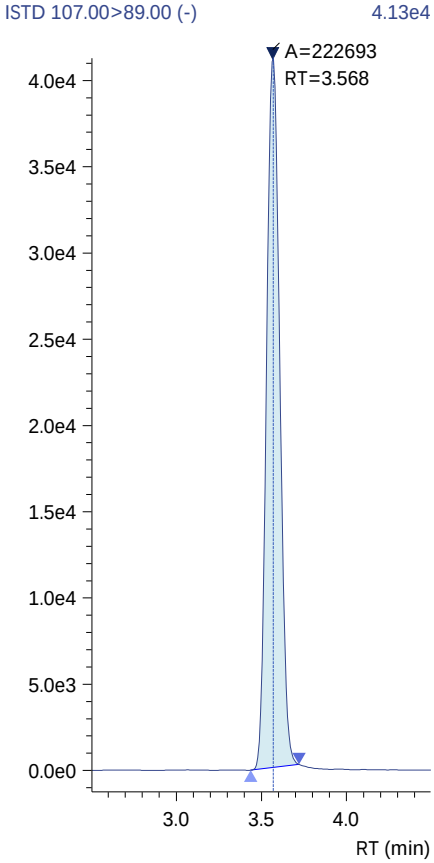
Perchlorate

Conc 0.0904
R#1 27.11 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 1:30:25 PM

Method File: I:\LCMS01\DATA\20230201\20230201ICAL.lcm
Project File: I:\LCMS01\DATA\20230201\20230201ICAL.damIp

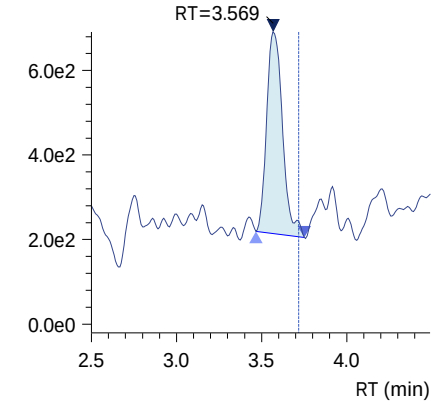
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 2/1/2023 11:50:11 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-003.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 1

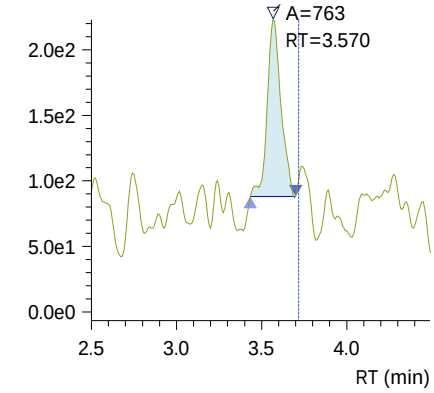
Perchlorate

Conc 0.0996
R#1 24.56 (34.45)

Q 99.00>83.00 (-) A=3105 6.91e2



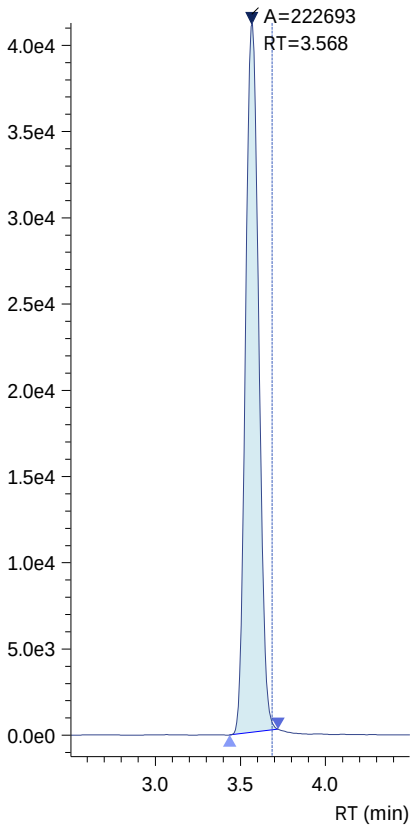
R1 101.00>85.00 (-) 2.23e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.13e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

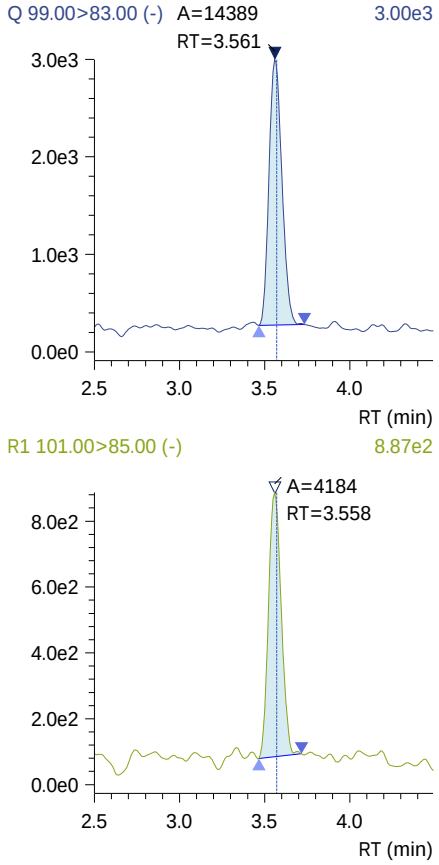
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 2/1/2023 11:55:59 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-004.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	3.561	14389	221291	0.4694	ng/mL	101.00 >85.00	29.08	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.558	221291	221291	1.0000	ng/mL	----	----	

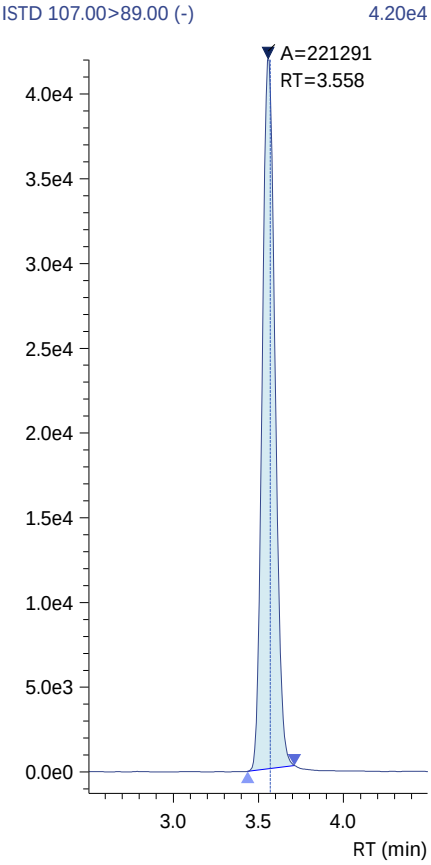
Perchlorate

Conc 0.4694
R#1 29.08 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

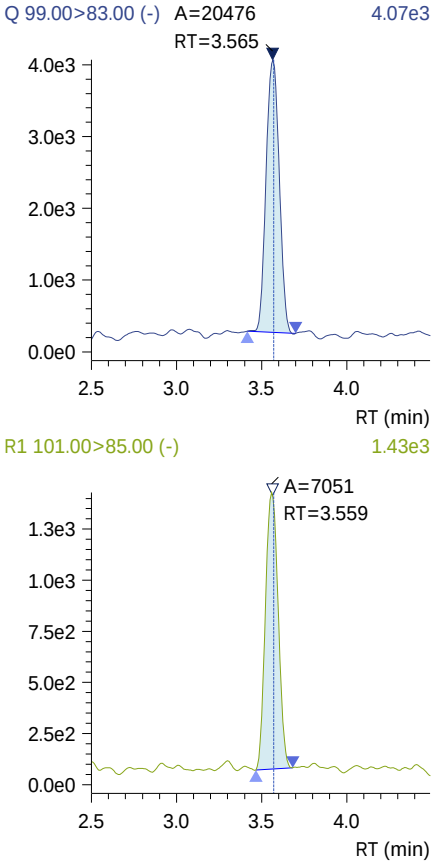
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 2/1/2023 12:01:49 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-005.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	3.565	20476	217325	0.6801	ng/mL	101.00 >85.00	34.44	24.11 -44.78
Sodium Perchlorate-18O4 _IS	Auto	3.559	2173 25	217325	1.0000	ng/mL	----	----	

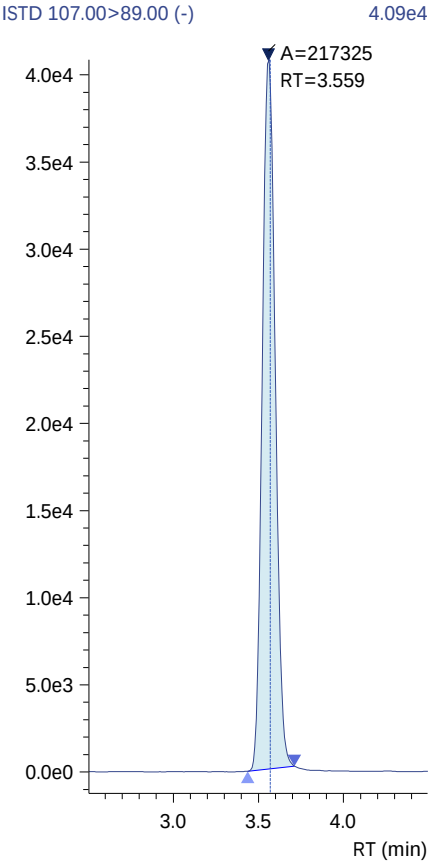
Perchlorate

Conc 0.6801
R#1 34.44 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

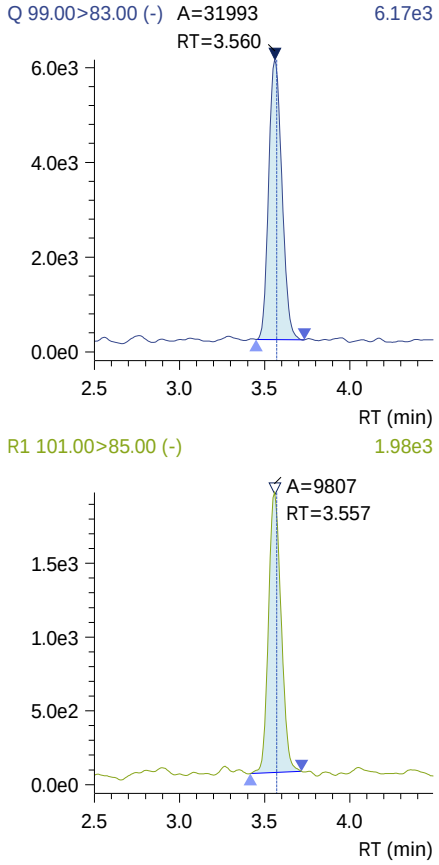
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 2/1/2023 12:07:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-006.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	3.560	31993	228763	1.0095	ng/mL	101.00 >85.00	30.65	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.557	228763	228763	1.0000	ng/mL	----	----	

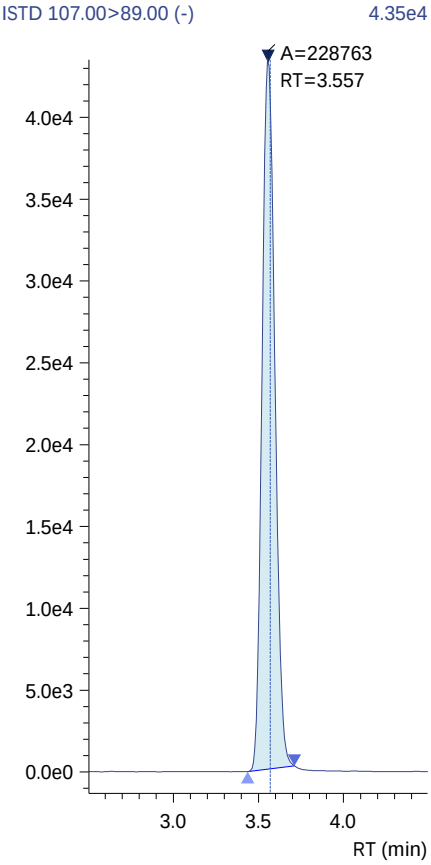
Perchlorate

Conc 1.0095
R#1 30.65 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

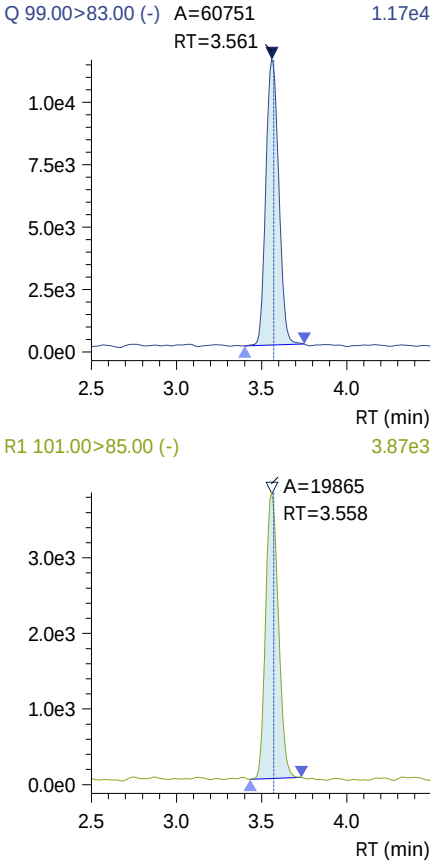
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 2/1/2023 12:13:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-007.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	3.561	60751	216066	2.0296	ng/mL	101.00 >85.00	32.70	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.557	216066	216066	1.0000	ng/mL	----	----	

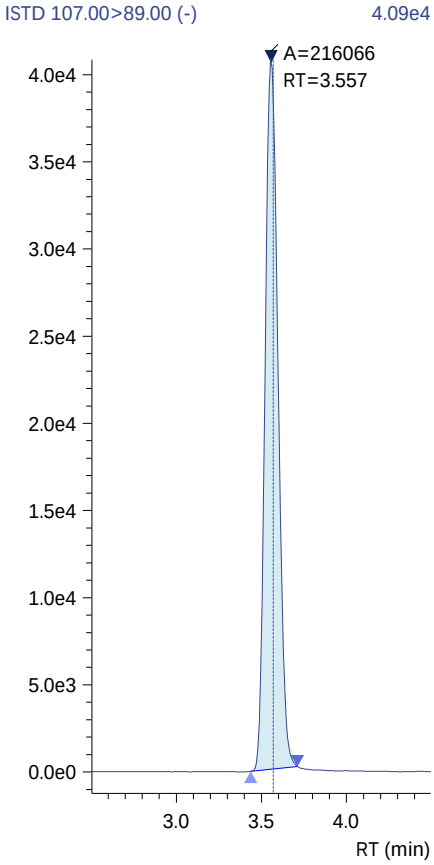
Perchlorate

Conc 2.0296
R#1 32.70 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE6

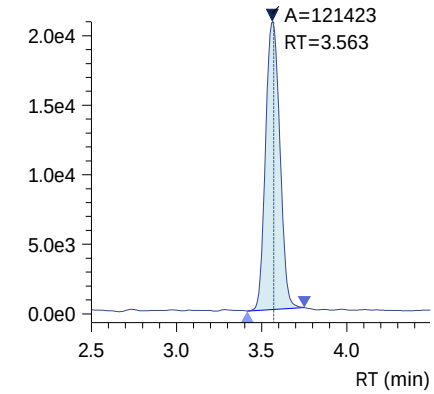
Sample ID: PERCHLORATE6
Date Acquired: 2/1/2023 12:19:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-008.lcd
Vial: 6 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.563	121423	172986	5.0667	ng/mL	101.00 >85.00	32.55	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.558	172986	172986	1.0000	ng/mL	----	----	

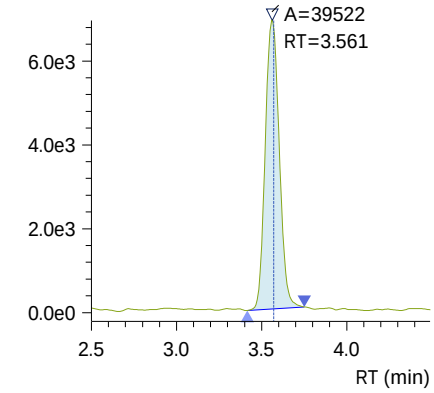
Perchlorate

Conc 5.0667
R#1 32.55 (31.99)

Q 99.00>83.00 (-) 2.10e4



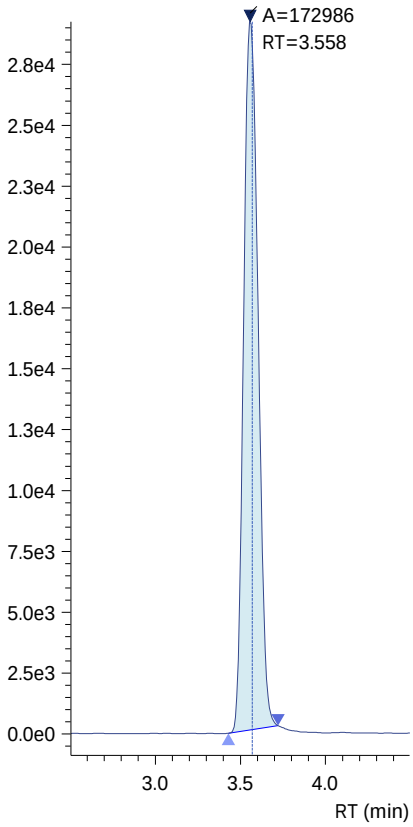
R1 101.00>85.00 (-) 6.97e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.93e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE7

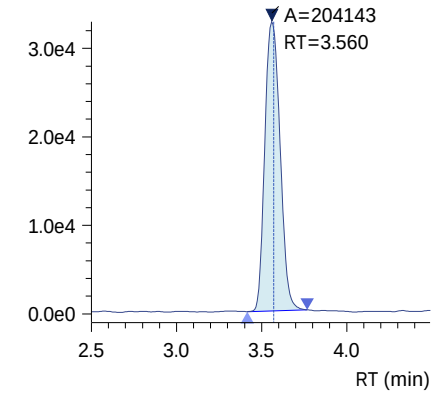
Sample ID: PERCHLORATE7
Date Acquired: 2/1/2023 12:25:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-009.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	2041 43	144196	10.2 192	ng/mL	101.00 >85.00	31.99	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.555	1441 96	144196	1.0000	ng/mL	----	----	

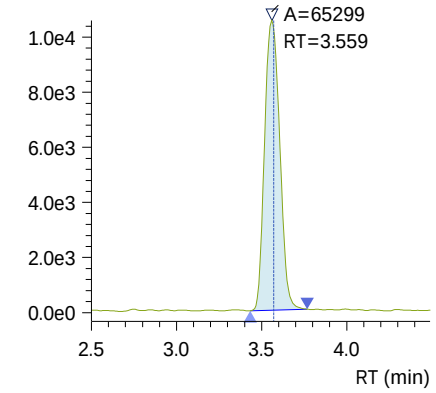
Perchlorate

Conc 10.2192
R#1 31.99 (31.99)

Q 99.00>83.00 (-) 3.30e4



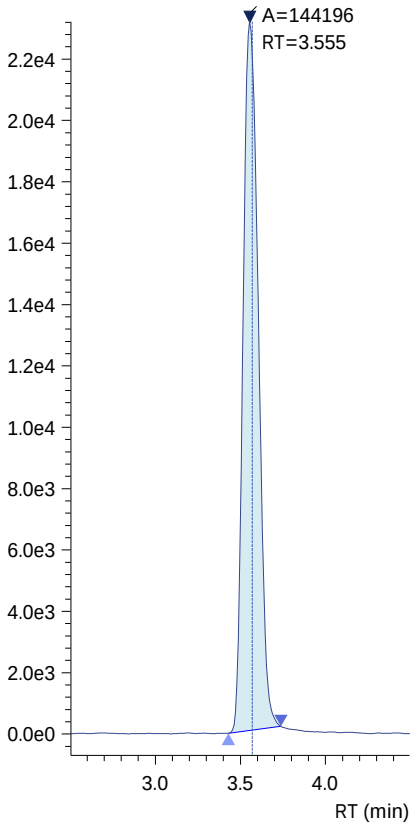
R1 101.00>85.00 (-) 1.06e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.32e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE8

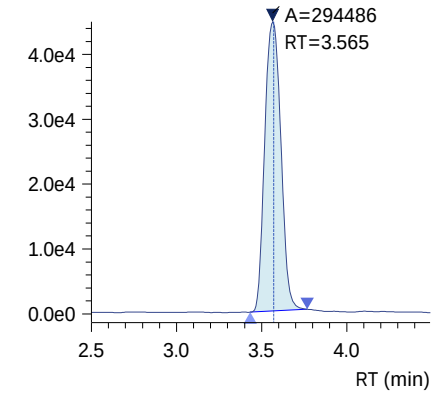
Sample ID: PERCHLORATE8
Date Acquired: 2/1/2023 12:30:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-010.lcd
Vial: 8 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.565	294486	104680	20.3065	ng/mL	101.00 >85.00	32.66	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.557	104680	104680	1.0000	ng/mL	----	----	

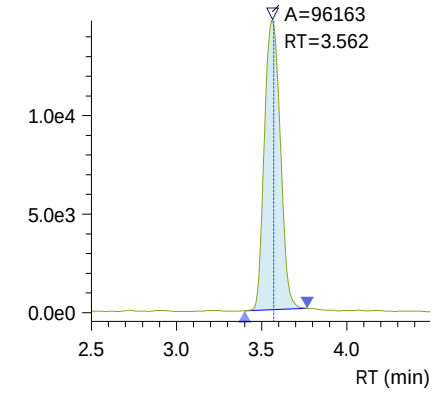
Perchlorate

Conc 20.3065
R#1 32.66 (31.99)

Q 99.00>83.00 (-) 4.50e4



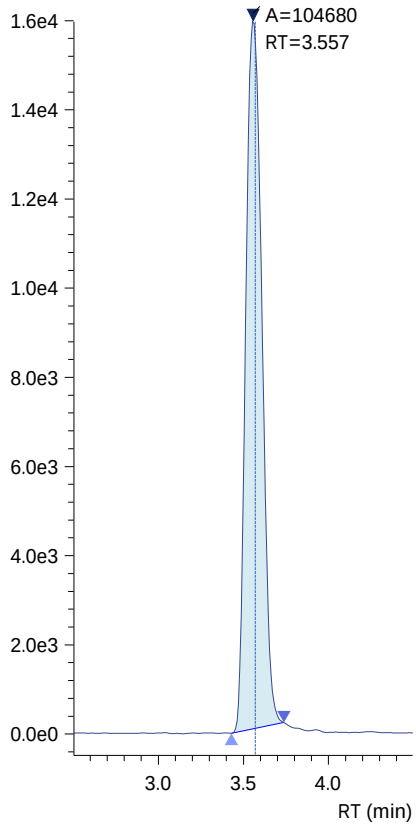
R1 101.00>85.00 (-) 1.48e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.60e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE9

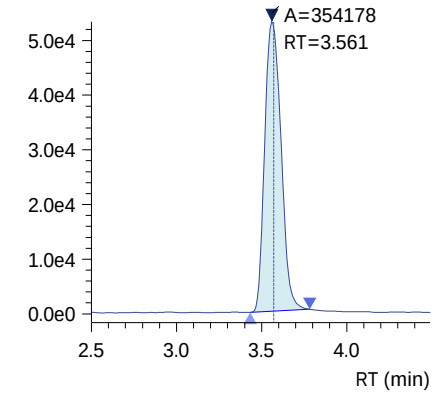
Sample ID: PERCHLORATE9
Date Acquired: 2/1/2023 12:36:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-011.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	3541	81577	31.3	ng/mL	101.00	31.89	24.11
			78		395		>85.00		-44.78
Sodium Perchlorate-18O4 _IS	Auto	3.557	81577	81577	1.0000	ng/mL	----	----	

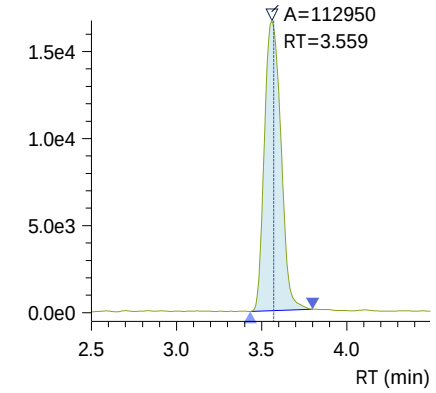
Perchlorate

Conc 31.3395
R#1 31.89 (31.99)

Q 99.00>83.00 (-) 5.34e4



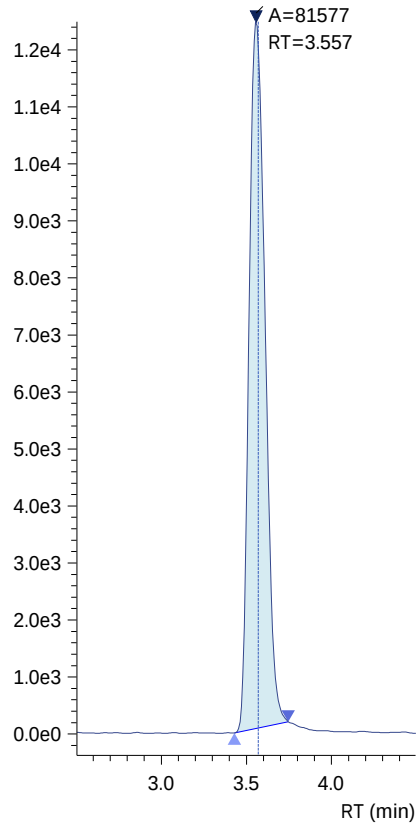
R1 101.00>85.00 (-) 1.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.25e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE10

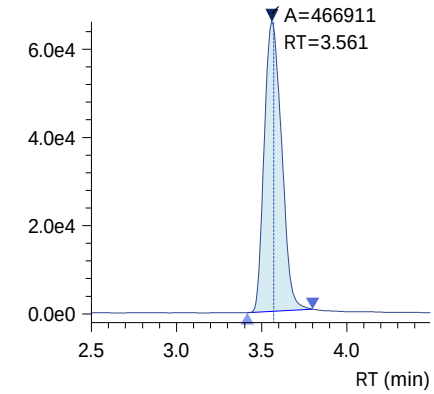
Sample ID: PERCHLORATE10
Date Acquired: 2/1/2023 12:42:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-012.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	4669	63237	53.2	ng/mL	101.00	32.40	24.11
			11		964		>85.00		-44.78
Sodium Perchlorate-18O4_IS	Auto	3.554	63237	63237	1.0000	ng/mL	----	----	

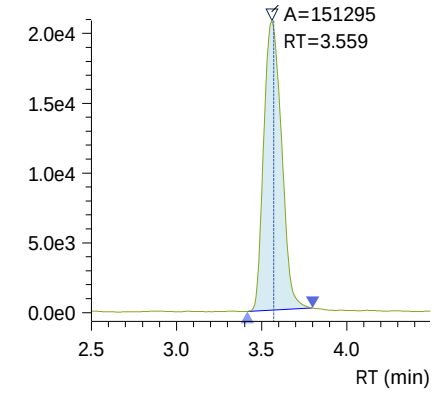
Perchlorate

Conc 53.2964
R#1 32.40 (31.99)

Q 99.00>83.00 (-) 6.62e4



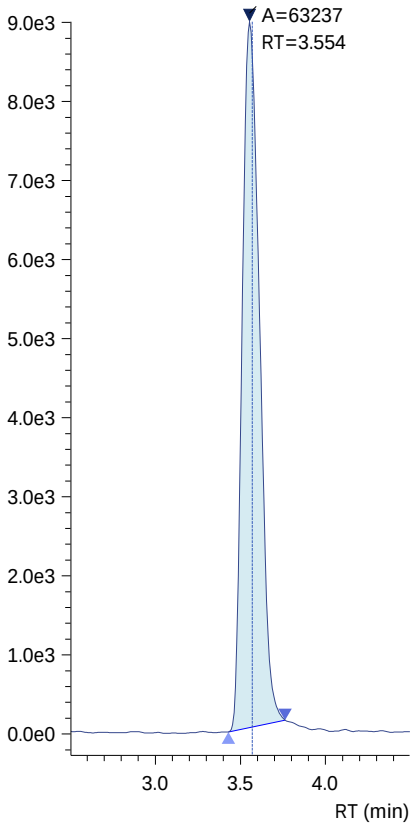
R1 101.00>85.00 (-) 2.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 9.01e3



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATEICV

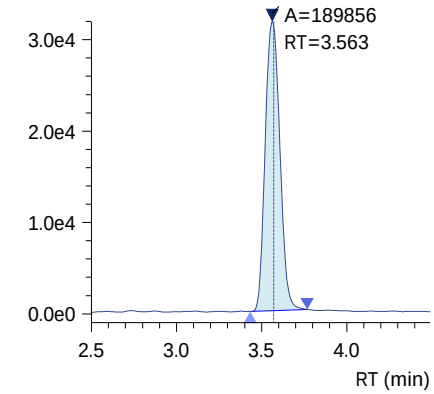
Sample ID: PERCHLORATEICV
Date Acquired: 2/1/2023 12:48:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-013.lcd
Vial: 11 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.563	189856 1898	130049	10.5379 10.5	ng/mL	101.00 >85.00	32.76	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.557	130049 1300	130049	1.0000	ng/mL	----	----	

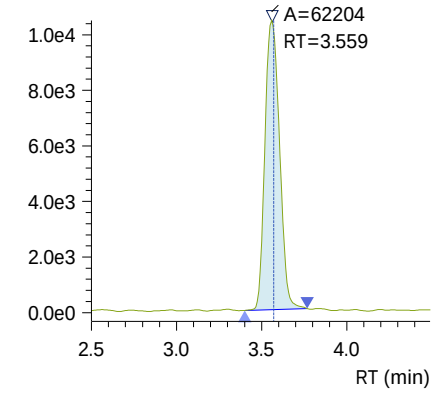
Perchlorate

Conc 10.5379
R#1 32.76 (31.99)

Q 99.00>83.00 (-) 3.20e4



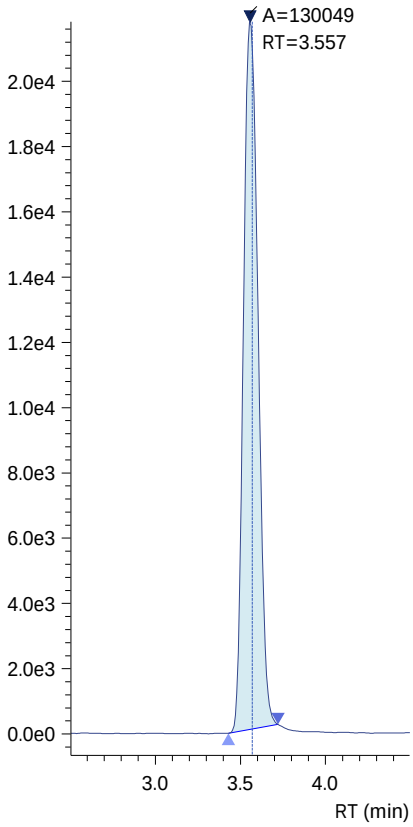
R1 101.00>85.00 (-) 1.05e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.18e4



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

20230202-793492

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XMI
2nd Review: Kneir

ICAL Date: 2/1/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300002

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	LODV		20230202-001	Perchlorate6850c.lcm	1x	☒	225199	2/2/2023 13:58
2	ICS		20230202-002	Perchlorate6850c.lcm	1x	☒	32103024	2/2/2023 14:33
3	PERCHLORATE7		20230202-003	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 14:38
4	R2300589-010		20230202-004	Perchlorate6850c.lcm	1x	☒		2/2/2023 14:44
5	EQ2300040-01		20230202-005	Perchlorate6850c.lcm	1x	☒		2/2/2023 14:49
6	EQ2300040-02		20230202-006	Perchlorate6850c.lcm	1x	☒		2/2/2023 15:01
7	EQ2300040-03		20230202-007	Perchlorate6850c.lcm	1x	☒		2/2/2023 15:12
8	EQ2300048-01		20230202-008	Perchlorate6850c.lcm	1x	☒		2/2/2023 15:18
9	EQ2300048-02		20230202-009	Perchlorate6850c.lcm	1x	☒		2/2/2023 15:30
10	EQ2300048-03		20230202-010	Perchlorate6850c.lcm	1x	☒	DNU-BAD PEAK SHAPE	2/2/2023 15:35
11	EQ2300049-01		20230202-011	Perchlorate6850c.lcm	1x	☒		2/2/2023 15:41
12	EQ2300049-02		20230202-012	Perchlorate6850c.lcm	1x	☒		2/2/2023 15:47
13	EQ2300049-03		20230202-013	Perchlorate6850c.lcm	1x	☒		2/2/2023 15:53
14	PERCHLORATE7		20230202-014	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 15:59
15	R2300538-005		20230202-015	Perchlorate6850c.lcm	1x	☒		2/2/2023 16:17
16	R2300538-010		20230202-016	Perchlorate6850c.lcm	1x	☒		2/2/2023 16:23
17	R2300561-005		20230202-017	Perchlorate6850c.lcm	1x	☒		2/2/2023 16:29
18	R2300561-010		20230202-018	Perchlorate6850c.lcm	1x	☒		2/2/2023 16:34
19	R2300561-015		20230202-019	Perchlorate6850c.lcm	1x	☒	DNU-BAD PEAK SHAPE	2/2/2023 16:40
20	R2300561-020		20230202-020	Perchlorate6850c.lcm	1x	☒		2/2/2023 16:46
21	R2300561-025		20230202-021	Perchlorate6850c.lcm	1x	☒		2/2/2023 16:51
22	R2300561-030		20230202-022	Perchlorate6850c.lcm	1x	☒		2/2/2023 16:57
23	R2300561-035		20230202-023	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:03
24	R2300561-040		20230202-024	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:08
25	PERCHLORATE7		20230202-025	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 17:14
26	R2300561-045		20230202-026	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:20
27	R2300561-050		20230202-027	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:25
28	R2300561-055		20230202-028	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:31
29	R2300650-005		20230202-029	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:37
30	R2300650-010		20230202-030	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:42
31	R2300537-012		20230202-031	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:48
32	E2300091-001		20230202-032	Perchlorate6850c.lcm	1000x	☒		2/2/2023 17:54
33	E2300093-001		20230202-033	Perchlorate6850c.lcm	1x	☒		2/2/2023 17:59
34	E2300093-002		20230202-034	Perchlorate6850c.lcm	1x	☒		2/2/2023 18:05
35	E2300093-003		20230202-035	Perchlorate6850c.lcm	100x	☒		2/2/2023 18:11
36	PERCHLORATE7		20230202-036	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 18:16
37	E2300093-004		20230202-037	Perchlorate6850c.lcm	1x	☒		2/2/2023 18:22
38	E2300093-005		20230202-038	Perchlorate6850c.lcm	20x	☒		2/2/2023 18:28
39	E2300093-006		20230202-039	Perchlorate6850c.lcm	10x	☒		2/2/2023 18:33
40	E2300093-007		20230202-040	Perchlorate6850c.lcm	10x	☒		2/2/2023 18:39

20230202-793492

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XMI
2nd Review: Kneir

ICAL Date: 2/1/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300002

Mobile Phases : A:0.10% Formic Acid/Water 3210303-02 **B:**MeOH 224417

	Sample Name		File Name	Acquisition Method	Dilution	R	Comments	Date/Time
41	E2300093-008		20230202-041	Perchlorate6850c.lcm	1x	☒		2/2/2023 18:45
42	E2300093-009		20230202-042	Perchlorate6850c.lcm	1x	☒		2/2/2023 18:50
43	E2300093-010		20230202-043	Perchlorate6850c.lcm	1x	☒		2/2/2023 18:56
44	E2300093-011		20230202-044	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:02
45	E2300093-012		20230202-045	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:07
46	E2300093-013		20230202-046	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:13
47	PERCHLORATE7		20230202-047	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 19:18
48	E2300093-014		20230202-048	Perchlorate6850c.lcm	100x	☒		2/2/2023 19:24
49	E2300093-015		20230202-049	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:30
50	E2300093-016		20230202-050	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:35
51	E2300093-017		20230202-051	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:41
52	E2300093-018		20230202-052	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:47
53	E2300095-001		20230202-053	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:52
54	E2300095-002		20230202-054	Perchlorate6850c.lcm	1x	☒		2/2/2023 19:58
55	E2300095-003		20230202-055	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:04
56	E2300095-004		20230202-056	Perchlorate6850c.lcm	20x	☒		2/2/2023 20:09
57	E2300095-005		20230202-057	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:15
58	PERCHLORATE7		20230202-058	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 20:21
59	E2300095-006		20230202-059	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:26
60	E2300095-007		20230202-060	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:32
61	E2300095-008		20230202-061	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:38
62	E2300095-009		20230202-062	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:43
63	E2300095-010		20230202-063	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:49
64	E2300095-011		20230202-064	Perchlorate6850c.lcm	1x	☒		2/2/2023 20:55
65	E2300095-012		20230202-065	Perchlorate6850c.lcm	1x	☒		2/2/2023 21:00
66	E2300098-001		20230202-066	Perchlorate6850c.lcm	1x	☒		2/2/2023 21:06
67	EQ2300049-04		20230202-067	Perchlorate6850c.lcm	1x	☒		2/2/2023 21:12
68	EQ2300049-05		20230202-068	Perchlorate6850c.lcm	1x	☒		2/2/2023 21:17
69	PERCHLORATE7		20230202-069	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 21:23
70	E2300098-002		20230202-070	Perchlorate6850c.lcm	1x	☒		2/2/2023 21:29
71	E2300098-003		20230202-071	Perchlorate6850c.lcm	1x	☒		2/2/2023 21:34
72	E2300098-004		20230202-072	Perchlorate6850c.lcm	1x	☒		2/2/2023 21:40
73	PERCHLORATE7		20230202-073	Perchlorate6850c.lcm	1x	☒	227251	2/2/2023 22:25

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300095
Project:	HS23011397	**Date Analyzed:**	2/2/23 18:16

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230202\20230202-036	**Lab Code:**	EQ2300053-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793492
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300053-04	145,156	3.43

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:**	E2300095
Project:	HS23011397	**Date Analyzed:**	2/2/23 19:18

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230202\20230202-047	**Lab Code:**	EQ2300053-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793492
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300053-05	154,748	3.43
16WW44-230121	E2300095-001	226,907	3.43
16PM14-230121	E2300095-002	247,569	3.43
16PM09-230121	E2300095-003	239,401	3.43
16PM03-230121	E2300095-004	161,108	3.43
16PM06-230121	E2300095-005	234,372	3.43

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:**	E2300095
Project:	HS23011397	**Date Analyzed:**	2/2/23 20:21

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230202\20230202-058	**Lab Code:**	EQ2300053-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793492
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300053-06	159,999	3.43
16PM02-230121	E2300095-006	221,287	3.43
16RW01-230123	E2300095-007	231,741	3.43
16RW05-230123	E2300095-008	250,921	3.43
16WW26-230123	E2300095-009	234,119	3.43
16WW25-230123	E2300095-010	232,056	3.43
16WW29-230123	E2300095-011	223,108	3.43
16WW30-230123	E2300095-012	219,062	3.43

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:**	E2300095
Project:	HS23011397	**Date Analyzed:**	2/2/23 21:23

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230202\20230202-069	**Lab Code:**	EQ2300053-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793492
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300053-07	158,293	3.42

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:**	E2300095
Project:	HS23011397	**Date Analyzed:**	2/2/23 22:25

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230202\20230202-073	**Lab Code:**	EQ2300053-08
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793492
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300053-08	154,097	3.42

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: HS23011397

Service Request: E2300095
Date Analyzed: 2/ 2/23

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\20230202\20230202-036

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793492
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.9	0.1392	0.1507	8.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011397

Service Request: E2300095
Date Analyzed: 2/ 2/23

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\20230202\20230202-047

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793492
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	11.0	0.1392	0.1522	9.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011397

Service Request: E2300095
Date Analyzed: 2/ 2/23

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\20230202\20230202-058

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793492
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.7	0.1392	0.1478	6.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011397

Service Request: E2300095
Date Analyzed: 2/ 2/23

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\20230202\20230202-069

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793492
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	11.0	0.1392	0.1524	9.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011397

Service Request: E2300095
Date Analyzed: 2/ 2/23

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\20230202\20230202-073

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793492
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.8	0.1392	0.1499	7.7	NA	± 15 %	Average RF

Insight Report

Printed at 2/3/2023 12:18:01 PM

Method File: I:\LCMS01\DATA\20230202\20230202.lcm
Project File: I:\LCMS01\DATA\20230202\20230202.damlp

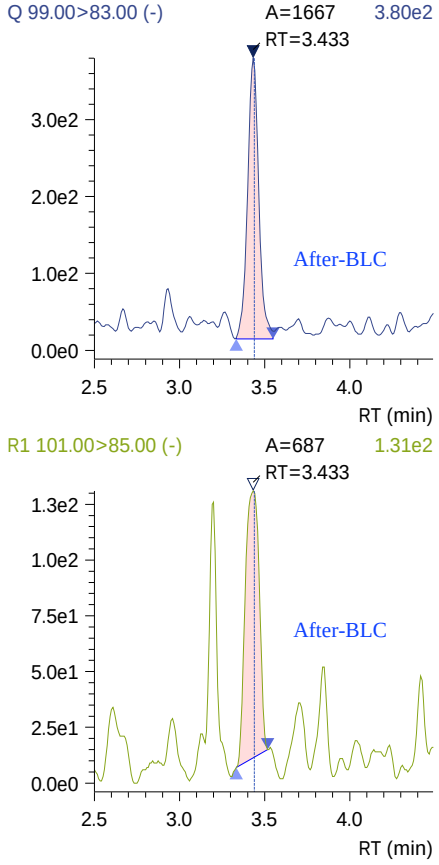
LODV

Sample ID: LODV
Date Acquired: 2/2/2023 1:58:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-001.lcd
Vial: 1 | 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	M	3.433	1667	204918	0.0587	ng/mL	101.00 >85.00	41.22	22.52 -41.82
Sodium Perchlorate-18O4 _IS	Auto	3.433	204918	204918	1.0000	ng/mL	----	----	

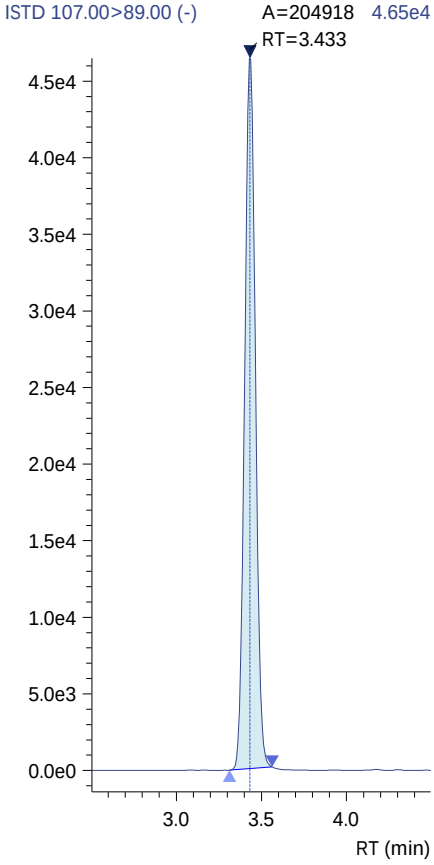
Perchlorate

Conc 0.0587
R#1 41.22 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

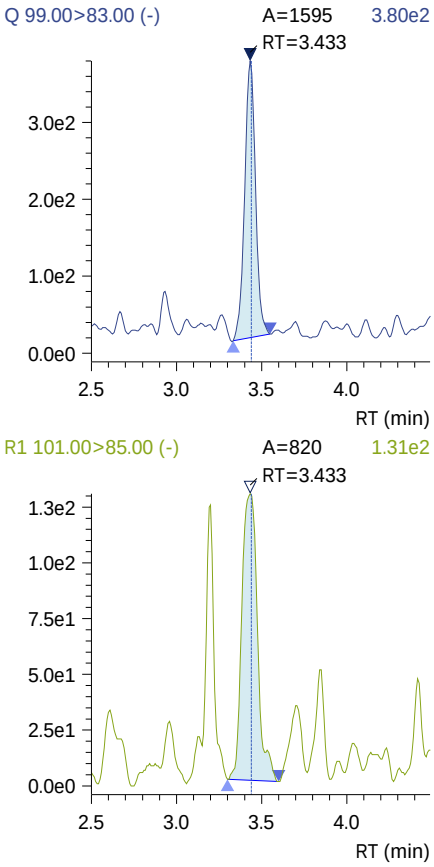
Method File: I:\LCMS01\DATA\20230202\20230202.lcm
Project File: I:\LCMS01\DATA\20230202\20230202.damlp

LODV

Sample ID: LODV
Date Acquired: 2/2/2023 1:58:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-001.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 0

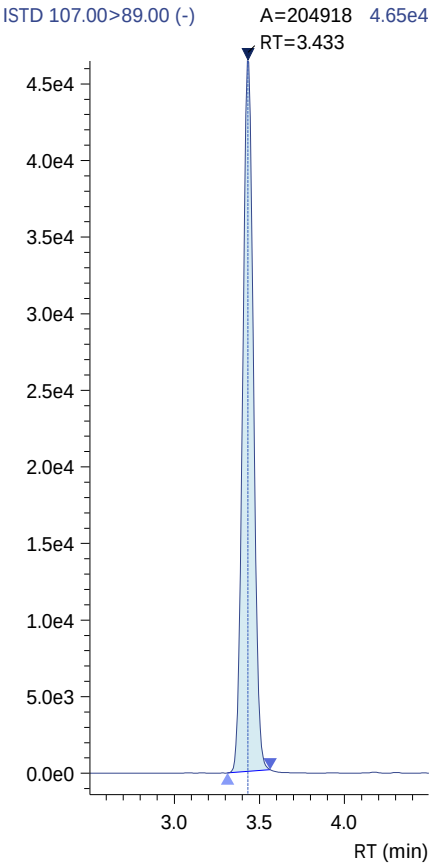
Perchlorate

Conc 0.0556
R#1 51.39 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

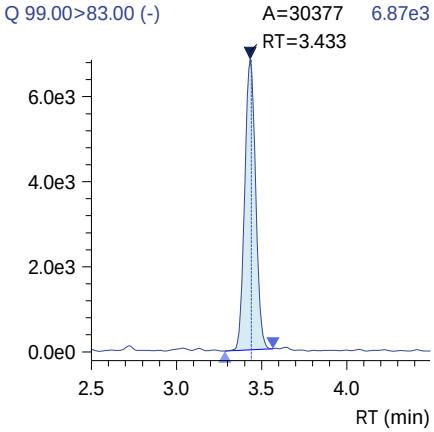
ICS

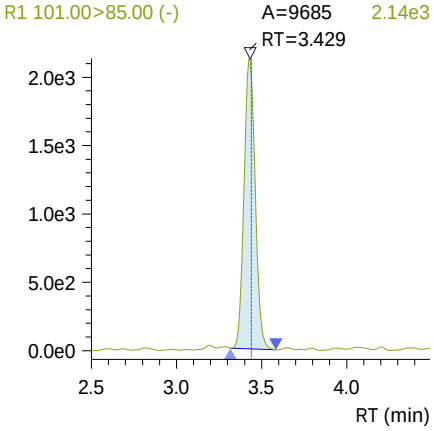
Sample ID: ICS
Date Acquired: 2/2/2023 2:33:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-002.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.433	30377	249505	0.8788	ng/mL	101.00 >85.00	31.88	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.429	249505	249505	1.0000	ng/mL	----	----	

Perchlorate

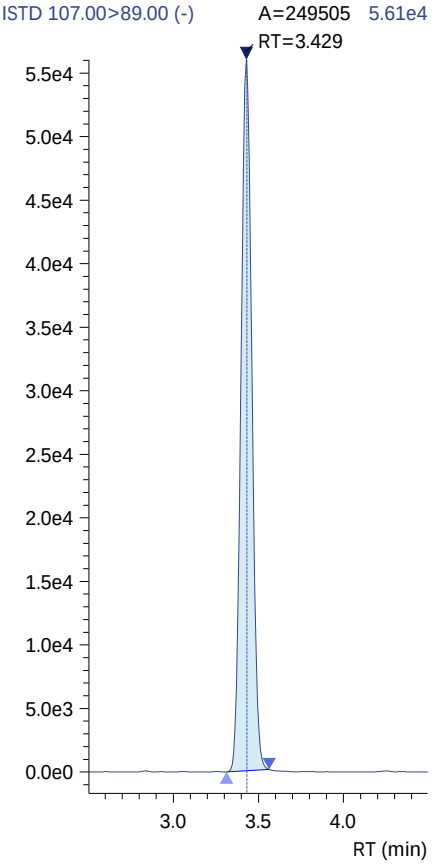
Conc 0.8788
R#1 31.88 (32.17)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

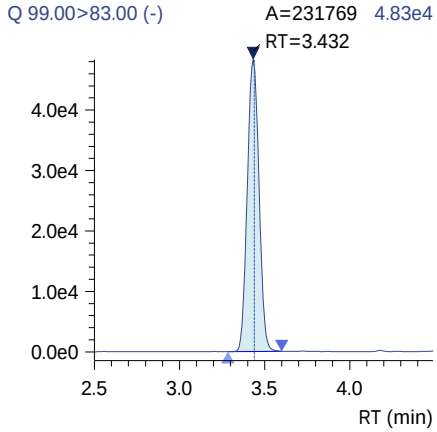
PERCHLORATE7

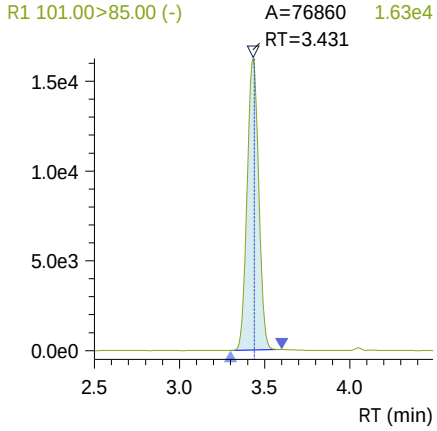
Sample ID: PERCHLORATE7
Date Acquired: 2/2/2023 2:38:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-003.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.432	2317 69	144978	11.5 396	ng/mL	101.00 >85.00	33.16	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.429	1449 78	144978	1.0000	ng/mL	----	----	

Perchlorate

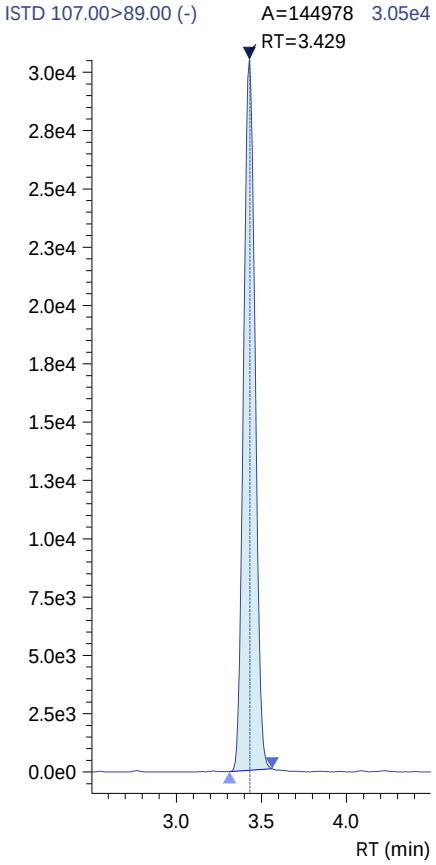
Conc 11.5396
R#1 33.16 (32.17)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

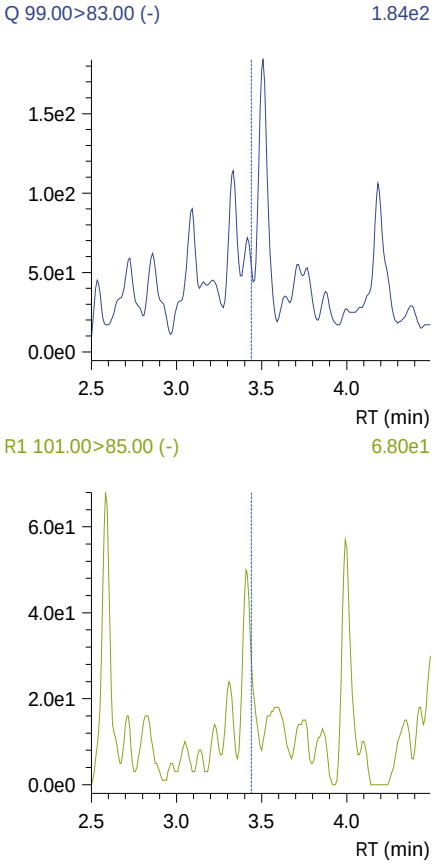
EQ2300049-01

Sample ID: EQ2300049-01
Date Acquired: 2/2/2023 3:41:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-011.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)	----	----	197679	----	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.427	197679	197679	1.0000	ng/mL	----	----	

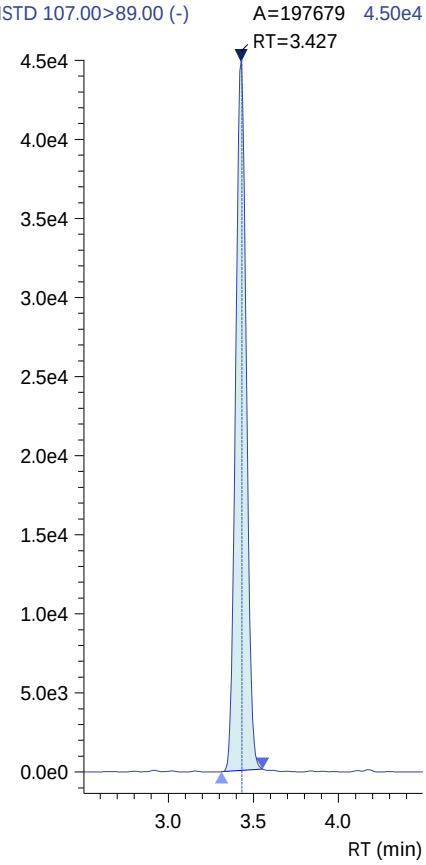
Perchlorate

Conc ----
R#1 0.00 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

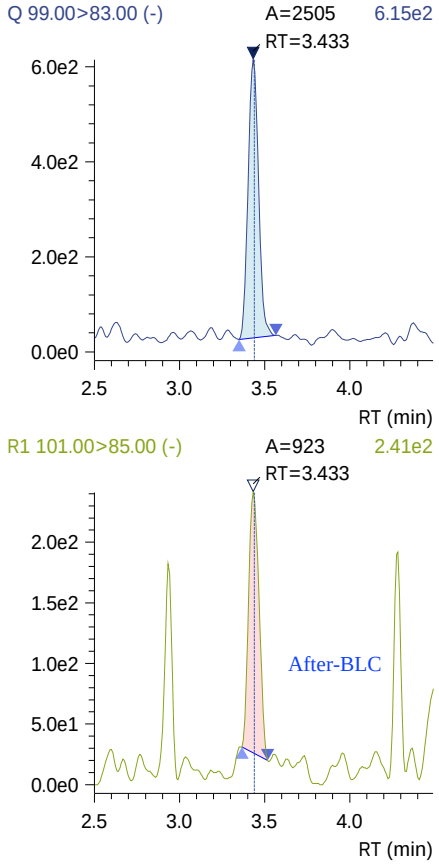
EQ2300049-02

Sample ID: EQ2300049-02
Date Acquired: 2/2/2023 3:47:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-012.lcd
Vial: 31 | 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	MI R1	3.433	2505	199169	0.0908	ng/mL	101.00 >85.00	36.83	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.428	199169	199169	1.0000	ng/mL	----	----	

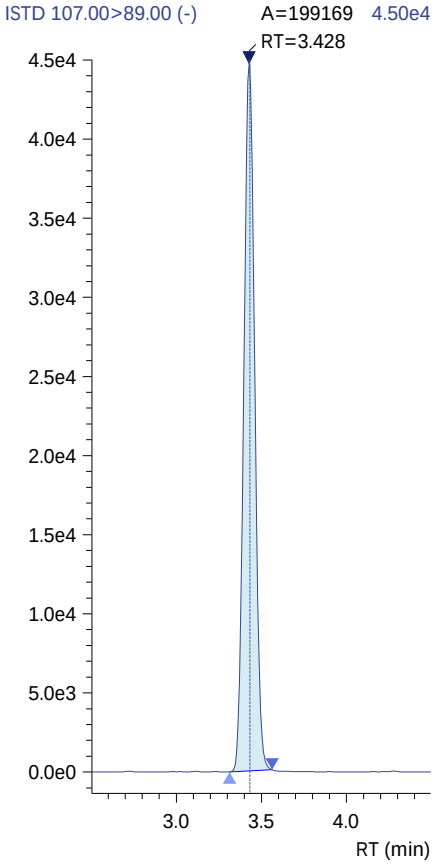
Perchlorate

Conc 0.0908
R#1 36.83 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:22:55 PM

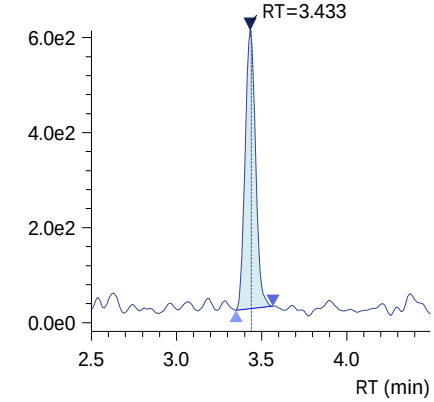
EQ2300049-02

Sample ID: EQ2300049-02
Date Acquired: 2/2/2023 3:47:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-012.lcd
Vial: 31 | Inj. Volume: 25.0000uL | Tray: 4

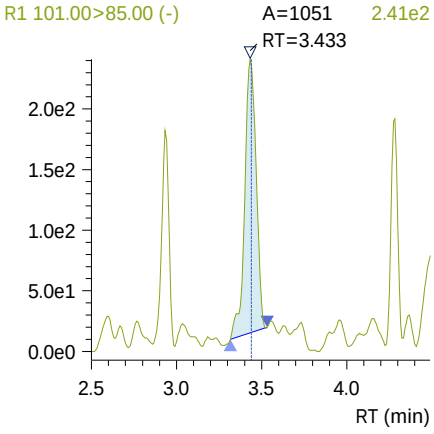
Perchlorate

Conc 0.0899
R#1 41.95 (32.17)

Q 99.00>83.00 (-) A=2505 6.15e2



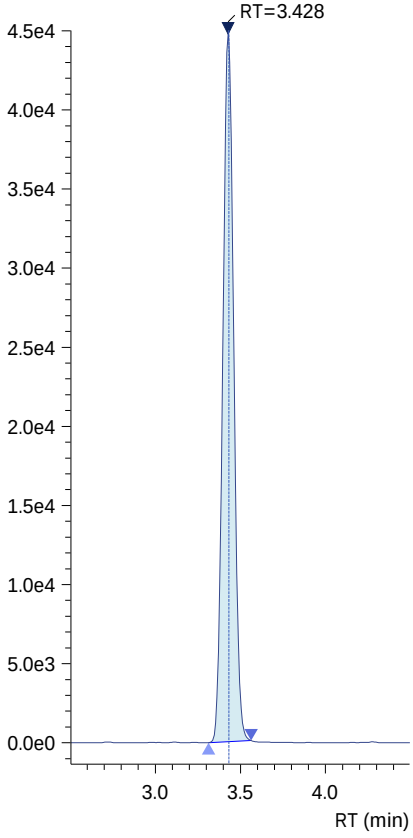
R1 101.00>85.00 (-) A=1051 2.41e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=199169 4.50e4



Insight Report

Printed at 2/3/2023 12:18:01 PM

EQ2300049-03

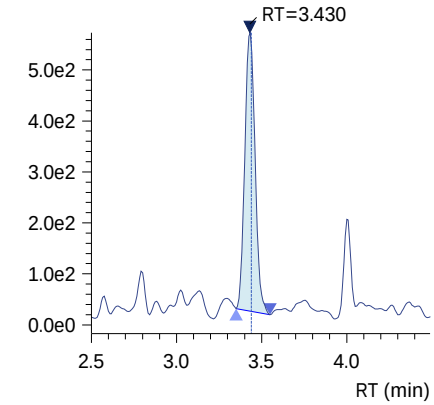
Sample ID: EQ2300049-03
Date Acquired: 2/2/2023 3:53:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-013.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.430	2298	188036	0.0882	ng/mL	101.00 >85.00	38.08	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.429	188036	188036	1.0000	ng/mL	----	----	

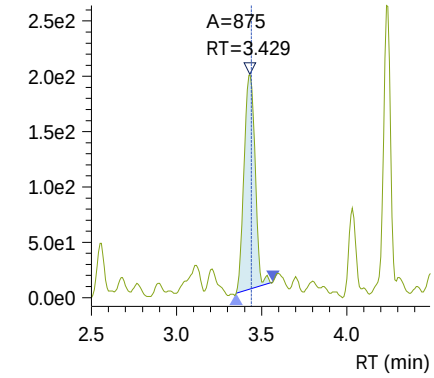
Perchlorate

Conc 0.0882
R#1 38.08 (32.17)

Q 99.00>83.00 (-) A=2298 5.73e2



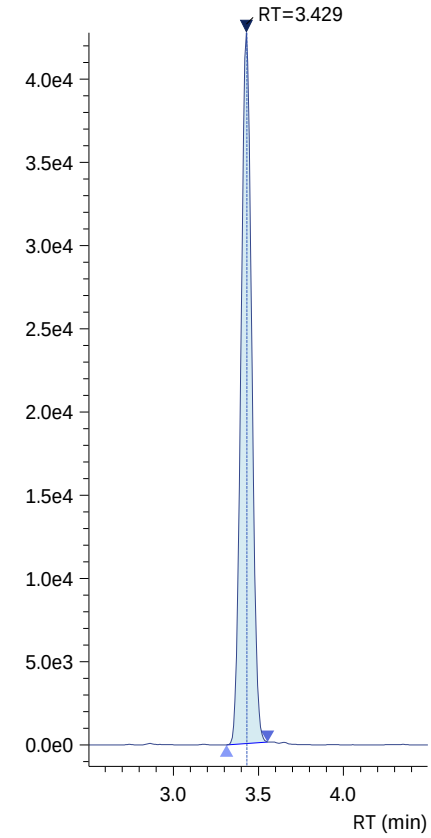
R1 101.00>85.00 (-) 2.64e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=188036 4.28e4



Insight Report

Printed at 2/3/2023 12:18:01 PM

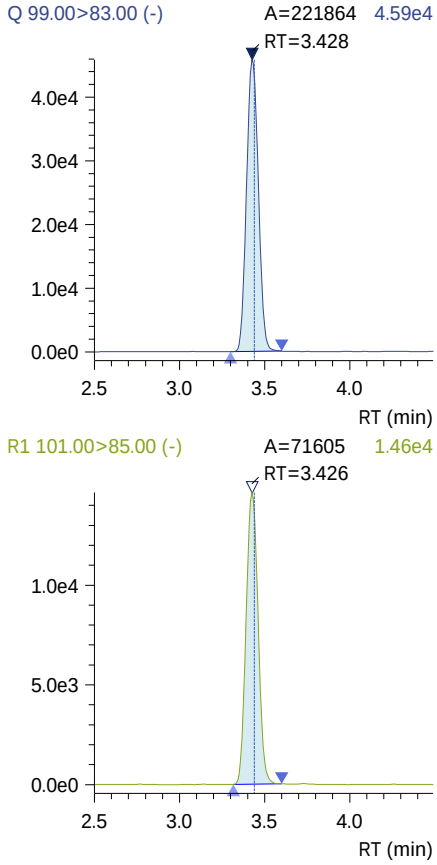
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 2/2/2023 3:59:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-014.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	3.428	221864 64	139707	11.4 632	ng/mL	101.00 >85.00	32.27	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.424	139707	139707	1.0000	ng/mL	----	----	

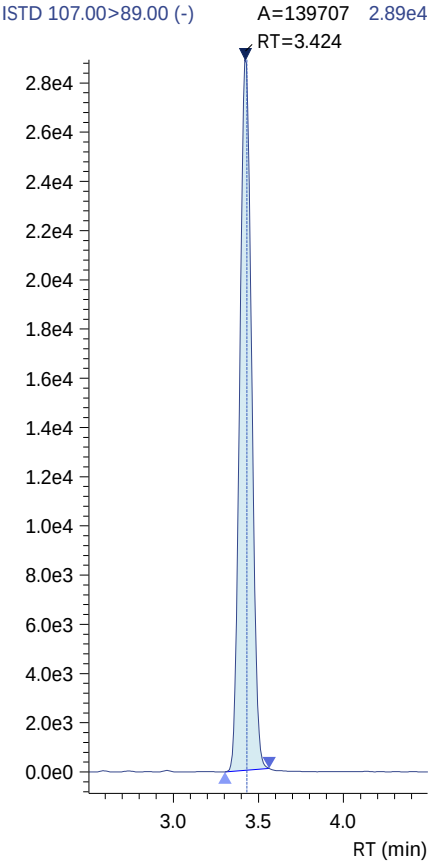
Perchlorate

Conc 11.4632
R#1 32.27 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

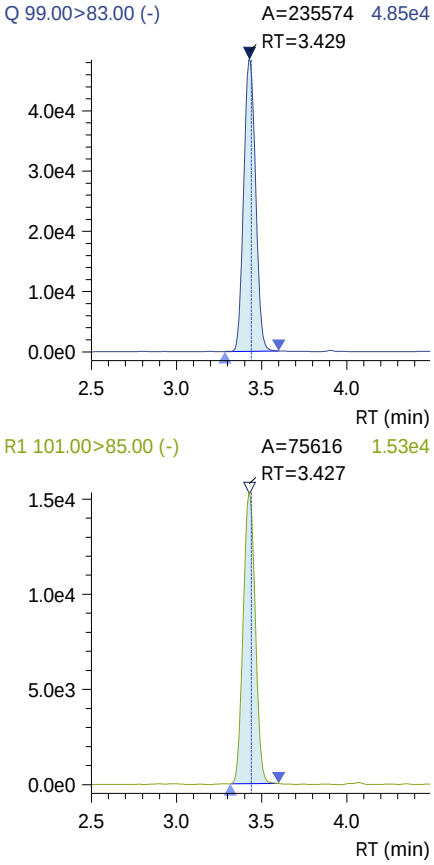
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 2/2/2023 7:18:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-047.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	3.429	2355 74	154748	10.9 885	ng/mL	101.00 >85.00	32.10	22.52 -41.82
Sodium Perchlorate-18O4 _IS	Auto	3.426	1547 48	154748	1.0000	ng/mL	----	----	

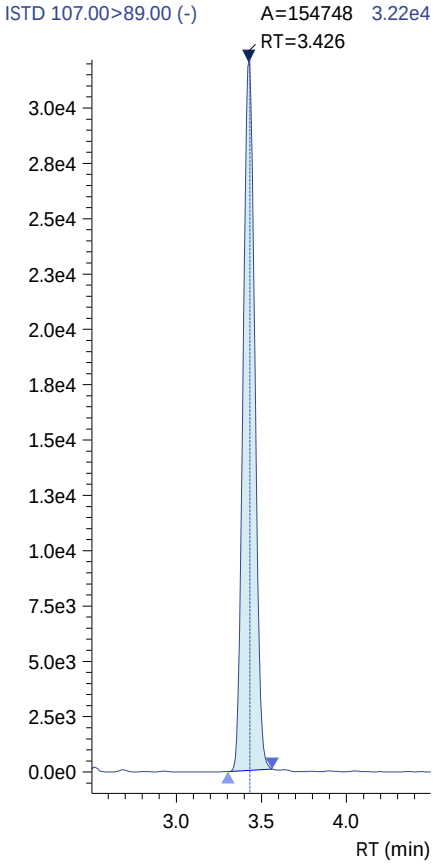
Perchlorate

Conc 10.9885
R#1 32.10 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

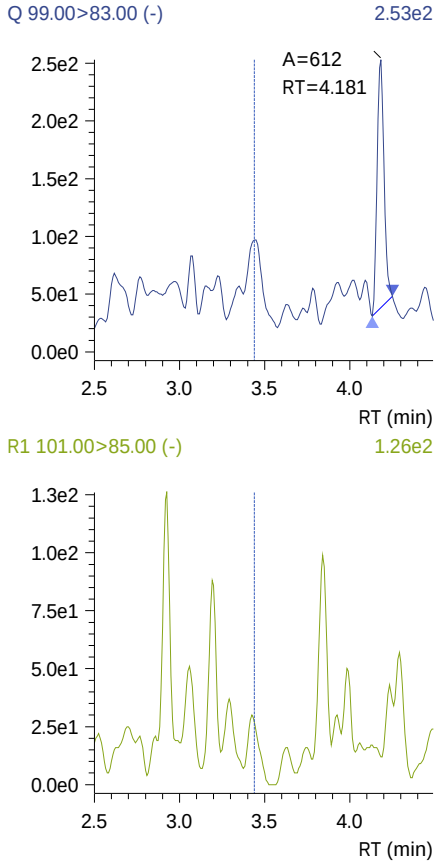
E2300095-001

Sample ID: E2300095-001
Date Acquired: 2/2/2023 7:52:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-053.lcd
Vial: 37 | 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)	----	----	226907	----	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.426	226907	226907	1.0000	ng/mL	----	----	

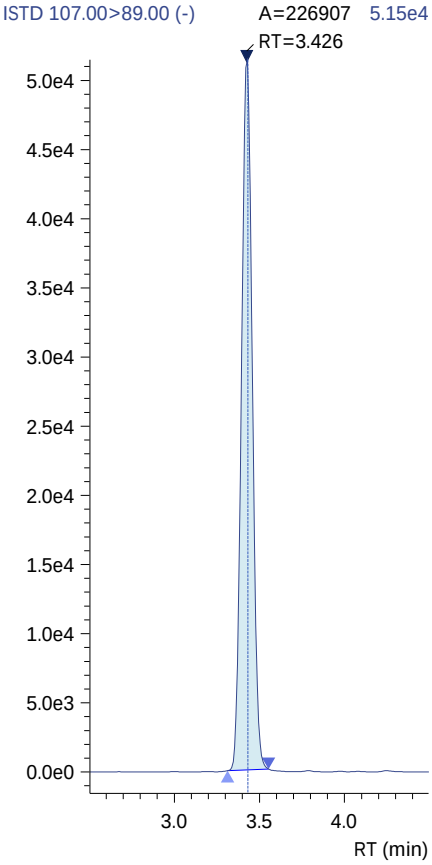
Perchlorate

Conc ----
R#1 0.00 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

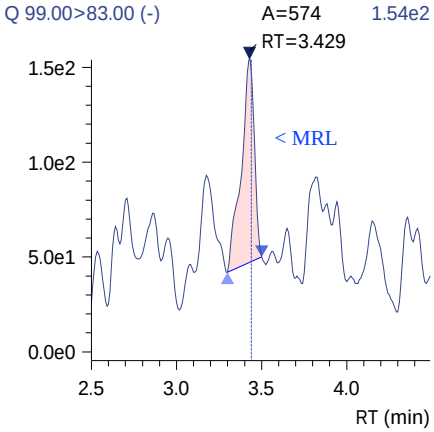
E2300095-002

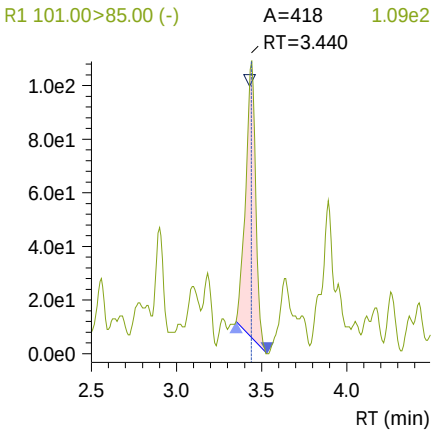
Sample ID: E2300095-002
Date Acquired: 2/2/2023 7:58:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-054.lcd
Vial: 38 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.429	574	247569	0.0167	ng/mL	101.00 >85.00	72.74	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.429	247569	247569	1.0000	ng/mL	----	----	

Perchlorate

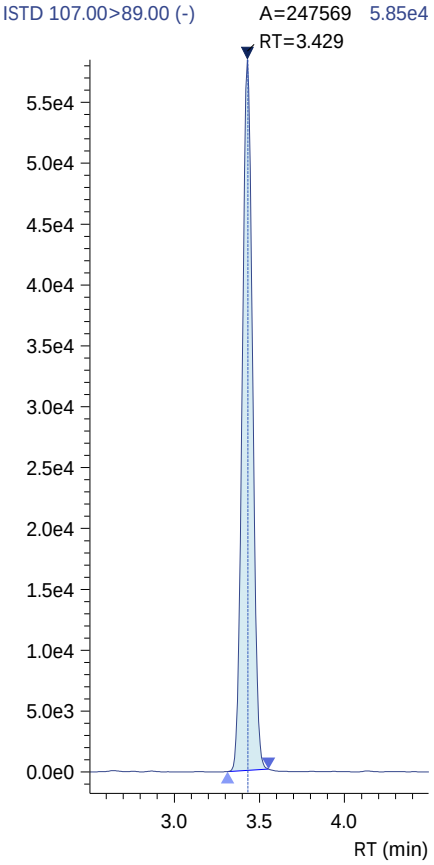
Conc 0.0167
R#1 72.74 (32.17)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:22:55 PM

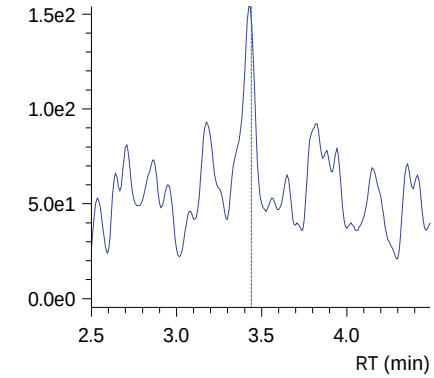
E2300095-002

Sample ID: E2300095-002
Date Acquired: 2/2/2023 7:58:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-054.lcd
Vial: 38 | Inj. Volume: 25.0000uL | Tray: 3

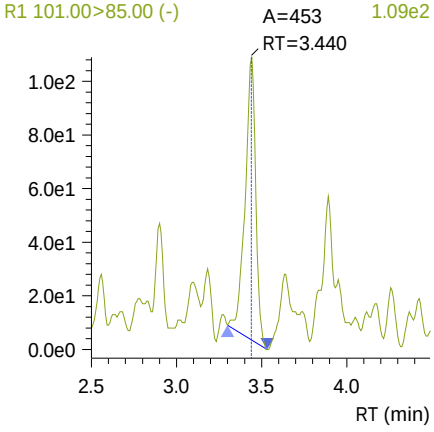
Perchlorate

Conc ----
R#1 0.00 (32.17)

Q 99.00>83.00 (-) 1.54e2



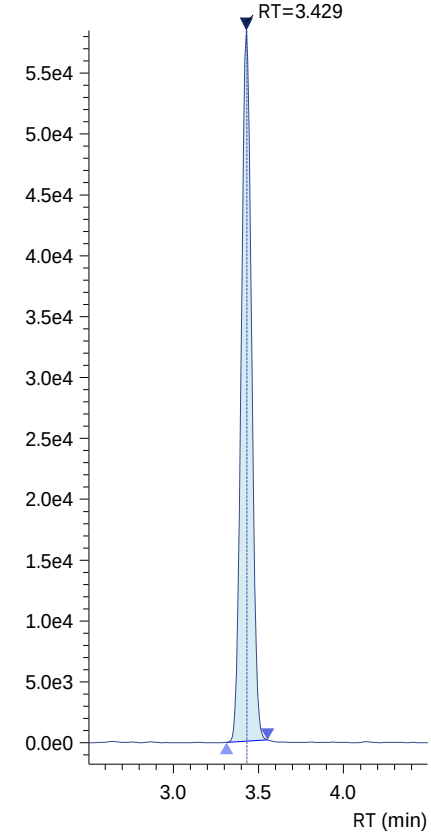
R1 101.00>85.00 (-) A=453 RT=3.440 1.09e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=247569 RT=3.429 5.85e4



Insight Report

Printed at 2/3/2023 12:18:01 PM

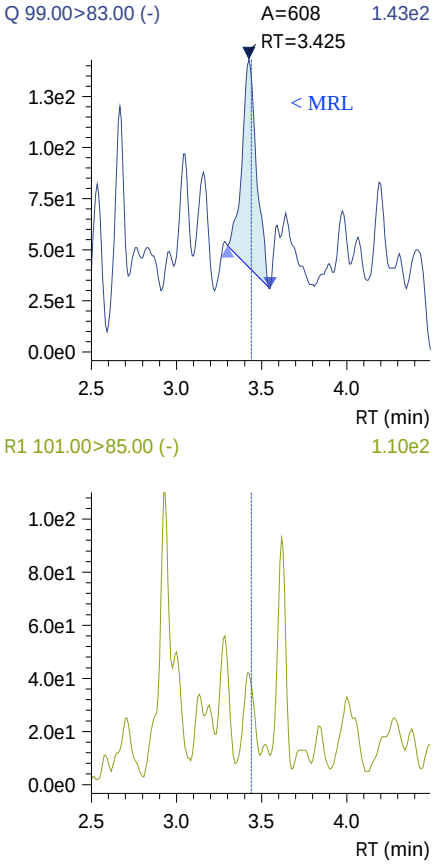
E2300095-003

Sample ID: E2300095-003
Date Acquired: 2/2/2023 8:04:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-055.lcd
Vial: 39 | 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	3.425	608	239401	0.0183	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.428	239401	239401	1.0000	ng/mL	----	----	

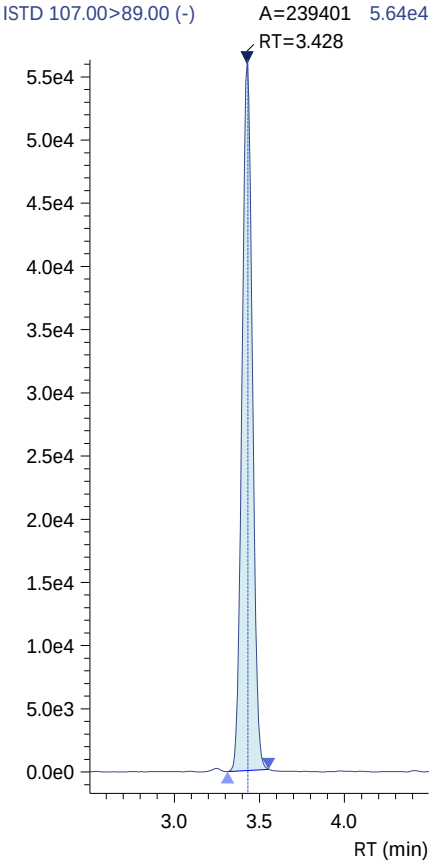
Perchlorate

Conc 0.0183
R#1 0.00 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

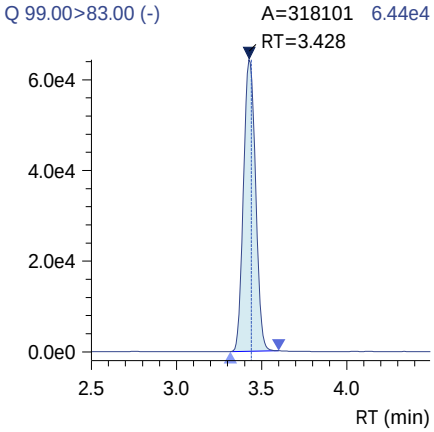
E2300095-004x20

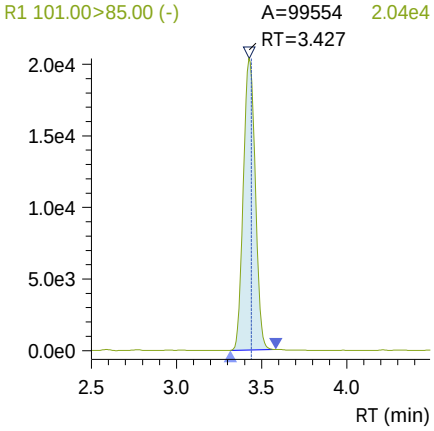
Sample ID: E2300095-004
Date Acquired: 2/2/2023 8:09:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-056.lcd
Vial: 41 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.428	318101	161108	14.2523	ng/mL	101.00 >85.00	31.30	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.425	161108	161108	1.0000	ng/mL	----	----	

Perchlorate

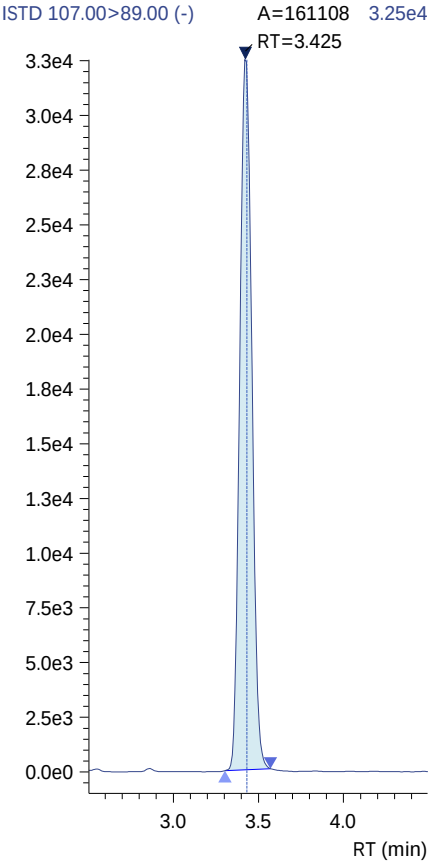
Conc 14.2523
R#1 31.30 (32.17)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

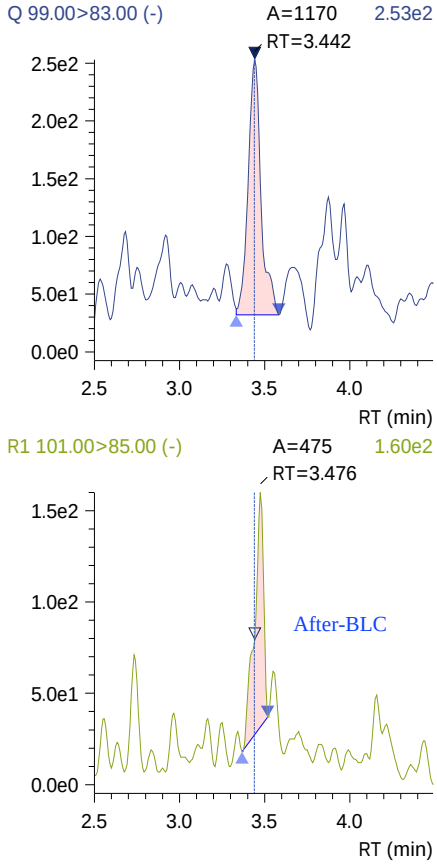
E2300095-005

Sample ID: E2300095-005
Date Acquired: 2/2/2023 8:15:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-057.lcd
Vial: 41 | 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	3.442	1170	234372	0.0360	ng/mL	101.00 >85.00	40.59	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.429	234372	234372	1.0000	ng/mL	----	----	

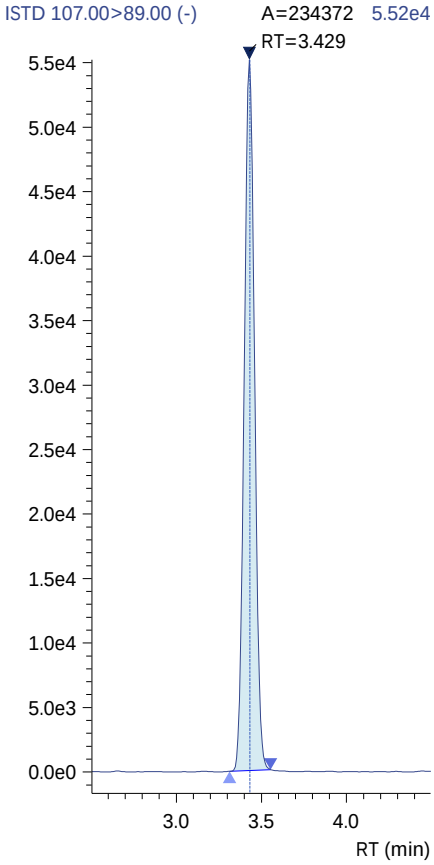
Perchlorate

Conc 0.0360
R#1 40.59 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:22:55 PM

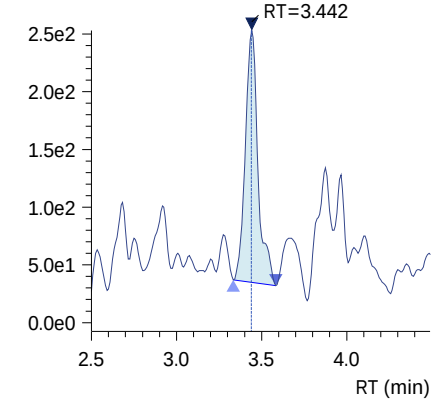
E2300095-005

Sample ID: E2300095-005
Date Acquired: 2/2/2023 8:15:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-057.lcd
Vial: 41 | Inj. Volume: 25.0000uL | Tray: 3

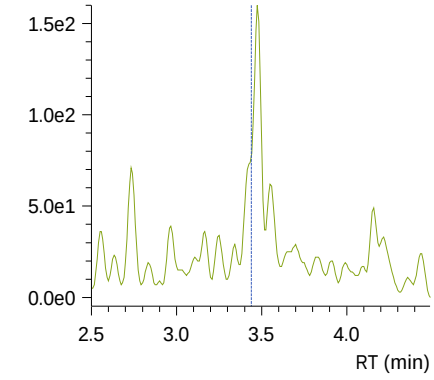
Perchlorate

Conc 0.0345
R#1 0.00 (32.17)

Q 99.00>83.00 (-) A=1132 2.53e2



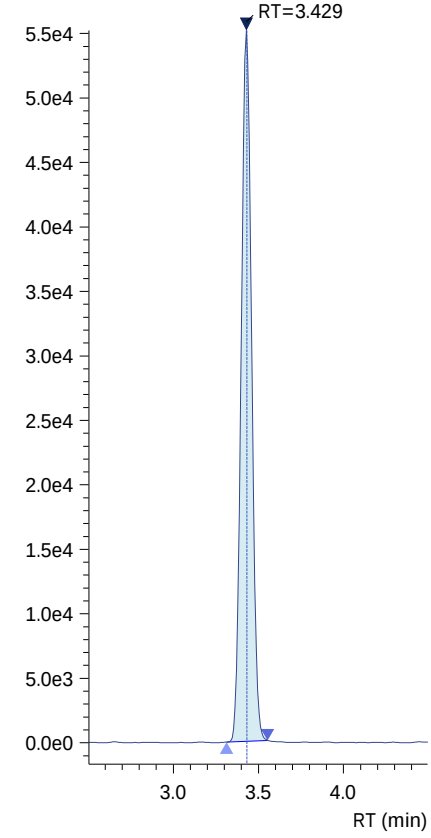
R1 101.00>85.00 (-) 1.60e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=234372 5.52e4



Insight Report

Printed at 2/3/2023 12:18:01 PM

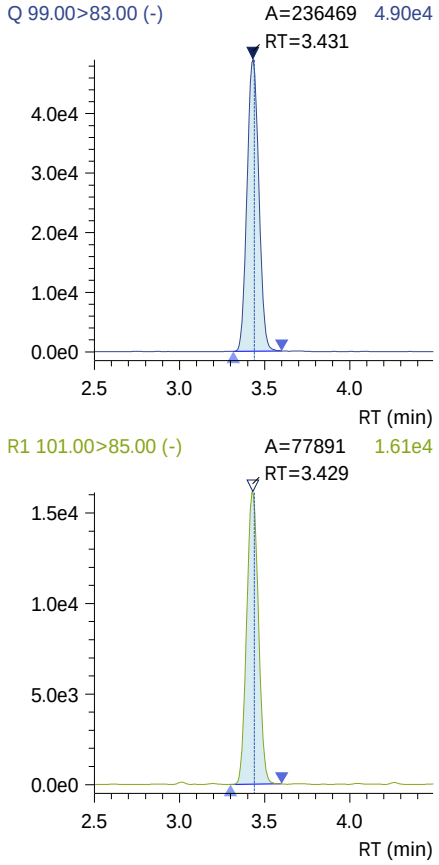
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 2/2/2023 8:21:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-058.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	3.431	2364 69	159999	10.6 683	ng/mL	101.00 >85.00	32.94	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.427	1599 99	159999	1.0000	ng/mL	----	----	

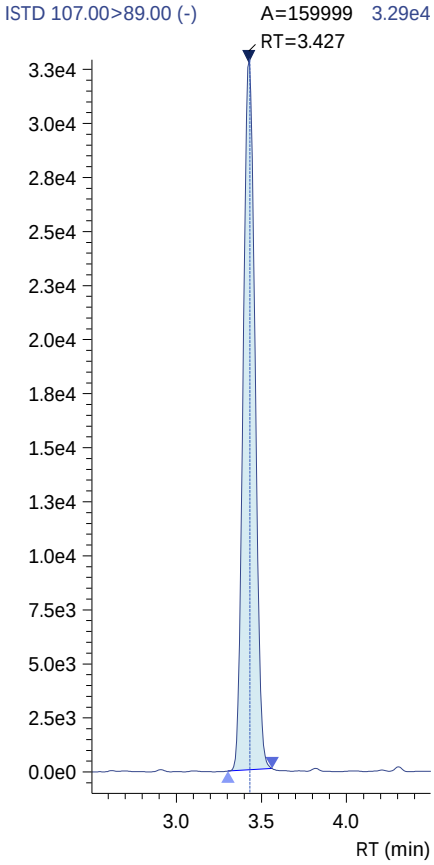
Perchlorate

Conc 10.6683
R#1 32.94 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

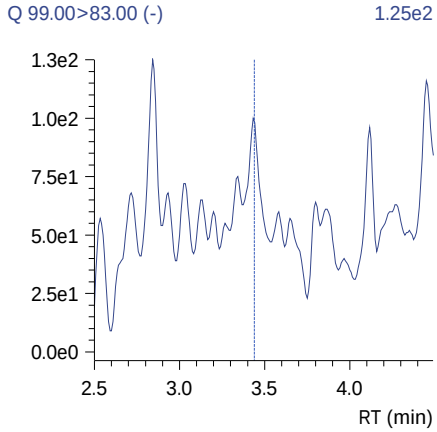
E2300095-006

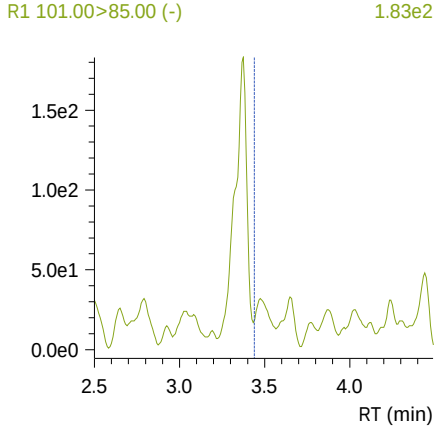
Sample ID: E2300095-006
Date Acquired: 2/2/2023 8:26:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-059.lcd
Vial: 42 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	221287	----	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.429	221287	221287	1.0000	ng/mL	----	----	

Perchlorate

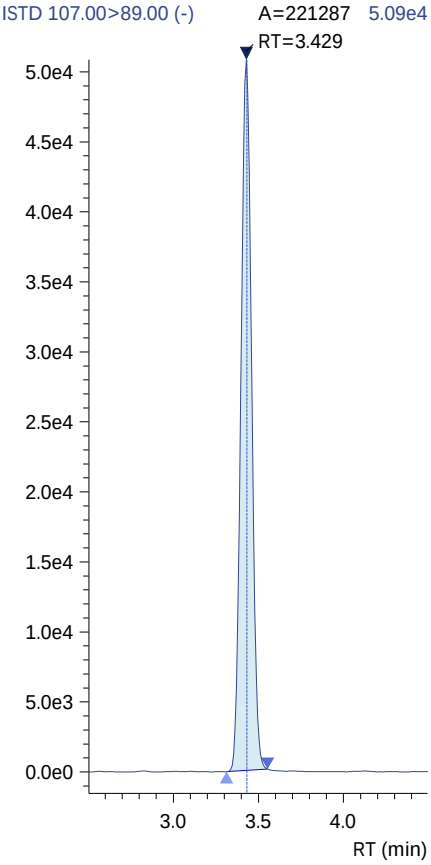
Conc ----
R#1 0.00 (32.17)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

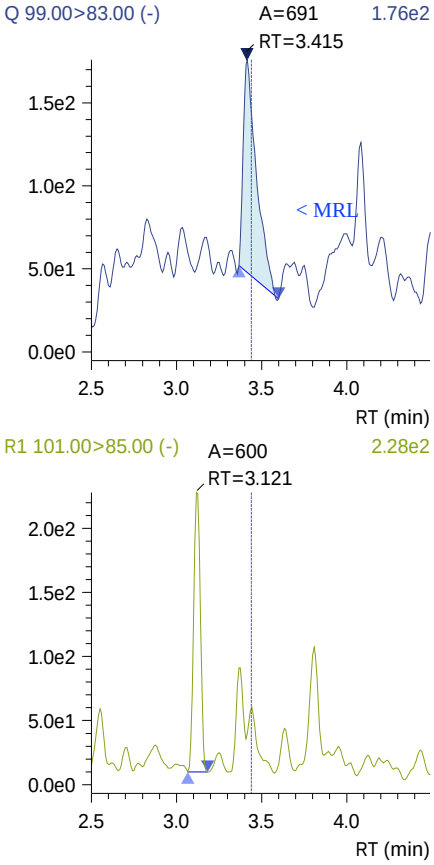
E2300095-007

Sample ID: E2300095-007
Date Acquired: 2/2/2023 8:32:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-060.lcd
Vial: 43 | 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	3.415	691	231741	0.0215	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.428	231741	231741	1.0000	ng/mL	----	----	

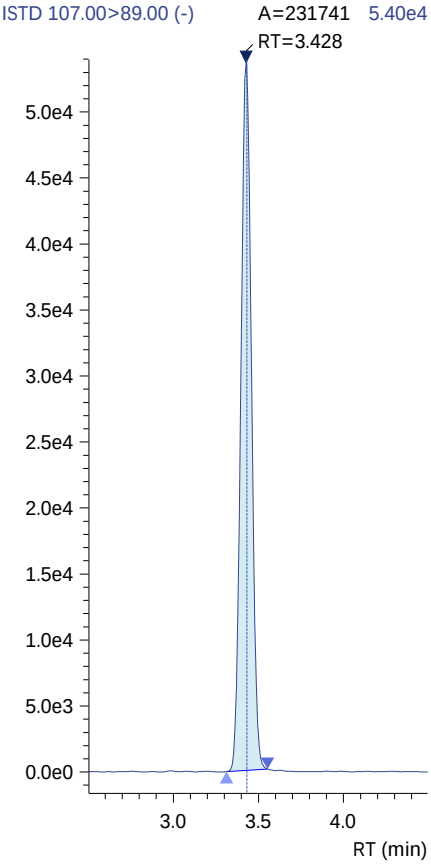
Perchlorate

Conc 0.0215
R#1 0.00 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

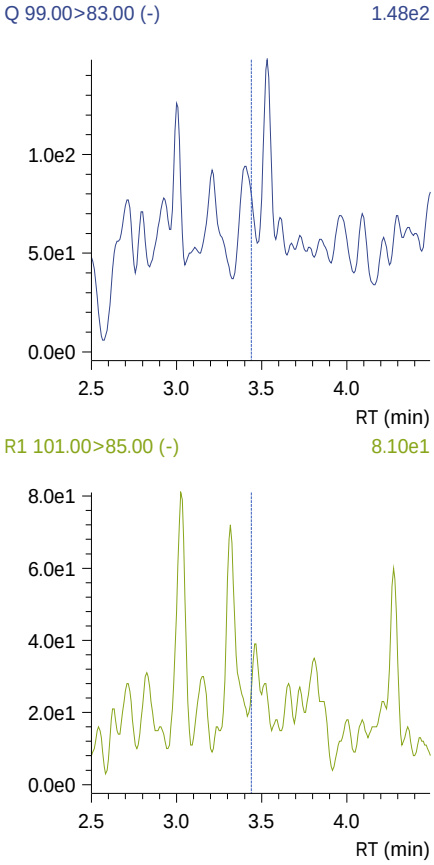
E2300095-008

Sample ID: E2300095-008
Date Acquired: 2/2/2023 8:38:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-061.lcd
Vial: 44 | 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)	----	----	250921	----	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.428	250921	250921	1.0000	ng/mL	----	----	

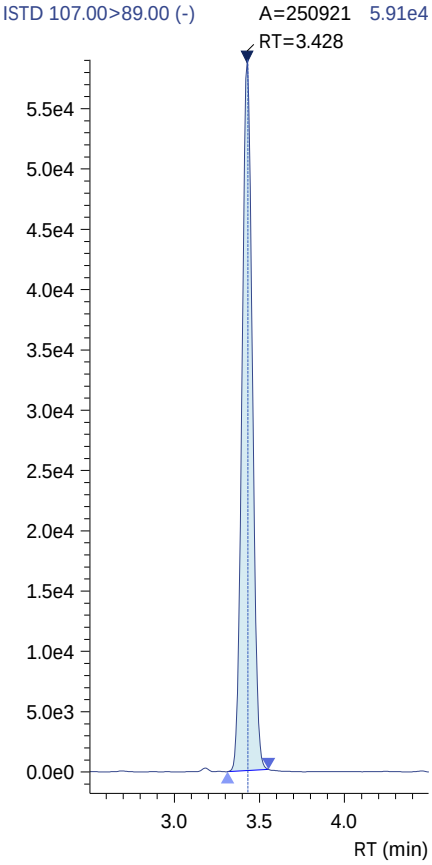
Perchlorate

Conc ----
R#1 0.00 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

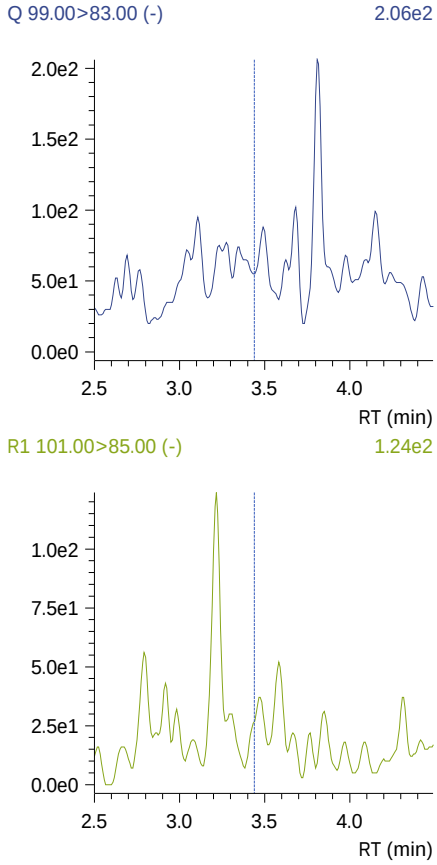
E2300095-009

Sample ID: E2300095-009
Date Acquired: 2/2/2023 8:43:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-062.lcd
Vial: 45 | 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)	----	----	234119	----	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.427	234119	234119	1.0000	ng/mL	----	----	

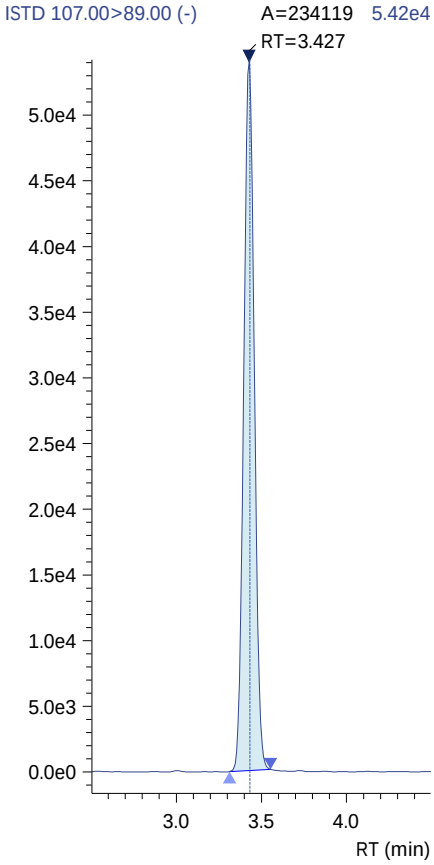
Perchlorate

Conc ----
R#1 0.00 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

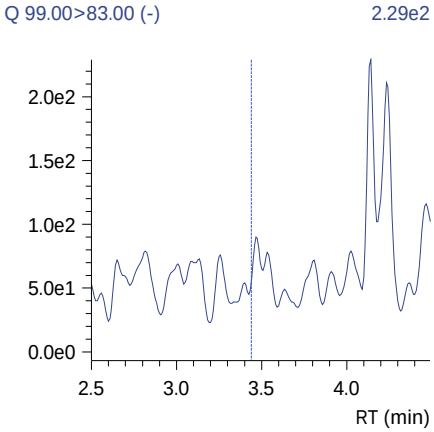
E2300095-010

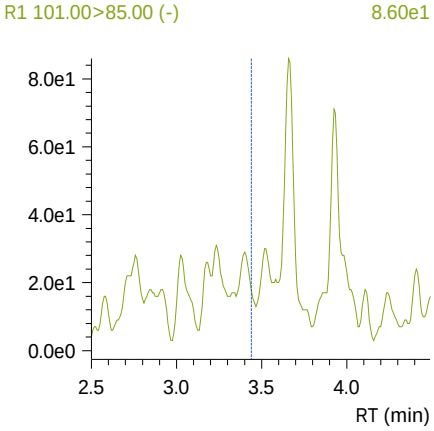
Sample ID: E2300095-010
Date Acquired: 2/2/2023 8:49:21 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-063.lcd
Vial: 46 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	232056	----	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.429	232056	232056	1.0000	ng/mL	----	----	

Perchlorate

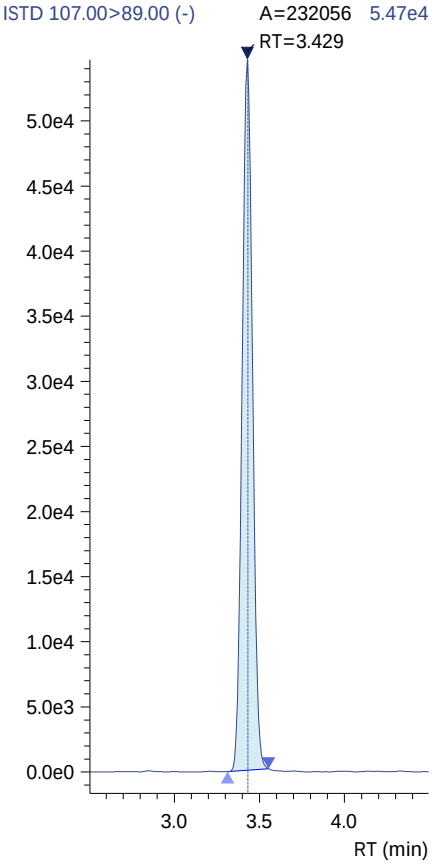
Conc ----
R#1 0.00 (32.17)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

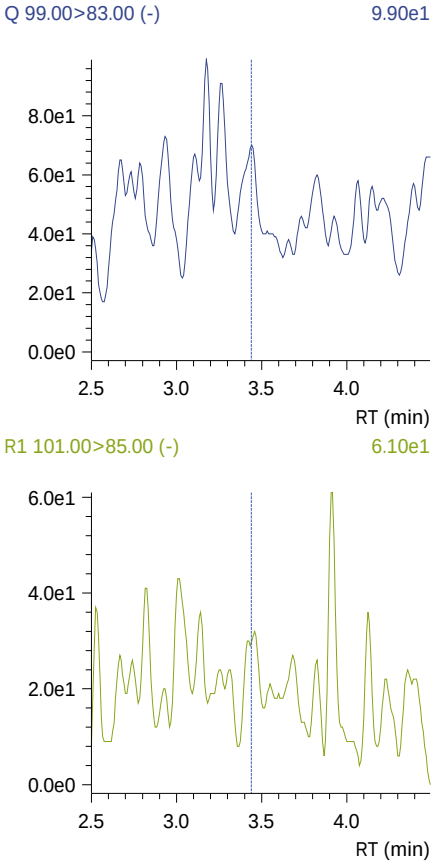
E2300095-011

Sample ID: E2300095-011
Date Acquired: 2/2/2023 8:55:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-064.lcd
Vial: 47 | 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)	----	----	223108	----	ng/mL	101.00 >85.00	0.00	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.428	223108	223108	1.0000	ng/mL	----	----	

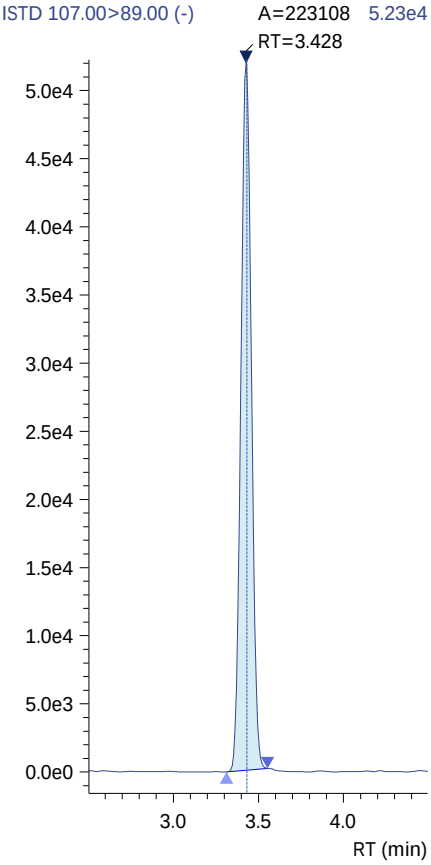
Perchlorate

Conc ----
R#1 0.00 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 12:18:01 PM

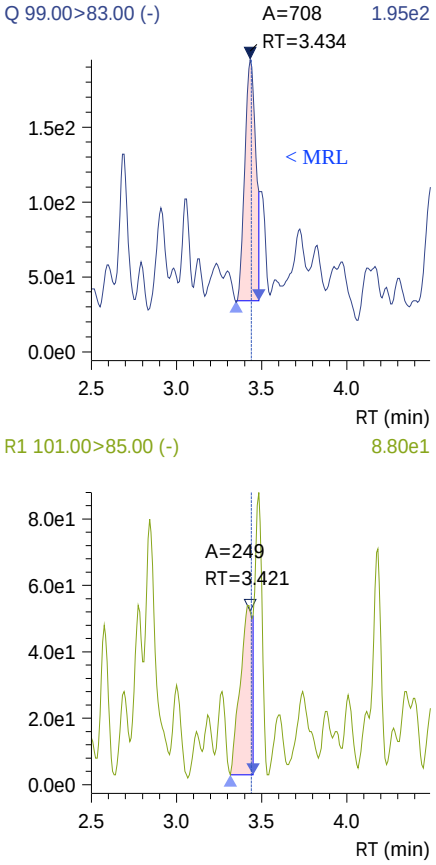
E2300095-012

Sample ID: E2300095-012
Date Acquired: 2/2/2023 9:00:42 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-065.lcd
Vial: 48 | 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	3.434	708	219062	0.0233	ng/mL	101.00 >85.00	35.17	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.426	219062	219062	1.0000	ng/mL	----	----	

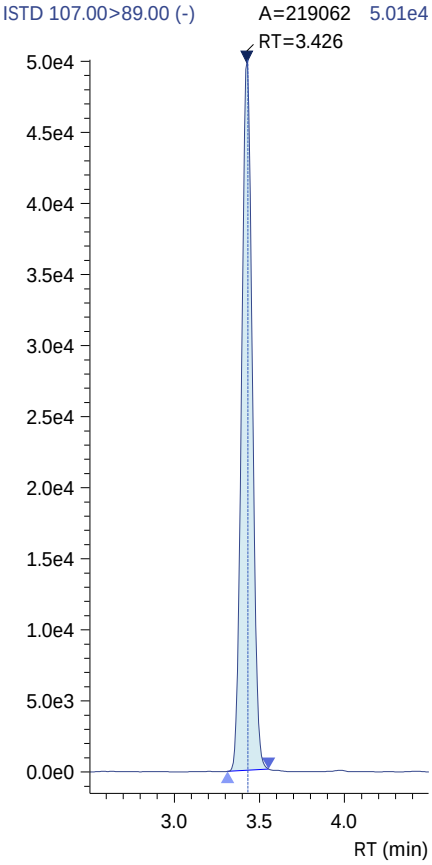
Perchlorate

Conc 0.0233
R#1 35.17 (32.17)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

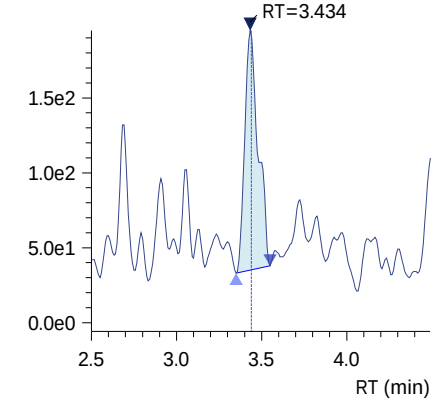
E2300095-012

Sample ID: E2300095-012
Date Acquired: 2/2/2023 9:00:42 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-065.lcd
Vial: 48 | Inj. Volume: 25.0000uL | Tray: 3

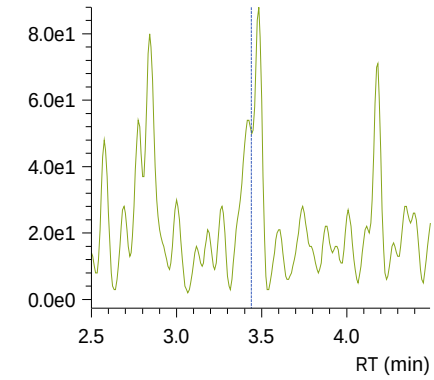
Perchlorate

Conc 0.0284
R#1 0.00 (32.17)

Q 99.00>83.00 (-) A=871 1.95e2



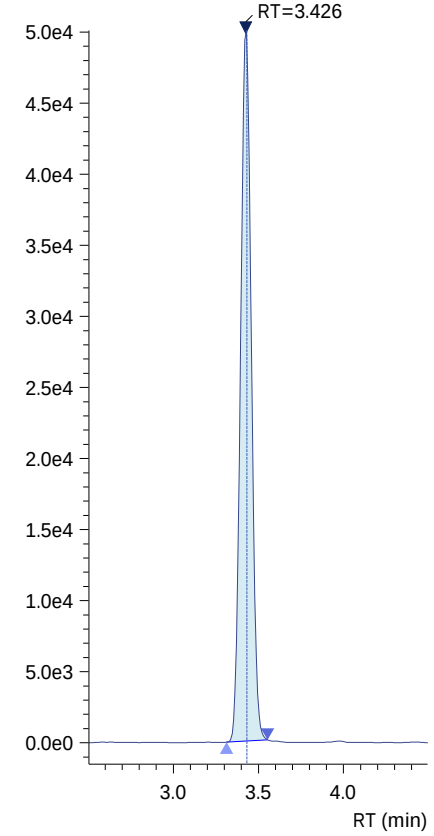
R1 101.00>85.00 (-) 8.80e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=219062 5.01e4



Insight Report

Printed at 2/3/2023 12:18:01 PM

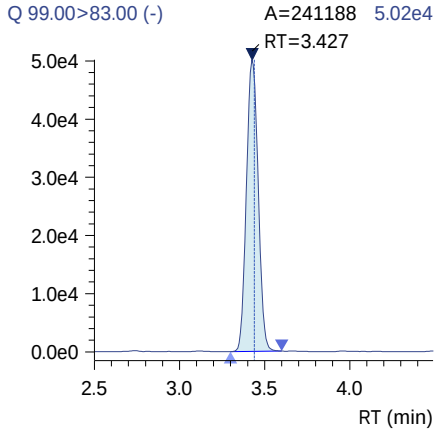
PERCHLORATE7

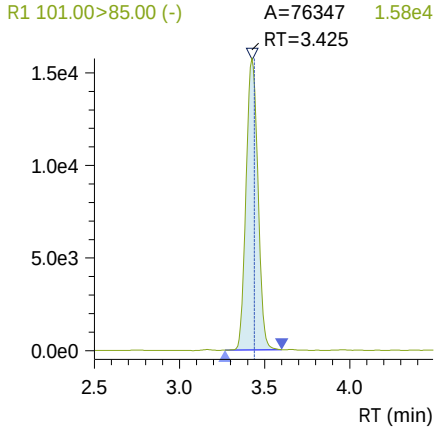
Sample ID: PERCHLORATE7
Date Acquired: 2/2/2023 9:23:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230202\20230202-069.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.427	241188 88	158293	10.9 984	ng/mL	101.00 >85.00	31.66	22.52 -41.82
Sodium Perchlorate-18O4_IS	Auto	3.423	158293	158293	1.0000	ng/mL	----	----	

Perchlorate

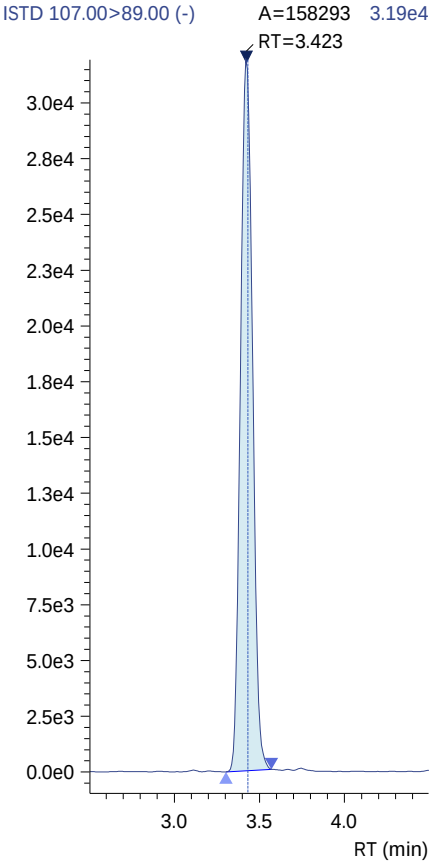
Conc 10.9984
R#1 31.66 (32.17)





Sodium Perchlorate-18O4_IS

Conc 1.0000



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WorkOrder: HS23011514

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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HS23011514 LHAAP 16 January 2023 Final

ALS WO# HS23011514

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February 09, 2023

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

Work Order: **HS23011514**

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

Dear Vicki Graves ,

ALS Environmental received 8 sample(s) on Jan 26, 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: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23011514

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23011514-01	16RW09-230125	Groundwater		25-Jan-2023 07:45	26-Jan-2023 10:15	☐
HS23011514-02	16RW10-230125	Groundwater		25-Jan-2023 08:30	26-Jan-2023 10:15	☐
HS23011514-03	16WW46-230125	Groundwater		25-Jan-2023 09:20	26-Jan-2023 10:15	☐
HS23011514-04	16WW12-230125	Groundwater		25-Jan-2023 10:10	26-Jan-2023 10:15	☐
HS23011514-05	16WW49-230125	Groundwater		25-Jan-2023 10:55	26-Jan-2023 10:15	☐
HS23011514-06	16WW36-230125	Groundwater		25-Jan-2023 11:45	26-Jan-2023 10:15	☐
HS23011514-07	16WW36-230125-FD	Groundwater		25-Jan-2023 11:45	26-Jan-2023 10:15	☐
HS23011514-08	Trip Blank-230125	Water	CG-121520-105	25-Jan-2023 00:00	26-Jan-2023 10:15	☐

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23011514

Work Order Comments

• The analysis for Perchlorate was performed by ALS Houston Specialty Lab. The final report is appended.

GC Semivolatiles by Method RSK-175

Batch ID: R427470

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

GCMS Volatiles by Method SW8260

Batch ID: R427420

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

WetChemistry by Method SM5310B

Batch ID: R427630

Sample ID: HS23020079-01MS

• MS is for an unrelated sample

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW09-230125
Collection Date: 25-Jan-2023 07:45

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-01
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	1.0	U	0.30	1.0	1.0	ug/L	1	06-Feb-2023 14:09
1,1-Dichloroethene	**4.8**		**0.20**	**1.0**	**1.0**	**ug/L**	1	06-Feb-2023 14:09
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 14:09
cis-1,2-Dichloroethene	**170**		**0.20**	**1.0**	**1.0**	**ug/L**	1	06-Feb-2023 14:09
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	06-Feb-2023 14:09
Trichloroethene	**590**		**4.0**	**20**	**20**	**ug/L**	20	06-Feb-2023 20:28
Vinyl chloride	**71**		**0.20**	**1.0**	**1.0**	**ug/L**	1	06-Feb-2023 14:09
Surr: 1,2-Dichloroethane-d4	*95.6*			**0**	*81-118*	*%REC*	*1*	*06-Feb-2023 14:09*
Surr: 1,2-Dichloroethane-d4	*98.0*			**0**	*81-118*	*%REC*	*20*	*06-Feb-2023 20:28*
Surr: 4-Bromofluorobenzene	*106*			**0**	*85-114*	*%REC*	*1*	*06-Feb-2023 14:09*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*20*	*06-Feb-2023 20:28*
Surr: Dibromofluoromethane	*90.4*			**0**	*80-119*	*%REC*	*20*	*06-Feb-2023 20:28*
Surr: Dibromofluoromethane	*90.1*			**0**	*80-119*	*%REC*	*1*	*06-Feb-2023 14:09*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*06-Feb-2023 14:09*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*20*	*06-Feb-2023 20:28*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	07-Feb-2023 10:01
Ethene	**0.0261**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	07-Feb-2023 10:01
Methane	**1.06**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	07-Feb-2023 10:37
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**4.10**		**0.500**	**1.00**	**1.00**	**mg/L**	1	08-Feb-2023 16:41
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW10-230125
Collection Date: 25-Jan-2023 08:30

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	06-Feb-2023 14:30
1,1-Dichloroethene	**33**		**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:30
1,2-Dichloroethane	**3.1**	J	**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:30
cis-1,2-Dichloroethene	**260**		**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:30
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	06-Feb-2023 14:30
Trichloroethene	**1,100**		**5.0**	**25**	**25**	**ug/L**	25	06-Feb-2023 17:18
Vinyl chloride	**180**		**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:30
Surr: 1,2-Dichloroethane-d4	*96.5*			**0**	*81-118*	*%REC*	*5*	*06-Feb-2023 14:30*
Surr: 1,2-Dichloroethane-d4	*97.9*			**0**	*81-118*	*%REC*	*25*	*06-Feb-2023 17:18*
Surr: 4-Bromofluorobenzene	*106*			**0**	*85-114*	*%REC*	*5*	*06-Feb-2023 14:30*
Surr: 4-Bromofluorobenzene	*105*			**0**	*85-114*	*%REC*	*25*	*06-Feb-2023 17:18*
Surr: Dibromofluoromethane	*91.7*			**0**	*80-119*	*%REC*	*5*	*06-Feb-2023 14:30*
Surr: Dibromofluoromethane	*91.7*			**0**	*80-119*	*%REC*	*25*	*06-Feb-2023 17:18*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*5*	*06-Feb-2023 14:30*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*25*	*06-Feb-2023 17:18*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	07-Feb-2023 10:21
Ethene	**0.0193**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	07-Feb-2023 10:21
Methane	**0.655**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	07-Feb-2023 10:48
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW46-230125
Collection Date: 25-Jan-2023 09:20

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-03
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	06-Feb-2023 13:48
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:48
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:48
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:48
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	06-Feb-2023 13:48
Trichloroethene	**0.71**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	06-Feb-2023 13:48
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:48
Surr: 1,2-Dichloroethane-d4	*97.5*			**0**	*81-118*	*%REC*	*1*	*06-Feb-2023 13:48*
Surr: 4-Bromofluorobenzene	*106*			**0**	*85-114*	*%REC*	*1*	*06-Feb-2023 13:48*
Surr: Dibromofluoromethane	*90.7*			**0**	*80-119*	*%REC*	*1*	*06-Feb-2023 13:48*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*06-Feb-2023 13:48*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW12-230125
Collection Date: 25-Jan-2023 10:10

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	06-Feb-2023 14:51
1,1-Dichloroethene	**4.0**	J	**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:51
1,2-Dichloroethane	**5.0**		**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:51
cis-1,2-Dichloroethene	**160**		**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:51
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	06-Feb-2023 14:51
Trichloroethene	**1,400**		**10**	**50**	**50**	**ug/L**	50	06-Feb-2023 17:39
Vinyl chloride	**16**		**1.0**	**5.0**	**5.0**	**ug/L**	5	06-Feb-2023 14:51
Surr: 1,2-Dichloroethane-d4	*98.5*			**0**	*81-118*	*%REC*	*50*	*06-Feb-2023 17:39*
Surr: 1,2-Dichloroethane-d4	*96.5*			**0**	*81-118*	*%REC*	*5*	*06-Feb-2023 14:51*
Surr: 4-Bromofluorobenzene	*105*			**0**	*85-114*	*%REC*	*5*	*06-Feb-2023 14:51*
Surr: 4-Bromofluorobenzene	*105*			**0**	*85-114*	*%REC*	*50*	*06-Feb-2023 17:39*
Surr: Dibromofluoromethane	*90.7*			**0**	*80-119*	*%REC*	*5*	*06-Feb-2023 14:51*
Surr: Dibromofluoromethane	*91.2*			**0**	*80-119*	*%REC*	*50*	*06-Feb-2023 17:39*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*5*	*06-Feb-2023 14:51*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*50*	*06-Feb-2023 17:39*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW49-230125
Collection Date: 25-Jan-2023 10:55

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Feb-2023 13:27
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:27
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:27
cis-1,2-Dichloroethene	**41**		**0.20**	**1.0**	**1.0**	**ug/L**	1	06-Feb-2023 13:27
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	06-Feb-2023 13:27
Trichloroethene	**73**		**0.20**	**1.0**	**1.0**	**ug/L**	1	06-Feb-2023 13:27
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:27
Surr: 1,2-Dichloroethane-d4	*97.9*			**0**	*81-118*	*%REC*	*1*	*06-Feb-2023 13:27*
Surr: 4-Bromofluorobenzene	*106*			**0**	*85-114*	*%REC*	*1*	*06-Feb-2023 13:27*
Surr: Dibromofluoromethane	*90.9*			**0**	*80-119*	*%REC*	*1*	*06-Feb-2023 13:27*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*06-Feb-2023 13:27*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW36-230125
Collection Date: 25-Jan-2023 11:45

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	06-Feb-2023 15:12
1,1-Dichloroethene	**140**		**10**	**50**	**50**	**ug/L**	50	06-Feb-2023 15:12
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	06-Feb-2023 15:12
cis-1,2-Dichloroethene	**16,000**		**100**	**500**	**500**	**ug/L**	500	06-Feb-2023 18:00
Methylene chloride	50	U	20	50	100	ug/L	50	06-Feb-2023 15:12
Trichloroethene	**22,000**		**100**	**500**	**500**	**ug/L**	500	06-Feb-2023 18:00
Vinyl chloride	**190**		**10**	**50**	**50**	**ug/L**	50	06-Feb-2023 15:12
Surr: 1,2-Dichloroethane-d4	*97.8*			**0**	*81-118*	*%REC*	*50*	*06-Feb-2023 15:12*
Surr: 1,2-Dichloroethane-d4	*99.8*			**0**	*81-118*	*%REC*	*500*	*06-Feb-2023 18:00*
Surr: 4-Bromofluorobenzene	*106*			**0**	*85-114*	*%REC*	*50*	*06-Feb-2023 15:12*
Surr: 4-Bromofluorobenzene	*105*			**0**	*85-114*	*%REC*	*500*	*06-Feb-2023 18:00*
Surr: Dibromofluoromethane	*92.6*			**0**	*80-119*	*%REC*	*50*	*06-Feb-2023 15:12*
Surr: Dibromofluoromethane	*93.6*			**0**	*80-119*	*%REC*	*500*	*06-Feb-2023 18:00*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*500*	*06-Feb-2023 18:00*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*50*	*06-Feb-2023 15:12*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**18.9**		**0.500**	**1.00**	**1.00**	**mg/L**	1	08-Feb-2023 16:56
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW36-230125-FD
Collection Date: 25-Jan-2023 11:45

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	06-Feb-2023 15:33
1,1-Dichloroethene	**140**		**10**	**50**	**50**	**ug/L**	50	06-Feb-2023 15:33
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	06-Feb-2023 15:33
cis-1,2-Dichloroethene	**16,000**		**100**	**500**	**500**	**ug/L**	500	06-Feb-2023 18:22
Methylene chloride	50	U	20	50	100	ug/L	50	06-Feb-2023 15:33
Trichloroethene	**22,000**		**100**	**500**	**500**	**ug/L**	500	06-Feb-2023 18:22
Vinyl chloride	**210**		**10**	**50**	**50**	**ug/L**	50	06-Feb-2023 15:33
Surr: 1,2-Dichloroethane-d4	*97.2*			**0**	*81-118*	*%REC*	*50*	*06-Feb-2023 15:33*
Surr: 1,2-Dichloroethane-d4	*97.4*			**0**	*81-118*	*%REC*	*500*	*06-Feb-2023 18:22*
Surr: 4-Bromofluorobenzene	*105*			**0**	*85-114*	*%REC*	*500*	*06-Feb-2023 18:22*
Surr: 4-Bromofluorobenzene	*104*			**0**	*85-114*	*%REC*	*50*	*06-Feb-2023 15:33*
Surr: Dibromofluoromethane	*91.5*			**0**	*80-119*	*%REC*	*50*	*06-Feb-2023 15:33*
Surr: Dibromofluoromethane	*91.5*			**0**	*80-119*	*%REC*	*500*	*06-Feb-2023 18:22*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*500*	*06-Feb-2023 18:22*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*50*	*06-Feb-2023 15:33*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**19.0**		**0.500**	**1.00**	**1.00**	**mg/L**	1	08-Feb-2023 17:11
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: Trip Blank-230125
Collection Date: 25-Jan-2023 00:00

ANALYTICAL REPORT
WorkOrder:HS23011514
Lab ID:HS23011514-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Feb-2023 13:06
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:06
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:06
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:06
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	06-Feb-2023 13:06
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:06
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	06-Feb-2023 13:06
Surr: 1,2-Dichloroethane-d4	*96.2*			**0**	*81-118*	*%REC*	*1*	*06-Feb-2023 13:06*
Surr: 4-Bromofluorobenzene	*105*			**0**	*85-114*	*%REC*	*1*	*06-Feb-2023 13:06*
Surr: Dibromofluoromethane	*90.8*			**0**	*80-119*	*%REC*	*1*	*06-Feb-2023 13:06*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*06-Feb-2023 13:06*

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

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011514

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R427276 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23011514-01	16RW09-230125	25 Jan 2023 07:45			03 Feb 2023 16:12	1
HS23011514-02	16RW10-230125	25 Jan 2023 08:30			03 Feb 2023 16:12	1
HS23011514-03	16WW46-230125	25 Jan 2023 09:20			03 Feb 2023 16:12	1
HS23011514-04	16WW12-230125	25 Jan 2023 10:10			03 Feb 2023 16:12	1
HS23011514-05	16WW49-230125	25 Jan 2023 10:55			03 Feb 2023 16:12	1
HS23011514-06	16WW36-230125	25 Jan 2023 11:45			03 Feb 2023 16:12	1
HS23011514-07	16WW36-230125-FD	25 Jan 2023 11:45			03 Feb 2023 16:12	1
Batch ID: R427420 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23011514-08	Trip Blank-230125	25 Jan 2023 00:00			06 Feb 2023 13:06	1
Batch ID: R427420 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23011514-01	16RW09-230125	25 Jan 2023 07:45			06 Feb 2023 20:28	20
HS23011514-01	16RW09-230125	25 Jan 2023 07:45			06 Feb 2023 14:09	1
HS23011514-02	16RW10-230125	25 Jan 2023 08:30			06 Feb 2023 17:18	25
HS23011514-02	16RW10-230125	25 Jan 2023 08:30			06 Feb 2023 14:30	5
HS23011514-03	16WW46-230125	25 Jan 2023 09:20			06 Feb 2023 13:48	1
HS23011514-04	16WW12-230125	25 Jan 2023 10:10			06 Feb 2023 17:39	50
HS23011514-04	16WW12-230125	25 Jan 2023 10:10			06 Feb 2023 14:51	5
HS23011514-05	16WW49-230125	25 Jan 2023 10:55			06 Feb 2023 13:27	1
HS23011514-06	16WW36-230125	25 Jan 2023 11:45			06 Feb 2023 18:00	500
HS23011514-06	16WW36-230125	25 Jan 2023 11:45			06 Feb 2023 15:12	50
HS23011514-07	16WW36-230125-FD	25 Jan 2023 11:45			06 Feb 2023 18:22	500
HS23011514-07	16WW36-230125-FD	25 Jan 2023 11:45			06 Feb 2023 15:33	50
Batch ID: R427470 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS23011514-01	16RW09-230125	25 Jan 2023 07:45			07 Feb 2023 10:37	50
HS23011514-01	16RW09-230125	25 Jan 2023 07:45			07 Feb 2023 10:01	1
HS23011514-02	16RW10-230125	25 Jan 2023 08:30			07 Feb 2023 10:48	50
HS23011514-02	16RW10-230125	25 Jan 2023 08:30			07 Feb 2023 10:21	1
Batch ID: R427630 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS23011514-01	16RW09-230125	25 Jan 2023 07:45			08 Feb 2023 16:41	1
HS23011514-06	16WW36-230125	25 Jan 2023 11:45			08 Feb 2023 16:56	1
HS23011514-07	16WW36-230125-FD	25 Jan 2023 11:45			08 Feb 2023 17:11	1

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011514

QC BATCH REPORT

Batch ID: R427470 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-230207** Units: **mg/L** Analysis Date: **07-Feb-2023 09:25**
Client ID: Run ID: **FID-4_427470** SeqNo: **7112006** 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-230207** Units: **mg/L** Analysis Date: **07-Feb-2023 09:38**
Client ID: Run ID: **FID-4_427470** SeqNo: **7112007** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0201	0.00100	0.01804	0	111	75 - 125				
Ethene	0.0181	0.00100	0.0168	0	108	75 - 125				
Methane	0.00880	0.000500	0.009647	0	91.2	75 - 125				

LCSD Sample ID: **LCSD-230207** Units: **mg/L** Analysis Date: **07-Feb-2023 09:46**
Client ID: Run ID: **FID-4_427470** SeqNo: **7112008** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0193	0.00100	0.01804	0	107	75 - 125	0.02009	4.02	30	
Ethene	0.0179	0.00100	0.0168	0	106	75 - 125	0.01806	1.06	30	
Methane	0.00817	0.000500	0.009647	0	84.7	75 - 125	0.008798	7.41	30	

The following samples were analyzed in this batch: HS23011514-01 HS23011514-02

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011514

QC BATCH REPORT

Batch ID: R427420 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230206** Units: **ug/L** Analysis Date: **06-Feb-2023 12:45**
Client ID: Run ID: **VOA6_427420** SeqNo: **7110727** 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	*48.79*	*1.0*	*50*	*0*	*97.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.52*	*1.0*	*50*	*0*	*105*	*85 - 114*				
Surr: Dibromofluoromethane	*45.81*	*1.0*	*50*	*0*	*91.6*	*80 - 119*				
Surr: Toluene-d8	*52.61*	*1.0*	*50*	*0*	*105*	*89 - 112*				

LCS Sample ID: **VLCSW-230206** Units: **ug/L** Analysis Date: **06-Feb-2023 12:03**
Client ID: Run ID: **VOA6_427420** SeqNo: **7110726** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	21.47	1.0	20	0	107	80 - 119				
1,1-Dichloroethene	16.65	1.0	20	0	83.3	71 - 131				
1,2-Dichloroethane	21.94	1.0	20	0	110	73 - 128				
cis-1,2-Dichloroethene	19.84	1.0	20	0	99.2	78 - 123				
Methylene chloride	20.03	2.0	20	0	100	74 - 124				
Trichloroethene	20.53	1.0	20	0	103	79 - 123				
Vinyl chloride	17.22	1.0	20	0	86.1	58 - 137				
Surr: 1,2-Dichloroethane-d4	*47.95*	*1.0*	*50*	*0*	*95.9*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.02*	*1.0*	*50*	*0*	*96.0*	*85 - 114*				
Surr: Dibromofluoromethane	*44.18*	*1.0*	*50*	*0*	*88.4*	*80 - 119*				
Surr: Toluene-d8	*46.3*	*1.0*	*50*	*0*	*92.6*	*89 - 112*				

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011514

QC BATCH REPORT

Batch ID: R427420 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23011590-04MS** Units: **ug/L** Analysis Date: **06-Feb-2023 16:36**
Client ID: Run ID: **VOA6_427420** SeqNo: **7110738** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	100.1	5.0	100	0	100	80 - 119				
1,1-Dichloroethene	87.89	5.0	100	0	87.9	71 - 131				
1,2-Dichloroethane	104.9	5.0	100	0	105	73 - 128				
cis-1,2-Dichloroethene	91.95	5.0	100	0	92.0	78 - 123				
Methylene chloride	87.58	10	100	0	87.6	74 - 124				
Trichloroethene	109.9	5.0	100	2.911	107	79 - 123				
Vinyl chloride	83.79	5.0	100	0	83.8	58 - 137				
Surr: 1,2-Dichloroethane-d4	*242.7*	*5.0*	*250*	*0*	*97.1*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*267*	*5.0*	*250*	*0*	*107*	*85 - 114*				
Surr: Dibromofluoromethane	*223*	*5.0*	*250*	*0*	*89.2*	*80 - 119*				
Surr: Toluene-d8	*265.1*	*5.0*	*250*	*0*	*106*	*89 - 112*				

MSD Sample ID: **HS23011590-04MSD** Units: **ug/L** Analysis Date: **06-Feb-2023 16:57**
Client ID: Run ID: **VOA6_427420** SeqNo: **7110739** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	99.46	5.0	100	0	99.5	80 - 119	100.1	0.659	20	
1,1-Dichloroethene	88.65	5.0	100	0	88.7	71 - 131	87.89	0.867	20	
1,2-Dichloroethane	107.4	5.0	100	0	107	73 - 128	104.9	2.4	20	
cis-1,2-Dichloroethene	91.45	5.0	100	0	91.5	78 - 123	91.95	0.548	20	
Methylene chloride	88.75	10	100	0	88.7	74 - 124	87.58	1.33	20	
Trichloroethene	107.9	5.0	100	2.911	105	79 - 123	109.9	1.89	20	
Vinyl chloride	82.61	5.0	100	0	82.6	58 - 137	83.79	1.43	20	
Surr: 1,2-Dichloroethane-d4	*249*	*5.0*	*250*	*0*	*99.6*	*81 - 118*	*242.7*	*2.56*	*20*	
Surr: 4-Bromofluorobenzene	*270.8*	*5.0*	*250*	*0*	*108*	*85 - 114*	*267*	*1.43*	*20*	
Surr: Dibromofluoromethane	*229.1*	*5.0*	*250*	*0*	*91.6*	*80 - 119*	*223*	*2.67*	*20*	
Surr: Toluene-d8	*260.2*	*5.0*	*250*	*0*	*104*	*89 - 112*	*265.1*	*1.86*	*20*	

The following samples were analyzed in this batch:

HS23011514-01	HS23011514-02	HS23011514-03	HS23011514-04
HS23011514-05	HS23011514-06	HS23011514-07	HS23011514-08

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011514

QC BATCH REPORT

Batch ID: R427630 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-02082023** Units: **mg/L** Analysis Date: **08-Feb-2023 13:42**
Client ID: Run ID: **TOC_04_427630** SeqNo: **7115217** 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-02082023** Units: **mg/L** Analysis Date: **08-Feb-2023 13:56**
Client ID: Run ID: **TOC_04_427630** SeqNo: **7115218** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.49	1.00	10	0	105	85 - 115				

LCSD Sample ID: **LCSD-02082023** Units: **mg/L** Analysis Date: **08-Feb-2023 14:10**
Client ID: Run ID: **TOC_04_427630** SeqNo: **7115219** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.85	1.00	10	0	108	85 - 115	10.49	3.37	20	

MS Sample ID: **HS23020079-01MS** Units: **mg/L** Analysis Date: **08-Feb-2023 15:32**
Client ID: Run ID: **TOC_04_427630** SeqNo: **7115225** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	24.32	1.00	10	11.8	125	80 - 120				S

The following samples were analyzed in this batch: HS23011514-01 HS23011514-06 HS23011514-07

ALS Houston, US Date: 09-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23011514**

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: 09-Feb-23

Sample Receipt Checklist

Work Order ID: HS23011514 **Date/Time Received:** 26-Jan-2023 10:15

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

Completed By:	/S/ Corey Grandits	30-Jan-2023 14:48	**Reviewed by:**	/S/ Dane J. Wacasey	01-Feb-2023 13:42
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

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

Temperature(s)/Thermometer(s):	3.8UC/3.3C	IR31
Cooler(s)/Kit(s):	48681	
Date/Time sample(s) sent to storage:	1/30/23	

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 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

Aptim Environmental & Infrastucture, Inc.
LHAAP 16 January 2023

HS23011514

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			
						Analyses									
16RW09-230125		wb	1/25/23	0745		9	X	X	X			X			
16RW10-230125		wb	1/25/23	0830		7	X		X			X			
16WW46-230125		wb	1/25/23	0920		4	X					X			
16WW12-230125		wb	1/25/23	1010		4	X					X			
16WW49-230125		wb	1/25/23	1055		4	X					X			
16WW36-230125		wb	1/25/23	1145		6	X	X				X			
16WW36-230125-FD		wb	1/25/23	1145		6	X	X				X			
TRIP BLANK-230125		w	1/25/23			2	X								

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

Lot# 476881 1123

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	1/25/23	1400		01/26/23	0915						

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-ces\Forms\Chain of Custody - BiWeekly

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

48681

CUSTODY SEAL

Date: 1.25.23 Time: 1430
Name: Scott Beesinger
Company: BHGE

Seal Broken By: SM
Date: 01/26/23

48681 JAN 2 5 2023

48681

ORIGIN ID:SGRA (903) 930-6193
SCOTT BEESINGER
APTIM ENVIRONMENTAL & INFASTRUCTURE
1203-B EAST GRAND AVE
PMB 202
MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 04JAN23
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3616
DIMS: 26x14x14 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
REF: PERFORMANCE MONITORING - BO 90113 - DW

RMA:

FedEx Express

TRK# 7789 2002 8342

PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

4238674 25Jan2023 CGCA 5816P/0797/CBIS

February 03, 2023 Service Request No:E2300096

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

Laboratory Results for: HS23011514

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 31, 2023
For your reference, these analyses have been assigned our service request number **E2300096.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston 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.:**	E2300094
Project:	HS23011514	**Date Received:**	01/31/23
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 II. 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 01/31/23.

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:

EQ2300047: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

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

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

Client: ALS Environmental - US **Service Request:**E2300096
Project: HS23011514

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300096-001	16RW09-230125	1/25/2023	0745
E2300096-002	16RW10-230125	1/25/2023	0830
E2300096-003	16WW46-230125	1/25/2023	0920
E2300096-004	16WW12-230125	1/25/2023	1010
E2300096-005	16WW49-230125	1/25/2023	1055
E2300096-006	16WW36-230125	1/25/2023	1145
E2300096-007	16WW36-230125-FD	1/25/2023	1145

Service Request Summary

Folder #: **E2300096**
Client Name: ALS Environmental - US
Project Name: HS23011514
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: 01/31/23
Internal Due Date: 2/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011514
EDD: EQUIS
EFWEDD_LHAAP

7 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300096-001	16RW09-230125	Ground Water	01/25/23 0745	**IV**
E2300096-002	16RW10-230125	Ground Water	01/25/23 0830	**IV**
E2300096-003	16WW46-230125	Ground Water	01/25/23 0920	**IV**
E2300096-004	16WW12-230125	Ground Water	01/25/23 1010	**IV**
E2300096-005	16WW49-230125	Ground Water	01/25/23 1055	**IV**
E2300096-006	16WW36-230125	Ground Water	01/25/23 1145	**IV**
E2300096-007	16WW36-230125-FD	Ground Water	01/25/23 1145	**IV**

Service Request Summary

Folder #: **E2300096**
Client Name: ALS Environmental - US
Project Name: HS23011514
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: 01/31/23
Internal Due Date: 2/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011514
EDD: EQUIS
EFWEDD_LHAAP

7 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	7	IV Due 2/16

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

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: 20859**

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:	HS23011514
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23011514-01**	**16RW09-230125**	**Groundwater**	**25 Jan 2023 07:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
2.	**HS23011514-02**	**16RW10-230125**	**Groundwater**	**25 Jan 2023 08:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
3.	**HS23011514-03**	**16WW46-230125**	**Groundwater**	**25 Jan 2023 09:20**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
4.	**HS23011514-04**	**16WW12-230125**	**Groundwater**	**25 Jan 2023 10:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
5.	**HS23011514-05**	**16WW49-230125**	**Groundwater**	**25 Jan 2023 10:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
6.	**HS23011514-06**	**16WW36-230125**	**Groundwater**	**25 Jan 2023 11:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
7.	**HS23011514-07**	**16WW36-230125-FD**	**Groundwater**	**25 Jan 2023 11:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20859**

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

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

ALS Environmental

Cooler Receipt Form

Project Chemist JG

Client/Project ALS-HI

Thermometer ID IR21

Date/Time Received: 1-31-23 Initials: CA Date/Time Logged in: 1-31-23 Initials CA

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

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

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

Were they intact? ◯ Yes ◯ No ☒ N/A

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

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

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

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		1-31-23	0800	CA	0.9	☒
						☐
						☐
						☐

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

ALS Environmental - Houston HRMS

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#: 413900 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/1/23 10:18

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300092-001	CTC-44_0123	.01	6850/ClO4			Water	10mL	
2	E2300092-002	EA-100_0123	.01	6850/ClO4			Water	10mL	
3	E2300092-003	EA-110_0123	.01	6850/ClO4			Water	10mL	
4	E2300092-004	CTC-14_0123	.01	6850/ClO4			Water	10mL	
5	E2300094-001	16WW39-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300094-002	16WW31-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300094-003	16WW32-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300094-004	16WW33-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300094-005	16WW34-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300096-001	16RW09-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300096-002	16RW10-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300096-003	16WW46-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300096-004	16WW12-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300096-005	16WW49-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300096-006	16WW36-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300096-007	16WW36-230125-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
17	EQ2300047-01	MB		6850/ClO4			Liquid	10mL	
18	EQ2300047-02	LCS		6850/ClO4			Liquid	10mL	
19	EQ2300047-03	DLCS		6850/ClO4			Liquid	10mL	
20	R2300589-005	2301231019A JP-3-509	.01	6850/ClO4			Water	10mL	
21	R2300589-010	2301231439A JP-3-689	.01	6850/ClO4			Water	10mL	
22	R2300648-018	2301241035A 100-F-358	.01	6850/ClO4			Water	10mL	
23	R2300648-025	2301241437A 100-G-223	.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

E2300092-001	100.00µL	E2300092-002	100.00µL	E2300092-003	100.00µL	E2300092-004	100.00µL	E2300094-001	100.00µL	E2300094-002	100.00µL
E2300094-003	100.00µL	E2300094-004	100.00µL	E2300094-005	100.00µL	E2300096-001	100.00µL	E2300096-002	100.00µL	E2300096-003	100.00µL
E2300096-004	100.00µL	E2300096-005	100.00µL	E2300096-006	100.00µL	E2300096-007	100.00µL	EQ2300047-01	100.00µL	EQ2300047-01	100.00µL
EQ2300047-02	100.00µL	EQ2300047-02	100.00µL	EQ2300047-03	100.00µL	EQ2300047-03	100.00µL	R2300589-005	100.00µL	R2300589-010	100.00µL
R2300648-018	100.00µL	R2300648-025	100.00µL								

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

EQ2300047-02	1.00µL	EQ2300047-02	1.00µL	EQ2300047-03	1.00µL	EQ2300047-03	1.00µL

Preparation Information Benchsheet

Prep Run#: 413900 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/1/23 10:18

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: 2/1/23 10:18
Finished: 2/1/23 11:50
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 02/01/23

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:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 0745
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW09-230125	**Units:**	µg/L
Lab Code:	E2300096-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:21	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 0830
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW10-230125	**Units:**	µg/L
Lab Code:	E2300096-002	**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	**3.39**		0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:27	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 0920
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW46-230125	**Units:**	µg/L
Lab Code:	E2300096-003	**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	2/ 1/23	2/1/23 17:33	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1010
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW12-230125	**Units:**	µg/L
Lab Code:	E2300096-004	**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	**21.9**		0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:39	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1055
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW49-230125	**Units:**	µg/L
Lab Code:	E2300096-005	**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	2/ 1/23	2/1/23 17:45	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1145
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW36-230125	**Units:**	µg/L
Lab Code:	E2300096-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:51	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1145
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW36-230125-FD	**Units:**	µg/L
Lab Code:	E2300096-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:56	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300047-01	**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	2/ 1/23	2/1/23 15:30	413900	793296	

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: HS23011514
Sample Matrix: Ground Water

Service Request: E2300096
Date Analyzed: 2/ 1/23

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: 413900

	Lab Control Sample EQ2300047-02			Duplicate Lab Control Sample EQ2300047-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.0948	0.100	95	84 - 119	5	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:**	E2300096
Project:	HS23011514	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300047-02	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 15:36	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300047-03	**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	**0.0948**	J	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 15:41	413900	793296	

HS23011514-MSVOA-SW8260

ALS WO# HS23011514

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by by EPA 8260

Workorder

HS23011514

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
HS23011514

Volatiles by EPA 8260

HS23011514-01

Collected	Received	Matrix	Basis
01/25/23 07:45	01/26/23 10:15	Groundwater	Wet

16RW09-230125

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	02/06/23 14:09	VOA6_427420	X020611
1,1-Dichloroethene	ug/L	4.8		0.20	1.0	1.0	1	02/06/23 14:09	VOA6_427420	X020611
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 14:09	VOA6_427420	X020611
cis-1,2-Dichloroethene	ug/L	170		0.20	1.0	1.0	1	02/06/23 14:09	VOA6_427420	X020611
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/06/23 14:09	VOA6_427420	X020611
Trichloroethene	ug/L	590		4.0	20	20	20	02/06/23 20:28	VOA6_427420	X020629
Vinyl chloride	ug/L	71		0.20	1.0	1.0	1	02/06/23 14:09	VOA6_427420	X020611

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

HS23011514-02	Collected	Received	Matrix	Basis
16RW10-230125	01/25/23 08:30	01/26/23 10:15	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	02/06/23 14:30	VOA6_427420	X020612
1,1-Dichloroethene	ug/L	33		1.0	5.0	5.0	5	02/06/23 14:30	VOA6_427420	X020612
1,2-Dichloroethane	ug/L	3.1	J	1.0	5.0	5.0	5	02/06/23 14:30	VOA6_427420	X020612
cis-1,2-Dichloroethene	ug/L	260		1.0	5.0	5.0	5	02/06/23 14:30	VOA6_427420	X020612
Methylene chloride	ug/L	10	U	2.0	10	10	5	02/06/23 14:30	VOA6_427420	X020612
Trichloroethene	ug/L	1,100		5.0	25	25	25	02/06/23 17:18	VOA6_427420	X020620
Vinyl chloride	ug/L	180		1.0	5.0	5.0	5	02/06/23 14:30	VOA6_427420	X020612

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

HS23011514-03

16WW46-230125

Collected	Received	Matrix	Basis
01/25/23 09:20	01/26/23 10:15	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	02/06/23 13:48	VOA6_427420	X020610
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:48	VOA6_427420	X020610
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:48	VOA6_427420	X020610
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:48	VOA6_427420	X020610
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/06/23 13:48	VOA6_427420	X020610
Trichloroethene	ug/L	0.71	J	0.20	1.0	1.0	1	02/06/23 13:48	VOA6_427420	X020610
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:48	VOA6_427420	X020610

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

HS23011514-04				Collected	Received	Matrix	Basis
16WW12-230125				01/25/23 10:10	01/26/23 10:15	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	02/06/23 14:51	VOA6_427420	X020613
1,1-Dichloroethene	ug/L	4.0	J	1.0	5.0	5.0	5	02/06/23 14:51	VOA6_427420	X020613
1,2-Dichloroethane	ug/L	5.0		1.0	5.0	5.0	5	02/06/23 14:51	VOA6_427420	X020613
cis-1,2-Dichloroethene	ug/L	160		1.0	5.0	5.0	5	02/06/23 14:51	VOA6_427420	X020613
Methylene chloride	ug/L	10	U	2.0	10	10	5	02/06/23 14:51	VOA6_427420	X020613
Trichloroethene	ug/L	1,400		10	50	50	50	02/06/23 17:39	VOA6_427420	X020621
Vinyl chloride	ug/L	16		1.0	5.0	5.0	5	02/06/23 14:51	VOA6_427420	X020613

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

HS23011514-05	Collected	Received	Matrix	Basis
16WW49-230125	01/25/23 10:55	01/26/23 10:15	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	02/06/23 13:27	VOA6_427420	X020609
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:27	VOA6_427420	X020609
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:27	VOA6_427420	X020609
cis-1,2-Dichloroethene	ug/L	41		0.20	1.0	1.0	1	02/06/23 13:27	VOA6_427420	X020609
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/06/23 13:27	VOA6_427420	X020609
Trichloroethene	ug/L	73		0.20	1.0	1.0	1	02/06/23 13:27	VOA6_427420	X020609
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:27	VOA6_427420	X020609

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

HS23011514-06				Collected	Received	Matrix	Basis
16WW36-230125				01/25/23 11:45	01/26/23 10:15	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	02/06/23 15:12	VOA6_427420	X020614
1,1-Dichloroethene	ug/L	140		10	50	50	50	02/06/23 15:12	VOA6_427420	X020614
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	02/06/23 15:12	VOA6_427420	X020614
cis-1,2-Dichloroethene	ug/L	16,000		100	500	500	500	02/06/23 18:00	VOA6_427420	X020622
Methylene chloride	ug/L	100	U	20	100	100	50	02/06/23 15:12	VOA6_427420	X020614
Trichloroethene	ug/L	22,000		100	500	500	500	02/06/23 18:00	VOA6_427420	X020622
Vinyl chloride	ug/L	190		10	50	50	50	02/06/23 15:12	VOA6_427420	X020614

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

HS23011514-07

16WW36-230125-FD

Collected	Received	Matrix	Basis
01/25/23 11:45	01/26/23 10:15	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	02/06/23 15:33	VOA6_427420	X020615
1,1-Dichloroethene	ug/L	140		10	50	50	50	02/06/23 15:33	VOA6_427420	X020615
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	02/06/23 15:33	VOA6_427420	X020615
cis-1,2-Dichloroethene	ug/L	16,000		100	500	500	500	02/06/23 18:22	VOA6_427420	X020623
Methylene chloride	ug/L	100	U	20	100	100	50	02/06/23 15:33	VOA6_427420	X020615
Trichloroethene	ug/L	22,000		100	500	500	500	02/06/23 18:22	VOA6_427420	X020623
Vinyl chloride	ug/L	210		10	50	50	50	02/06/23 15:33	VOA6_427420	X020615

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

HS23011514-08	Collected	Received	Matrix	Basis
Trip Blank-230125	01/25/23 00:00	01/26/23 10:15	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	02/06/23 13:06	VOA6_427420	X020608
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:06	VOA6_427420	X020608
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:06	VOA6_427420	X020608
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:06	VOA6_427420	X020608
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/06/23 13:06	VOA6_427420	X020608
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:06	VOA6_427420	X020608
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 13:06	VOA6_427420	X020608

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

VBLKW-230206	Collected	Received	Matrix	Basis
VBLKW-230206	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	02/06/23 12:45	VOA6_427420	X020607
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 12:45	VOA6_427420	X020607
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 12:45	VOA6_427420	X020607
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 12:45	VOA6_427420	X020607
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/06/23 12:45	VOA6_427420	X020607
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 12:45	VOA6_427420	X020607
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/06/23 12:45	VOA6_427420	X020607

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Form 2

System Monitoring Compound Recovery

Volatiles by by EPA 8260

Workorder

HS23011514

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 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

RunID
VOA6_427420

Volatiles by EPA 8260

CCV	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.62	50	95.2	80-120	
4-Bromofluorobenzene	47.8	50	95.6	80-120	
Dibromofluoromethane	44.14	50	88.3	80-120	
Toluene-d8	46.34	50	92.7	80-120	

CCB	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.86	50	95.7	80-120	
4-Bromofluorobenzene	53.09	50	106	80-120	
Dibromofluoromethane	45.48	50	91.0	80-120	
Toluene-d8	51.98	50	104	80-120	

VLCSW-230206	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.95	50	95.9	81-118	
4-Bromofluorobenzene	48.02	50	96.0	85-114	
Dibromofluoromethane	44.18	50	88.4	80-119	
Toluene-d8	46.3	50	92.6	89-112	

VBLKW-230206	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.79	50	97.6	81-118	
4-Bromofluorobenzene	52.52	50	105	85-114	
Dibromofluoromethane	45.81	50	91.6	80-119	
Toluene-d8	52.61	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
HS23011514

RunID
VOA6_427420

Volatiles by EPA 8260

HS23011514-08	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48	50	96.2	81-118	
4-Bromofluorobenzene	53	50	105	85-114	
Dibromofluoromethane	45	50	90.8	80-119	
Toluene-d8	52	50	105	89-112	

HS23011514-05	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	97.9	81-118	
4-Bromofluorobenzene	53	50	106	85-114	
Dibromofluoromethane	45	50	90.9	80-119	
Toluene-d8	53	50	105	89-112	

HS23011514-03	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	97.5	81-118	
4-Bromofluorobenzene	53	50	106	85-114	
Dibromofluoromethane	45	50	90.7	80-119	
Toluene-d8	53	50	106	89-112	

HS23011514-01	Analyzed 02/06/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48	50	95.6	81-118	
4-Bromofluorobenzene	53	50	106	85-114	
Dibromofluoromethane	45	50	90.1	80-119	
Toluene-d8	53	50	106	89-112	
1,2-Dichloroethane-d4	980	1000	98.0	81-118	
4-Bromofluorobenzene	1,000	1000	103	85-114	
Dibromofluoromethane	900	1000	90.4	80-119	
Toluene-d8	1,000	1000	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
HS23011514

RunID
VOA6_427420

Volatiles by EPA 8260

HS23011514-02	Analyzed 02/06/23		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	240	250	96.5	81-118	
4-Bromofluorobenzene	260	250	106	85-114	
Dibromofluoromethane	230	250	91.7	80-119	
Toluene-d8	260	250	105	89-112	
1,2-Dichloroethane-d4	1,200	1250	97.9	81-118	
4-Bromofluorobenzene	1,300	1250	105	85-114	
Dibromofluoromethane	1,100	1250	91.7	80-119	
Toluene-d8	1,300	1250	107	89-112	

HS23011514-04	Analyzed 02/06/23		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	240	250	96.5	81-118	
4-Bromofluorobenzene	260	250	105	85-114	
Dibromofluoromethane	230	250	90.7	80-119	
Toluene-d8	260	250	105	89-112	
1,2-Dichloroethane-d4	2,500	2500	98.5	81-118	
4-Bromofluorobenzene	2,600	2500	105	85-114	
Dibromofluoromethane	2,300	2500	91.2	80-119	
Toluene-d8	2,600	2500	103	89-112	

HS23011514-06	Analyzed 02/06/23		Conc Units µg/L		DF 50
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	2,400	2500	97.8	81-118	
4-Bromofluorobenzene	2,600	2500	106	85-114	
Dibromofluoromethane	2,300	2500	92.6	80-119	
Toluene-d8	2,600	2500	103	89-112	
1,2-Dichloroethane-d4	25,000	25000	99.8	81-118	
4-Bromofluorobenzene	26,000	25000	105	85-114	
Dibromofluoromethane	23,000	25000	93.6	80-119	
Toluene-d8	26,000	25000	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
HS23011514

RunID
VOA6_427420

Volatiles by EPA 8260

HS23011514-07	Analyzed 02/06/23		Conc Units µg/L		DF 50
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	2,400	2500	97.2	81-118	
4-Bromofluorobenzene	2,600	2500	104	85-114	
Dibromofluoromethane	2,300	2500	91.5	80-119	
Toluene-d8	2,600	2500	105	89-112	
1,2-Dichloroethane-d4	24,000	25000	97.4	81-118	
4-Bromofluorobenzene	26,000	25000	105	85-114	
Dibromofluoromethane	23,000	25000	91.5	80-119	
Toluene-d8	26,000	25000	105	89-112	

HS23011590-04MS	Analyzed 02/06/23		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	242.7	250	97.1	81-118	
4-Bromofluorobenzene	267	250	107	85-114	
Dibromofluoromethane	223	250	89.2	80-119	
Toluene-d8	265.1	250	106	89-112	

HS23011590-04MSD	Analyzed 02/06/23		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	249	250	99.6	81-118	
4-Bromofluorobenzene	270.8	250	108	85-114	
Dibromofluoromethane	229.1	250	91.6	80-119	
Toluene-d8	260.2	250	104	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

HS23011514

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
HS23011514

		HS23011590-04		HS23011590-04MS				HS23011590-04MSD						
Sample Matrix	Aqueous	**Run Date**	02/06/23	02/06/23				02/06/23						
Units	µg/L	**Run Time**	16:15	16:36				16:57						
		Data File	X020617.D	X020618.D				X020619.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	5	0	100.1	100.0	100		99.46	100.0	100		20	0.700	
1,1-Dichloroethene	71-131	5	0	87.89	100.0	88		88.65	100.0	89		20	0.900	
1,2-Dichloroethane	73-128	5	0	104.9	100.0	105		107.4	100.0	107		20	2.40	
cis-1,2-Dichloroethene	78-123	5	0	91.95	100.0	92		91.45	100.0	92		20	0.500	
Methylene chloride	74-124	5	0	87.58	100.0	88		88.75	100.0	89		20	1.30	
Trichloroethene	79-123	5	2.911	109.9	100.0	107		107.9	100.0	105		20	1.90	
Vinyl chloride	58-137	5	0	83.79	100.0	84		82.61	100.0	83		20	1.40	

- %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

HS23011514

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
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Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Volatiles by EPA 8260

VOA6_427420		QC ID	VLCSW-230206			
QC Matrix Aqueous	Units	Run Date	02/06/23			
	ug/L	Run Time	12:03			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	21.47	107		
1,1-Dichloroethene	71-131	20	16.65	83		
1,2-Dichloroethane	73-128	20	21.94	110		
1,2-Dichloroethane-d4	81-118	50	47.95	96		
4-Bromofluorobenzene	85-114	50	48.02	96		
cis-1,2-Dichloroethene	78-123	20	19.84	99		
Dibromofluoromethane	80-119	50	44.18	88		
Methylene chloride	74-124	20	20.03	100		
Toluene-d8	89-112	50	46.3	93		
Trichloroethene	79-123	20	20.53	103		
Vinyl chloride	58-137	20	17.22	86		

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

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Form 4

Method Blank Summary

Volatiles by by EPA 8260

Workorder

HS23011514

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
HS23011514

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230206	X020607.D	02/06/23 12:45	VOA6_427420
VLCSW-230206	LCS	VLCSW-230206	X020605.D	02/06/23 12:03	VOA6_427420
Trip Blank-230125	SAMP	HS23011514-08	X020608.D	02/06/23 13:06	VOA6_427420
16WW49-230125	SAMP	HS23011514-05	X020609.D	02/06/23 13:27	VOA6_427420
16WW46-230125	SAMP	HS23011514-03	X020610.D	02/06/23 13:48	VOA6_427420
16RW09-230125	SAMP	HS23011514-01	X020611.D	02/06/23 14:09	VOA6_427420
16RW10-230125	SAMP	HS23011514-02	X020612.D	02/06/23 14:30	VOA6_427420
16WW12-230125	SAMP	HS23011514-04	X020613.D	02/06/23 14:51	VOA6_427420
16WW36-230125	SAMP	HS23011514-06	X020614.D	02/06/23 15:12	VOA6_427420
16WW36-230125-FD	SAMP	HS23011514-07	X020615.D	02/06/23 15:33	VOA6_427420
BatchQC	MS	HS23011590-04MS	X020618.D	02/06/23 16:36	VOA6_427420
BatchQC	MSD	HS23011590-04MSD	X020619.D	02/06/23 16:57	VOA6_427420
16RW10-230125	SAMP	HS23011514-02	X020620.D	02/06/23 17:18	VOA6_427420
16WW12-230125	SAMP	HS23011514-04	X020621.D	02/06/23 17:39	VOA6_427420
16WW36-230125	SAMP	HS23011514-06	X020622.D	02/06/23 18:00	VOA6_427420
16WW36-230125-FD	SAMP	HS23011514-07	X020623.D	02/06/23 18:22	VOA6_427420
16RW09-230125	SAMP	HS23011514-01	X020629.D	02/06/23 20:28	VOA6_427420

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Form 5

Instrument Performance Check

Volatiles by by EPA 8260

Workorder

HS23011514

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
HS23011514

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
HS23011514

RunID
VOA6_427420

Tune File X020601.D 02/06/23 10:39

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16.5 (16.5)
75	30.0 - 60.0% of mass 95	49 (49)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.3 (7.28)
173	Less than 2.0% of mass 174	0.5 (0.586) 1
174	50.0 - 120.0% of mass 95	82.4 (82.4)
175	4.0 - 9.0% of mass 174	6.7 (8.11) 1
176	93.0 - 101.0% of mass 174	80 (97.1) 1
177	5.0 - 9.0% of mass 176	5.9 (7.43) 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	02/06/23 11:00	X020602	CCV
2	CCB	02/06/23 11:42	X020604	CCB
3	LCS	02/06/23 12:03	X020605	VLCSW-230206
4	MBLK	02/06/23 12:45	X020607	VBLKW-230206
5	SAMP	02/06/23 13:06	X020608	Trip Blank-230125
6	SAMP	02/06/23 13:27	X020609	16WW49-230125
7	SAMP	02/06/23 13:48	X020610	16WW46-230125
8	SAMP	02/06/23 14:09	X020611	16RW09-230125
9	SAMP	02/06/23 14:30	X020612	16RW10-230125
10	SAMP	02/06/23 14:51	X020613	16WW12-230125
11	SAMP	02/06/23 15:12	X020614	16WW36-230125
12	SAMP	02/06/23 15:33	X020615	16WW36-230125-FD
13	MS	02/06/23 16:36	X020618	ZZZZZZMS
14	MSD	02/06/23 16:57	X020619	ZZZZZZMSD
15	SAMP	02/06/23 17:18	X020620	16RW10-230125
16	SAMP	02/06/23 17:39	X020621	16WW12-230125
17	SAMP	02/06/23 18:00	X020622	16WW36-230125
18	SAMP	02/06/23 18:22	X020623	16WW36-230125-FD
19	SAMP	02/06/23 20:28	X020629	16RW09-230125
20	CCV_EN	02/06/23 20:49	X020630	CCV-END

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Form 6

Initial Calibration Data

Volatiles by by EPA 8260

Workorder

HS23011514

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 HS23011514

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 HS23011514

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	

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Initial Calibration Data

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

Workorder HS23011514

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	

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Initial Calibration Data

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

Workorder HS23011514

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

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Initial Calibration Data

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

Workorder HS23011514

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
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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Initial Calibration Data

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

Workorder HS23011514

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
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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Initial Calibration Data

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Project LHAAP 16 January 2023

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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
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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Initial Calibration Data

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

Workorder HS23011514

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
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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Initial Calibration Data

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Project LHAAP 16 January 2023

Workorder HS23011514

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

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Project LHAAP 16 January 2023

Workorder HS23011514

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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Project LHAAP 16 January 2023

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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

HS23011514

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 HS23011514

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)

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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)

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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
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

HS23011514

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

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Continuing Calibration Verification (CCV)

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

Workorder HS23011514

RunID VOA6_427420

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 06-FEB-2023 1100
Lab File ID X020602.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
1,4-Dioxane	0.00457	0.00536	0.00536	0.001	-17.22758	20.0	Averaged	
1,3-Butadiene	0.34316	0.30748	0.30748	0.100	10.39629	20.0	Averaged	
Methacrylonitrile	0.35404	0.41374	0.41374	0.100	-16.86151	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06647	0.06647	0.005	-18.18542	20.0	Averaged	
Acetonitrile	0.04551	0.04503	0.04503	0.005	1.05509	20.0	Averaged	
Allyl Chloride	0.86670	0.98303	0.98303	0.100	-13.42247	20.0	Averaged	
Propionitrile	0.05102	0.06094	0.06094	0.010	-19.45294	20.0	Averaged	
Diethyl ether	0.33409	0.30849	0.30849	0.100	7.66344	20.0	Averaged	
Tetrahydrofuran	100	116	0.07200	0.001	-16.33135	20.0	Linear	
alpha-Methylstyrene	1.10787	1.10413	1.10413	0.100	0.33744	20.0	Averaged	
Diisopropyl ether	1.29704	1.36550	1.36550	0.100	-5.27770	20.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.35003	2.35003	0.100	2.39739	20.0	Averaged	
Dichlorodifluoromethane	50.0	79.98797	0.56110	0.100	-59.97595	20.0	Linear	<-
Chloromethane	50.0	41.15496	0.36865	0.100	17.69009	20.0	Linear	
Vinyl Chloride	0.43678	0.37284	0.37284	0.100	14.63968	20.0	Averaged	
Bromomethane	50.0	40.08319	0.26244	0.100	19.83363	20.0	Linear	
Chloroethane	0.30401	0.25657	0.25657	0.100	15.60534	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.54033	0.54033	0.100	11.59815	20.0	Averaged	
Acrolein	100	77.04545	0.02612	0.010	22.95455	20.0	Linear	<-
Acetone	100	105	0.14759	0.100	-5.19918	20.0	Linear	
1,1-Dichloroethene	0.37948	0.30809	0.30809	0.100	18.81286	20.0	Averaged	
Iodomethane	100	87.22120	0.43159	0.100	12.77880	20.0	Quadratic	
Acrylonitrile	0.12870	0.14594	0.14594	0.050	-13.38900	20.0	Averaged	
Methylene Chloride	0.52052	0.49366	0.49366	0.100	5.16102	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.33280	1.33280	0.100	-7.30156	20.0	Averaged	
Carbon Disulfide	0.99285	0.90721	0.90721	0.100	8.62626	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.41234	0.41234	0.100	2.91212	20.0	Averaged	
Vinyl Acetate	1.09037	1.27636	1.27636	0.010	-17.05761	20.0	Averaged	
1,1-Dichloroethane	0.74536	0.75840	0.75840	0.200	-1.74857	20.0	Averaged	
2-Butanone	100	119	0.17795	0.100	-18.98565	20.0	Linear	
2,2-Dichloropropane	0.63286	0.68518	0.68518	0.100	-8.26859	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.49794	0.49794	0.100	3.66012	20.0	Averaged	
Chloroform	0.83541	0.84294	0.84294	0.200	-0.90142	20.0	Averaged	
Bromochloromethane	0.28299	0.26674	0.26674	0.100	5.74317	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011514

RunID VOA6_427420

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 06-FEB-2023 1100
Lab File ID X020602.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
Dibromofluoromethane	50.0	44.14473	0.42406	0.100	11.71054	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.66471	0.66471	0.100	-0.28414	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.37929	0.37929	0.100	-6.85123	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.45562	0.45562	0.100	-11.21768	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.35750	0.35750	0.100	5.68876	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	47.62295	0.48251	0.100	4.75411	20.0	Linear	
Benzene	1.19399	1.22396	1.22396	0.500	-2.50988	20.0	Averaged	
Trichloroethene	0.33865	0.34285	0.34285	0.200	-1.23851	20.0	Averaged	
Bromodichloromethane	0.44810	0.45822	0.45822	0.200	-2.25956	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.17761	0.17761	0.001	-39.32607	20.0	Averaged	<-
1,2-Dichloropropane	0.31761	0.32995	0.32995	0.100	-3.88478	20.0	Averaged	
Dibromomethane	0.21588	0.21114	0.21114	0.100	2.19257	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.32948	0.32948	0.100	-23.28544	20.0	Averaged	<-
cis-1,3-Dichloropropene	0.52625	0.58636	0.58636	0.200	-11.42259	20.0	Averaged	
Toluene-d8	1.23554	1.14502	1.14502	0.100	7.32571	20.0	Averaged	
Toluene	1.38201	1.40789	1.40789	0.400	-1.87265	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.51062	0.51062	0.100	-16.91877	20.0	Averaged	
2-Hexanone	0.18183	0.23142	0.23142	0.100	-27.27508	20.0	Averaged	<-
1,1,2-Trichloroethane	0.27726	0.28982	0.28982	0.100	-4.53248	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.59655	0.59655	0.100	-9.31277	20.0	Averaged	
Dibromochloromethane	0.40016	0.42498	0.42498	0.100	-6.20193	20.0	Averaged	
Tetrachloroethene	0.28594	0.27959	0.27959	0.200	2.22102	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.37862	0.37862	0.100	-9.22266	20.0	Averaged	
1-Chlorohexane	0.24163	0.24556	0.24556	0.100	-1.62613	20.0	Averaged	
Chlorobenzene	0.98026	0.97729	0.97729	0.500	0.30244	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37644	0.37644	0.100	-3.19183	20.0	Averaged	
Ethylbenzene	0.46175	0.46926	0.46926	0.100	-1.62677	20.0	Averaged	
m,p-Xylenes	0.59525	0.58928	0.58928	0.100	1.00297	20.0	Averaged	
o-Xylene	0.58751	0.58575	0.58575	0.300	0.29995	20.0	Averaged	
Styrene	0.98473	1.02915	1.02915	0.300	-4.50997	20.0	Averaged	
Bromoform	0.27722	0.29851	0.29851	0.100	-7.68004	20.0	Averaged	
Isopropylbenzene	1.34224	1.35516	1.35516	0.100	-0.96243	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.87851	0.87851	0.300	-10.23685	20.0	Averaged	
4-Bromofluorobenzene	50.0	47.79927	0.44147	0.100	4.40146	20.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23011514

RunID VOA6_427420

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 06-FEB-2023 1100
Lab File ID X020602.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
1,2,3-Trichloropropane	0.55636	0.64454	0.64454	0.100	-15.84971	20.0	Averaged	
n-Propylbenzene	2.76956	2.97978	2.97978	0.100	-7.59041	20.0	Averaged	
Bromobenzene	0.82033	0.84038	0.84038	0.100	-2.44530	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.19072	2.19072	0.100	-7.07547	20.0	Averaged	
2-Chlorotoluene	1.81741	1.95243	1.95243	0.100	-7.42927	20.0	Averaged	
4-Chlorotoluene	2.07183	2.26335	2.26335	0.100	-9.24403	20.0	Averaged	
tert-Butylbenzene	1.67475	1.75602	1.75602	0.100	-4.85241	20.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.26289	2.26289	0.100	-5.11559	20.0	Averaged	
sec-Butylbenzene	2.22832	2.41854	2.41854	0.100	-8.53663	20.0	Averaged	
p-Isopropyltoluene	1.99679	2.20169	2.20169	0.100	-10.26184	20.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.40424	1.40424	0.600	-3.13537	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.45236	1.45236	0.400	2.24835	20.0	Averaged	
n-Butylbenzene	50.0	50.25266	1.93448	0.500	-0.50531	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.38981	1.38981	0.400	0.88734	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	58.07498	0.14802	0.040	-16.14996	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	0.98794	0.98794	0.100	-11.63914	20.0	Averaged	
Hexachlorobutadiene	50.0	55.07278	0.43248	0.100	-10.14556	20.0	Quadratic	
Naphthalene	2.01347	2.26967	2.26967	0.200	-12.72459	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.90829	0.90829	0.010	-7.16747	20.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.45514	0.45514	0.200	3.32272	20.0	Averaged	
Xylenes (total)	0.56589	0.54396	0.54396	0.100	3.87589	20.0	Averaged	
Cyclohexane	50.0	49.05327	0.49420	0.100	1.89347	20.0	Linear	
Freon TF	0.36703	0.30356	0.30356	0.100	17.29233	20.0	Averaged	
Methylcyclohexane	0.61204	0.69673	0.69673	0.100	-13.83756	20.0	Averaged	
Methyl Acetate	0.22499	0.26934	0.26934	0.100	-19.71087	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.04615	0.04615	0.005	-33.29003	20.0	Averaged	<-
Isopropyl alcohol	0.01808	0.02572	0.02572	0.005	-42.26650	20.0	Averaged	<-

Continuing Calibration Verification (CCV)

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

Workorder HS23011514

RunID VOA6_427420

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 06-FEB-2023 2049
Lab File ID X020630.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	0.00605	0.00605	0.001	-32.38209	50.0	Averaged	
1,3-Butadiene	0.34316	0.33994	0.33994	0.100	0.93739	50.0	Averaged	
Methacrylonitrile	0.35404	0.43336	0.43336	0.100	-22.40415	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06866	0.06866	0.005	-22.08695	50.0	Averaged	
Acetonitrile	0.04551	0.04834	0.04834	0.005	-6.22452	50.0	Averaged	
Allyl Chloride	0.86670	1.03037	1.03037	0.100	-18.88456	50.0	Averaged	
Propionitrile	0.05102	0.06394	0.06394	0.010	-25.33269	50.0	Averaged	
Diethyl ether	0.33409	0.32029	0.32029	0.100	4.13136	50.0	Averaged	
Tetrahydrofuran	100	115	0.07106	0.001	-14.77849	50.0	Linear	
alpha-Methylstyrene	1.10787	1.24429	1.24429	0.100	-12.31389	50.0	Averaged	
Diisopropyl ether	1.29704	1.43617	1.43617	0.100	-10.72606	50.0	Averaged	
1,2,3-Trimethylbenzene	2.40776	2.51909	2.51909	0.100	-4.62388	50.0	Averaged	
Dichlorodifluoromethane	50.0	94.90305	0.66625	0.100	-89.80610	50.0	Linear	
Chloromethane	50.0	43.67996	0.39255	0.100	12.64009	50.0	Linear	
Vinyl Chloride	0.43678	0.40997	0.40997	0.100	6.13857	50.0	Averaged	
Bromomethane	50.0	43.68694	0.28712	0.100	12.62613	50.0	Linear	
Chloroethane	0.30401	0.27624	0.27624	0.100	9.13445	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.61210	0.61210	0.100	-0.14325	50.0	Averaged	
Acrolein	100	89.70307	0.03057	0.010	10.29693	50.0	Linear	
Acetone	100	108	0.15183	0.100	-8.22622	50.0	Linear	
1,1-Dichloroethene	0.37948	0.34598	0.34598	0.100	8.82612	50.0	Averaged	
Iodomethane	100	84.26987	0.41586	0.100	15.73013	50.0	Quadratic	
Acrylonitrile	0.12870	0.15943	0.15943	0.050	-23.87256	50.0	Averaged	
Methylene Chloride	0.52052	0.51940	0.51940	0.100	0.21492	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.37090	1.37090	0.100	-10.36894	50.0	Averaged	
Carbon Disulfide	0.99285	0.96460	0.96460	0.100	2.84504	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.44337	0.44337	0.100	-4.39488	50.0	Averaged	
Vinyl Acetate	1.09037	1.16539	1.16539	0.010	-6.88033	50.0	Averaged	
1,1-Dichloroethane	0.74536	0.78974	0.78974	0.200	-5.95404	50.0	Averaged	
2-Butanone	100	124	0.18627	0.100	-24.40676	50.0	Linear	
2,2-Dichloropropane	0.63286	0.63544	0.63544	0.100	-0.40830	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.53013	0.53013	0.100	-2.56787	50.0	Averaged	
Chloroform	0.83541	0.88229	0.88229	0.200	-5.61150	50.0	Averaged	
Bromochloromethane	0.28299	0.27500	0.27500	0.100	2.82345	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011514

RunID VOA6_427420

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 06-FEB-2023 2049
Lab File ID X020630.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
Dibromofluoromethane	50.0	43.47979	0.41770	0.100	13.04042	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.74022	0.74022	0.100	-11.67724	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.41513	0.41513	0.100	-16.94526	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.45356	0.45356	0.100	-10.71355	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.39419	0.39419	0.100	-3.99000	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	47.77981	0.48411	0.100	4.44038	50.0	Linear	
Benzene	1.19399	1.29545	1.29545	0.500	-8.49787	50.0	Averaged	
Trichloroethene	0.33865	0.37927	0.37927	0.200	-11.99487	50.0	Averaged	
Bromodichloromethane	0.44810	0.47077	0.47077	0.200	-5.05935	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.18037	0.18037	0.001	-41.48875	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.34128	0.34128	0.100	-7.45433	50.0	Averaged	
Dibromomethane	0.21588	0.21809	0.21809	0.100	-1.02583	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.33404	0.33404	0.100	-24.99155	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.58060	0.58060	0.200	-10.32728	50.0	Averaged	
Toluene-d8	1.23554	1.10660	1.10660	0.100	10.43592	50.0	Averaged	
Toluene	1.38201	1.49765	1.49765	0.400	-8.36693	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.50266	0.50266	0.100	-15.09617	50.0	Averaged	
2-Hexanone	0.18183	0.23450	0.23450	0.100	-28.96695	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.29493	0.29493	0.100	-6.37617	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.60613	0.60613	0.100	-11.06770	50.0	Averaged	
Dibromochloromethane	0.40016	0.43496	0.43496	0.100	-8.69663	50.0	Averaged	
Tetrachloroethene	0.28594	0.31079	0.31079	0.200	-8.68871	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.38896	0.38896	0.100	-12.20601	50.0	Averaged	
1-Chlorohexane	0.24163	0.27730	0.27730	0.100	-14.76043	50.0	Averaged	
Chlorobenzene	0.98026	1.03306	1.03306	0.500	-5.38721	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.39847	0.39847	0.100	-9.22928	50.0	Averaged	
Ethylbenzene	0.46175	0.51789	0.51789	0.100	-12.15815	50.0	Averaged	
m,p-Xylenes	0.59525	0.65484	0.65484	0.100	-10.00991	50.0	Averaged	
o-Xylene	0.58751	0.64520	0.64520	0.300	-9.81927	50.0	Averaged	
Styrene	0.98473	1.11460	1.11460	0.300	-13.18787	50.0	Averaged	
Bromoform	0.27722	0.30324	0.30324	0.100	-9.38405	50.0	Averaged	
Isopropylbenzene	1.34224	1.55641	1.55641	0.100	-15.95667	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.89329	0.89329	0.300	-12.09136	50.0	Averaged	
4-Bromofluorobenzene	50.0	47.29851	0.43684	0.100	5.40298	50.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23011514

RunID VOA6_427420

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 06-FEB-2023 2049
Lab File ID X020630.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
1,2,3-Trichloropropane	0.55636	0.71624	0.71624	0.100	-28.73854	50.0	Averaged	
n-Propylbenzene	2.76956	3.39898	3.39898	0.100	-22.72637	50.0	Averaged	
Bromobenzene	0.82033	0.90775	0.90775	0.100	-10.65782	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.52140	2.52140	0.100	-23.23813	50.0	Averaged	
2-Chlorotoluene	1.81741	2.17758	2.17758	0.100	-19.81739	50.0	Averaged	
4-Chlorotoluene	2.07183	2.49986	2.49986	0.100	-20.65966	50.0	Averaged	
tert-Butylbenzene	1.67475	2.05424	2.05424	0.100	-22.65924	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.56954	2.56954	0.100	-19.36004	50.0	Averaged	
sec-Butylbenzene	2.22832	2.80797	2.80797	0.100	-26.01318	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.51976	2.51976	0.100	-26.19096	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.56156	1.56156	0.600	-14.68952	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.62191	1.62191	0.400	-9.16333	50.0	Averaged	
n-Butylbenzene	50.0	55.48647	2.14334	0.500	-10.97295	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.55454	1.55454	0.400	-10.86015	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	62.35255	0.15894	0.040	-24.70510	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.13085	1.13085	0.100	-27.78714	50.0	Averaged	
Hexachlorobutadiene	50.0	58.20284	0.45739	0.100	-16.40568	50.0	Quadratic	
Naphthalene	2.01347	2.59587	2.59587	0.200	-28.92540	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	1.03675	1.03675	0.010	-22.32303	50.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.48675	0.48675	0.200	-3.39197	50.0	Averaged	
Xylenes (total)	0.56589	0.61190	0.61190	0.100	-8.12971	50.0	Averaged	
Cyclohexane	50.0	56.58138	0.57205	0.100	-13.16277	50.0	Linear	
Freon TF	0.36703	0.34341	0.34341	0.100	6.43598	50.0	Averaged	
Methylcyclohexane	0.61204	0.76371	0.76371	0.100	-24.78026	50.0	Averaged	
Methyl Acetate	0.22499	0.28059	0.28059	0.100	-24.71087	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.04840	0.04840	0.005	-39.78929	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02677	0.02677	0.005	-48.04437	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by by EPA 8260

Workorder

HS23011514

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
HS23011514

RunID
VOA6_427420

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X020602	589502	#	4.18	#	894149	#	4.96	#	827037	#	7.67	#	446442	#	9.66	#
CCB	X020604	725523		4.18		1032987		4.97		942618		7.67		497779		9.66	
VLCSW-230206	X020605	592141		4.17		890062		4.97		822267		7.67		442749		9.66	
VBLKW-230206	X020607	723934		4.18		1024052		4.96		925329		7.67		480030		9.66	
HS23011514-08	X020608	720916		4.18		1030405		4.97		918120		7.67		480161		9.66	
HS23011514-05	X020609	718899		4.17		1023621		4.96		911432		7.67		486480		9.66	
HS23011514-03	X020610	701513		4.18		999738		4.96		892876		7.67		460722		9.66	
HS23011514-01	X020611	722750		4.18		1032413		4.96		907637		7.67		478229		9.66	
HS23011514-02	X020612	712320		4.17		1017064		4.96		907028		7.67		471719		9.66	
HS23011514-04	X020613	721079		4.18		1036167		4.96		917353		7.67		477943		9.66	
HS23011514-06	X020614	718111		4.18		1033624		4.96		922657		7.67		482298		9.66	
HS23011514-07	X020615	708688		4.18		1016878		4.96		895881		7.67		453240		9.66	
ZZZZZZMS	X020618	707773		4.18		1009963		4.96		907600		7.67		487663		9.66	
ZZZZZZMSD	X020619	695840		4.18		1005084		4.96		920347		7.67		495102		9.66	
HS23011514-02	X020620	685316		4.18		981658		4.96		864214		7.67		437989		9.66	
HS23011514-04	X020621	711305		4.17		1023882		4.96		923641		7.67		478692		9.66	
HS23011514-06	X020622	708196		4.18		1026275		4.97		904701		7.67		457299		9.66	
HS23011514-07	X020623	716248		4.18		1021047		4.96		915247		7.67		470712		9.66	
HS23011514-01	X020629	704509		4.18		1008530		4.96		906633		7.67		459932		9.66	
CCV-END	X020630	556412		4.18		862225		4.97		809665		7.67		439564		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

HS23011514

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
HS23011514

Volatiles by EPA 8260

RUNID
VOA6_427420

Run ID VOA6_427420 **Start Date** 02/06/23 **EndDate** 02/06/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X020602.D	02/06/23 11:00	1
CCB	CCB	CCB	X020604.D	02/06/23 11:42	1
VLCSW-230206	LCS	VLCSW-230206	X020605.D	02/06/23 12:03	1
VBLKW-230206	MBLK	VBLKW-230206	X020607.D	02/06/23 12:45	1
Trip Blank-230125	SAMP	HS23011514-08	X020608.D	02/06/23 13:06	1
16WW49-230125	SAMP	HS23011514-05	X020609.D	02/06/23 13:27	1
16WW46-230125	SAMP	HS23011514-03	X020610.D	02/06/23 13:48	1
16RW09-230125	SAMP	HS23011514-01	X020611.D	02/06/23 14:09	1
16RW10-230125	SAMP	HS23011514-02	X020612.D	02/06/23 14:30	5
16WW12-230125	SAMP	HS23011514-04	X020613.D	02/06/23 14:51	5
16WW36-230125	SAMP	HS23011514-06	X020614.D	02/06/23 15:12	50
16WW36-230125-FD	SAMP	HS23011514-07	X020615.D	02/06/23 15:33	50
BatchQC	MS	HS23011590-04MS	X020618.D	02/06/23 16:36	5
BatchQC	MSD	HS23011590-04MSD	X020619.D	02/06/23 16:57	5
16RW10-230125	SAMP	HS23011514-02	X020620.D	02/06/23 17:18	25
16WW12-230125	SAMP	HS23011514-04	X020621.D	02/06/23 17:39	50
16WW36-230125	SAMP	HS23011514-06	X020622.D	02/06/23 18:00	500
16WW36-230125-FD	SAMP	HS23011514-07	X020623.D	02/06/23 18:22	500
16RW09-230125	SAMP	HS23011514-01	X020629.D	02/06/23 20:28	20

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Raw Data VOA6 424237

Volatiles by by EPA 8260

Workorder

HS23011514

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)	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

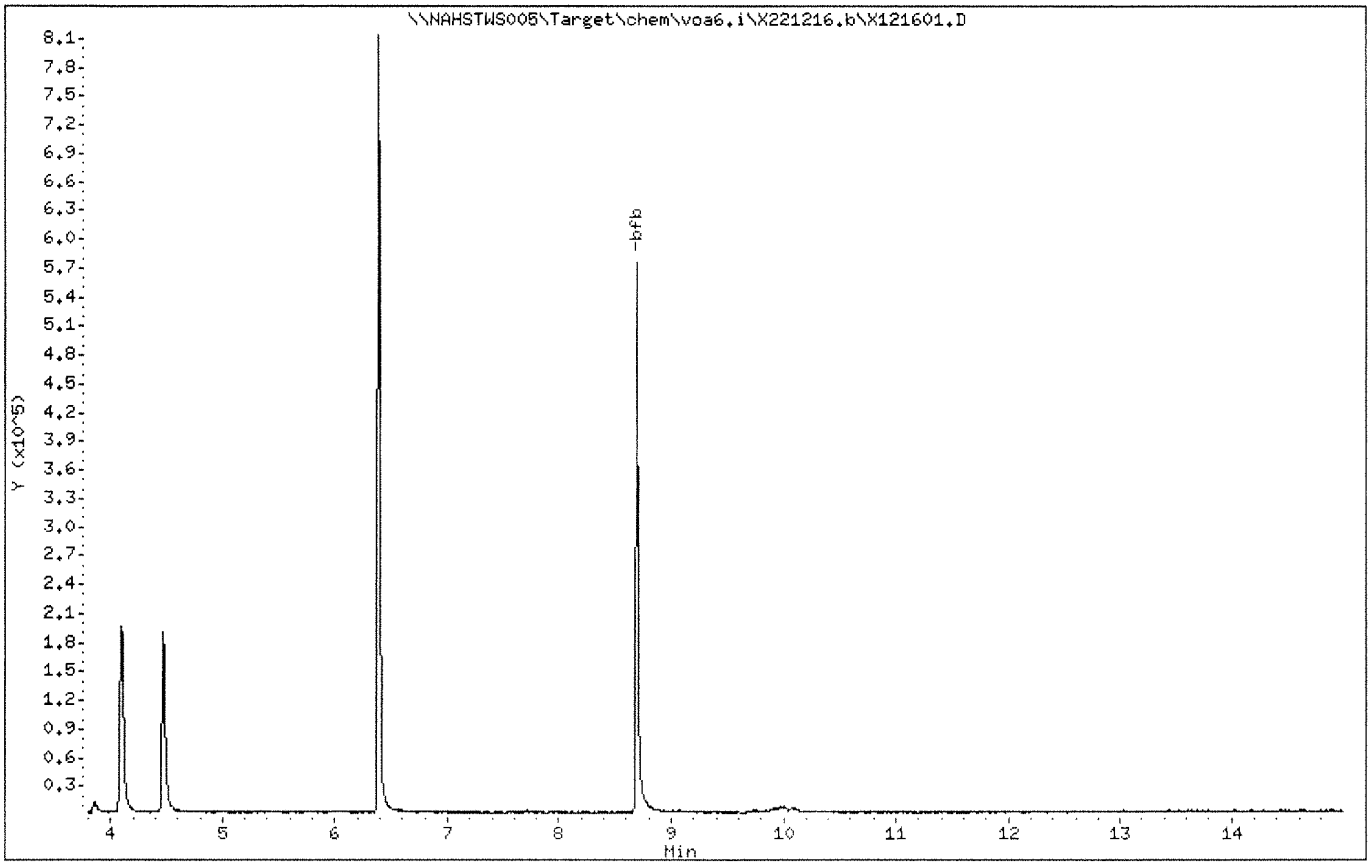
Date : 16-DEC-2022 11:17

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

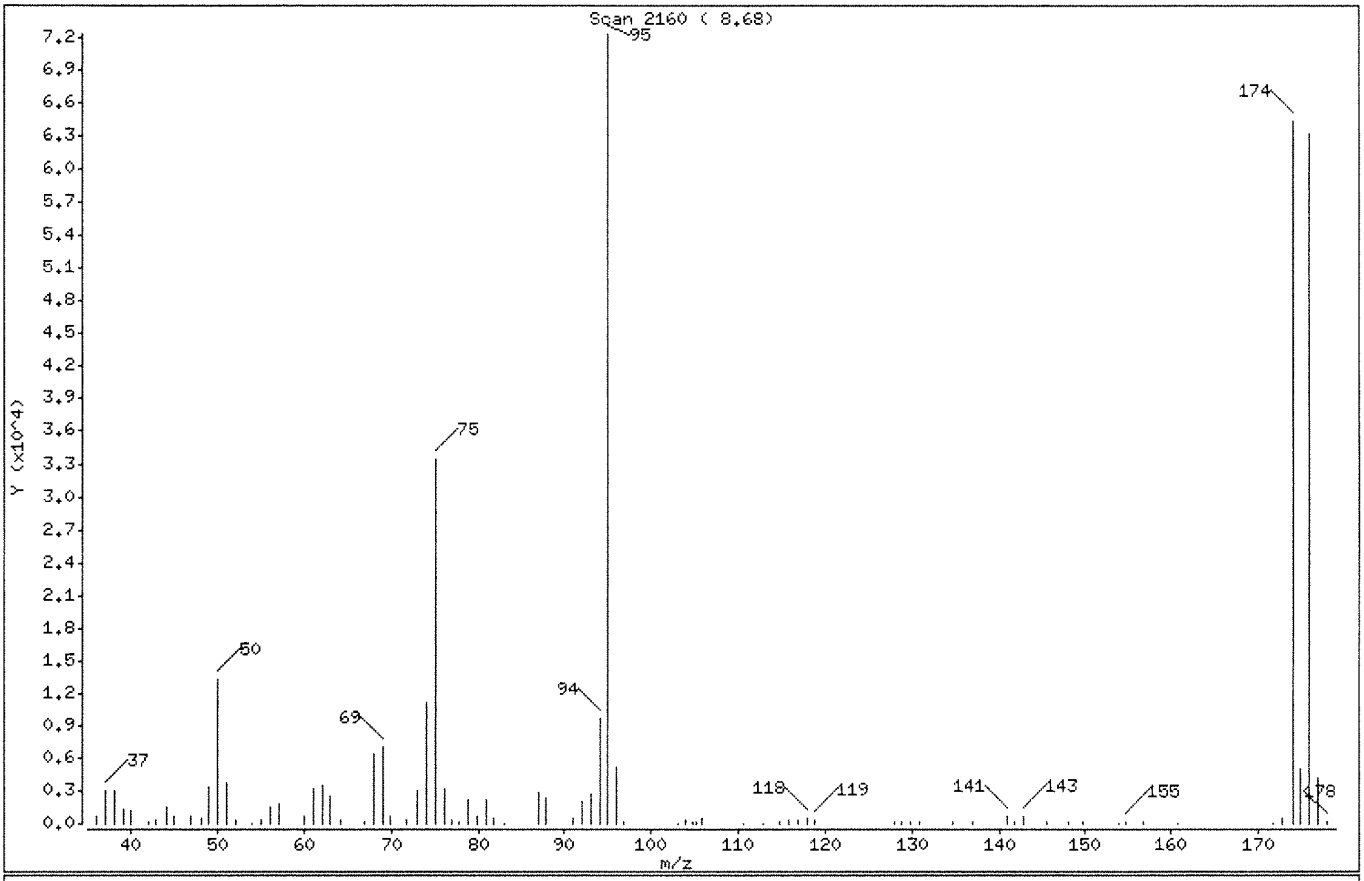
Client ID: BFB Instrument: voa6.i

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
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

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)

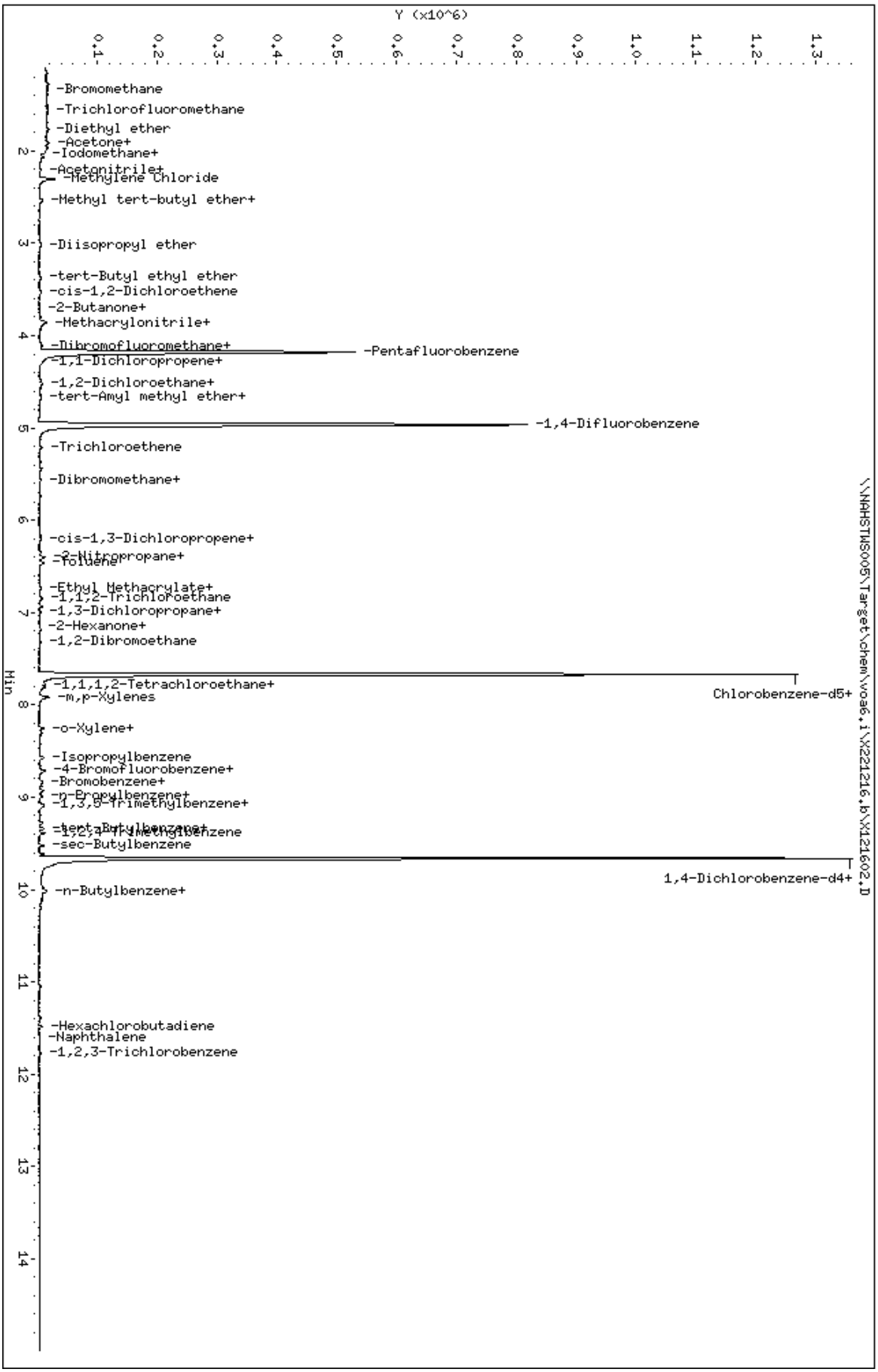
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	15 Iodomethane	142	2.026	2.026	(0.485)	1106	0.50000	3.56(T)
	17 Methylene Chloride	84	2.292	2.292	(0.549)	1436	0.25000	0.29(M)
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	2787	0.25000	0.24
	19 Carbon Disulfide	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.



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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

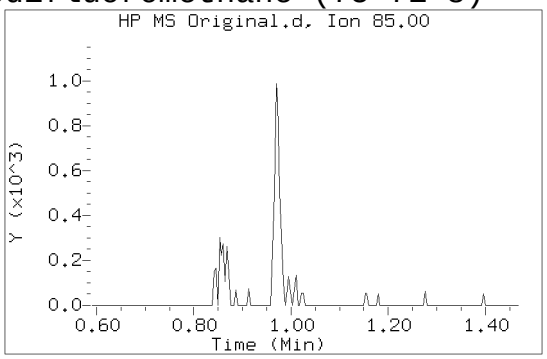
Instrument: voa6,i
Operator: PC
Column diameter: 0.18

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)

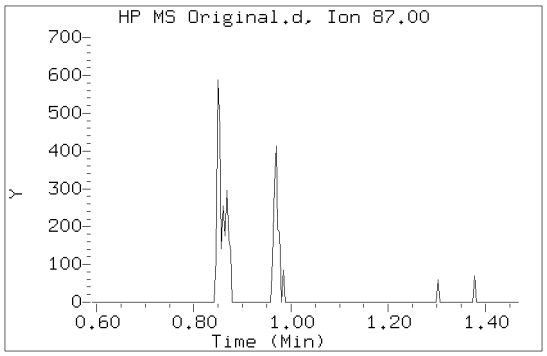
BEFORE

MASS
50
AREA
1420
HEIGHT
1809
16-Dec-2022
11:54
ALSHS
Server



BEFORE

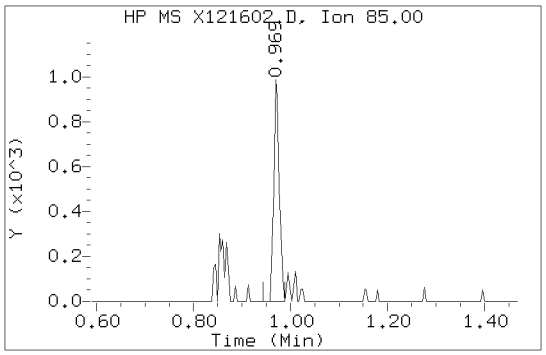
MASS
52
AREA
731
HEIGHT
740
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

MASS
85
AREA
801
HEIGHT
987
27-Dec-2022
16:07
ALSHS
Ser



AFTER

MASS
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AREA
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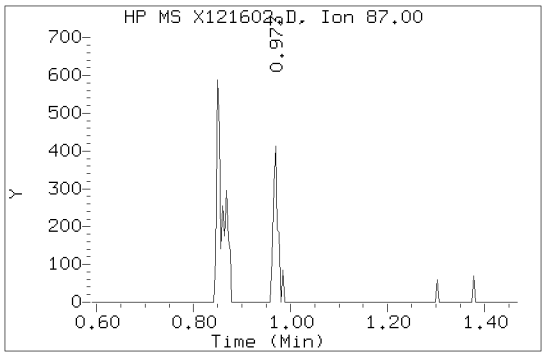
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Vinyl Chloride (75-01-4)

BEFORE

MASS
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AREA
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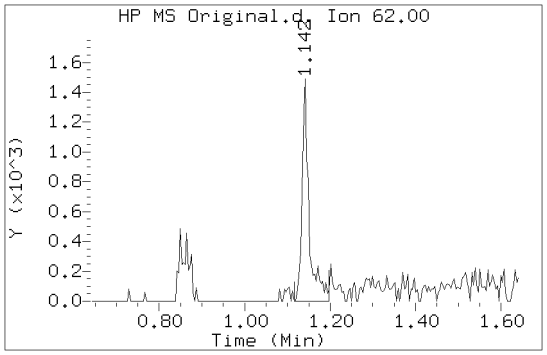
HEIGHT
983
16-Dec-2022
11:54
ALSHS
Server



BEFORE

MASS
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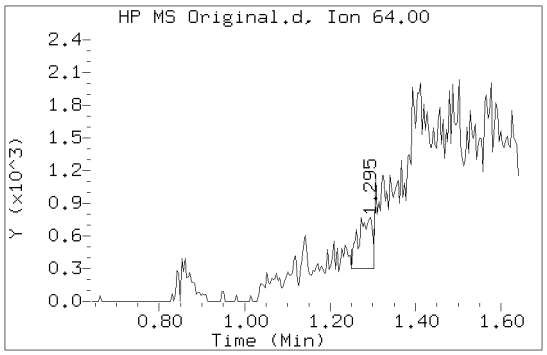
AREA
1330
HEIGHT
961
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

MASS
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AREA
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HEIGHT
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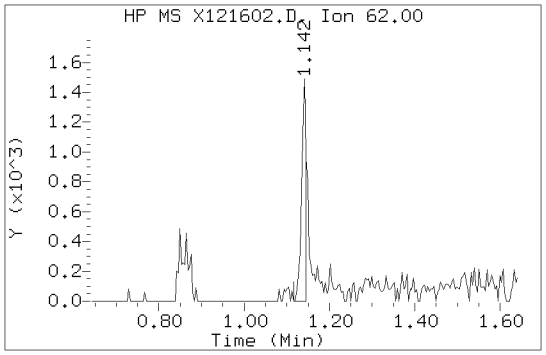
27-Dec-2022
16:07
ALSHS
Ser



AFTER

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AREA
1053
HEIGHT
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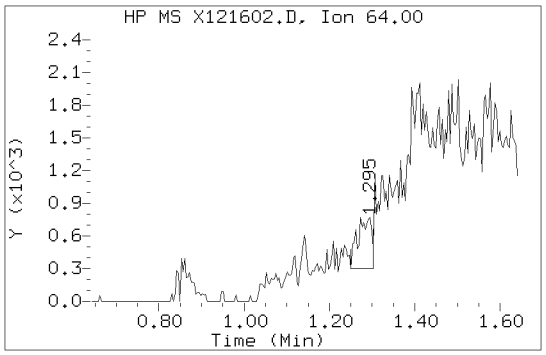
27-Dec-2022
16:07
ALSHS
Ser



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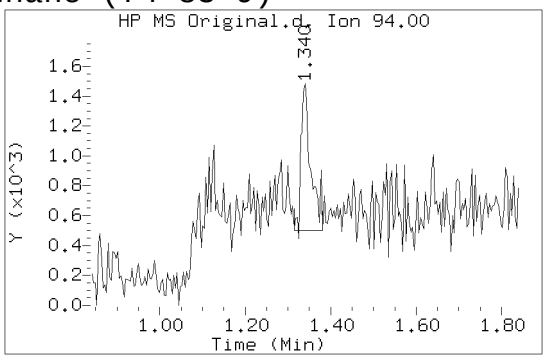
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

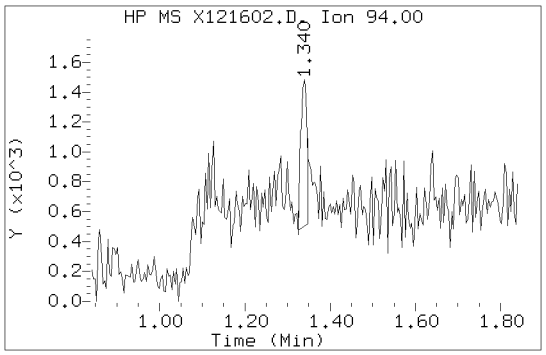
Bromomethane (74-83-9)

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
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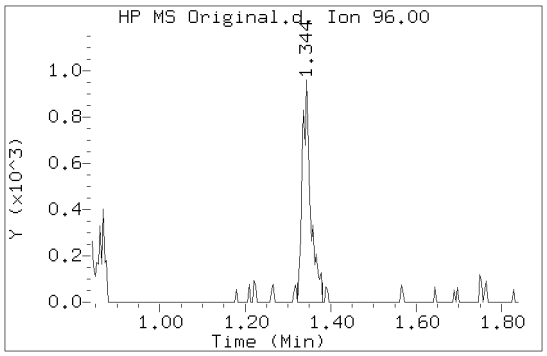
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
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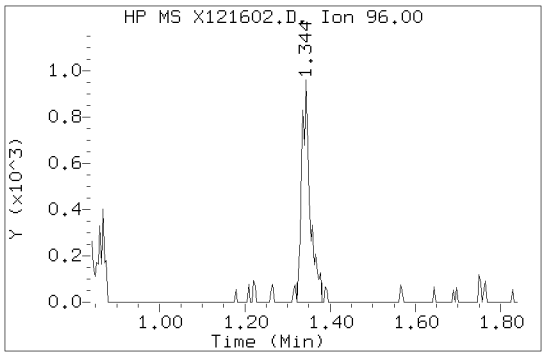
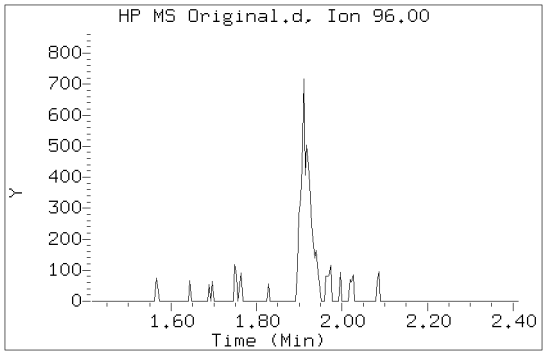
AREA
1330
HEIGHT
961
27-Dec-2022
16:07
ALSHS
Ser



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

Reason Code:

BEFORE
MASS
142
AREA
1106
HEIGHT
699
16-Dec-2022
11:54
ALSHS
Server



AFTER
MASS
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AREA
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HEIGHT
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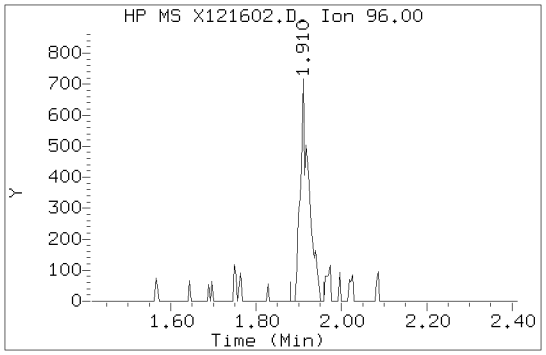
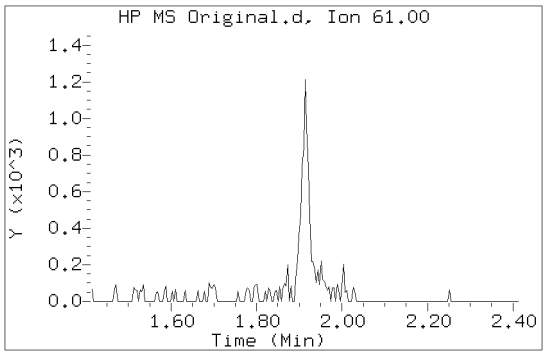
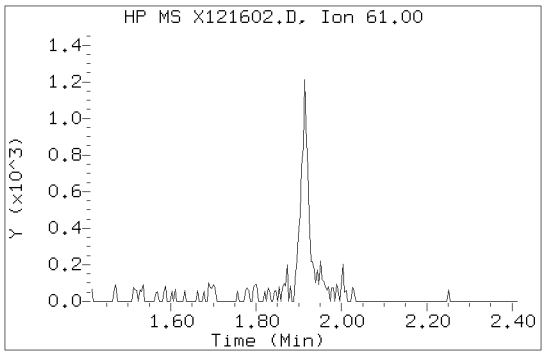
27-Dec-2022
16:07
ALSHS
Ser



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



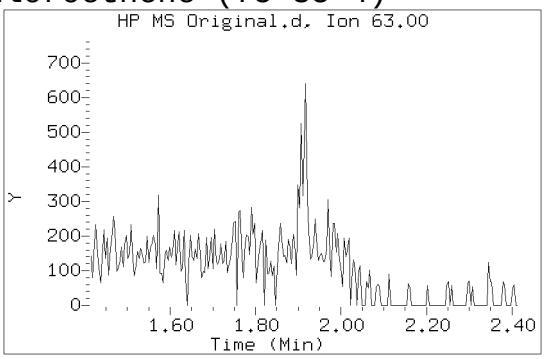
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

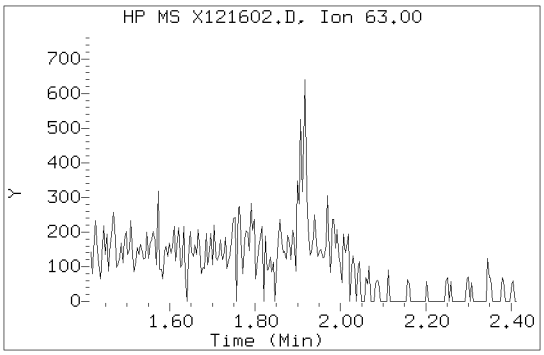
BEFORE

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

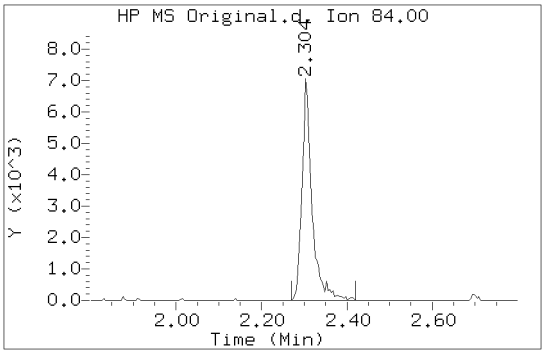


Methylene Chloride (75-09-2)

Reason Code:

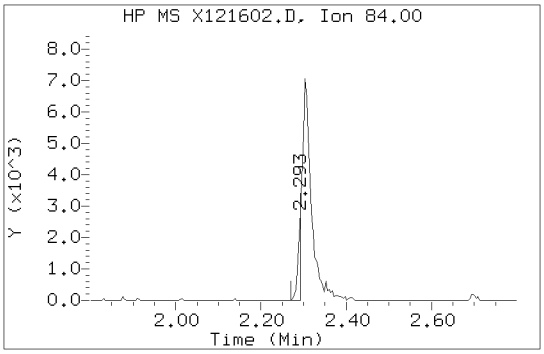
BEFORE

MASS
84
AREA
11777
HEIGHT
7057
16-Dec-2022
11:54
ALSHS
Server



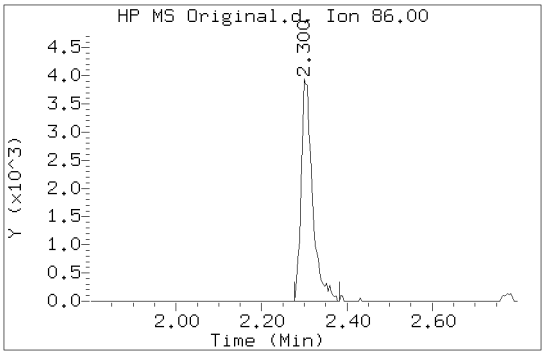
AFTER

MASS
84
AREA
1436
HEIGHT
2786
27-Dec-2022
16:07
ALSHS
Ser



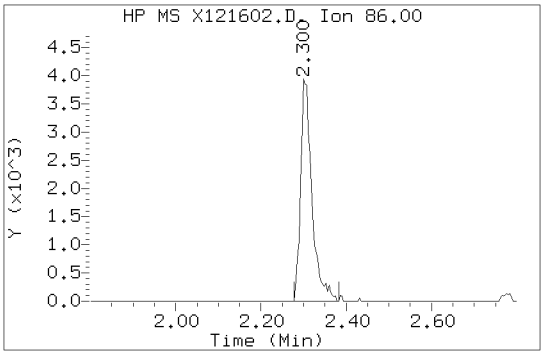
BEFORE

MASS
86
AREA
7453
HEIGHT
3944
16-Dec-2022
11:54
ALSHS
Server



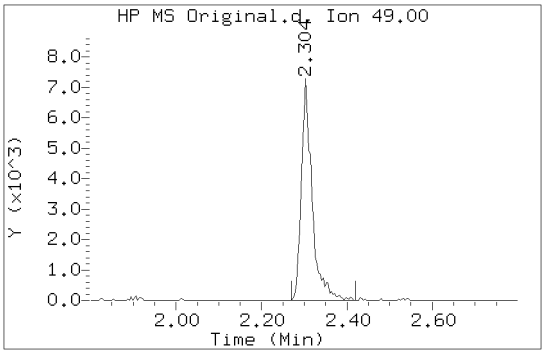
AFTER

MASS
86
AREA
7453
HEIGHT
3944
27-Dec-2022
16:07
ALSHS
Ser



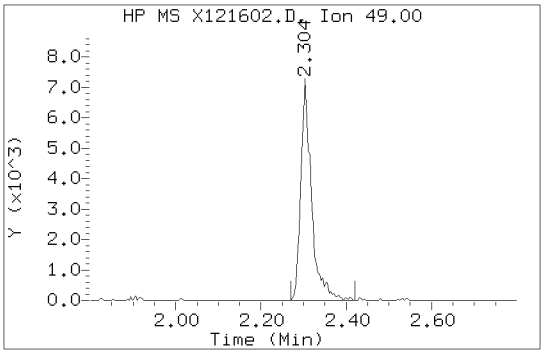
BEFORE

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



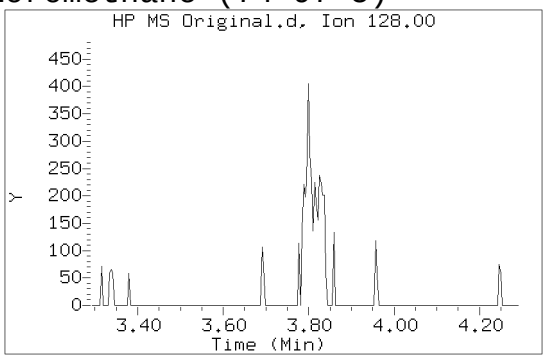
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Bromochloromethane (74-97-5)

Reason Code:

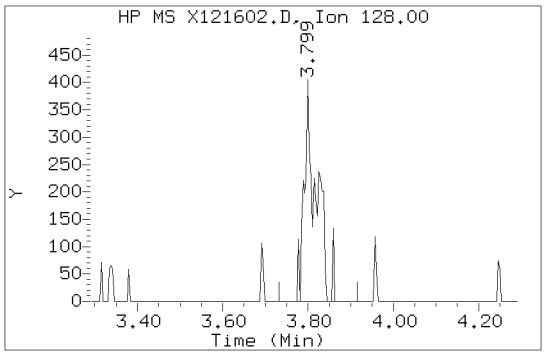
BEFORE

MASS
96
AREA
1402
HEIGHT
854
16-Dec-2022
11:54
ALSHS
Server



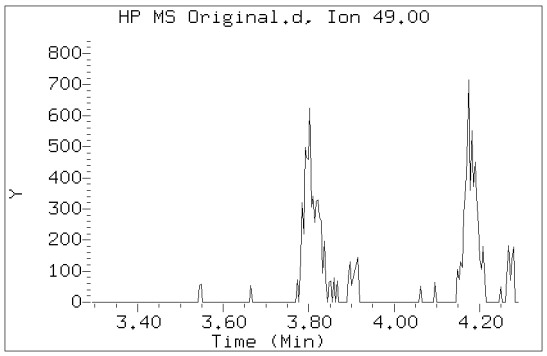
AFTER

MASS
128
AREA
802
HEIGHT
405
27-Dec-2022
16:07
ALSHS
Ser



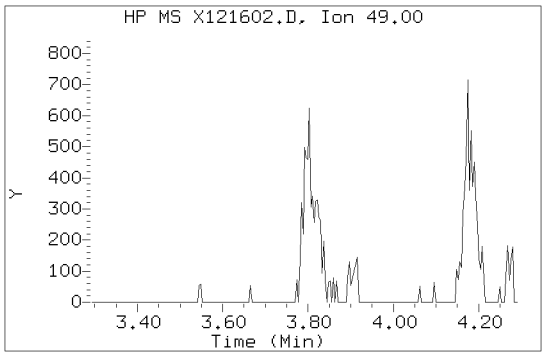
BEFORE

MASS
61
AREA
1975
HEIGHT
828
16-Dec-2022
11:54
ALSHS
Server



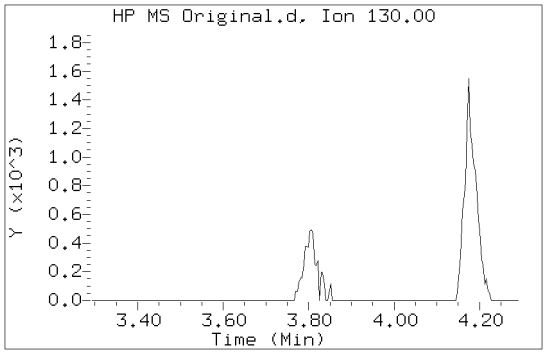
AFTER

MASS
49
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



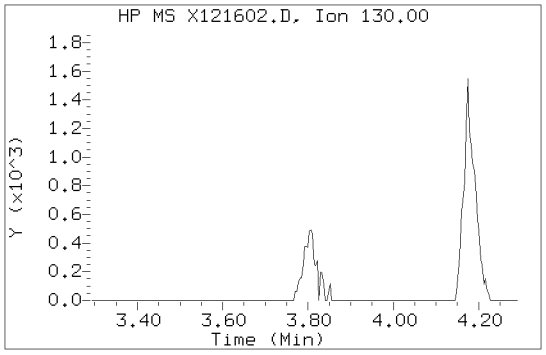
BEFORE

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

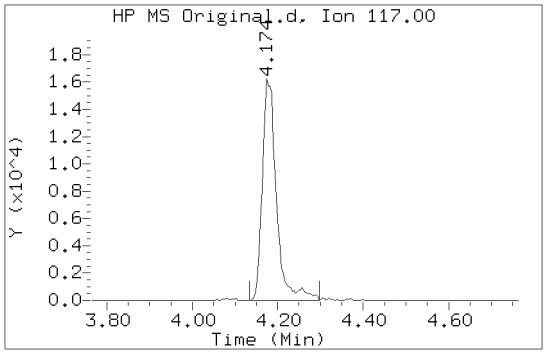


Carbon Tetrachloride (56-23-5)

Reason Code:

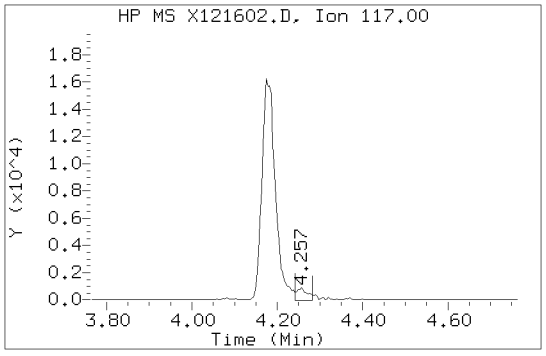
BEFORE

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



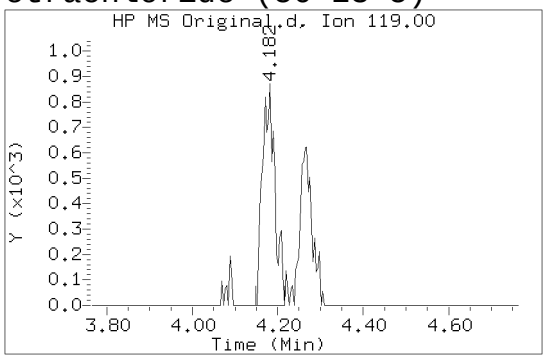
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Carbon Tetrachloride (56-23-5)

Reason Code:

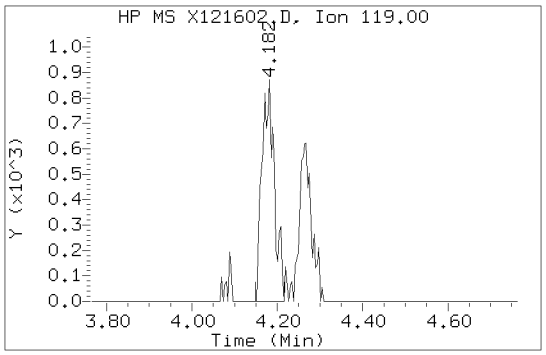
BEFORE

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

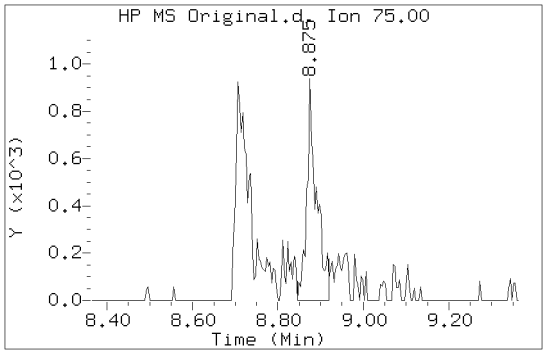


1,2,3-Trichloropropane (96-18-4)

Reason Code:

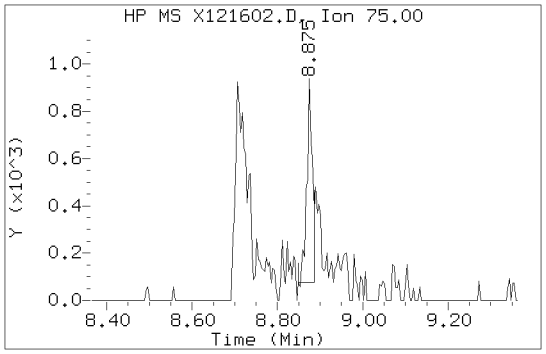
BEFORE

MASS
152
AREA
348702
HEIGHT
242350
16-Dec-2022
11:54
ALSHS
Server



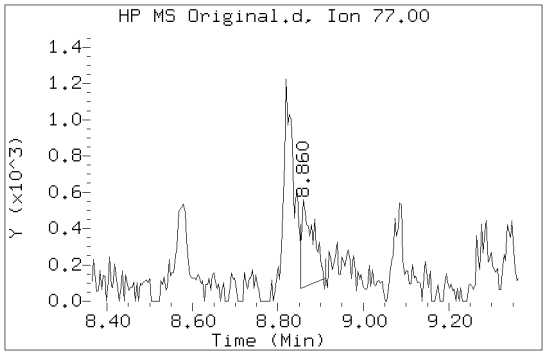
AFTER

MASS
75
AREA
766
HEIGHT
862
27-Dec-2022
16:07
ALSHS
Ser



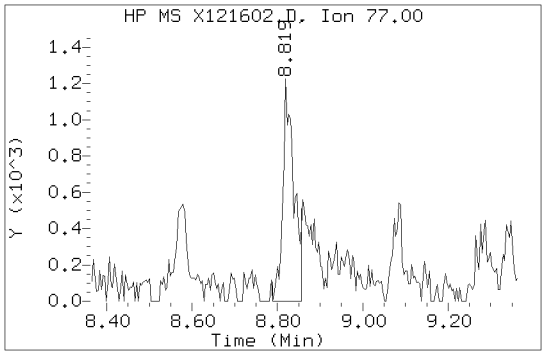
BEFORE

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

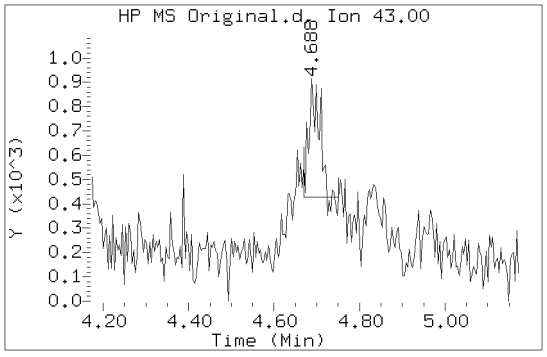


Isobutyl Alcohol (78-83-1)

Reason Code:

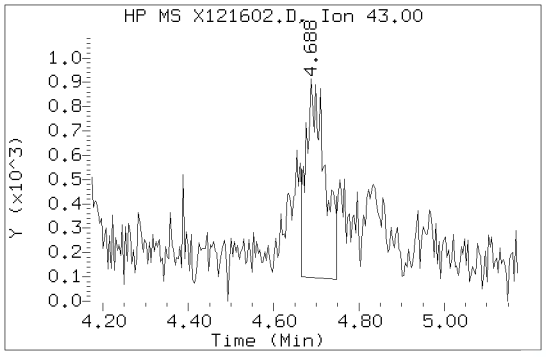
BEFORE

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

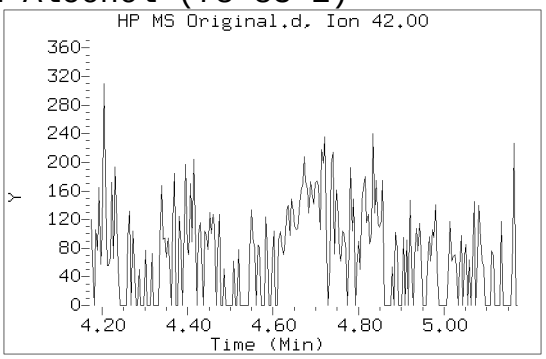


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Isobutyl Alcohol (78-83-1)

BEFORE

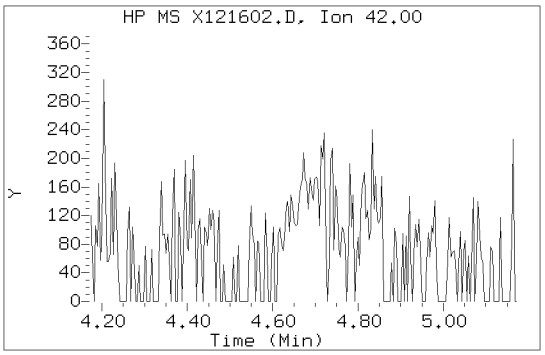
MASS
77
AREA
888
HEIGHT
483
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

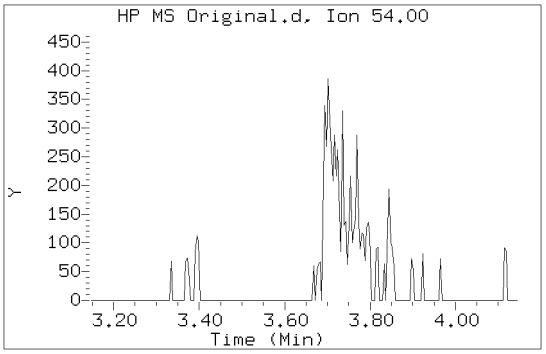
MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Propionitrile (107-12-0)

BEFORE

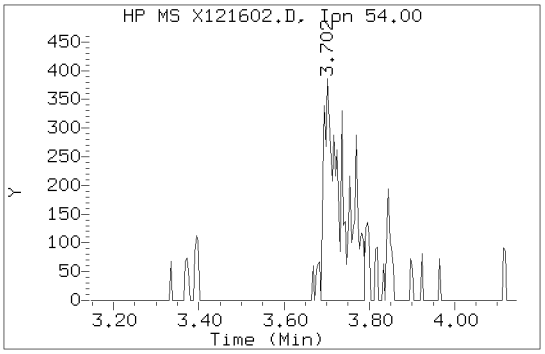
MASS
91
AREA
3881
HEIGHT
1822
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

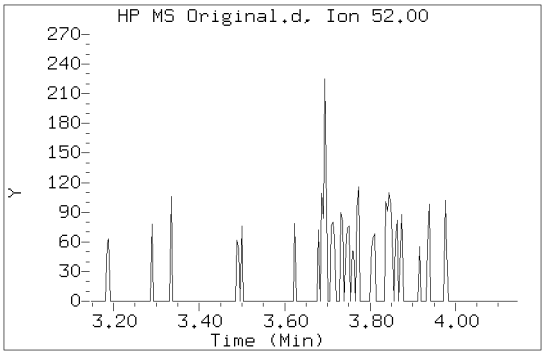
AFTER

MASS
54
AREA
1165
HEIGHT
386
27-Dec-2022
16:07
ALSHS
Ser



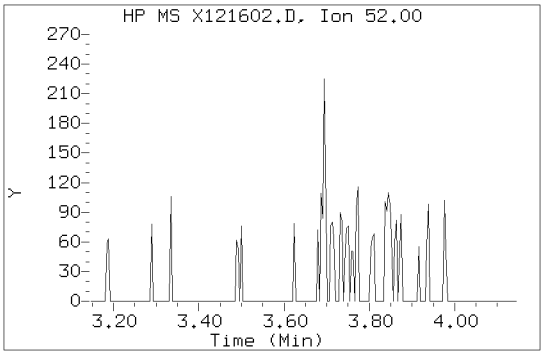
BEFORE

MASS
126
AREA
1511
HEIGHT
914
16-Dec-2022
11:54
ALSHS
Server



AFTER

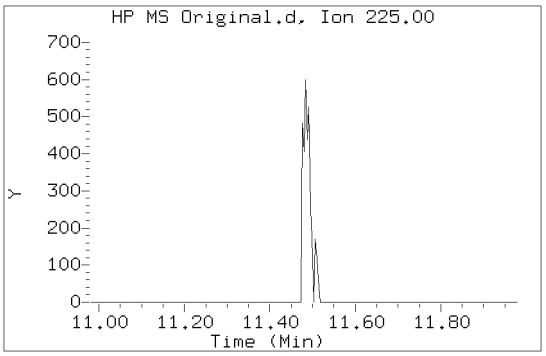
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Hexachlorobutadiene (87-68-3)

BEFORE

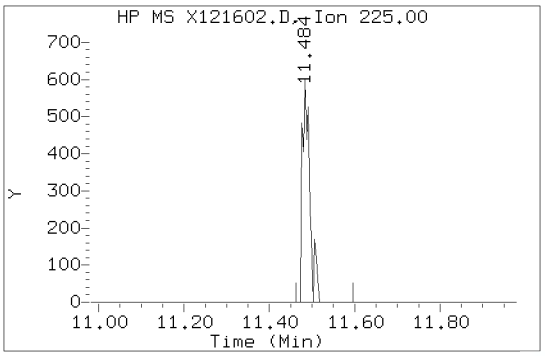
MASS
155
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

MASS
225
AREA
726
HEIGHT
599
27-Dec-2022
16:07
ALSHS
Ser

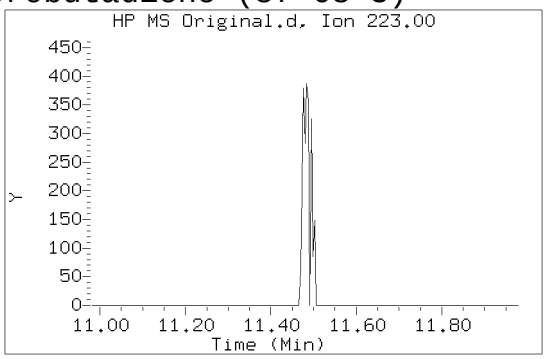


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

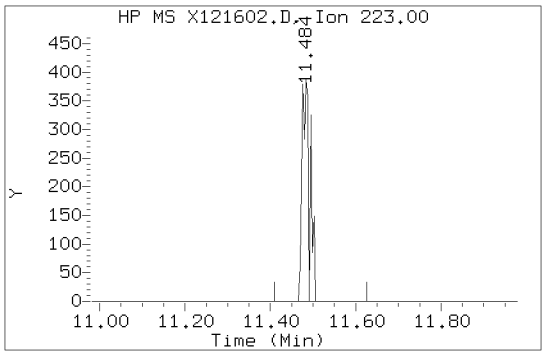
Hexachlorobutadiene (87-68-3)

Reason Code:

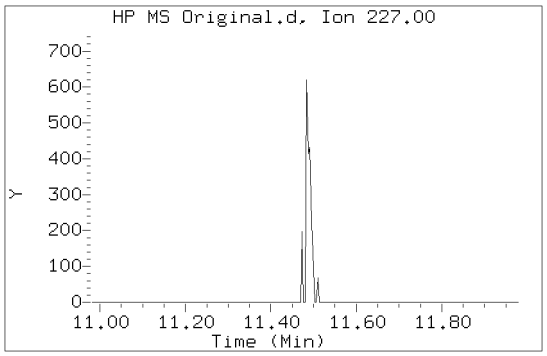
BEFORE
MASS
157
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



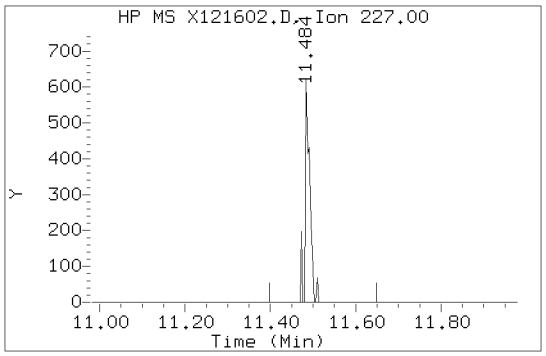
AFTER
MASS
223
AREA
502
HEIGHT
387
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
75
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



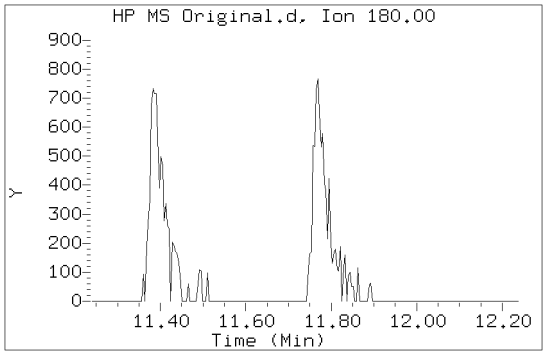
AFTER
MASS
227
AREA
469
HEIGHT
620
27-Dec-2022
16:07
ALSHS
Ser



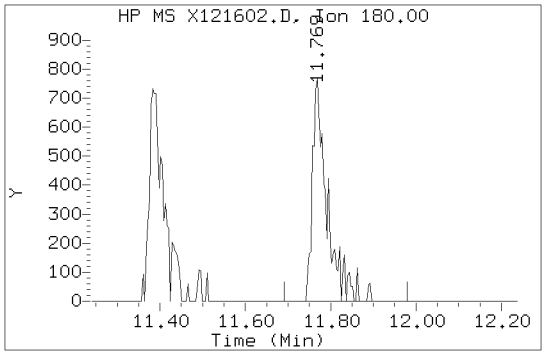
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

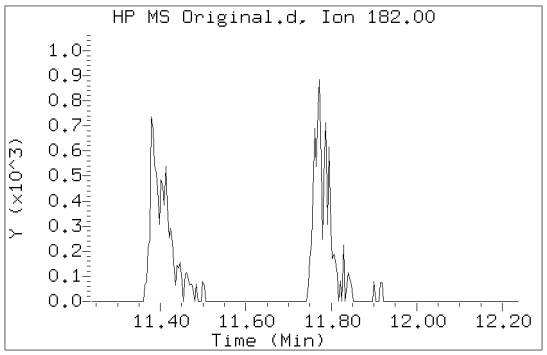
BEFORE
MASS
225
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



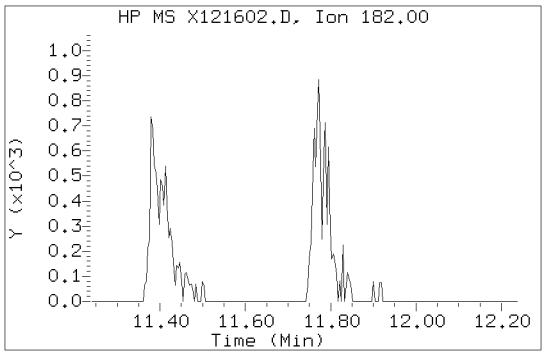
AFTER
MASS
180
AREA
1816
HEIGHT
766
27-Dec-2022
16:07
ALSHS
Ser



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



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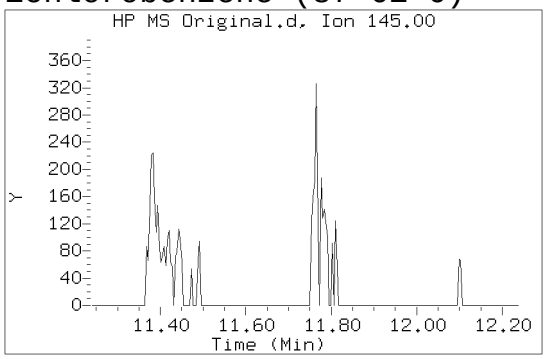
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

BEFORE
MASS
227
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER
MASS
145
AREA
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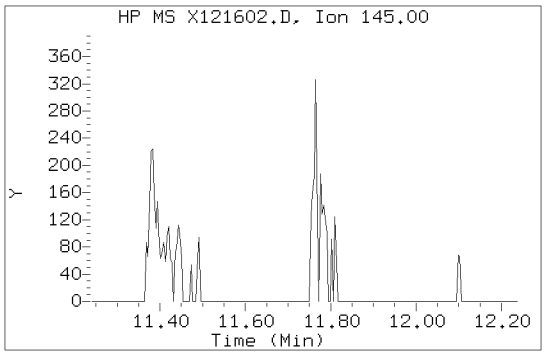
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



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

BEFORE
MASS
53
AREA
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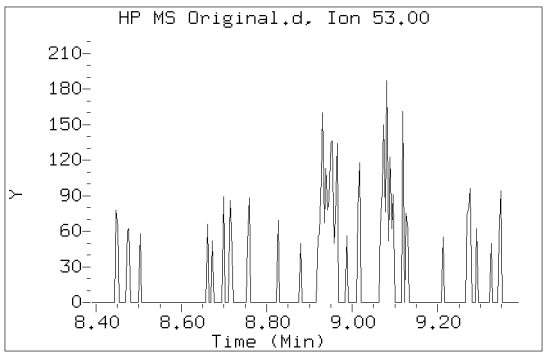
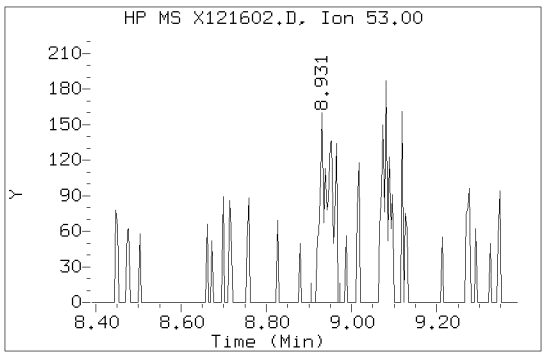
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server

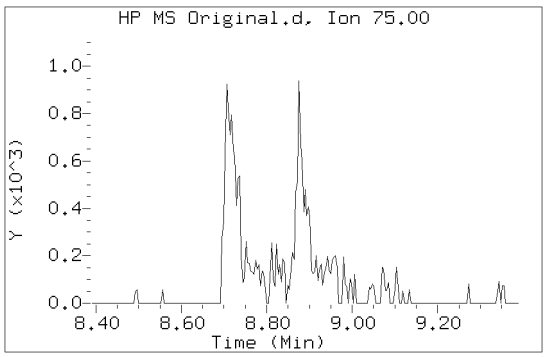


Reason Code:

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
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AREA
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HEIGHT
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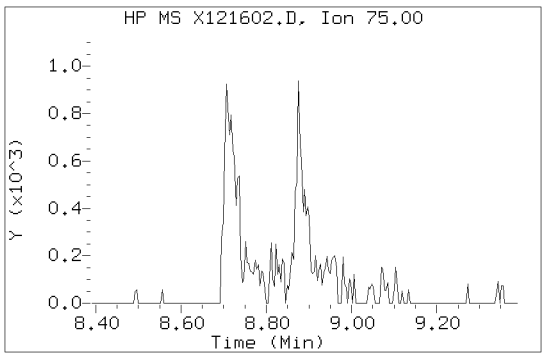
27-Dec-2022
16:07
ALSHS
Ser



1,4-Dioxane ()

BEFORE
MASS
57
AREA
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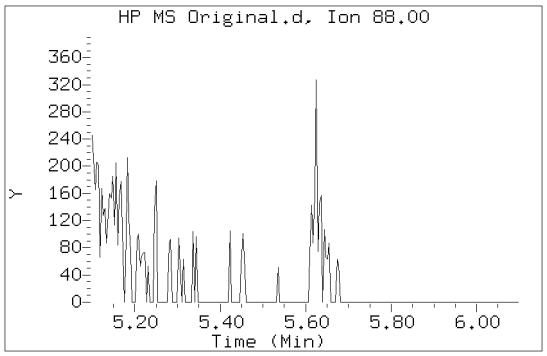
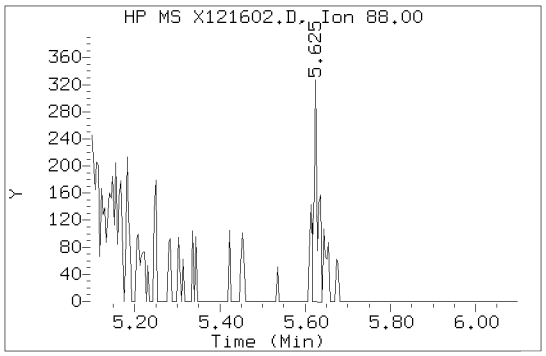
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER
MASS
88
AREA
214
HEIGHT
327
27-Dec-2022
16:07
ALSHS
Ser



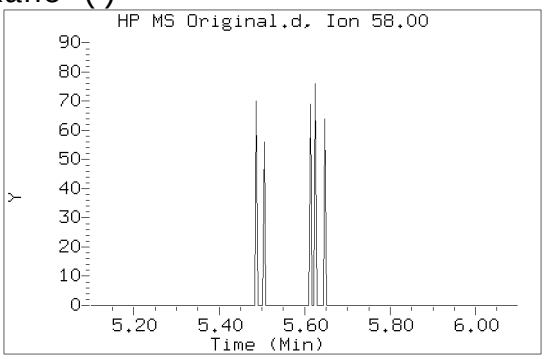
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

BEFORE

MASS
41
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
58
AREA
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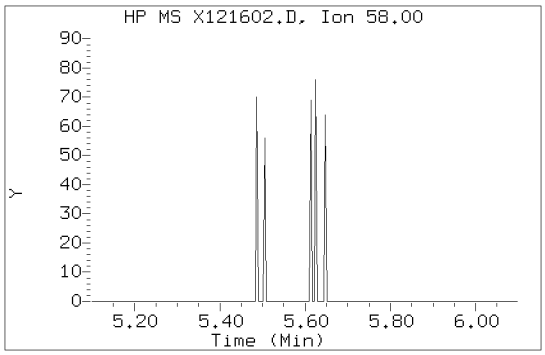
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

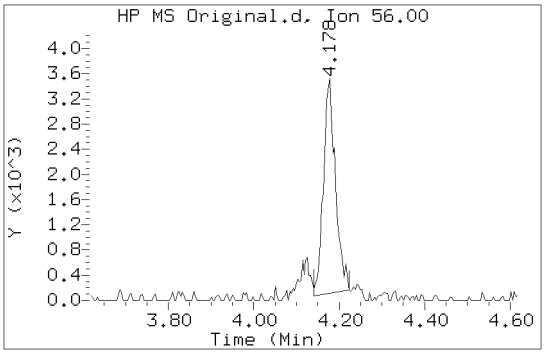


Cyclohexane (110-82-7)

Reason Code:

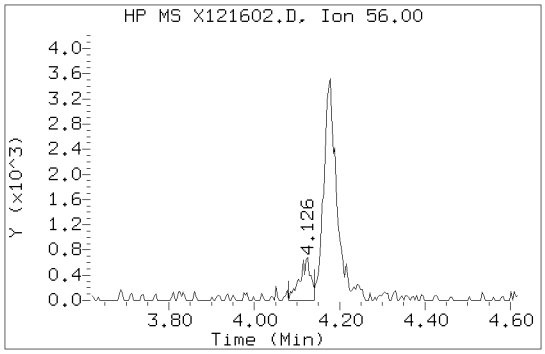
BEFORE

MASS
42
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



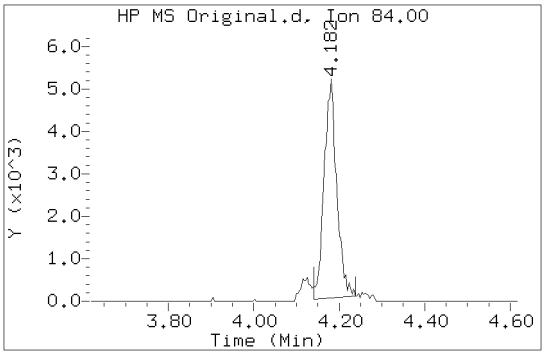
AFTER

MASS
56
AREA
1235
HEIGHT
682
27-Dec-2022
16:07
ALSHS
Ser



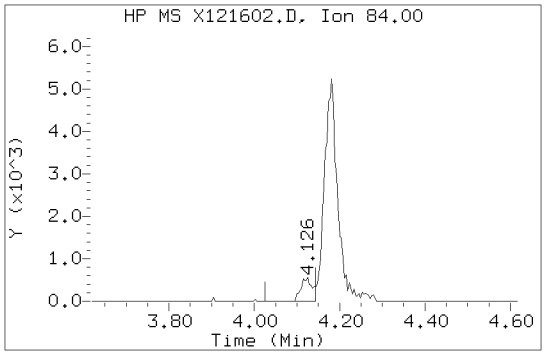
BEFORE

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

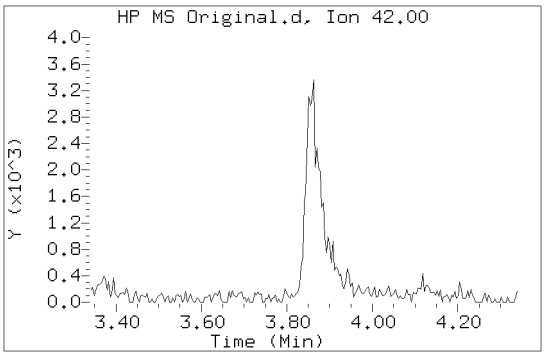


Tetrahydrofuran (109-99-9)

Reason Code:

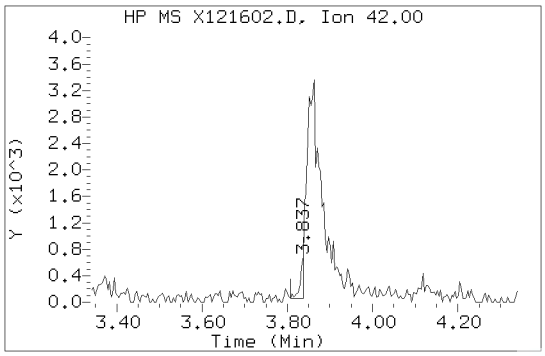
BEFORE

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



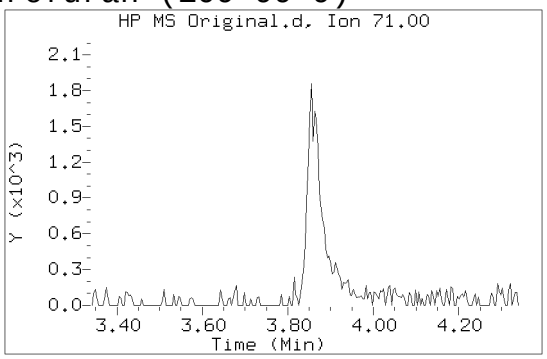
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Tetrahydrofuran (109-99-9)

Reason Code:

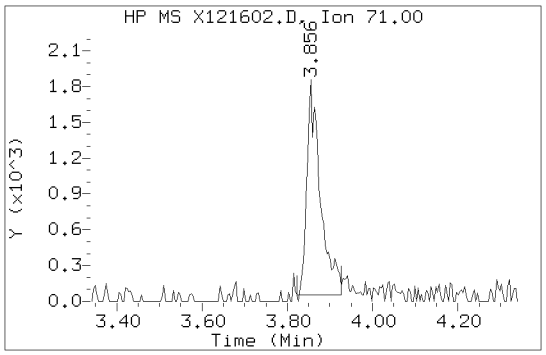
BEFORE

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
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HEIGHT
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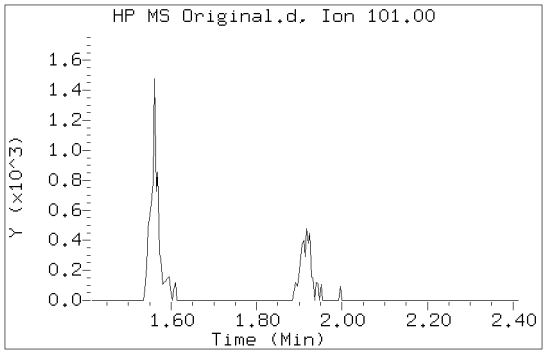
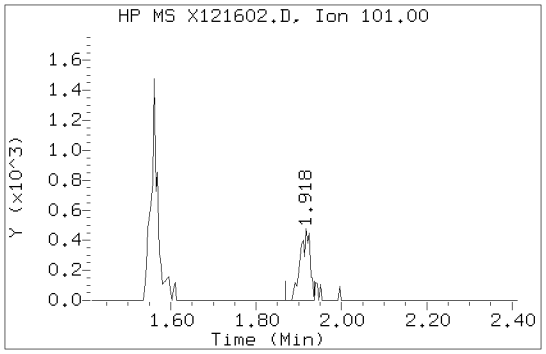
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
101
AREA
765
HEIGHT
479
27-Dec-2022
16:07
ALSHS
Ser



BEFORE

MASS
103
AREA
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HEIGHT
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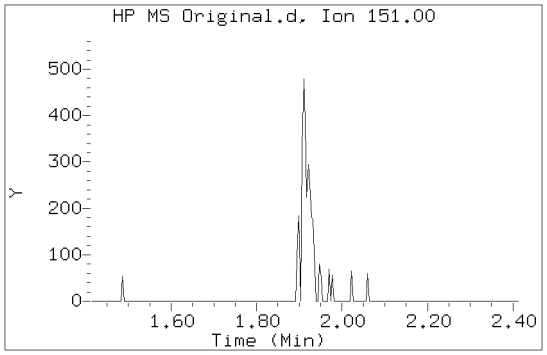
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
151
AREA
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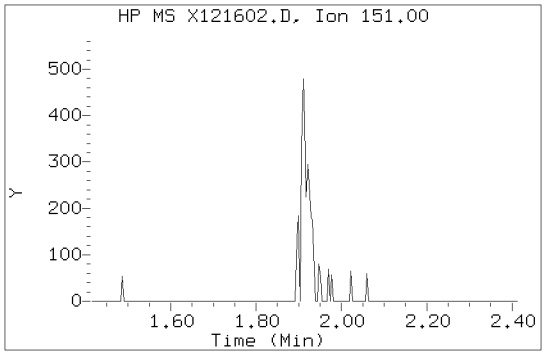
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



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)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D Page 2
Report Date: 27-Dec-2022 16:07

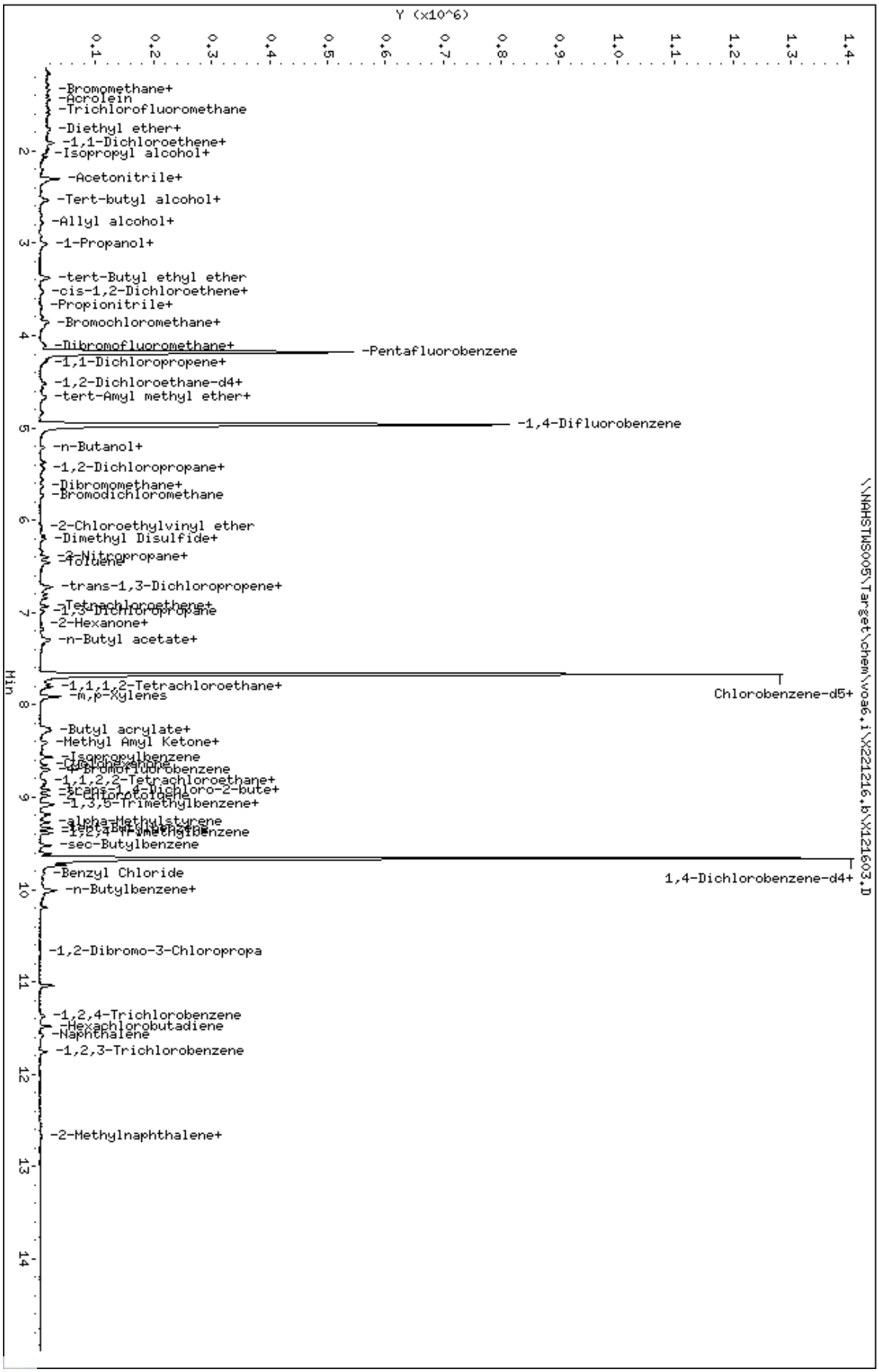
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	162	Butyl acrylate	55	8.271	8.271	(1.079)	4718	0.50000	0.55(M)
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1990	0.50000	1.00(M)
	3	Chloromethane	50	1.077	1.077	(0.258)	2466	0.50000	2.77(M)
	5	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)

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(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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Date : 16-DEC-2022 12:20
Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

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

\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

m,p-Xylenes ()

Reason Code:

BEFORE
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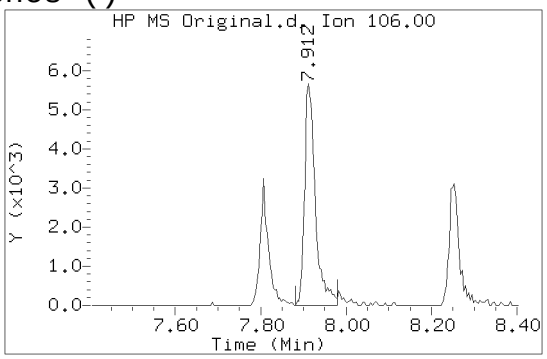
106
AREA
10070
HEIGHT
5666
27-Dec-2022
16:03
linh
pham



AFTER
MASS
106
AREA
9016
HEIGHT
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27-Dec-2022
16:07
linh
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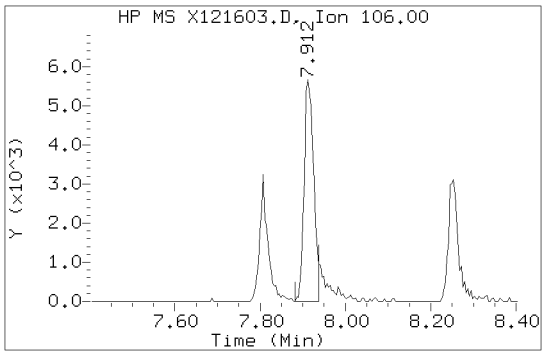
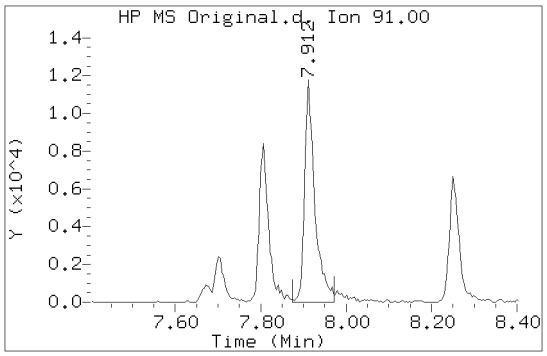


BEFORE
MASS
91
AREA
19887
HEIGHT
11768
27-Dec-2022
16:03
linh
pham



AFTER
MASS
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AREA
19887
HEIGHT
11768
27-Dec-2022
16:07
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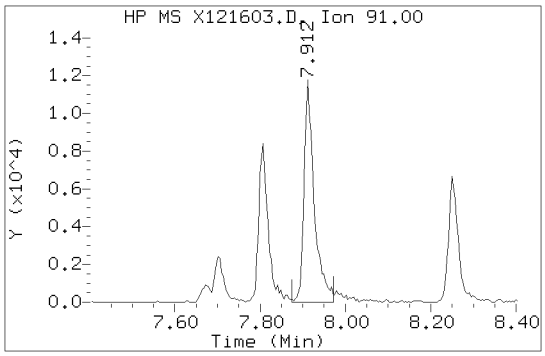
pham



Dichlorodifluoromethane (75-71-8)

Reason Code:

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AREA
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HEIGHT
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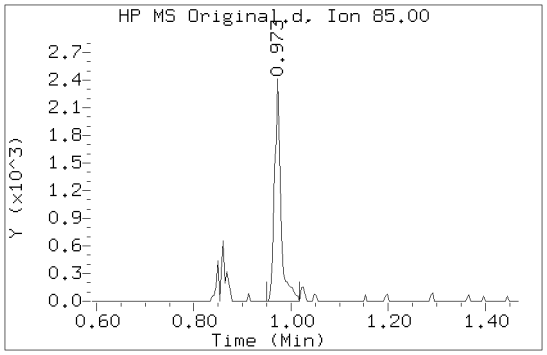
27-Dec-2022
16:03
linh
pham



AFTER
MASS
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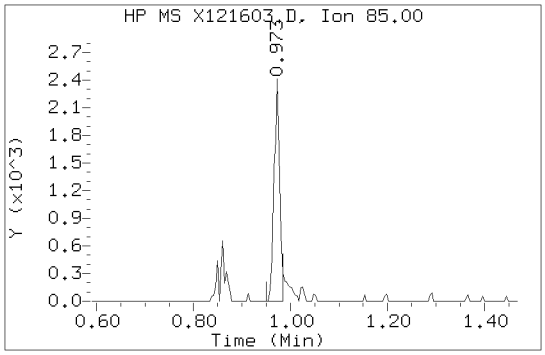
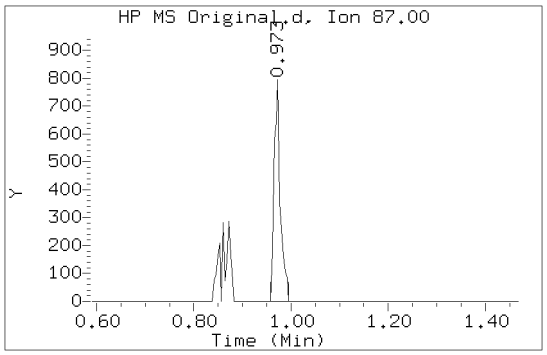
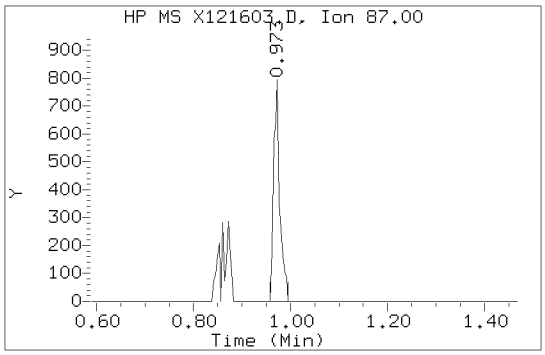
AREA
1990
HEIGHT
2413
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
87
AREA
713
HEIGHT
795
27-Dec-2022
16:03
linh
pham



AFTER
MASS
87
AREA
713
HEIGHT
795
27-Dec-2022
16:07
linh
pham



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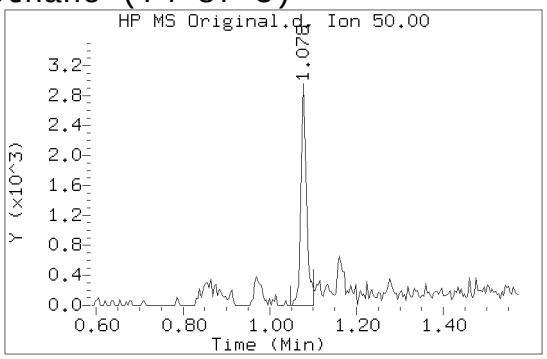
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloromethane (74-87-3)

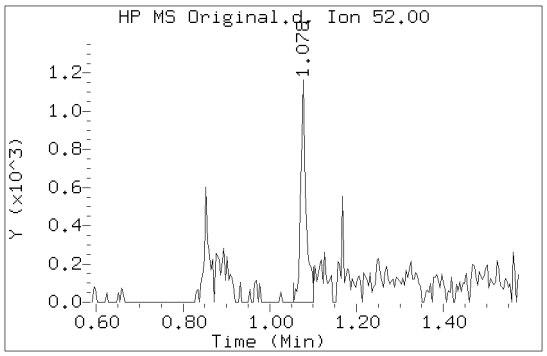
BEFORE

MASS
50
AREA
2589
HEIGHT
2959
27-Dec-2022
16:03
linh
pham



BEFORE

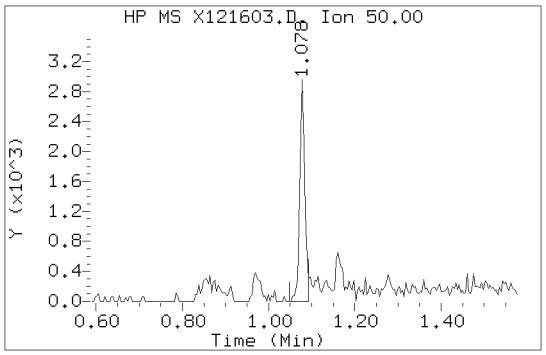
MASS
52
AREA
985
HEIGHT
1164
27-Dec-2022
16:03
linh
pham



Reason Code:

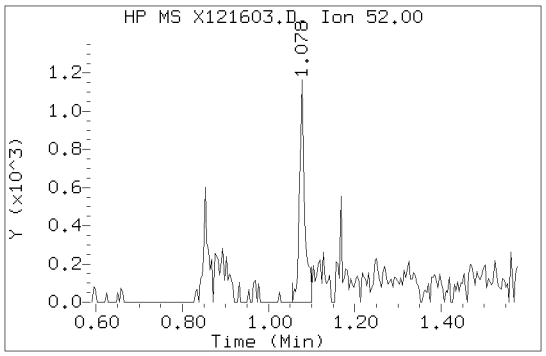
AFTER

MASS
50
AREA
2466
HEIGHT
2959
27-Dec-2022
16:07
linh
pham



AFTER

MASS
52
AREA
985
HEIGHT
1164
27-Dec-2022
16:07
linh
pham



Vinyl Chloride (75-01-4)

BEFORE

MASS
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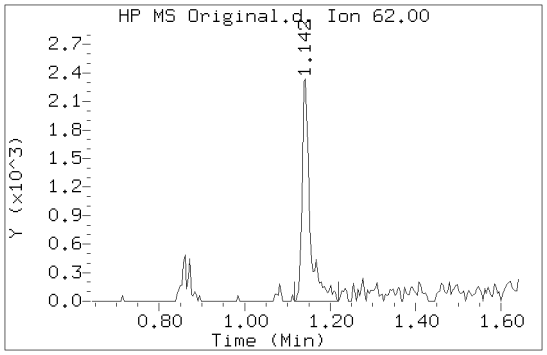
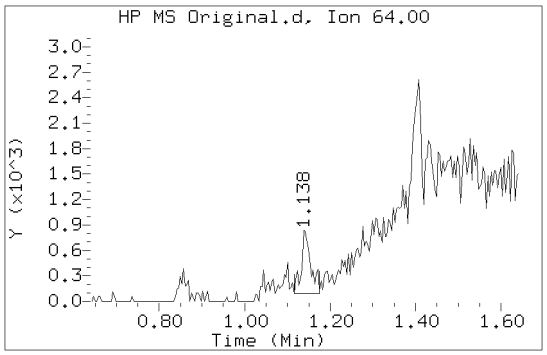
AREA
3132
HEIGHT
2337
27-Dec-2022
16:03
linh
pham



BEFORE

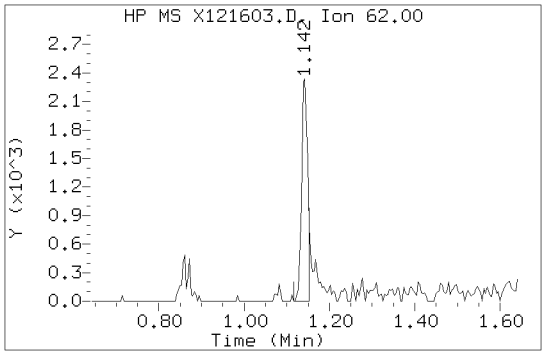
MASS
64
AREA
1174
HEIGHT
750
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
62
AREA
2412
HEIGHT
2337
27-Dec-2022
16:07
linh
pham



AFTER

MASS
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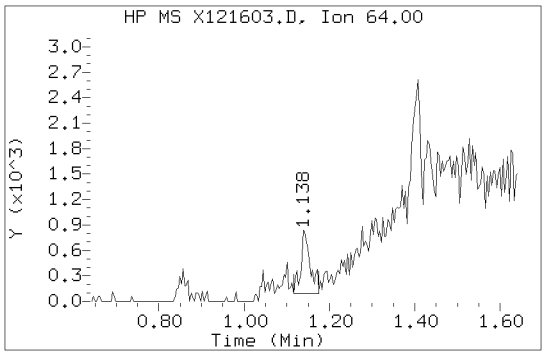
AREA
1174
HEIGHT
750
27-Dec-2022
16:07
linh
pham



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
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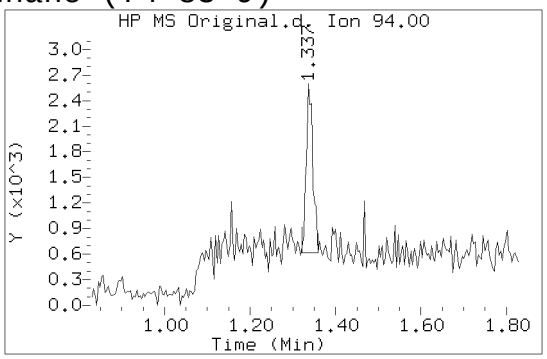
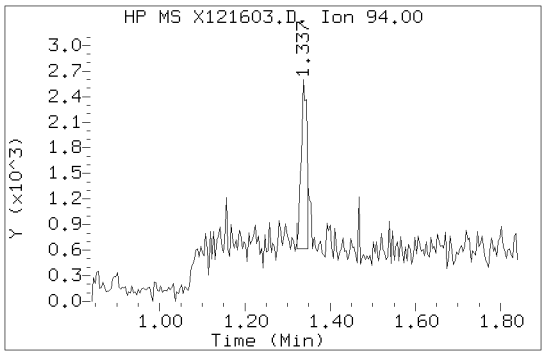
AREA
2146
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



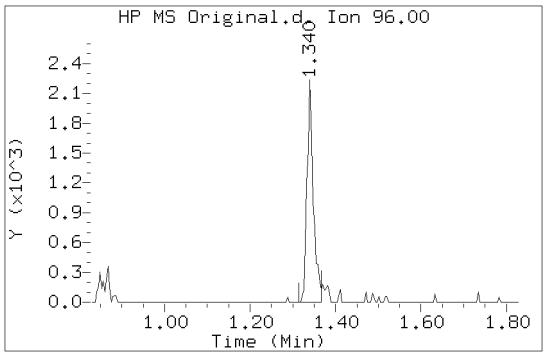
AFTER

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
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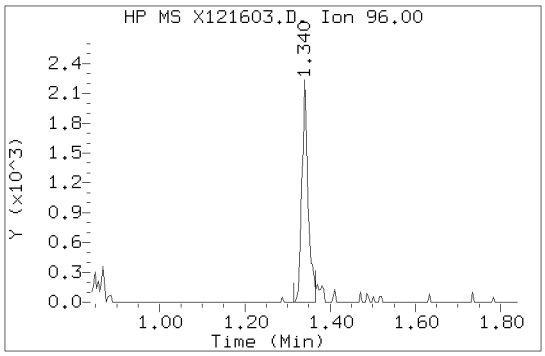
AREA
2304
HEIGHT
2236
27-Dec-2022
16:07
linh
pham



Chloroethane (75-00-3)

Reason Code:

BEFORE

MASS
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AREA
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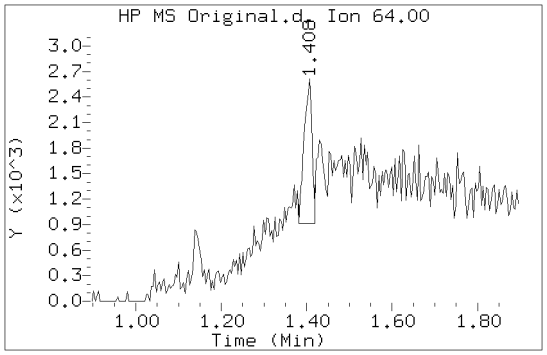
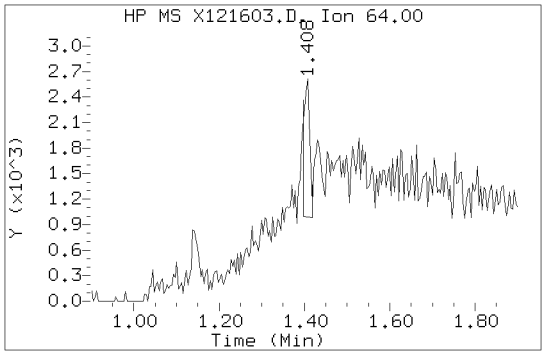
HEIGHT
1702
27-Dec-2022
16:03
linh
pham



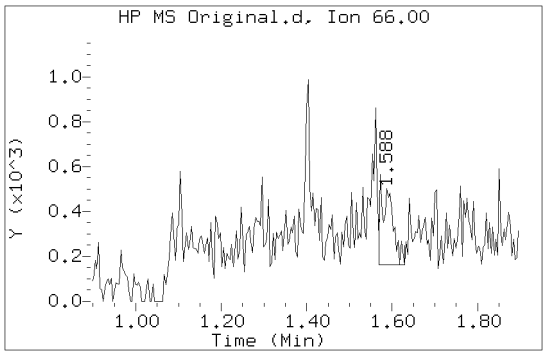
AFTER

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
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AREA
677
HEIGHT
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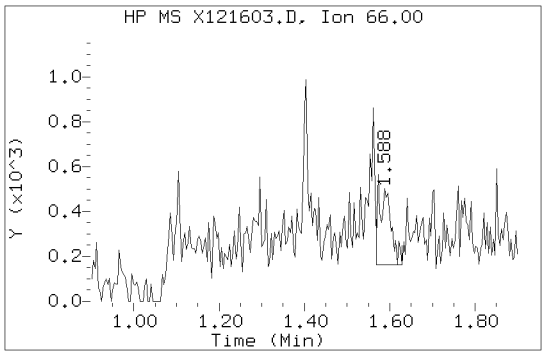
27-Dec-2022
16:07
linh
pham



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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
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AREA
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HEIGHT
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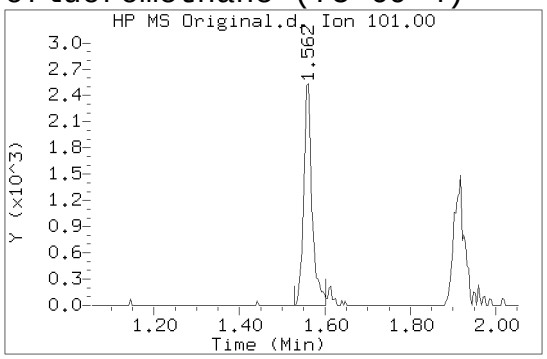
27-Dec-2022
16:03
linh
pham



AFTER

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16:07
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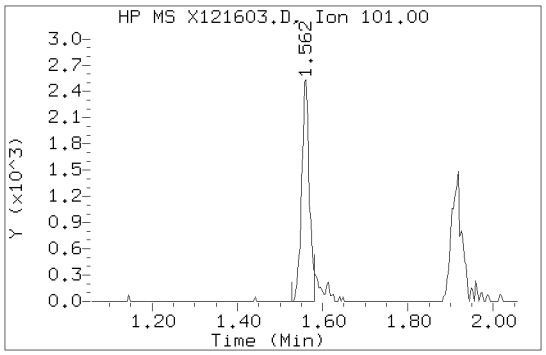

BEFORE

MASS
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27-Dec-2022
16:03
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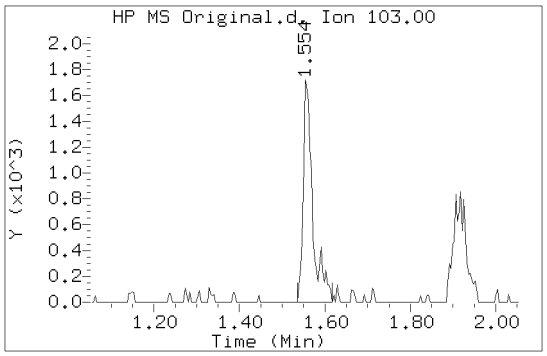

AFTER

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27-Dec-2022
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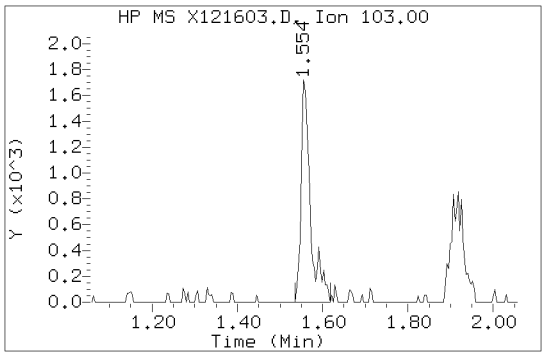

Acrolein (107-02-8)

Reason Code:

BEFORE

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AREA
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HEIGHT
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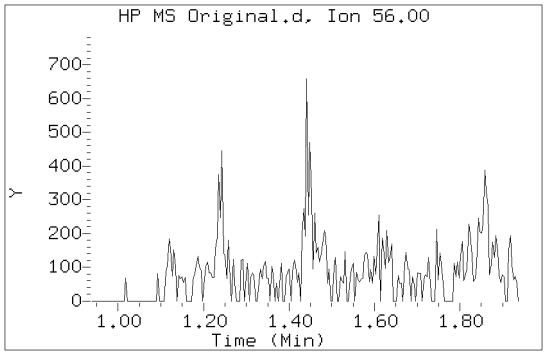
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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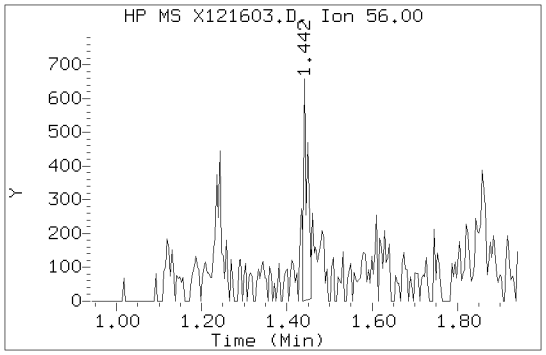
27-Dec-2022
16:07
linh
pham



BEFORE

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16:03
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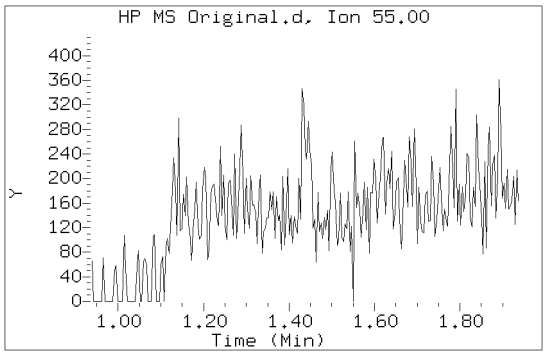

AFTER

MASS
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AREA
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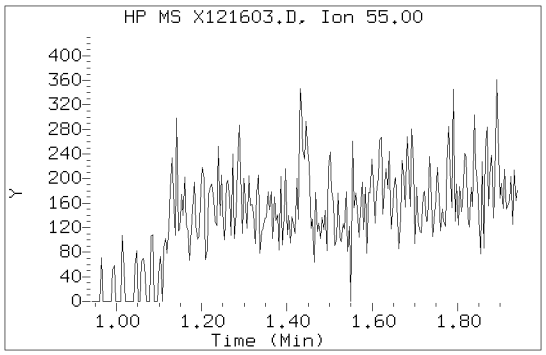
HEIGHT
0
27-Dec-2022
16:07
linh
pham



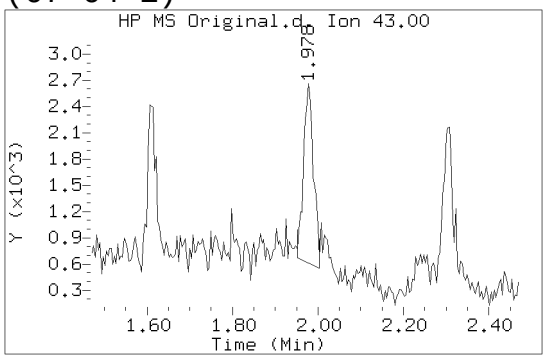
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acetone (67-64-1)

Reason Code:

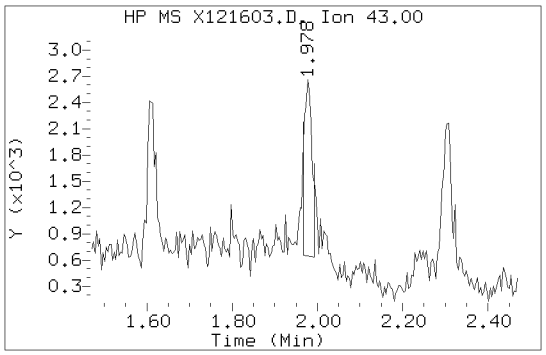
BEFORE

MASS
43
AREA
3388
HEIGHT
2046
27-Dec-2022
16:03
linh
pham



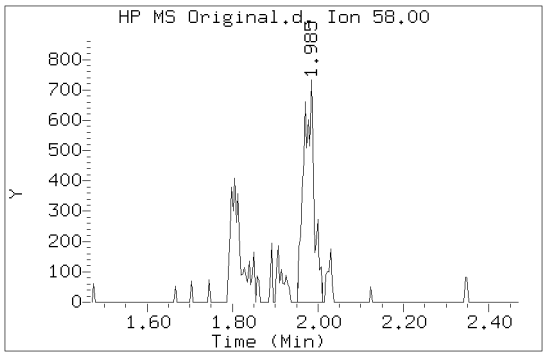
AFTER

MASS
43
AREA
2669
HEIGHT
2015
27-Dec-2022
16:07
linh
pham



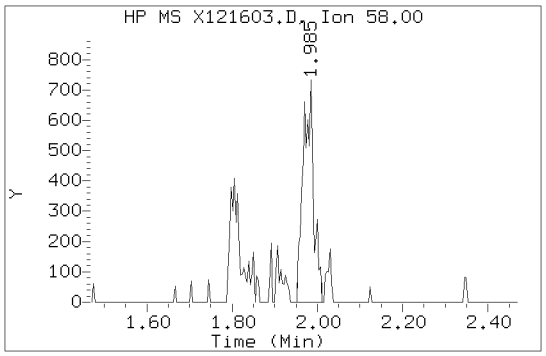
BEFORE

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

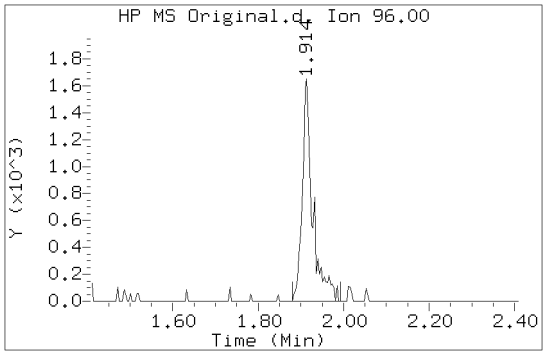


1,1-Dichloroethene (75-35-4)

Reason Code:

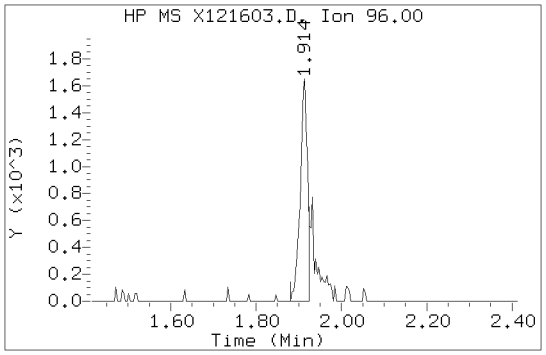
BEFORE

MASS
96
AREA
2836
HEIGHT
1651
27-Dec-2022
16:03
linh
pham



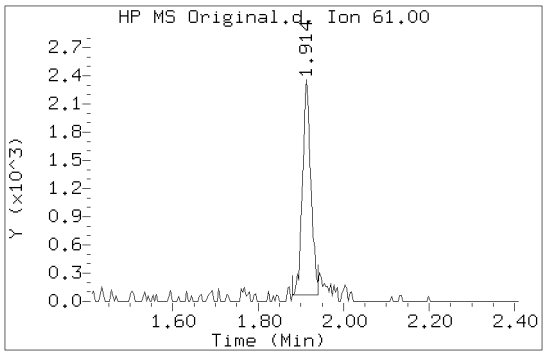
AFTER

MASS
96
AREA
2037
HEIGHT
1651
27-Dec-2022
16:07
linh
pham



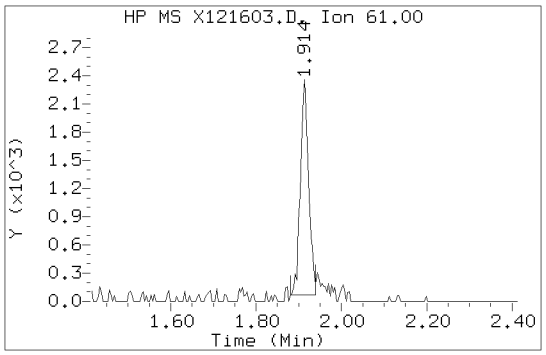
BEFORE

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



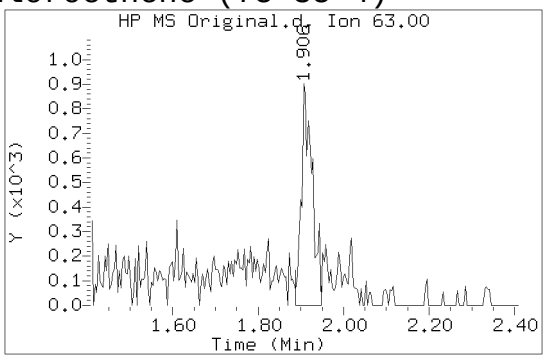
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

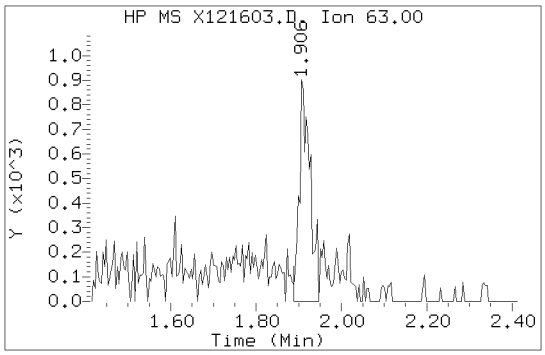
BEFORE

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

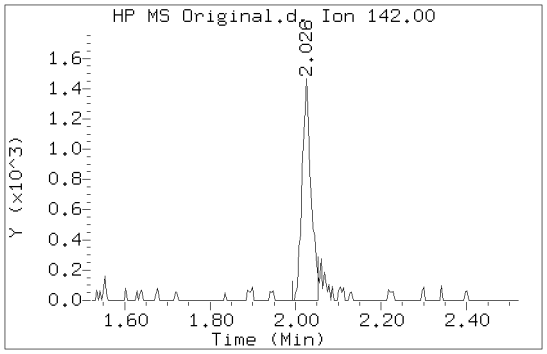


Iodomethane (74-88-4)

Reason Code:

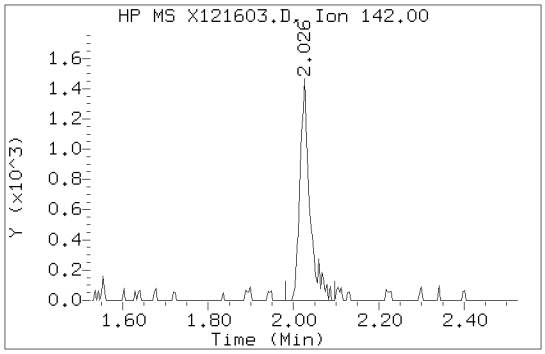
BEFORE

MASS
142
AREA
2166
HEIGHT
1466
27-Dec-2022
16:03
linh
pham



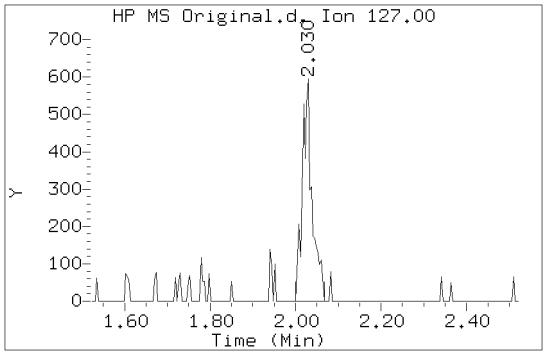
AFTER

MASS
142
AREA
2397
HEIGHT
1466
27-Dec-2022
16:07
linh
pham



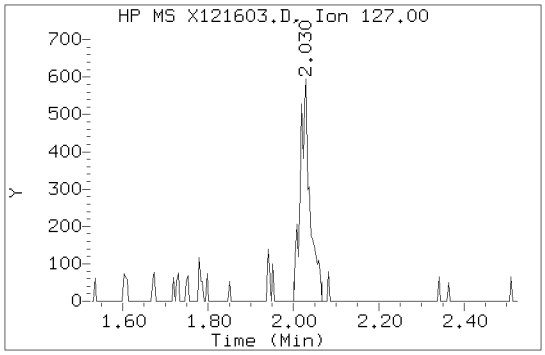
BEFORE

MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:03
linh
pham



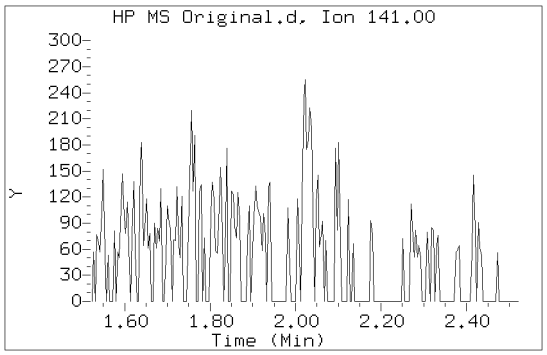
AFTER

MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:07
linh
pham



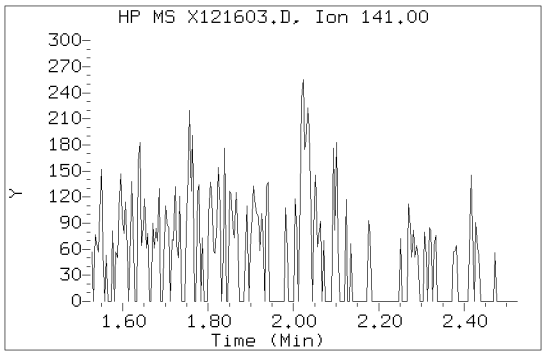
BEFORE

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

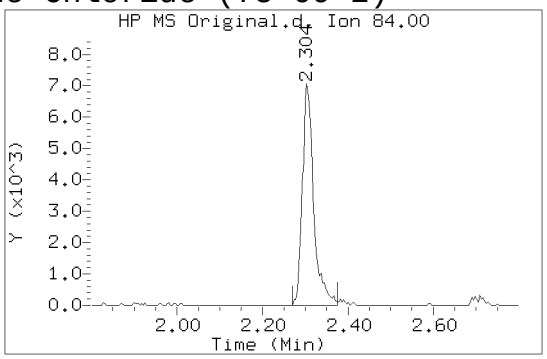


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

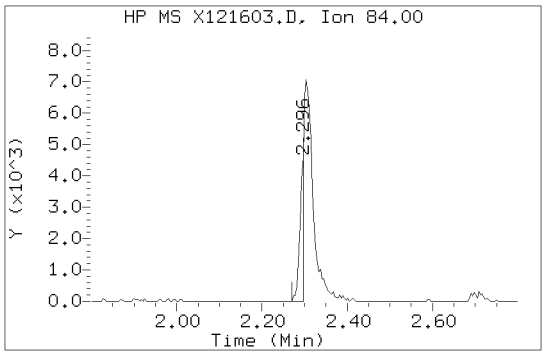
Methylene Chloride (75-09-2)

Reason Code:

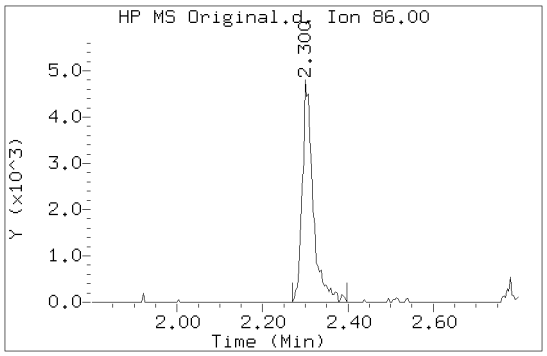
BEFORE
MASS
84
AREA
13307
HEIGHT
7067
27-Dec-2022
16:03
linh
pham



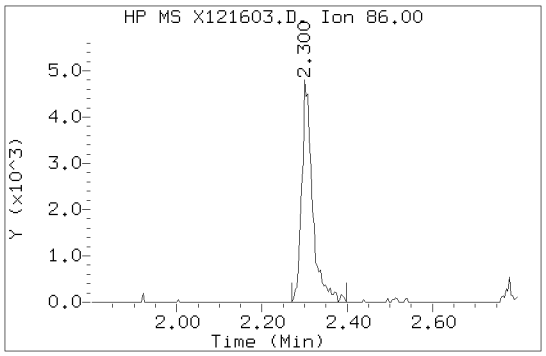
AFTER
MASS
84
AREA
2938
HEIGHT
4595
27-Dec-2022
16:07
linh
pham



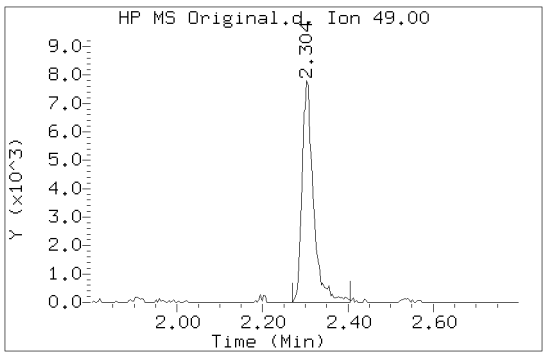
BEFORE
MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:03
linh
pham



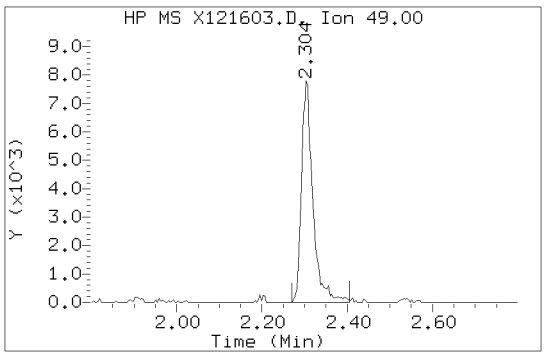
AFTER
MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
49
AREA
14733
HEIGHT
7803
27-Dec-2022
16:03
linh
pham



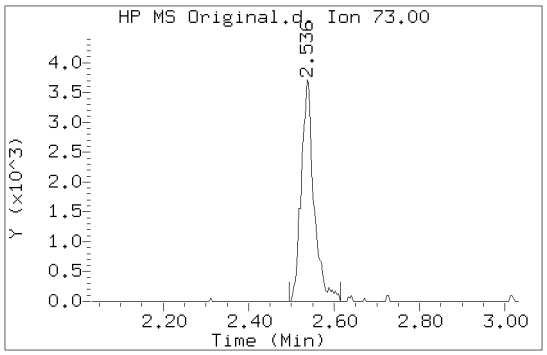
AFTER
MASS
49
AREA
14733
HEIGHT
7803
27-Dec-2022
16:07
linh
pham



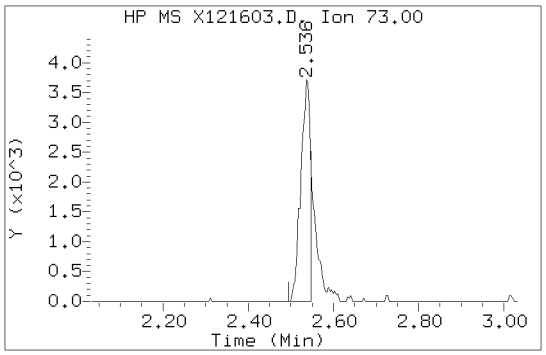
Methyl tert-butyl ether (1634-04-4)

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

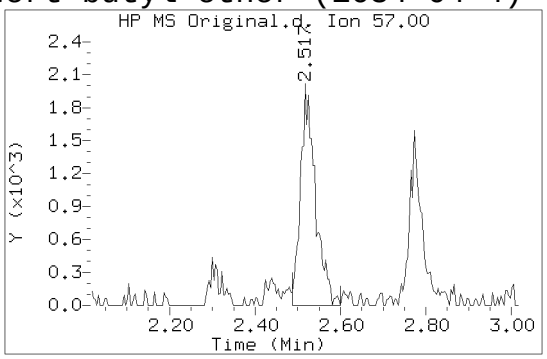


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl tert-butyl ether (1634-04-4)

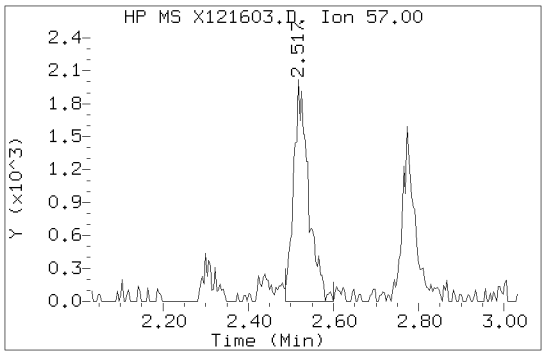
BEFORE

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

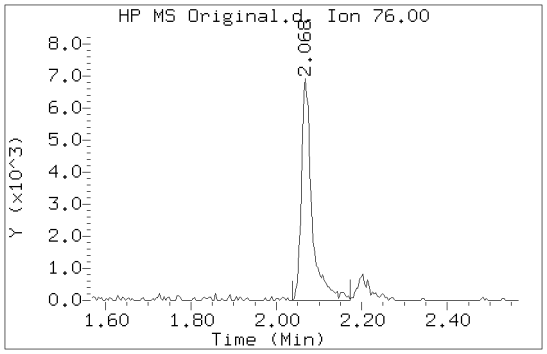


Reason Code:

Carbon Disulfide (75-15-0)

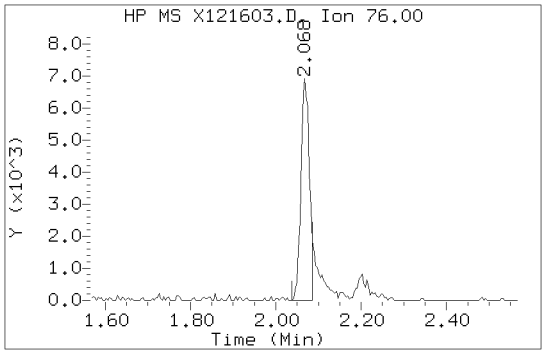
BEFORE

MASS
76
AREA
12313
HEIGHT
6923
27-Dec-2022
16:03
linh
pham



AFTER

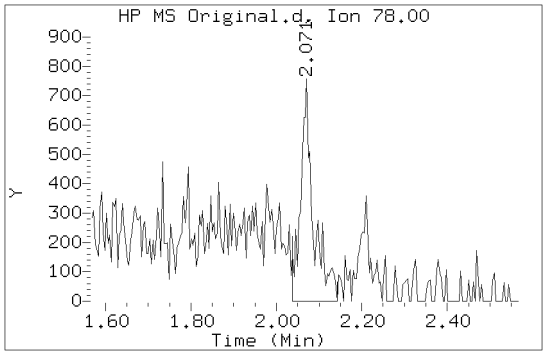
MASS
76
AREA
9921
HEIGHT
6923
27-Dec-2022
16:07
linh
pham



Reason Code:

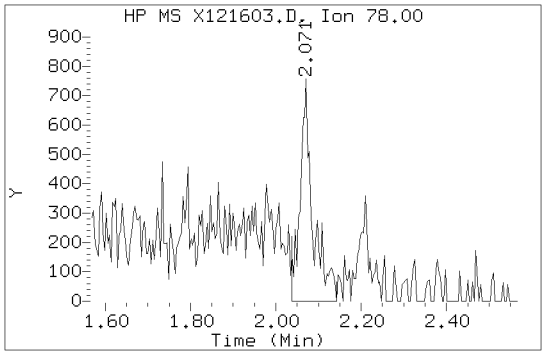
BEFORE

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

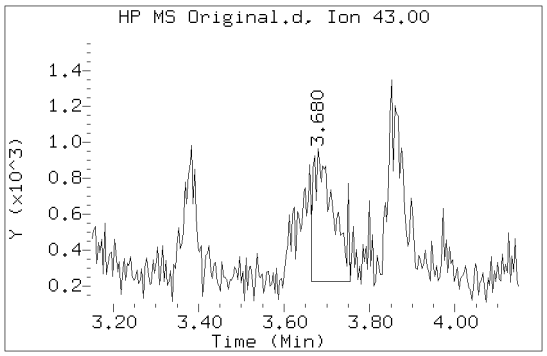


Reason Code:

2-Butanone (78-93-3)

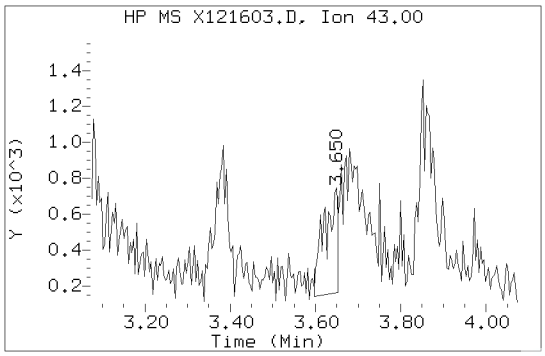
BEFORE

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:

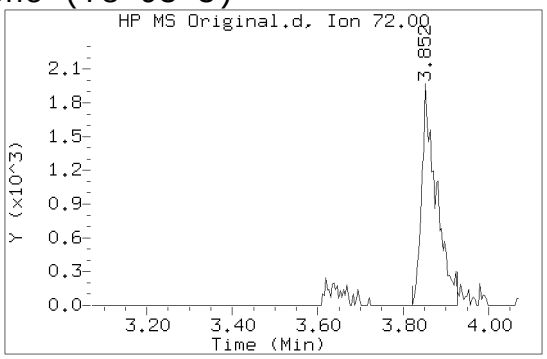
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

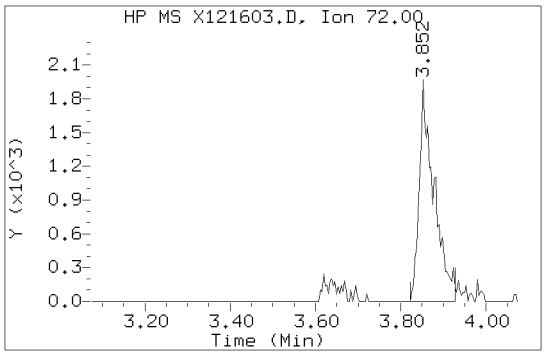
BEFORE

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

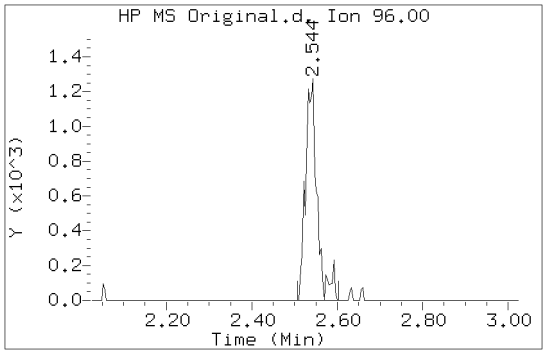


trans-1,2-Dichloroethene (156-60-5)

Reason Code:

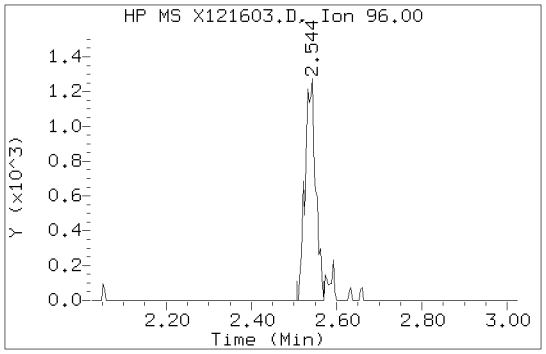
BEFORE

MASS
96
AREA
2404
HEIGHT
1274
27-Dec-2022
16:03
linh
pham



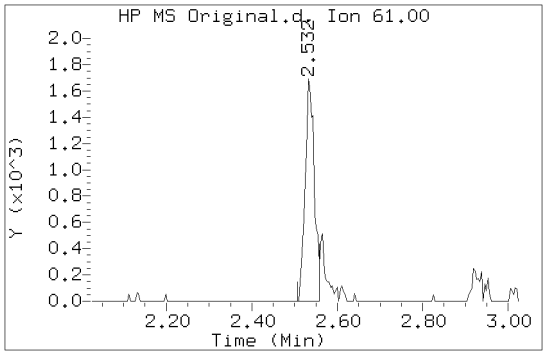
AFTER

MASS
96
AREA
2218
HEIGHT
1274
27-Dec-2022
16:07
linh
pham



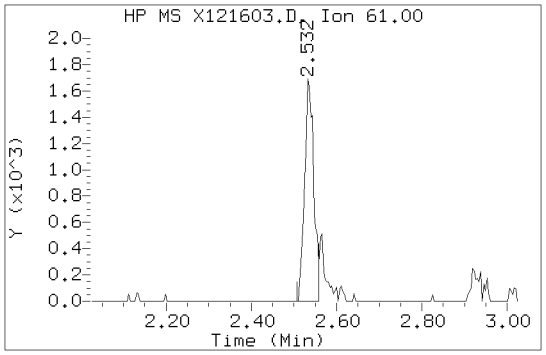
BEFORE

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:03
linh
pham



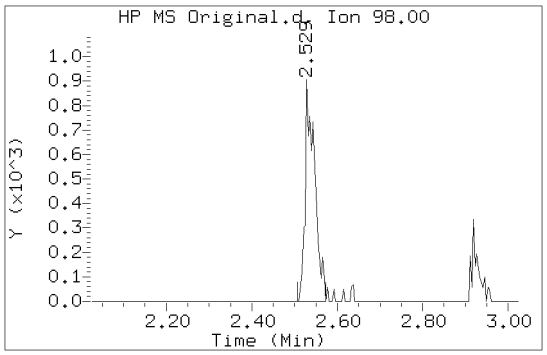
AFTER

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:07
linh
pham



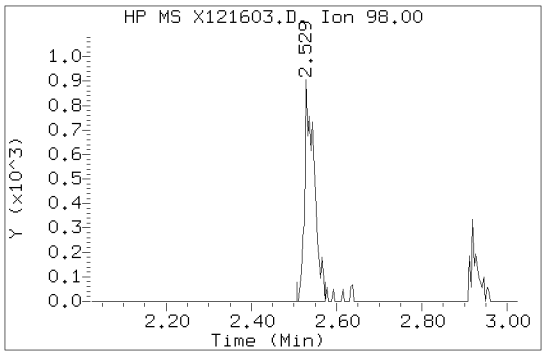
BEFORE

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



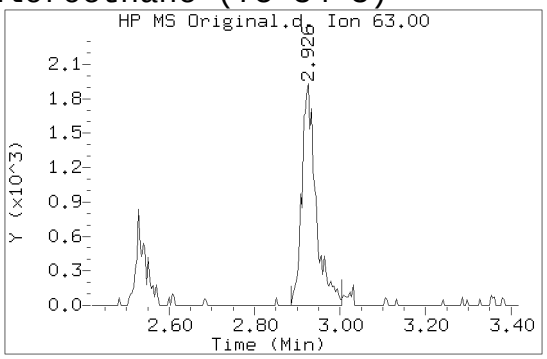
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

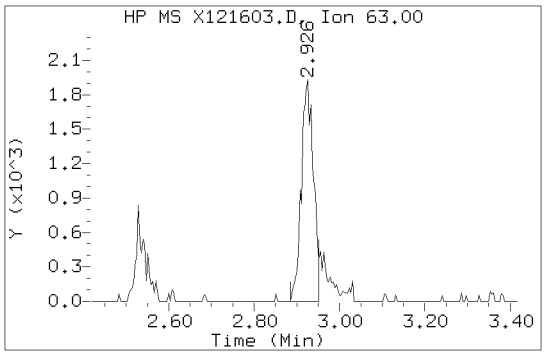
BEFORE

MASS
63
AREA
4504
HEIGHT
1931
27-Dec-2022
16:03
linh
pham



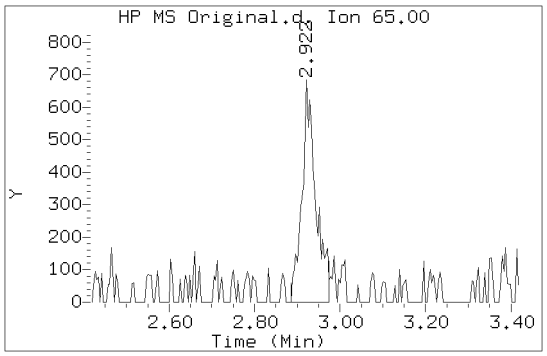
AFTER

MASS
63
AREA
3874
HEIGHT
1931
27-Dec-2022
16:07
linh
pham



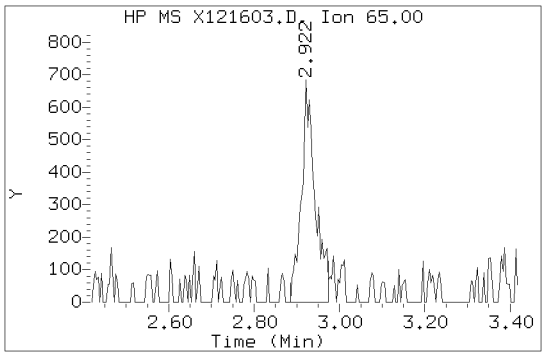
BEFORE

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:03
linh
pham



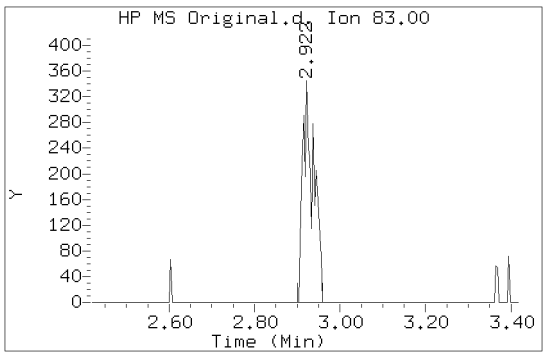
AFTER

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:07
linh
pham



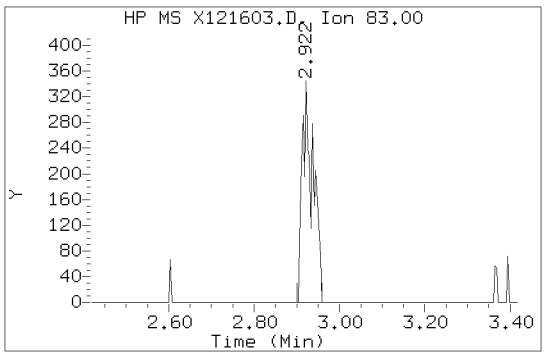
BEFORE

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

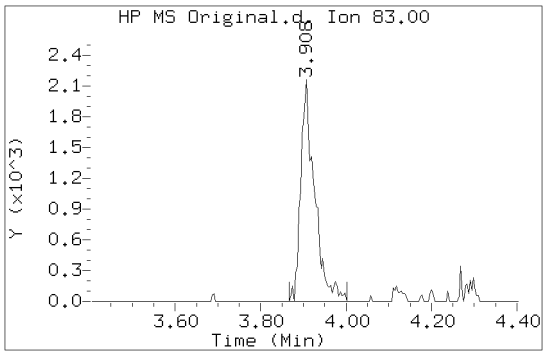


Chloroform (67-66-3)

Reason Code:

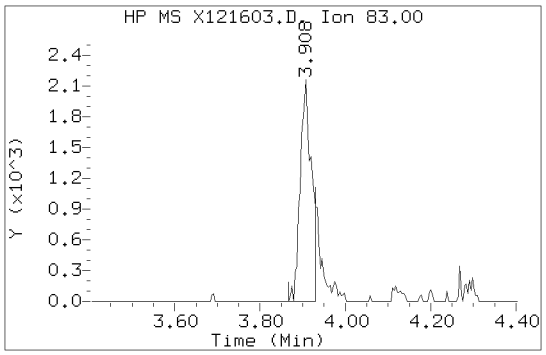
BEFORE

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



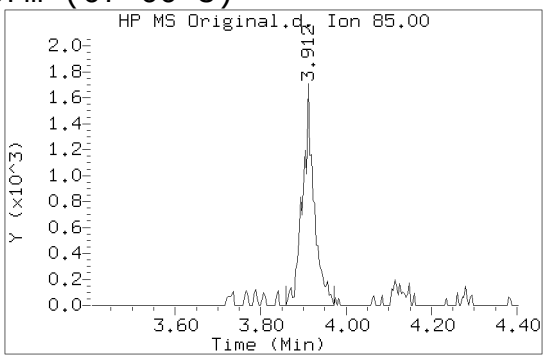
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroform (67-66-3)

Reason Code:

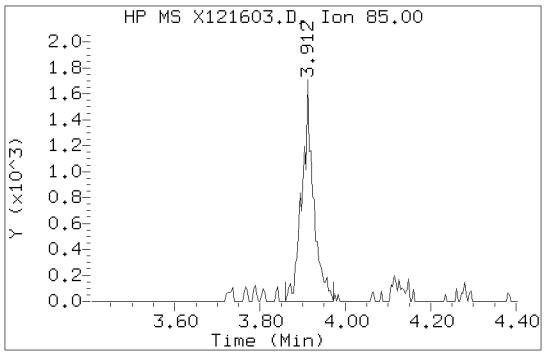
BEFORE

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

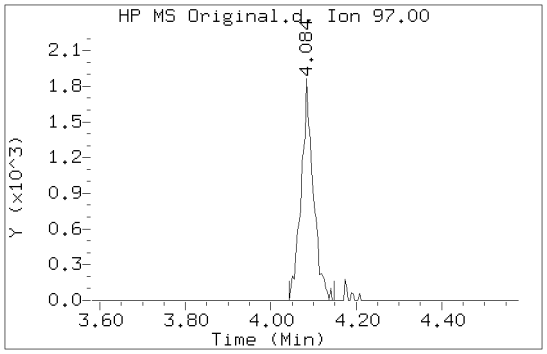


1,1,1-Trichloroethane (71-55-6)

Reason Code:

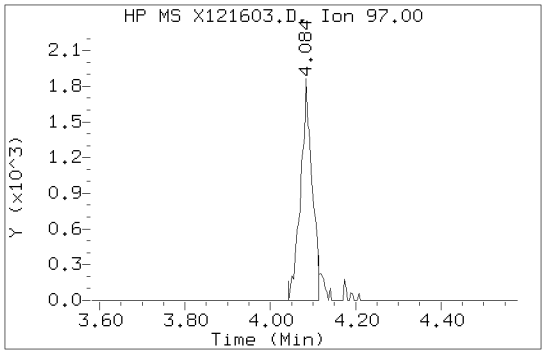
BEFORE

MASS
97
AREA
3710
HEIGHT
1863
27-Dec-2022
16:03
linh
pham



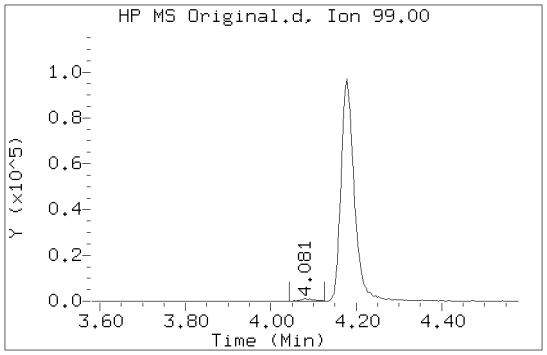
AFTER

MASS
97
AREA
3512
HEIGHT
1863
27-Dec-2022
16:07
linh
pham



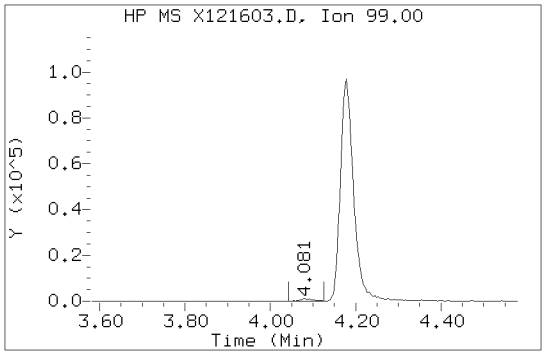
BEFORE

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:03
linh
pham



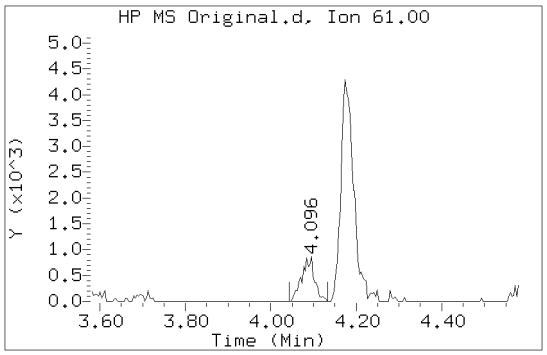
AFTER

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:07
linh
pham



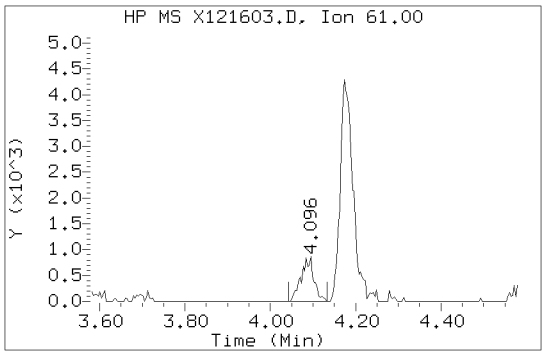
BEFORE

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



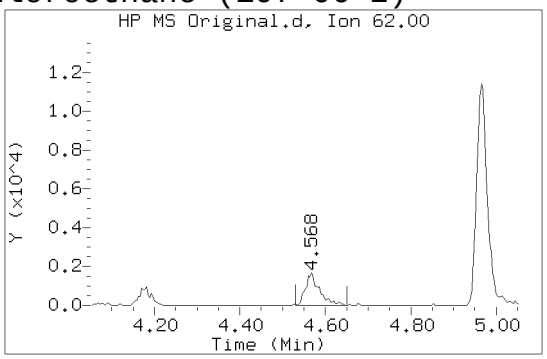
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

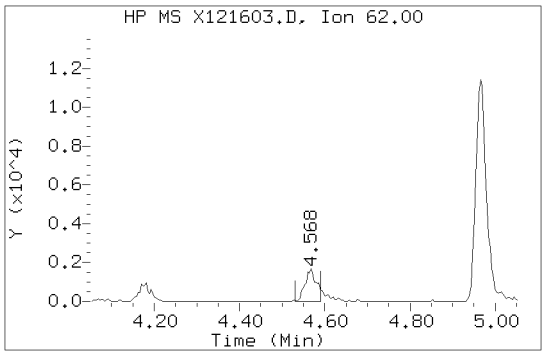
BEFORE

MASS
62
AREA
3822
HEIGHT
1678
27-Dec-2022
16:03
linh
pham



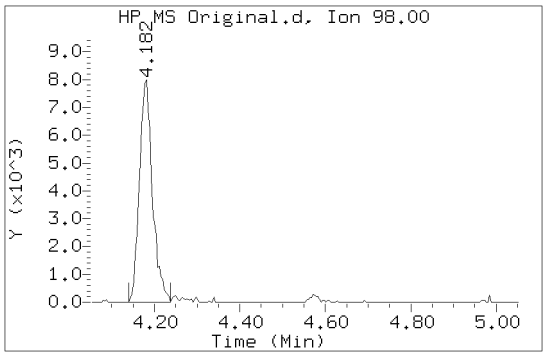
AFTER

MASS
62
AREA
3129
HEIGHT
1678
27-Dec-2022
16:07
linh
pham



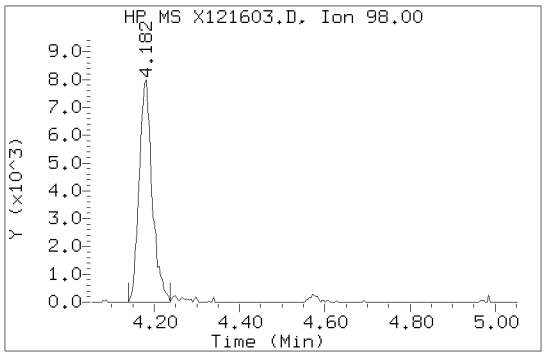
BEFORE

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

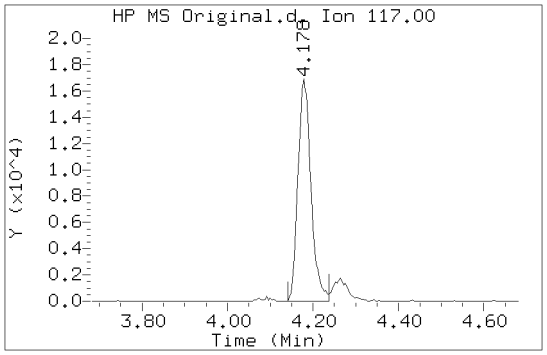


Carbon Tetrachloride (56-23-5)

Reason Code:

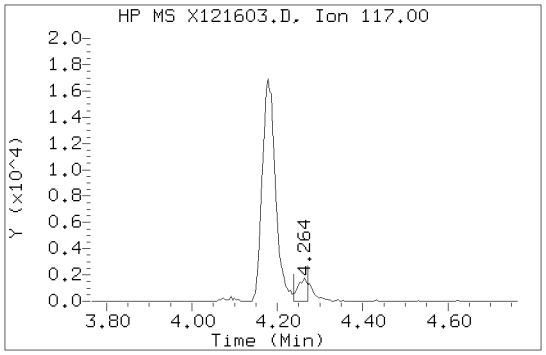
BEFORE

MASS
117
AREA
36559
HEIGHT
16920
27-Dec-2022
16:03
linh
pham



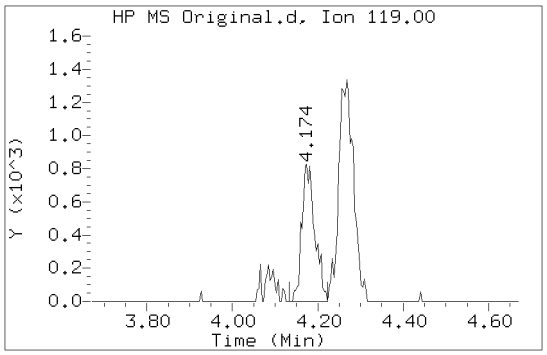
AFTER

MASS
117
AREA
2763
HEIGHT
1744
27-Dec-2022
16:07
linh
pham



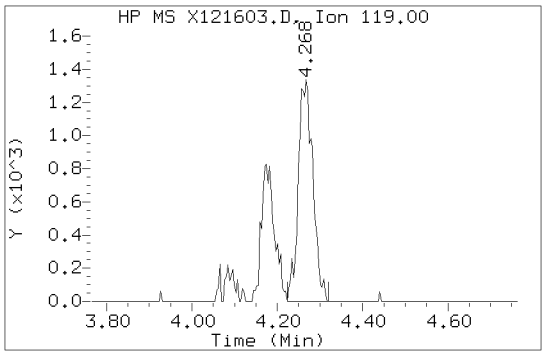
BEFORE

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

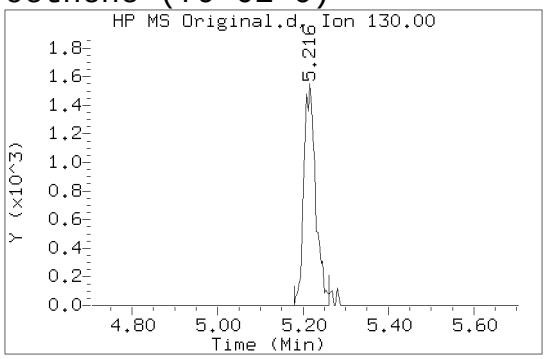


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

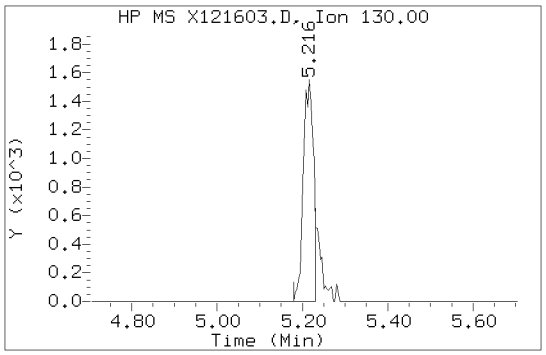
Trichloroethene (79-01-6)

Reason Code:

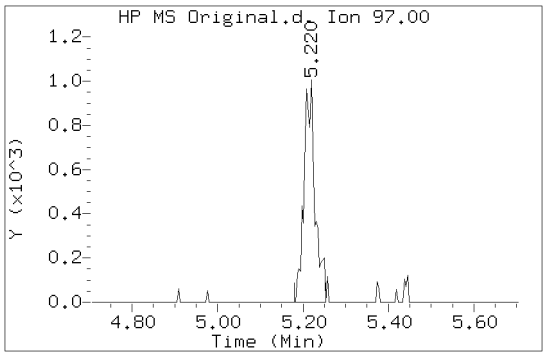
BEFORE
MASS
130
AREA
3011
HEIGHT
1551
27-Dec-2022
16:03
linh
pham



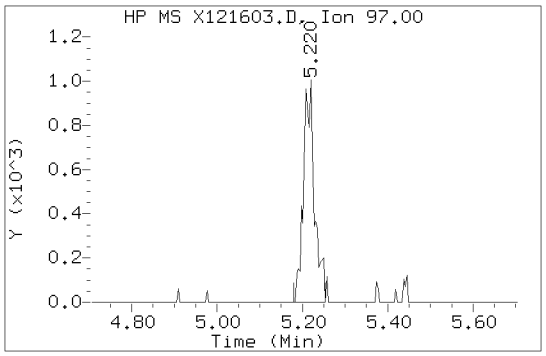
AFTER
MASS
130
AREA
2583
HEIGHT
1551
27-Dec-2022
16:07
linh
pham



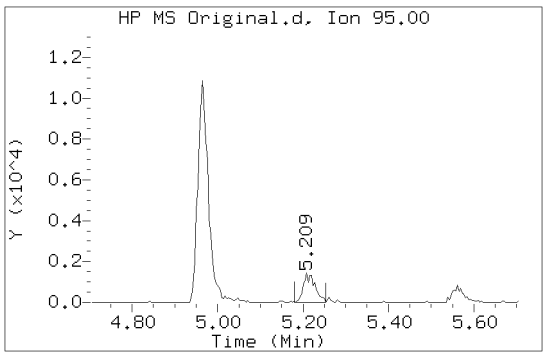
BEFORE
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:03
linh
pham



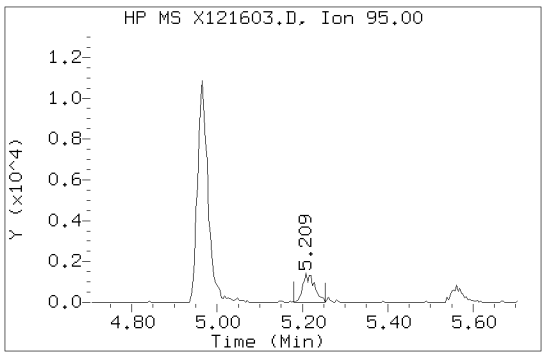
AFTER
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:03
linh
pham



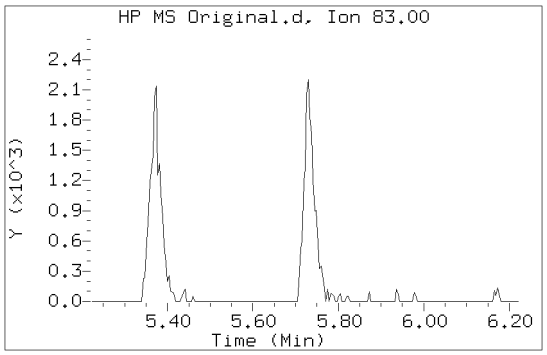
AFTER
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:07
linh
pham



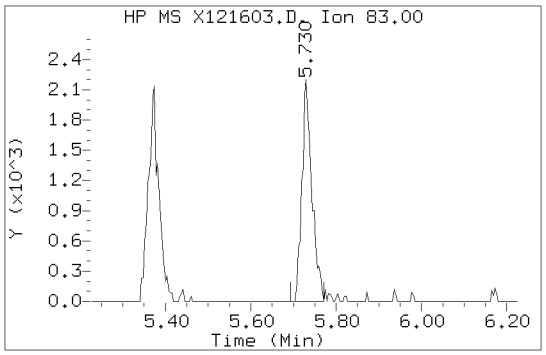
Bromodichloromethane (75-27-4)

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

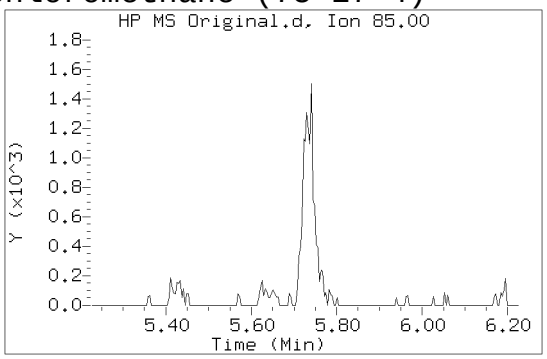


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

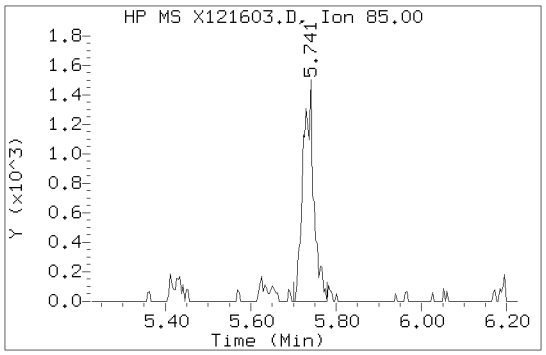
Bromodichloromethane (75-27-4)

Reason Code:

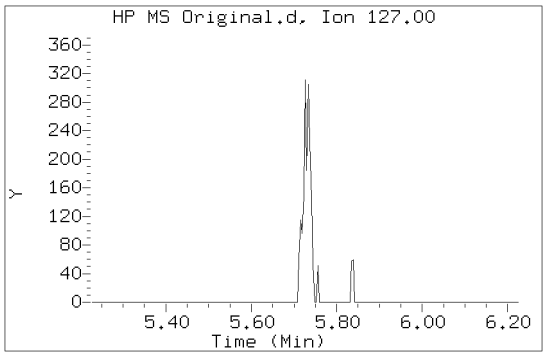
BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



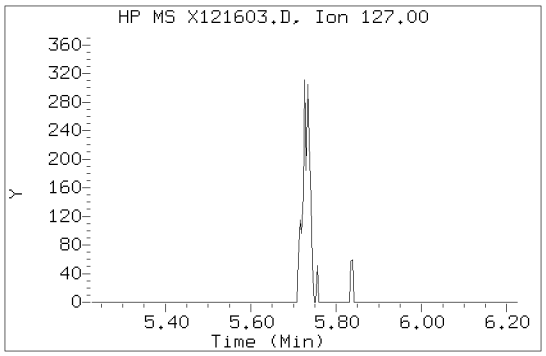
AFTER
MASS
85
AREA
2639
HEIGHT
1503
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



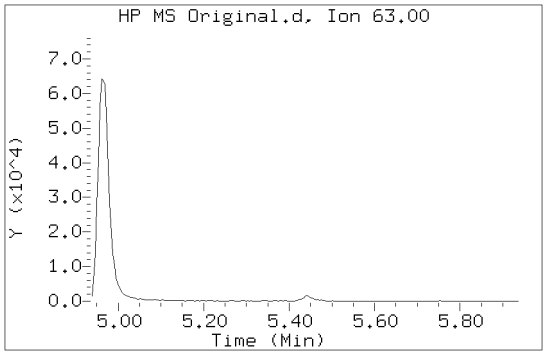
AFTER
MASS
127
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



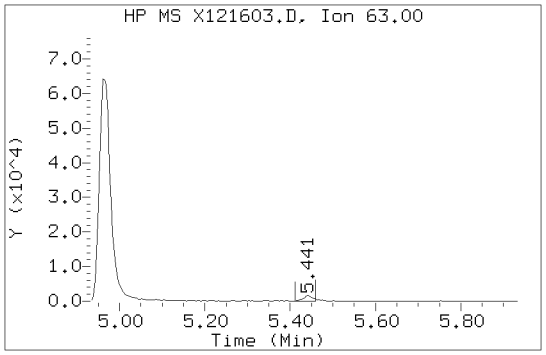
1,2-Dichloropropane (78-87-5)

Reason Code:

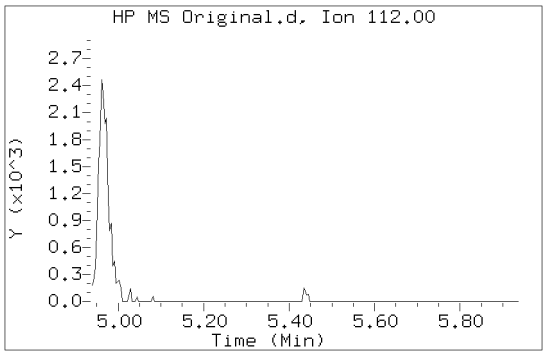
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



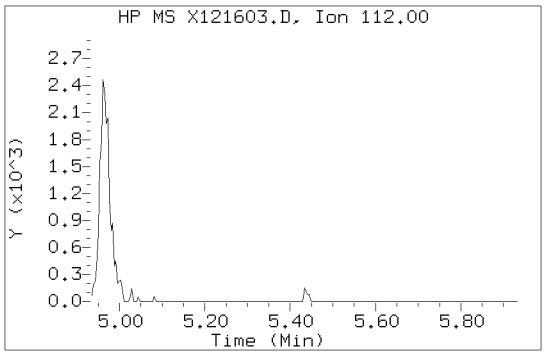
AFTER
MASS
63
AREA
2449
HEIGHT
1587
27-Dec-2022
16:07
linh
pham



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



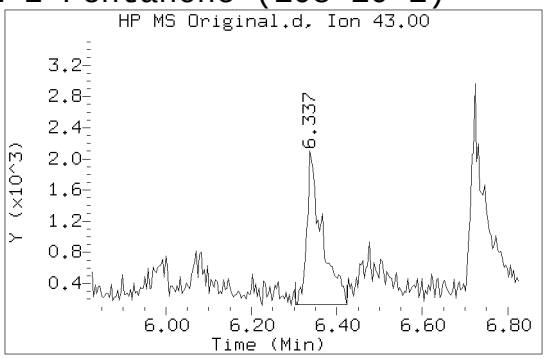
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

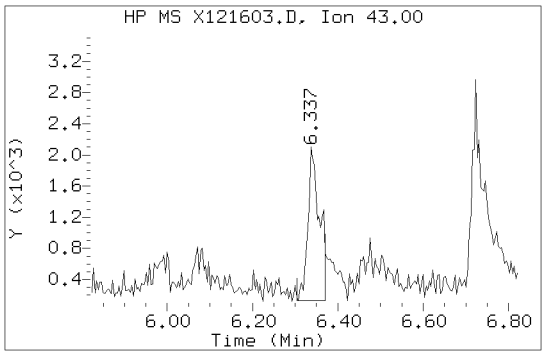
BEFORE

MASS
43
AREA
4873
HEIGHT
1970
27-Dec-2022
16:03
linh
pham



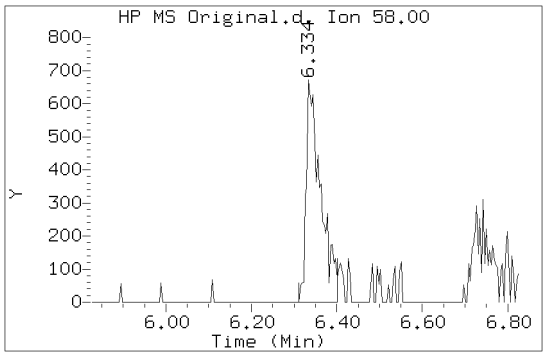
AFTER

MASS
43
AREA
3741
HEIGHT
1970
27-Dec-2022
16:07
linh
pham



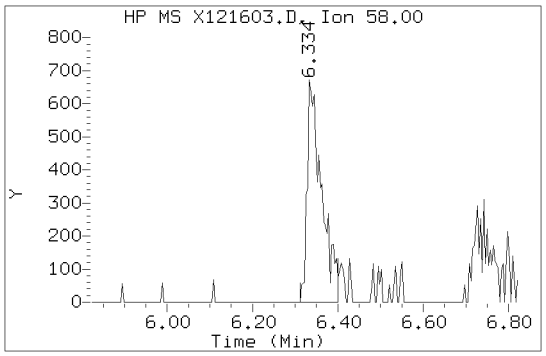
BEFORE

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:03
linh
pham



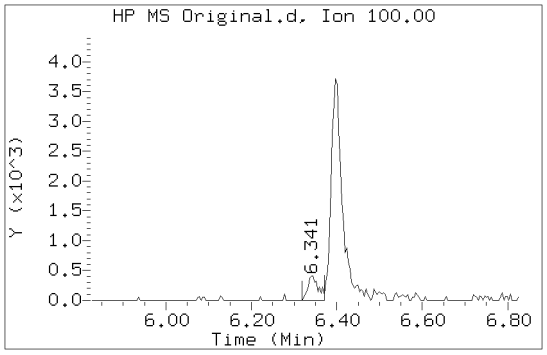
AFTER

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:07
linh
pham



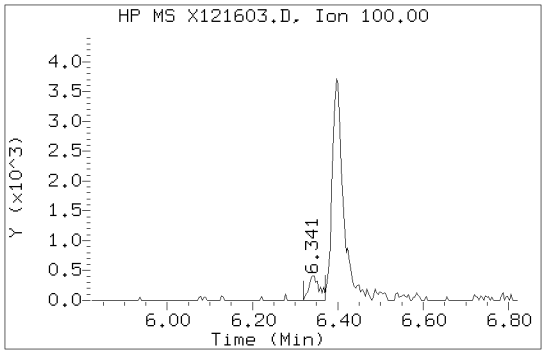
BEFORE

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

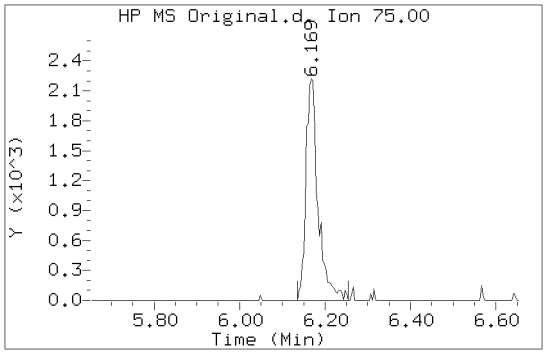


cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

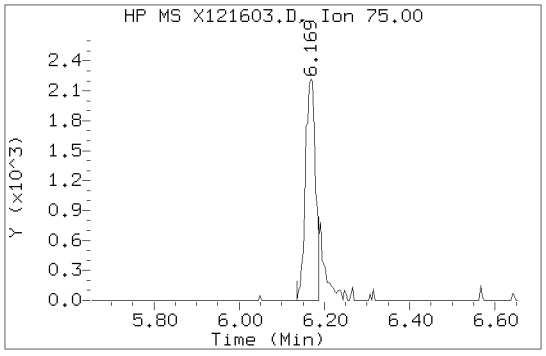
BEFORE

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



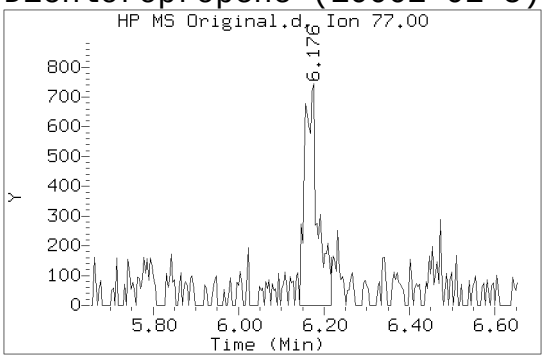
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

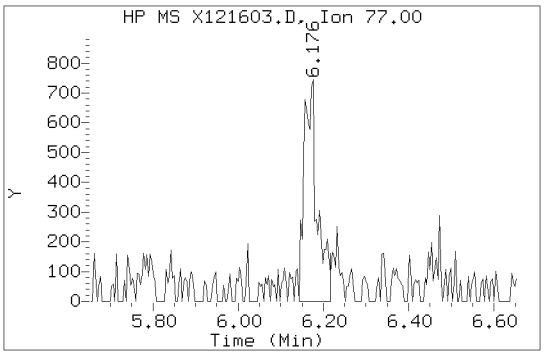
BEFORE

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:03
linh
pham



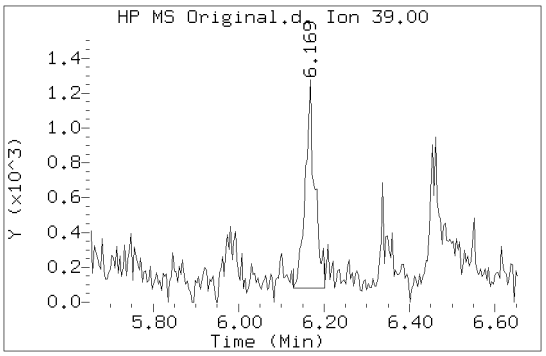
AFTER

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:07
linh
pham



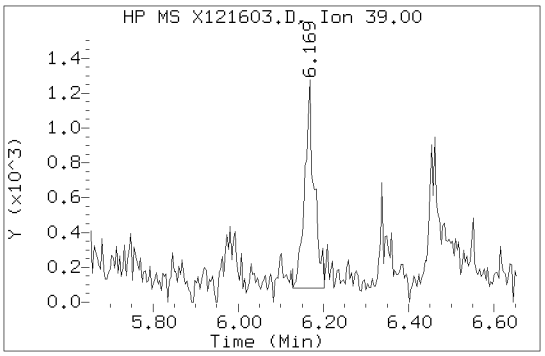
BEFORE

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

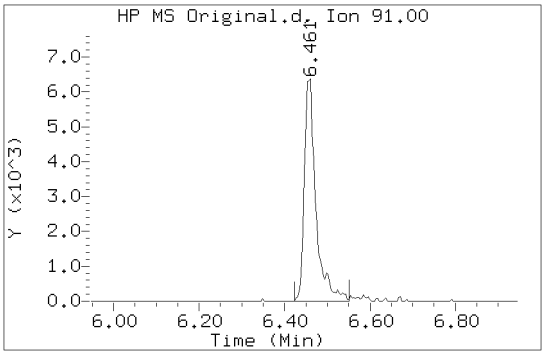


Toluene (108-88-3)

Reason Code:

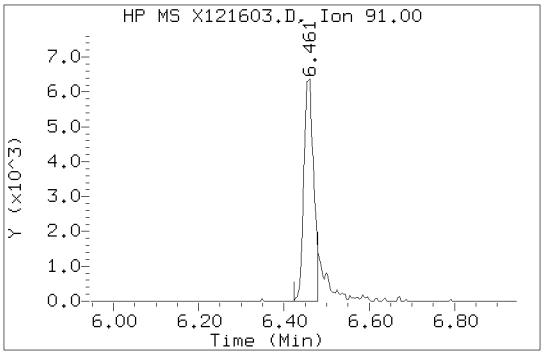
BEFORE

MASS
91
AREA
12225
HEIGHT
6374
27-Dec-2022
16:03
linh
pham



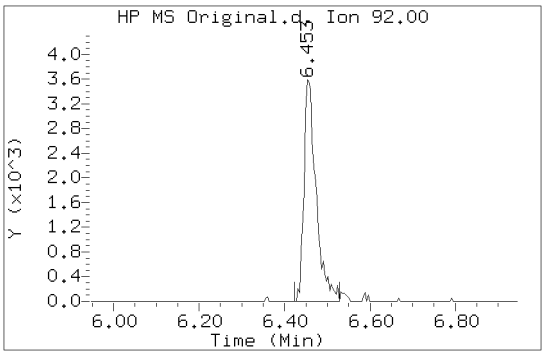
AFTER

MASS
91
AREA
10374
HEIGHT
6374
27-Dec-2022
16:07
linh
pham



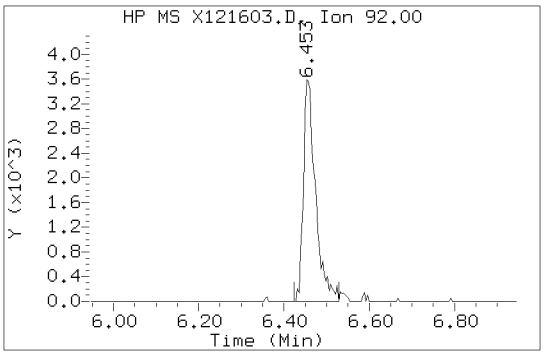
BEFORE

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

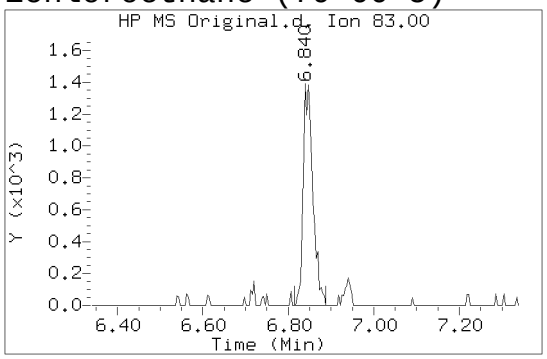


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

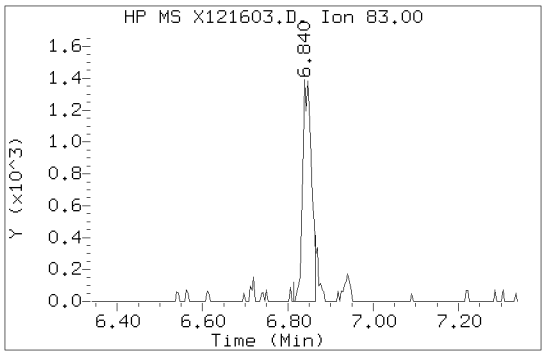
1,1,2-Trichloroethane (79-00-5)

Reason Code:

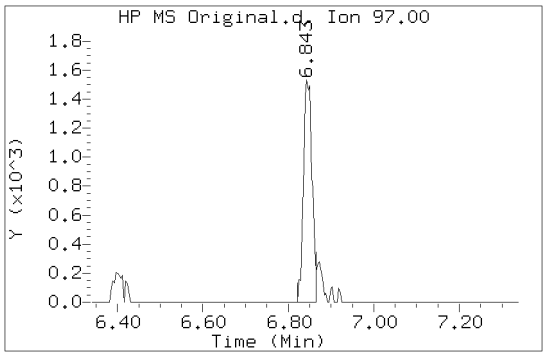
BEFORE
MASS
83
AREA
2247
HEIGHT
1391
27-Dec-2022
16:03
linh
pham



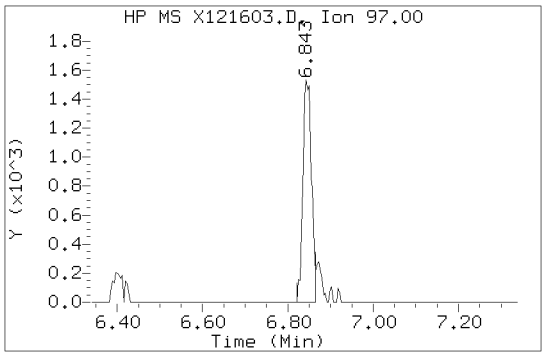
AFTER
MASS
83
AREA
2092
HEIGHT
1391
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
97
AREA
2224
HEIGHT
1532
27-Dec-2022
16:03
linh
pham



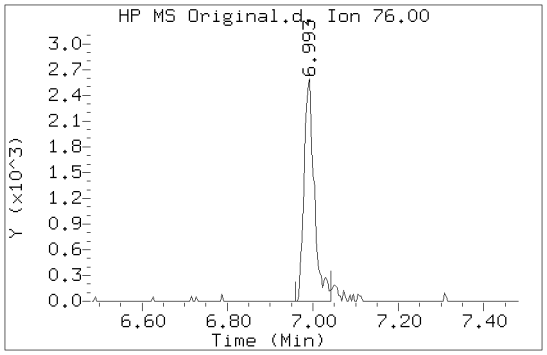
AFTER
MASS
97
AREA
2224
HEIGHT
1532
27-Dec-2022
16:07
linh
pham



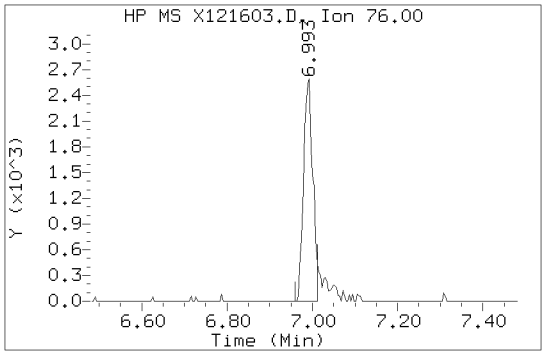
1,3-Dichloropropane (142-28-9)

Reason Code:

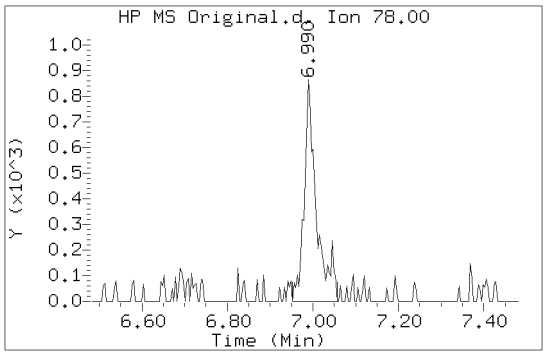
BEFORE
MASS
76
AREA
4415
HEIGHT
2592
27-Dec-2022
16:03
linh
pham



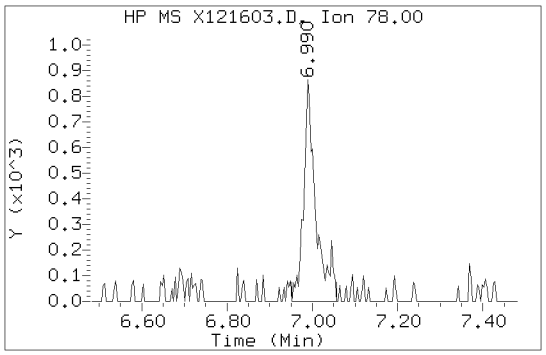
AFTER
MASS
76
AREA
4005
HEIGHT
2592
27-Dec-2022
16:07
linh
pham



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



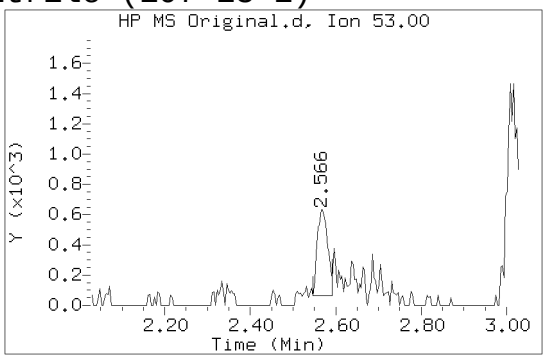
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acrylonitrile (107-13-1)

Reason Code:

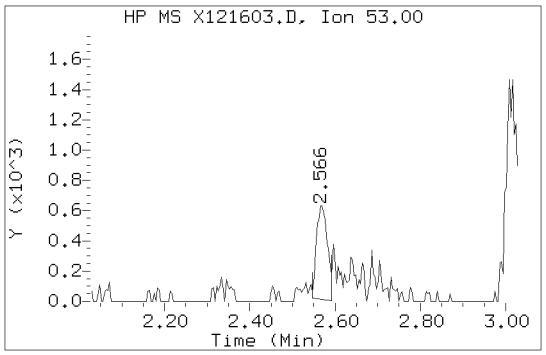
BEFORE

MASS
53
AREA
975
HEIGHT
571
27-Dec-2022
16:03
linh
pham



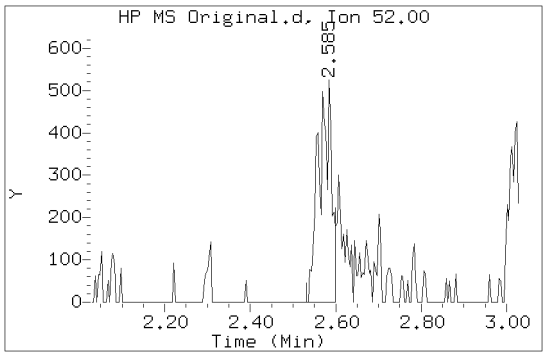
AFTER

MASS
53
AREA
1118
HEIGHT
618
27-Dec-2022
16:07
linh
pham



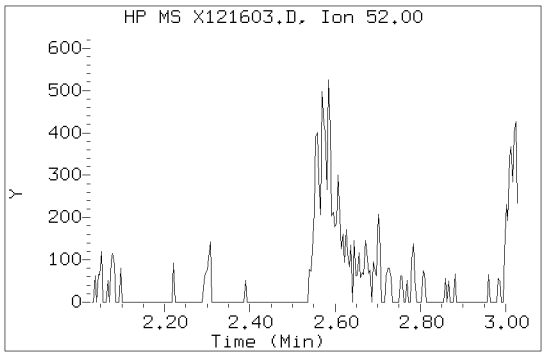
BEFORE

MASS
52
AREA
1100
HEIGHT
525
27-Dec-2022
16:03
linh
pham



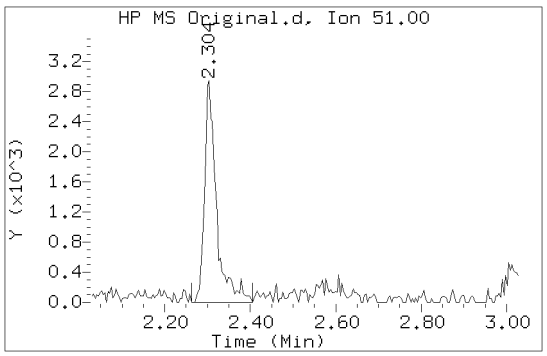
AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



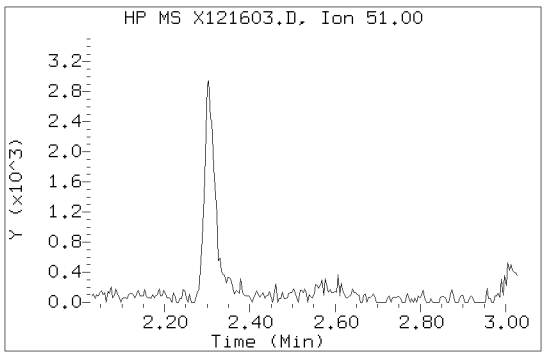
BEFORE

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

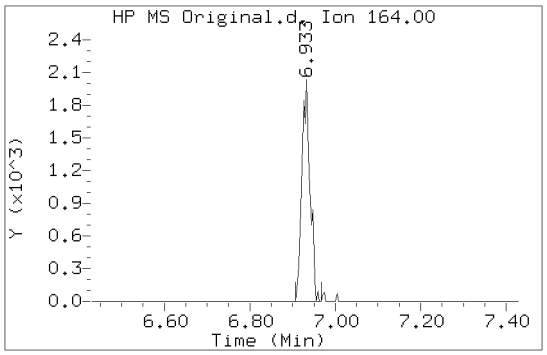


Tetrachloroethene (127-18-4)

Reason Code:

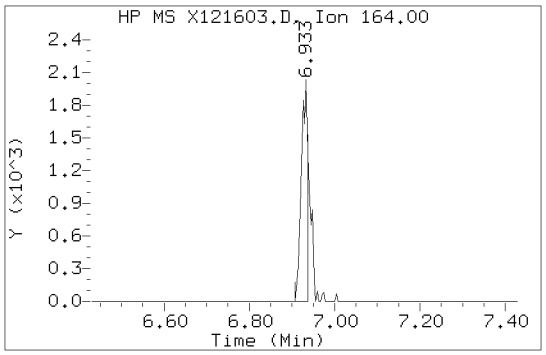
BEFORE

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



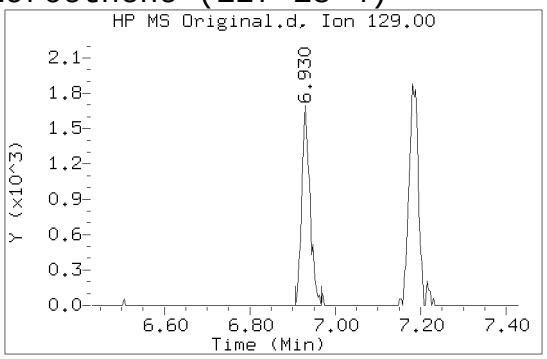
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrachloroethene (127-18-4)

Reason Code:

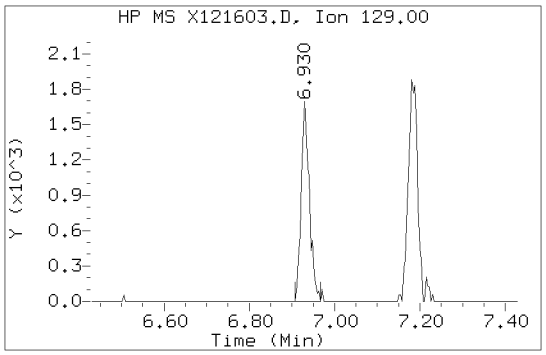
BEFORE

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:03
linh
pham



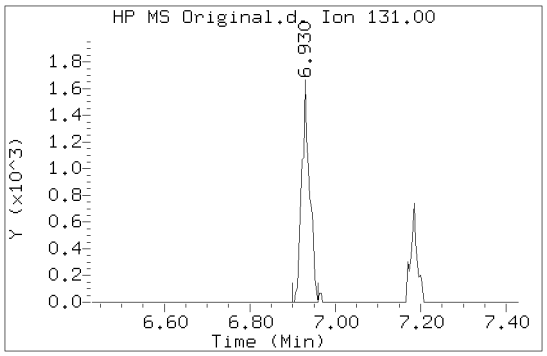
AFTER

MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:07
linh
pham



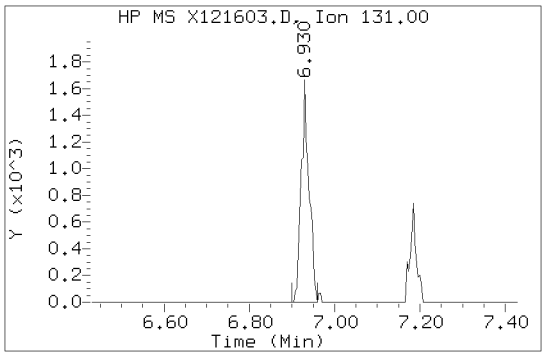
BEFORE

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

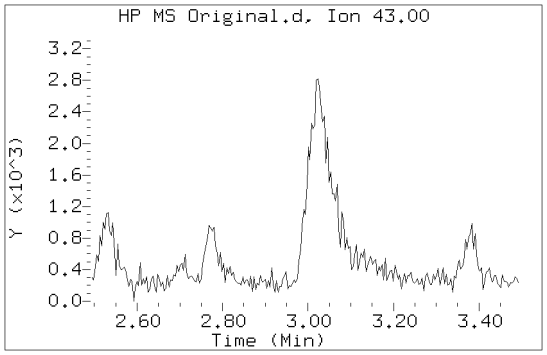


Vinyl Acetate (108-05-4)

Reason Code:

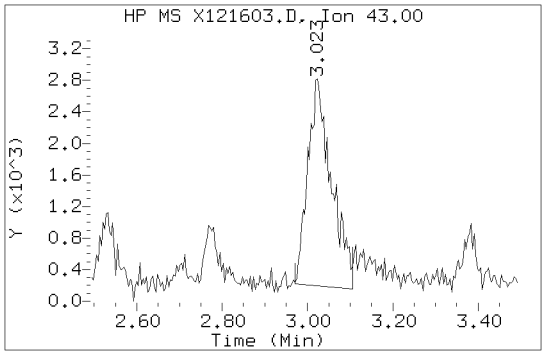
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



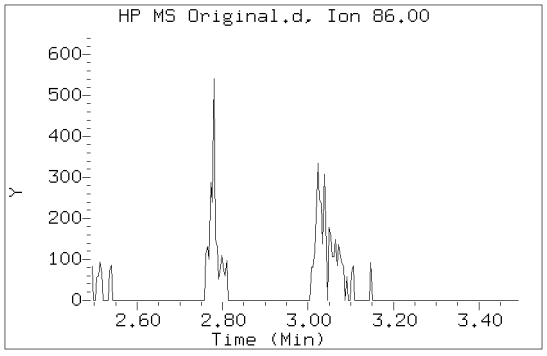
AFTER

MASS
43
AREA
10138
HEIGHT
2622
27-Dec-2022
16:07
linh
pham



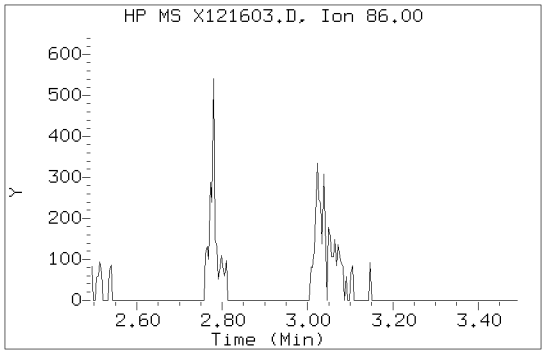
BEFORE

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

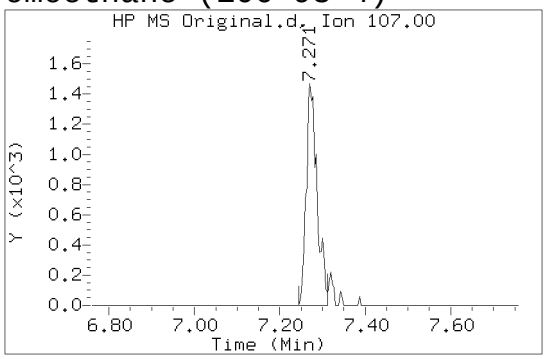


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

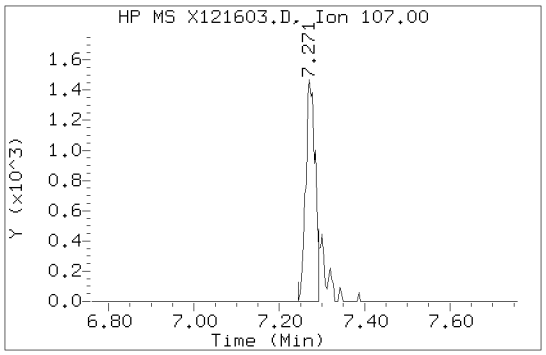
1,2-Dibromoethane (106-93-4)

Reason Code:

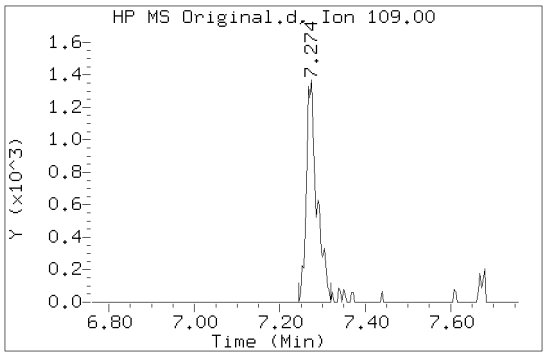
BEFORE
MASS
107
AREA
2627
HEIGHT
1469
27-Dec-2022
16:03
linh
pham



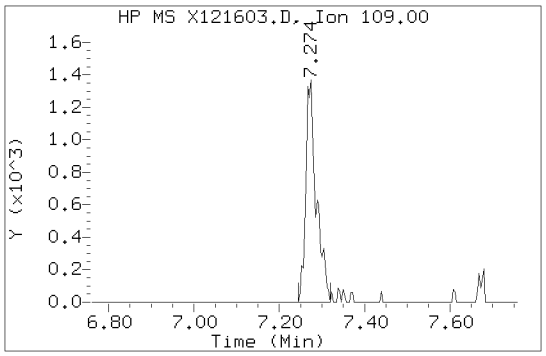
AFTER
MASS
107
AREA
2340
HEIGHT
1469
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:03
linh
pham



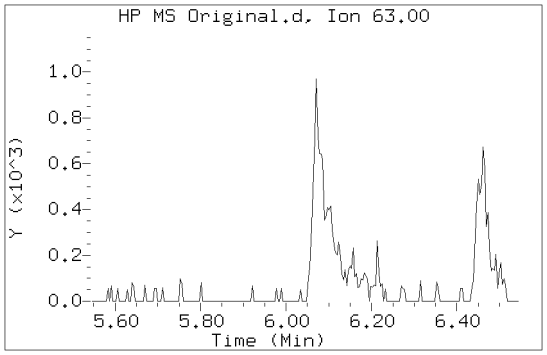
AFTER
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:07
linh
pham



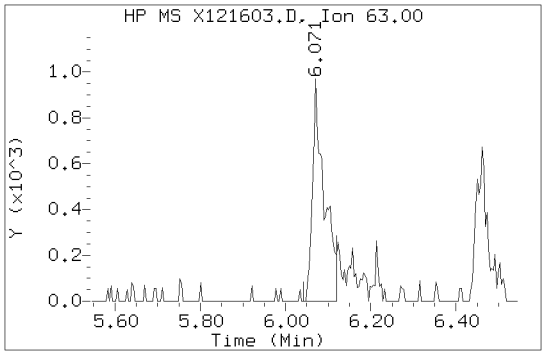
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

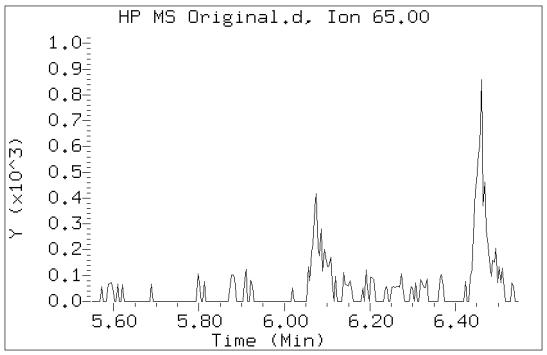
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



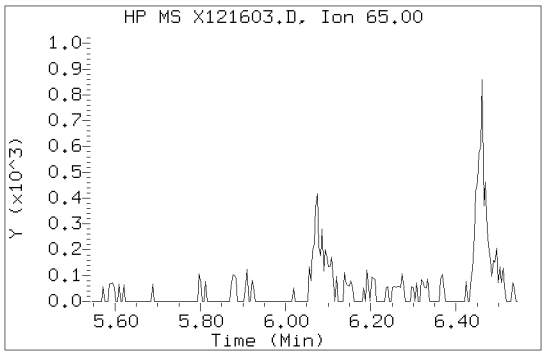
AFTER
MASS
63
AREA
1861
HEIGHT
970
27-Dec-2022
16:07
linh
pham



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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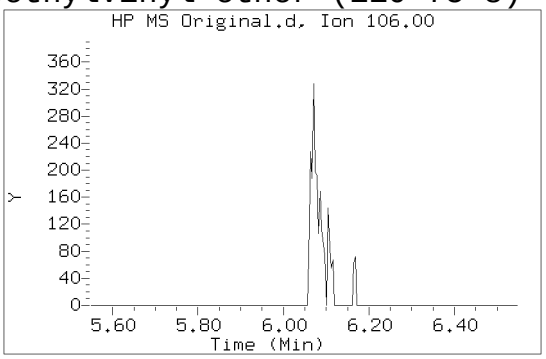
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

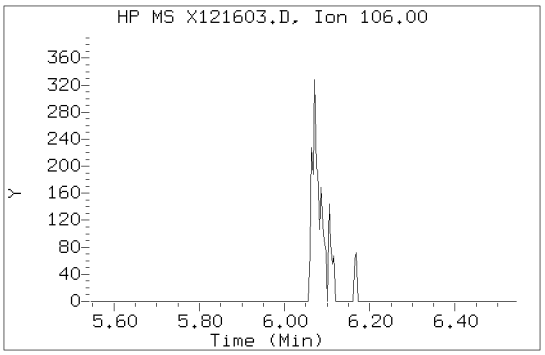
BEFORE

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

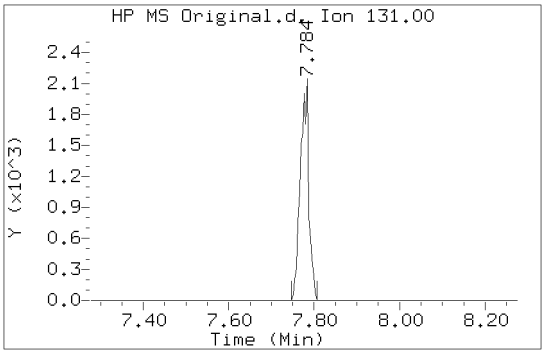


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

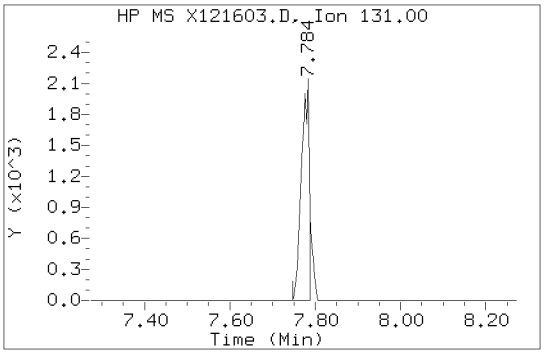
BEFORE

MASS
131
AREA
3036
HEIGHT
2146
27-Dec-2022
16:03
linh
pham



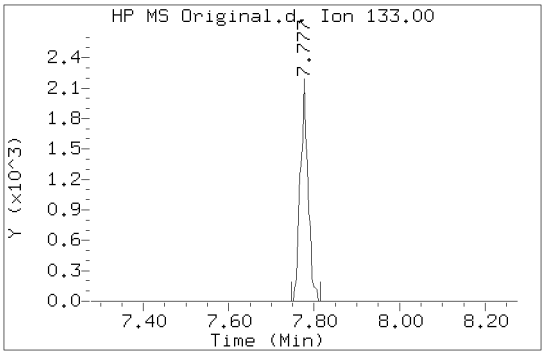
AFTER

MASS
131
AREA
2741
HEIGHT
2146
27-Dec-2022
16:07
linh
pham



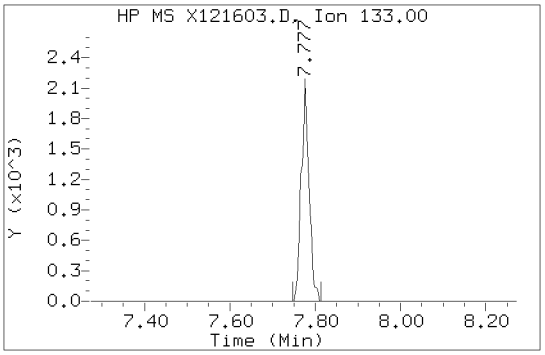
BEFORE

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:03
linh
pham



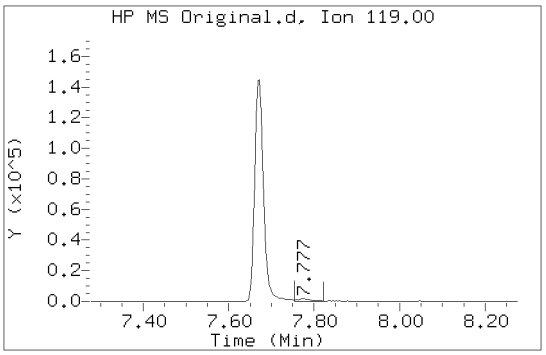
AFTER

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:07
linh
pham



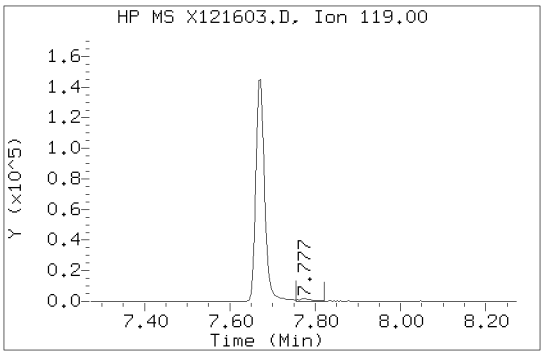
BEFORE

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



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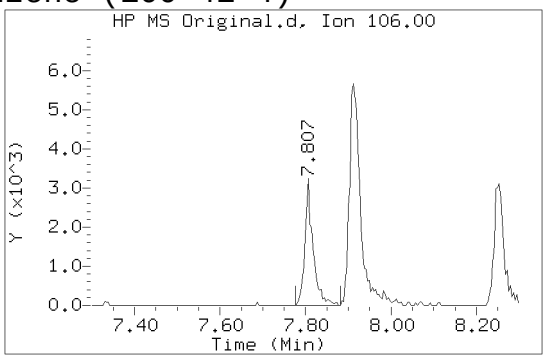
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

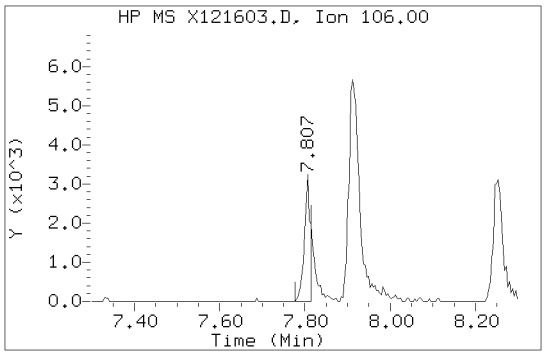
BEFORE

MASS
106
AREA
4331
HEIGHT
3242
27-Dec-2022
16:03
linh
pham



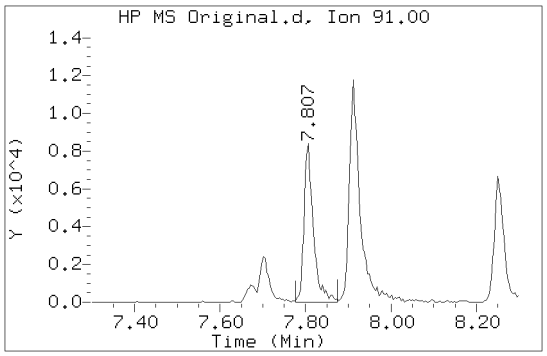
AFTER

MASS
106
AREA
3064
HEIGHT
3242
27-Dec-2022
16:07
linh
pham



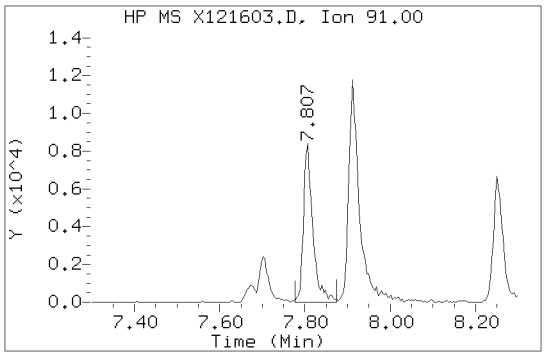
BEFORE

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

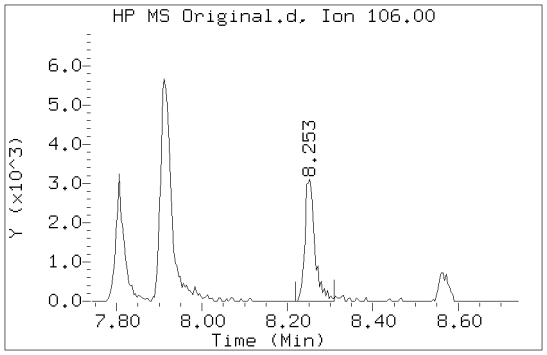


o-Xylene (95-47-6)

Reason Code:

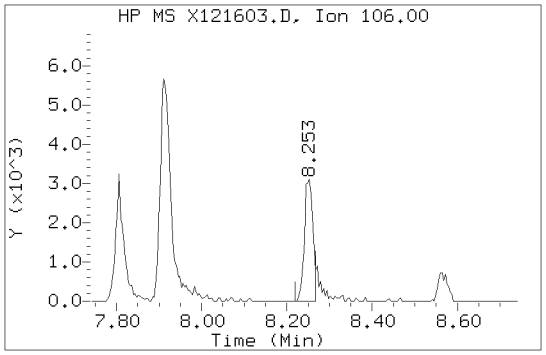
BEFORE

MASS
106
AREA
5100
HEIGHT
3111
27-Dec-2022
16:03
linh
pham



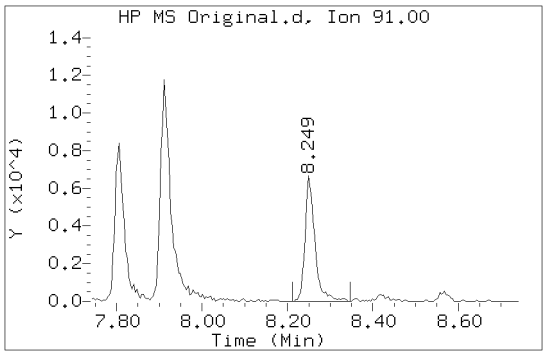
AFTER

MASS
106
AREA
4412
HEIGHT
3111
27-Dec-2022
16:07
linh
pham



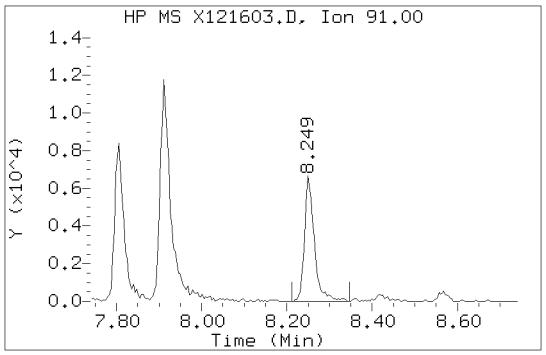
BEFORE

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



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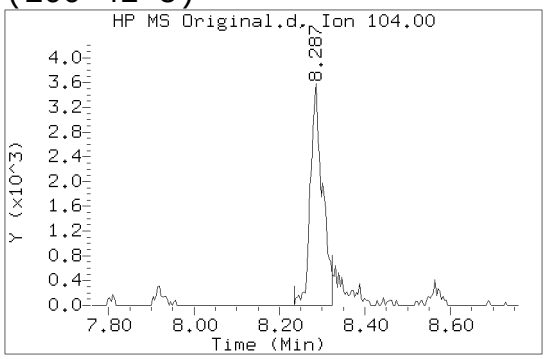
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

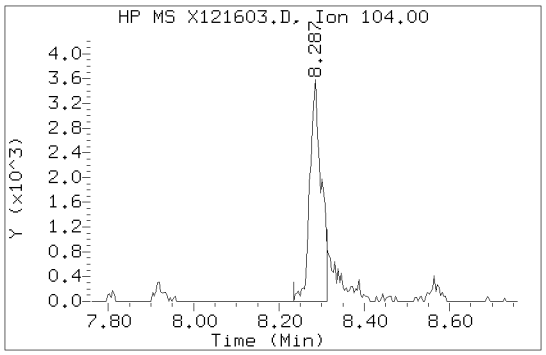
Styrene (100-42-5)

Reason Code:

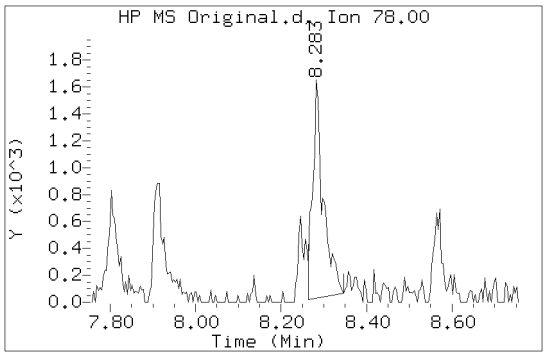
BEFORE
MASS
104
AREA
7074
HEIGHT
3581
27-Dec-2022
16:03
linh
pham



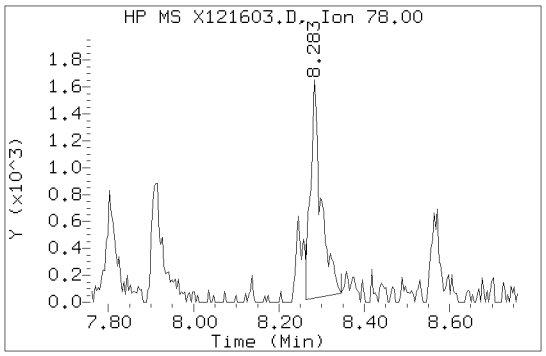
AFTER
MASS
104
AREA
6634
HEIGHT
3581
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:03
linh
pham



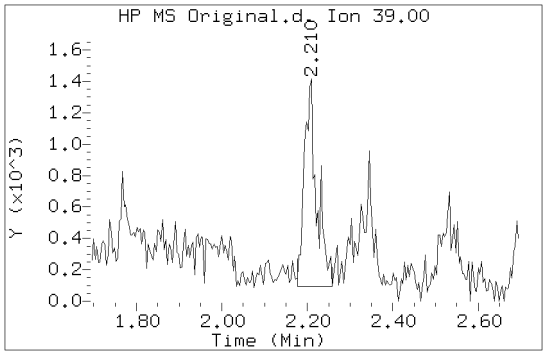
AFTER
MASS
78
AREA
2827
HEIGHT
1622
27-Dec-2022
16:07
linh
pham



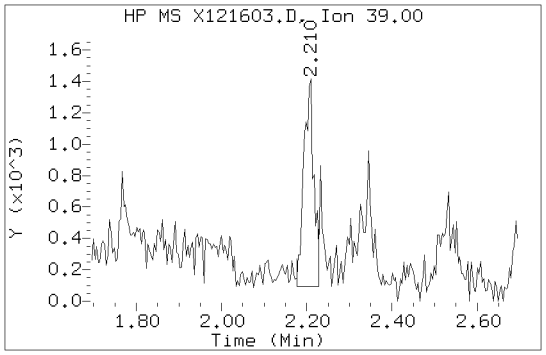
Acetonitrile (75-05-8)

Reason Code:

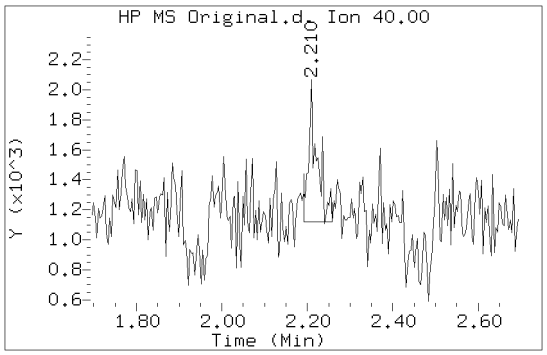
BEFORE
MASS
39
AREA
2674
HEIGHT
1321
27-Dec-2022
16:03
linh
pham



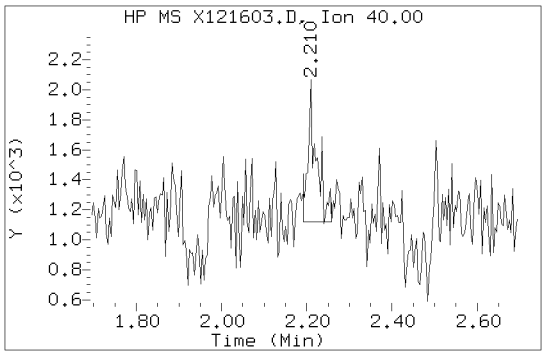
AFTER
MASS
39
AREA
2204
HEIGHT
1321
27-Dec-2022
16:07
linh
pham



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



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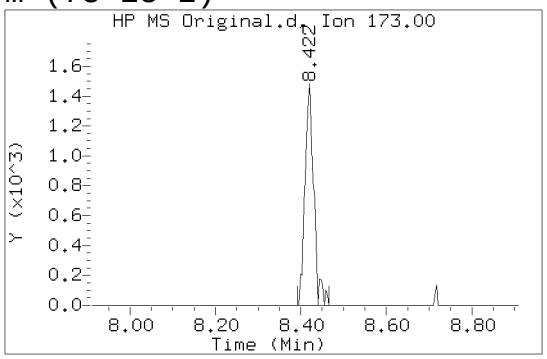
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromoform (75-25-2)

Reason Code:

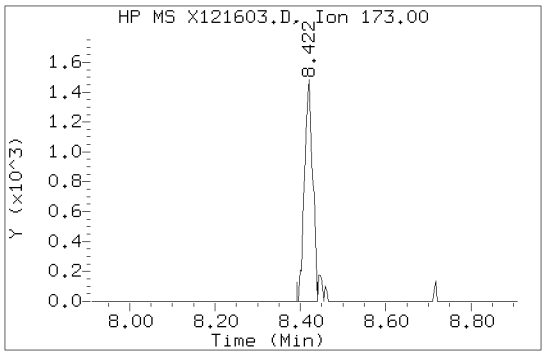
BEFORE

MASS
173
AREA
2158
HEIGHT
1483
27-Dec-2022
16:03
linh
pham



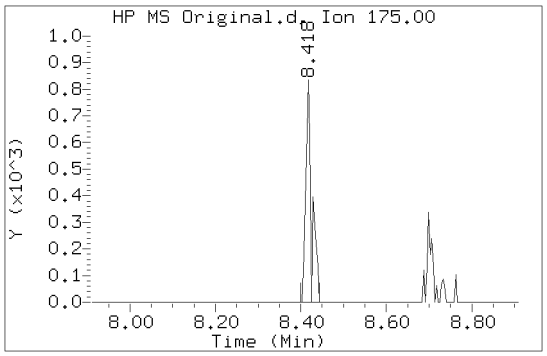
AFTER

MASS
173
AREA
2013
HEIGHT
1483
27-Dec-2022
16:07
linh
pham



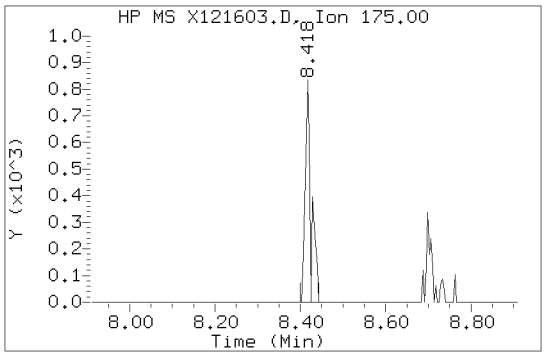
BEFORE

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:03
linh
pham



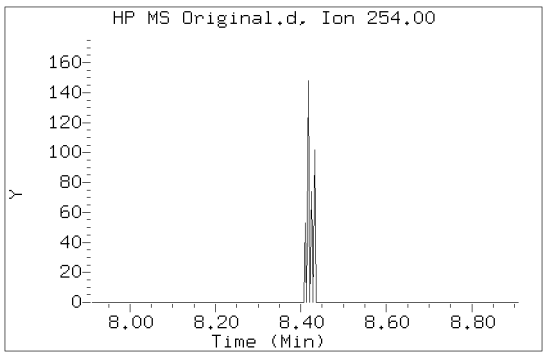
AFTER

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:07
linh
pham



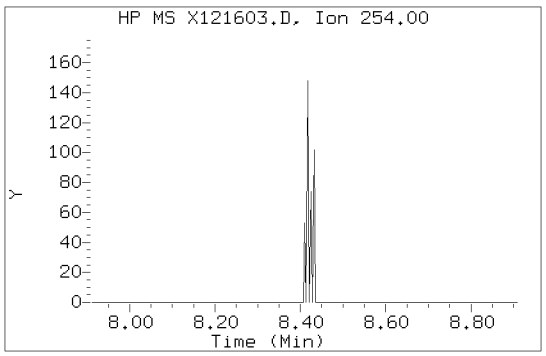
BEFORE

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

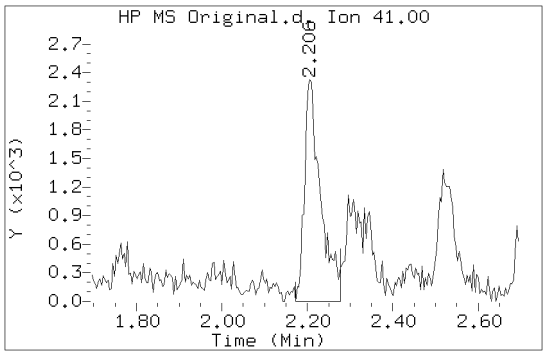


Allyl Chloride (107-05-1)

Reason Code:

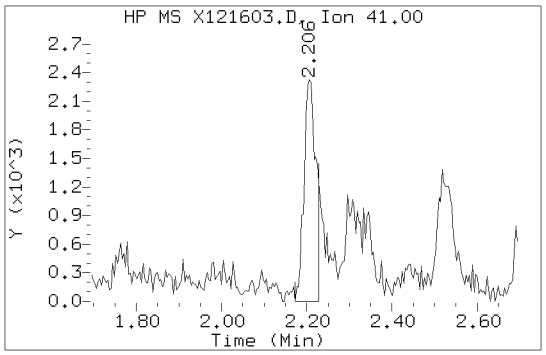
BEFORE

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



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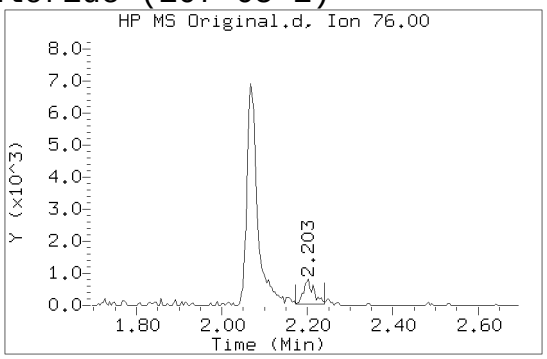
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Allyl Chloride (107-05-1)

Reason Code:

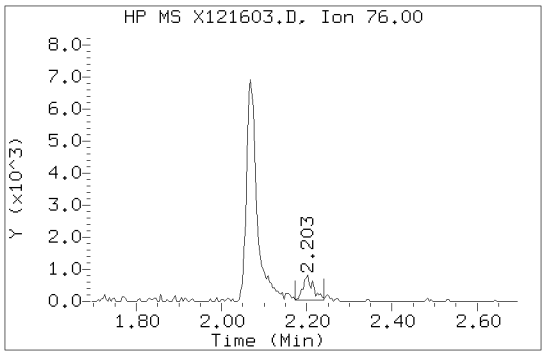
BEFORE

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

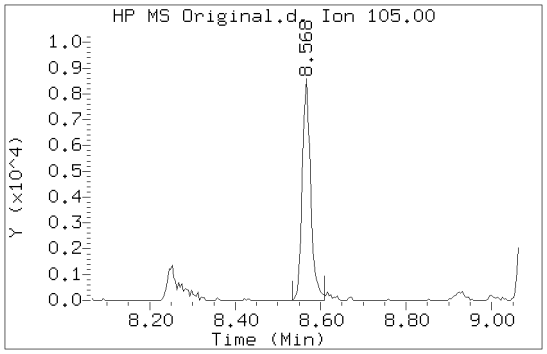


Isopropylbenzene (98-82-8)

Reason Code:

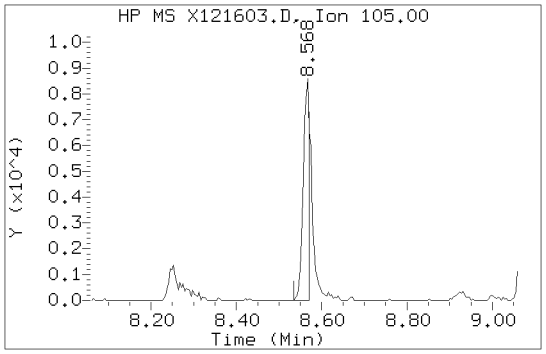
BEFORE

MASS
105
AREA
12091
HEIGHT
8588
27-Dec-2022
16:03
linh
pham



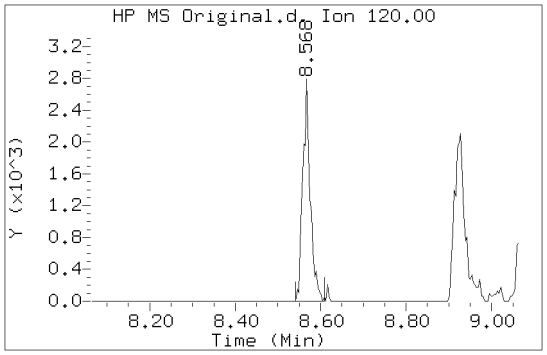
AFTER

MASS
105
AREA
8757
HEIGHT
8588
27-Dec-2022
16:07
linh
pham



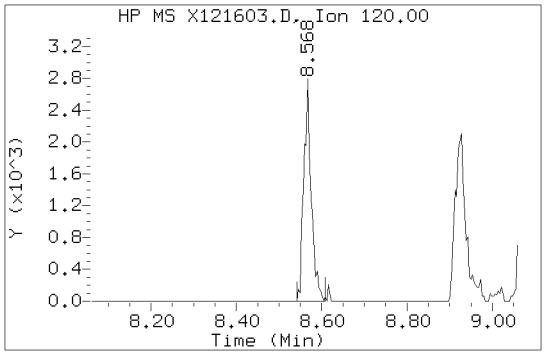
BEFORE

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

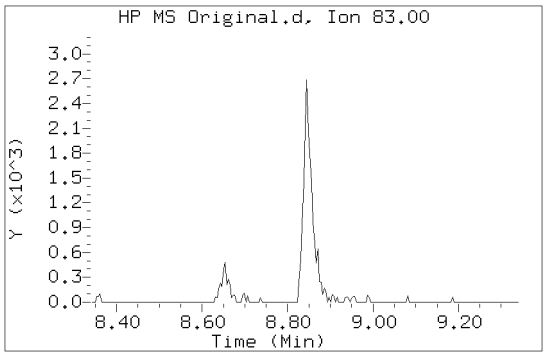


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

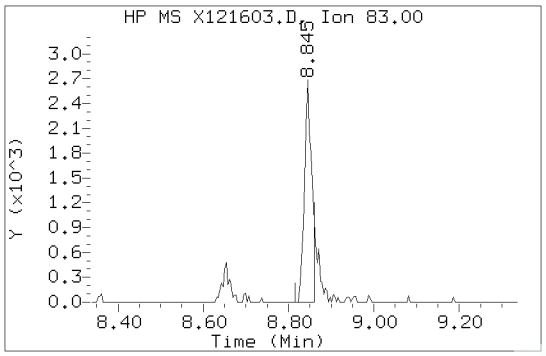
BEFORE

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



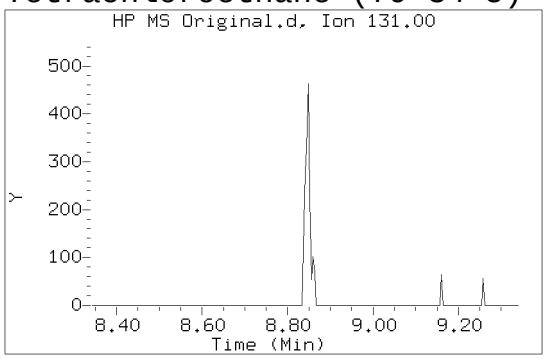
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

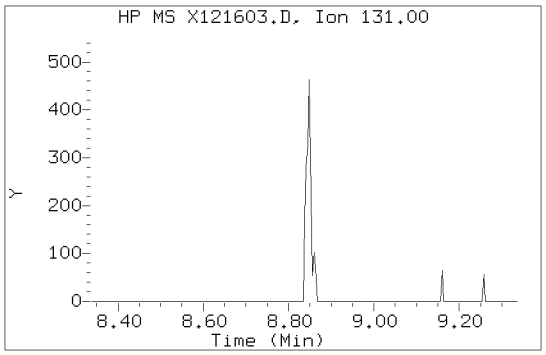
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



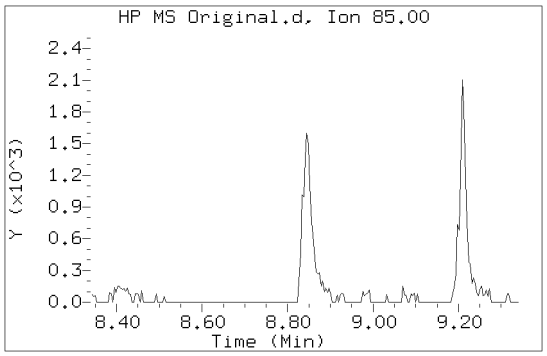
AFTER

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



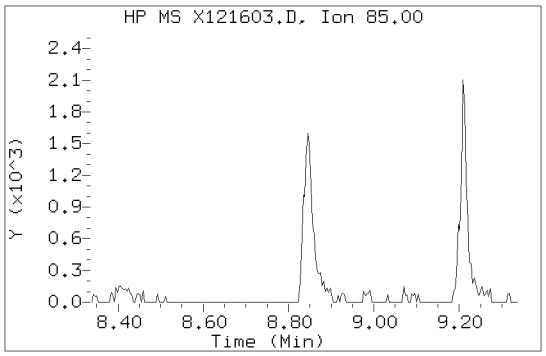
BEFORE

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

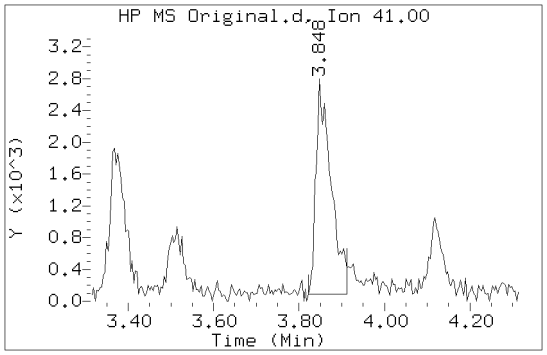


Methacrylonitrile (126-98-7)

Reason Code:

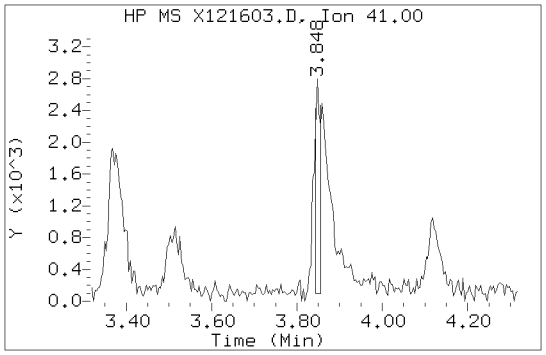
BEFORE

MASS
41
AREA
6587
HEIGHT
2708
27-Dec-2022
16:03
linh
pham



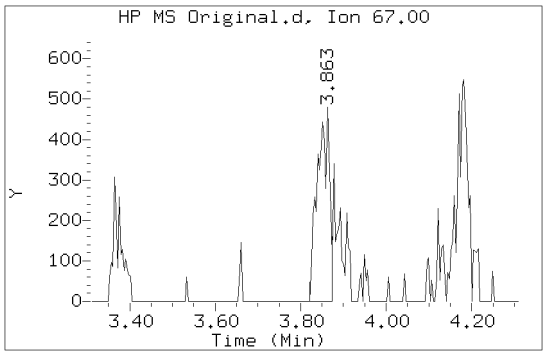
AFTER

MASS
41
AREA
2066
HEIGHT
2701
27-Dec-2022
16:07
linh
pham



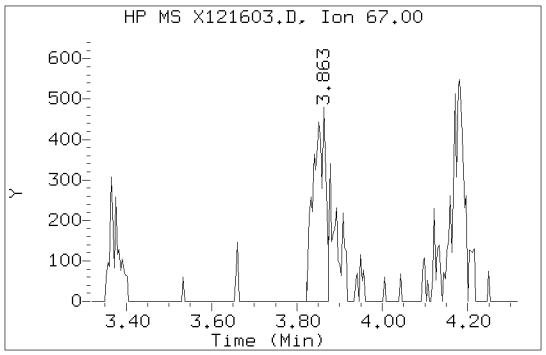
BEFORE

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



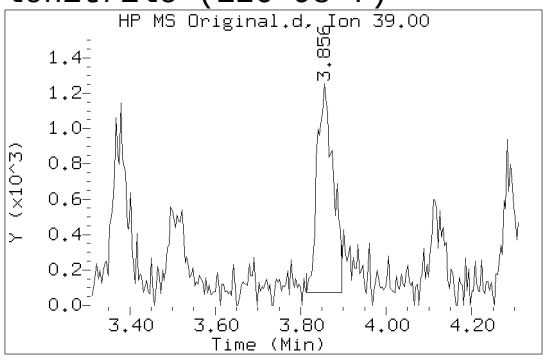
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methacrylonitrile (126-98-7)

Reason Code:

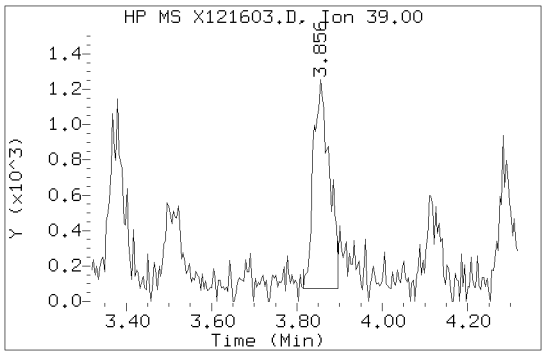
BEFORE

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

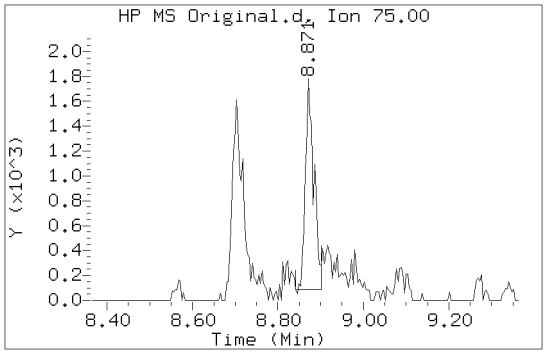


1,2,3-Trichloropropane (96-18-4)

Reason Code:

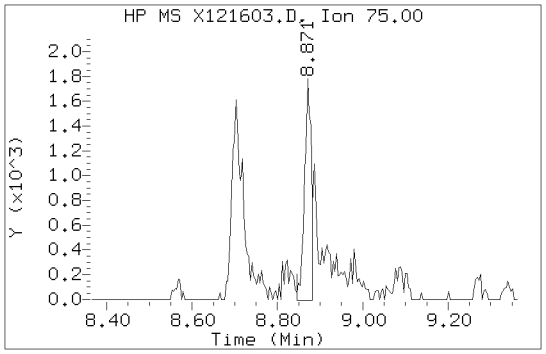
BEFORE

MASS
75
AREA
2351
HEIGHT
1693
27-Dec-2022
16:03
linh
pham



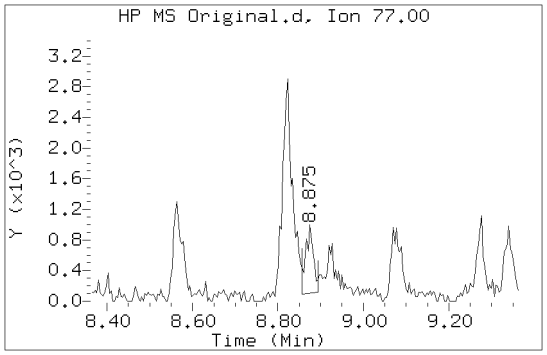
AFTER

MASS
75
AREA
2019
HEIGHT
1788
27-Dec-2022
16:07
linh
pham



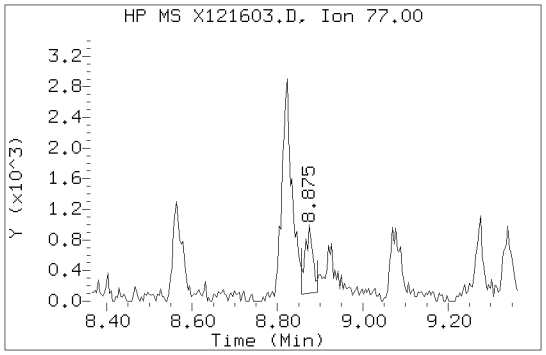
BEFORE

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

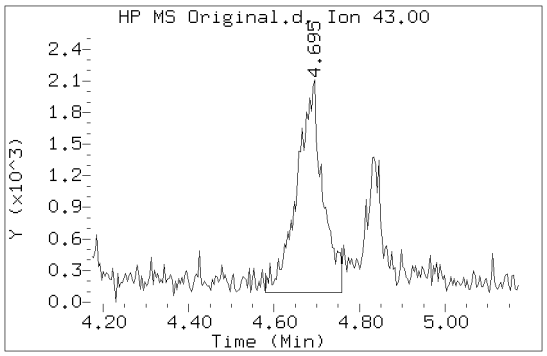


Isobutyl Alcohol (78-83-1)

Reason Code:

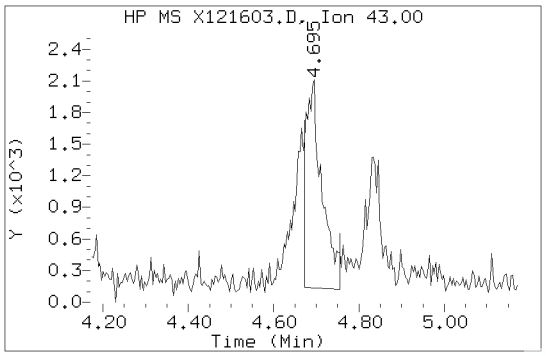
BEFORE

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

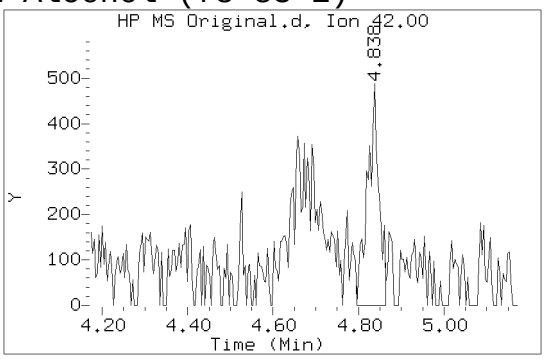


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutyl Alcohol (78-83-1)

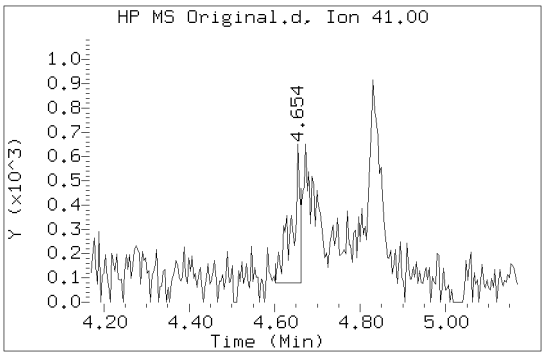
BEFORE

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:03
linh
pham



BEFORE

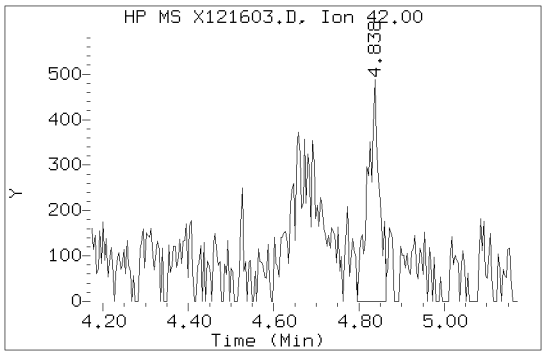
MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:03
linh
pham



Reason Code:

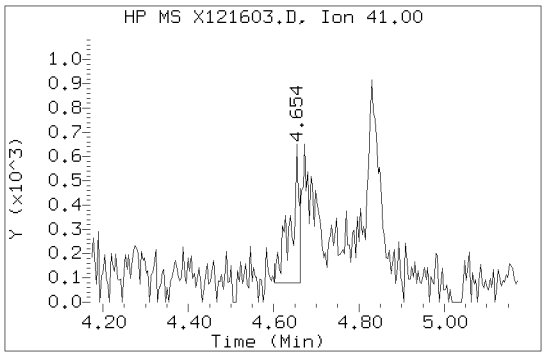
AFTER

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:07
linh
pham



AFTER

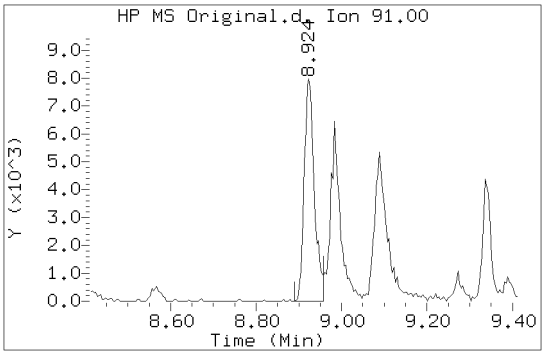
MASS
41
AREA
776
HEIGHT
572
27-Dec-2022
16:07
linh
pham



n-Propylbenzene (106-65-1)

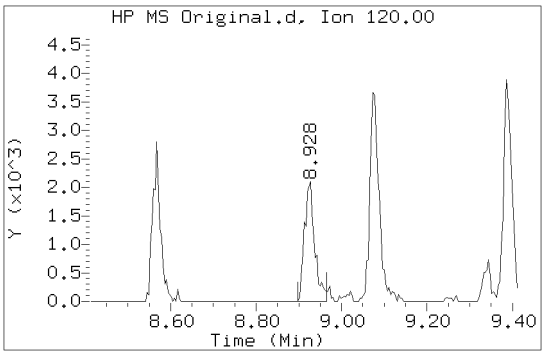
BEFORE

MASS
91
AREA
13496
HEIGHT
7972
27-Dec-2022
16:03
linh
pham



BEFORE

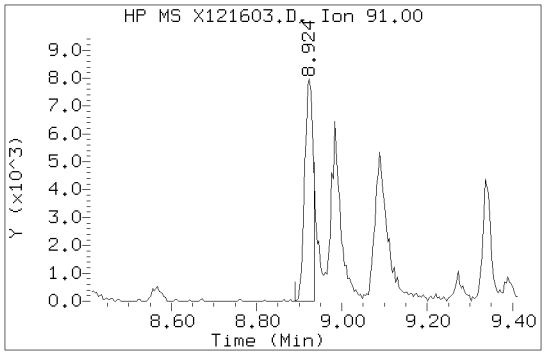
MASS
120
AREA
3559
HEIGHT
2104
27-Dec-2022
16:03
linh
pham



Reason Code:

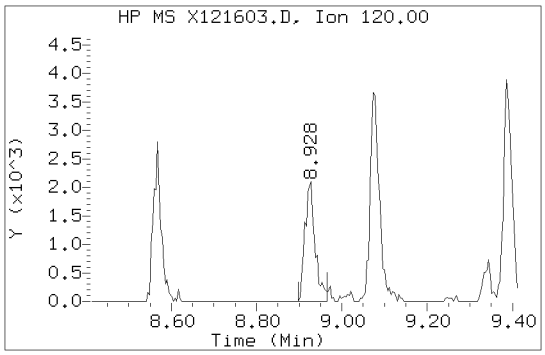
AFTER

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

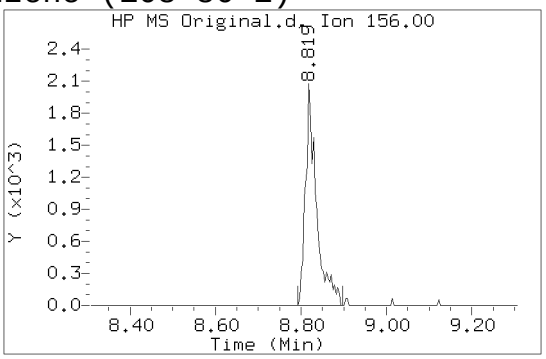


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

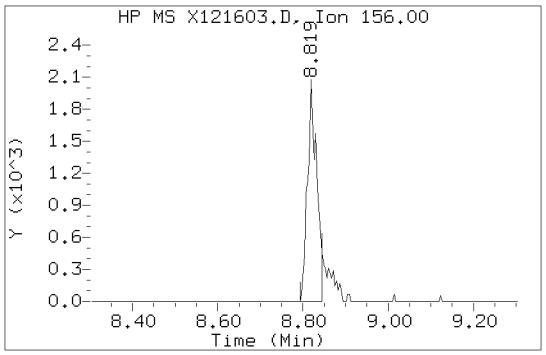
Bromobenzene (108-86-1)

Reason Code:

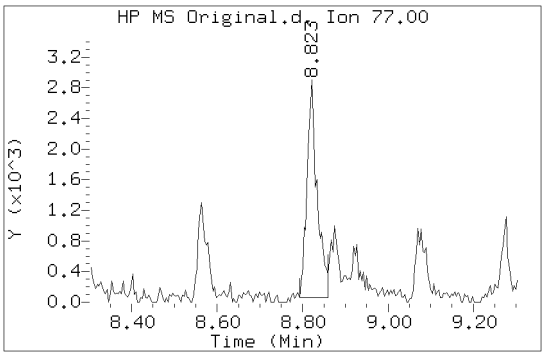
BEFORE
MASS
156
AREA
3747
HEIGHT
2077
27-Dec-2022
16:03
linh
pham



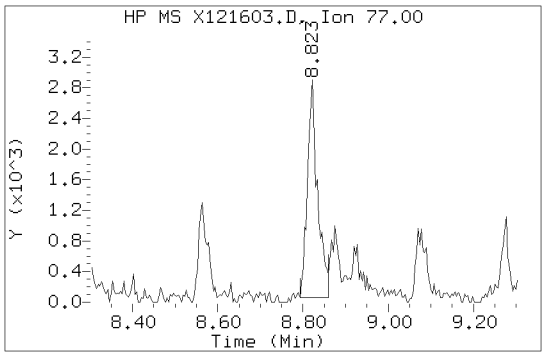
AFTER
MASS
156
AREA
3147
HEIGHT
2077
27-Dec-2022
16:07
linh
pham



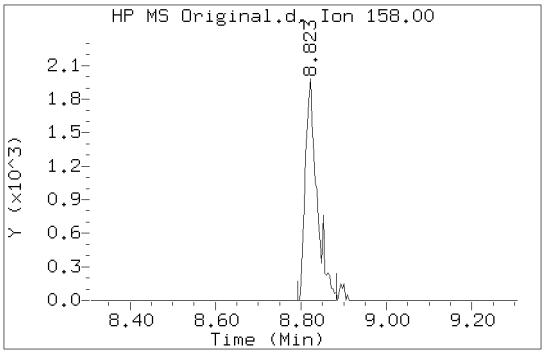
BEFORE
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:03
linh
pham



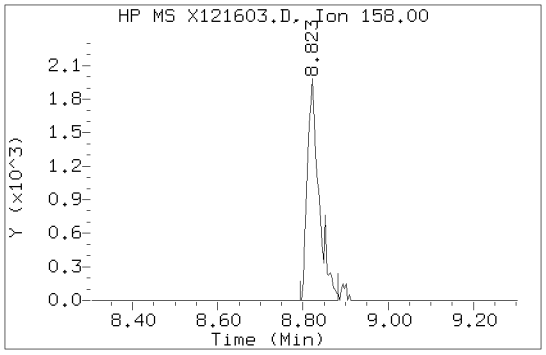
AFTER
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



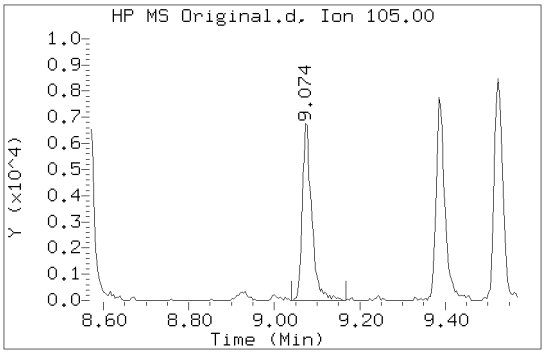
AFTER
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:07
linh
pham



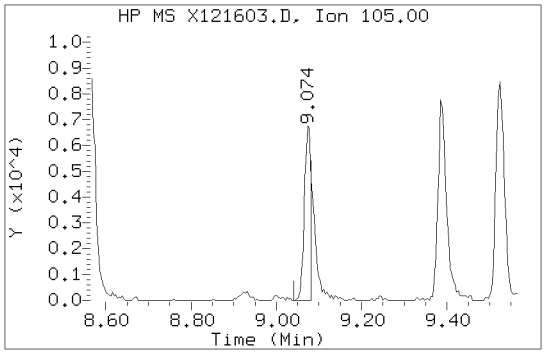
1,3,5-Trimethylbenzene (108-67-8)

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



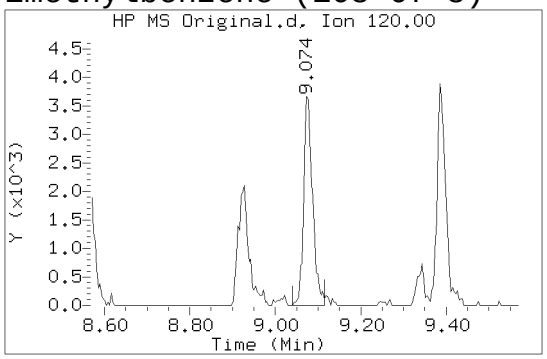
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

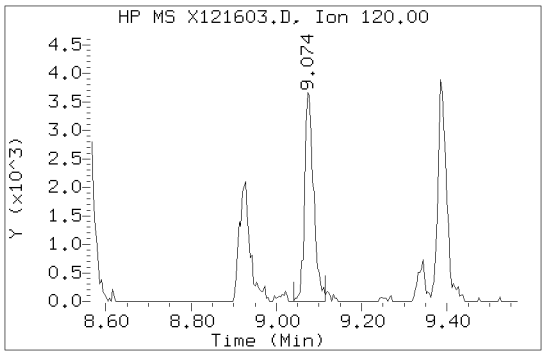
BEFORE

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

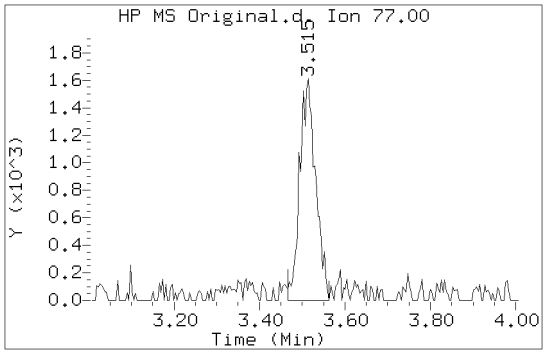


2,2-Dichloropropane (594-20-7)

Reason Code:

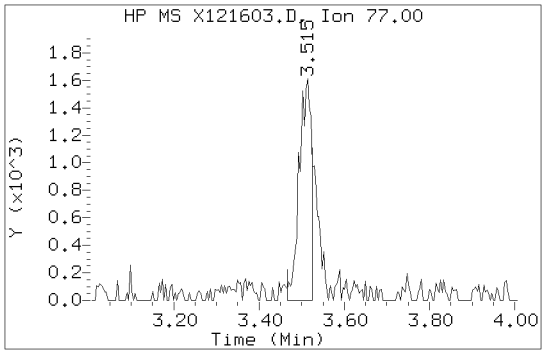
BEFORE

MASS
77
AREA
4217
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



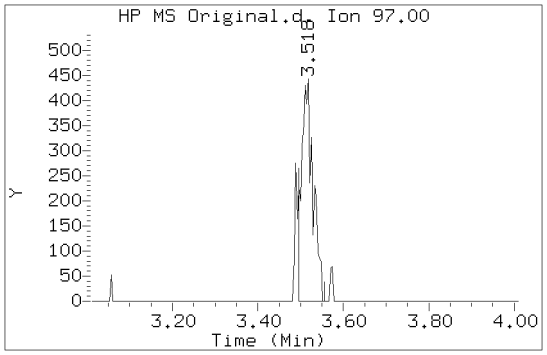
AFTER

MASS
77
AREA
3238
HEIGHT
1612
27-Dec-2022
16:07
linh
pham



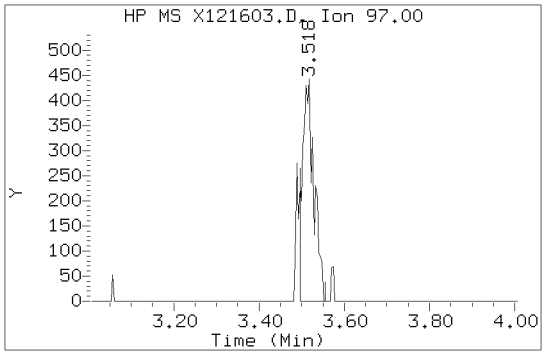
BEFORE

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

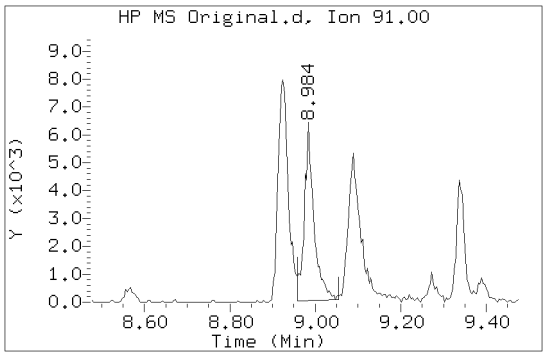


2-Chlorotoluene (95-49-8)

Reason Code:

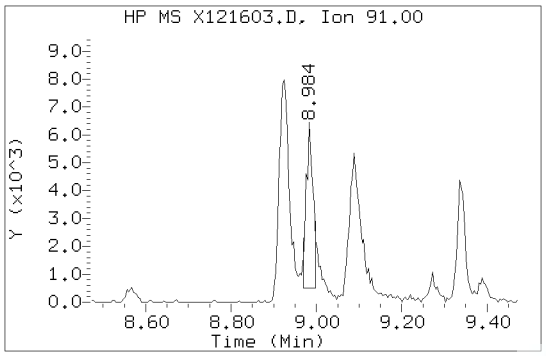
BEFORE

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



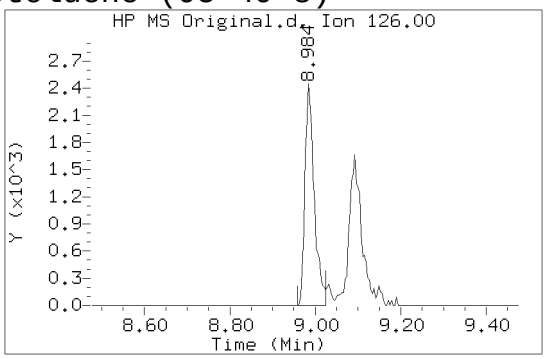
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

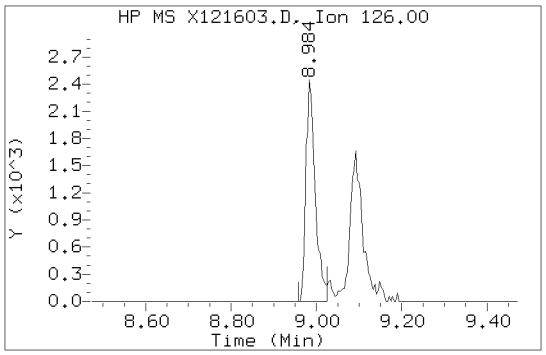
BEFORE

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

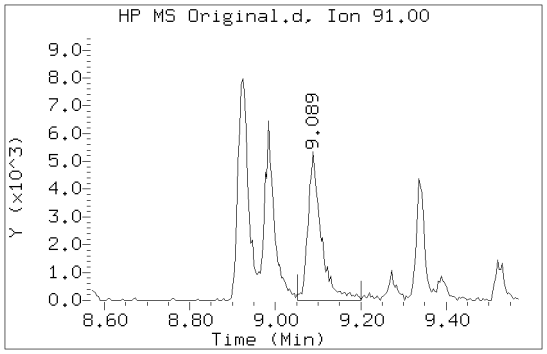


4-Chlorotoluene (106-43-4)

Reason Code:

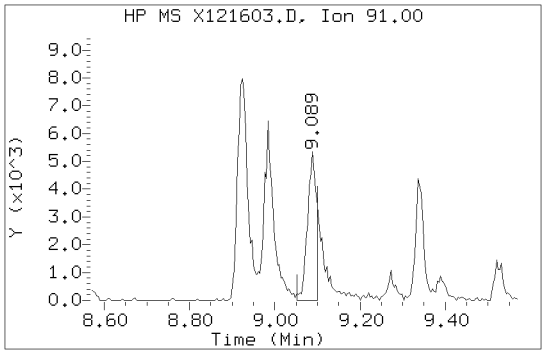
BEFORE

MASS
91
AREA
11481
HEIGHT
5337
27-Dec-2022
16:03
linh
pham



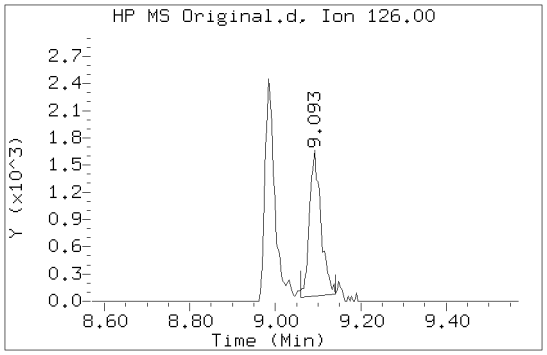
AFTER

MASS
91
AREA
7644
HEIGHT
5337
27-Dec-2022
16:07
linh
pham



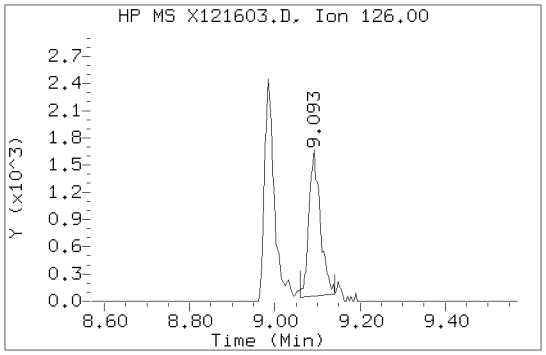
BEFORE

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

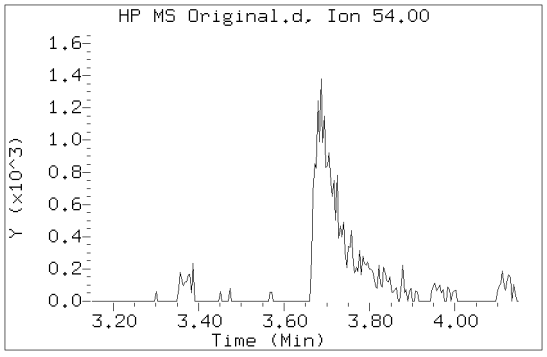


Propionitrile (107-12-0)

Reason Code:

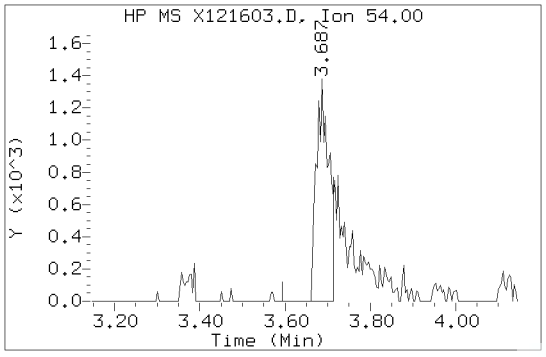
BEFORE

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

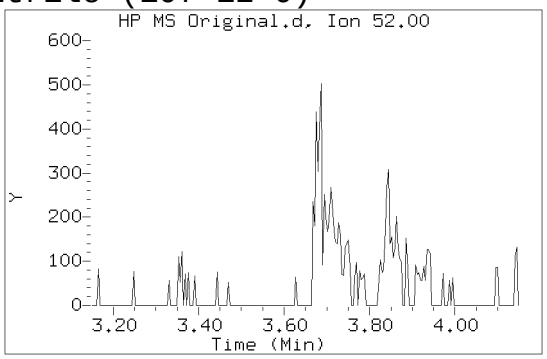


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

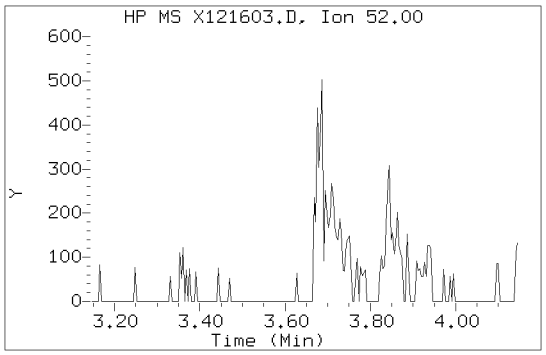
Propionitrile (107-12-0)

Reason Code:

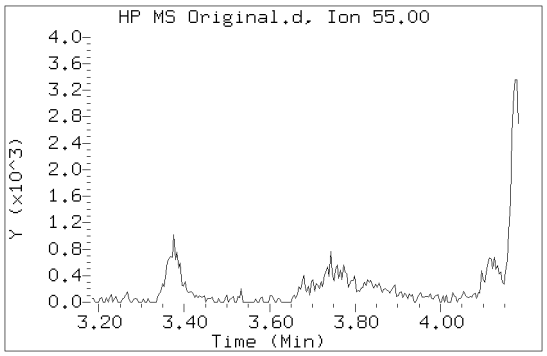
BEFORE
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



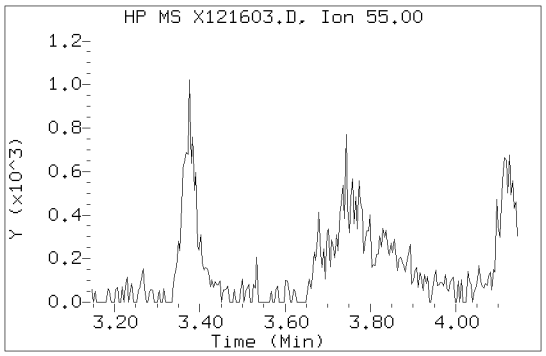
AFTER
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



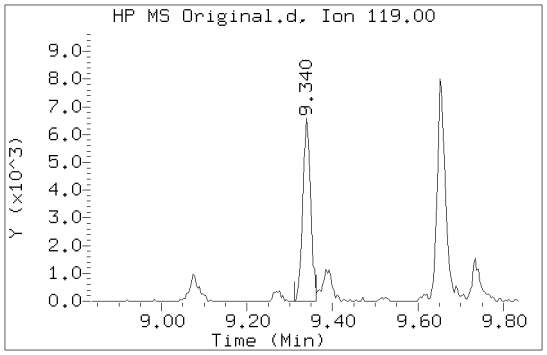
AFTER
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



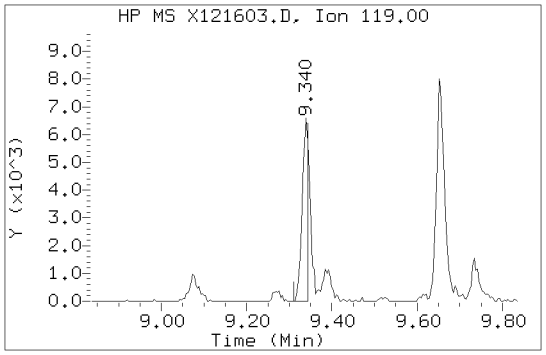
tert-Butylbenzene (98-06-6)

Reason Code:

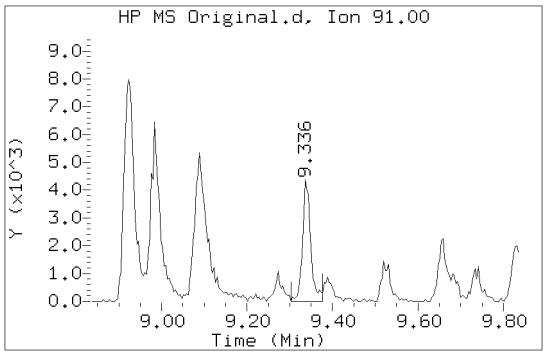
BEFORE
MASS
119
AREA
8660
HEIGHT
6598
27-Dec-2022
16:03
linh
pham



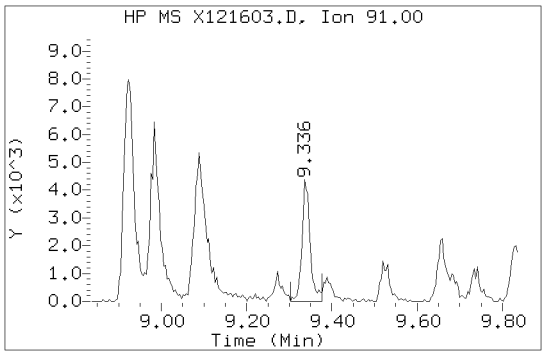
AFTER
MASS
119
AREA
6389
HEIGHT
6598
27-Dec-2022
16:07
linh
pham



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



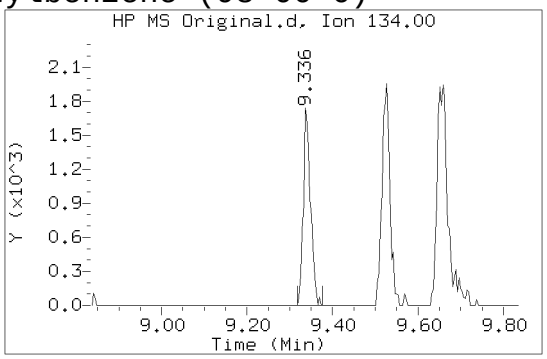
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butylbenzene (98-06-6)

Reason Code:

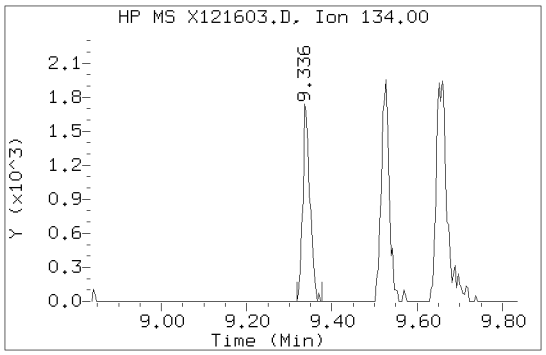
BEFORE

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

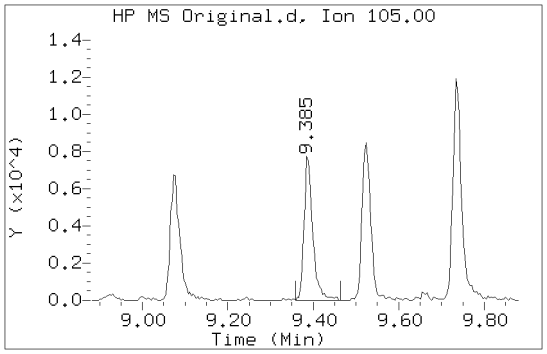


1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

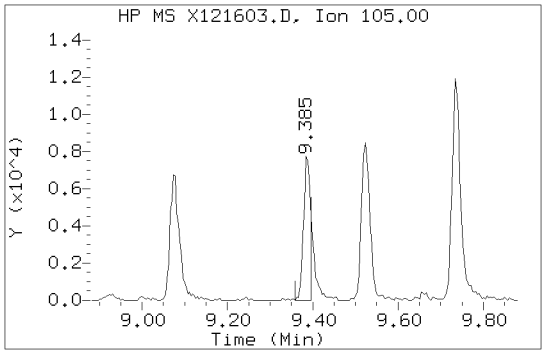
BEFORE

MASS
105
AREA
11065
HEIGHT
7775
27-Dec-2022
16:03
linh
pham



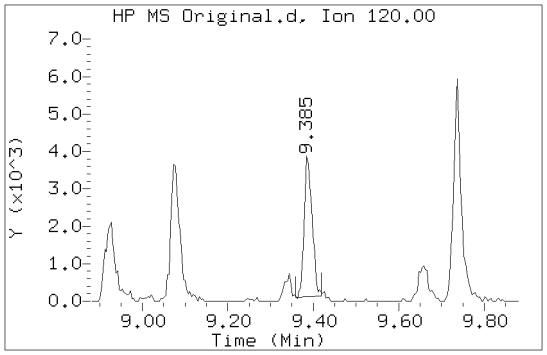
AFTER

MASS
105
AREA
8496
HEIGHT
7775
27-Dec-2022
16:07
linh
pham



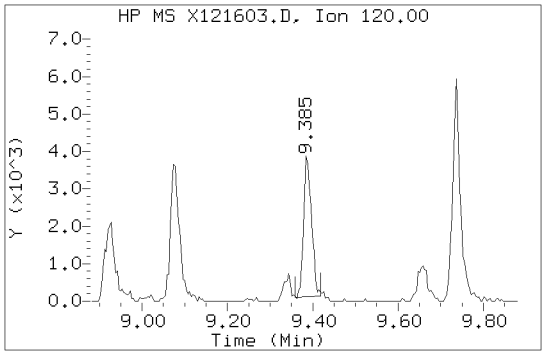
BEFORE

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

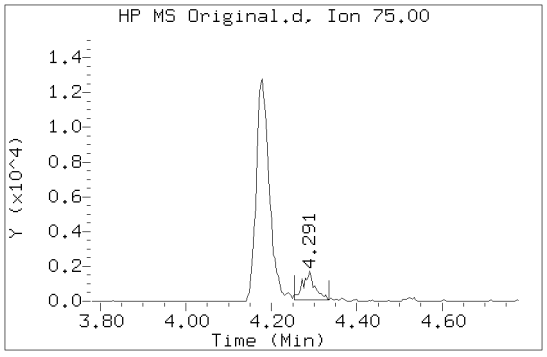


1,1-Dichloropropene (563-58-6)

Reason Code:

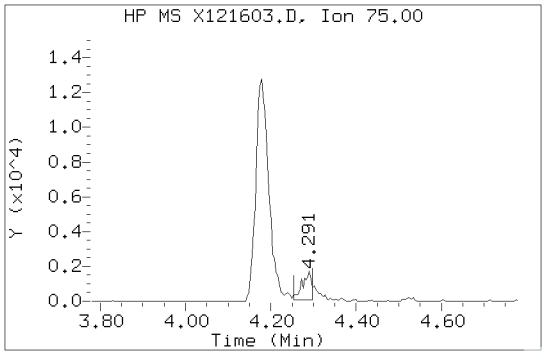
BEFORE

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



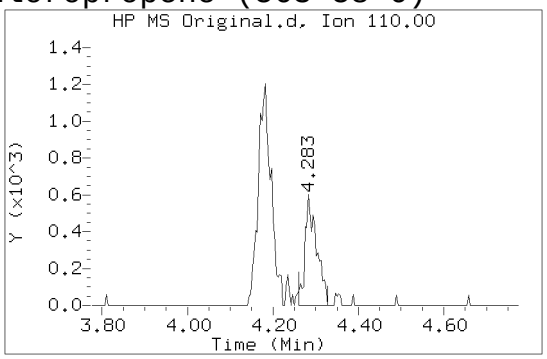
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

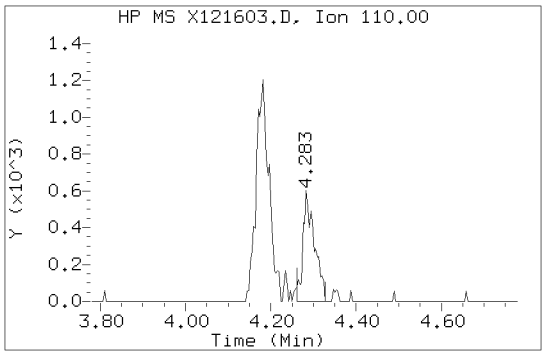
BEFORE

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:03
linh
pham



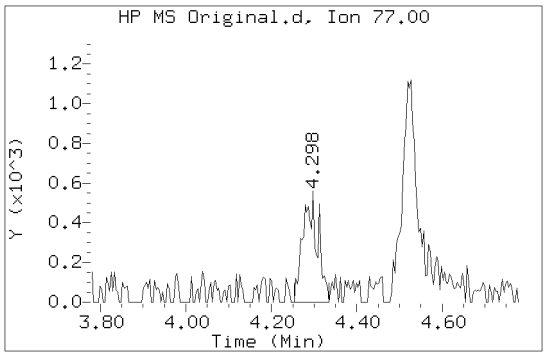
AFTER

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:07
linh
pham



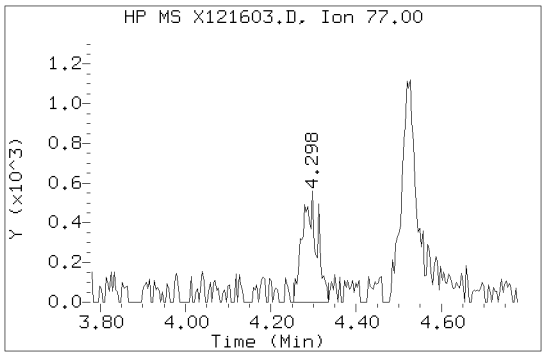
BEFORE

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

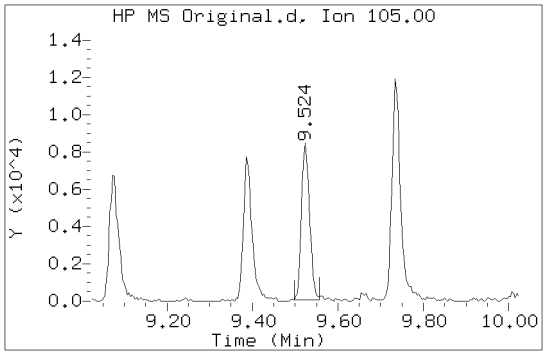


sec-Butylbenzene (135-98-8)

Reason Code:

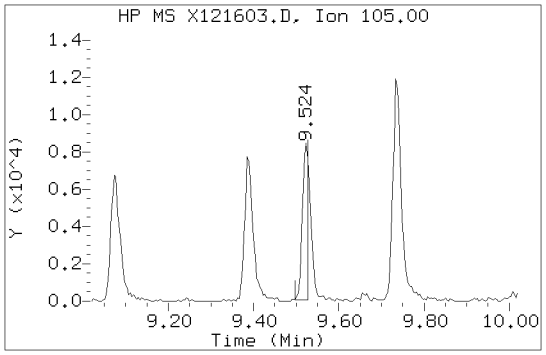
BEFORE

MASS
105
AREA
11512
HEIGHT
8394
27-Dec-2022
16:03
linh
pham



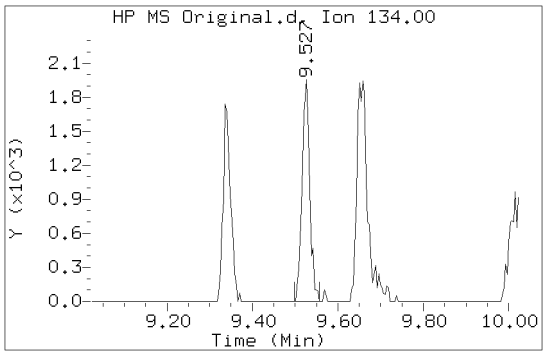
AFTER

MASS
105
AREA
7938
HEIGHT
8394
27-Dec-2022
16:07
linh
pham



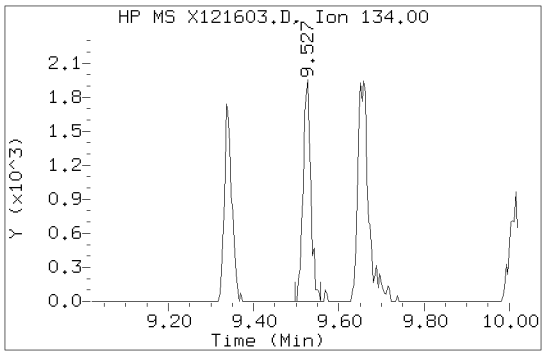
BEFORE

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



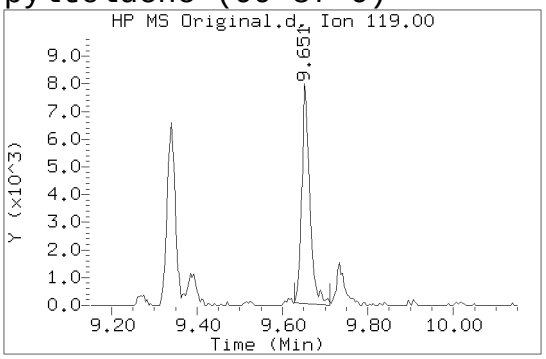
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

Reason Code:

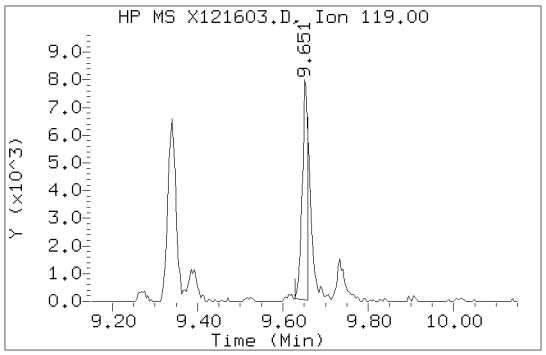
BEFORE

MASS
119
AREA
10660
HEIGHT
7944
27-Dec-2022
16:03
linh
pham



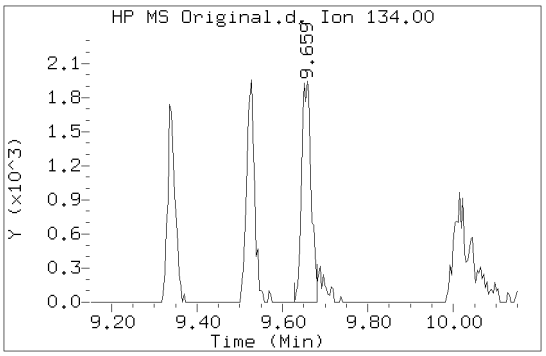
AFTER

MASS
119
AREA
7343
HEIGHT
7944
27-Dec-2022
16:07
linh
pham



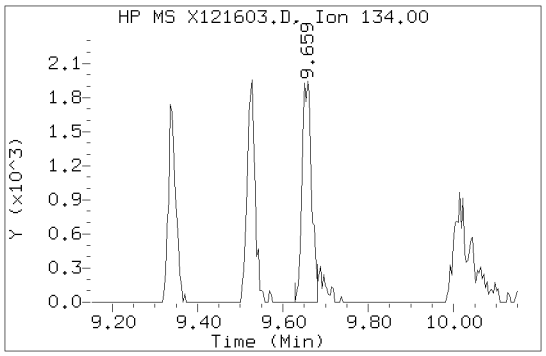
BEFORE

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:03
linh
pham



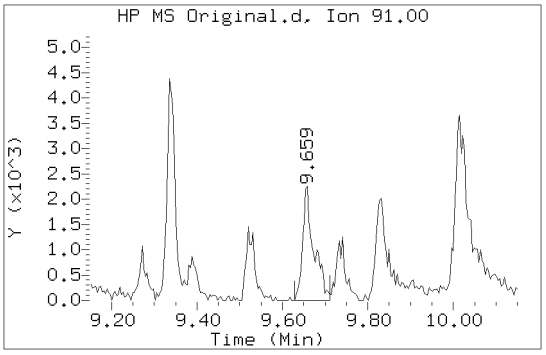
AFTER

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:07
linh
pham



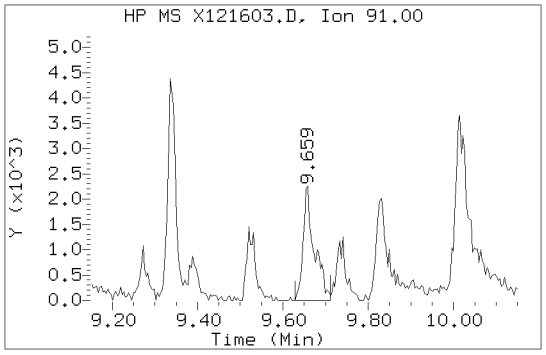
BEFORE

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

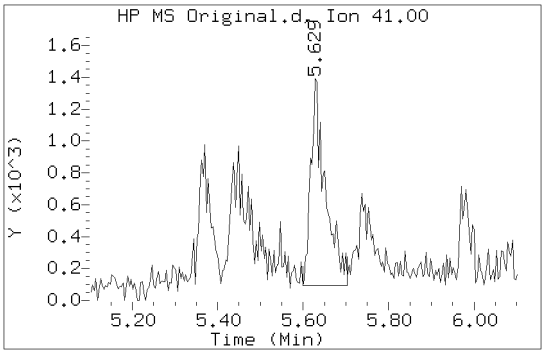


Methyl Methacrylate (80-62-6)

Reason Code:

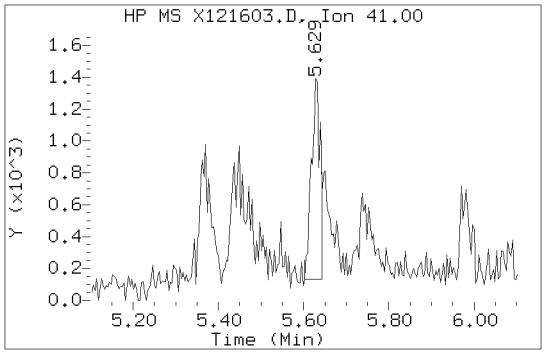
BEFORE

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



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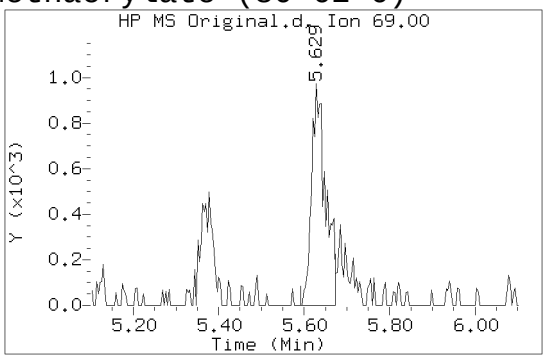
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

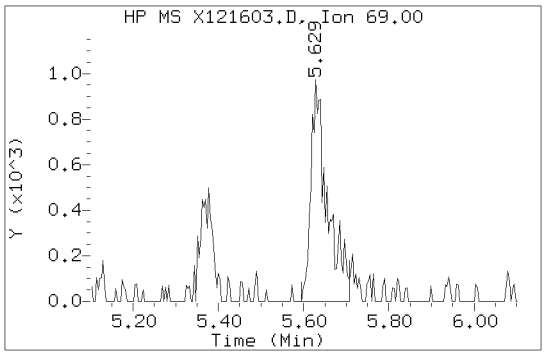
Methyl Methacrylate (80-62-6)

Reason Code:

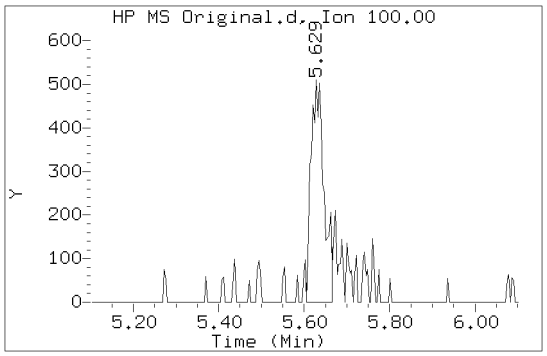
BEFORE
MASS
69
AREA
2216
HEIGHT
973
27-Dec-2022
16:03
linh
pham



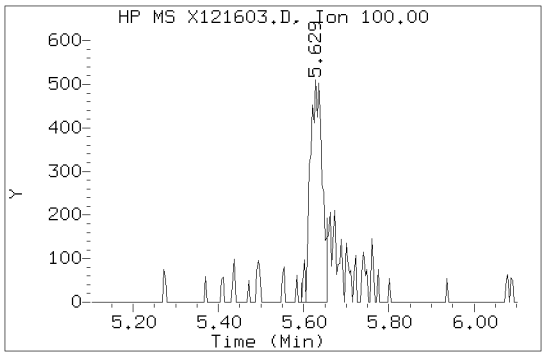
AFTER
MASS
69
AREA
2595
HEIGHT
973
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
100
AREA
1074
HEIGHT
510
27-Dec-2022
16:03
linh
pham



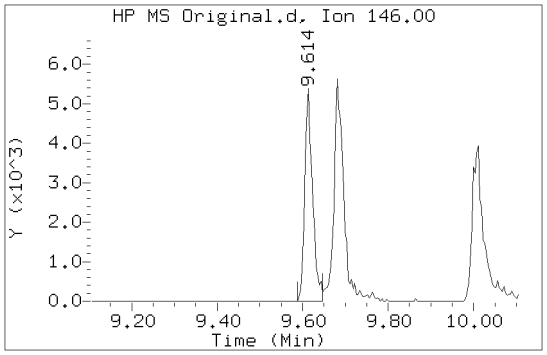
AFTER
MASS
100
AREA
1011
HEIGHT
510
27-Dec-2022
16:07
linh
pham



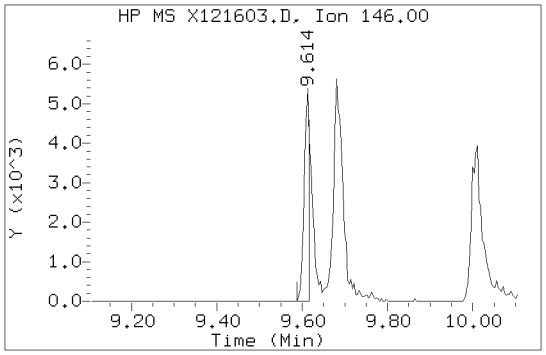
1,3-Dichlorobenzene (541-73-1)

Reason Code:

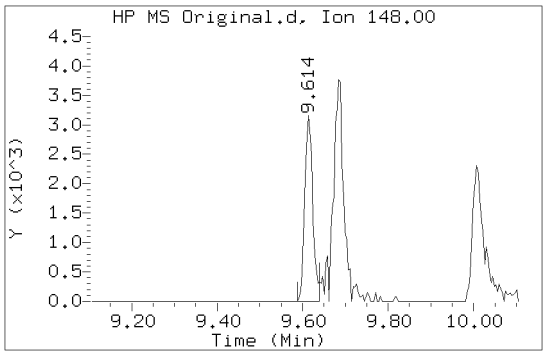
BEFORE
MASS
146
AREA
6964
HEIGHT
5387
27-Dec-2022
16:03
linh
pham



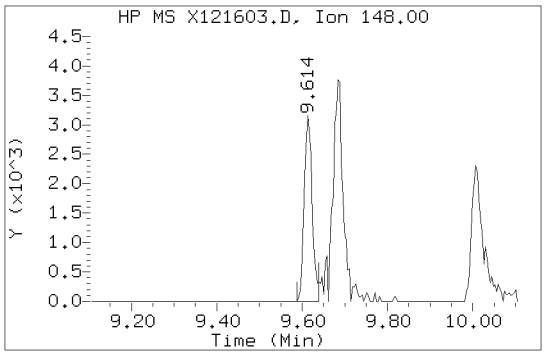
AFTER
MASS
146
AREA
4677
HEIGHT
5387
27-Dec-2022
16:07
linh
pham



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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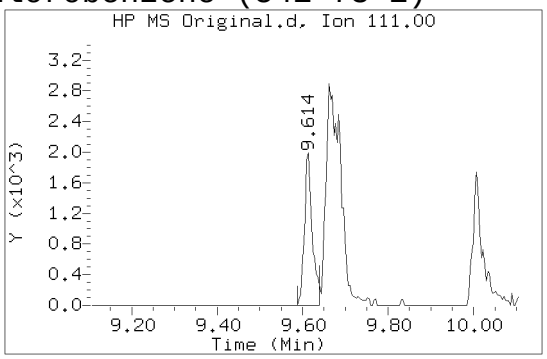
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,3-Dichlorobenzene (541-73-1)

Reason Code:

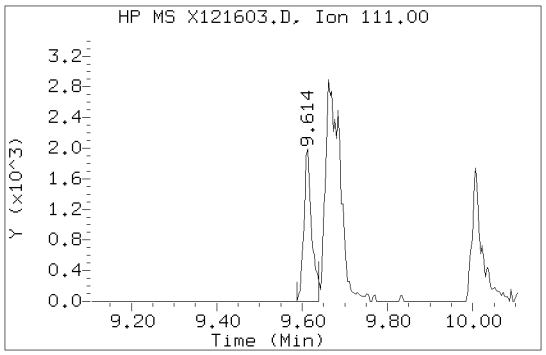
BEFORE

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

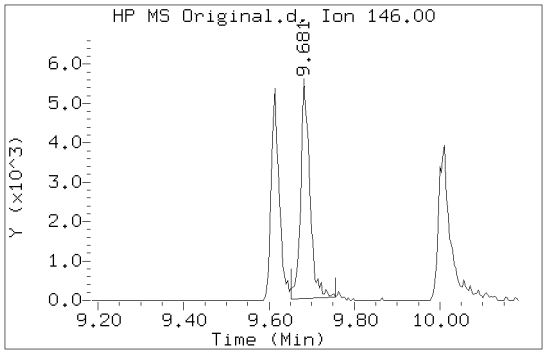


1,4-Dichlorobenzene (106-46-7)

Reason Code:

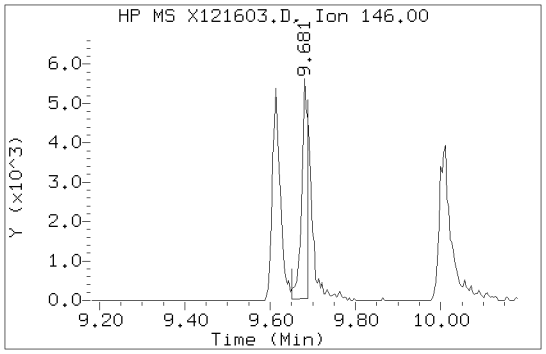
BEFORE

MASS
146
AREA
8510
HEIGHT
5586
27-Dec-2022
16:03
linh
pham



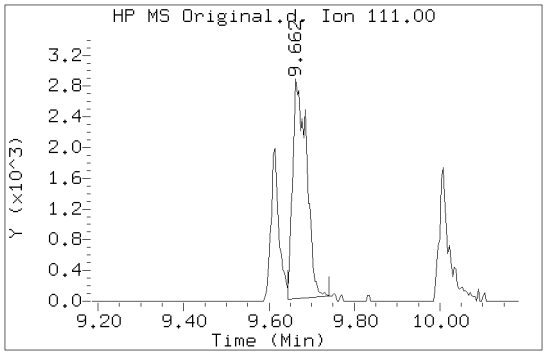
AFTER

MASS
146
AREA
5674
HEIGHT
5587
27-Dec-2022
16:07
linh
pham



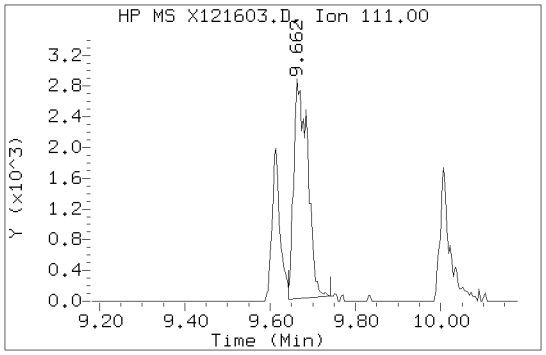
BEFORE

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:03
linh
pham



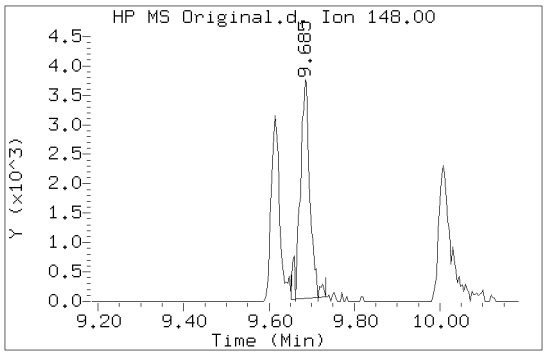
AFTER

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:07
linh
pham



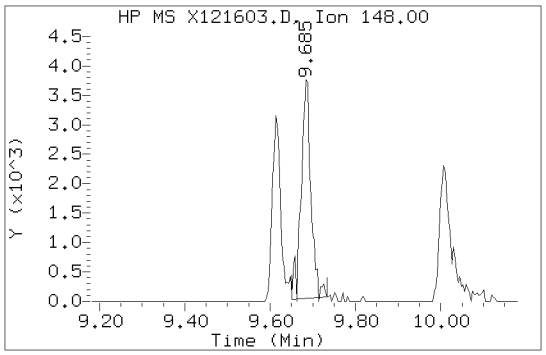
BEFORE

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



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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
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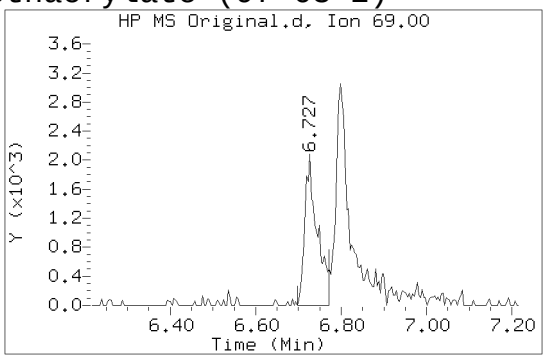
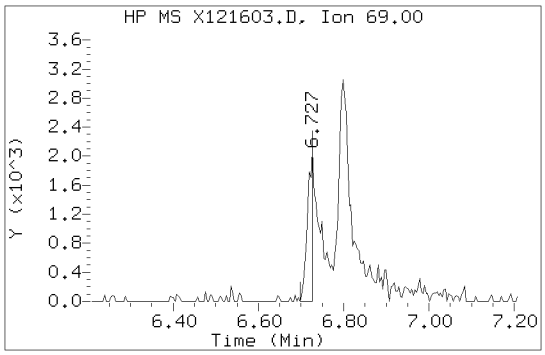
AREA
4283
HEIGHT
2083
27-Dec-2022
16:03
linh
pham



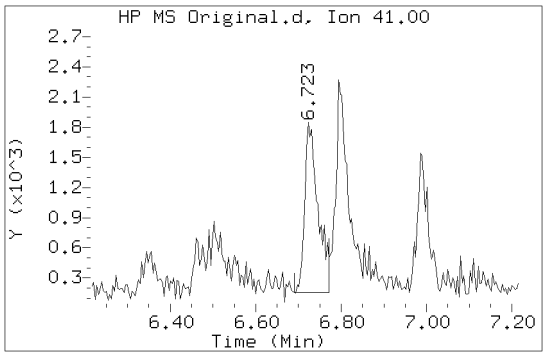
AFTER

MASS
69
AREA
1935
HEIGHT
2083
27-Dec-2022
16:07
linh
pham



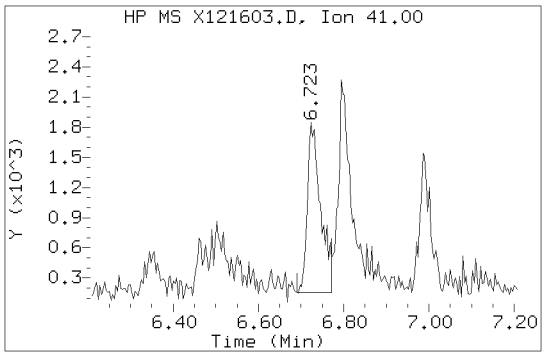
BEFORE

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

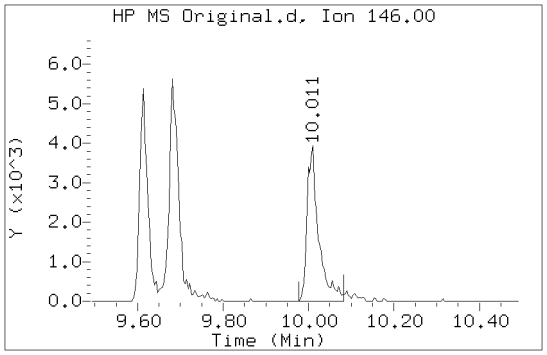


1,2-Dichlorobenzene (95-50-1)

Reason Code:

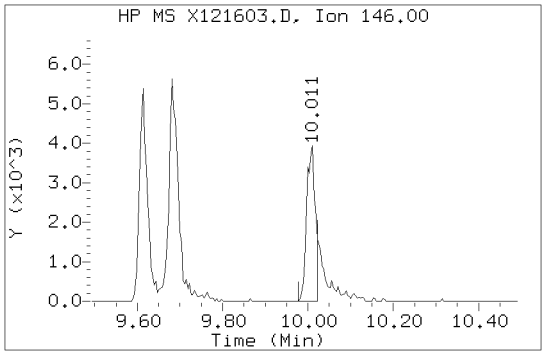
BEFORE

MASS
146
AREA
7400
HEIGHT
3934
27-Dec-2022
16:03
linh
pham



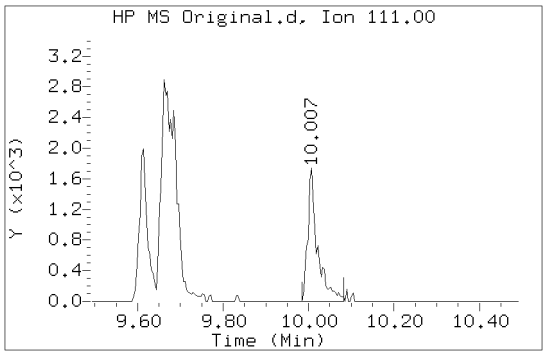
AFTER

MASS
146
AREA
5504
HEIGHT
3934
27-Dec-2022
16:07
linh
pham



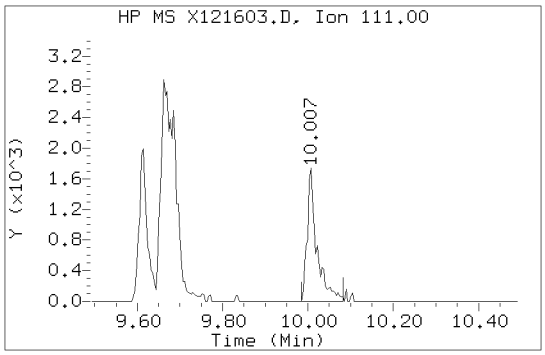
BEFORE

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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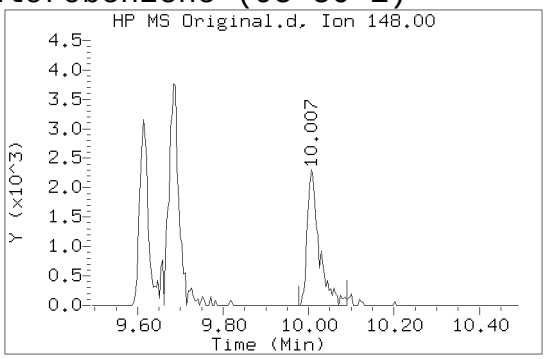
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

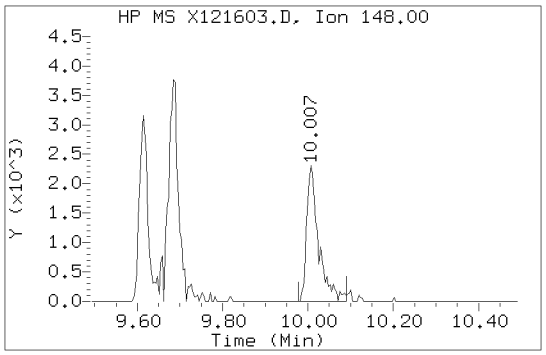
BEFORE

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

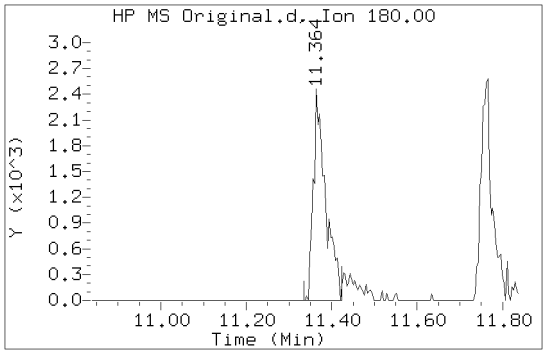


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

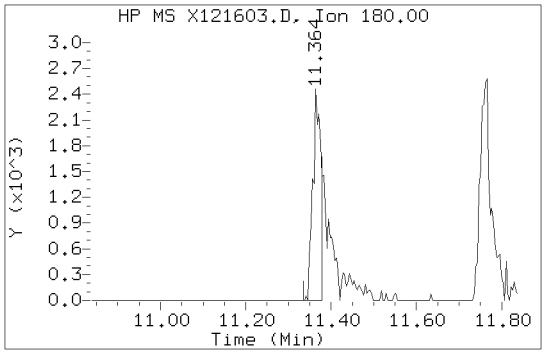
BEFORE

MASS
180
AREA
4912
HEIGHT
2459
27-Dec-2022
16:03
linh
pham



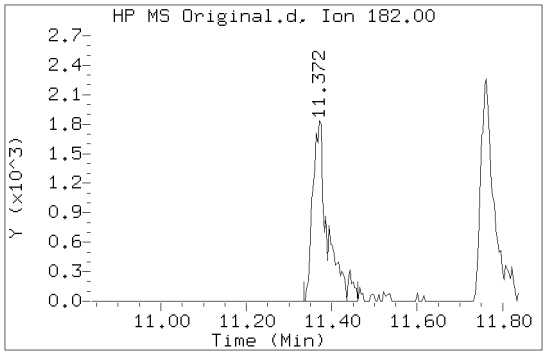
AFTER

MASS
180
AREA
3187
HEIGHT
2459
27-Dec-2022
16:07
linh
pham



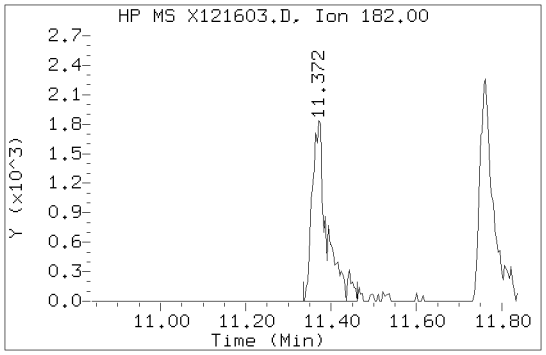
BEFORE

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:03
linh
pham



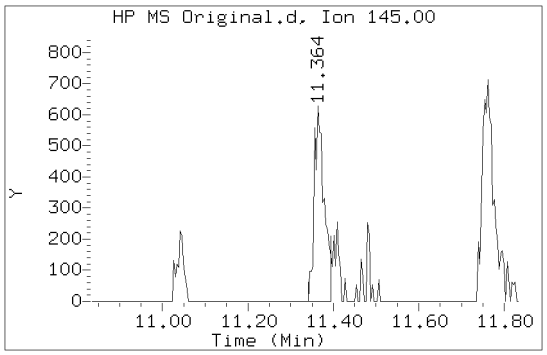
AFTER

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:07
linh
pham



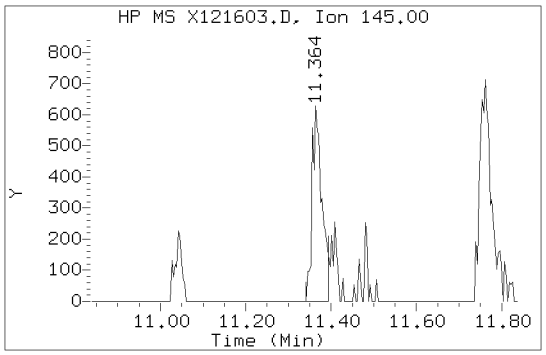
BEFORE

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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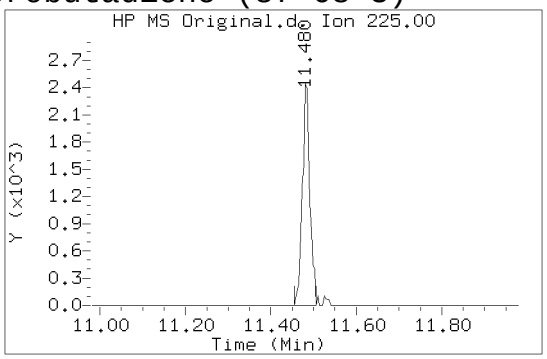
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

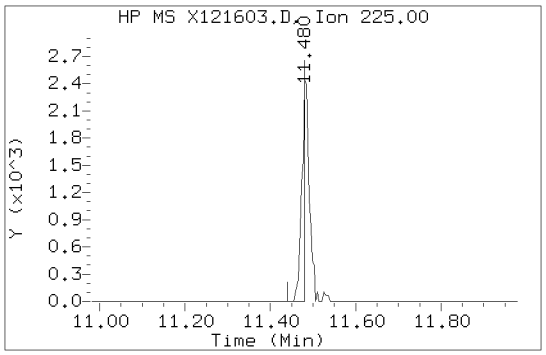
Hexachlorobutadiene (87-68-3)

Reason Code:

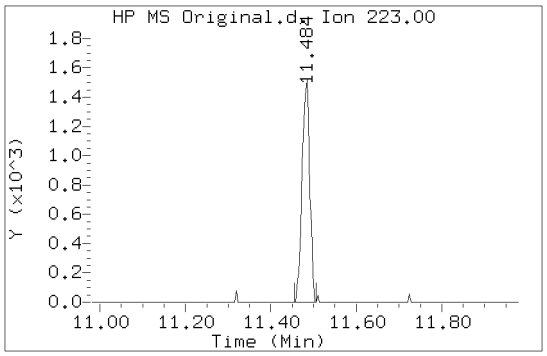
BEFORE
MASS
225
AREA
3038
HEIGHT
2444
27-Dec-2022
16:03
linh
pham



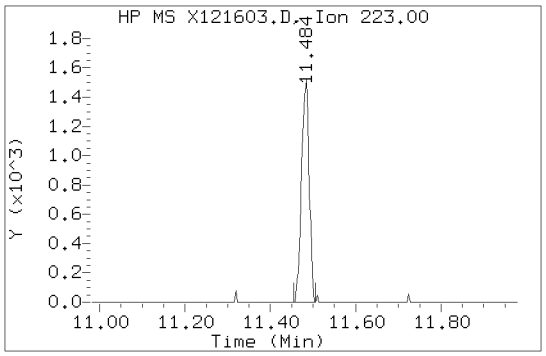
AFTER
MASS
225
AREA
1477
HEIGHT
2444
27-Dec-2022
16:07
linh
pham



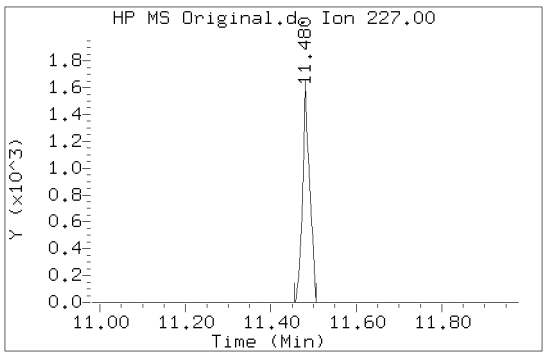
BEFORE
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:03
linh
pham



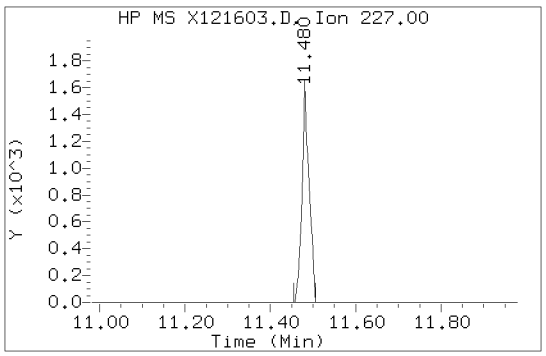
AFTER
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:03
linh
pham



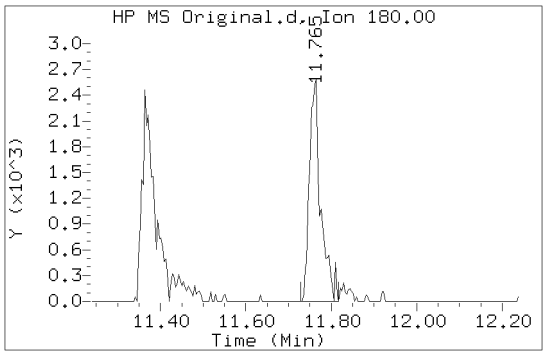
AFTER
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:07
linh
pham



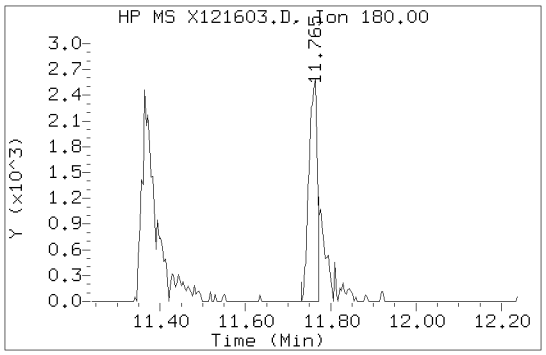
1,2,3-Trichlorobenzene (87-61-6)

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



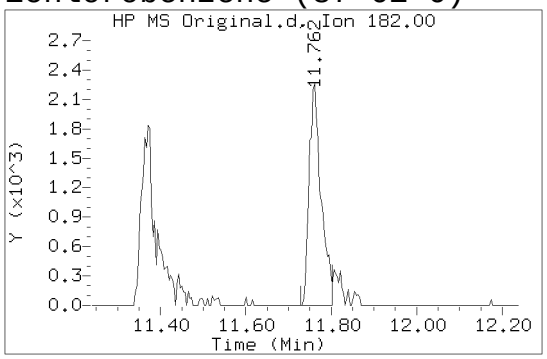
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

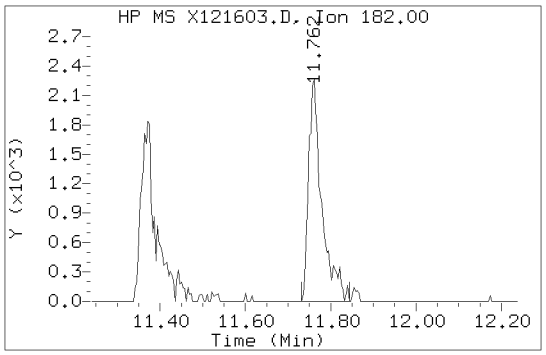
BEFORE

MASS
182
AREA
4404
HEIGHT
2261
27-Dec-2022
16:03
linh
pham



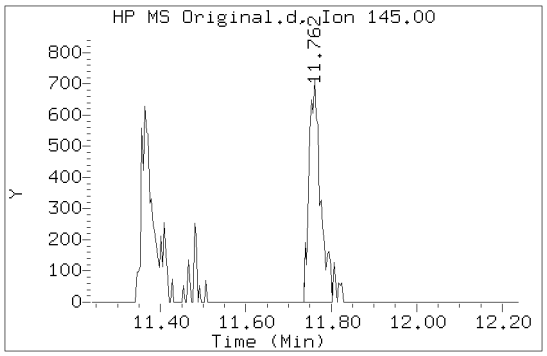
AFTER

MASS
182
AREA
4881
HEIGHT
2261
27-Dec-2022
16:07
linh
pham



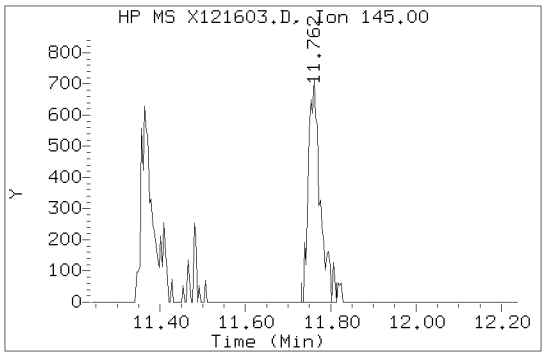
BEFORE

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

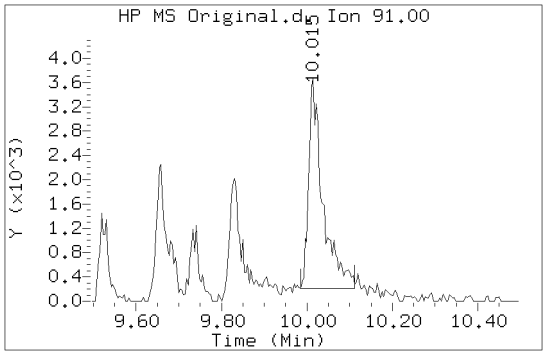


n-Butylbenzene (104-51-8)

Reason Code:

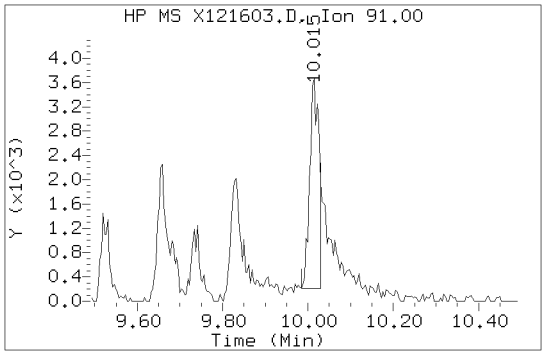
BEFORE

MASS
91
AREA
8005
HEIGHT
3451
27-Dec-2022
16:03
linh
pham



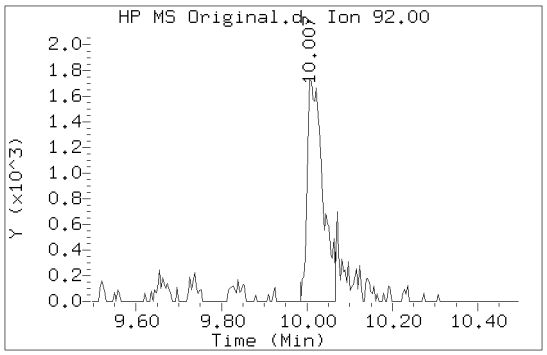
AFTER

MASS
91
AREA
5149
HEIGHT
3451
27-Dec-2022
16:07
linh
pham



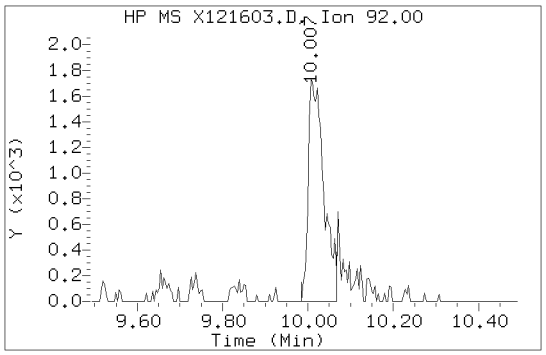
BEFORE

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



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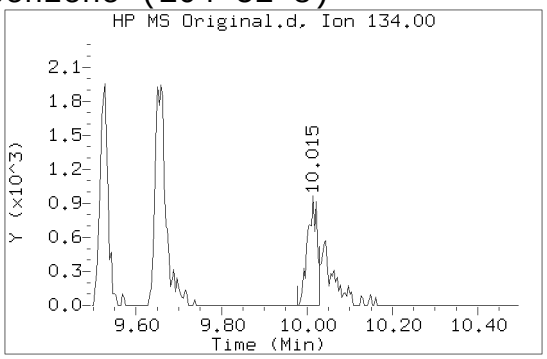
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

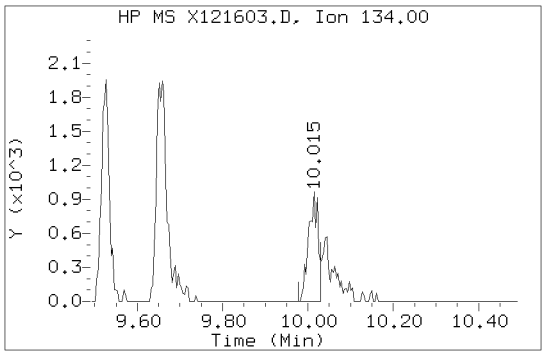
BEFORE

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

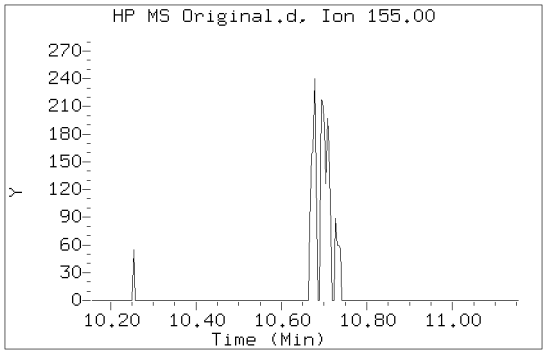


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

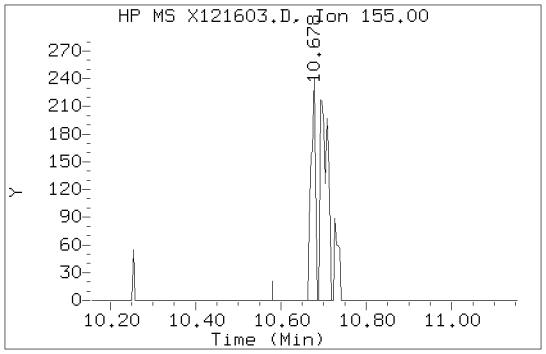
BEFORE

MASS
155
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



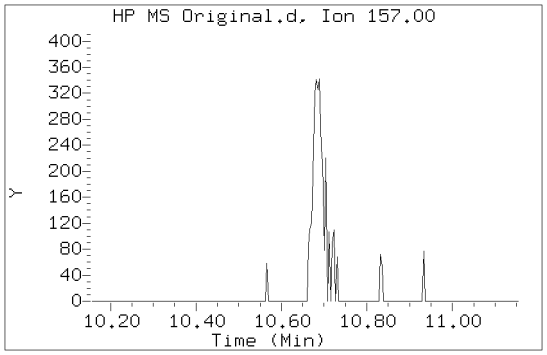
AFTER

MASS
155
AREA
441
HEIGHT
240
27-Dec-2022
16:07
linh
pham



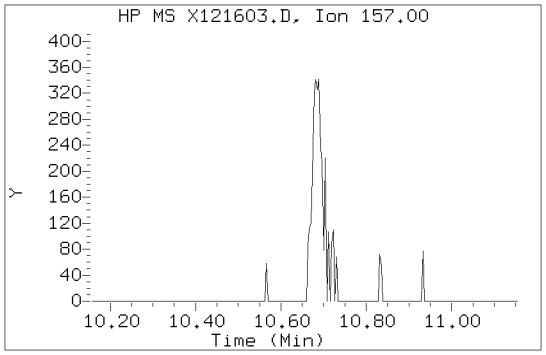
BEFORE

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



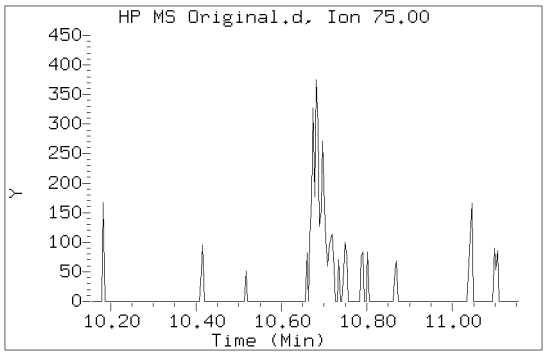
AFTER

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



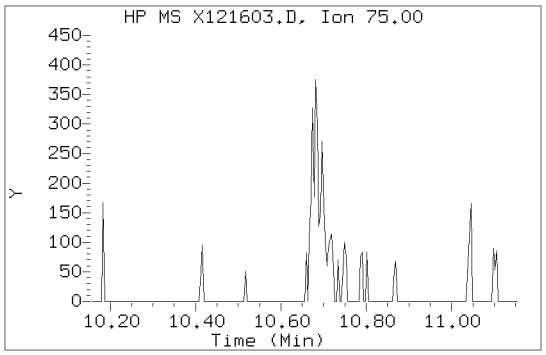
BEFORE

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



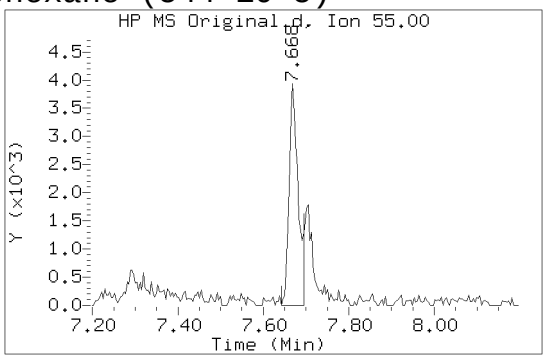
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1-Chlorohexane (544-10-5)

Reason Code:

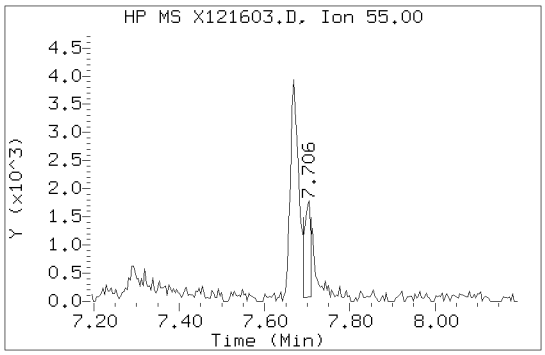
BEFORE

MASS
55
AREA
5785
HEIGHT
3936
27-Dec-2022
16:03
linh
pham



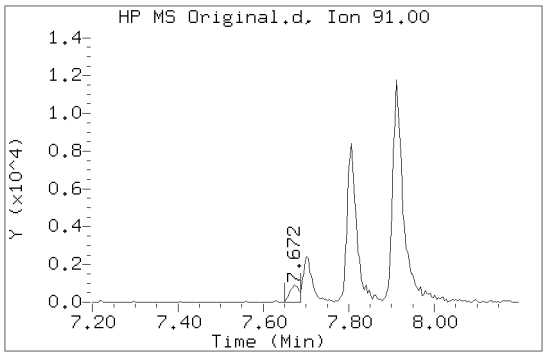
AFTER

MASS
55
AREA
1829
HEIGHT
1707
27-Dec-2022
16:07
linh
pham



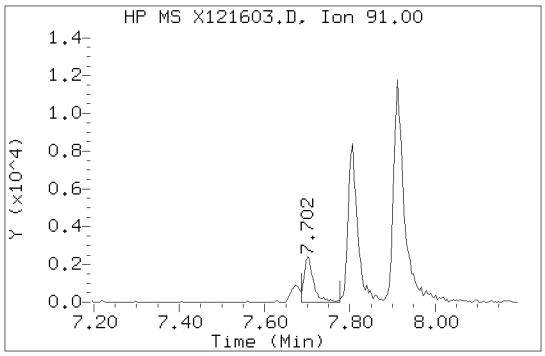
BEFORE

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

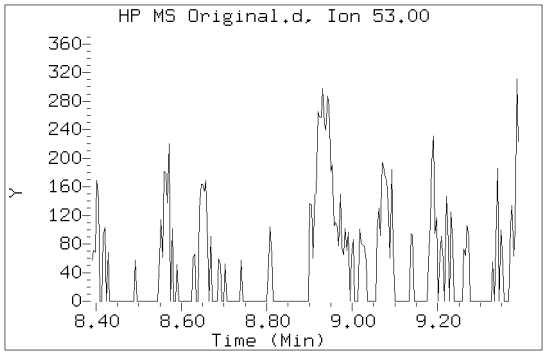


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

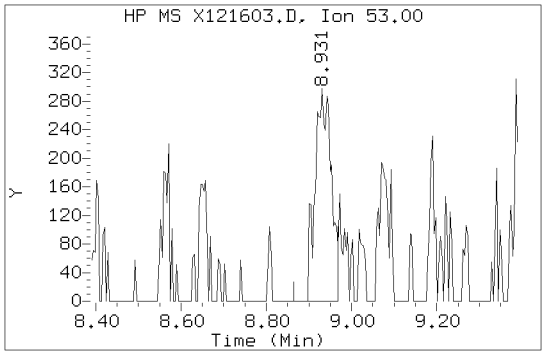
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



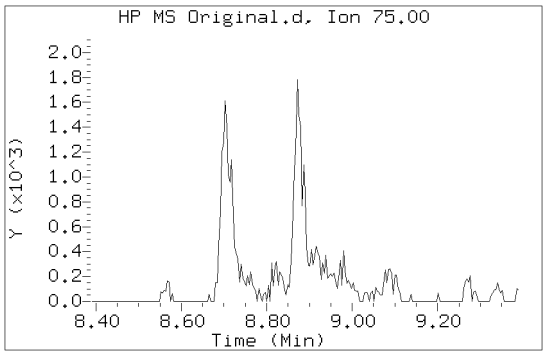
AFTER

MASS
53
AREA
792
HEIGHT
298
27-Dec-2022
16:07
linh
pham



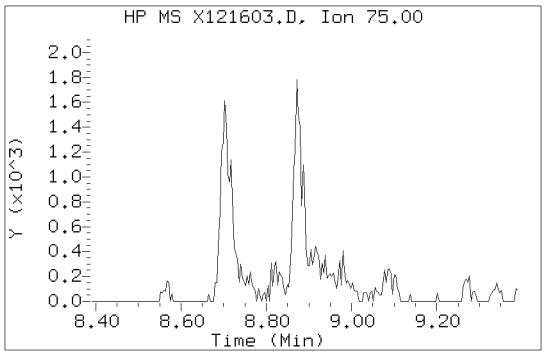
BEFORE

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



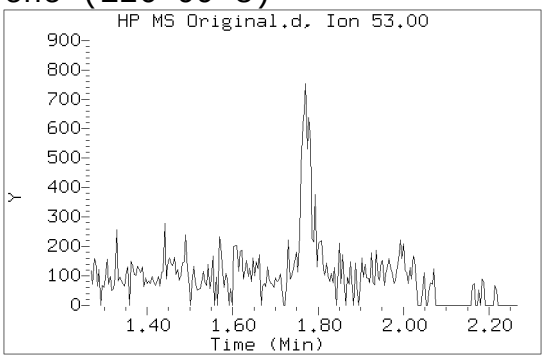
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroprene (126-99-8)

Reason Code:

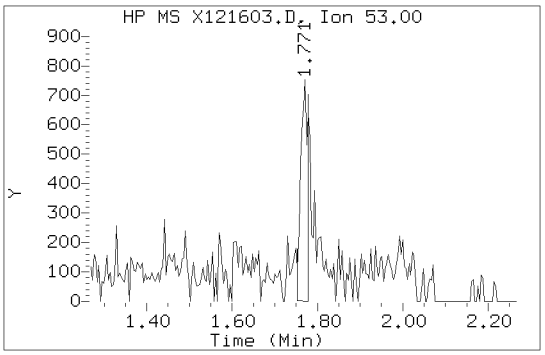
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



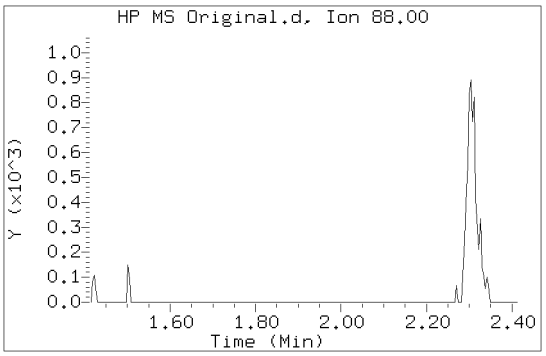
AFTER

MASS
53
AREA
900
HEIGHT
751
27-Dec-2022
16:07
linh
pham



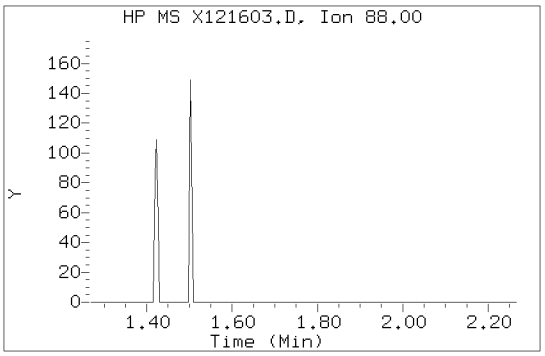
BEFORE

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

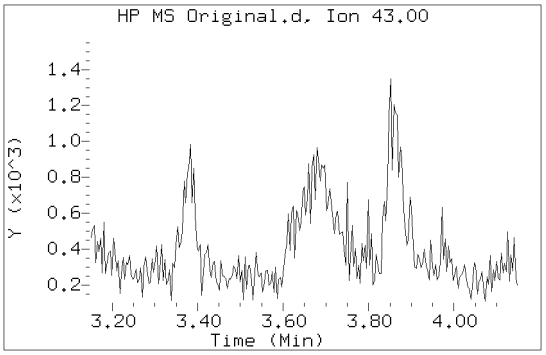


Ethyl Acetate (141-78-6)

Reason Code:

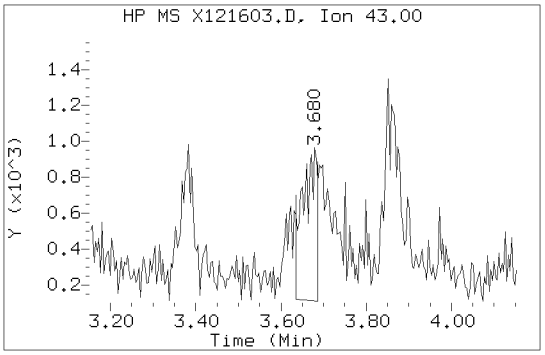
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



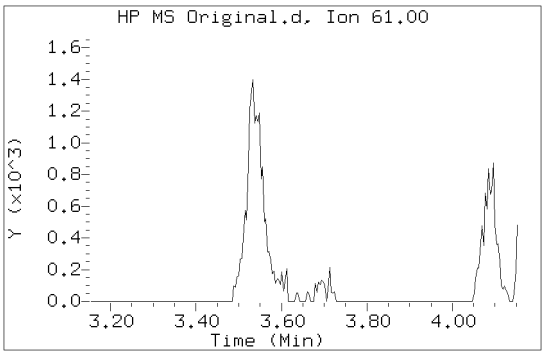
AFTER

MASS
43
AREA
2065
HEIGHT
853
27-Dec-2022
16:07
linh
pham



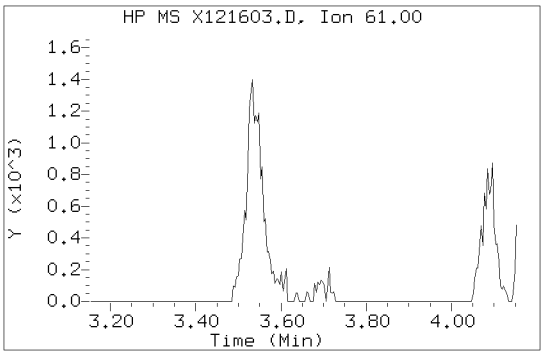
BEFORE

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



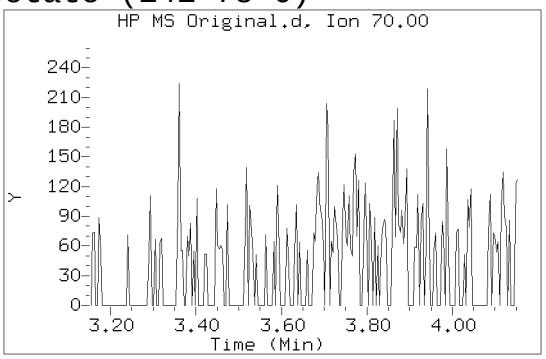
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Acetate (141-78-6)

Reason Code:

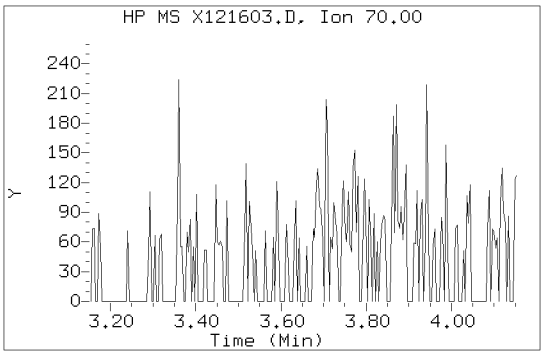
BEFORE

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

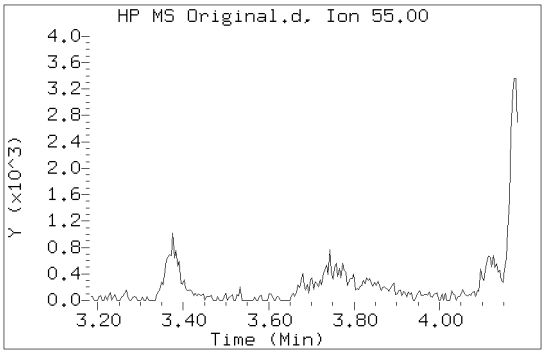


Methyl Acrylate (96-33-3)

Reason Code:

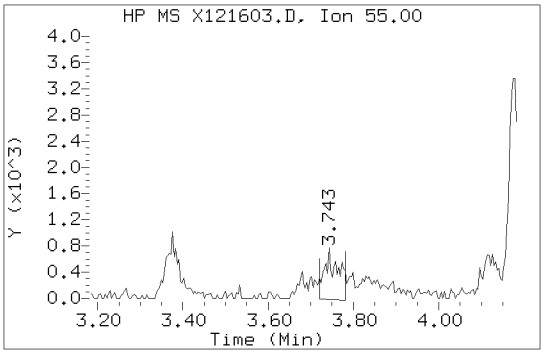
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



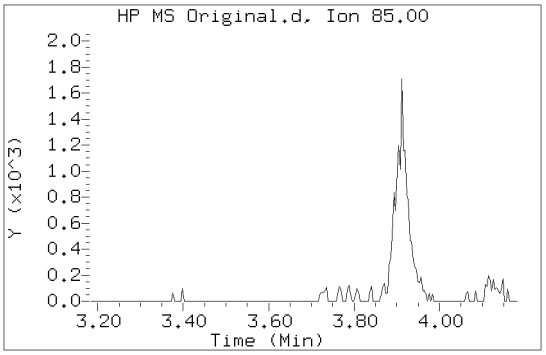
AFTER

MASS
55
AREA
1765
HEIGHT
787
27-Dec-2022
16:07
linh
pham



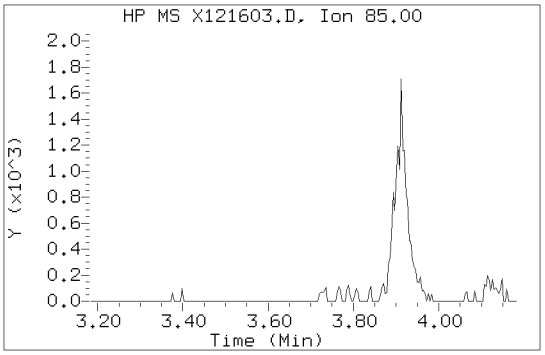
BEFORE

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

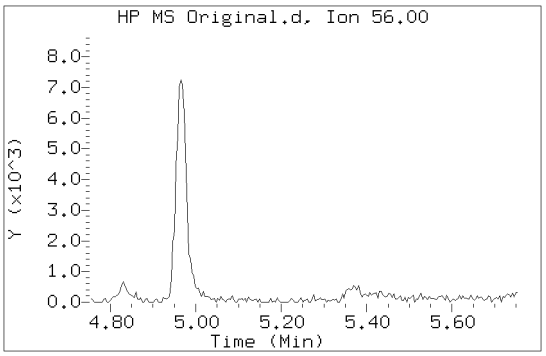


n-Butanol (71-36-3)

Reason Code:

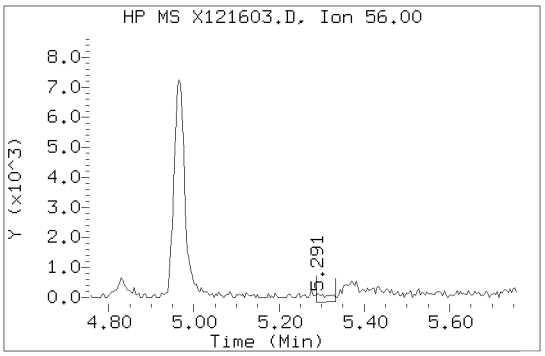
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
56
AREA
622
HEIGHT
300
27-Dec-2022
16:07
linh
pham



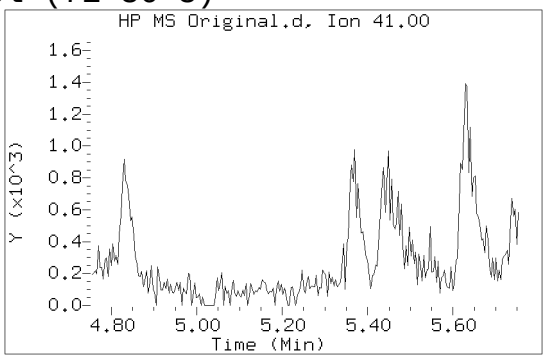
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butanol (71-36-3)

Reason Code:

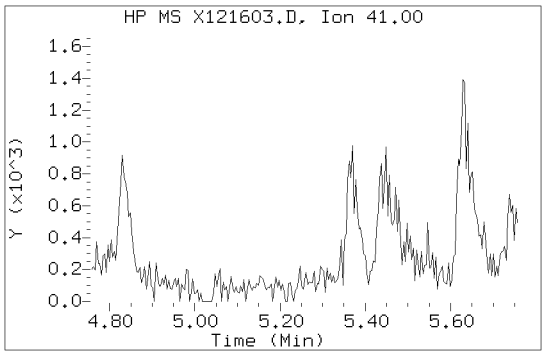
BEFORE

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

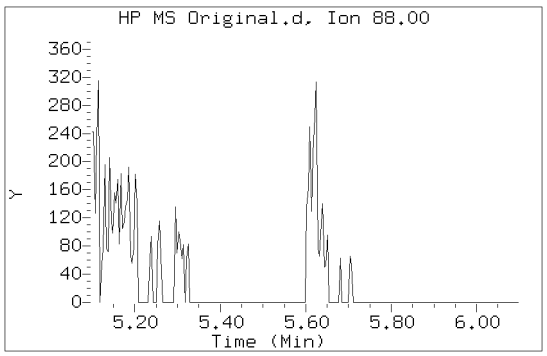


1,4-Dioxane ()

Reason Code:

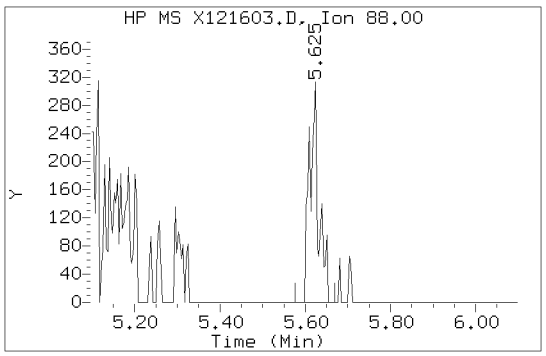
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



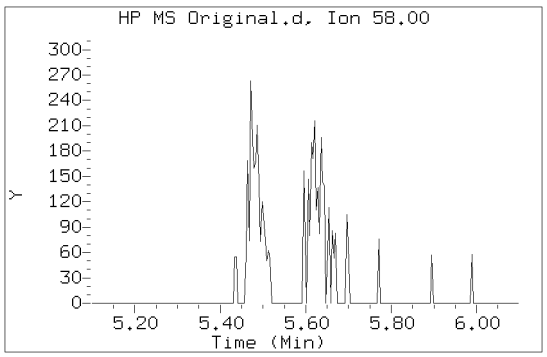
AFTER

MASS
88
AREA
462
HEIGHT
313
27-Dec-2022
16:07
linh
pham



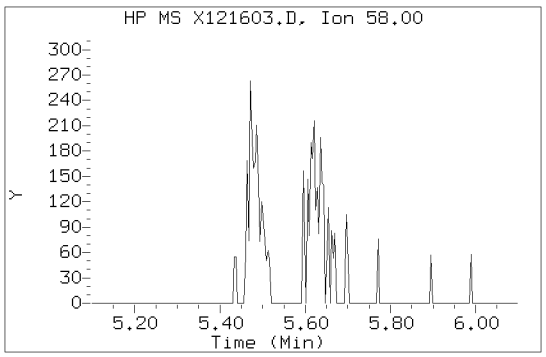
BEFORE

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

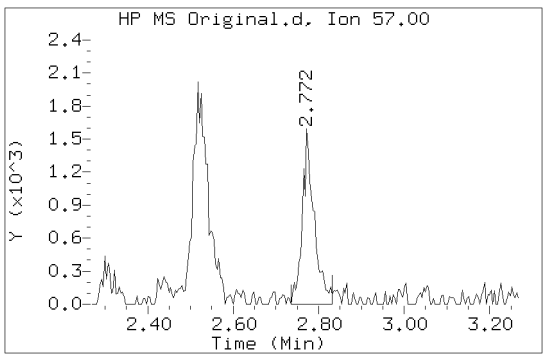


n-Hexane (110-54-3)

Reason Code:

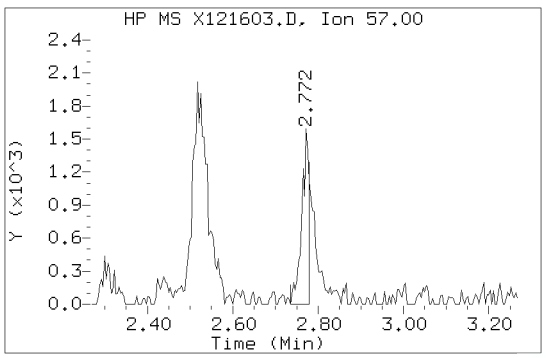
BEFORE

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

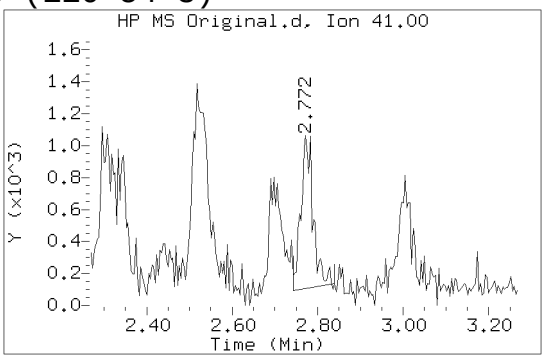


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

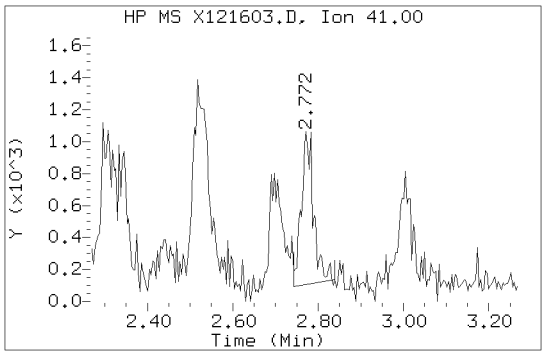
n-Hexane (110-54-3)

Reason Code:

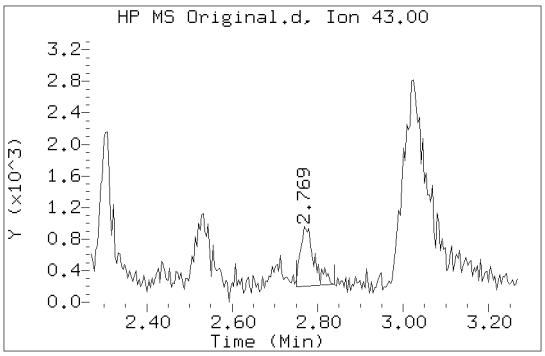
BEFORE
MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:03
linh
pham



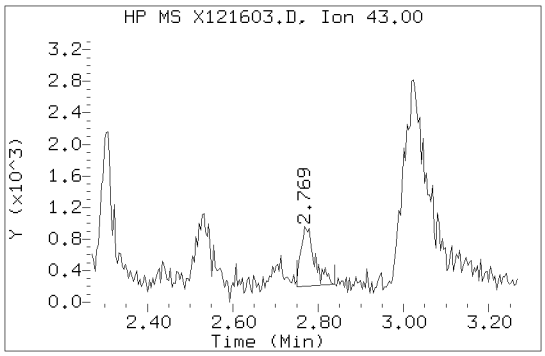
AFTER
MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:03
linh
pham



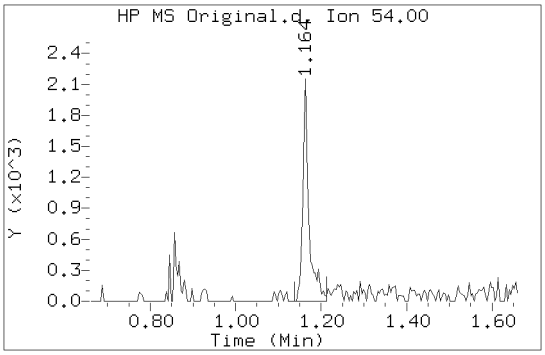
AFTER
MASS
43
AREA
1726
HEIGHT
759
27-Dec-2022
16:07
linh
pham



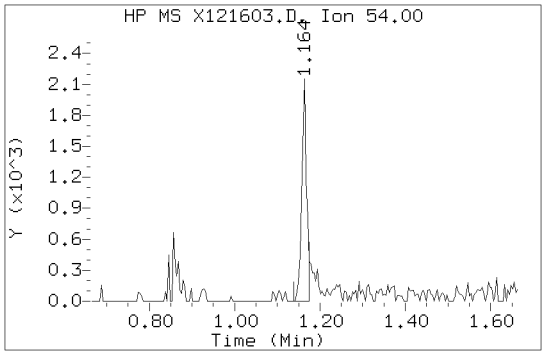
1,3-Butadiene (106-99-0)

Reason Code:

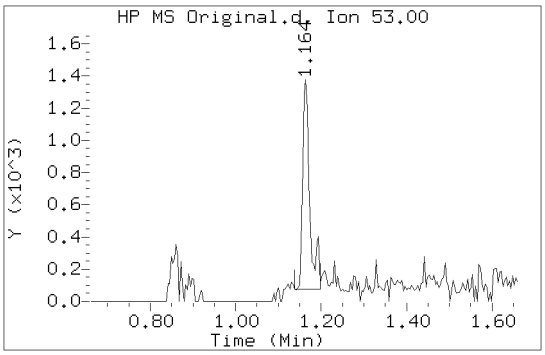
BEFORE
MASS
54
AREA
2206
HEIGHT
2153
27-Dec-2022
16:03
linh
pham



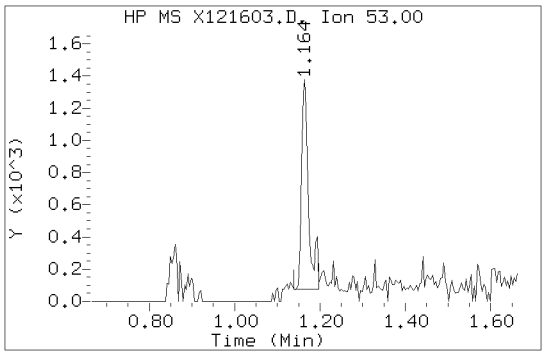
AFTER
MASS
54
AREA
1793
HEIGHT
2153
27-Dec-2022
16:07
linh
pham



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



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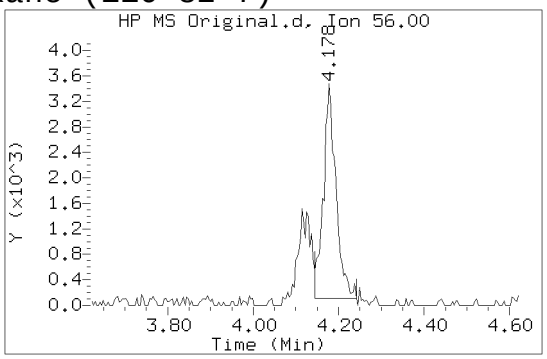
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

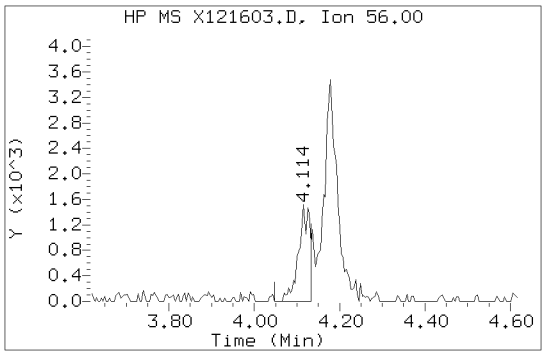
Cyclohexane (110-82-7)

Reason Code:

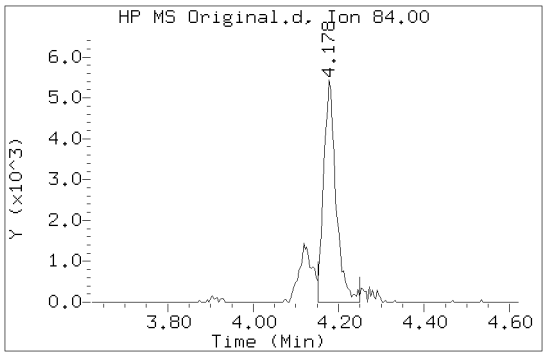
BEFORE
MASS
56
AREA
6884
HEIGHT
3363
27-Dec-2022
16:03
linh
pham



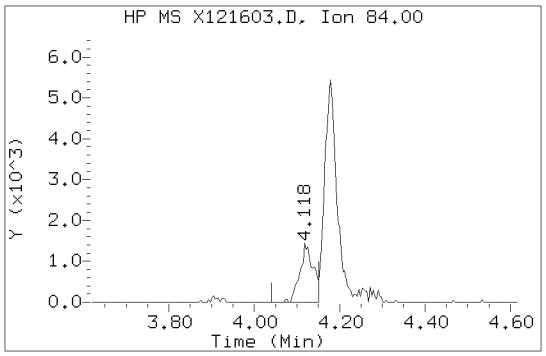
AFTER
MASS
56
AREA
2803
HEIGHT
1514
27-Dec-2022
16:07
linh
pham



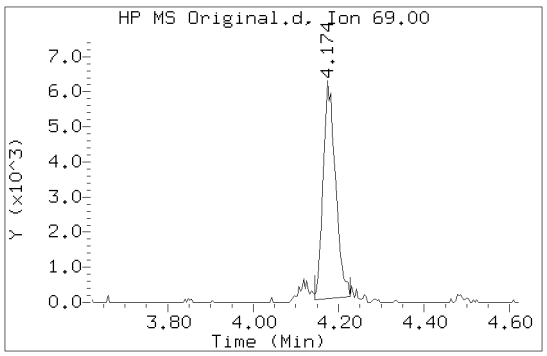
BEFORE
MASS
84
AREA
10951
HEIGHT
5440
27-Dec-2022
16:03
linh
pham



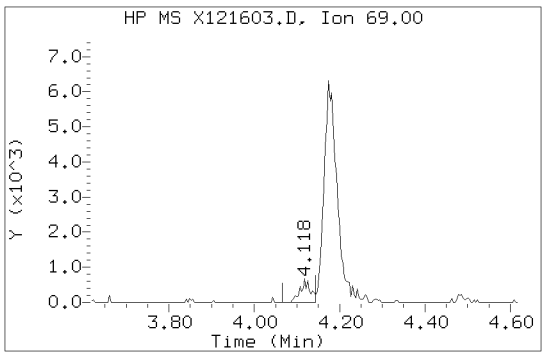
AFTER
MASS
84
AREA
3197
HEIGHT
1443
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
69
AREA
12449
HEIGHT
6206
27-Dec-2022
16:03
linh
pham



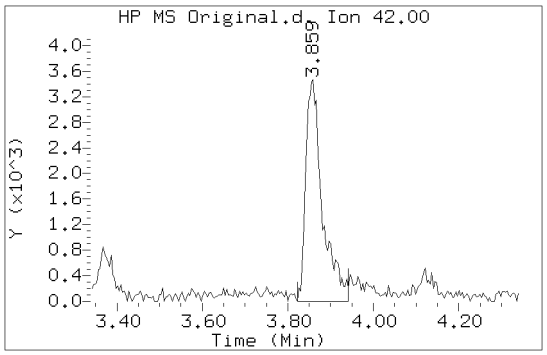
AFTER
MASS
69
AREA
1108
HEIGHT
681
27-Dec-2022
16:07
linh
pham



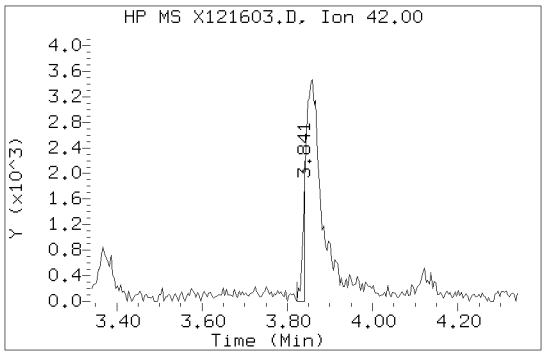
Tetrahydrofuran (109-99-9)

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

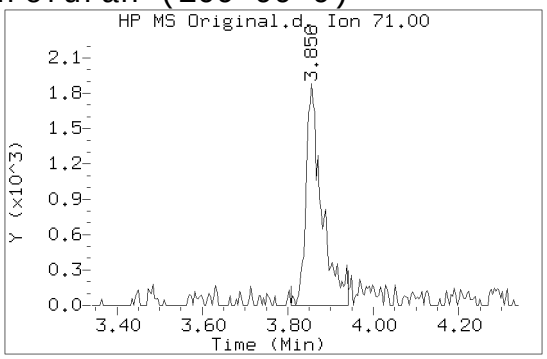


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrahydrofuran (109-99-9)

BEFORE

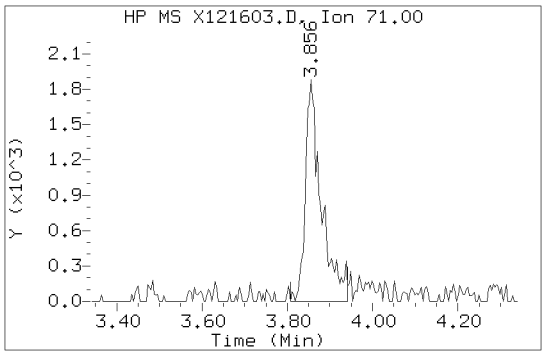
MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

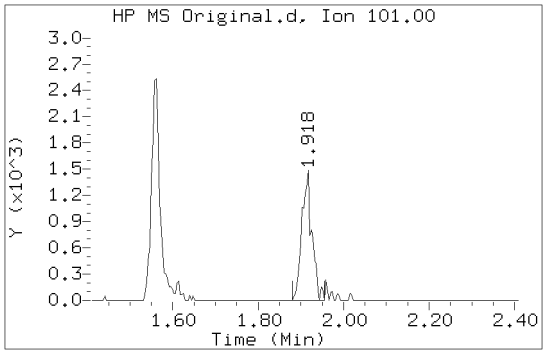
MASS
71
AREA
4885
HEIGHT
1881
27-Dec-2022
16:07
linh
pham



Freon TF (76-13-1)

BEFORE

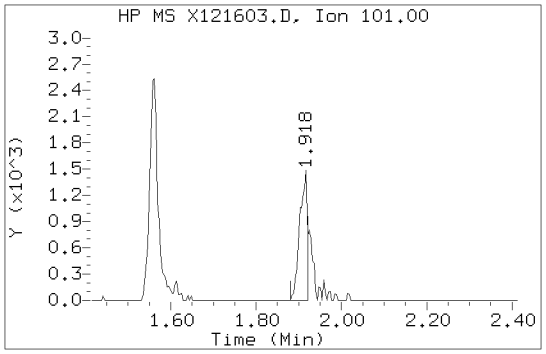
MASS
101
AREA
2478
HEIGHT
1484
27-Dec-2022
16:03
linh
pham



Reason Code:

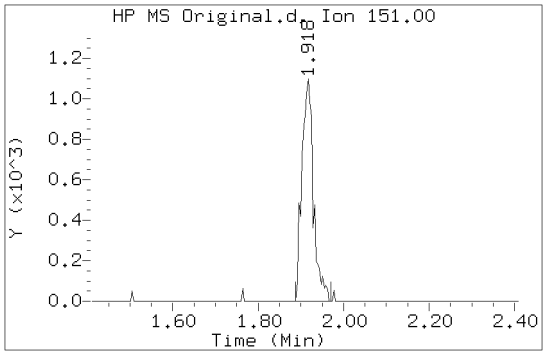
AFTER

MASS
101
AREA
1851
HEIGHT
1484
27-Dec-2022
16:07
linh
pham



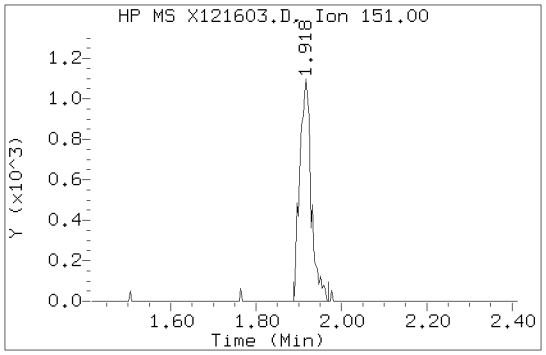
BEFORE

MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:03
linh
pham



AFTER

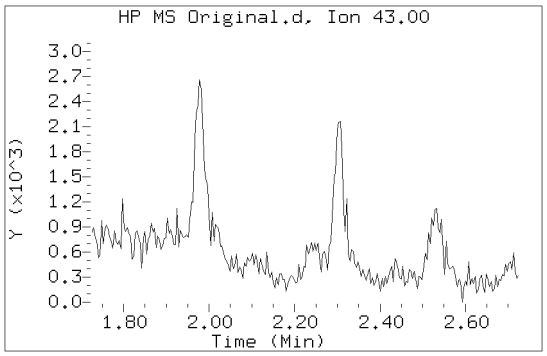
MASS
151
AREA
2095
HEIGHT
1098
27-Dec-2022
16:07
linh
pham



Methyl Acetate (79-20-9)

BEFORE

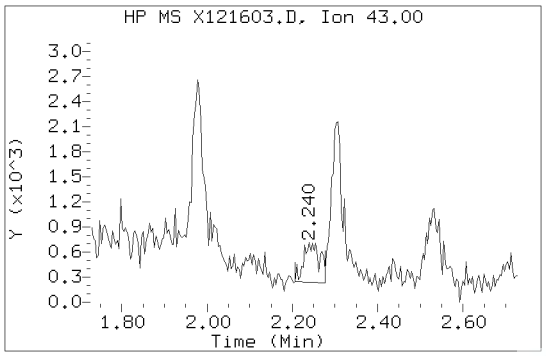
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
43
AREA
1269
HEIGHT
477
27-Dec-2022
16:07
linh
pham



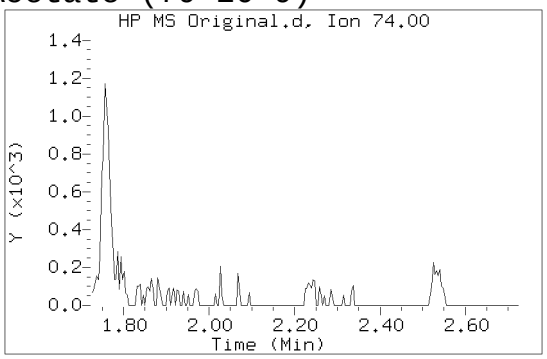
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Acetate (79-20-9)

Reason Code:

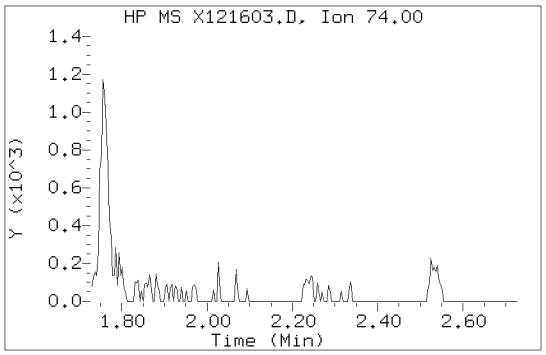
BEFORE

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

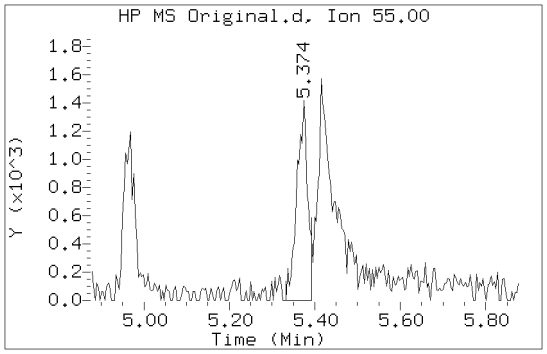


Methylcyclohexane (108-87-2)

Reason Code:

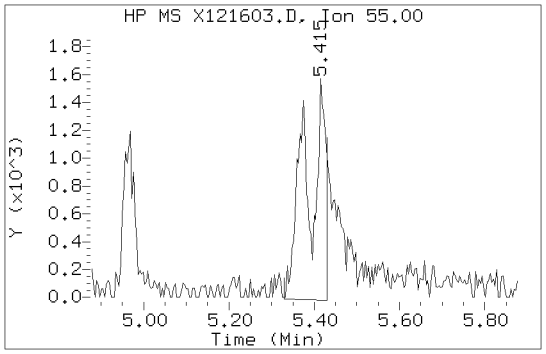
BEFORE

MASS
55
AREA
2505
HEIGHT
1416
27-Dec-2022
16:03
linh
pham



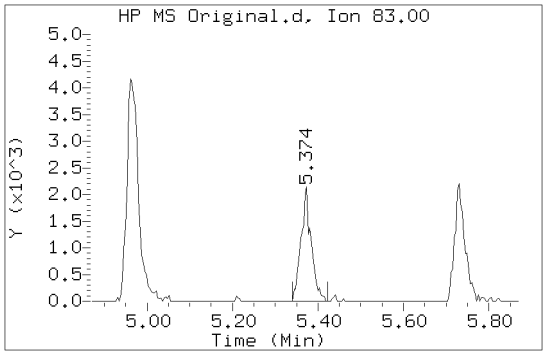
AFTER

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
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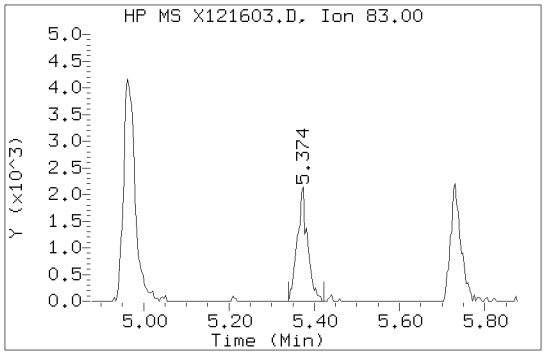

Butyl acrylate (141-32-2)

Reason Code:

BEFORE

MASS
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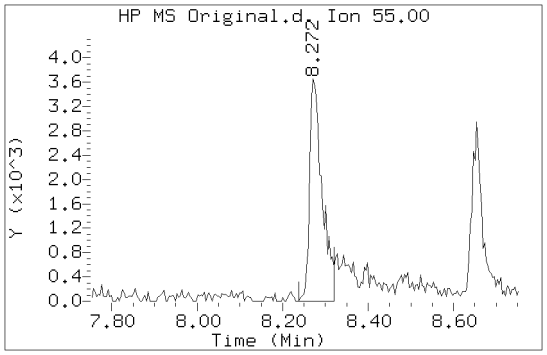

AFTER

MASS
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AREA
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3653
27-Dec-2022
16:07
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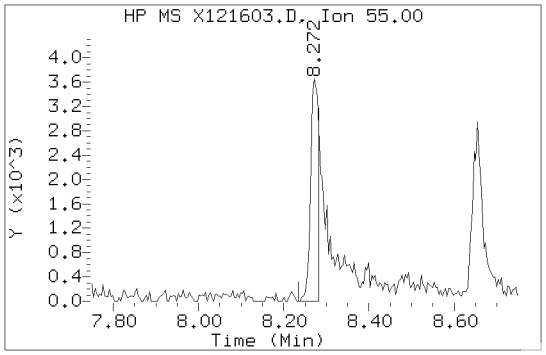

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl acrylate (141-32-2)

Reason Code:

BEFORE
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HEIGHT
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16:03
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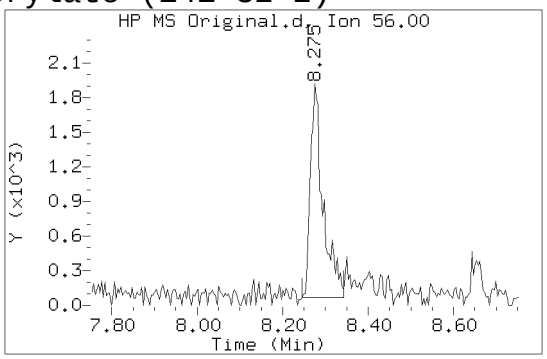

AFTER
MASS
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HEIGHT
1923
27-Dec-2022
16:07
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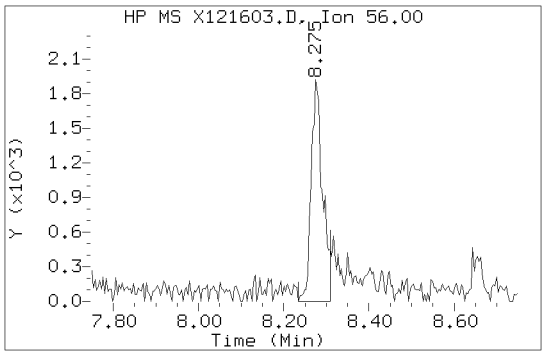

BEFORE
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AREA
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HEIGHT
1542
27-Dec-2022
16:03
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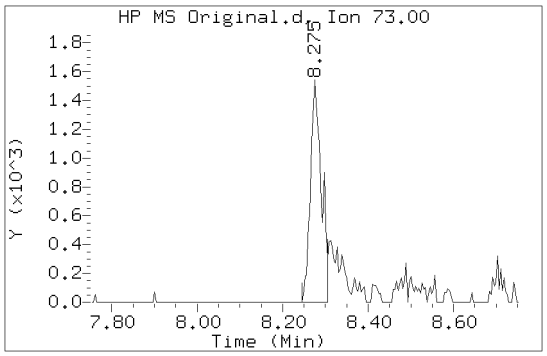

AFTER
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27-Dec-2022
16:07
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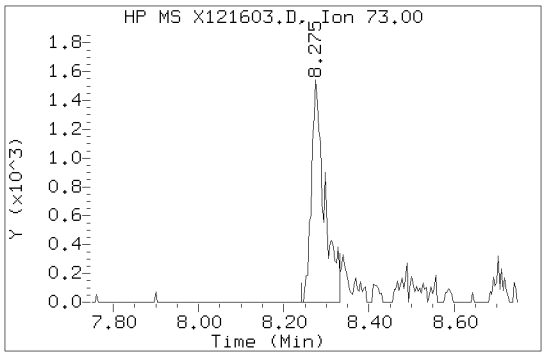

1,2,3-Trimethylbenzene (526-73-8)

Reason Code:

BEFORE
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HEIGHT
11860
27-Dec-2022
16:03
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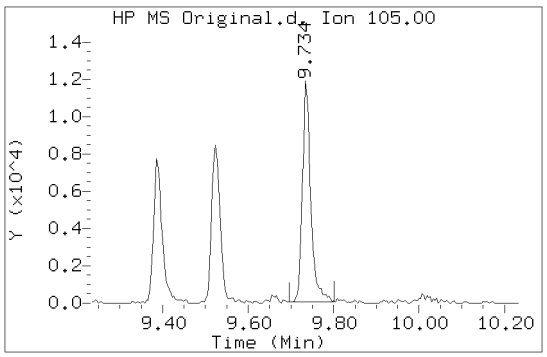
pham



AFTER
MASS
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AREA
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11860
27-Dec-2022
16:07
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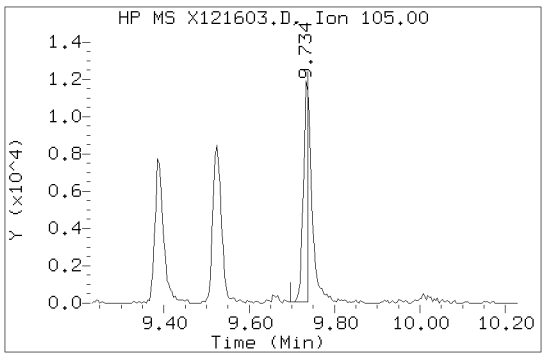

Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE
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AREA
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HEIGHT
3352
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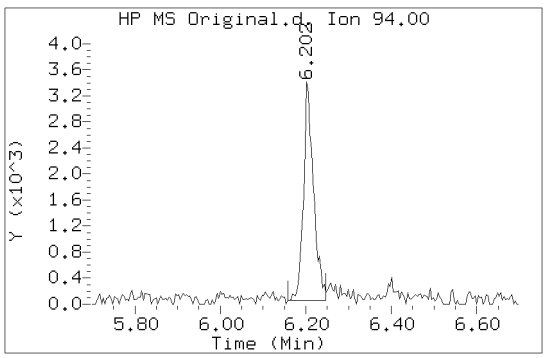
16:03
linh
pham



AFTER
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16:07
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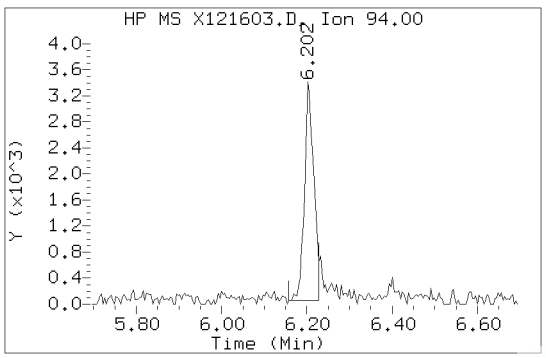

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE
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AREA
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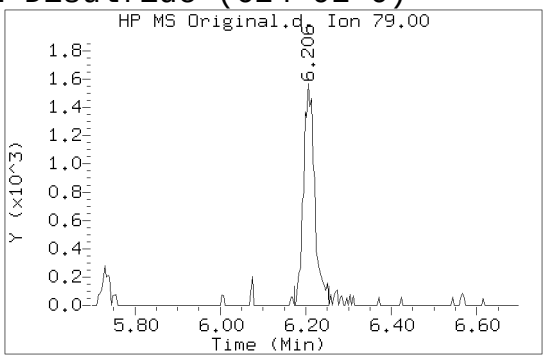
HEIGHT
1568
27-Dec-2022
16:03
linh
pham



AFTER
MASS
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HEIGHT
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16:07
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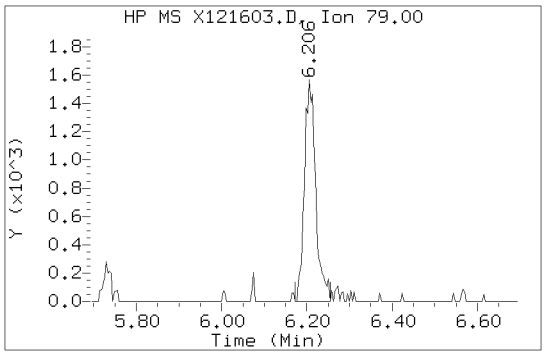

BEFORE
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AREA
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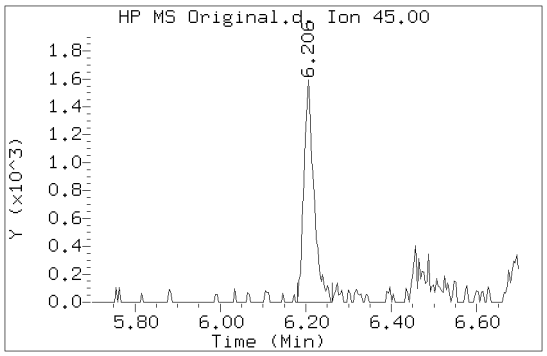
1593
27-Dec-2022
16:03
linh
pham



AFTER
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16:07
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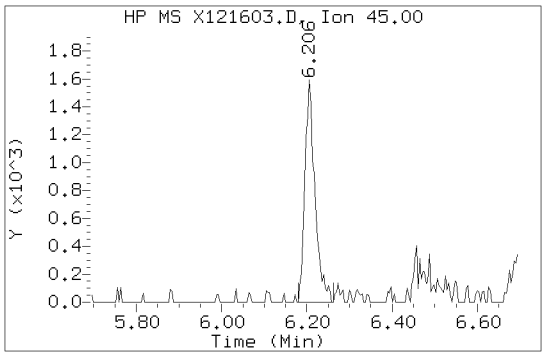

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE
MASS
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AREA
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HEIGHT
3372
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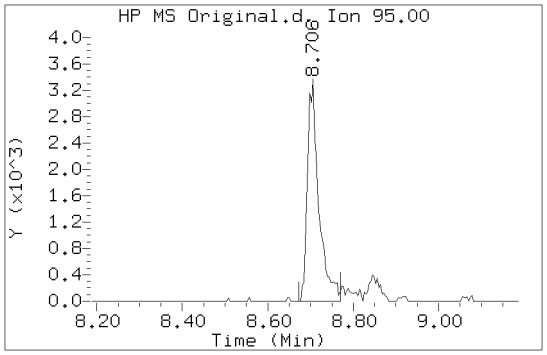
16:03
linh
pham



AFTER
MASS
95
AREA
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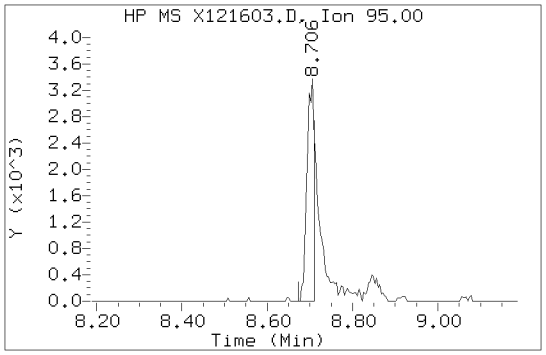
HEIGHT
3372
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
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AREA
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HEIGHT
3502
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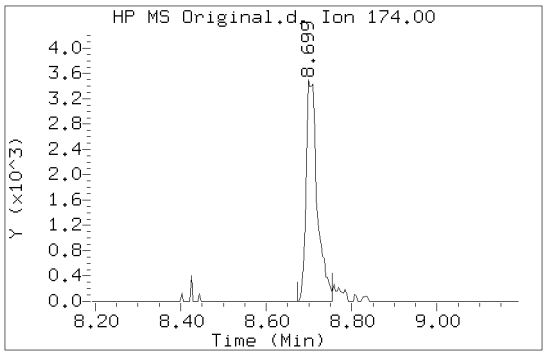
16:03
linh
pham



AFTER
MASS
174
AREA
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16:07
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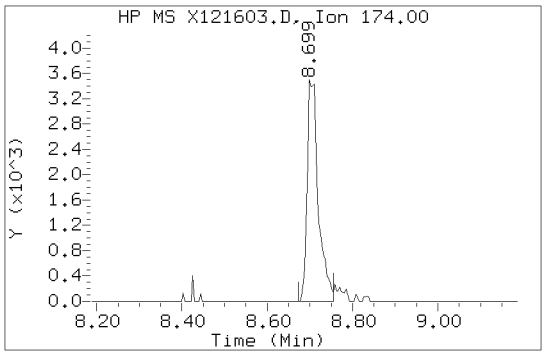

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
176
AREA
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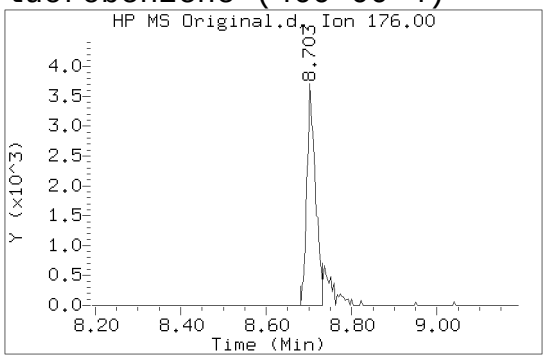
HEIGHT
3711
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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HEIGHT
3711
27-Dec-2022
16:07
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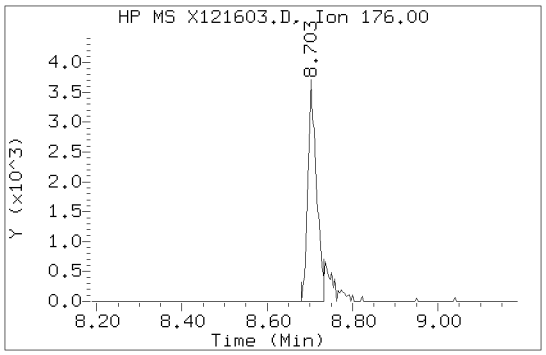

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D Page 1
Report Date: 27-Dec-2022 16:07

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

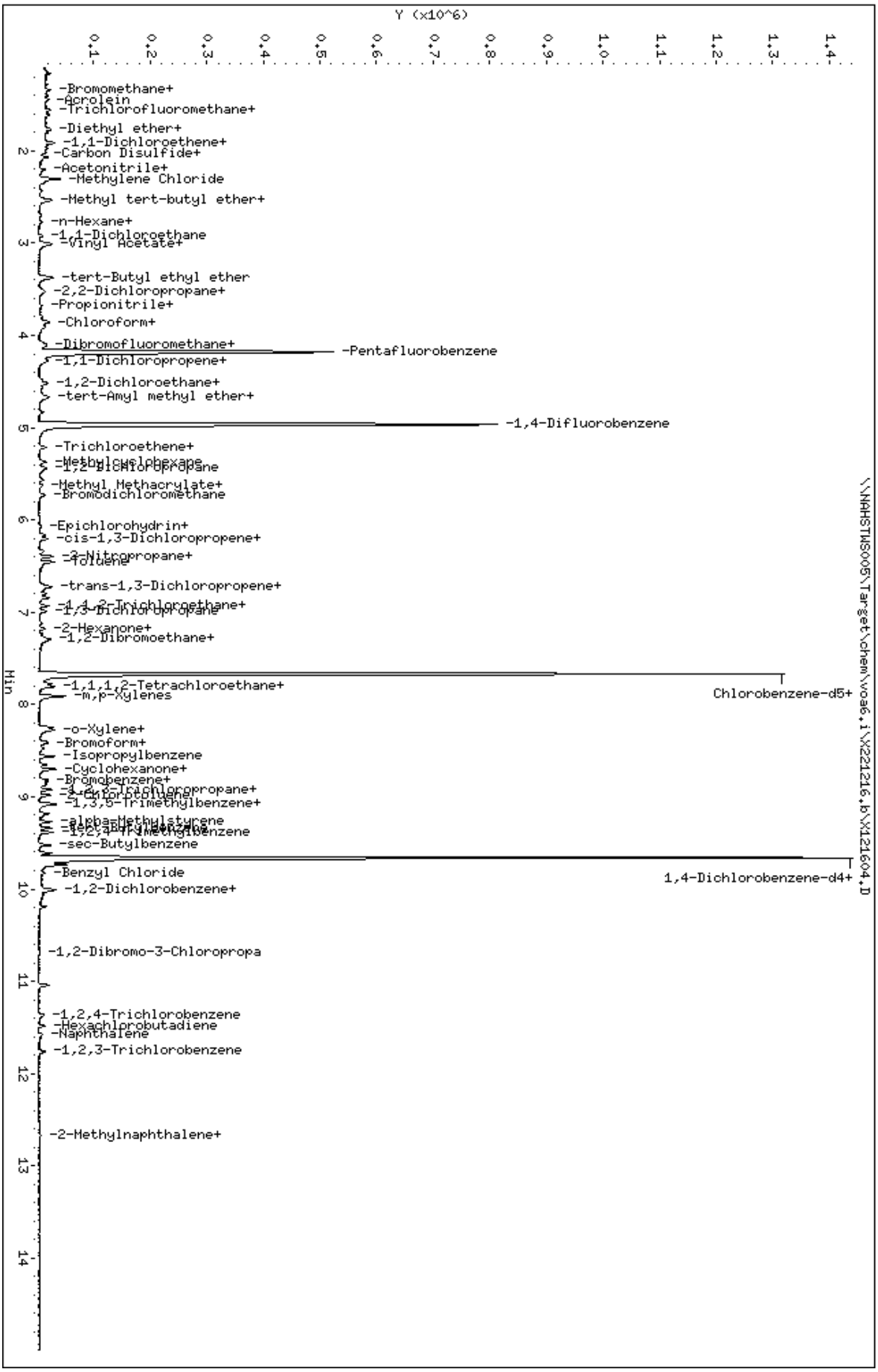
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.743	3.743	(0.896)	3084	1.00000	1.00(M)
	162	Butyl acrylate	55	8.271	8.271	(1.078)	7647	1.00000	0.90
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	2911	1.00000	1.30
	3	Chloromethane	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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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

\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D

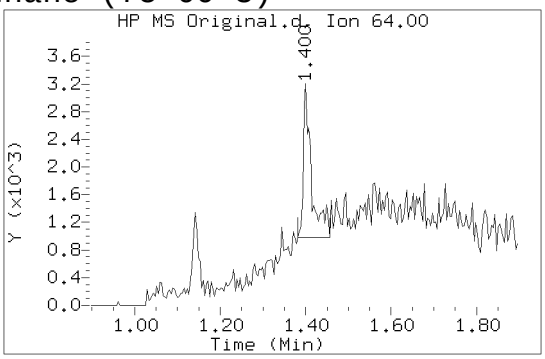
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Chloroethane (75-00-3)

Reason Code:

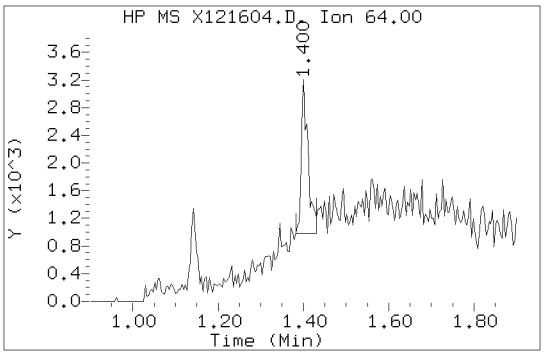
BEFORE

MASS
64
AREA
2984
HEIGHT
2221
27-Dec-2022
16:03
linh
pham



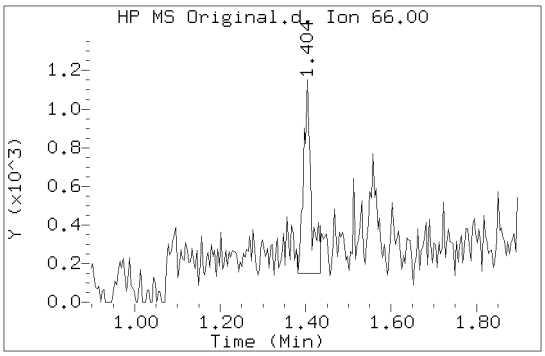
AFTER

MASS
64
AREA
2516
HEIGHT
2221
27-Dec-2022
16:07
linh
pham



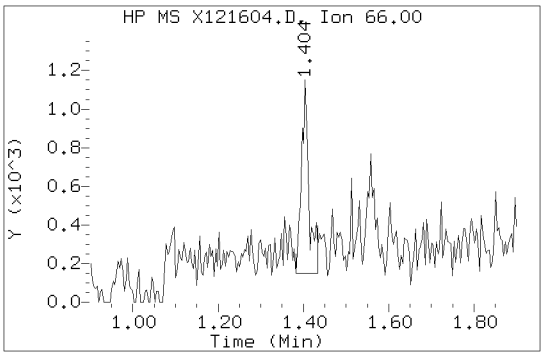
BEFORE

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

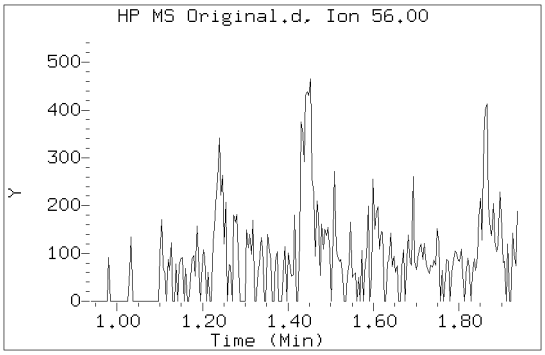


Acrolein (107-02-8)

Reason Code:

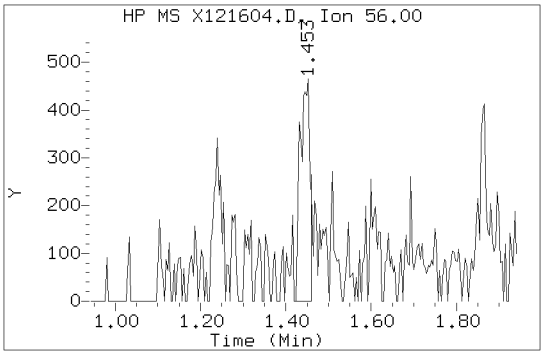
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



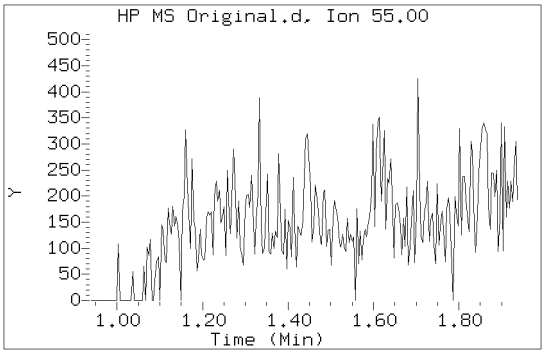
AFTER

MASS
56
AREA
761
HEIGHT
465
27-Dec-2022
16:07
linh
pham



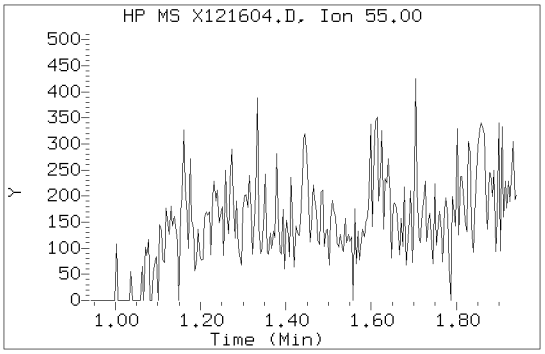
BEFORE

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



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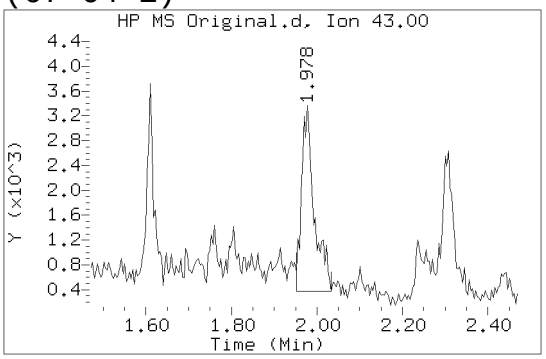
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acetone (67-64-1)

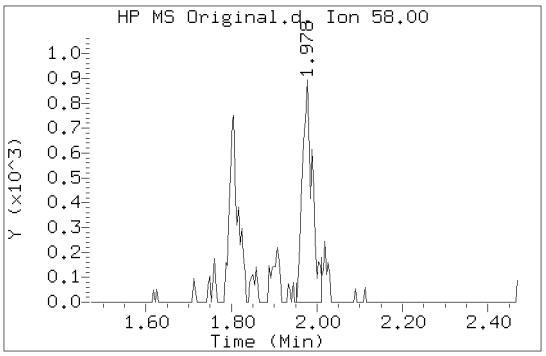
BEFORE

MASS
43
AREA
6265
HEIGHT
2993
27-Dec-2022
16:03
linh
pham



BEFORE

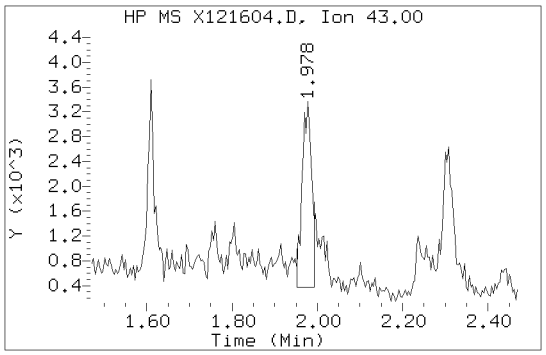
MASS
58
AREA
1474
HEIGHT
894
27-Dec-2022
16:03
linh
pham



Reason Code:

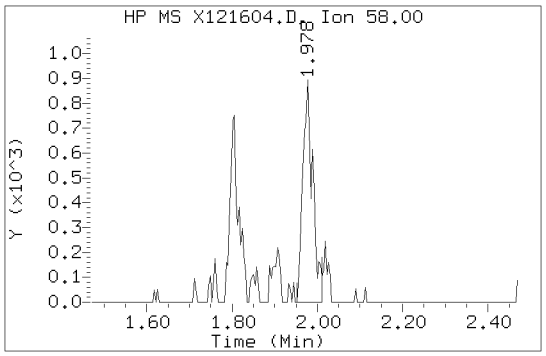
AFTER

MASS
43
AREA
4787
HEIGHT
2993
27-Dec-2022
16:07
linh
pham



AFTER

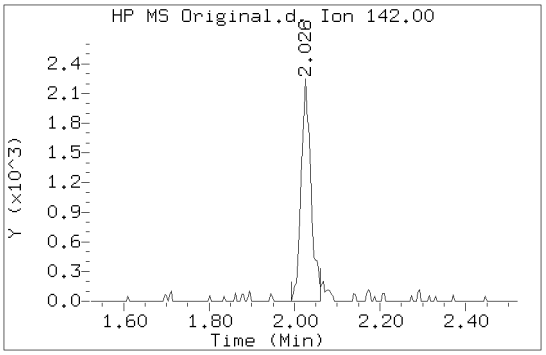
MASS
58
AREA
1474
HEIGHT
894
27-Dec-2022
16:07
linh
pham



Iodomethane (74-88-4)

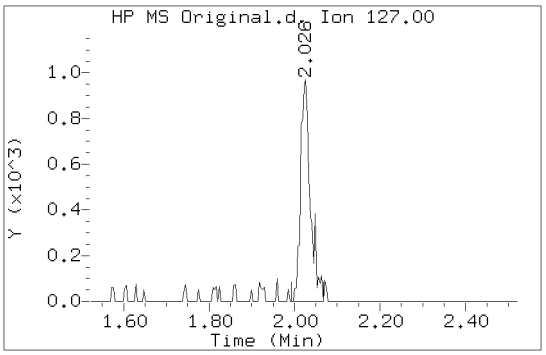
BEFORE

MASS
142
AREA
3661
HEIGHT
2248
27-Dec-2022
16:03
linh
pham



BEFORE

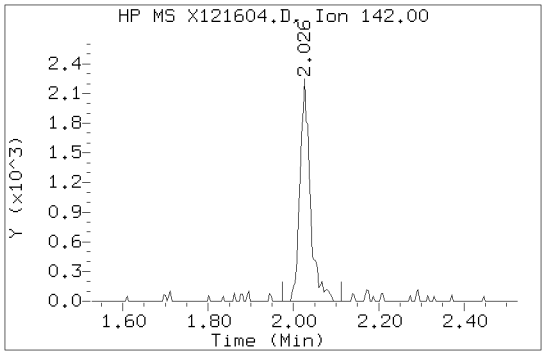
MASS
127
AREA
1585
HEIGHT
970
27-Dec-2022
16:03
linh
pham



Reason Code:

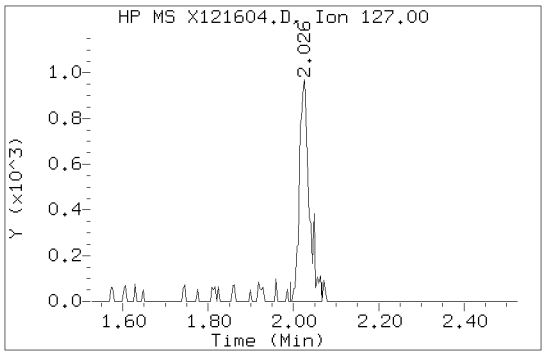
AFTER

MASS
142
AREA
3865
HEIGHT
2248
27-Dec-2022
16:07
linh
pham



AFTER

MASS
127
AREA
1585
HEIGHT
970
27-Dec-2022
16:07
linh
pham



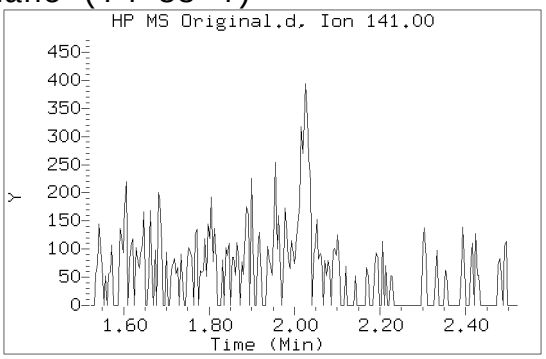
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Iodomethane (74-88-4)

Reason Code:

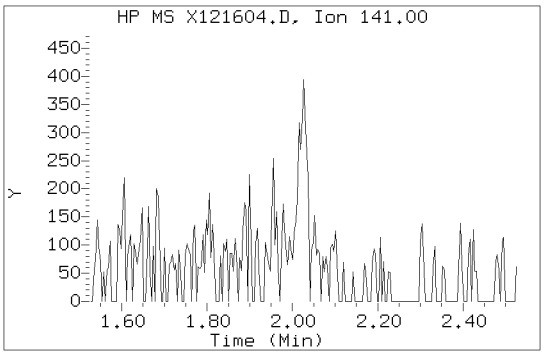
BEFORE

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

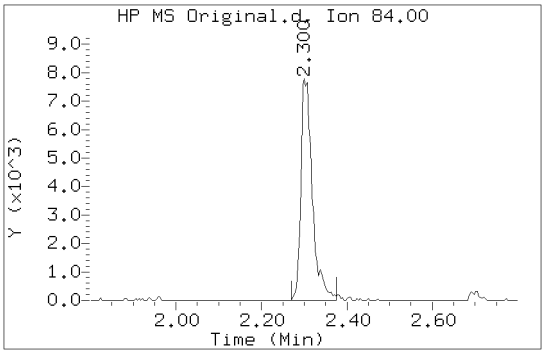


Methylene Chloride (75-09-2)

Reason Code:

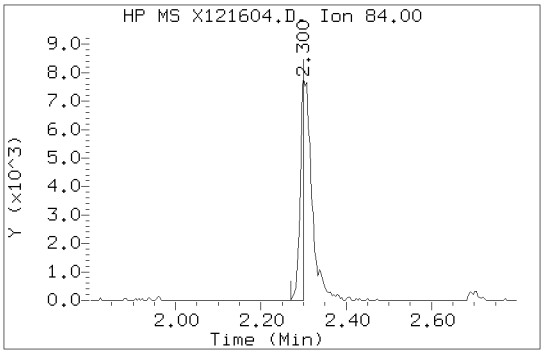
BEFORE

MASS
84
AREA
14864
HEIGHT
7788
27-Dec-2022
16:03
linh
pham



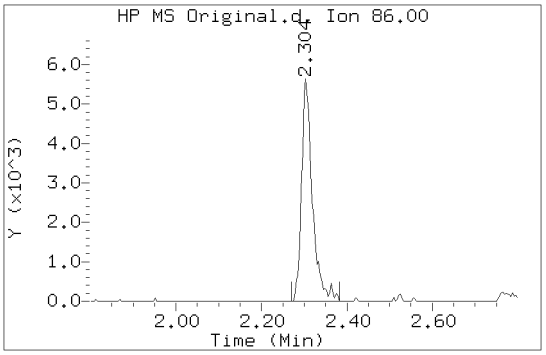
AFTER

MASS
84
AREA
5355
HEIGHT
7788
27-Dec-2022
16:07
linh
pham



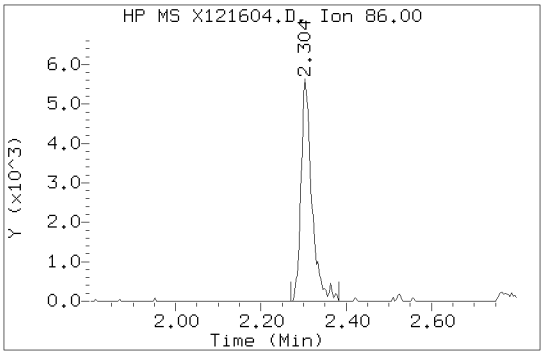
BEFORE

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:03
linh
pham



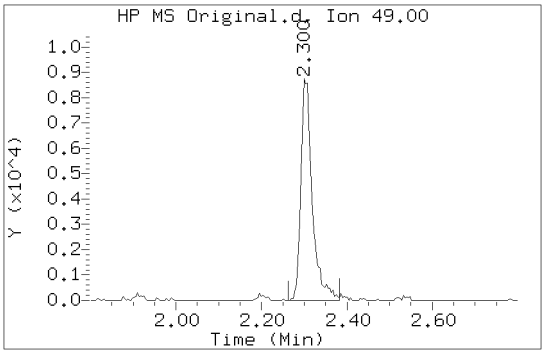
AFTER

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:07
linh
pham



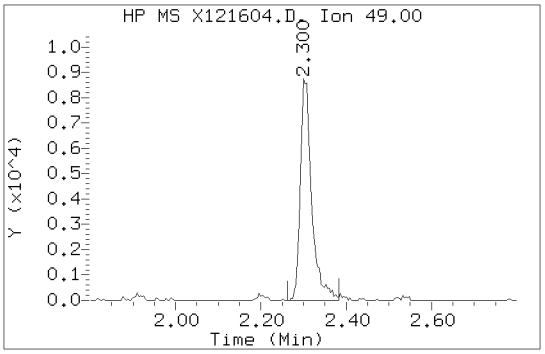
BEFORE

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

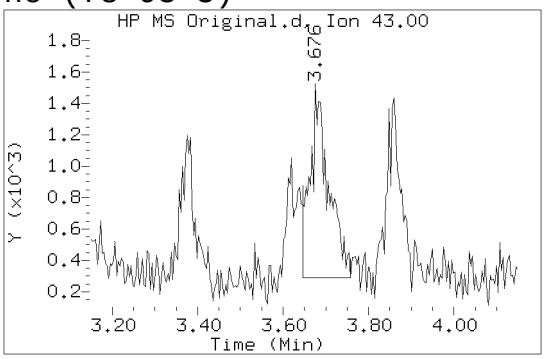


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Butanone (78-93-3)

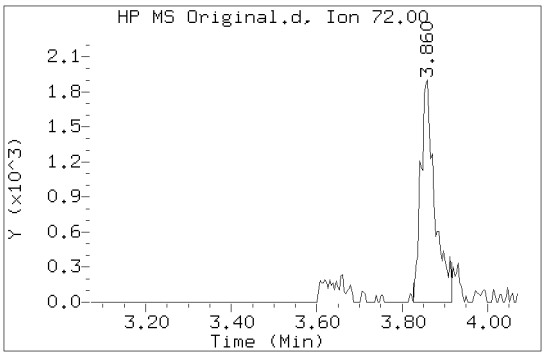
BEFORE

MASS
43
AREA
3758
HEIGHT
1236
27-Dec-2022
16:03
linh
pham



BEFORE

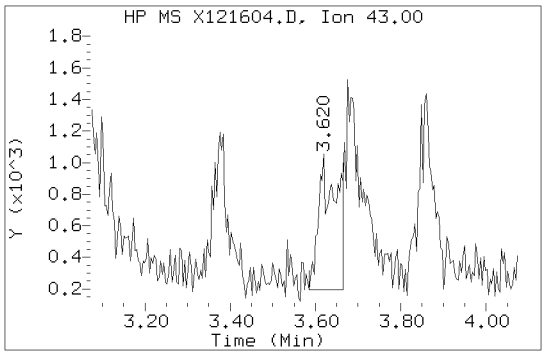
MASS
72
AREA
4320
HEIGHT
1902
27-Dec-2022
16:03
linh
pham



Reason Code:

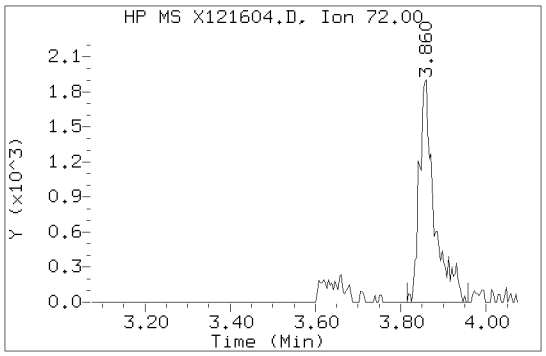
AFTER

MASS
43
AREA
2498
HEIGHT
859
27-Dec-2022
16:07
linh
pham



AFTER

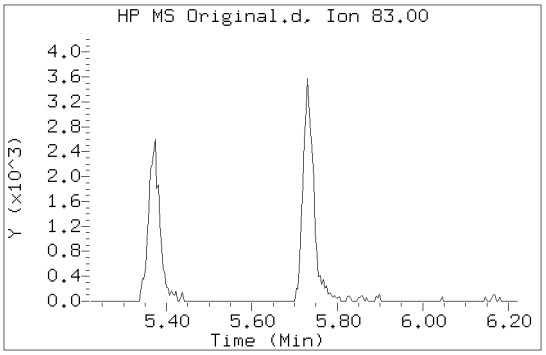
MASS
72
AREA
4690
HEIGHT
1902
27-Dec-2022
16:07
linh
pham



Bromodichloromethane (75-27-4)

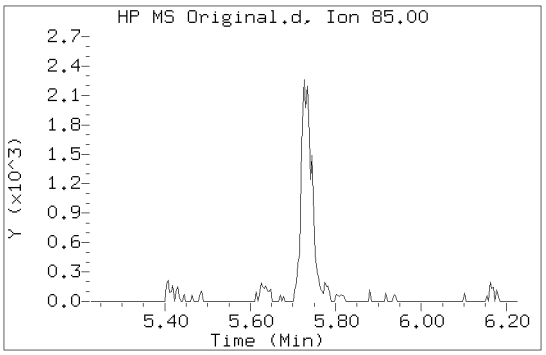
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

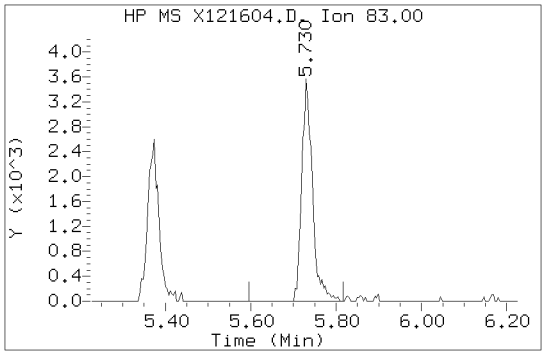
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

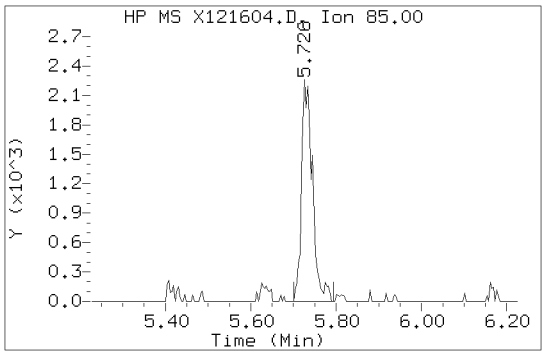
AFTER

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



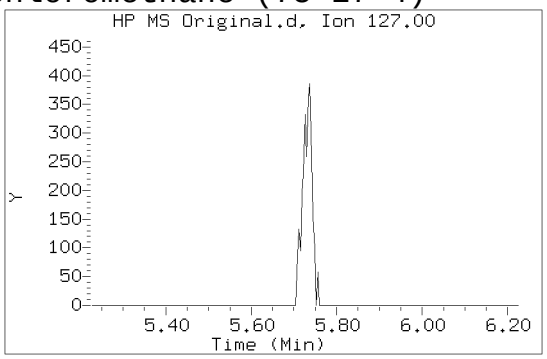
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Bromodichloromethane (75-27-4)

Reason Code:

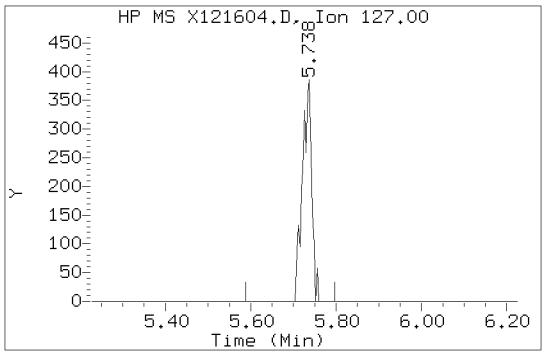
BEFORE

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

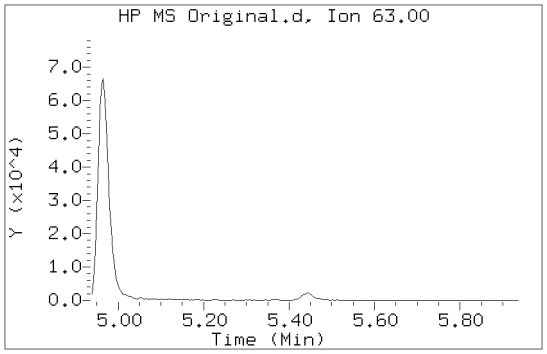


1,2-Dichloropropane (78-87-5)

Reason Code:

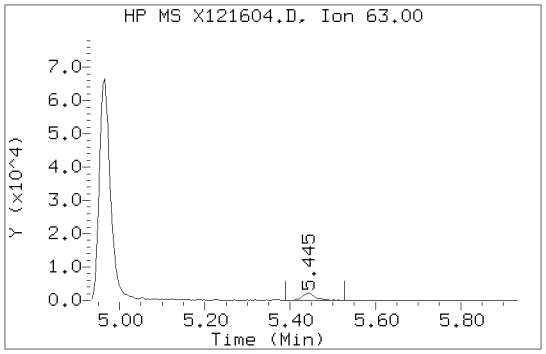
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



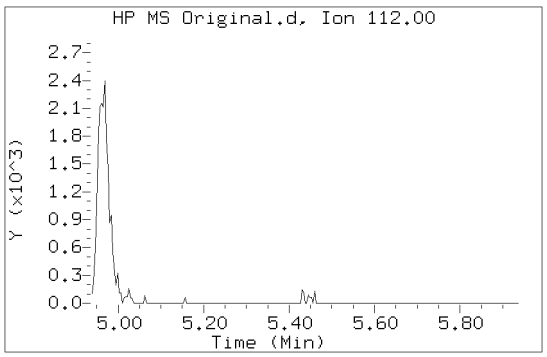
AFTER

MASS
63
AREA
4604
HEIGHT
2381
27-Dec-2022
16:07
linh
pham



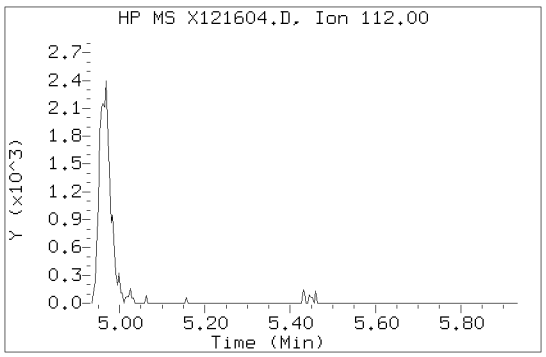
BEFORE

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

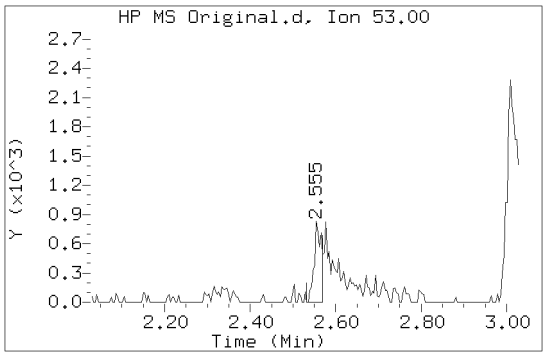


Acrylonitrile (107-13-1)

Reason Code:

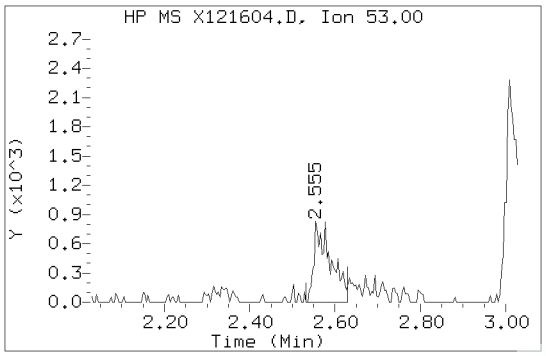
BEFORE

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



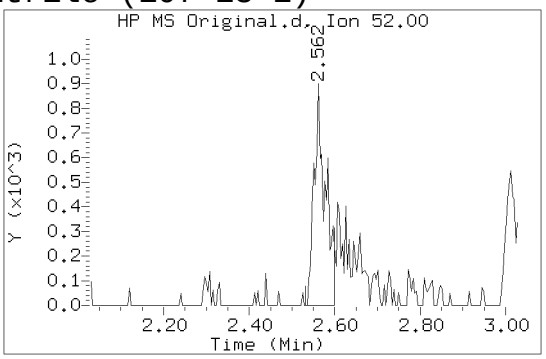
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

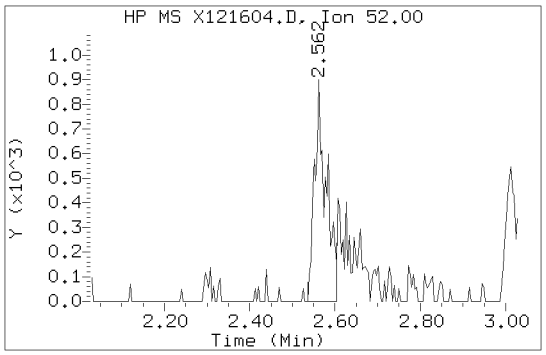
BEFORE

MASS
52
AREA
1657
HEIGHT
900
27-Dec-2022
16:03
linh
pham



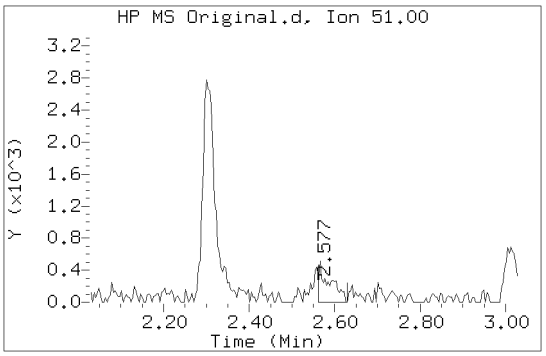
AFTER

MASS
52
AREA
1692
HEIGHT
900
27-Dec-2022
16:07
linh
pham



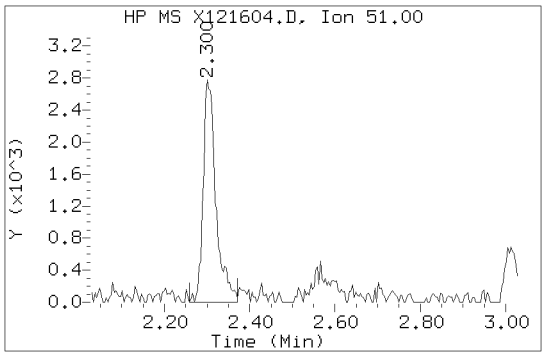
BEFORE

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

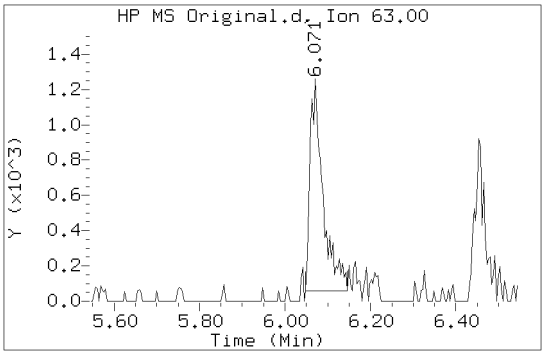


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

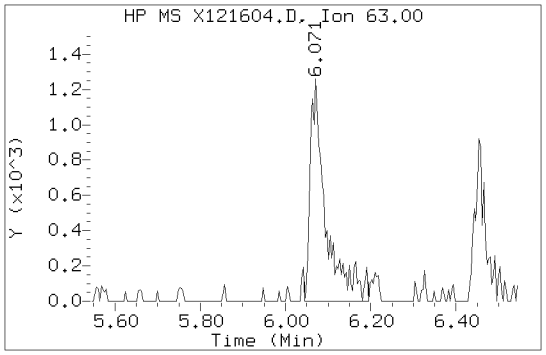
BEFORE

MASS
63
AREA
2513
HEIGHT
1202
27-Dec-2022
16:03
linh
pham



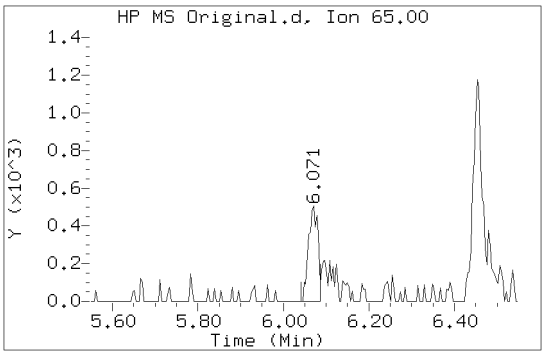
AFTER

MASS
63
AREA
3202
HEIGHT
1260
27-Dec-2022
16:07
linh
pham



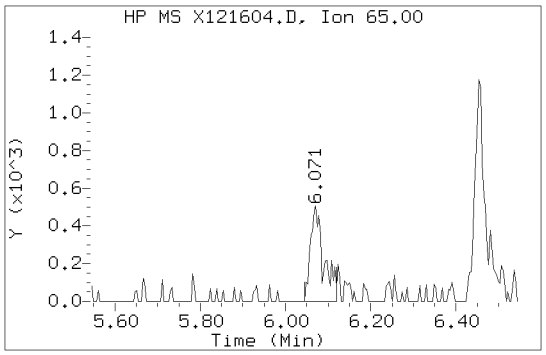
BEFORE

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



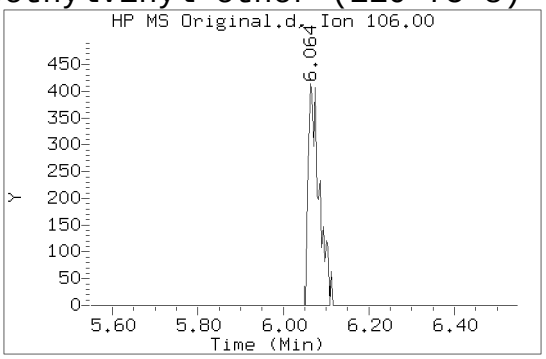
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

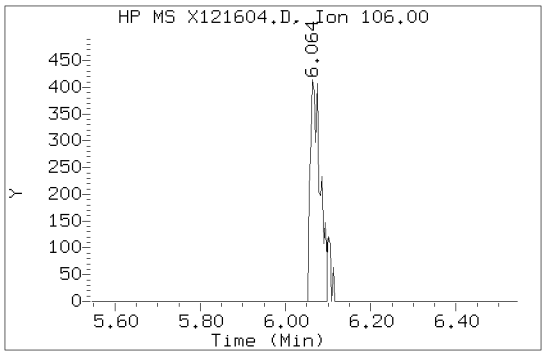
BEFORE

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

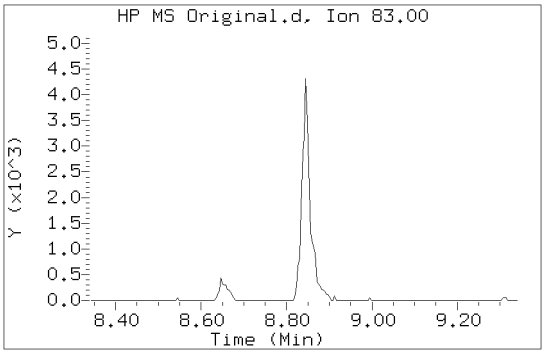


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

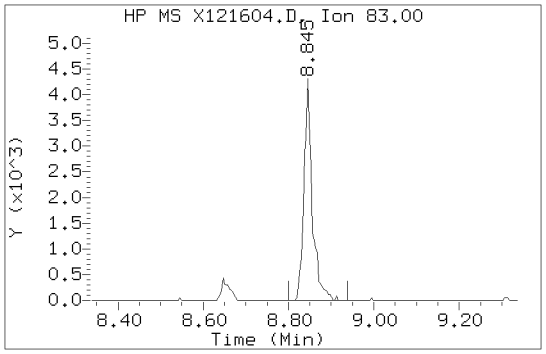
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



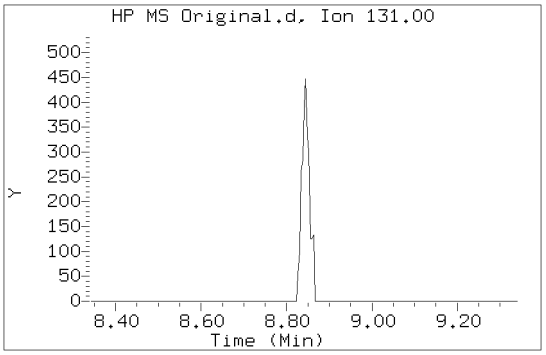
AFTER

MASS
83
AREA
5934
HEIGHT
4312
27-Dec-2022
16:07
linh
pham



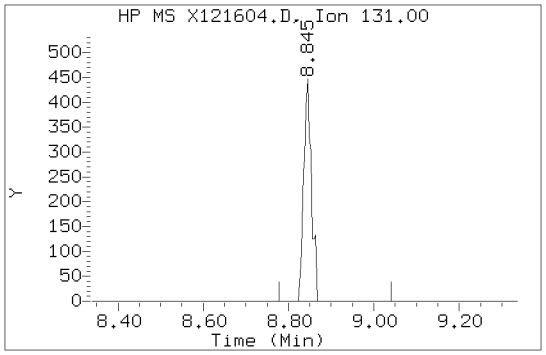
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



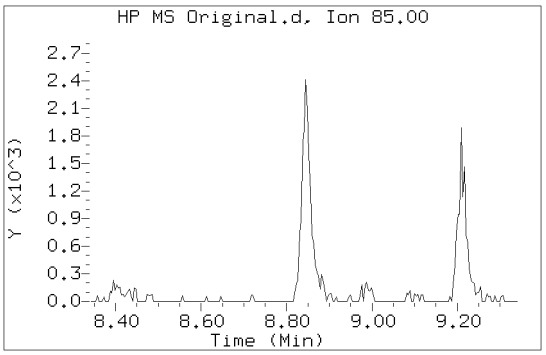
AFTER

MASS
131
AREA
574
HEIGHT
447
27-Dec-2022
16:07
linh
pham



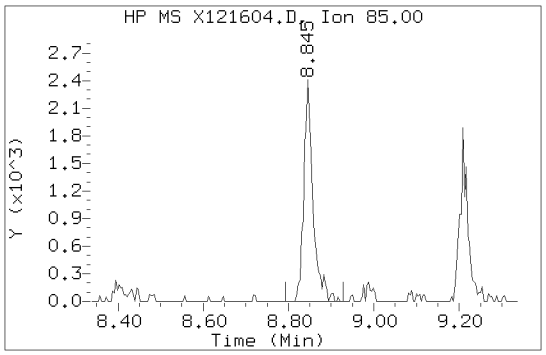
BEFORE

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

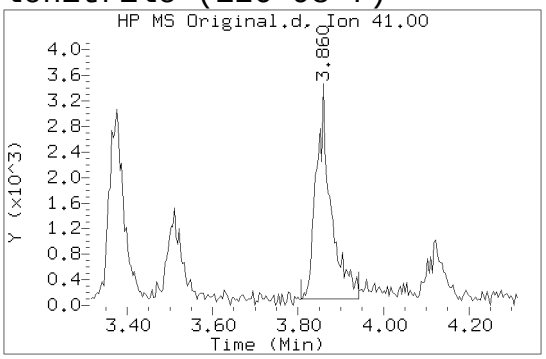


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

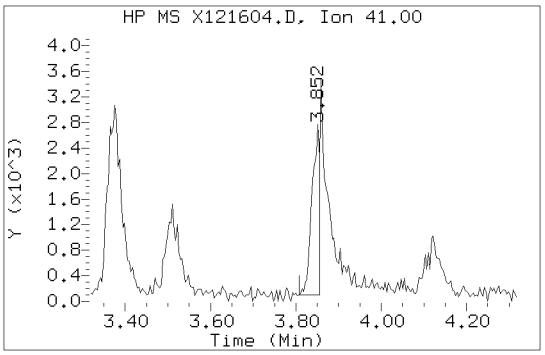
Methacrylonitrile (126-98-7)

Reason Code:

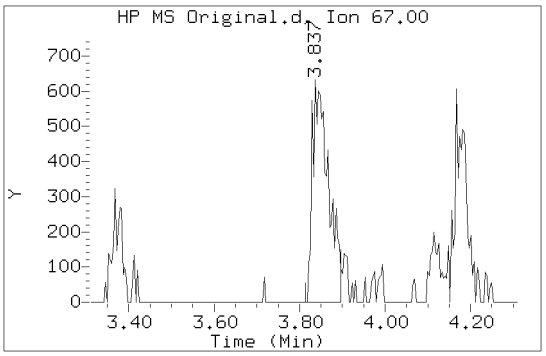
BEFORE
MASS
41
AREA
7966
HEIGHT
3370
27-Dec-2022
16:03
linh
pham



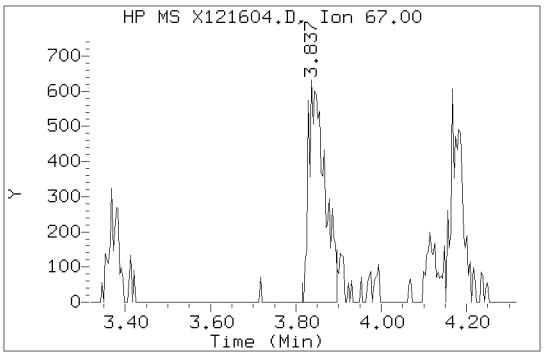
AFTER
MASS
41
AREA
3285
HEIGHT
2668
27-Dec-2022
16:07
linh
pham



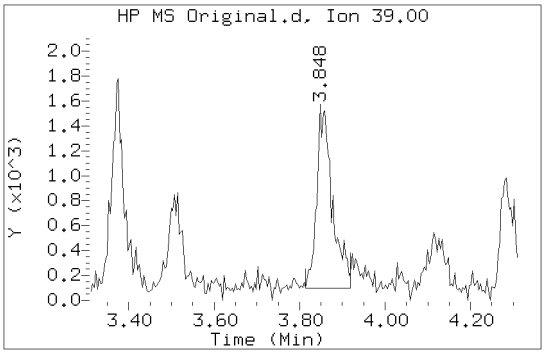
BEFORE
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:03
linh
pham



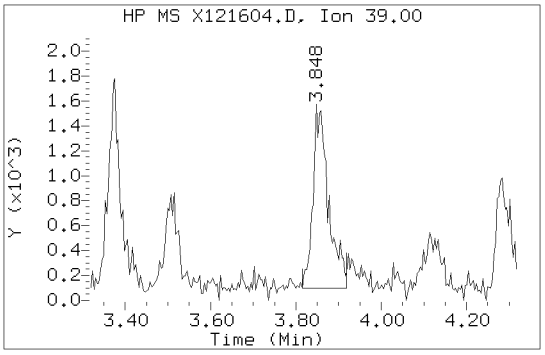
AFTER
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:03
linh
pham



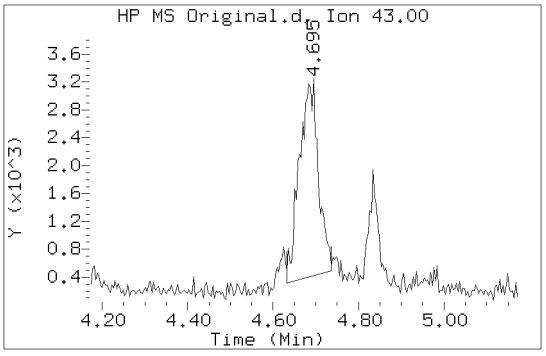
AFTER
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:07
linh
pham



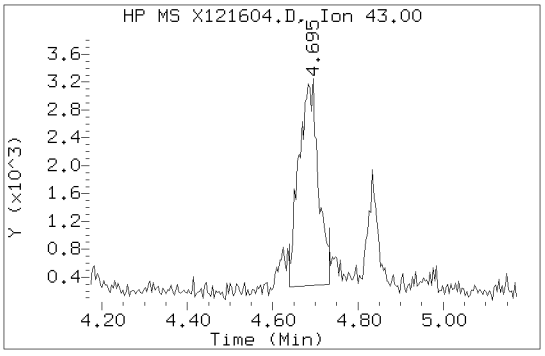
Isobutyl Alcohol (78-83-1)

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



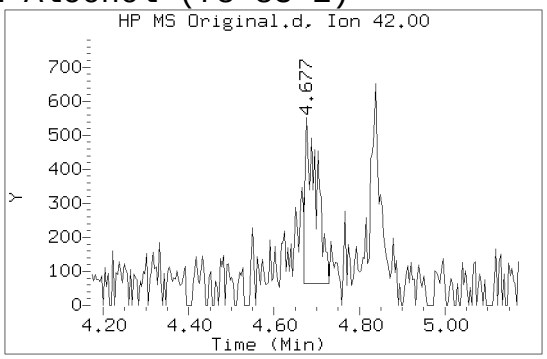
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Isobutyl Alcohol (78-83-1)

Reason Code:

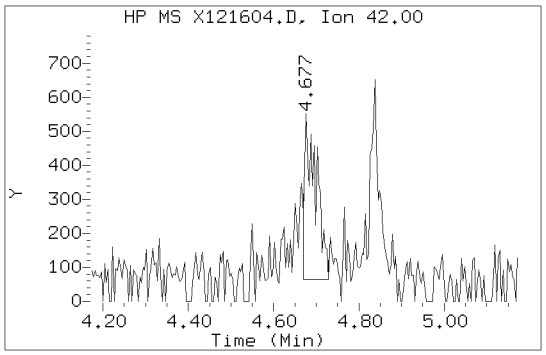
BEFORE

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:03
linh
pham



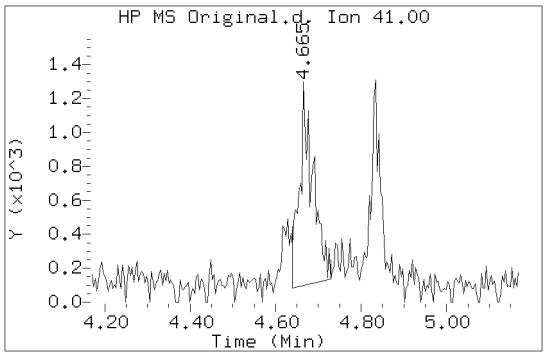
AFTER

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:07
linh
pham



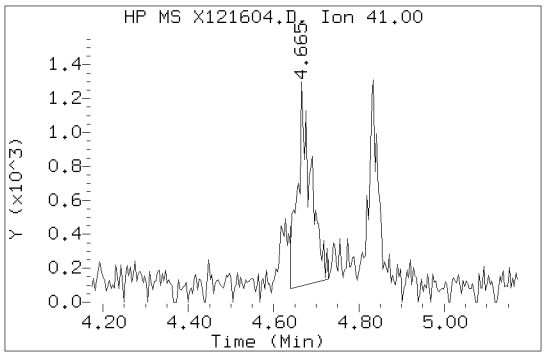
BEFORE

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

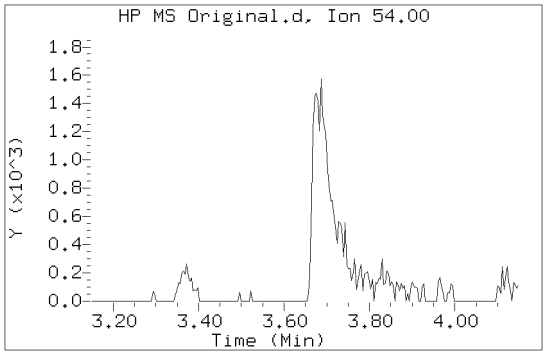


Propionitrile (107-12-0)

Reason Code:

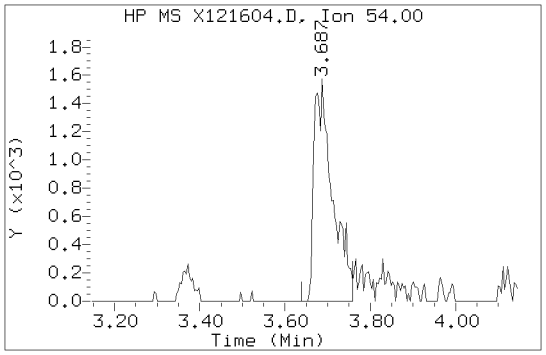
BEFORE

MASS
54
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



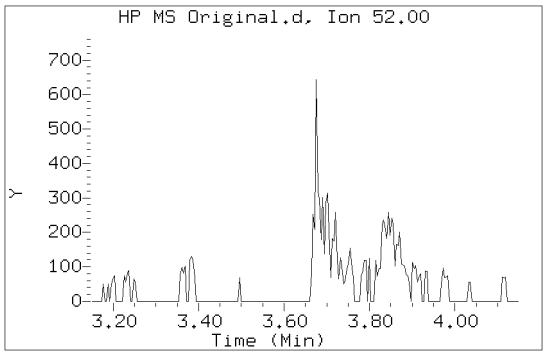
AFTER

MASS
54
AREA
4742
HEIGHT
1574
27-Dec-2022
16:07
linh
pham



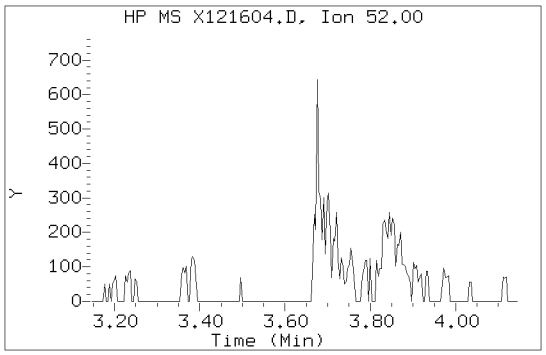
BEFORE

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



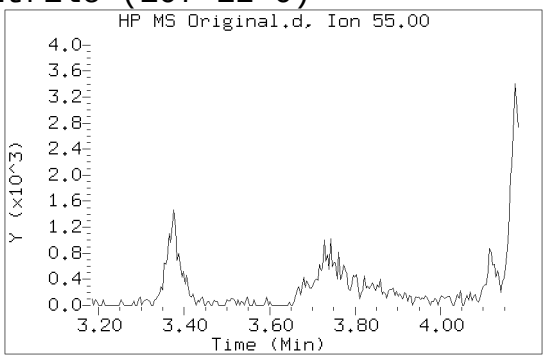
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Propionitrile (107-12-0)

Reason Code:

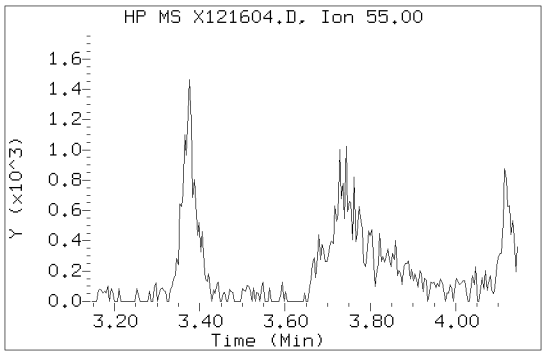
BEFORE

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

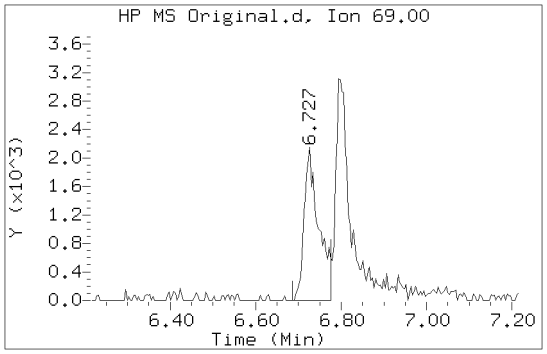


Ethyl Methacrylate (97-63-2)

Reason Code:

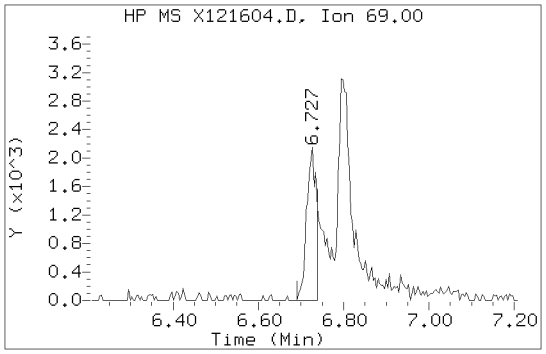
BEFORE

MASS
69
AREA
5177
HEIGHT
2156
27-Dec-2022
16:03
linh
pham



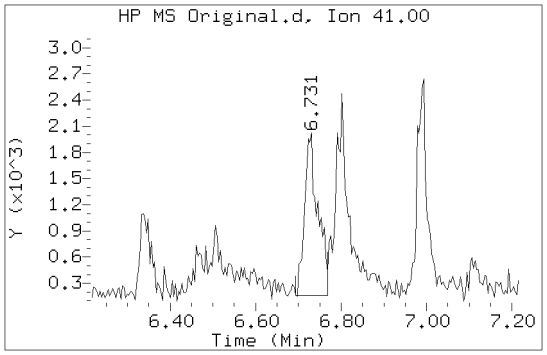
AFTER

MASS
69
AREA
3303
HEIGHT
2156
27-Dec-2022
16:07
linh
pham



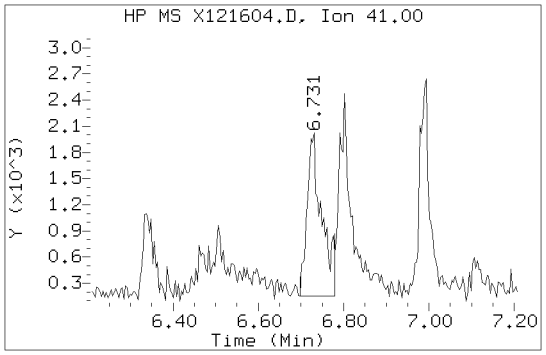
BEFORE

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

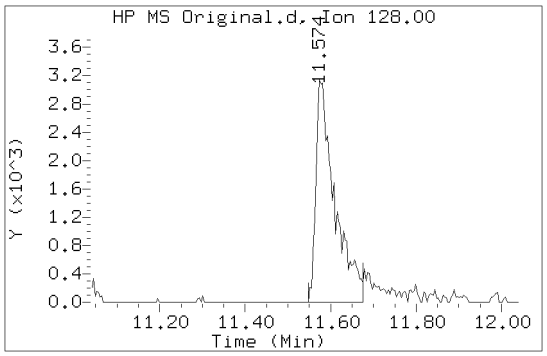


Naphthalene (91-20-3)

Reason Code:

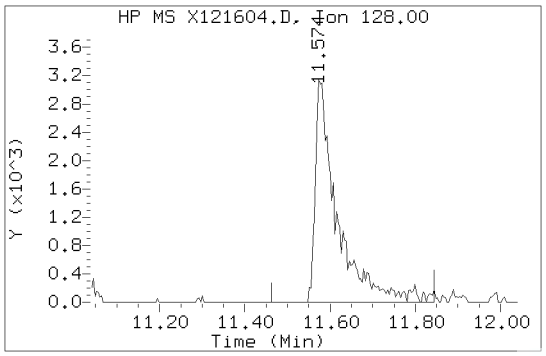
BEFORE

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



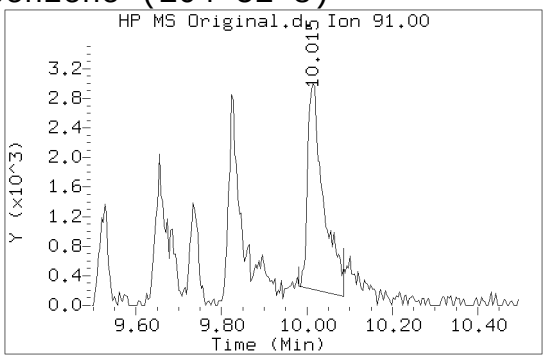
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

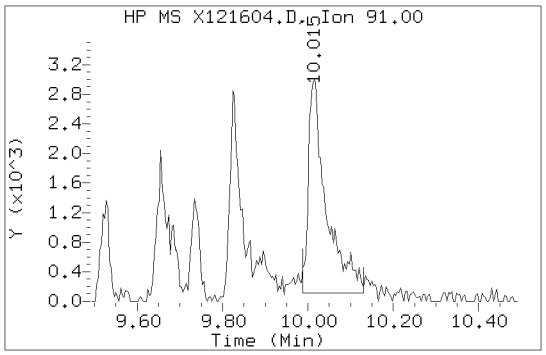
BEFORE

MASS
91
AREA
7194
HEIGHT
2783
27-Dec-2022
16:03
linh
pham



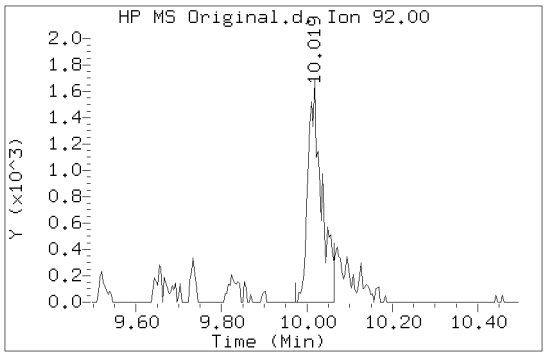
AFTER

MASS
91
AREA
8459
HEIGHT
2887
27-Dec-2022
16:07
linh
pham



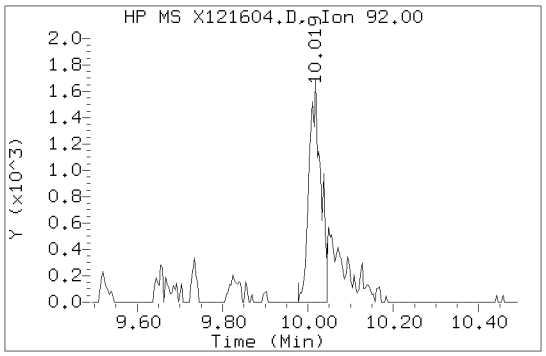
BEFORE

MASS
92
AREA
3696
HEIGHT
1686
27-Dec-2022
16:03
linh
pham



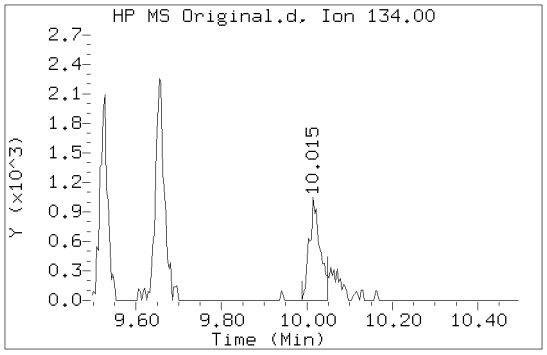
AFTER

MASS
92
AREA
3188
HEIGHT
1686
27-Dec-2022
16:07
linh
pham



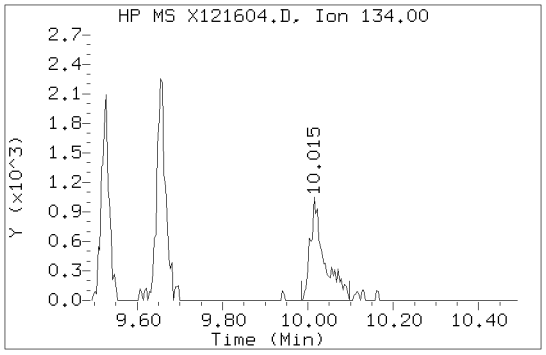
BEFORE

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

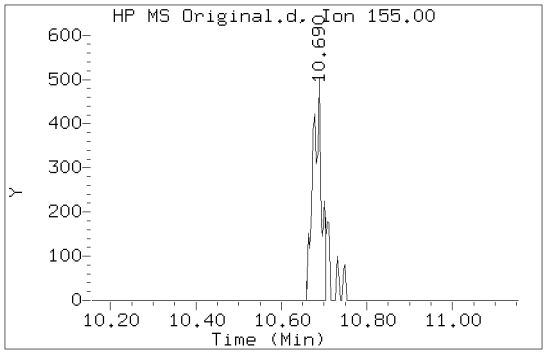


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

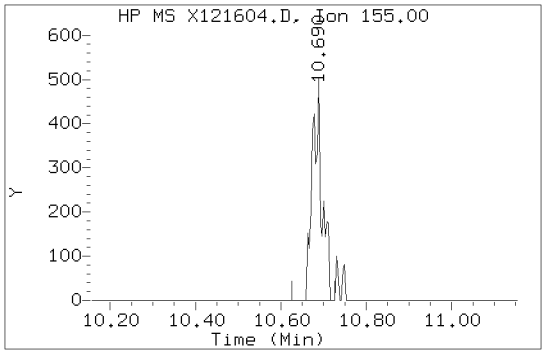
BEFORE

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



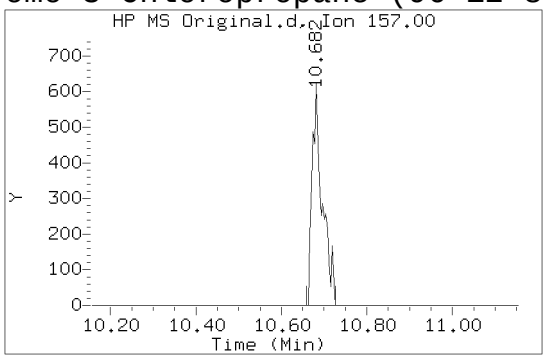
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

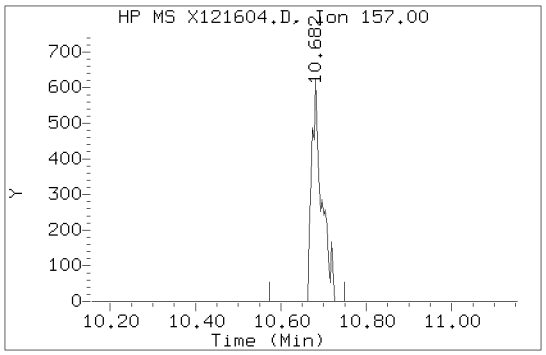
BEFORE

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:03
linh
pham



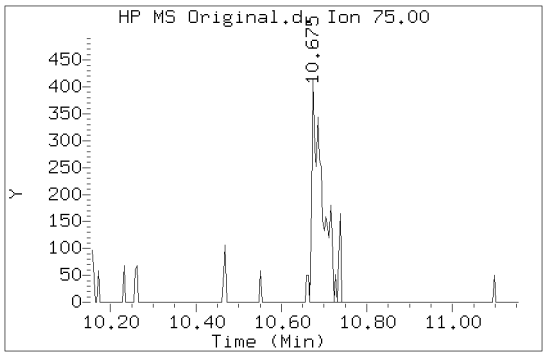
AFTER

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:07
linh
pham



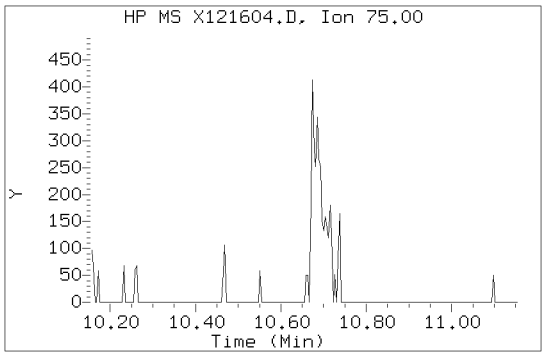
BEFORE

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

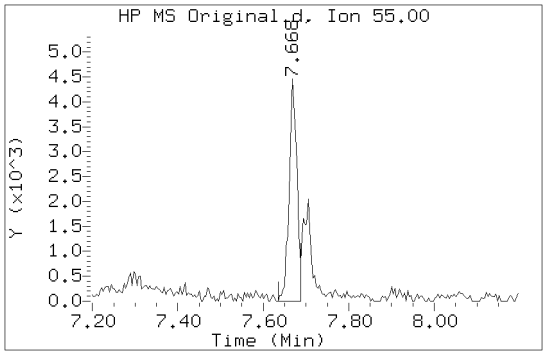


1-Chlorohexane (544-10-5)

Reason Code:

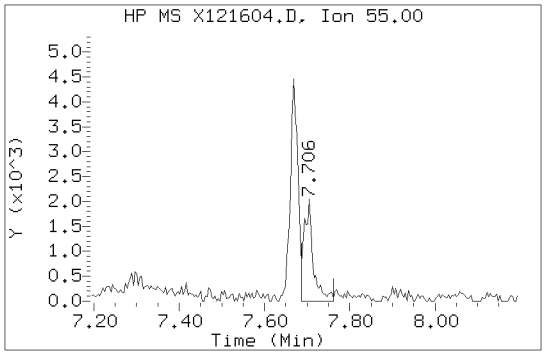
BEFORE

MASS
55
AREA
5660
HEIGHT
4460
27-Dec-2022
16:03
linh
pham



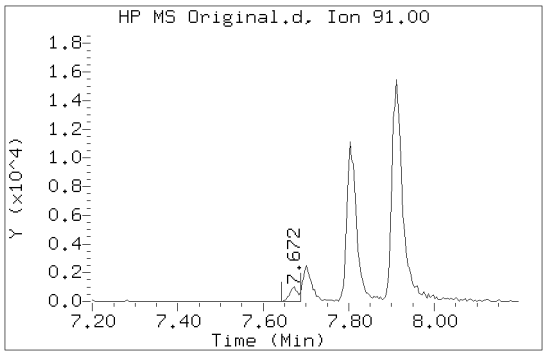
AFTER

MASS
55
AREA
3155
HEIGHT
2048
27-Dec-2022
16:07
linh
pham



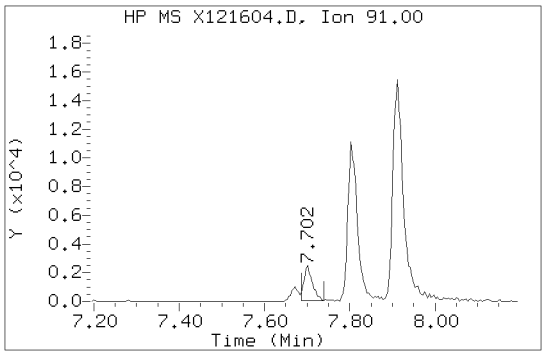
BEFORE

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

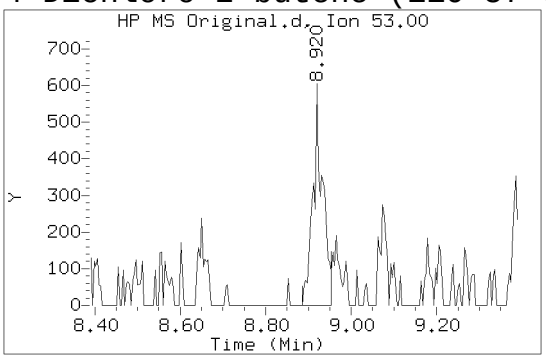


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

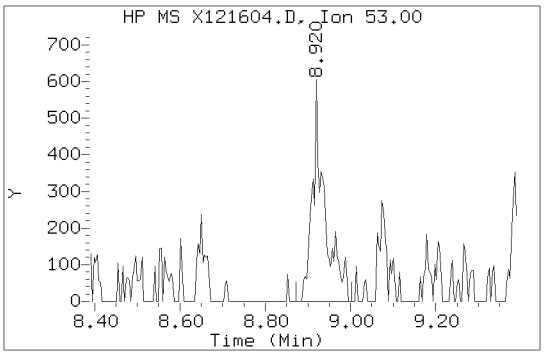
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

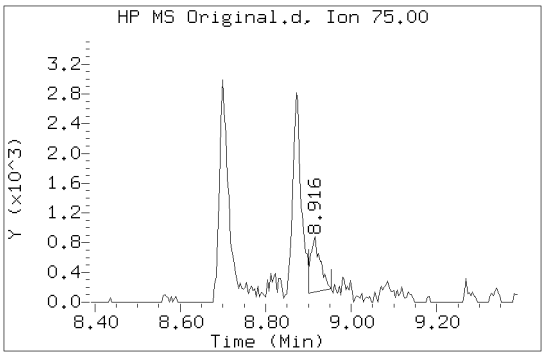
BEFORE
MASS
53
AREA
956
HEIGHT
605
27-Dec-2022
16:03
linh
pham



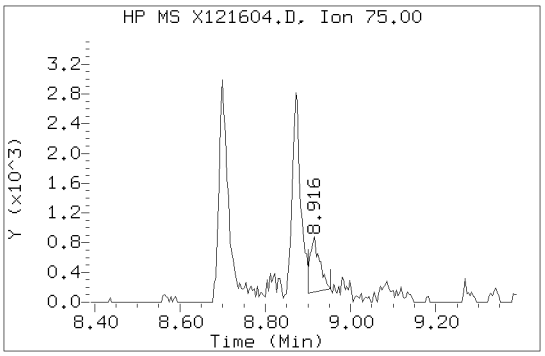
AFTER
MASS
53
AREA
1196
HEIGHT
605
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:03
linh
pham



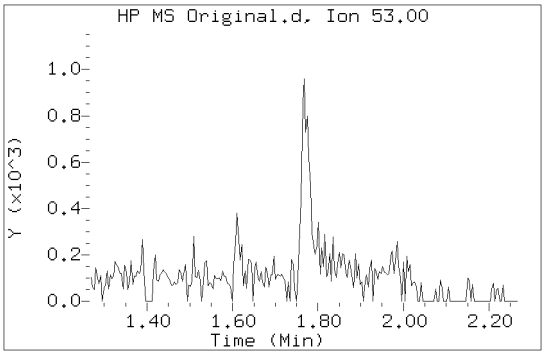
AFTER
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:07
linh
pham



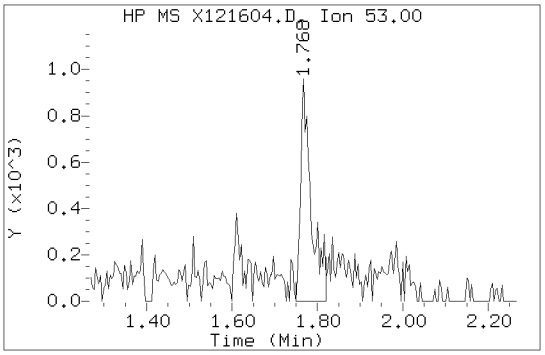
Chloroprene (126-99-8)

Reason Code:

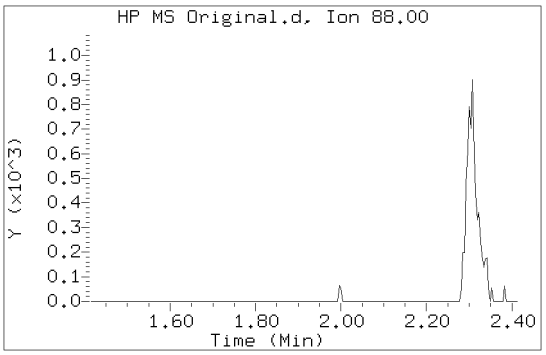
BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



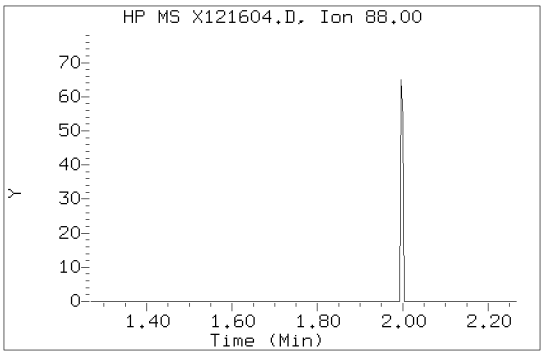
AFTER
MASS
53
AREA
1686
HEIGHT
959
27-Dec-2022
16:07
linh
pham



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



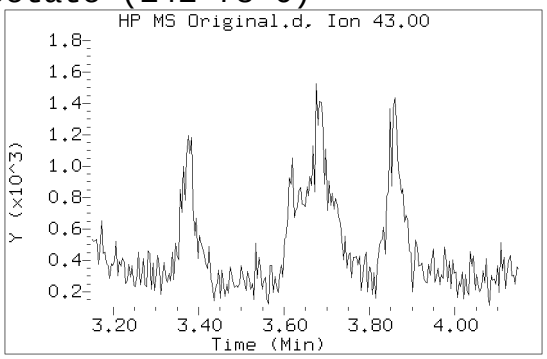
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

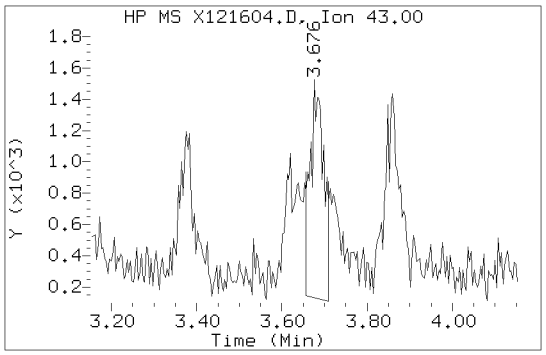
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



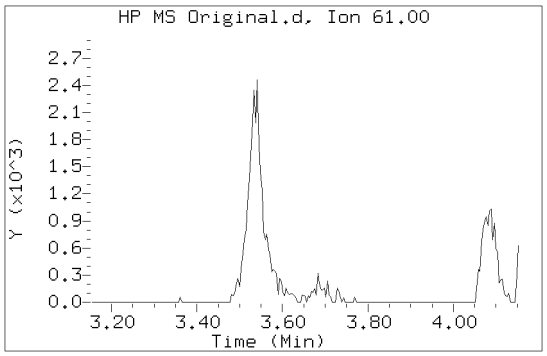
AFTER

MASS
43
AREA
3144
HEIGHT
1392
27-Dec-2022
16:07
linh
pham



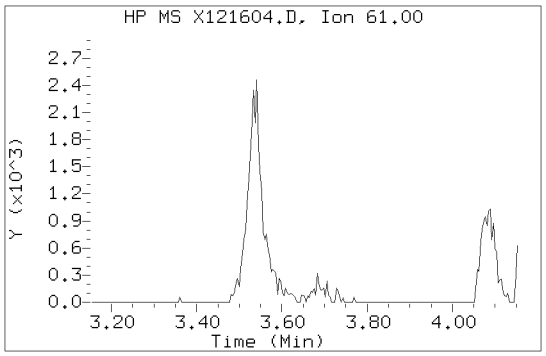
BEFORE

MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



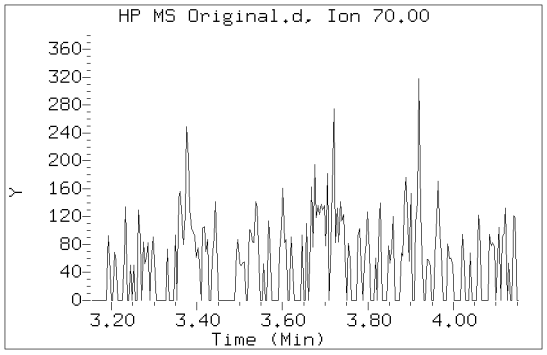
AFTER

MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



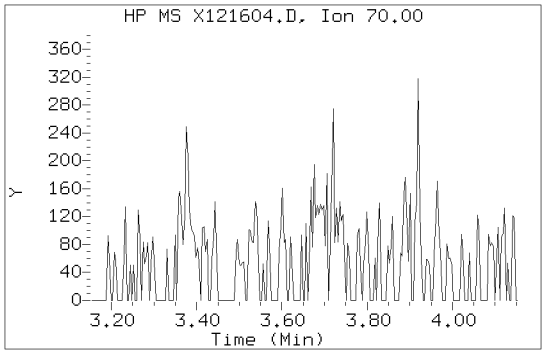
BEFORE

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

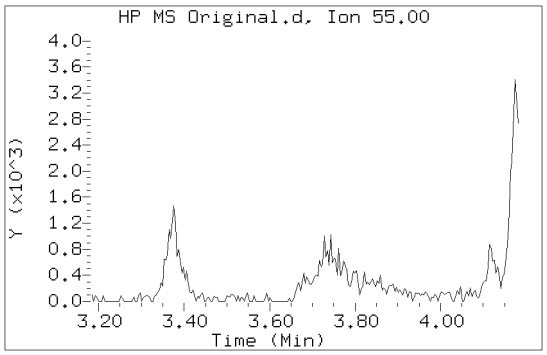


Methyl Acrylate (96-33-3)

Reason Code:

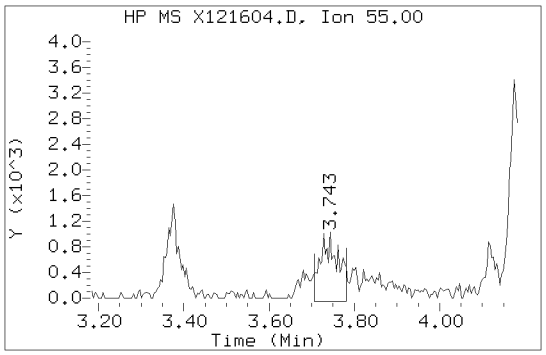
BEFORE

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

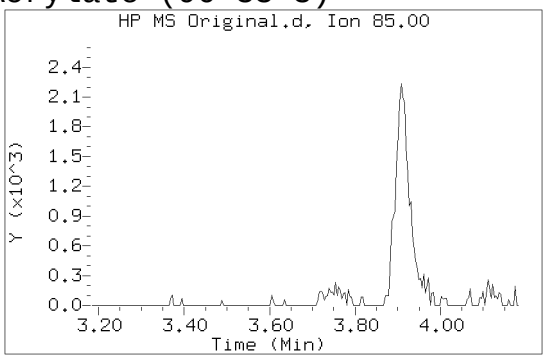


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

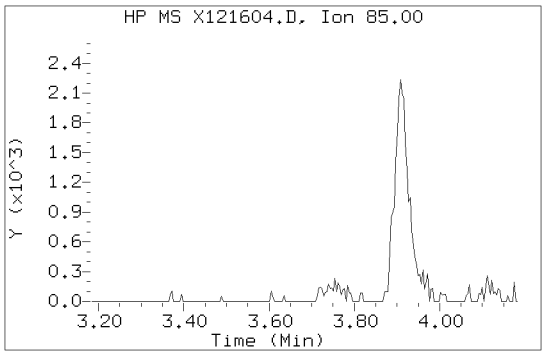
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



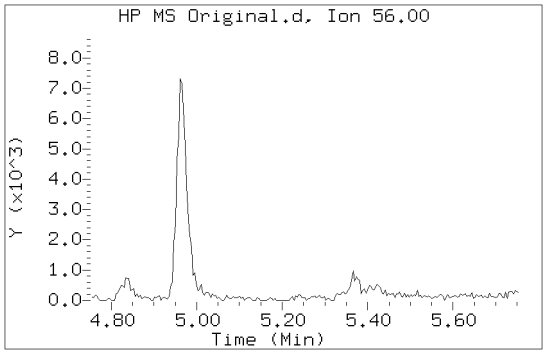
AFTER
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



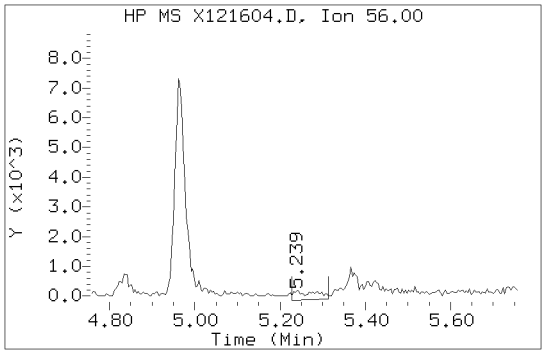
n-Butanol (71-36-3)

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
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HEIGHT
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27-Dec-2022
16:03
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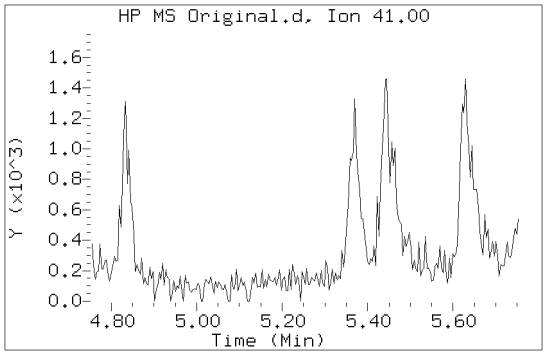

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16:07
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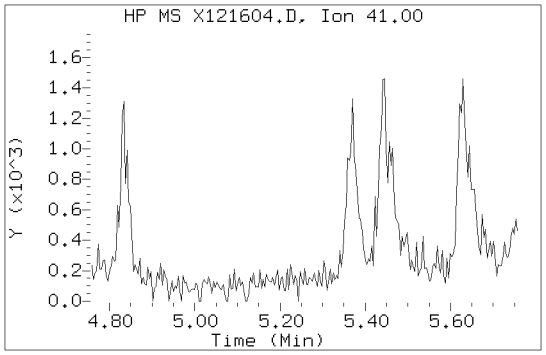

1,4-Dioxane ()

Reason Code:

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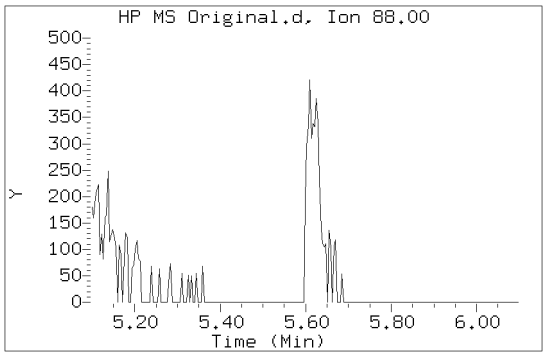

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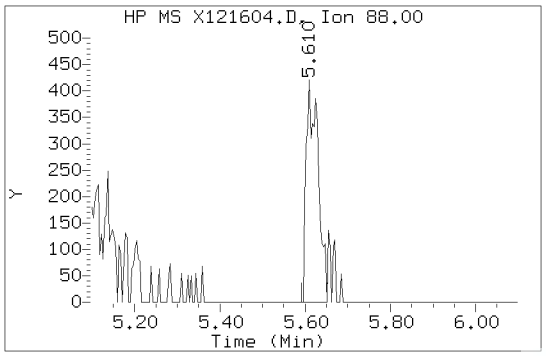

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

1,4-Dioxane ()

Reason Code:

BEFORE

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27-Dec-2022
16:03
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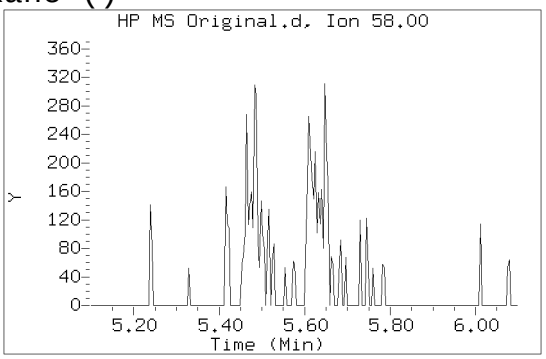

AFTER

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27-Dec-2022
16:07
linh
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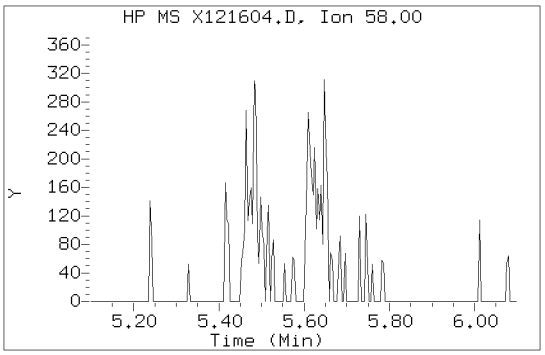

Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE

MASS
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HEIGHT
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16:03
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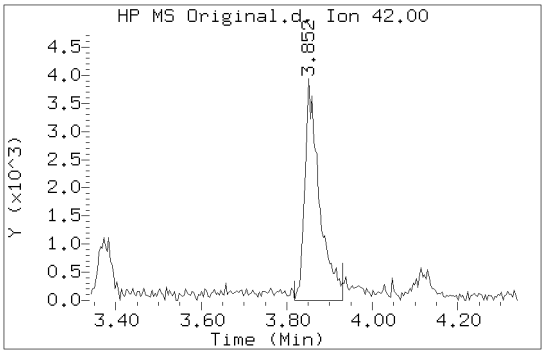
pham



AFTER

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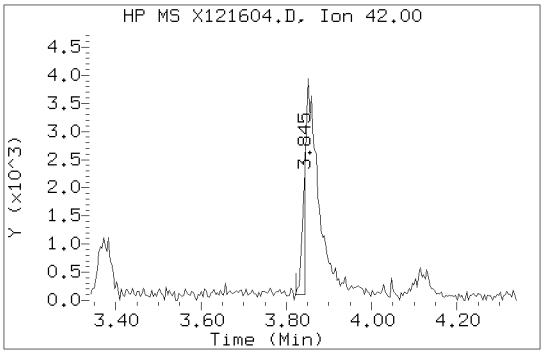

BEFORE

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16:03
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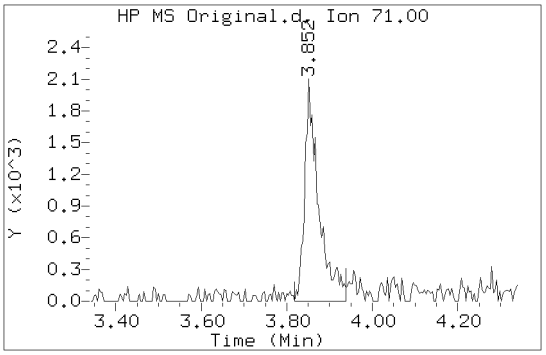

AFTER

MASS
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27-Dec-2022
16:07
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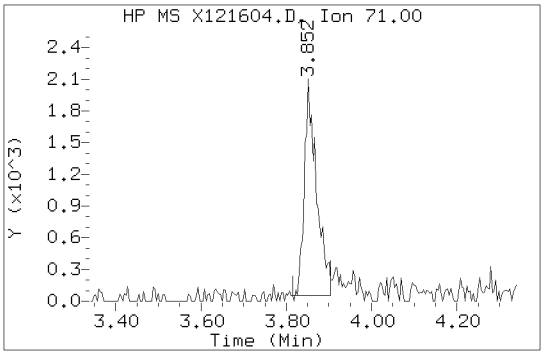

Methyl Acetate (79-20-9)

Reason Code:

BEFORE

MASS
43
AREA
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HEIGHT
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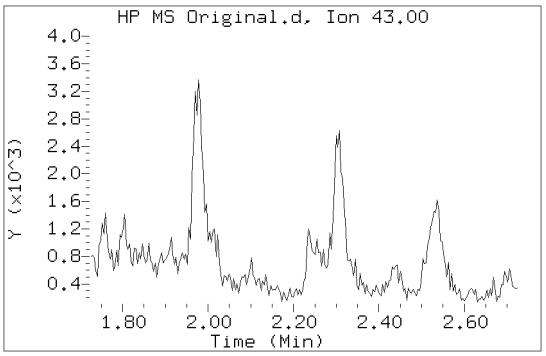
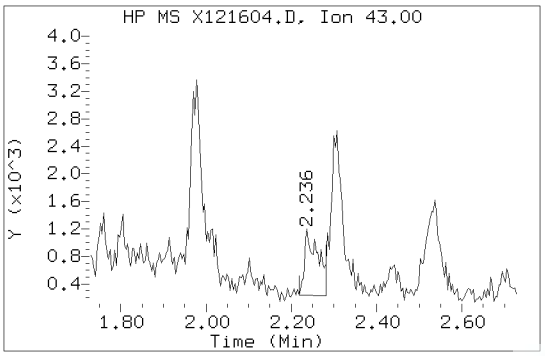
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
2127
HEIGHT
968
27-Dec-2022
16:07
linh
pham



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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acetate (79-20-9)

Reason Code:

BEFORE

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74
AREA
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HEIGHT
0
27-Dec-2022
16:03
linh
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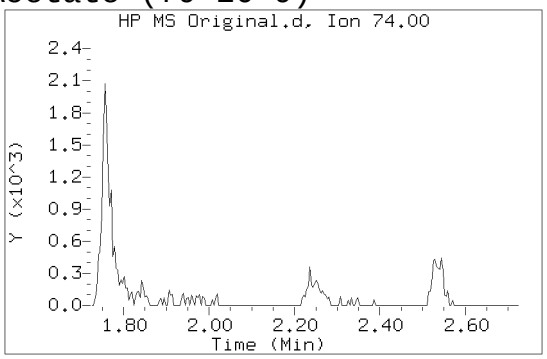

AFTER

MASS
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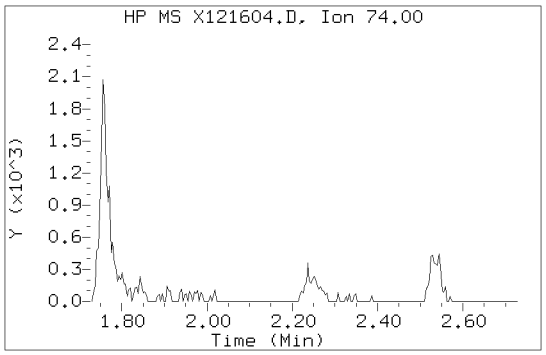
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Methylcyclohexane (108-87-2)

Reason Code:

BEFORE

MASS
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AREA
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HEIGHT
1612
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16:03
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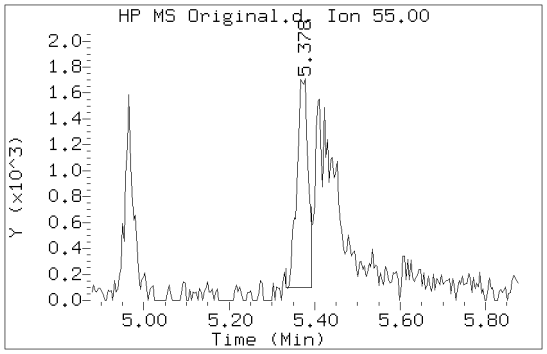
pham



AFTER

MASS
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16:07
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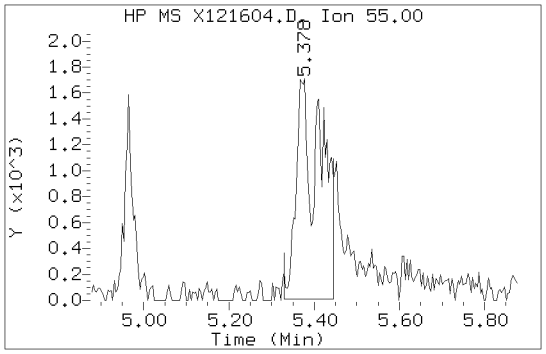

BEFORE

MASS
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AREA
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HEIGHT
2601
27-Dec-2022
16:03
linh
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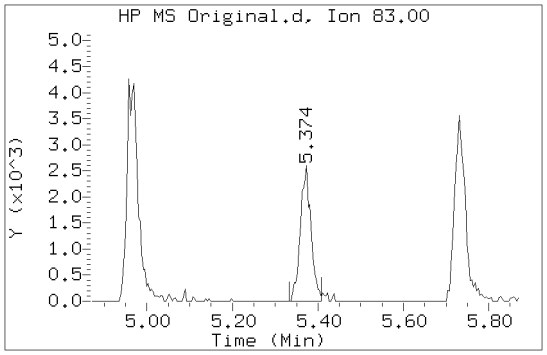

AFTER

MASS
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AREA
4577
HEIGHT
2601
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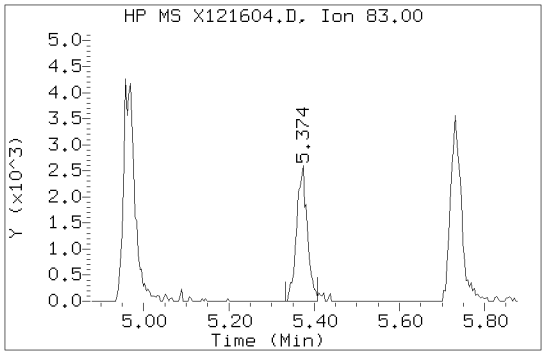
16:07
linh
pham



Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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AREA
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HEIGHT
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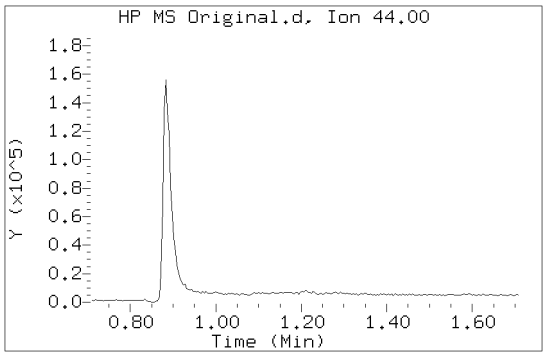
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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16:07
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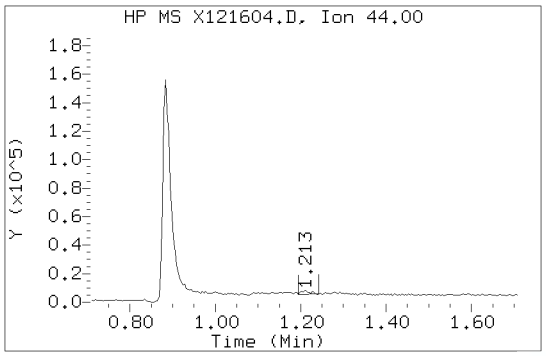

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

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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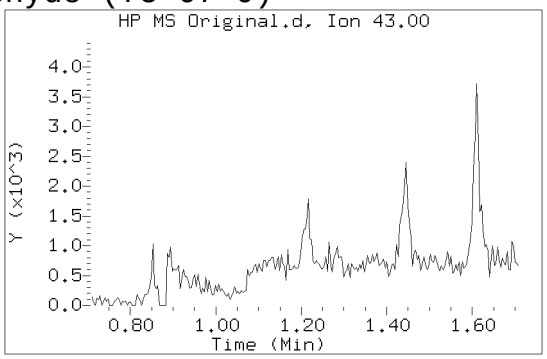

AFTER
MASS
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27-Dec-2022
16:07
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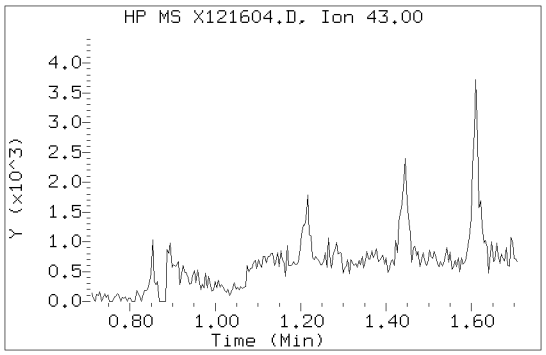

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HEIGHT
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27-Dec-2022
16:03
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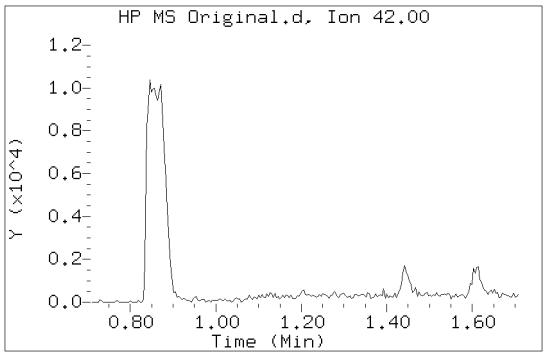

AFTER
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16:07
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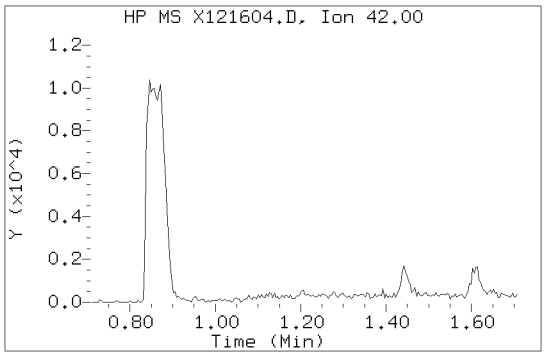

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE
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AREA
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HEIGHT
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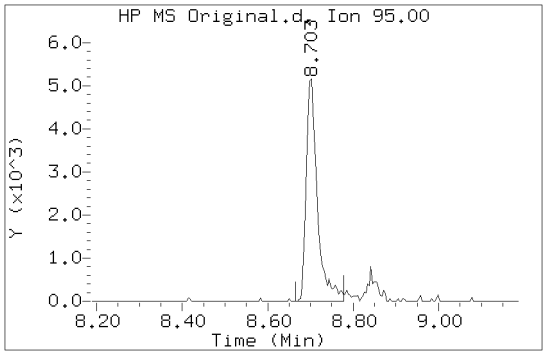
27-Dec-2022
16:03
linh
pham



AFTER
MASS
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AREA
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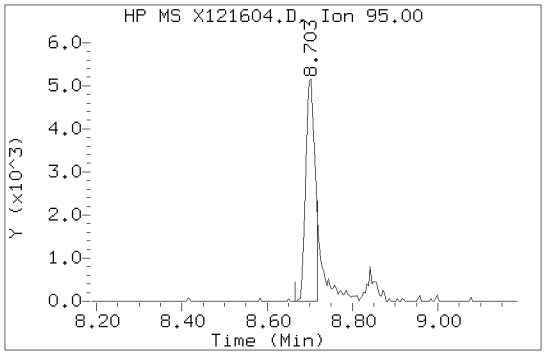
HEIGHT
5159
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
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5802
27-Dec-2022
16:03
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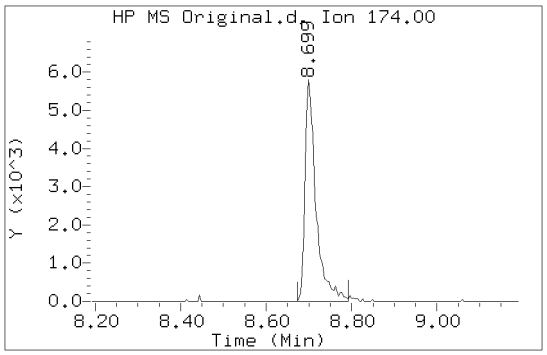

AFTER
MASS
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HEIGHT
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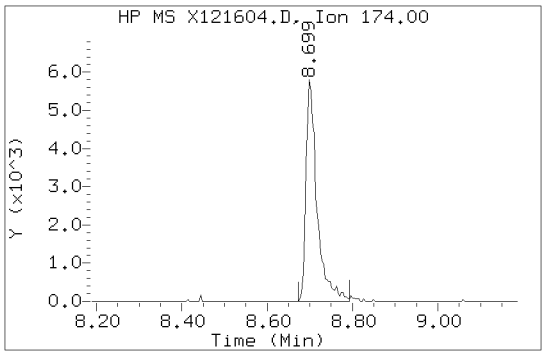
27-Dec-2022
16:07
linh
pham



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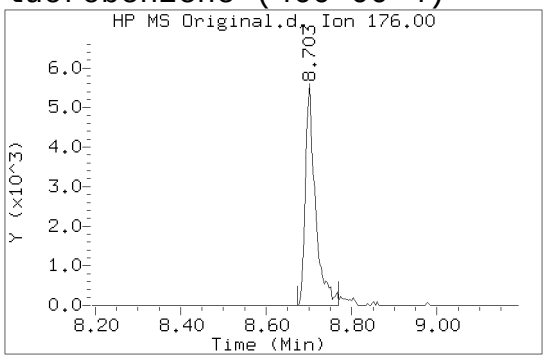
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
176
AREA
9226
HEIGHT
5603
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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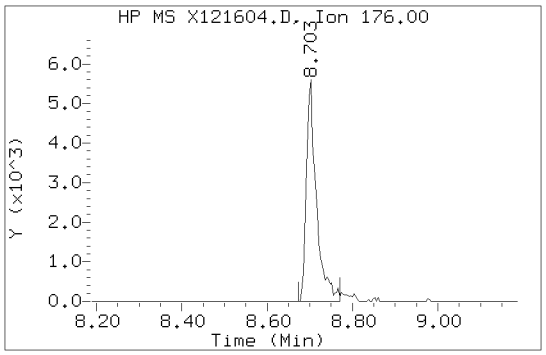
HEIGHT
5603
27-Dec-2022
16:07
linh
pham



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   :
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 12:41 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

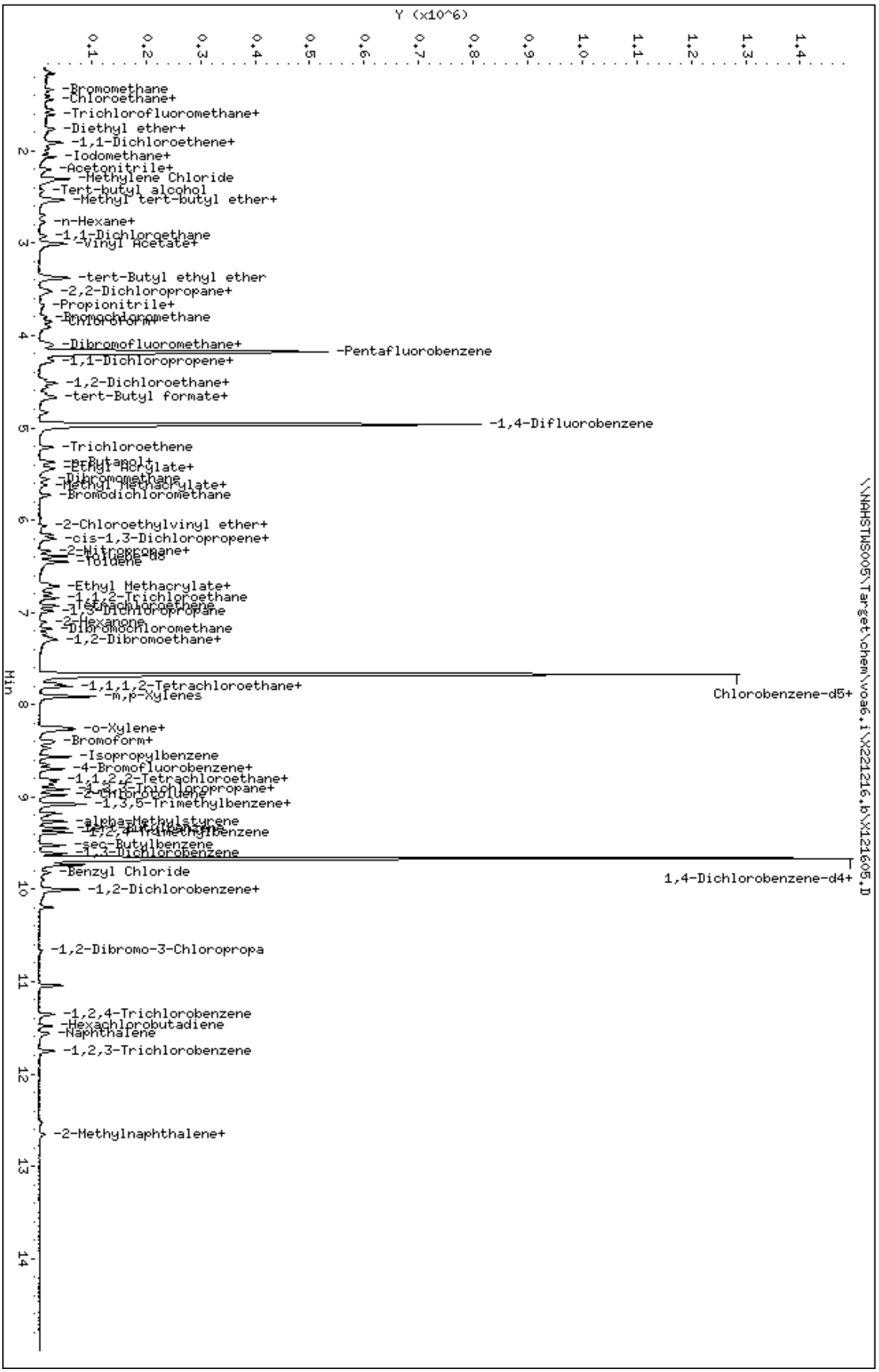
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.720	3.720	(0.891)	5443	2.00000	1.75(M)
	162 Butyl acrylate	55	8.267	8.267	(1.078)	15015	2.00000	1.77
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	6239	2.00000	2.33
	3 Chloromethane	50	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

	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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Date : 16-DEC-2022 13:02
Client ID: VSTD002
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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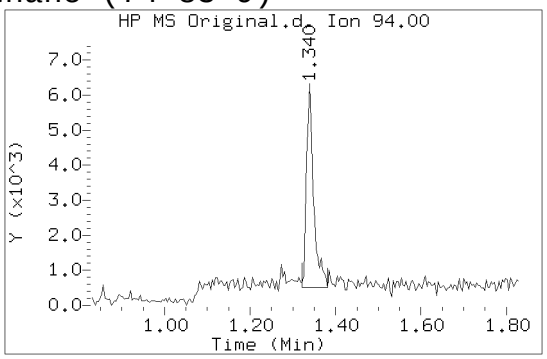
94
AREA
6762
HEIGHT
5808
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER
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94
AREA
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HEIGHT
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27-Dec-2022
16:07
linh
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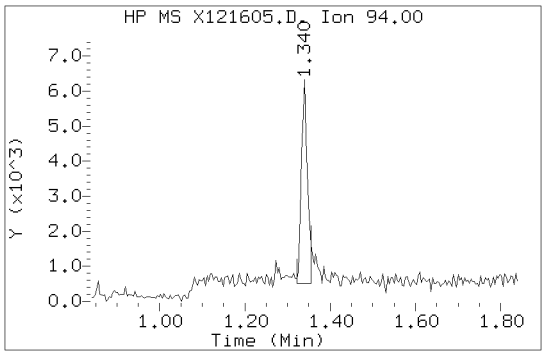

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6661
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16:03
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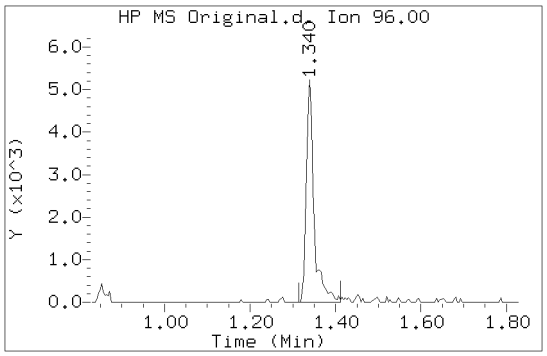

AFTER
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16:07
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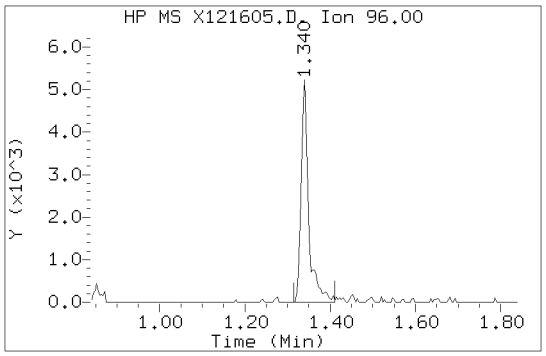

Chloroethane (75-00-3)

BEFORE
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6641
HEIGHT
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27-Dec-2022
16:03
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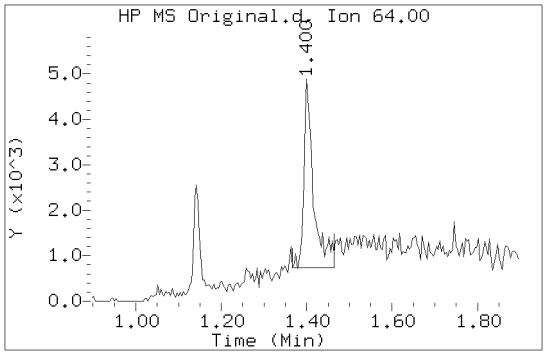

Reason Code:

AFTER
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64
AREA
5667
HEIGHT
4162
27-Dec-2022
16:07
linh
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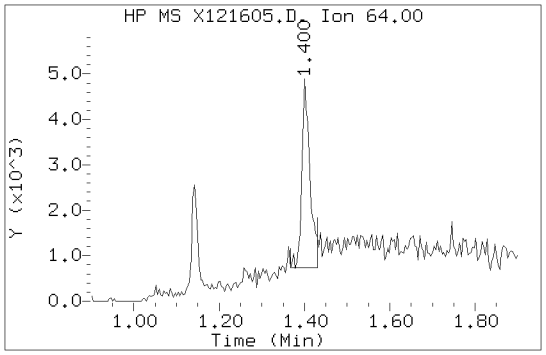

BEFORE
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66
AREA
1745
HEIGHT
1315
27-Dec-2022
16:03
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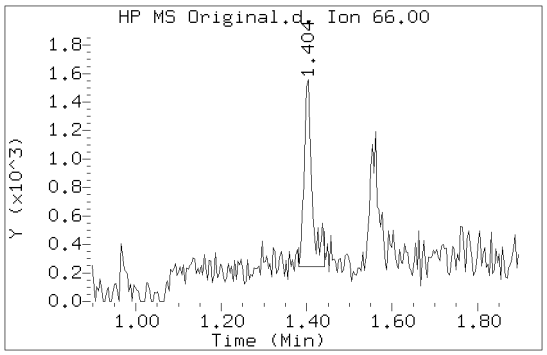

AFTER
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AREA
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27-Dec-2022
16:07
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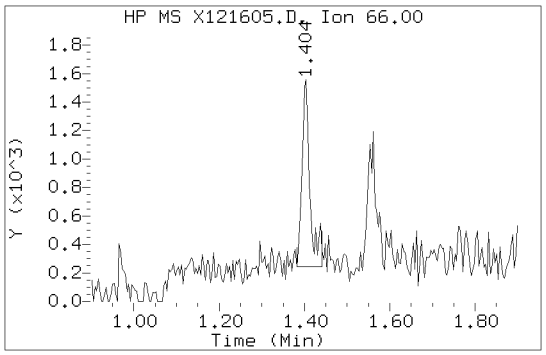
pham



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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Acrolein (107-02-8)

Reason Code:

BEFORE
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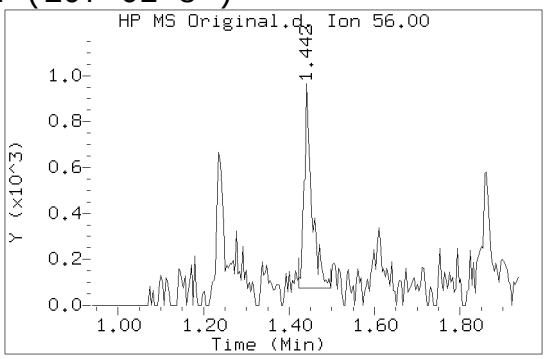
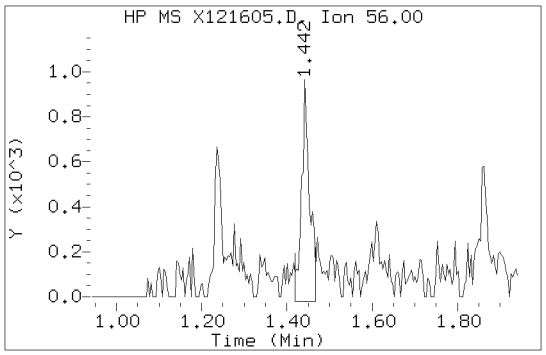
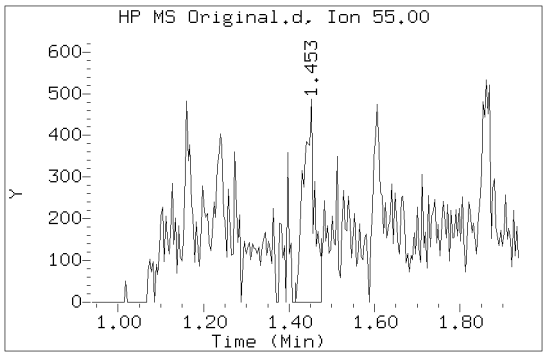
56
AREA
1122
HEIGHT
890
27-Dec-2022
16:03
linh
pham



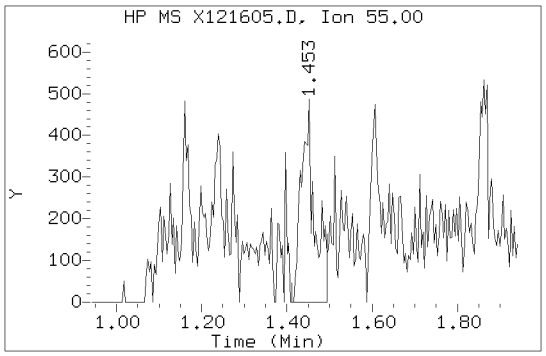
AFTER
MASS
56
AREA
1317
HEIGHT
985
27-Dec-2022
16:07
linh
pham



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
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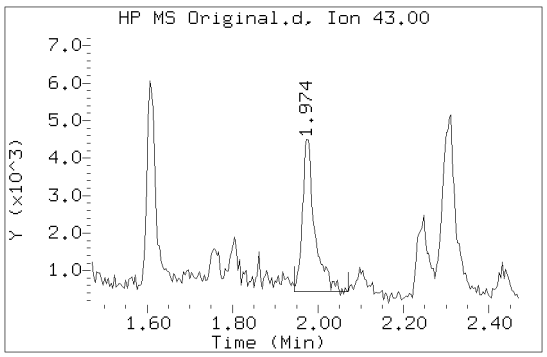
HEIGHT
4066
27-Dec-2022
16:03
linh
pham



AFTER
MASS
43
AREA
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HEIGHT
4066
27-Dec-2022
16:07
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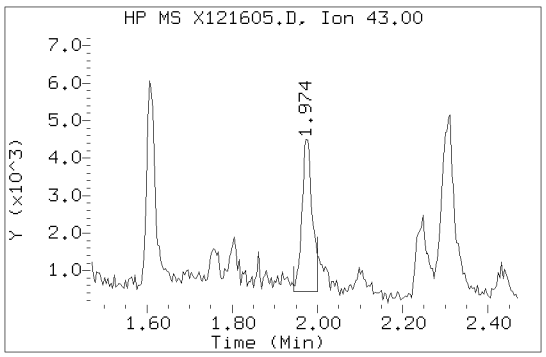

BEFORE
MASS
58
AREA
2165
HEIGHT
1717
27-Dec-2022
16:03
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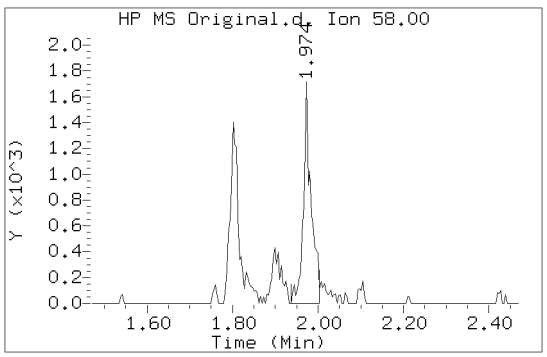

AFTER
MASS
58
AREA
2165
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1717
27-Dec-2022
16:07
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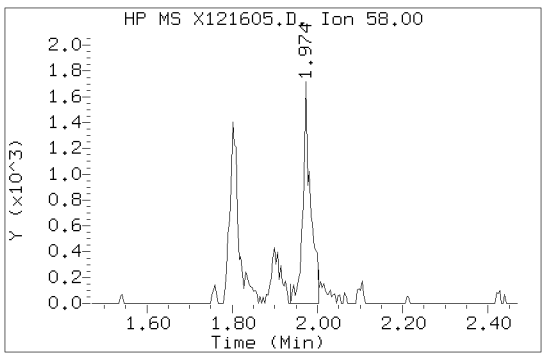

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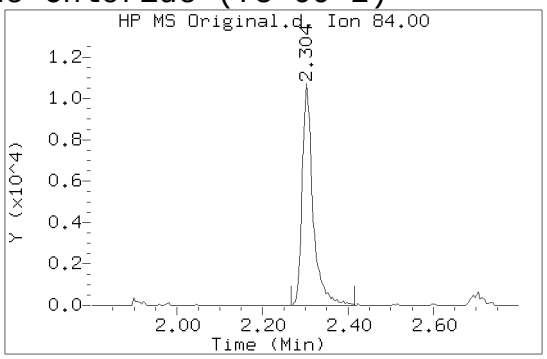
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Methylene Chloride (75-09-2)

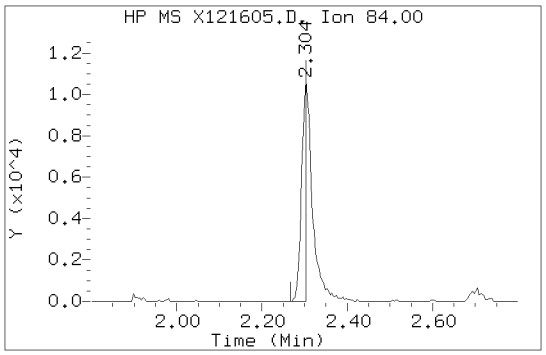
BEFORE

MASS
84
AREA
19299
HEIGHT
10710
27-Dec-2022
16:03
linh
pham



AFTER

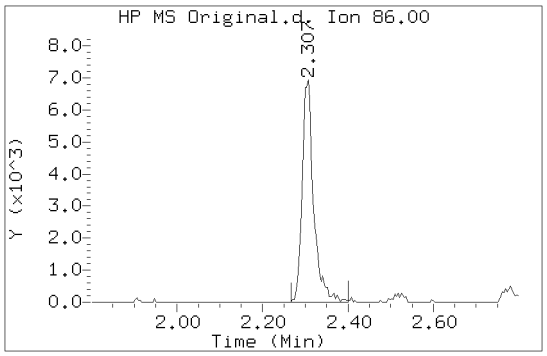
MASS
84
AREA
9194
HEIGHT
10710
27-Dec-2022
16:07
linh
pham



Reason Code:

BEFORE

MASS
86
AREA
13231
HEIGHT
6936
27-Dec-2022
16:03
linh
pham



AFTER

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13231
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16:07
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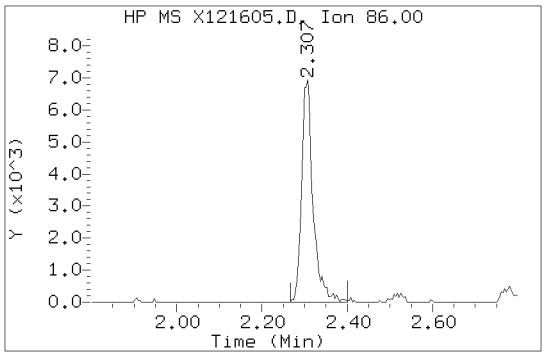
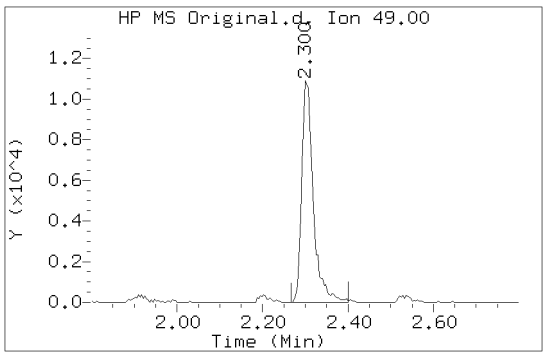


BEFORE

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
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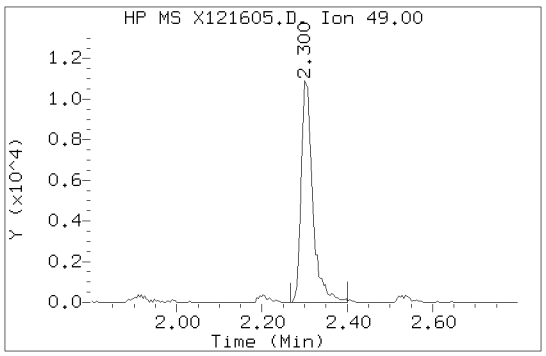
pham



2-Butanone (78-93-3)

Reason Code:

BEFORE

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AREA
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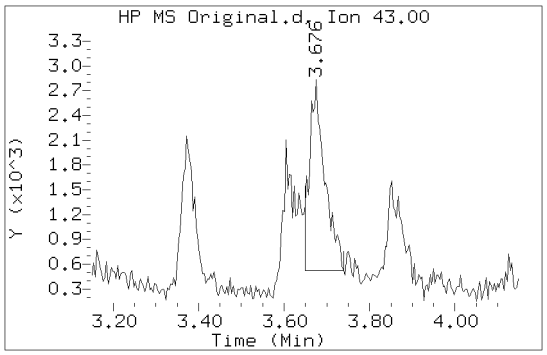
HEIGHT
2307
27-Dec-2022
16:03
linh
pham



AFTER

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27-Dec-2022
16:07
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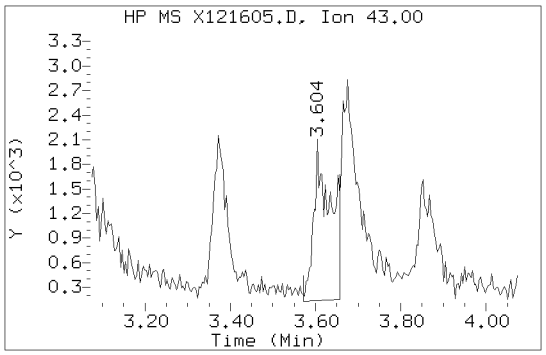

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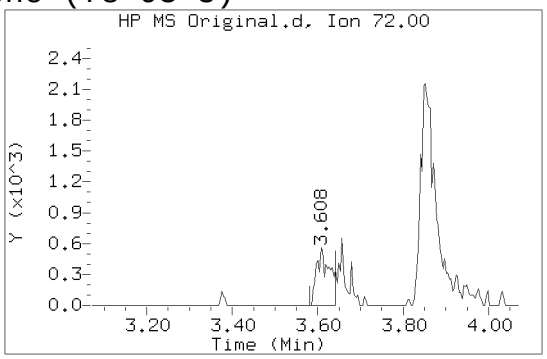
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

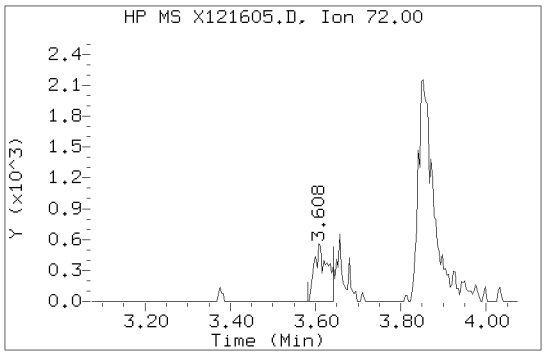
BEFORE

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

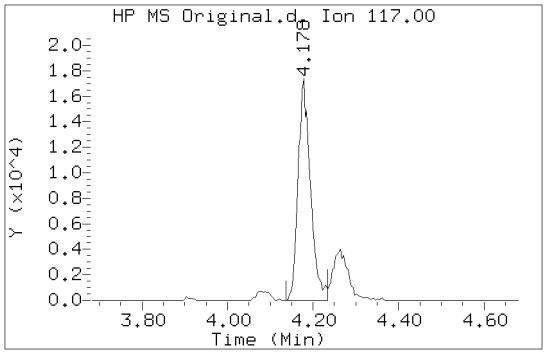


Carbon Tetrachloride (56-23-5)

Reason Code:

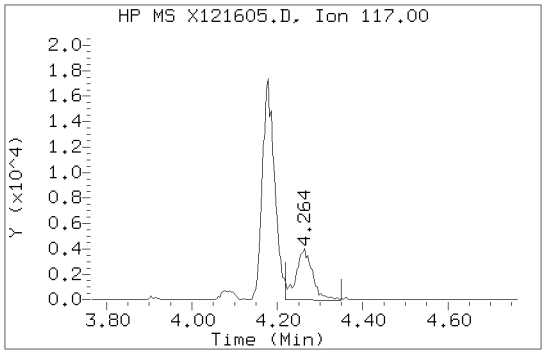
BEFORE

MASS
117
AREA
35555
HEIGHT
17376
27-Dec-2022
16:03
linh
pham



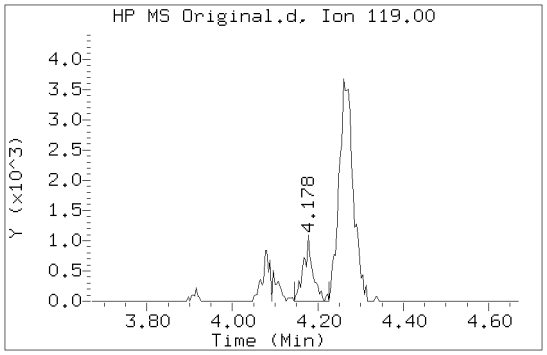
AFTER

MASS
117
AREA
11092
HEIGHT
4036
27-Dec-2022
16:07
linh
pham



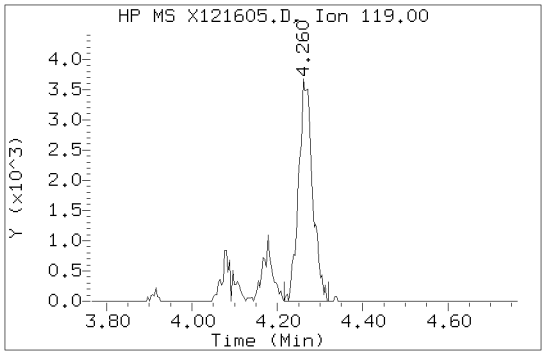
BEFORE

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

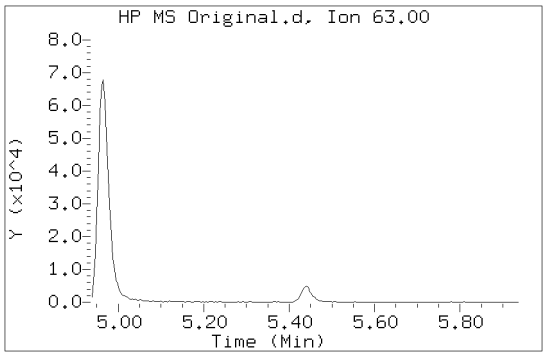


1,2-Dichloropropane (78-87-5)

Reason Code:

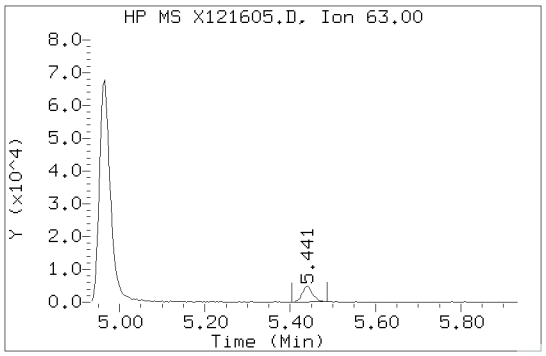
BEFORE

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



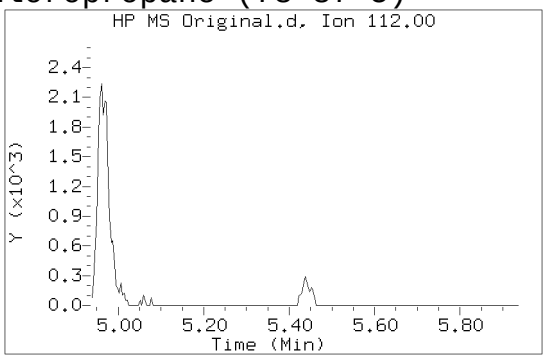
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

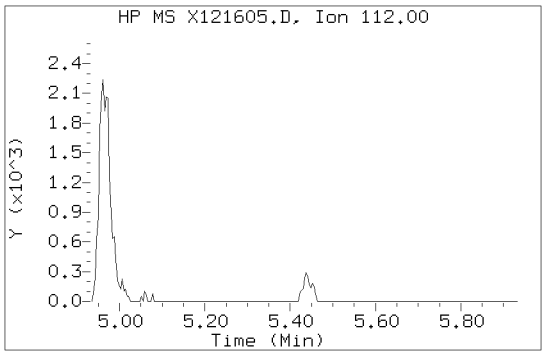
BEFORE

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

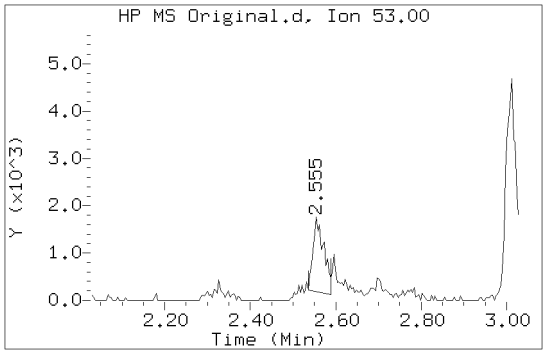


Acrylonitrile (107-13-1)

Reason Code:

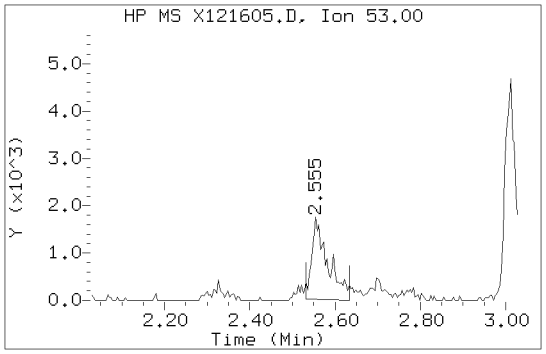
BEFORE

MASS
53
AREA
2810
HEIGHT
1577
27-Dec-2022
16:03
linh
pham



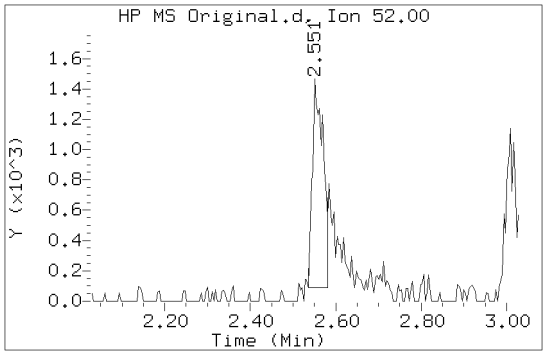
AFTER

MASS
53
AREA
4557
HEIGHT
1735
27-Dec-2022
16:07
linh
pham



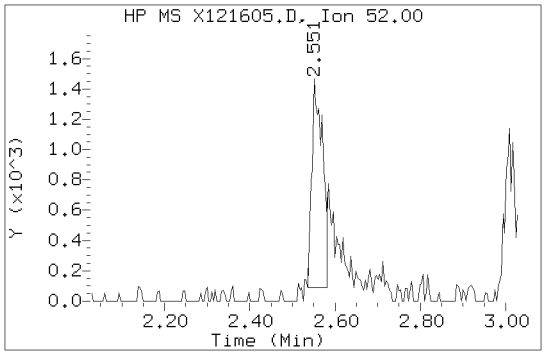
BEFORE

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:03
linh
pham



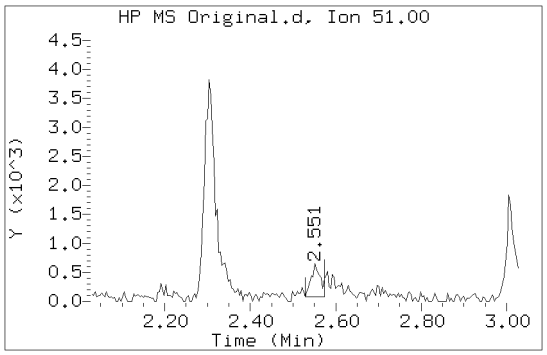
AFTER

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:07
linh
pham



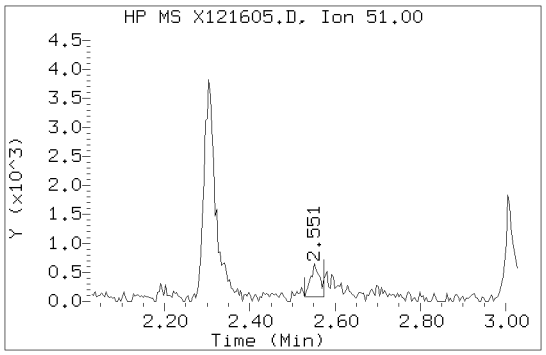
BEFORE

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

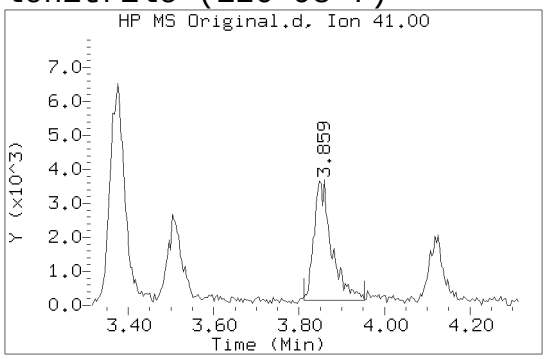


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

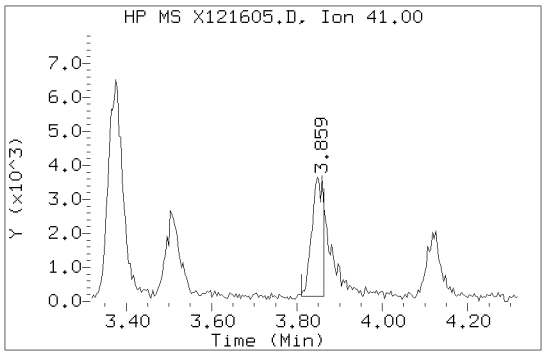
Methacrylonitrile (126-98-7)

Reason Code:

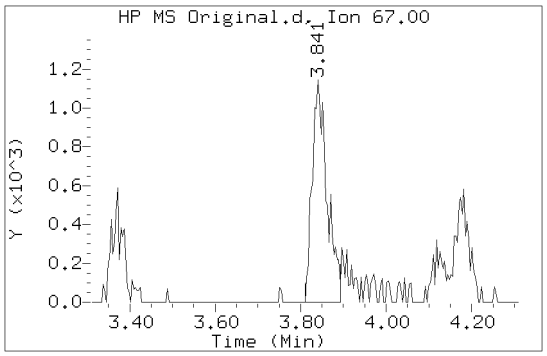
BEFORE
MASS
41
AREA
10013
HEIGHT
3544
27-Dec-2022
16:03
linh
pham



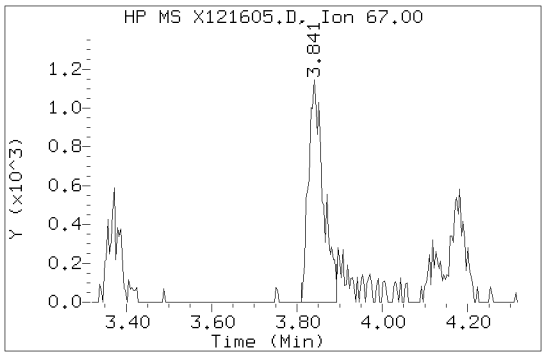
AFTER
MASS
41
AREA
6388
HEIGHT
3544
27-Dec-2022
16:07
linh
pham



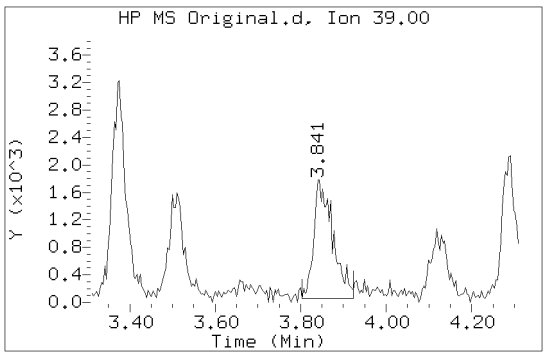
BEFORE
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:03
linh
pham



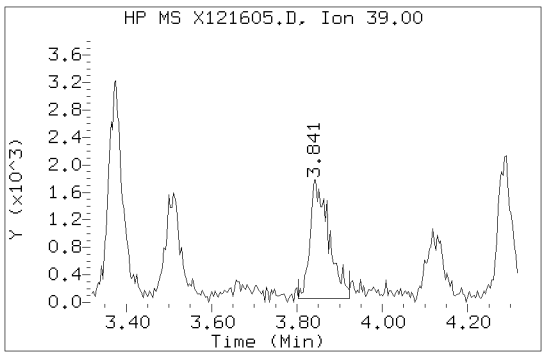
AFTER
MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:03
linh
pham



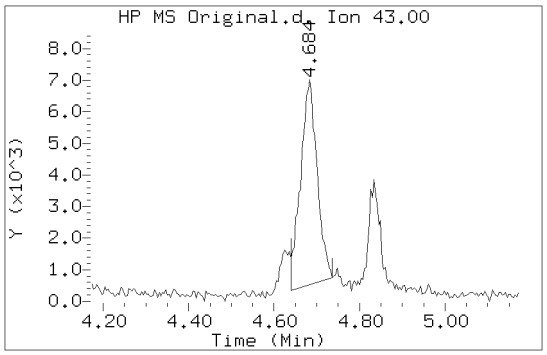
AFTER
MASS
39
AREA
5310
HEIGHT
1724
27-Dec-2022
16:07
linh
pham



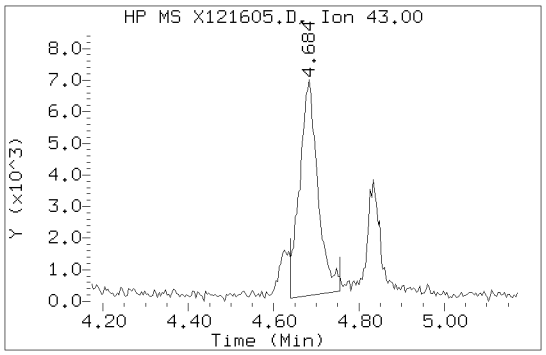
Isobutyl Alcohol (78-83-1)

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



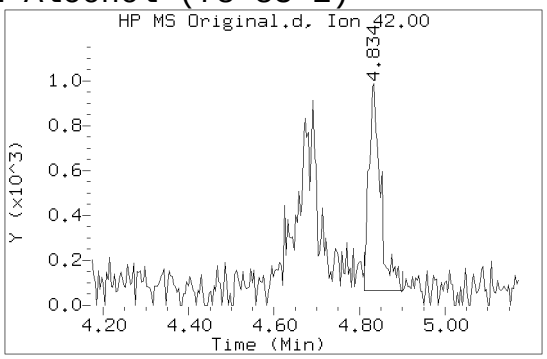
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Isobutyl Alcohol (78-83-1)

Reason Code:

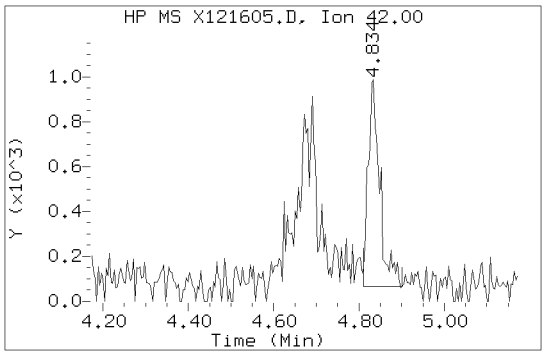
BEFORE

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:03
linh
pham



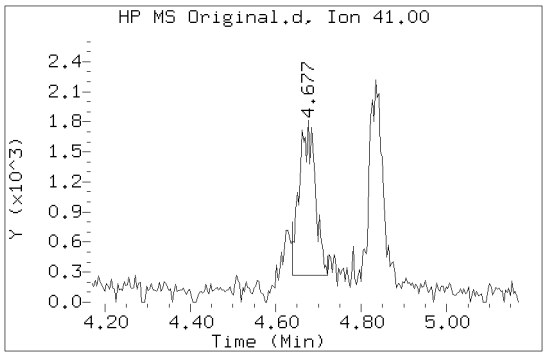
AFTER

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:07
linh
pham



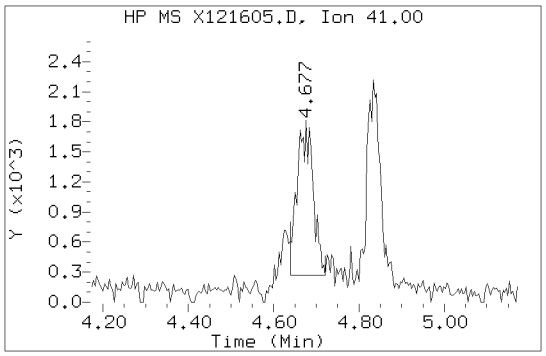
BEFORE

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

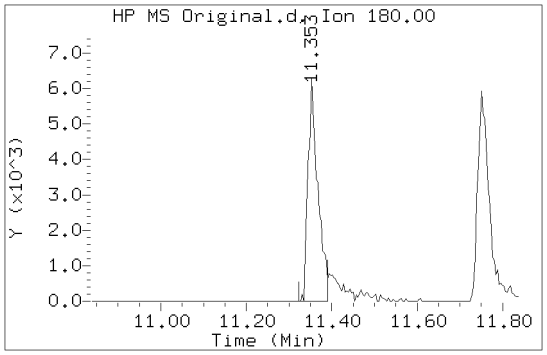


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

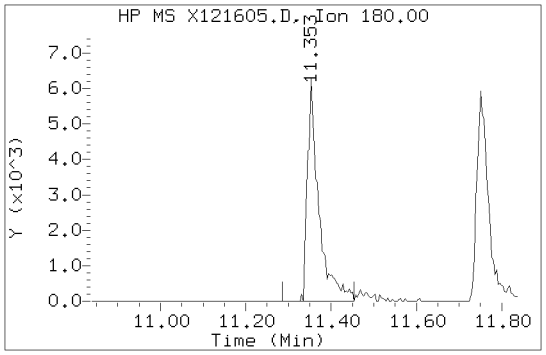
BEFORE

MASS
180
AREA
10131
HEIGHT
6269
27-Dec-2022
16:03
linh
pham



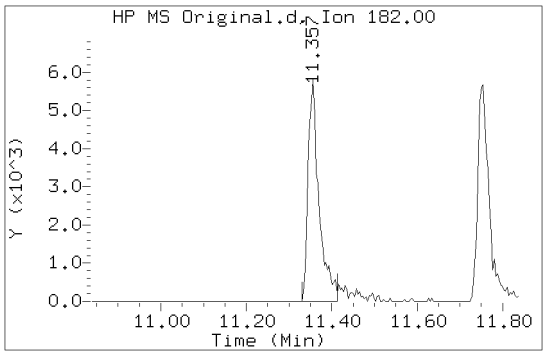
AFTER

MASS
180
AREA
11764
HEIGHT
6269
27-Dec-2022
16:07
linh
pham



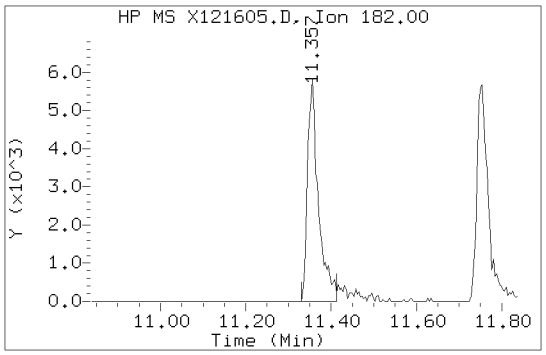
BEFORE

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



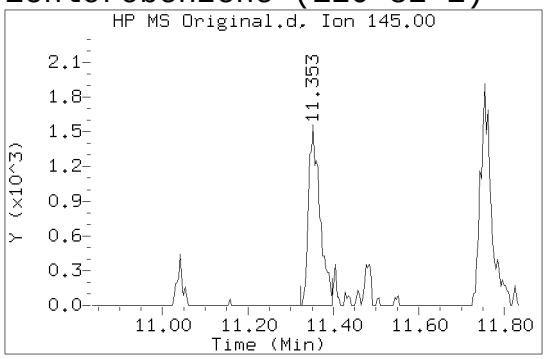
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

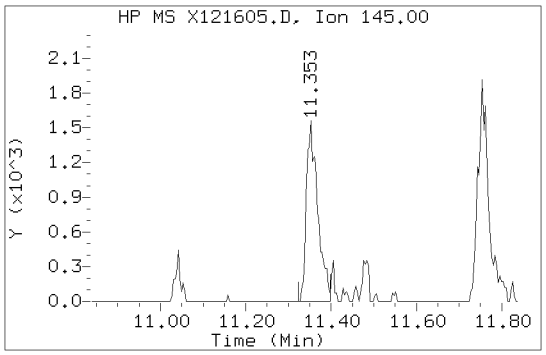
BEFORE

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

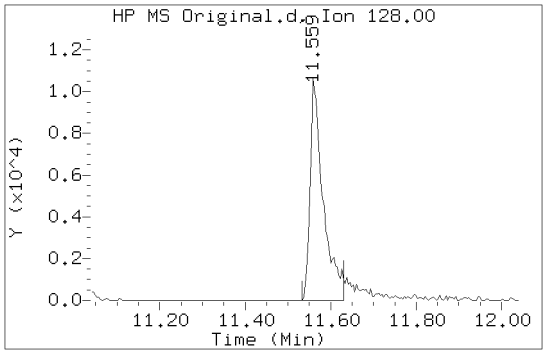


Naphthalene (91-20-3)

Reason Code:

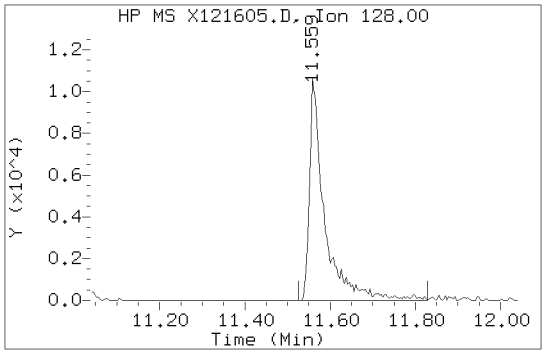
BEFORE

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

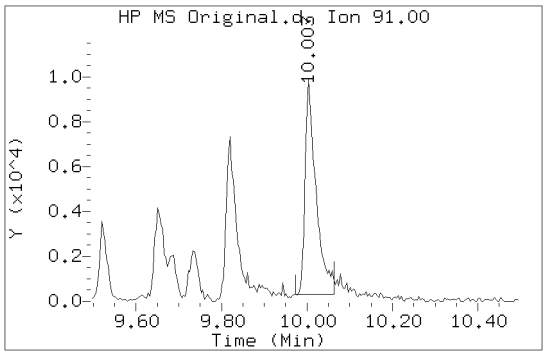


n-Butylbenzene (104-51-8)

Reason Code:

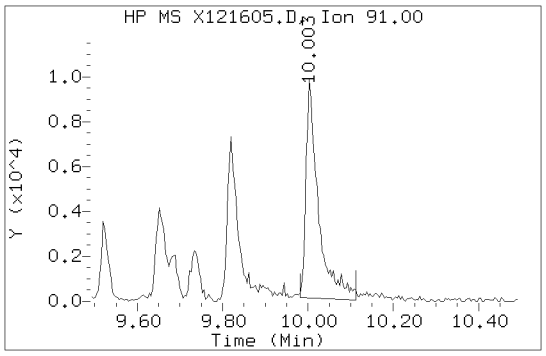
BEFORE

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



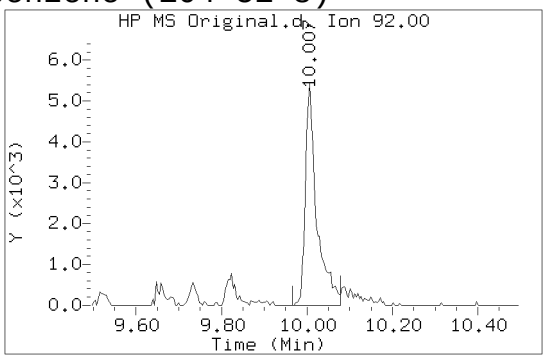
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butylbenzene (104-51-8)

Reason Code:

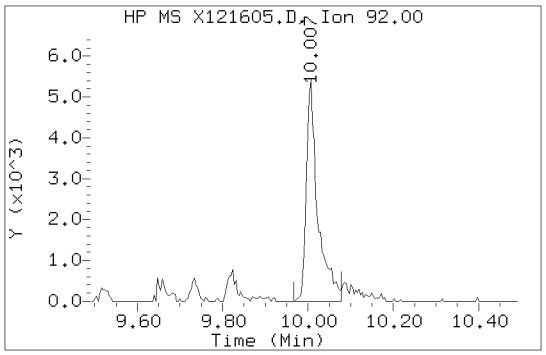
BEFORE

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:03
linh
pham



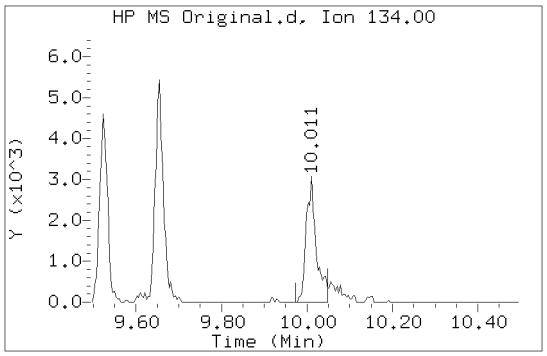
AFTER

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:07
linh
pham



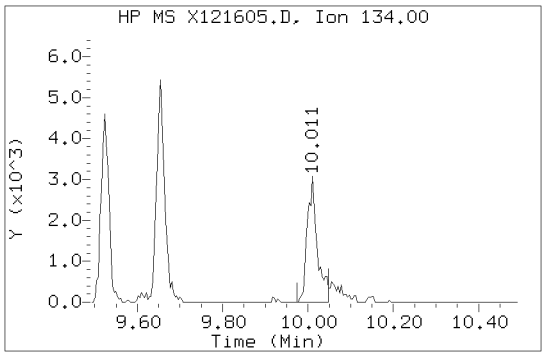
BEFORE

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

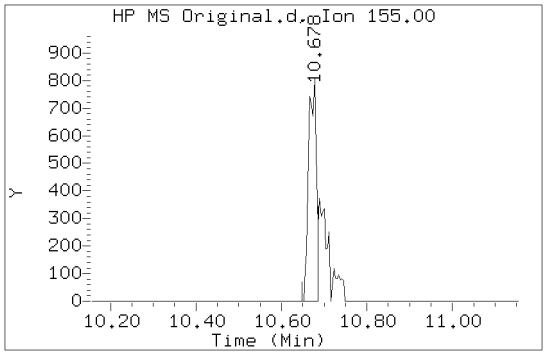


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

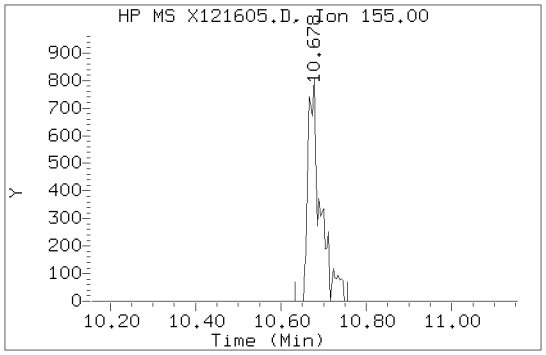
BEFORE

MASS
155
AREA
1026
HEIGHT
806
27-Dec-2022
16:03
linh
pham



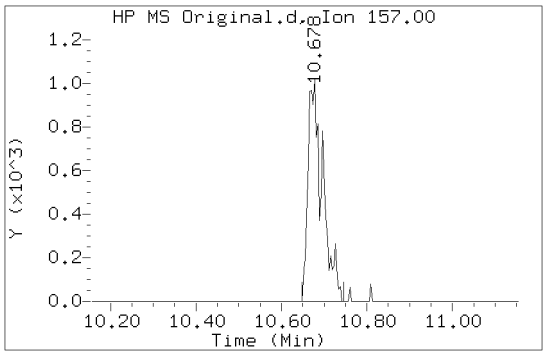
AFTER

MASS
155
AREA
1619
HEIGHT
806
27-Dec-2022
16:07
linh
pham



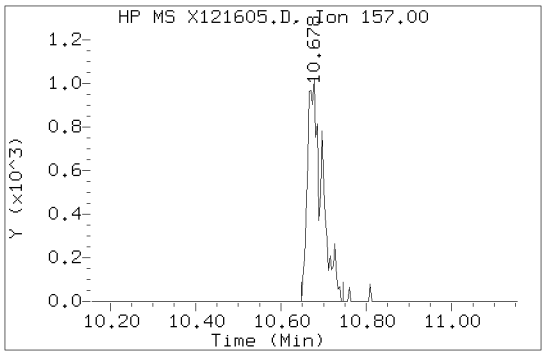
BEFORE

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



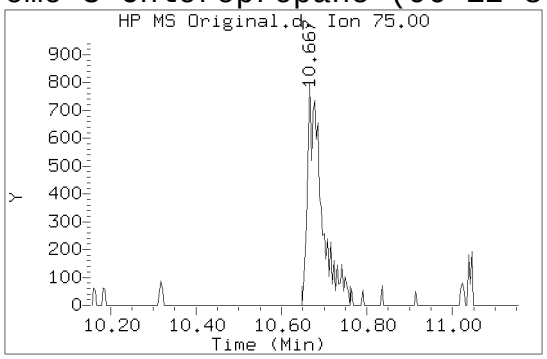
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

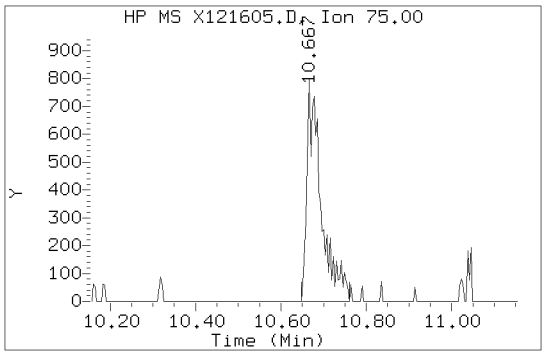
BEFORE

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

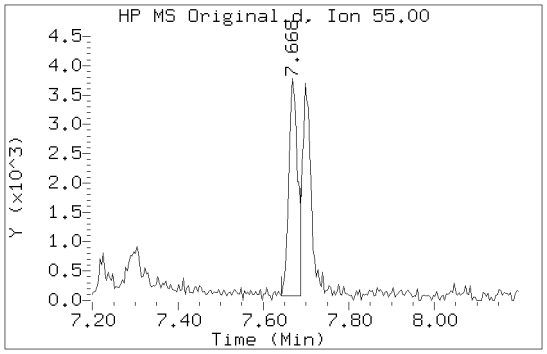


1-Chlorohexane (544-10-5)

Reason Code:

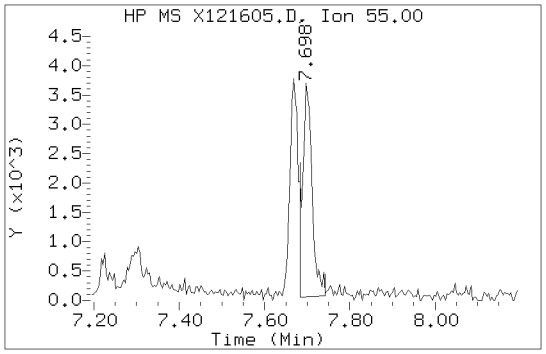
BEFORE

MASS
55
AREA
5357
HEIGHT
3703
27-Dec-2022
16:03
linh
pham



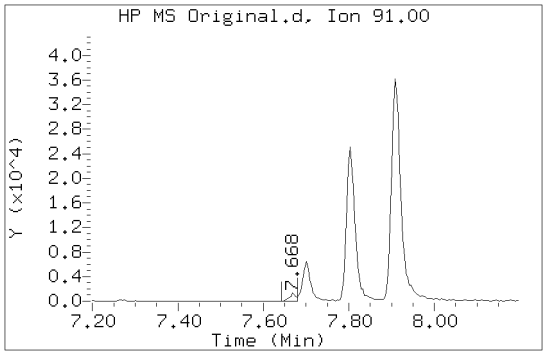
AFTER

MASS
55
AREA
5855
HEIGHT
3647
27-Dec-2022
16:07
linh
pham



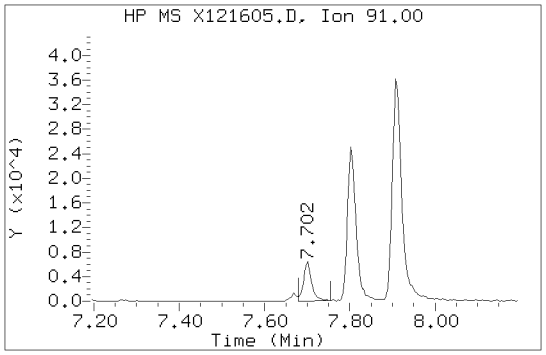
BEFORE

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

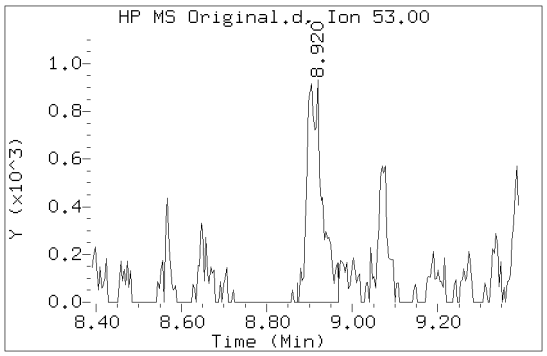


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

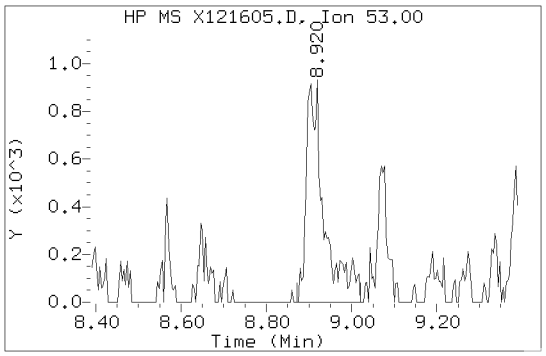
BEFORE

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



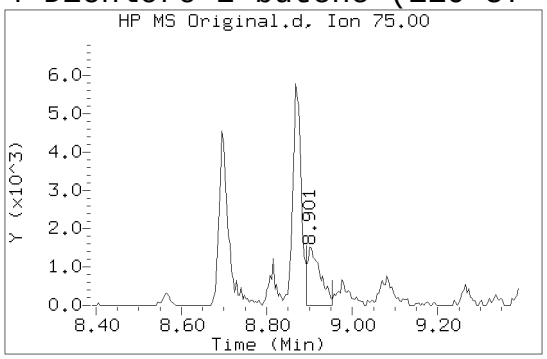
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

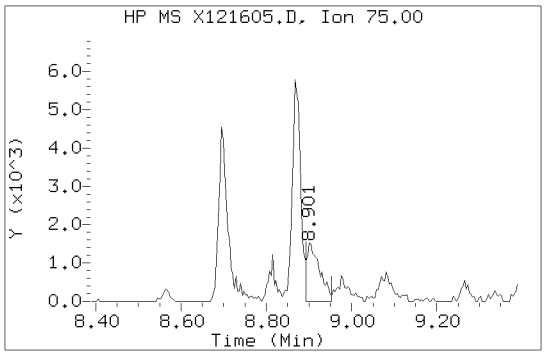
BEFORE

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

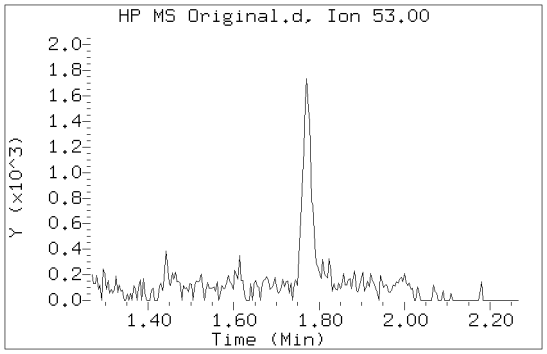


Chloroprene (126-99-8)

Reason Code:

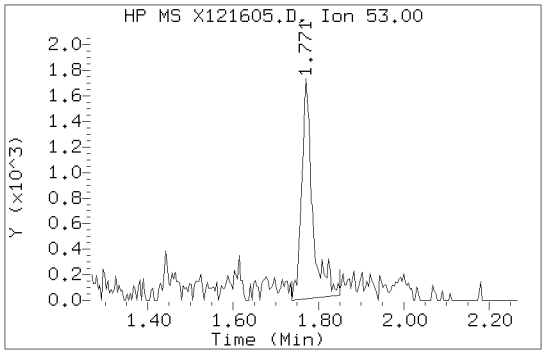
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



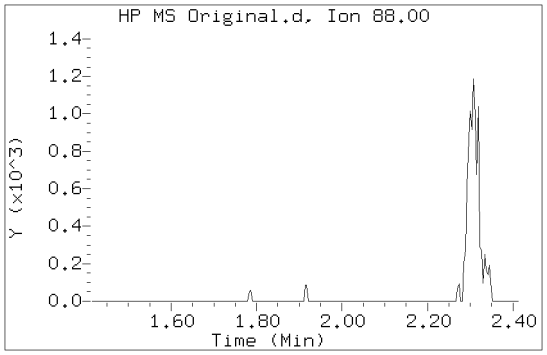
AFTER

MASS
53
AREA
3126
HEIGHT
1722
27-Dec-2022
16:07
linh
pham



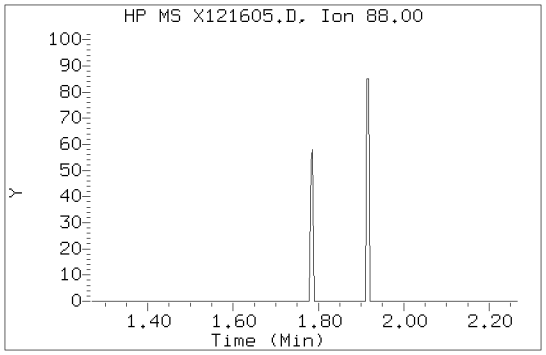
BEFORE

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

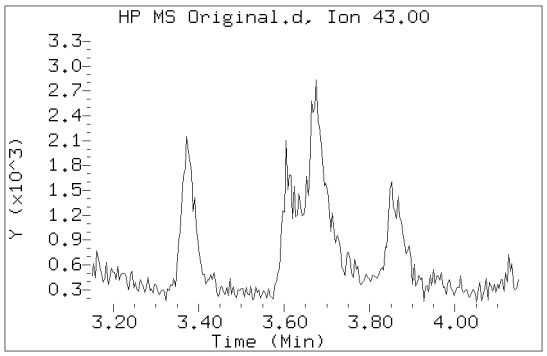


Ethyl Acetate (141-78-6)

Reason Code:

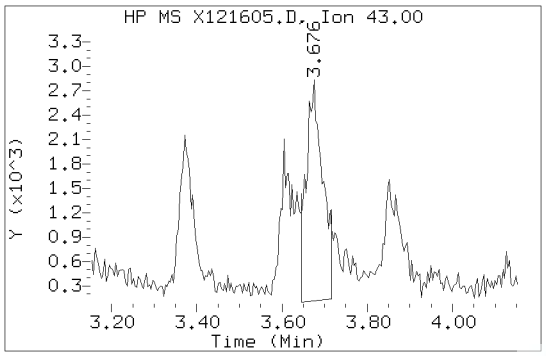
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

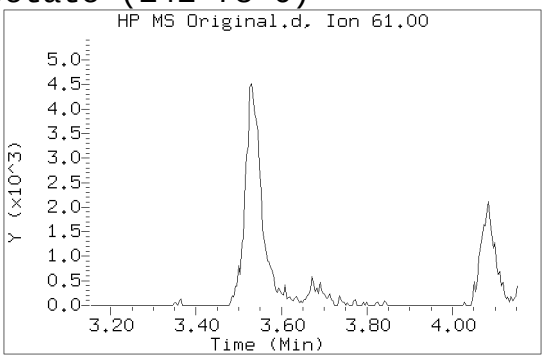
MASS
43
AREA
7422
HEIGHT
2716
27-Dec-2022
16:07
linh
pham



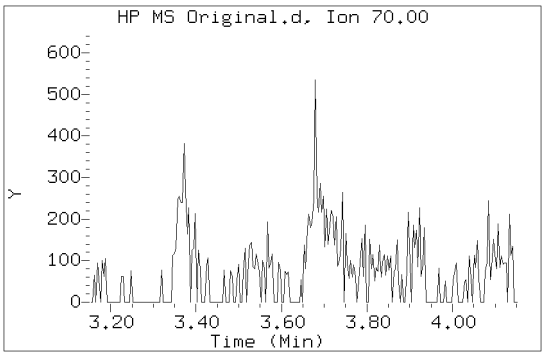
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

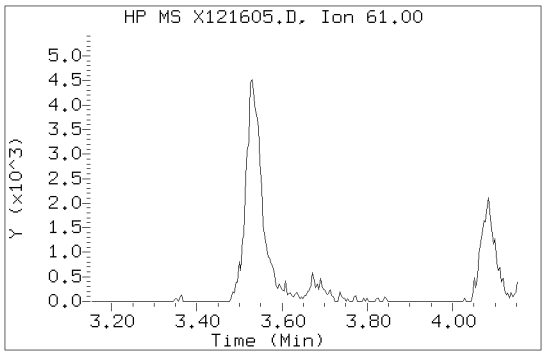


BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

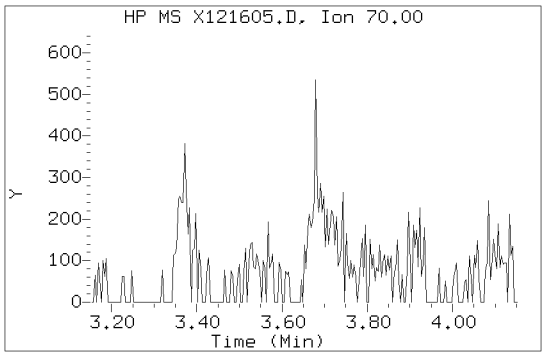


Reason Code:

AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

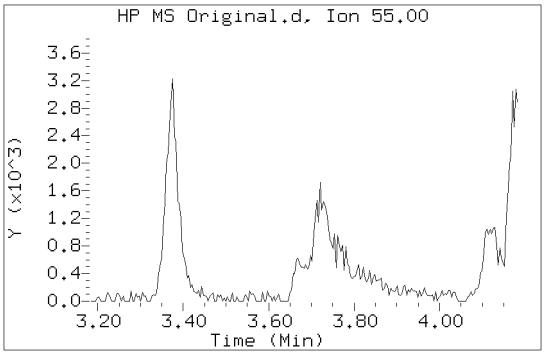


AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

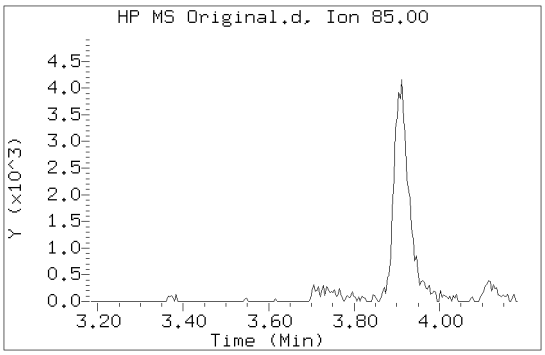


Methyl Acrylate (96-33-3)

BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

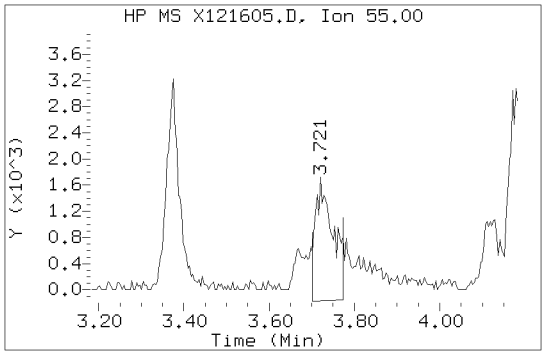


BEFORE
MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

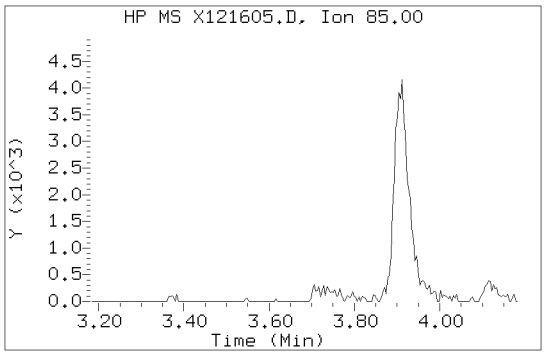


Reason Code:

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



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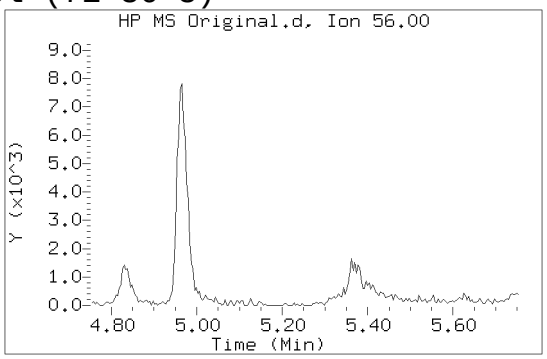
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

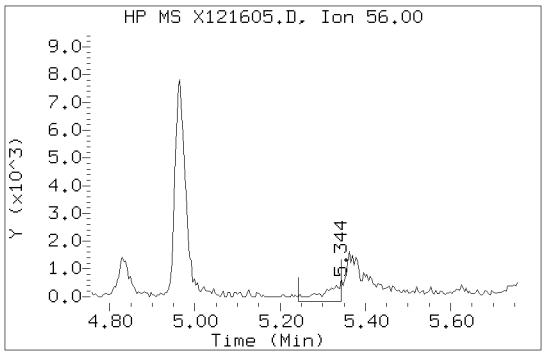
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



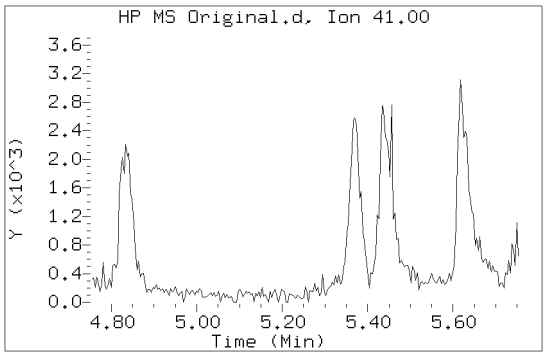
AFTER

MASS
56
AREA
2004
HEIGHT
808
27-Dec-2022
16:07
linh
pham



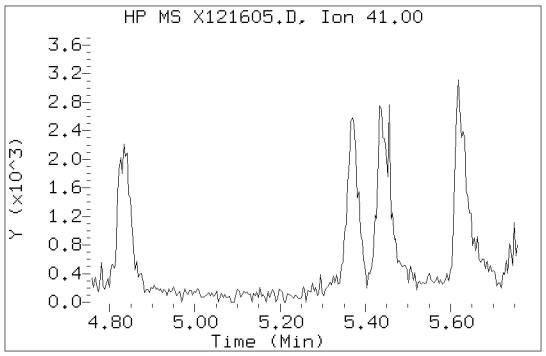
BEFORE

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

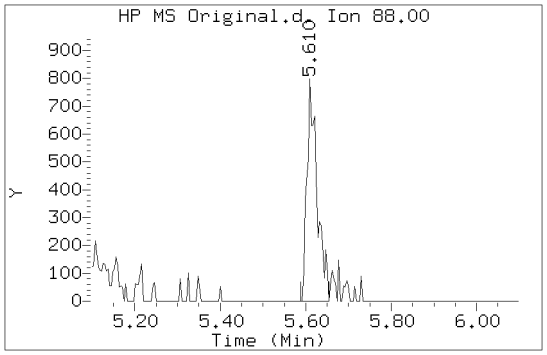


1,4-Dioxane ()

Reason Code:

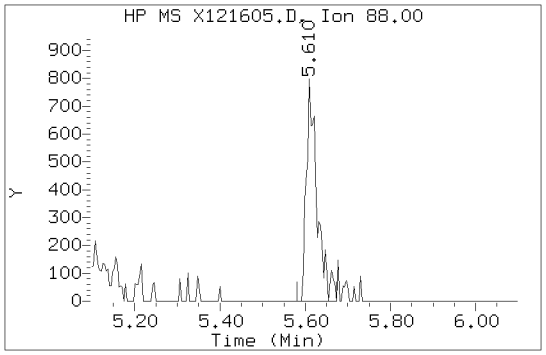
BEFORE

MASS
88
AREA
1335
HEIGHT
798
27-Dec-2022
16:03
linh
pham



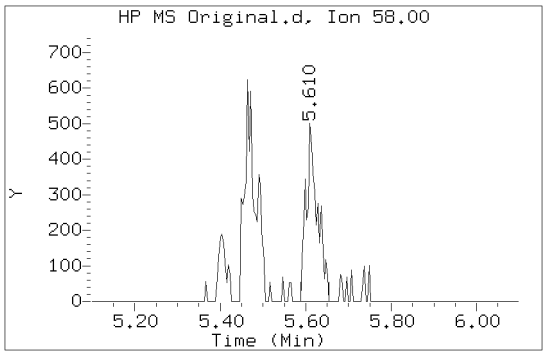
AFTER

MASS
88
AREA
1409
HEIGHT
798
27-Dec-2022
16:07
linh
pham



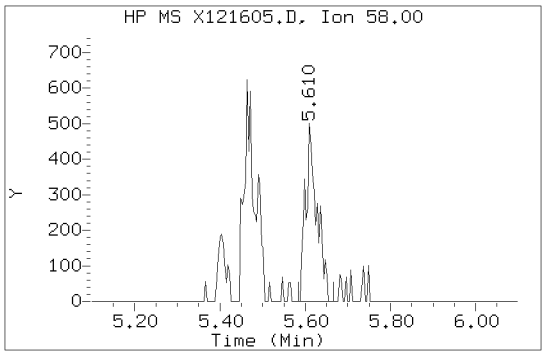
BEFORE

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

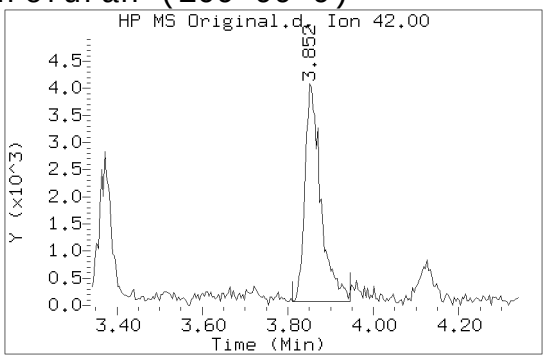


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

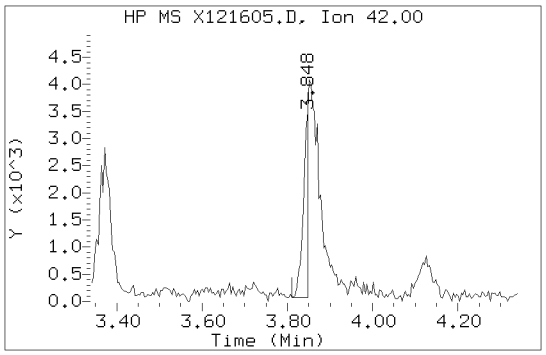
Tetrahydrofuran (109-99-9)

Reason Code:

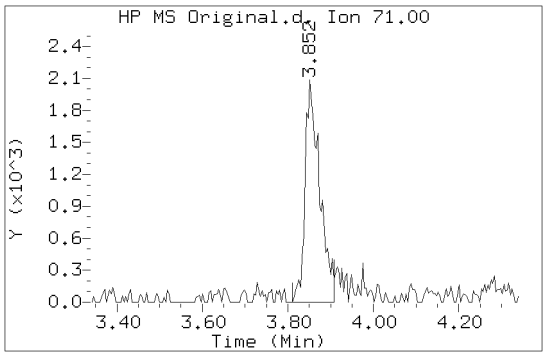
BEFORE
MASS
42
AREA
10469
HEIGHT
4012
27-Dec-2022
16:03
linh
pham



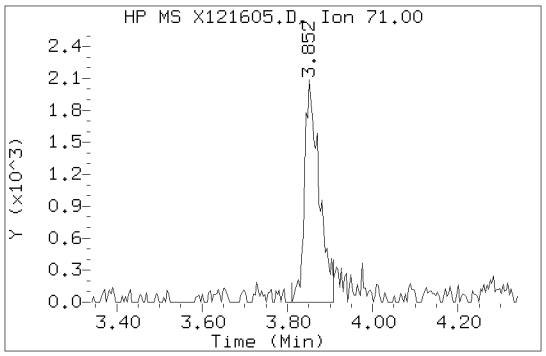
AFTER
MASS
42
AREA
2867
HEIGHT
3419
27-Dec-2022
16:07
linh
pham



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)

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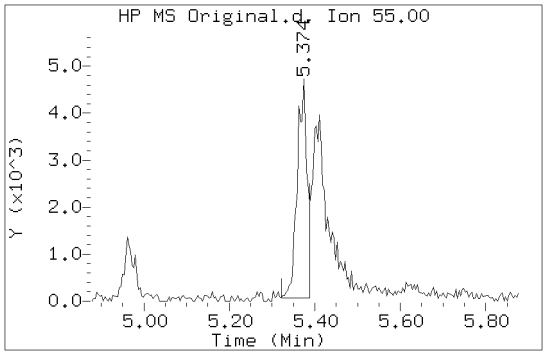

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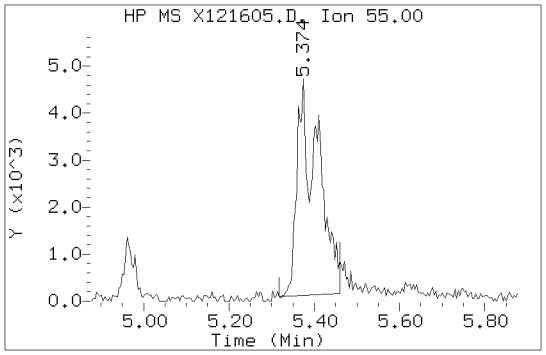

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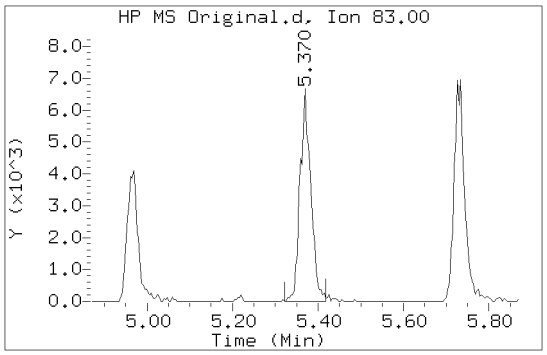

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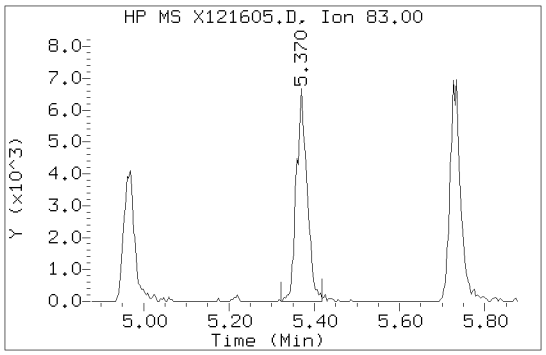

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Inj Date : 16-DEC-2022 13:02
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LabSampID : VSTD002

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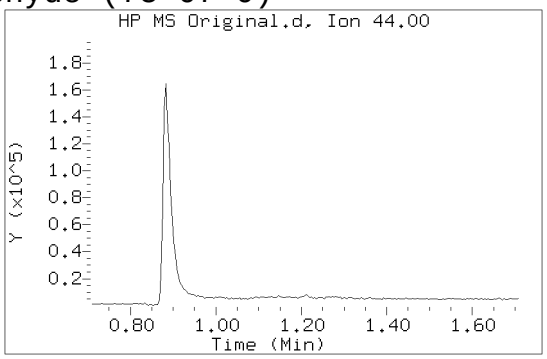

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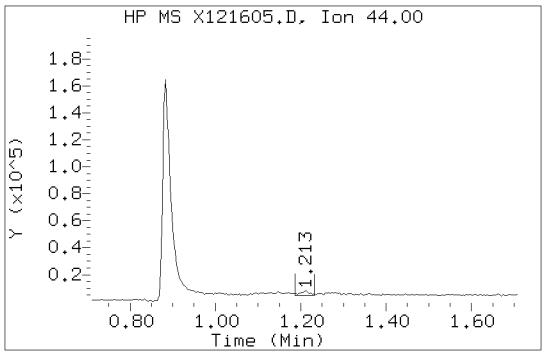

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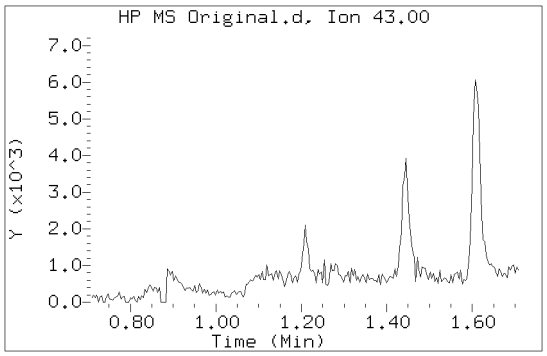

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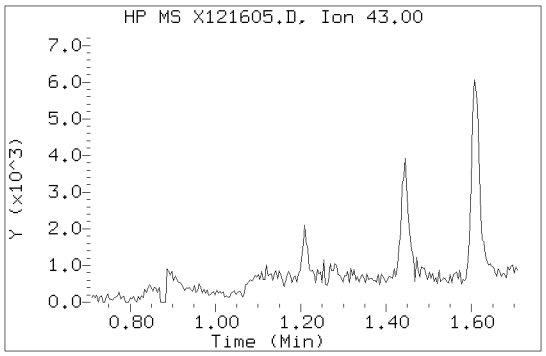

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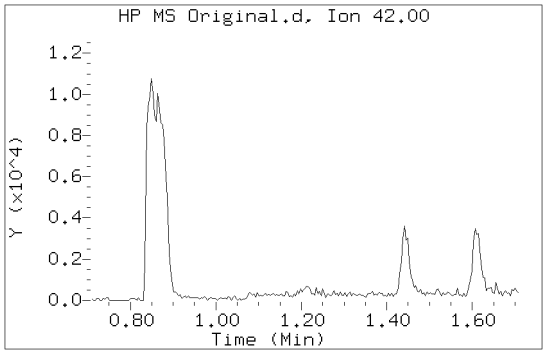

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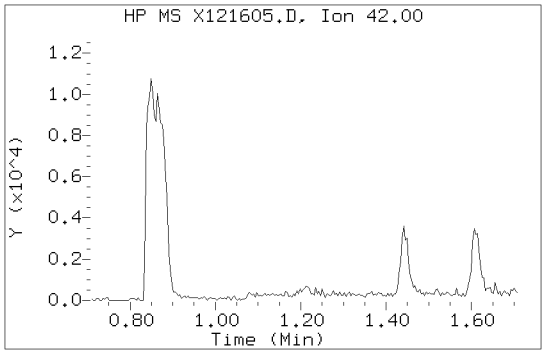

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D Page 1
Report Date: 27-Dec-2022 16:07

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   :
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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

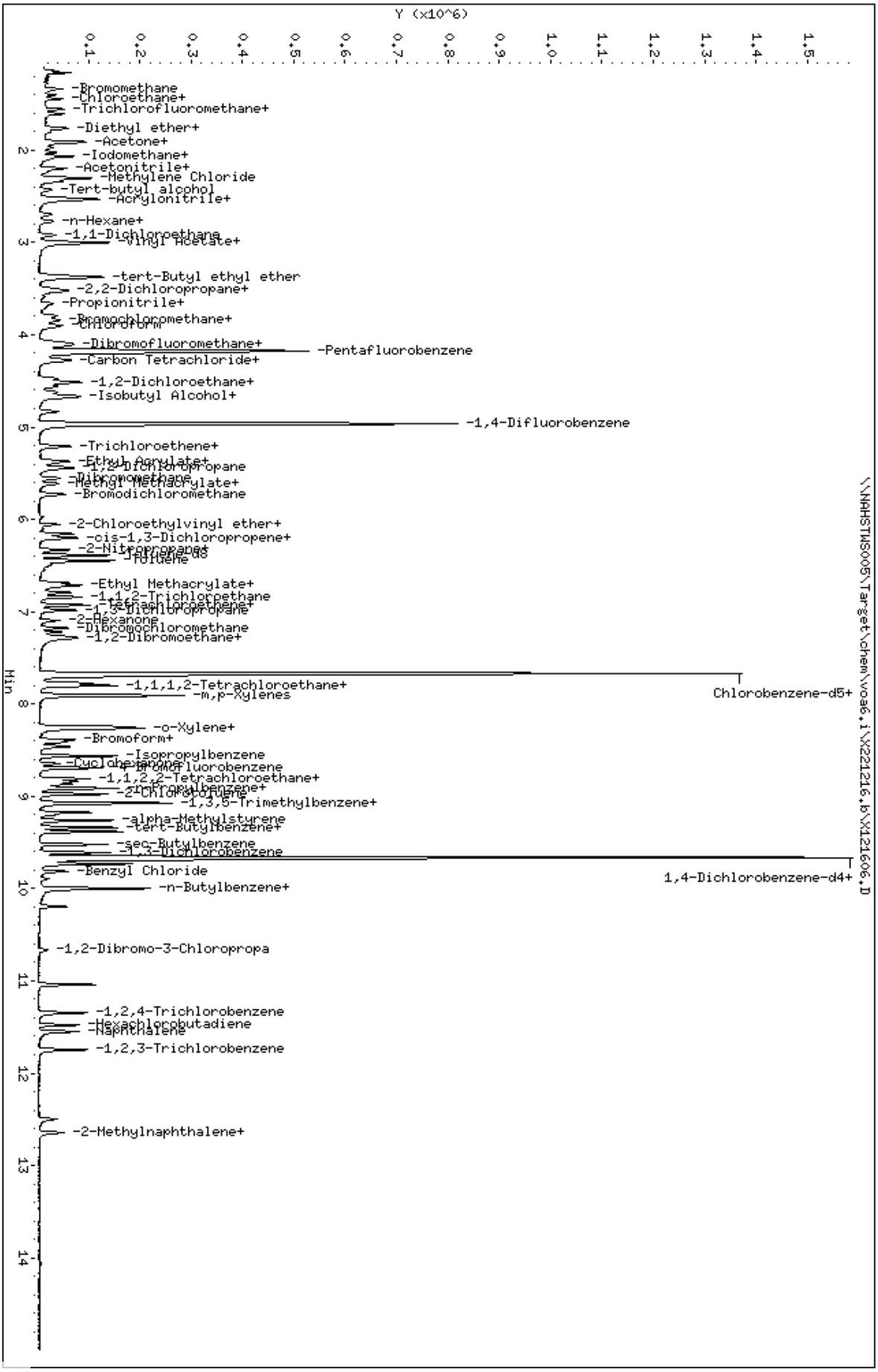
		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.705	3.705	(0.887)	14950	5.00000	4.88(M)
	162 Butyl acrylate	55	8.260	8.260	(1.077)	38320	5.00000	4.48
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	15008	5.00000	5.11
	3 Chloromethane	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

	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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Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D

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

Page 1

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:

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27-Dec-2022
16:03
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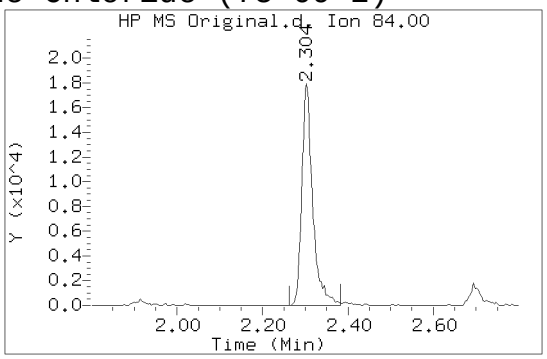

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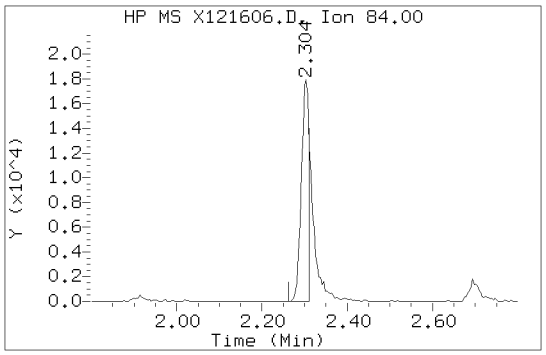

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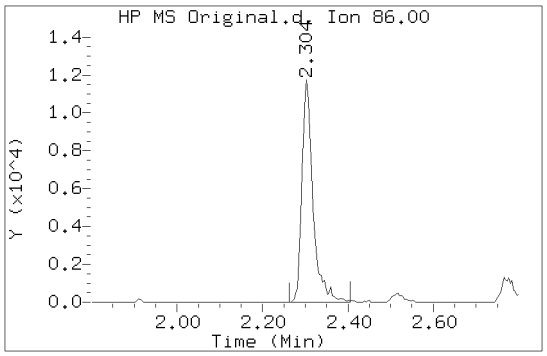

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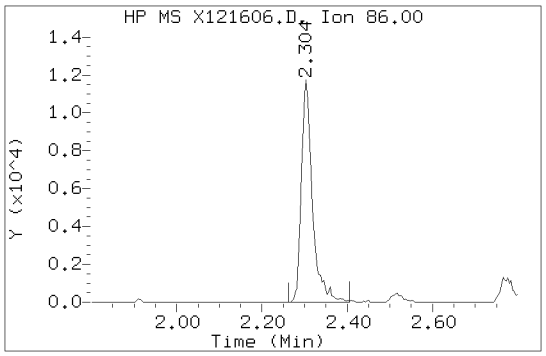

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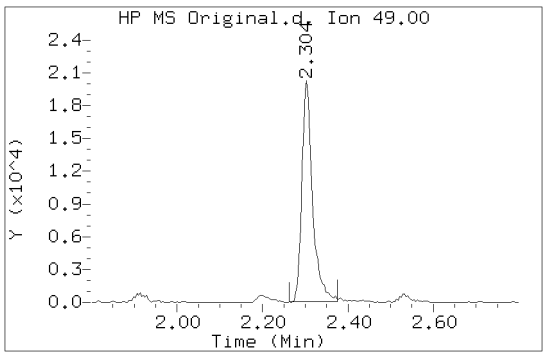
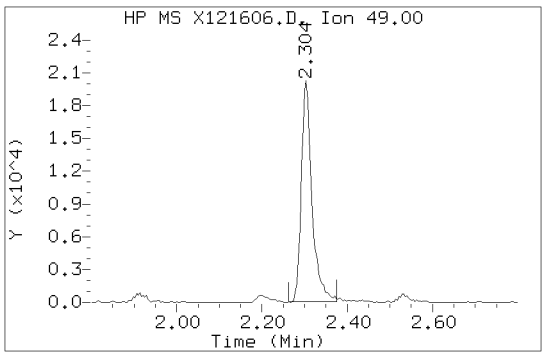
linh
pham



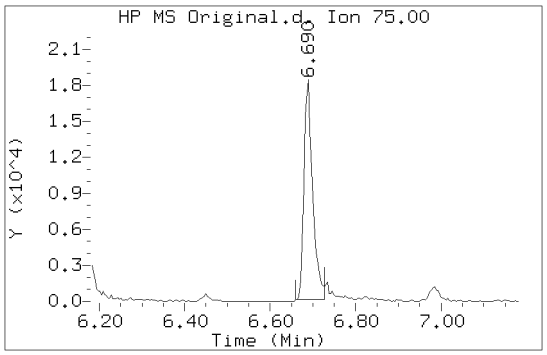
AFTER
MASS
49
AREA
35909
HEIGHT
20222
27-Dec-2022
16:07
linh
pham



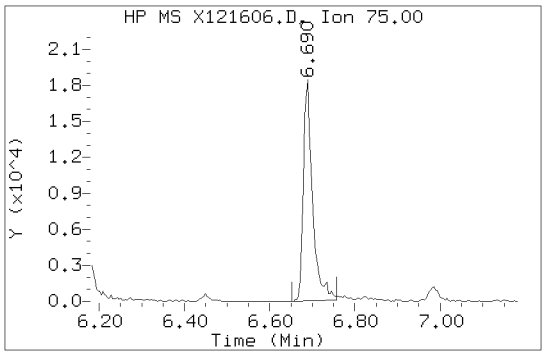
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
75
AREA
26483
HEIGHT
18306
27-Dec-2022
16:03
linh
pham



AFTER
MASS
75
AREA
28399
HEIGHT
18443
27-Dec-2022
16:07
linh
pham



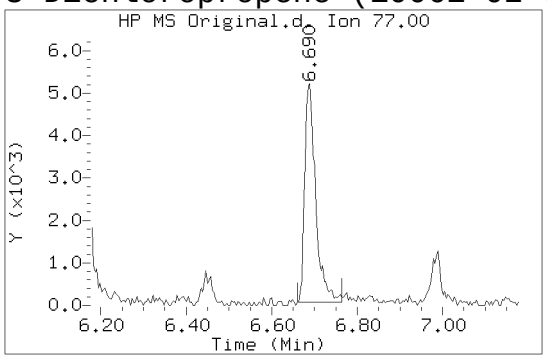
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

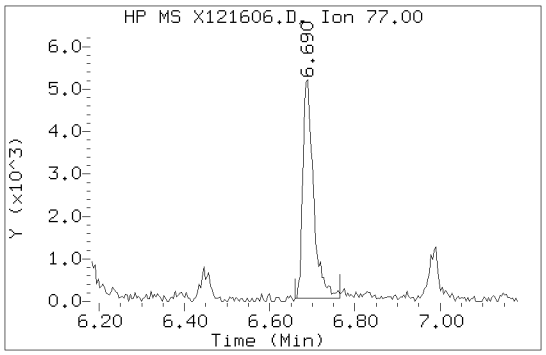
BEFORE

MASS
77
AREA
9244
HEIGHT
5154
27-Dec-2022
16:03
linh
pham



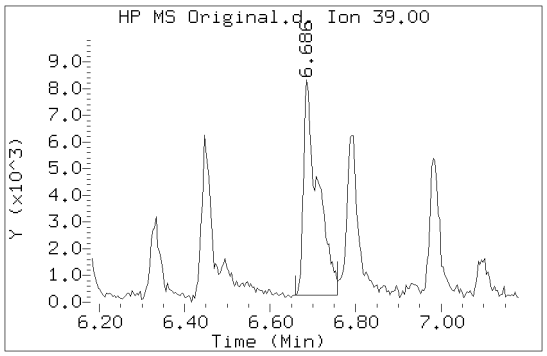
AFTER

MASS
77
AREA
9244
HEIGHT
5154
27-Dec-2022
16:07
linh
pham



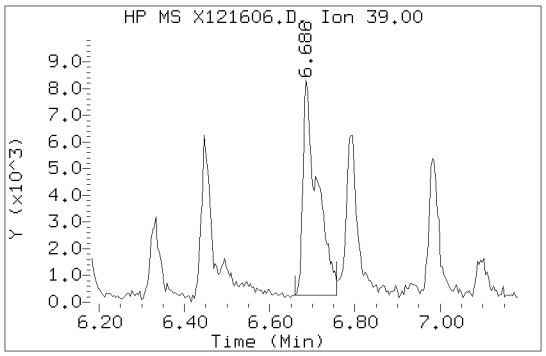
BEFORE

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

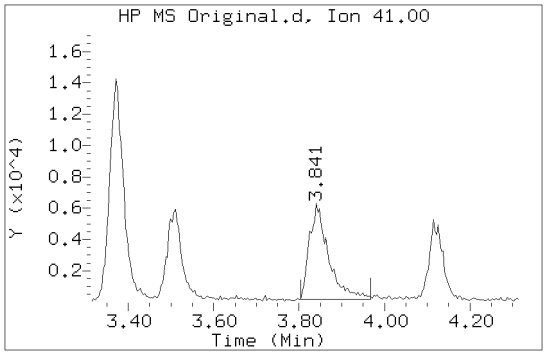


Methacrylonitrile (126-98-7)

Reason Code:

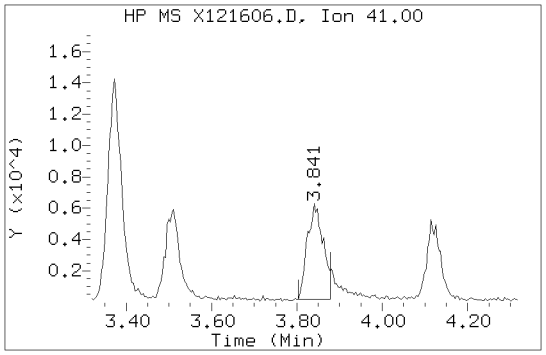
BEFORE

MASS
41
AREA
18790
HEIGHT
6109
27-Dec-2022
16:03
linh
pham



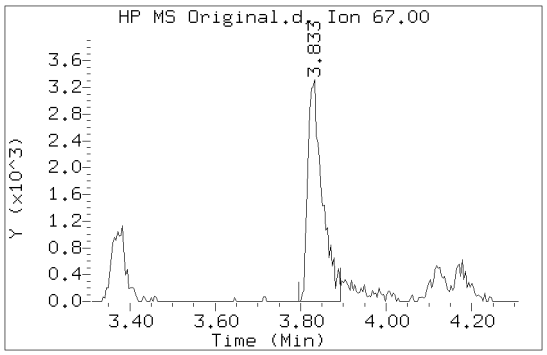
AFTER

MASS
41
AREA
15701
HEIGHT
6109
27-Dec-2022
16:07
linh
pham



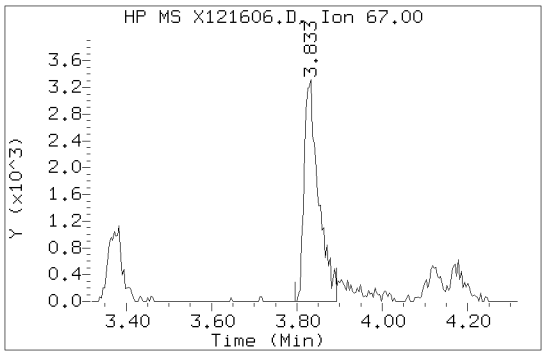
BEFORE

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



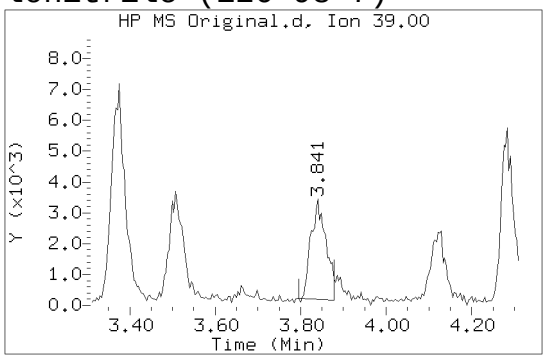
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methacrylonitrile (126-98-7)

Reason Code:

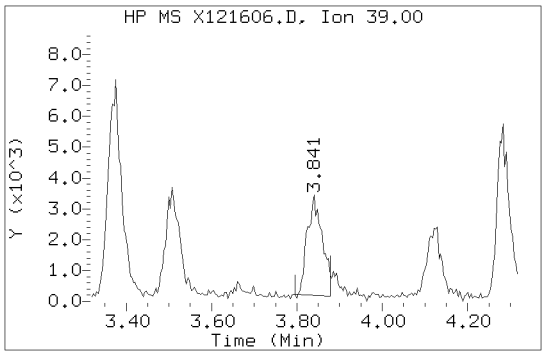
BEFORE

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

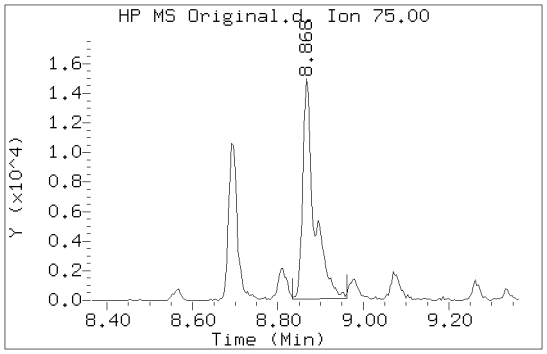


1,2,3-Trichloropropane (96-18-4)

Reason Code:

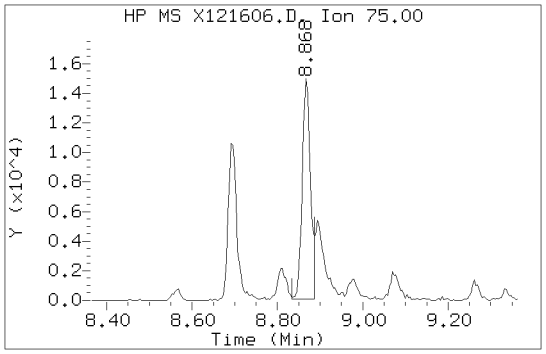
BEFORE

MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham



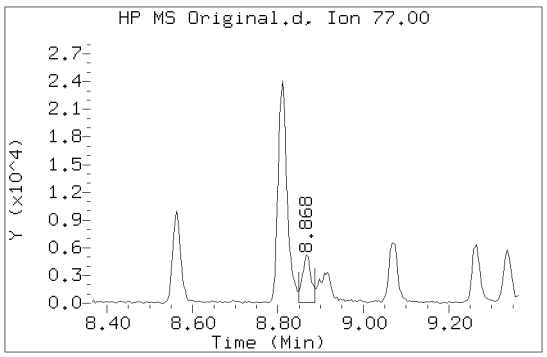
AFTER

MASS
75
AREA
20685
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



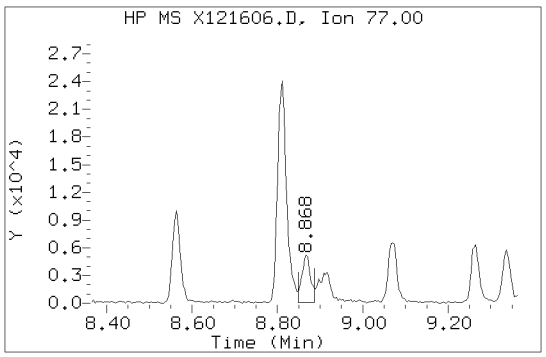
BEFORE

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

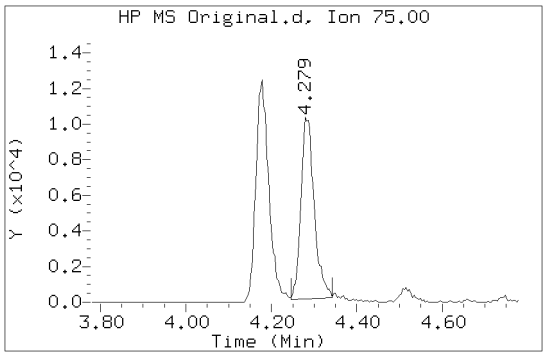


1,1-Dichloropropene (563-58-6)

Reason Code:

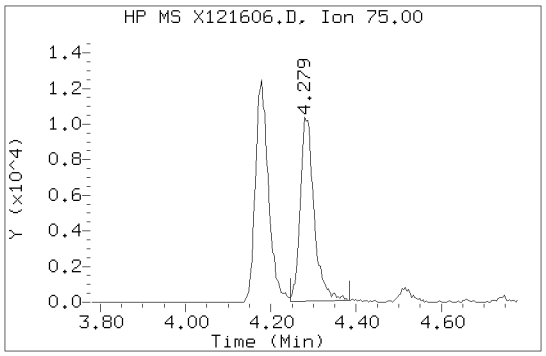
BEFORE

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



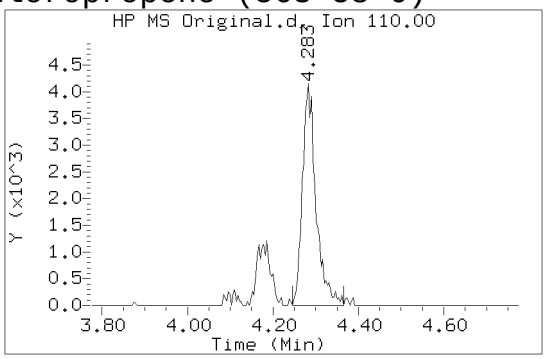
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

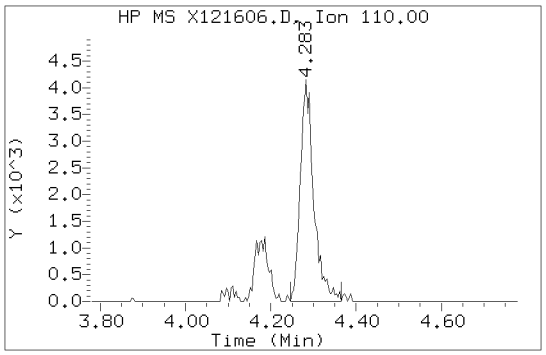
BEFORE

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:03
linh
pham



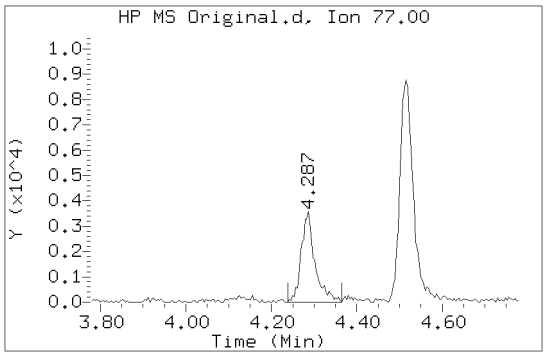
AFTER

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:07
linh
pham



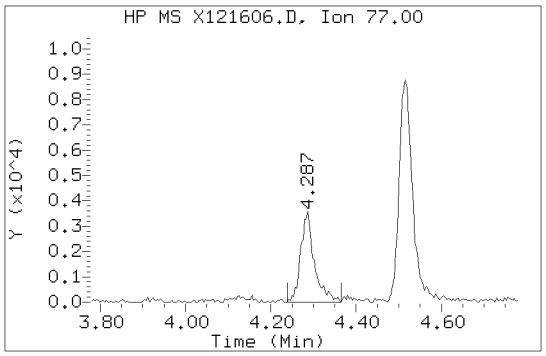
BEFORE

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

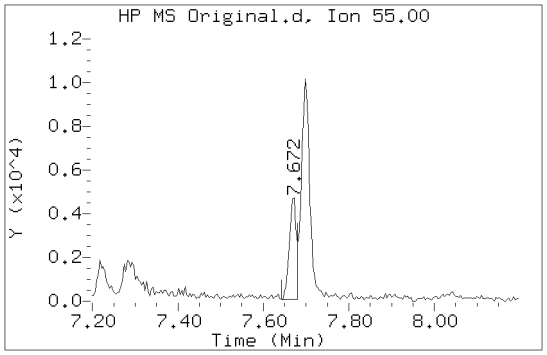


1-Chlorohexane (544-10-5)

Reason Code:

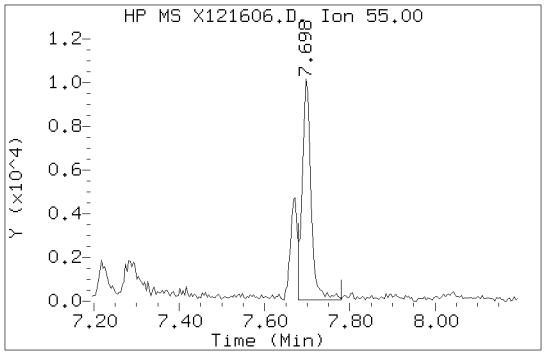
BEFORE

MASS
55
AREA
5371
HEIGHT
4660
27-Dec-2022
16:03
linh
pham



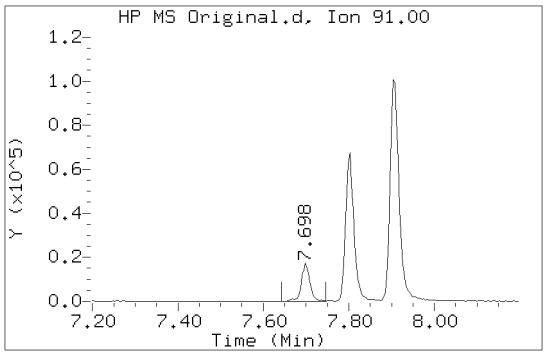
AFTER

MASS
55
AREA
15210
HEIGHT
10126
27-Dec-2022
16:07
linh
pham



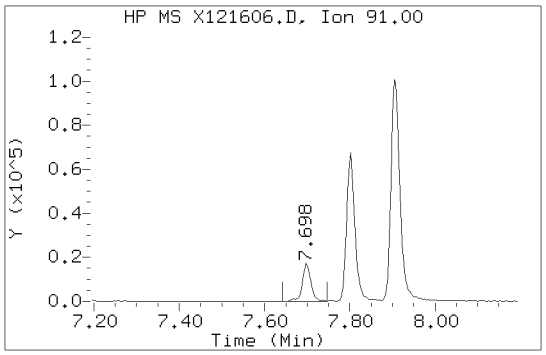
BEFORE

MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:03
linh
pham



AFTER

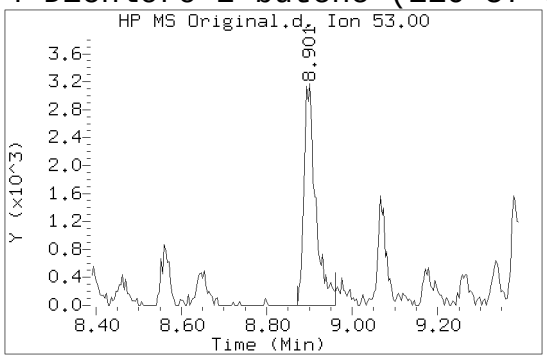
MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:07
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

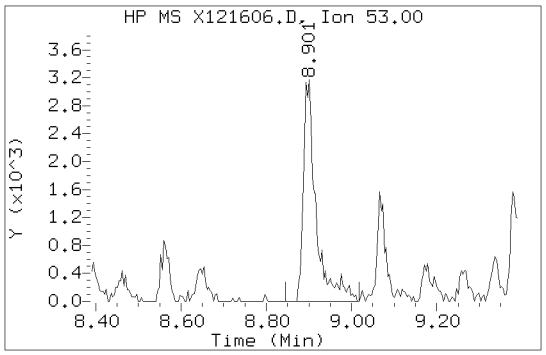
trans-1,4-Dichloro-2-butene (110-57-6)

BEFORE
MASS
53
AREA
6122
HEIGHT
3172
27-Dec-2022
16:03
linh
pham

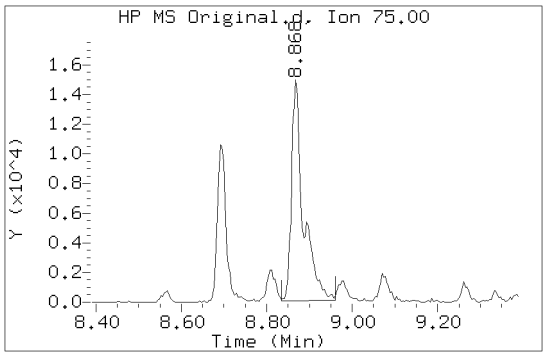


Reason Code:

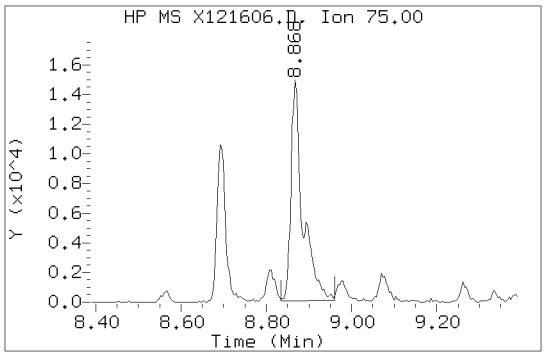
AFTER
MASS
53
AREA
6648
HEIGHT
3172
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham

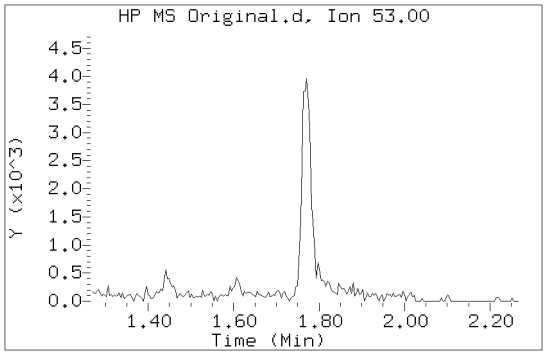


AFTER
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



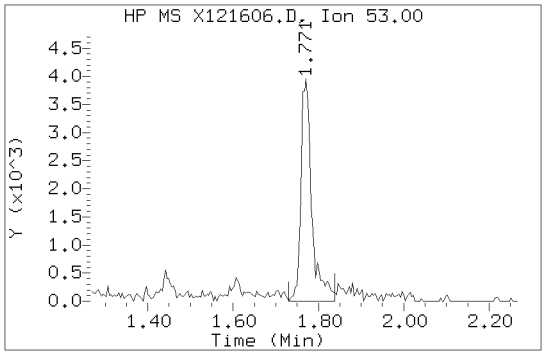
Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

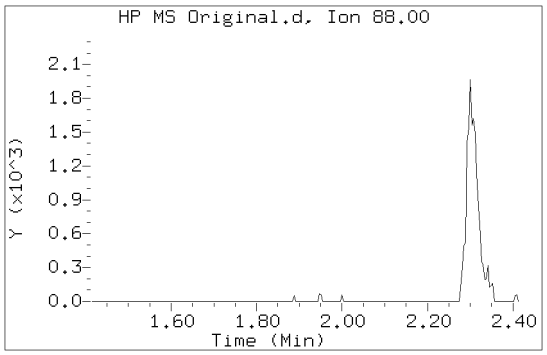


Reason Code:

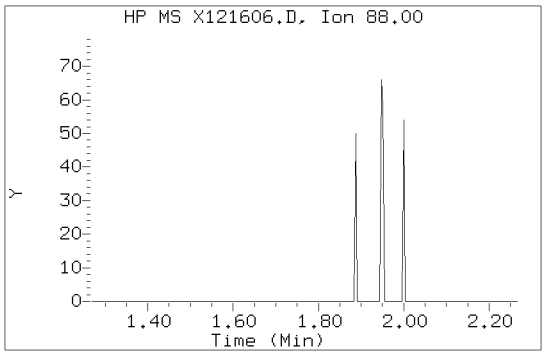
AFTER
MASS
53
AREA
7154
HEIGHT
3955
27-Dec-2022
16:07
linh
pham



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



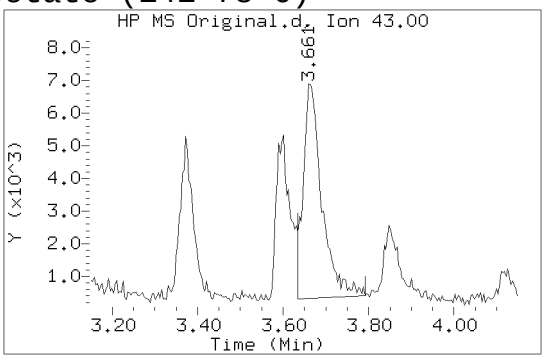
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

Reason Code:

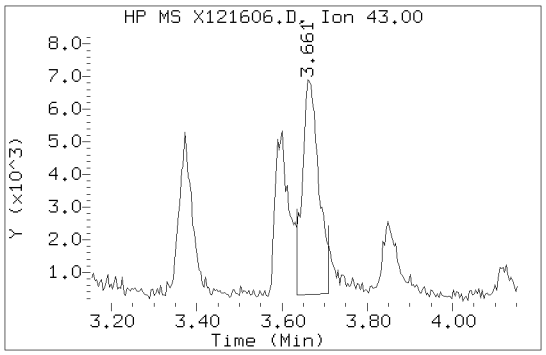
BEFORE

MASS
43
AREA
20113
HEIGHT
6576
27-Dec-2022
16:03
linh
pham



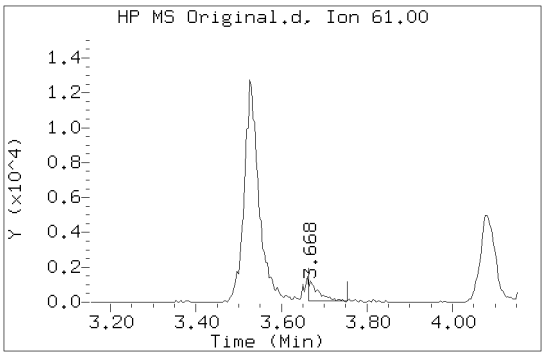
AFTER

MASS
43
AREA
18020
HEIGHT
6576
27-Dec-2022
16:07
linh
pham



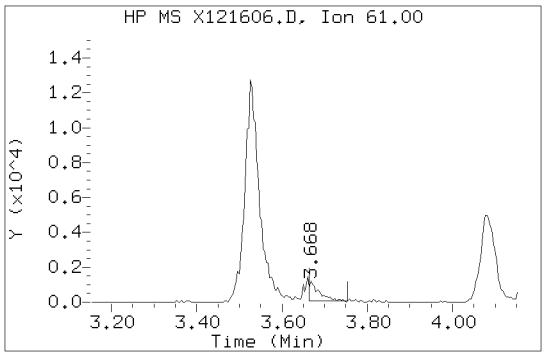
BEFORE

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:03
linh
pham



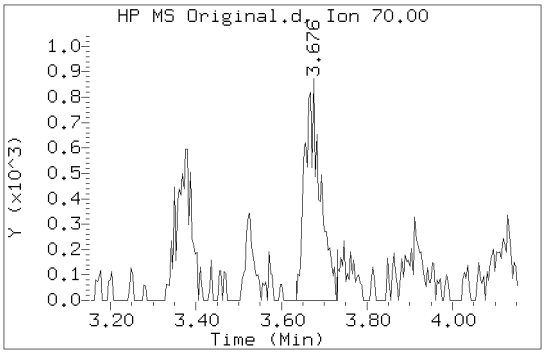
AFTER

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:07
linh
pham



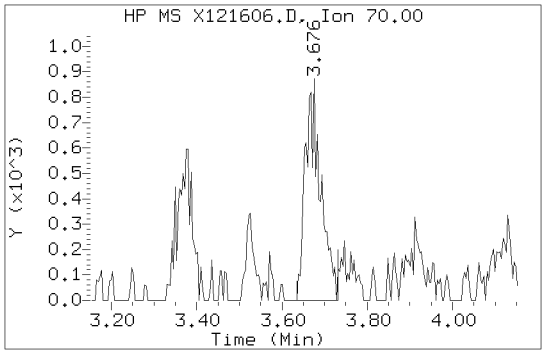
BEFORE

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

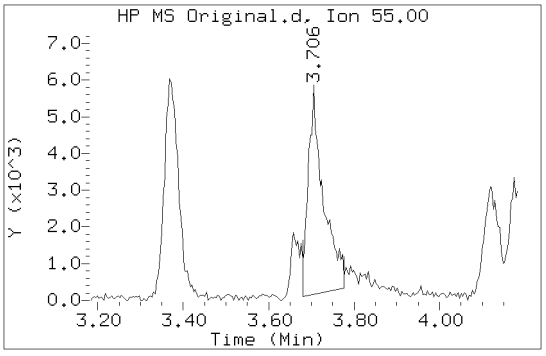


Methyl Acrylate (96-33-3)

Reason Code:

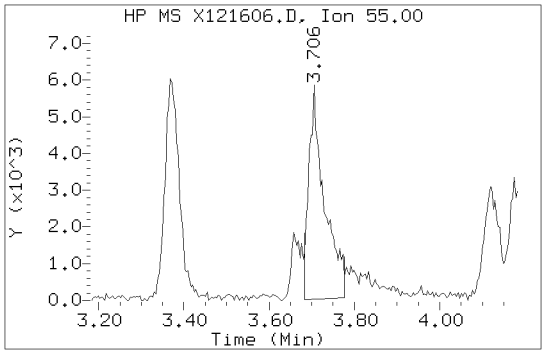
BEFORE

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



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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
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AREA
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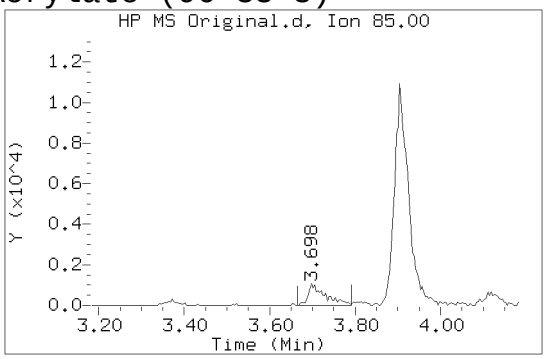
HEIGHT
1073
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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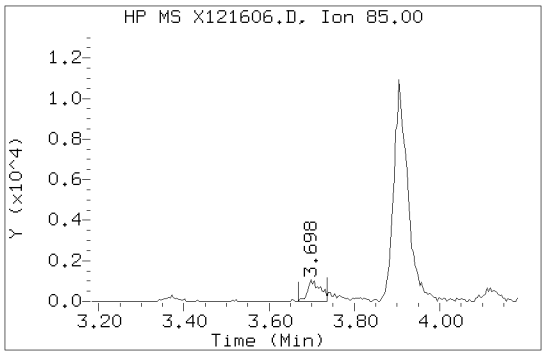
AREA
2159
HEIGHT
1073
27-Dec-2022
16:07
linh
pham

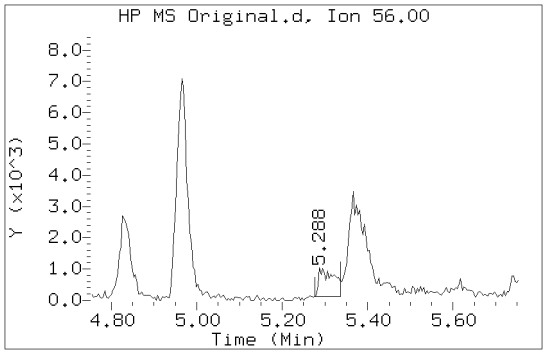


n-Butanol (71-36-3)

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
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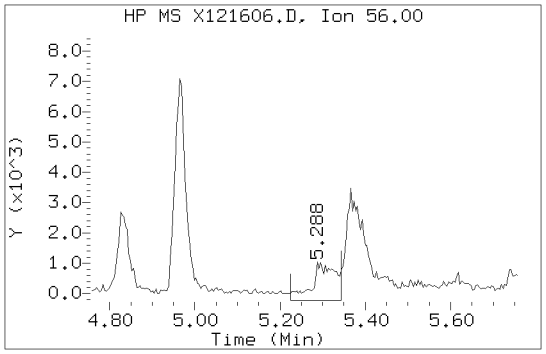
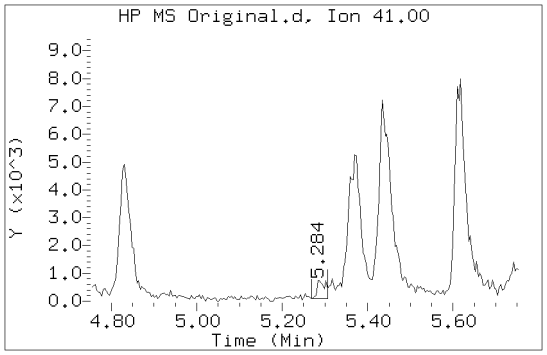


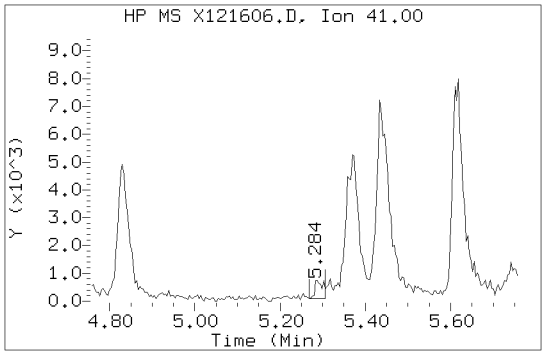
BEFORE

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

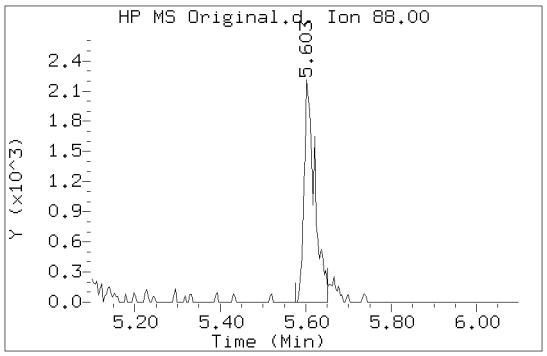


1,4-Dioxane ()

Reason Code:

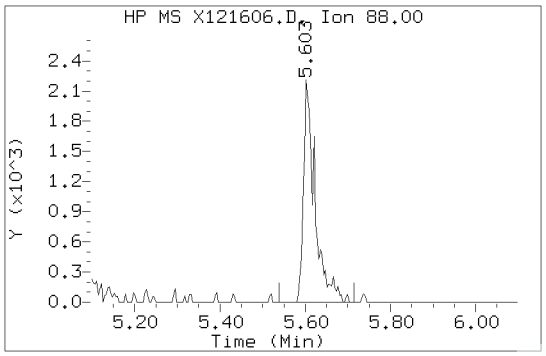
BEFORE

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



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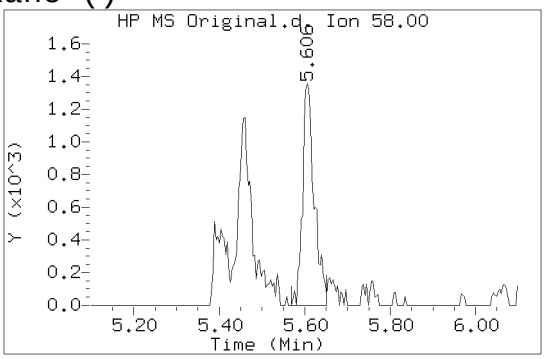
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

1,4-Dioxane ()

Reason Code:

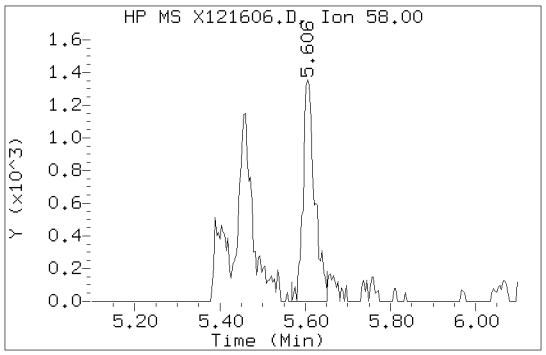
BEFORE

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

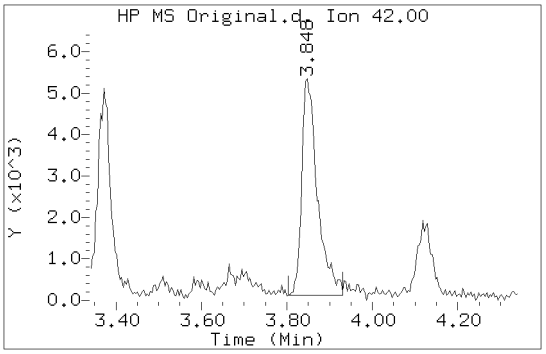


Tetrahydrofuran (109-99-9)

Reason Code:

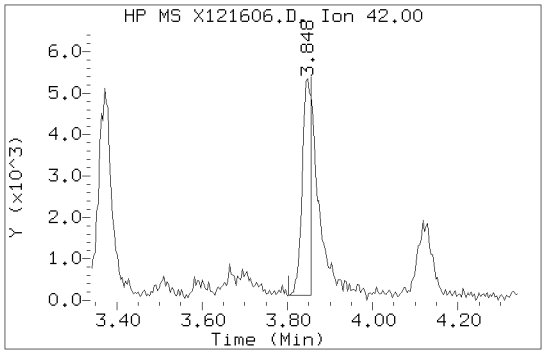
BEFORE

MASS
42
AREA
13557
HEIGHT
5225
27-Dec-2022
16:03
linh
pham



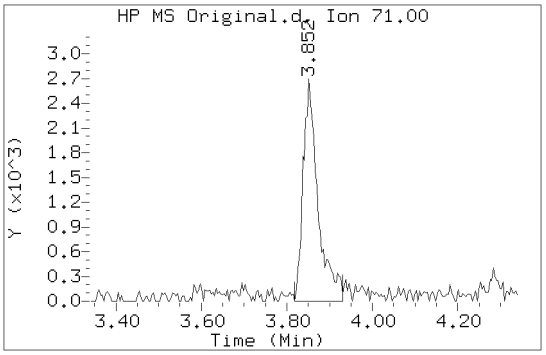
AFTER

MASS
42
AREA
7598
HEIGHT
5225
27-Dec-2022
16:07
linh
pham



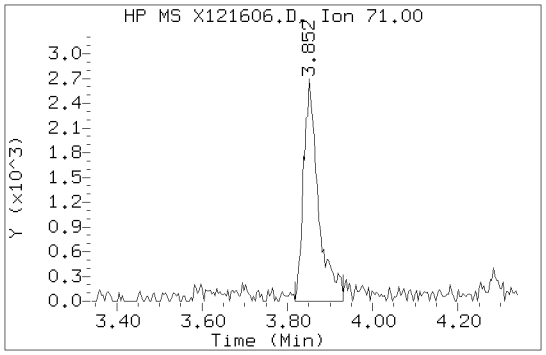
BEFORE

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

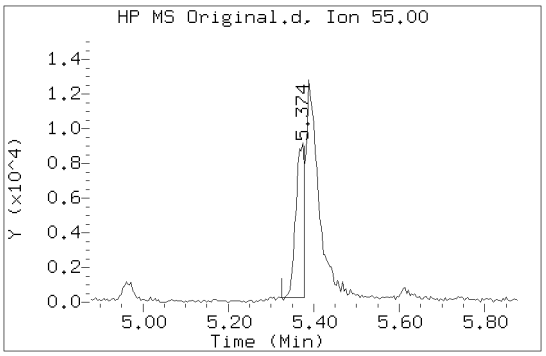


Methylcyclohexane (108-87-2)

Reason Code:

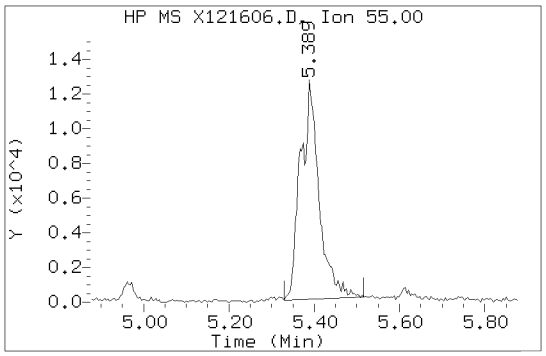
BEFORE

MASS
55
AREA
12381
HEIGHT
8941
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
38650
HEIGHT
12647
27-Dec-2022
16:07
linh
pham

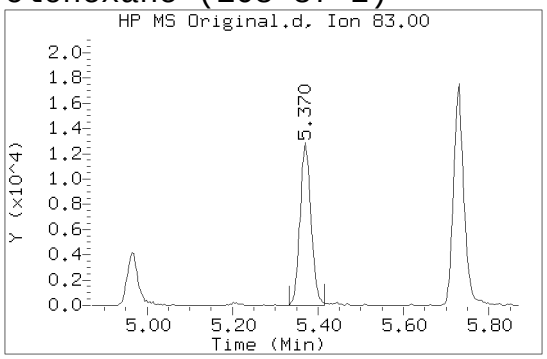


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methylcyclohexane (108-87-2)

BEFORE

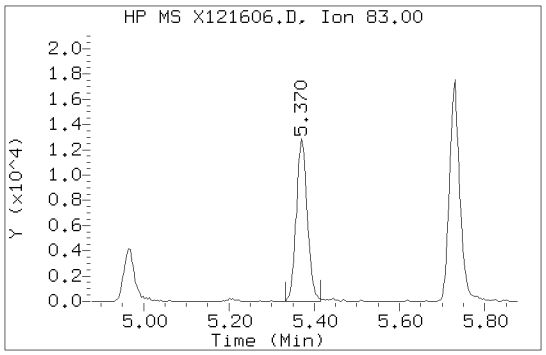
MASS
83
AREA
23564
HEIGHT
12870
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

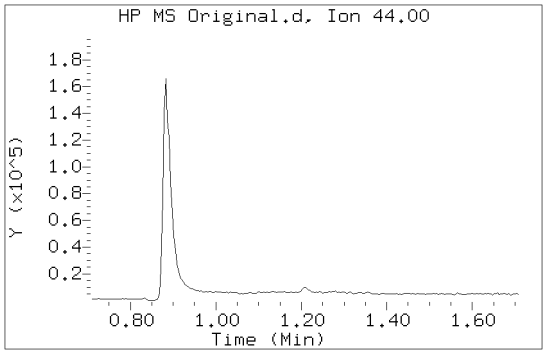
MASS
83
AREA
23564
HEIGHT
12870
27-Dec-2022
16:07
linh
pham



Acetaldehyde (75-07-0)

BEFORE

MASS
44
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
44
AREA
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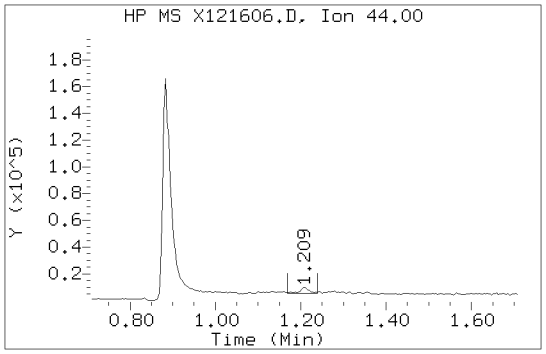
HEIGHT
4314
27-Dec-2022
16:07
linh
pham



BEFORE

MASS
43
AREA
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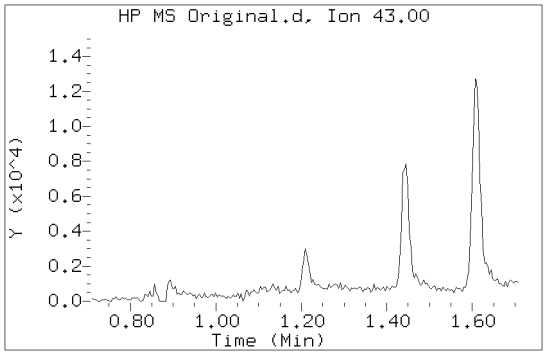
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
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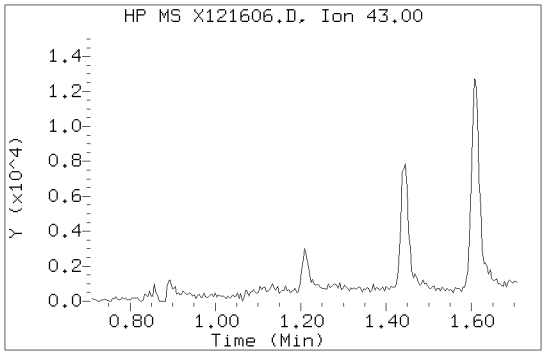
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE

MASS
42
AREA
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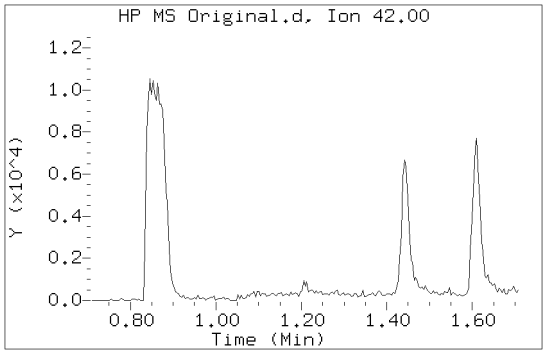
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
42
AREA
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HEIGHT
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16:07
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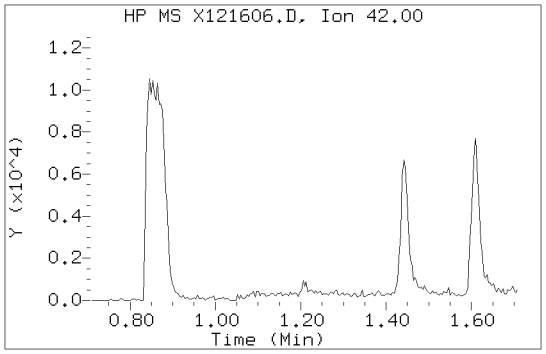

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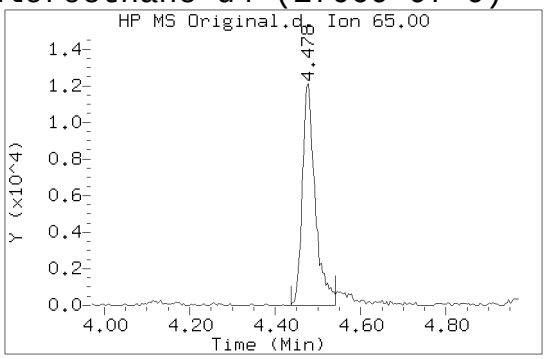
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

BEFORE

MASS
65
AREA
25815
HEIGHT
12121
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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12121
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16:07
linh
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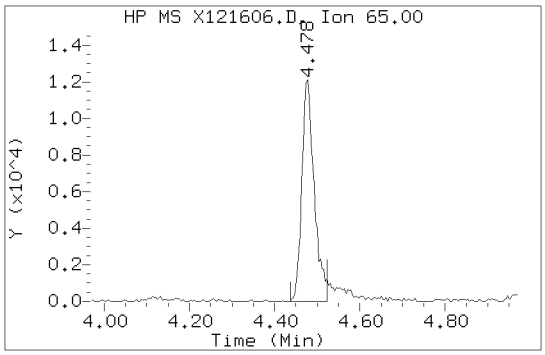
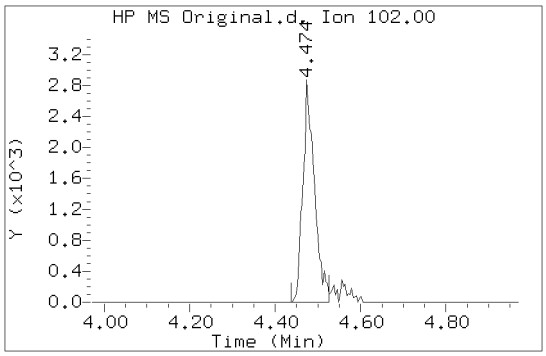


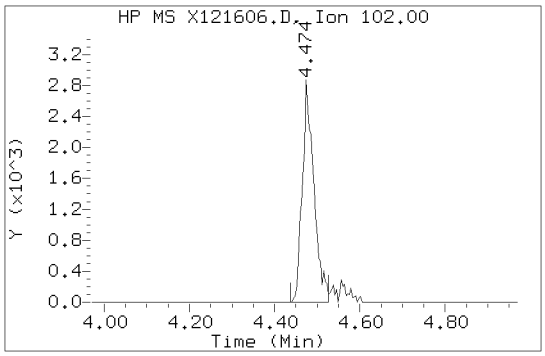
BEFORE

MASS
102
AREA
5492
HEIGHT
2873
27-Dec-2022
16:03
linh
pham



AFTER

MASS
102
AREA
5492
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

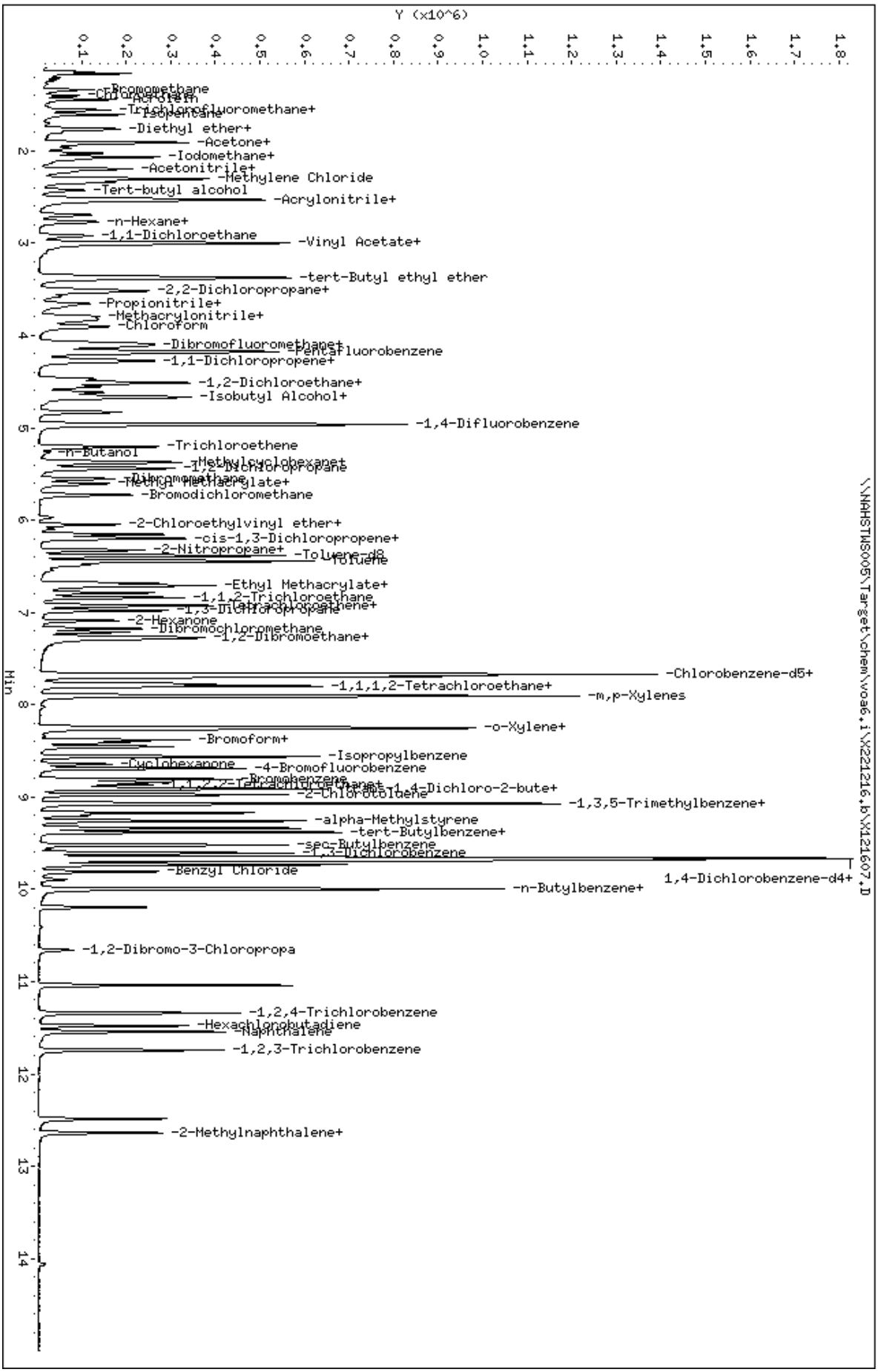
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.690	3.690	(0.883)	57874	20.0000	18.55(M)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	156518	20.0000	18.50
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	63382	20.0000	19.96
	3	Chloromethane	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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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\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
linh
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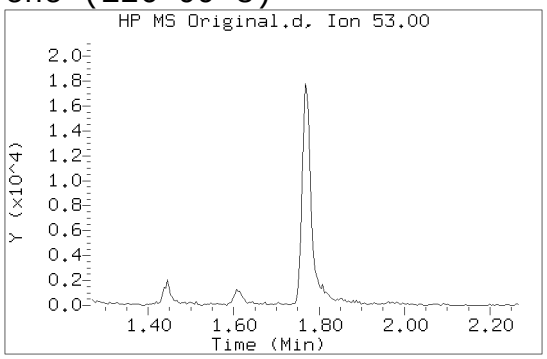

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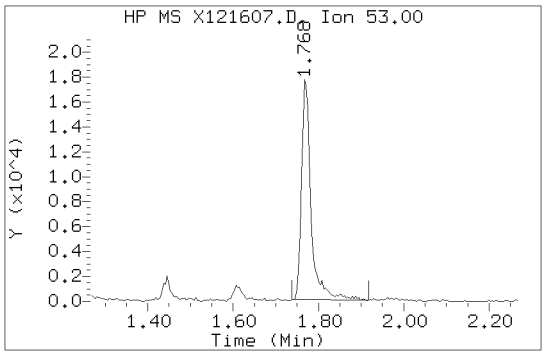

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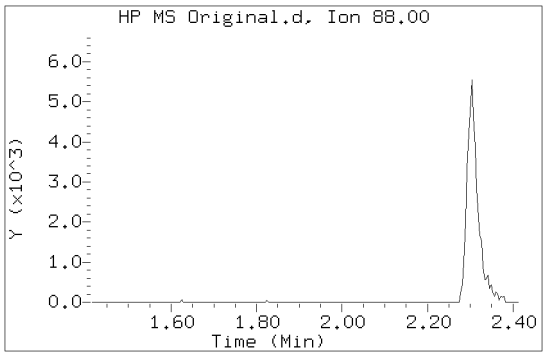

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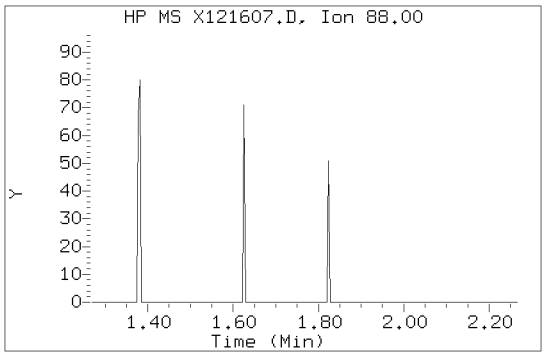

Methyl Acrylate (96-33-3)

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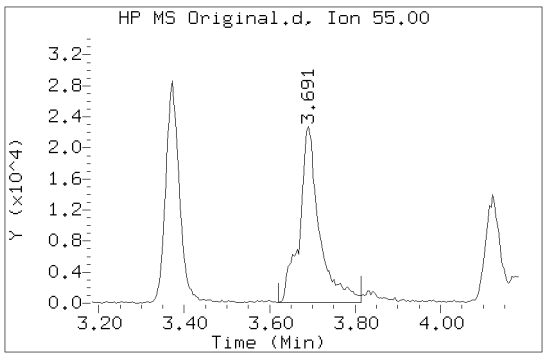

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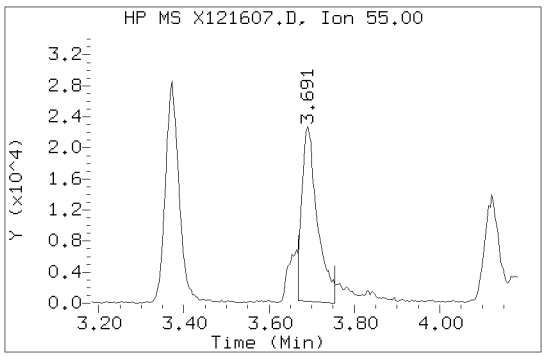

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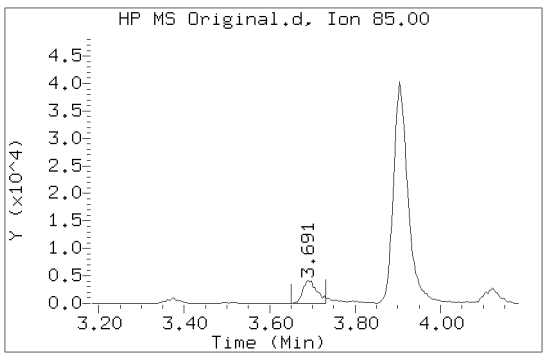

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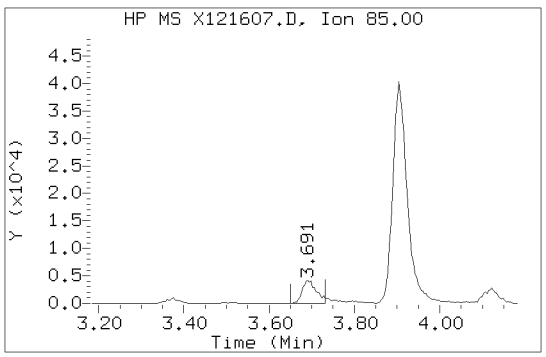

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InstruID : voa6.i
LabSampID : VSTD020

1,4-Dioxane ()

Reason Code:

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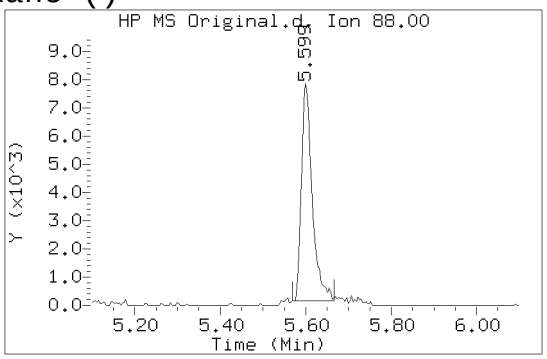

AFTER
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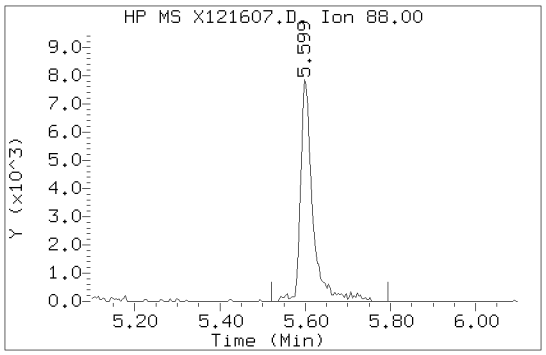

BEFORE
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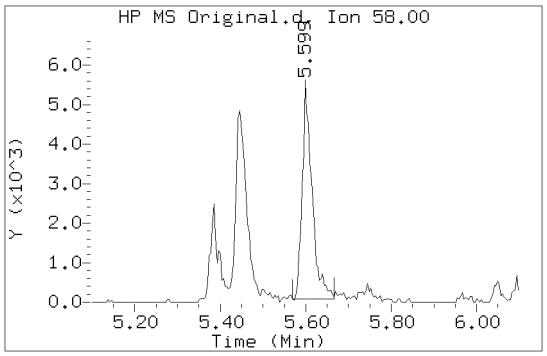

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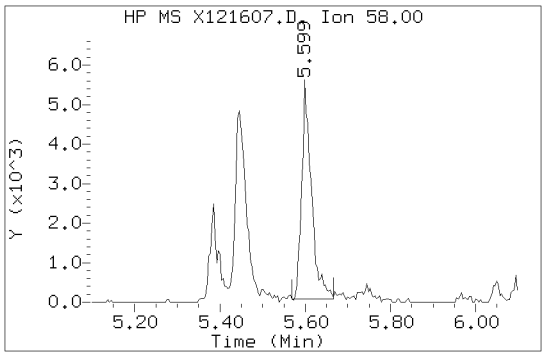

Cyclohexane (110-82-7)

Reason Code:

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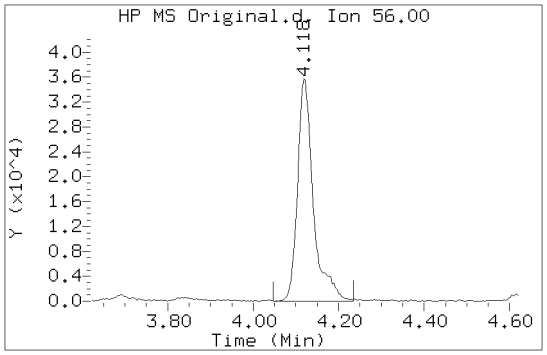

AFTER
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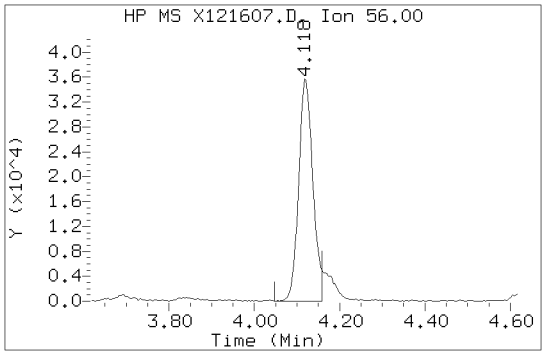

BEFORE
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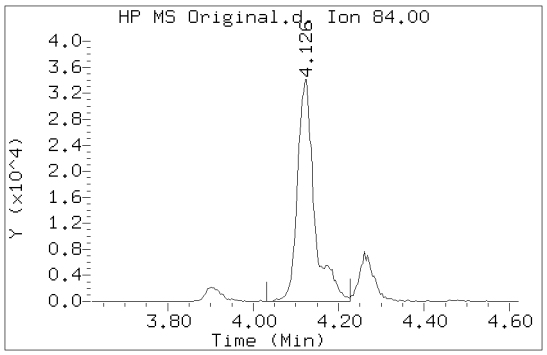

AFTER
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27-Dec-2022
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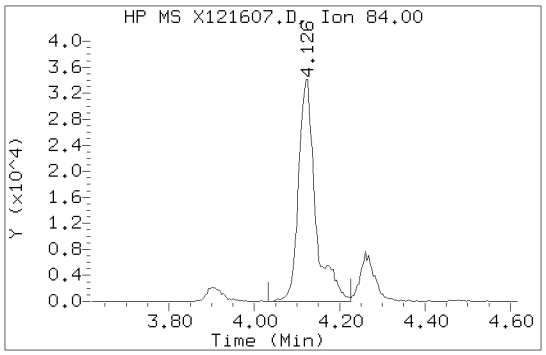

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InstruID : voa6.i
LabSampID : VSTD020

Cyclohexane (110-82-7)

Reason Code:

BEFORE
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AREA
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27-Dec-2022
16:03
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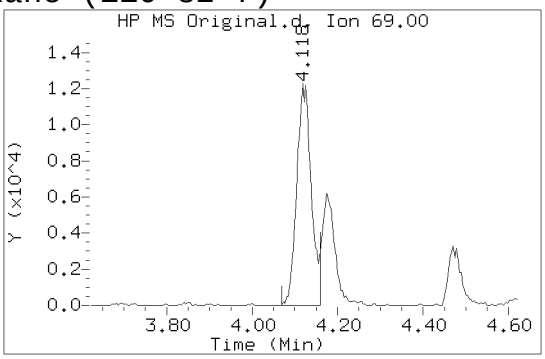

AFTER
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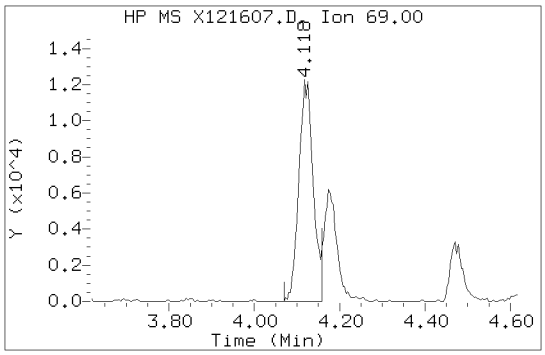

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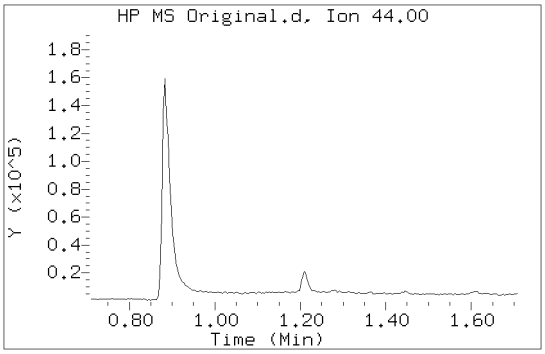

AFTER
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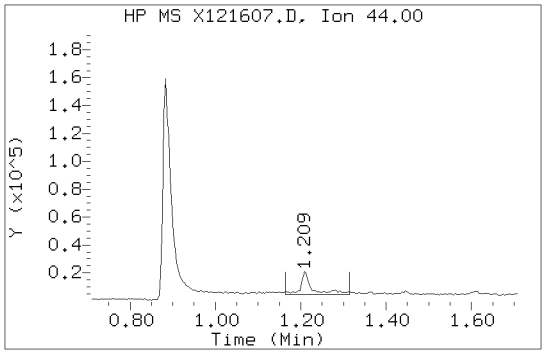

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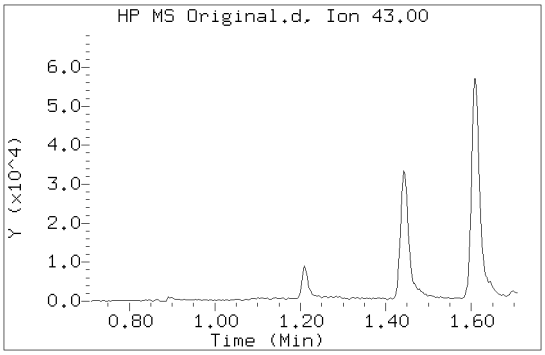

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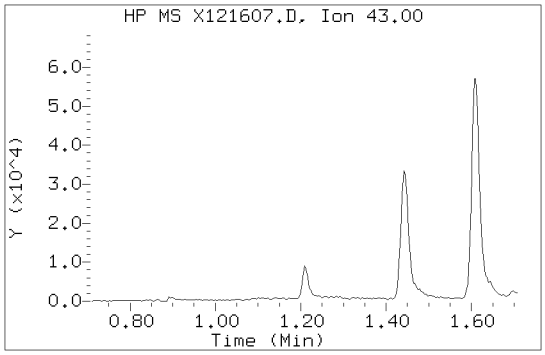

BEFORE
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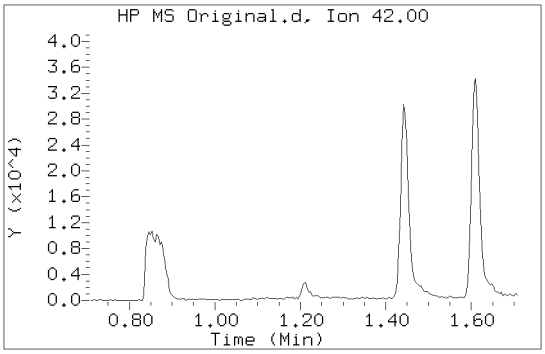

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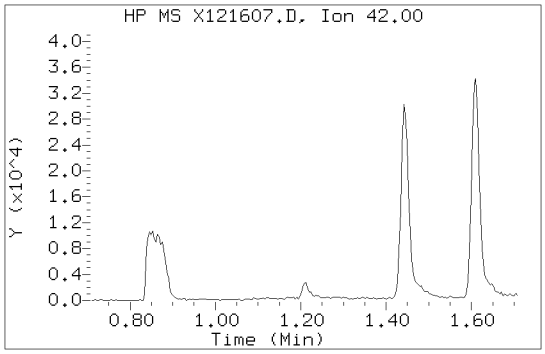

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Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\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

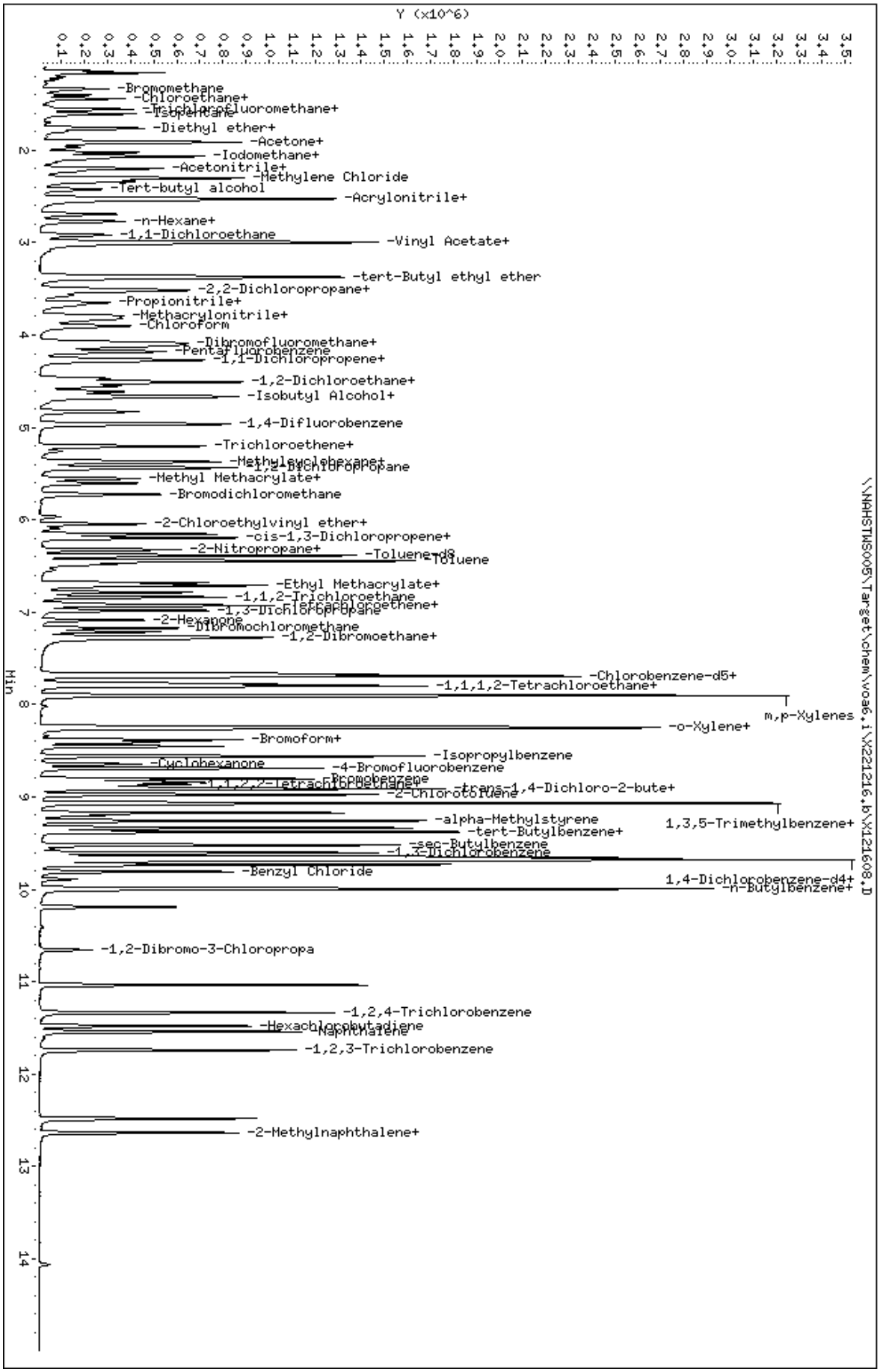
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	151068	50.0000	48.62(M)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	415774	50.0000	48.76
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	160392	50.0000	50.11
	3	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

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	63	o-Xylene	106	8.241	8.241	(1.075)	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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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

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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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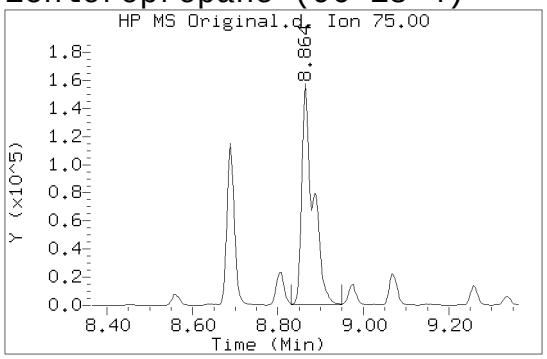

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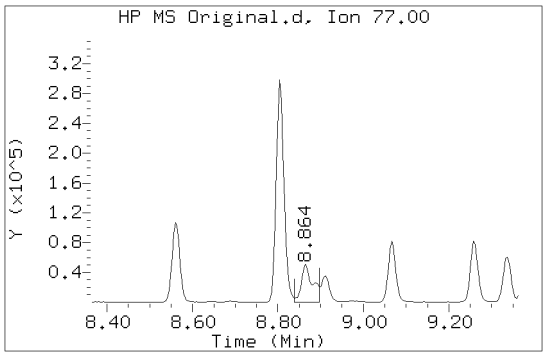

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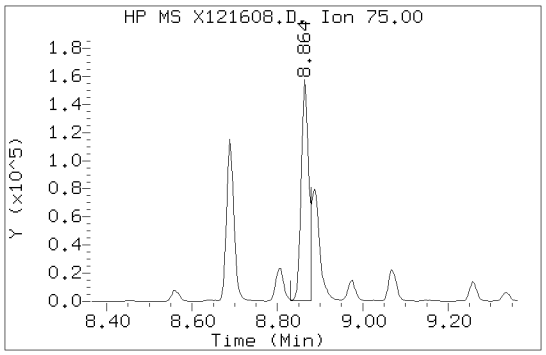

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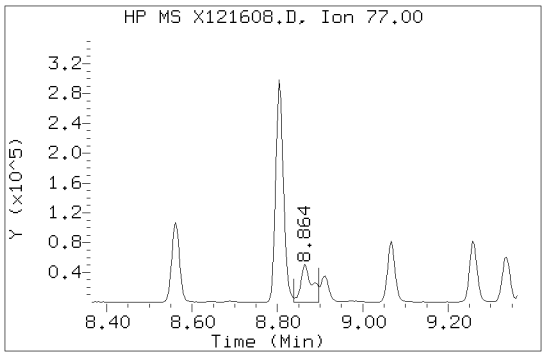

Chloroprene (126-99-8)

BEFORE

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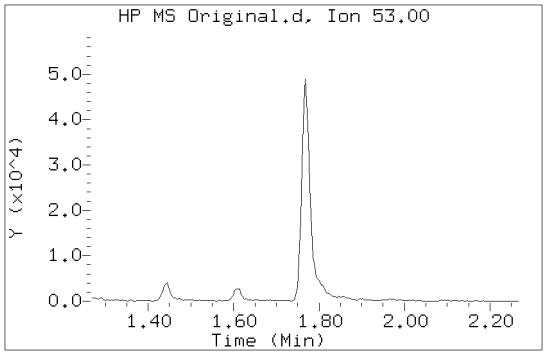

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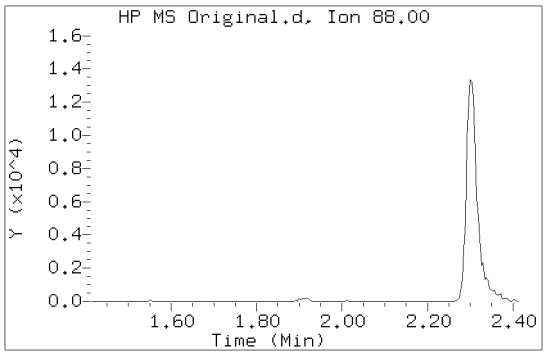

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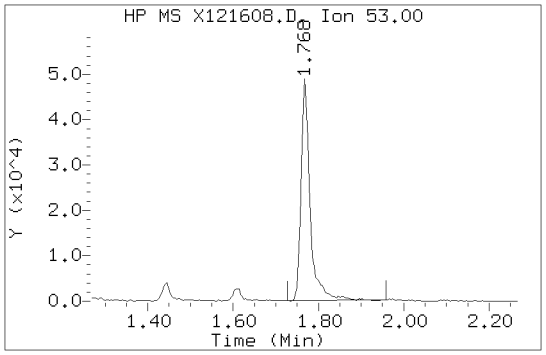

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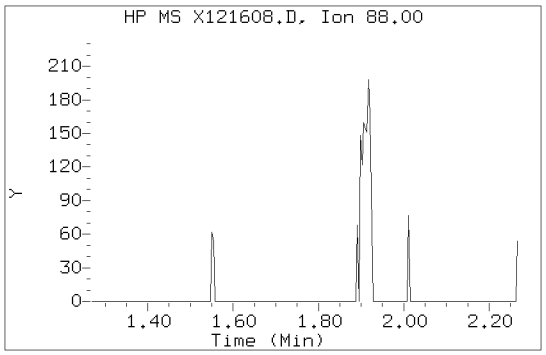

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Methyl Acrylate (96-33-3)

BEFORE

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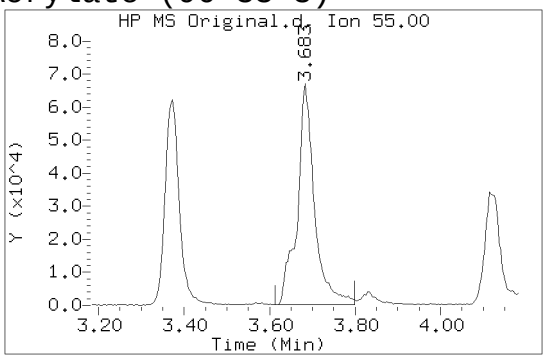

BEFORE

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27-Dec-2022
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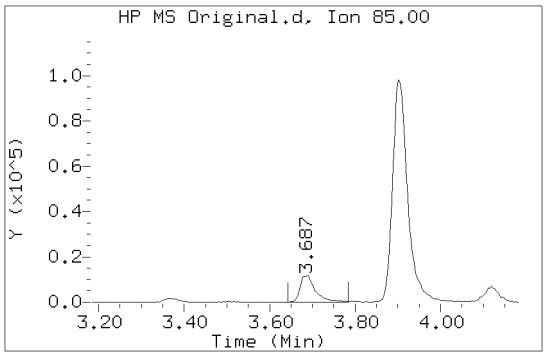

Reason Code:

AFTER

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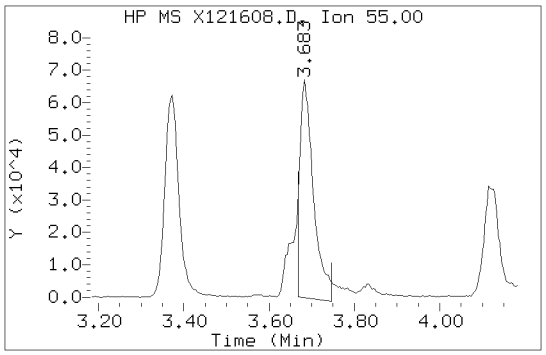

AFTER

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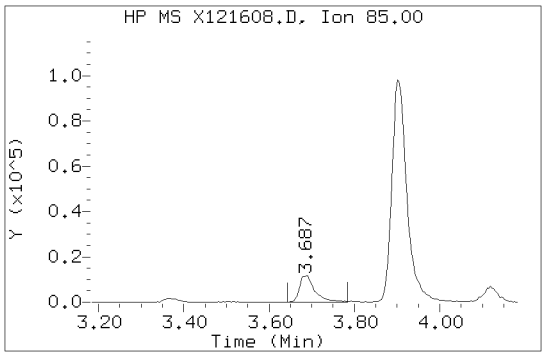

Acetaldehyde (75-07-0)

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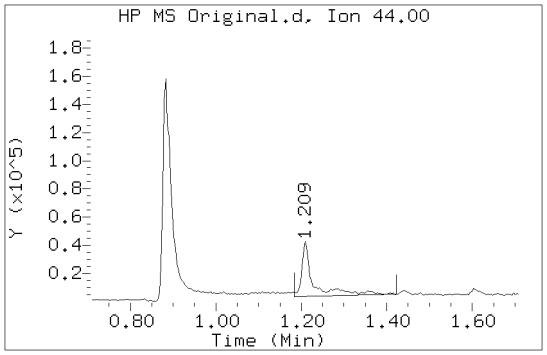

BEFORE

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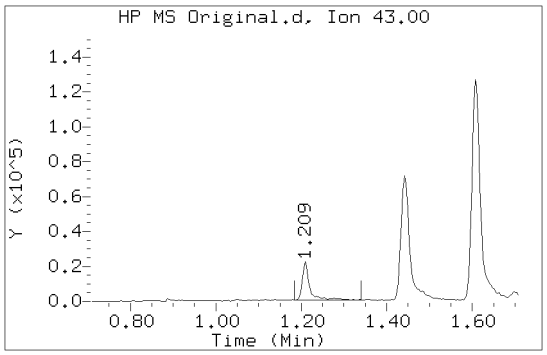

Reason Code:

AFTER

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AREA
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HEIGHT
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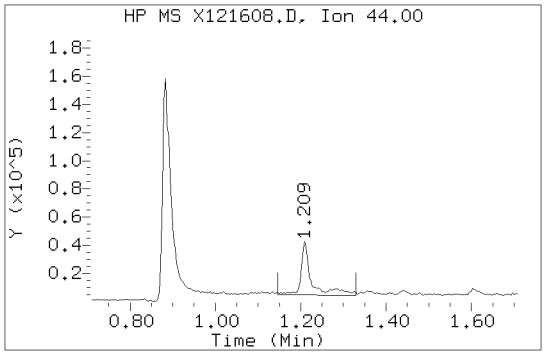

AFTER

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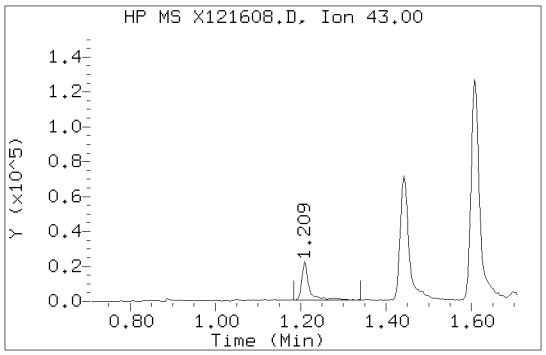
16:06
linh
pham



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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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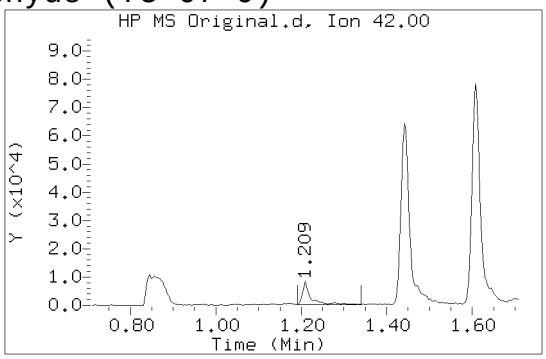
HEIGHT
8504
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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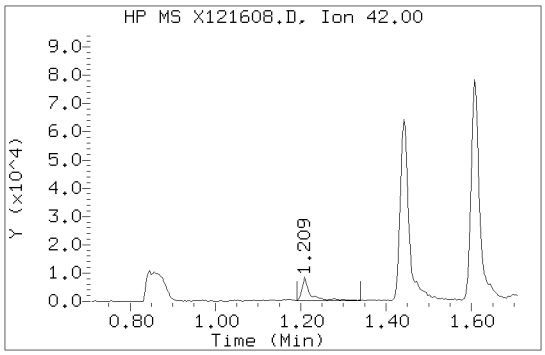
27-Dec-2022
16:06
linh
pham



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   :
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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

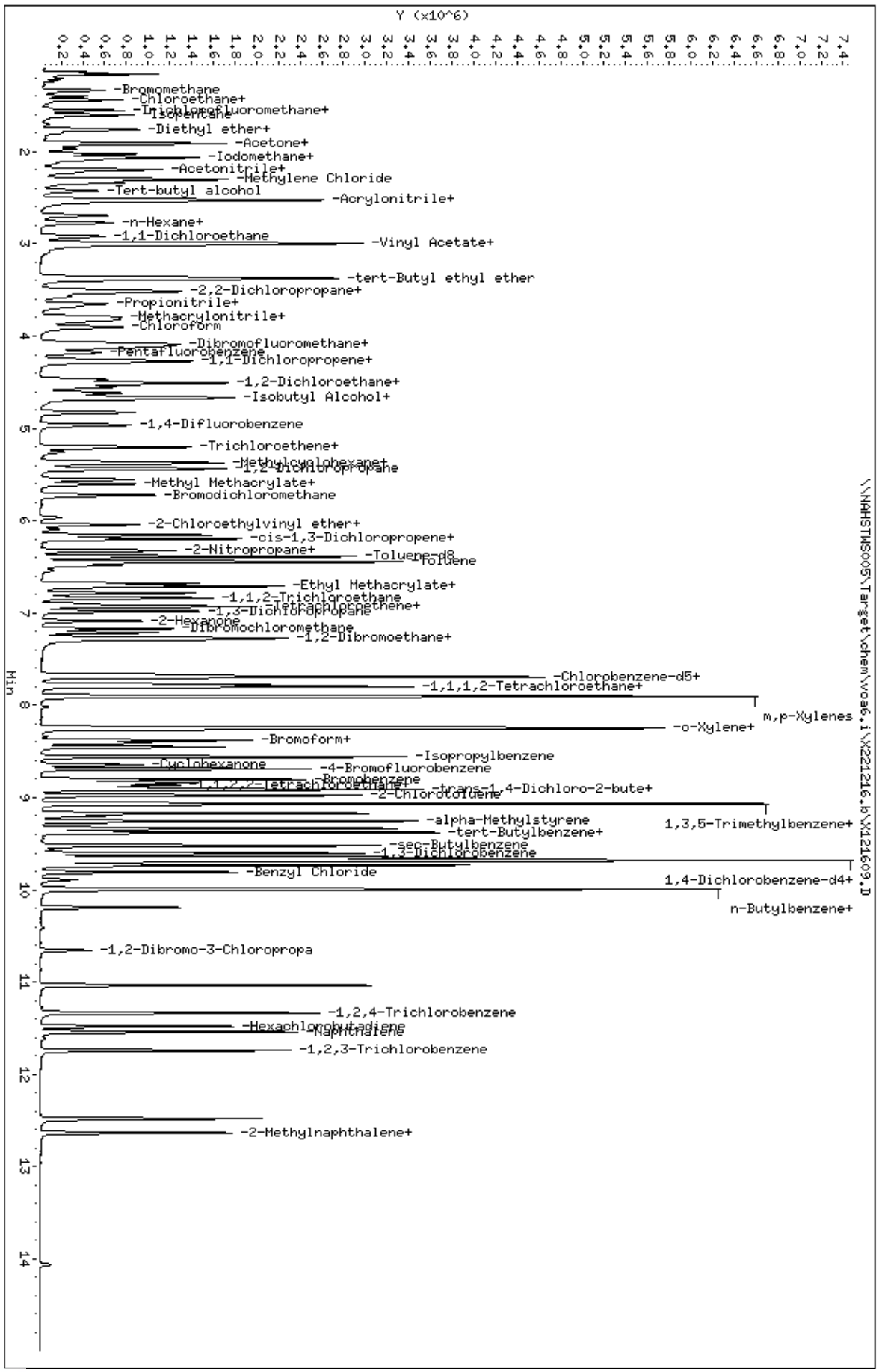
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	308372	100.000	99.90(M)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	901265	100.000	103.44
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	309019	100.000	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.



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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

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

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)

Reason Code:

BEFORE

MASS
75
AREA
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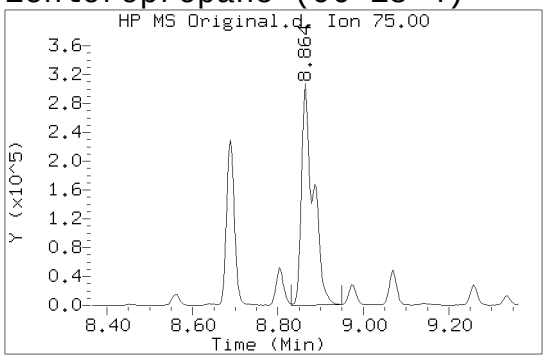
HEIGHT
307037
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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27-Dec-2022
16:06
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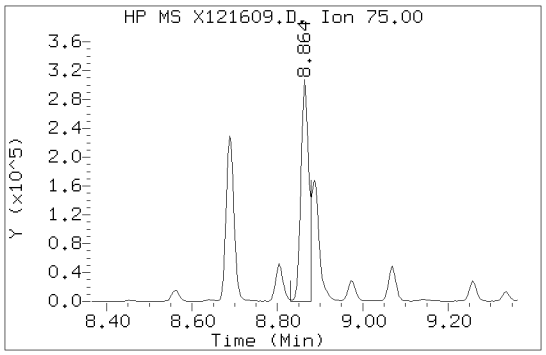

BEFORE

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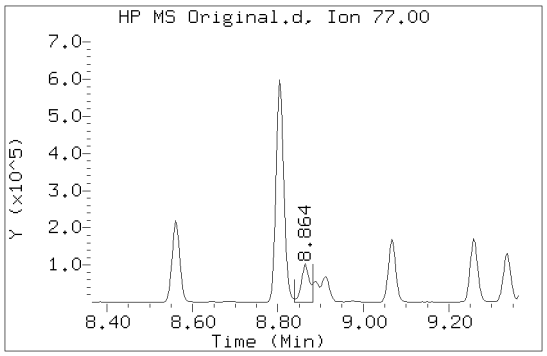

AFTER

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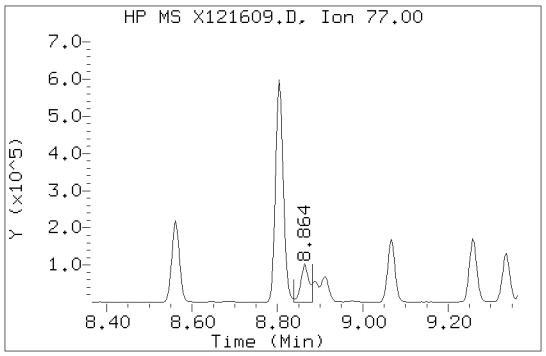

Chloroprene (126-99-8)

Reason Code:

BEFORE

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27-Dec-2022
16:03
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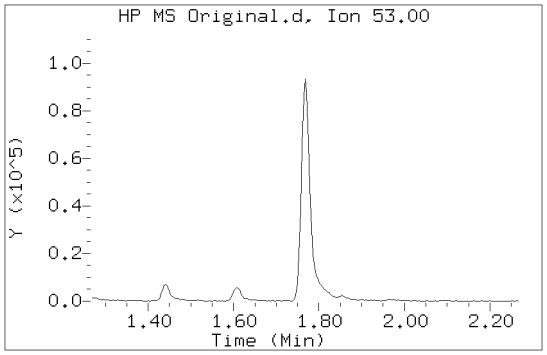

AFTER

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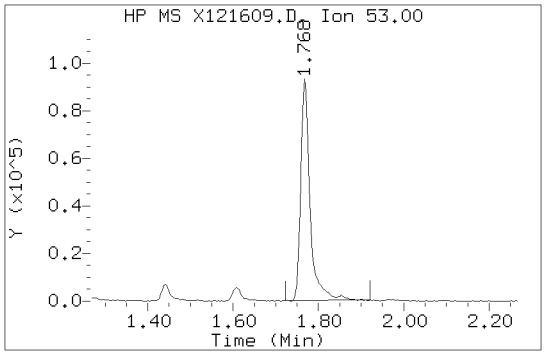

BEFORE

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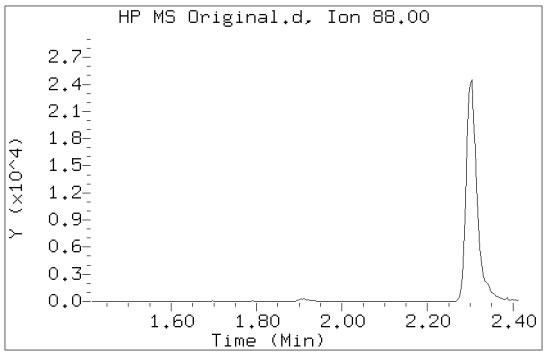

AFTER

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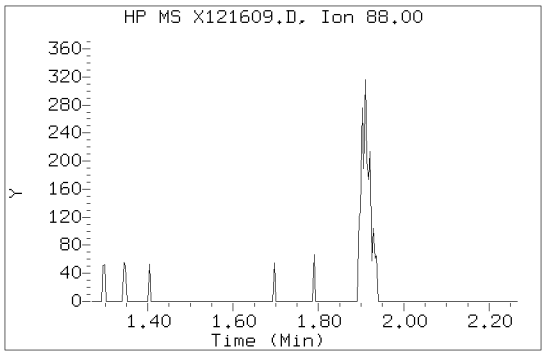

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Methyl Acrylate (96-33-3)

BEFORE

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AREA
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HEIGHT
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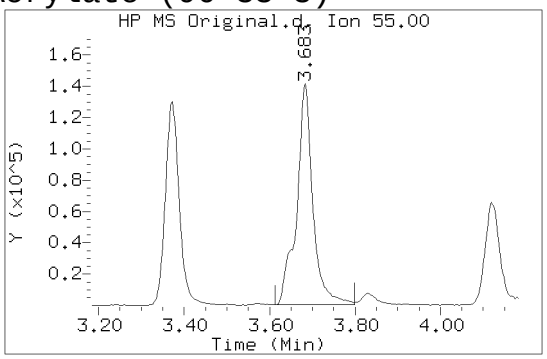
27-Dec-2022
16:03
linh
pham



BEFORE

MASS
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27-Dec-2022
16:03
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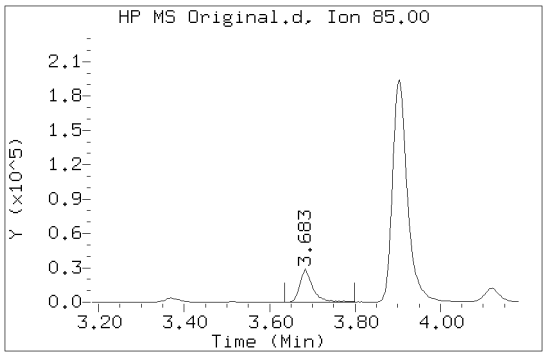

Reason Code:

AFTER

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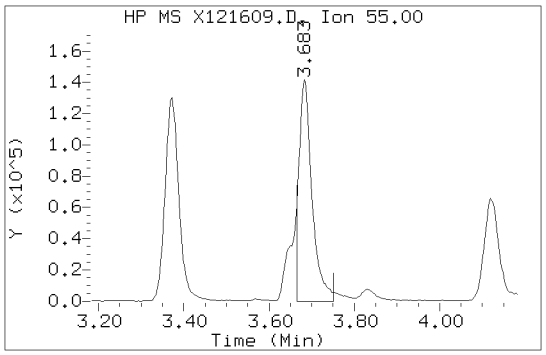

AFTER

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16:06
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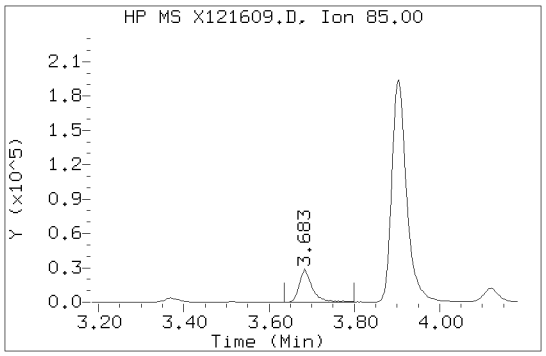

Acetaldehyde (75-07-0)

BEFORE

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16:03
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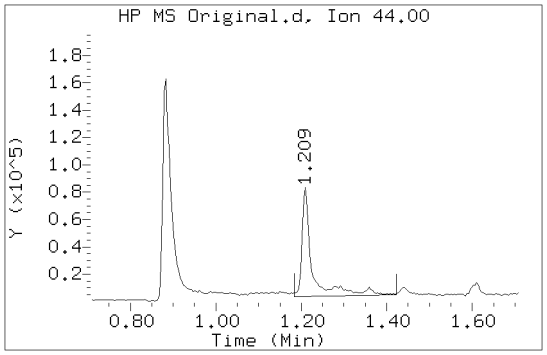

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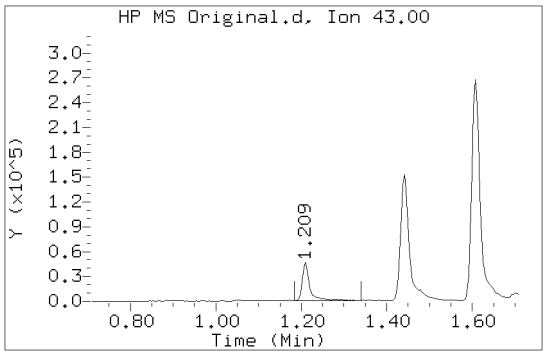

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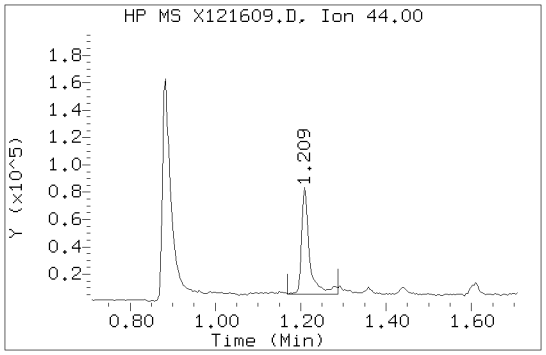

AFTER

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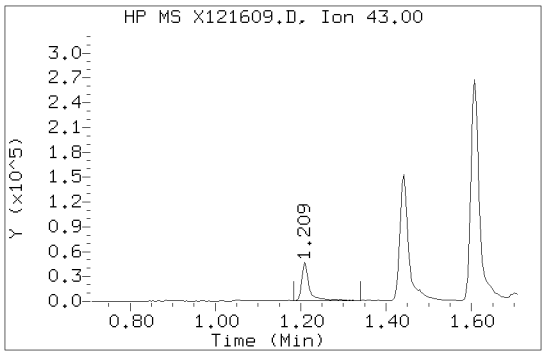

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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27-Dec-2022
16:03
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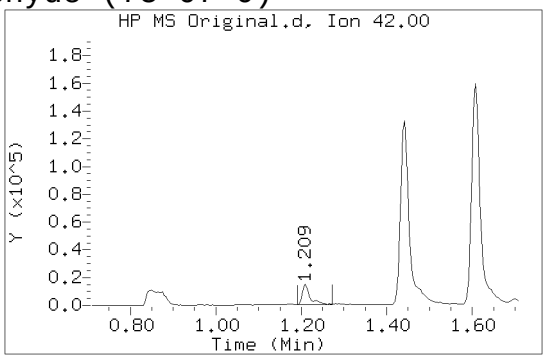

AFTER

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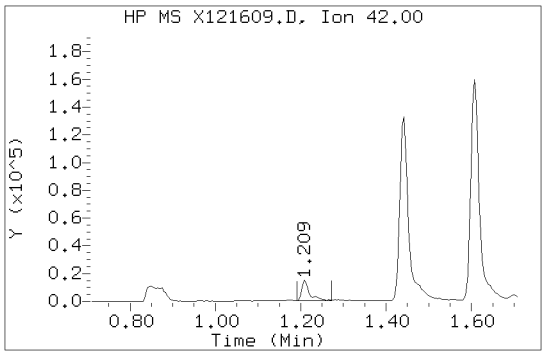

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D
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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   :
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

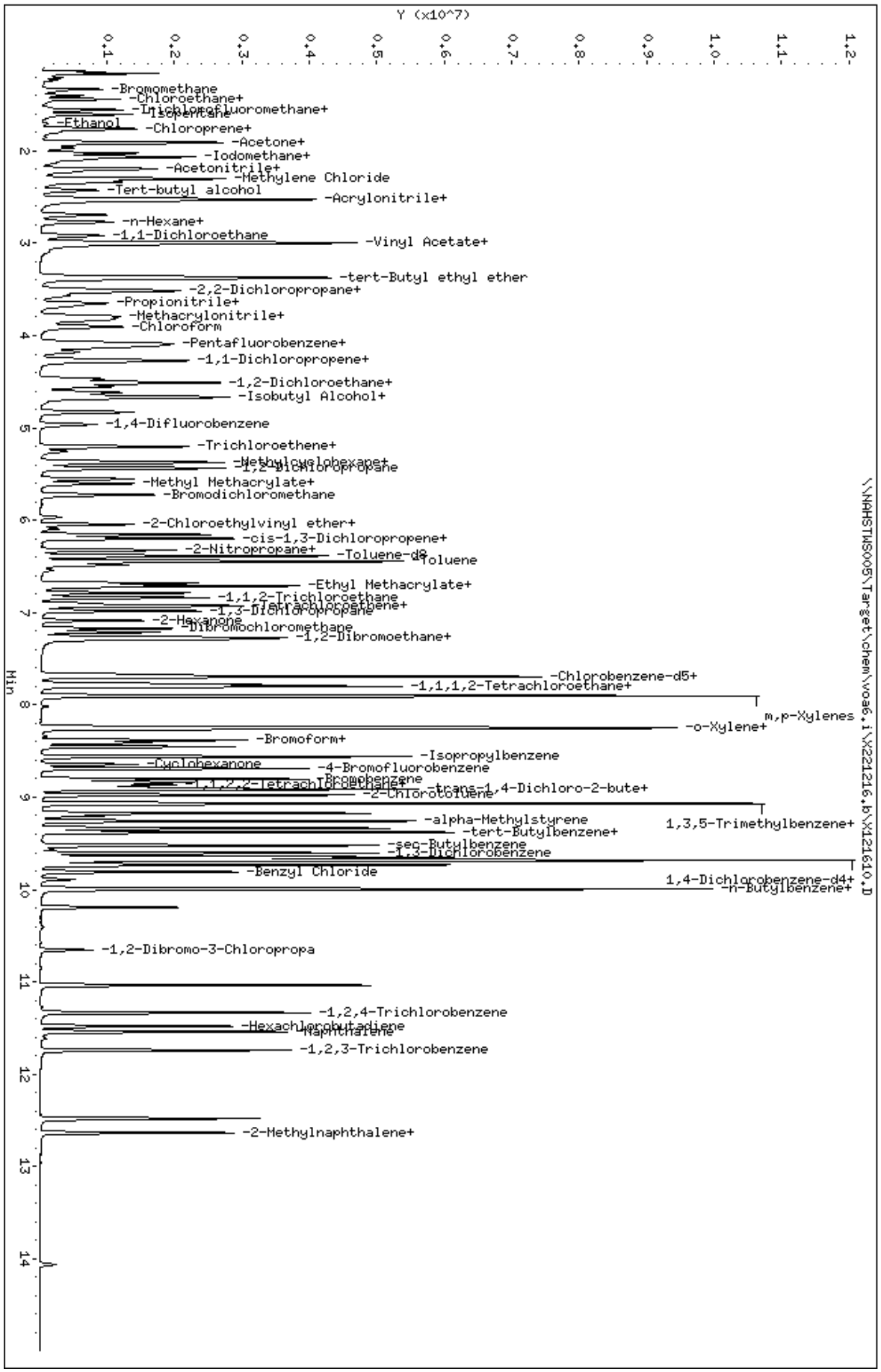
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	479571	150.000	157.93(M)
	162	Butyl acrylate	55	8.248	8.248	(1.076)	1470193	150.000	167.53
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	476130	150.000	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.



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Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\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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HEIGHT
225588
27-Dec-2022
16:04
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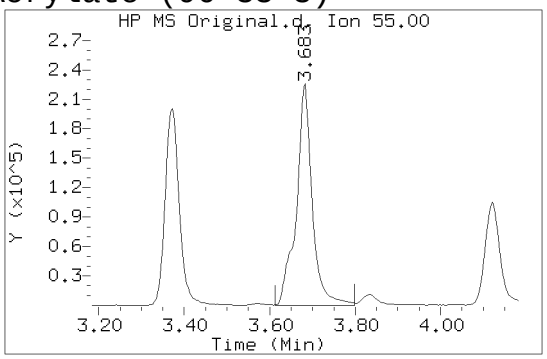

BEFORE

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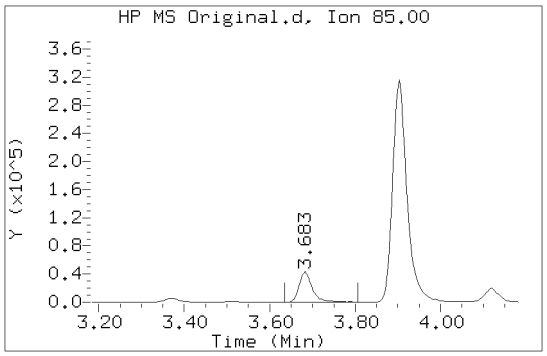

Reason Code:

AFTER

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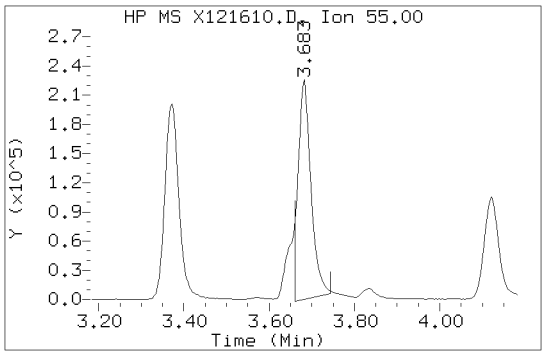

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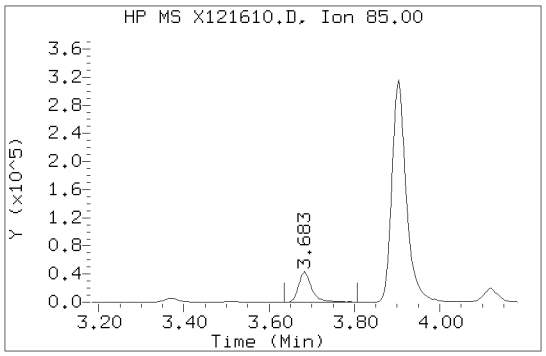

Acetaldehyde (75-07-0)

BEFORE

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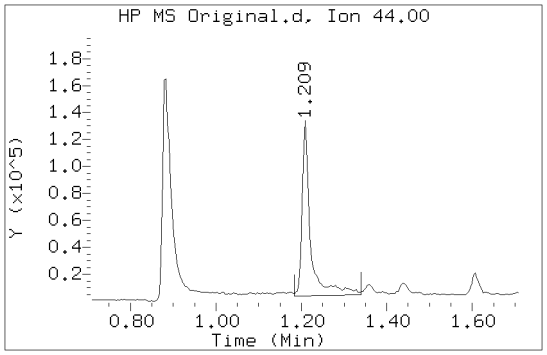

BEFORE

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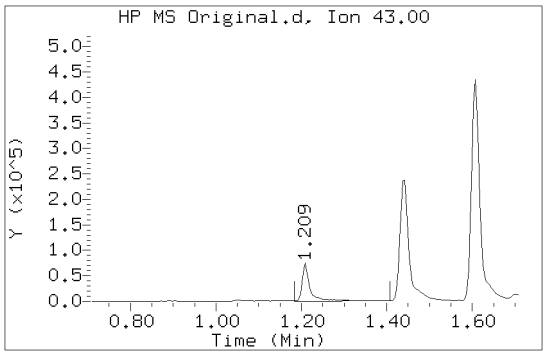

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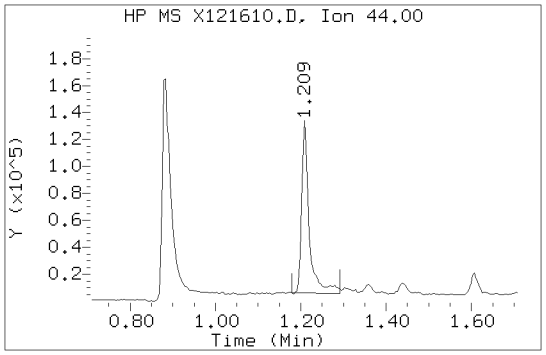

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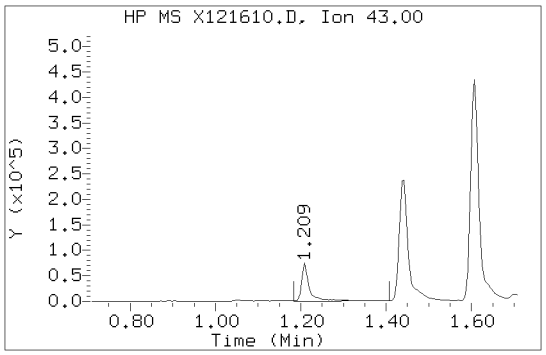

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Inj Date : 16-DEC-2022 14:46
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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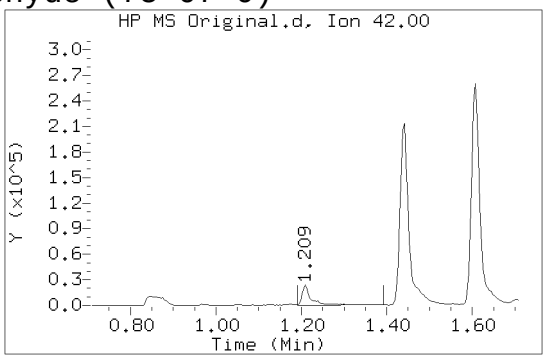
HEIGHT
23932
27-Dec-2022
16:04
linh
pham



AFTER

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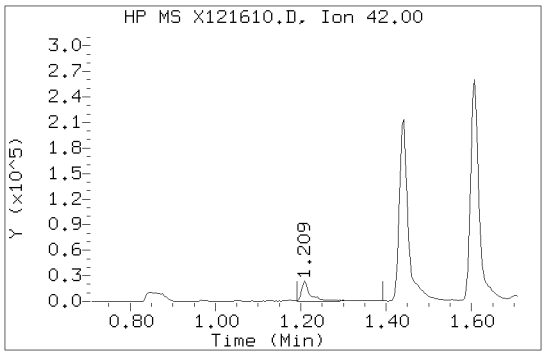

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D
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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

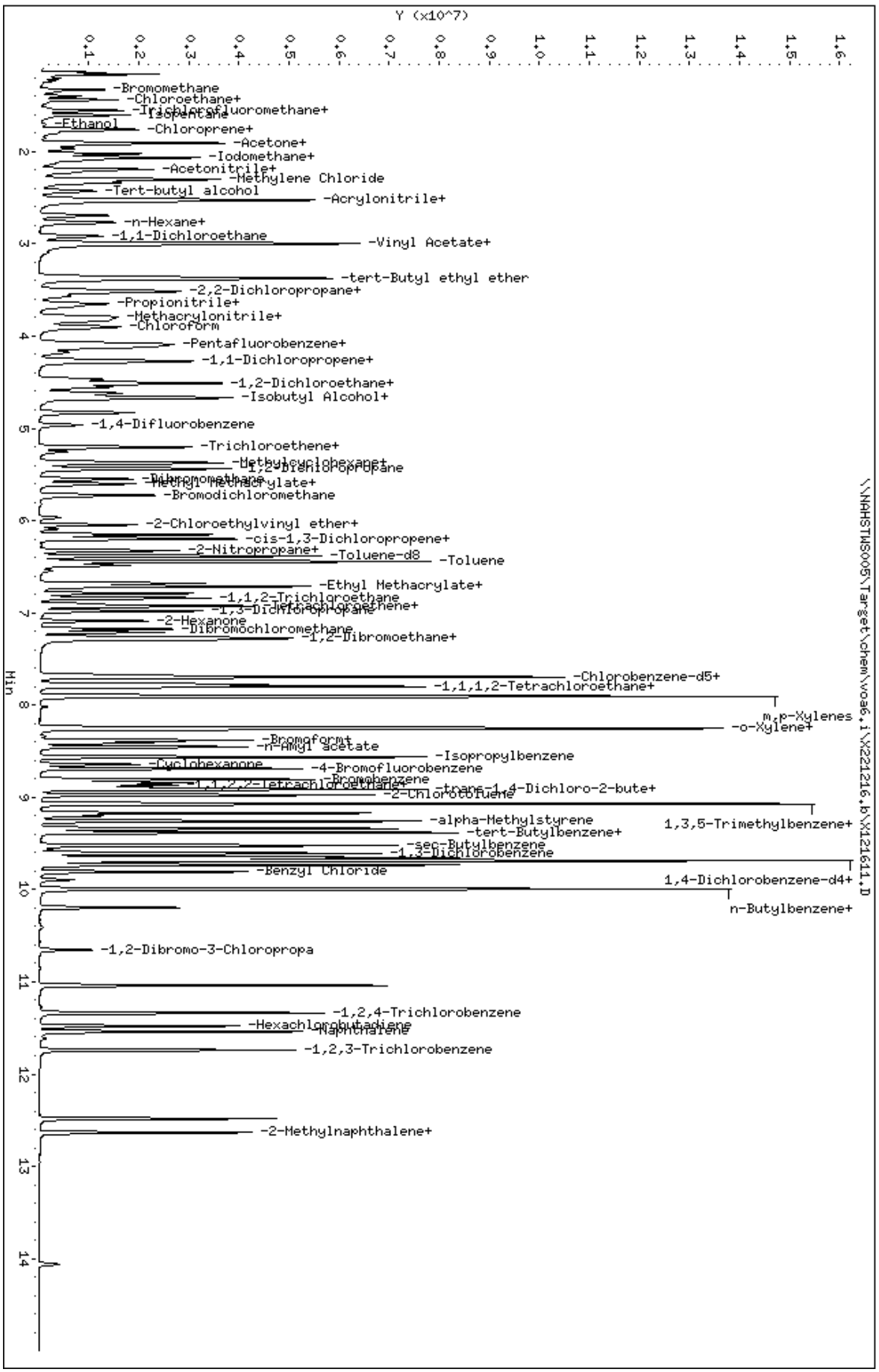
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	646827	200.000	211.32(AM)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	2063916	200.000	228.52(A)
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	635808	200.000	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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Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D
Min
-Bromomethane
-Chloroethane+
-Trichlorofluoromethane+
-Isopentane
-Ethanol
-Chloroprene+
-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
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-Dibromomethane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Chloroethylvinyl ether+
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-2-Nitropropane+
-Toluene-d8
-Toluene
-Ethyl Methacrylate+
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-2-Hexanone
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-o-Xylene+
-Bromoform+
-n-Amyl acetate
-Isopropylbenzene
-Cyclohexanone
-4-Bromofluorobenzene
-Bromobenzene
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-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 : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

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

BEFORE

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HEIGHT
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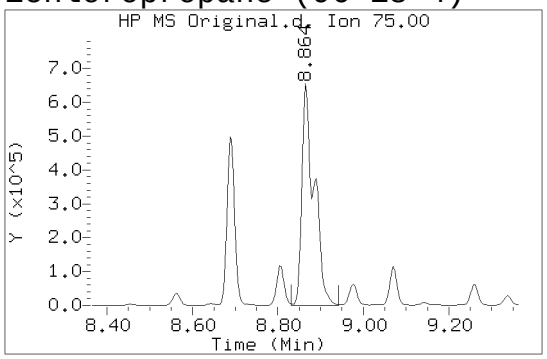
27-Dec-2022
16:04
linh
pham



BEFORE

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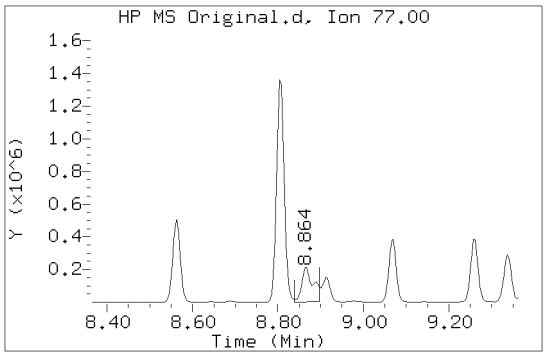

Reason Code:

AFTER

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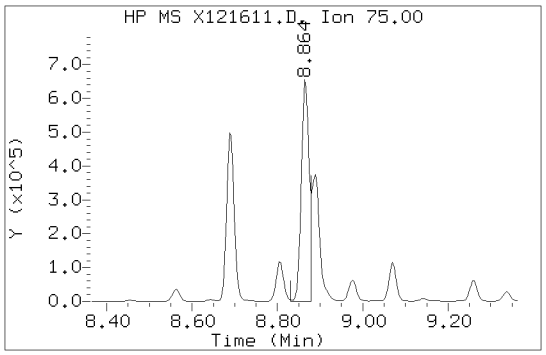

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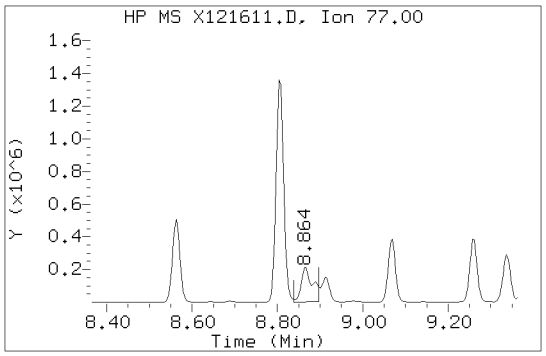

Methyl Acrylate (96-33-3)

BEFORE

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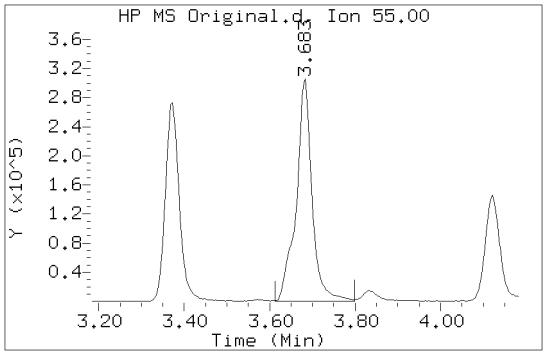

BEFORE

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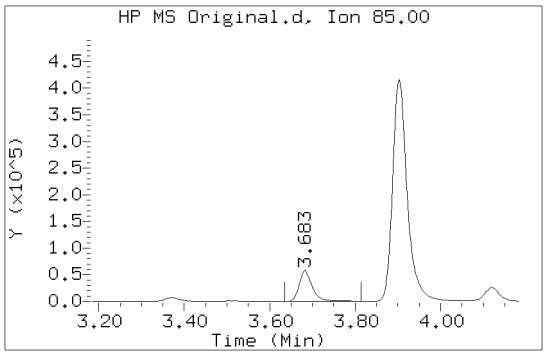

Reason Code:

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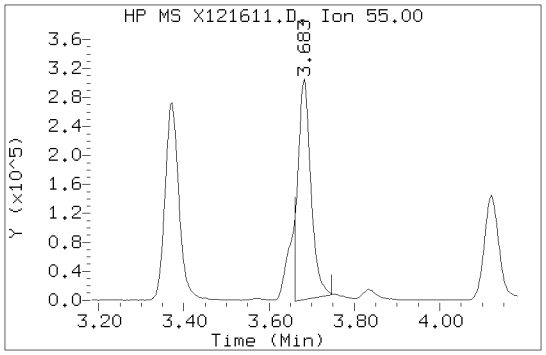

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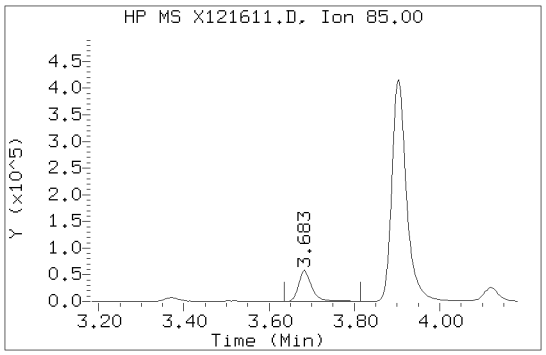

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Inj Date : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

Acetaldehyde (75-07-0)

Reason Code:

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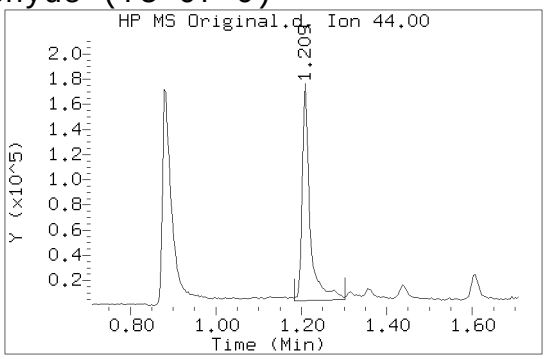

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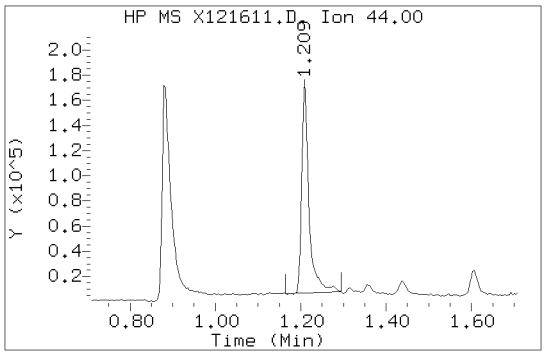

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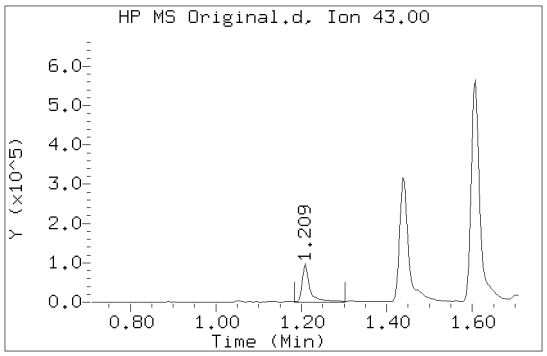

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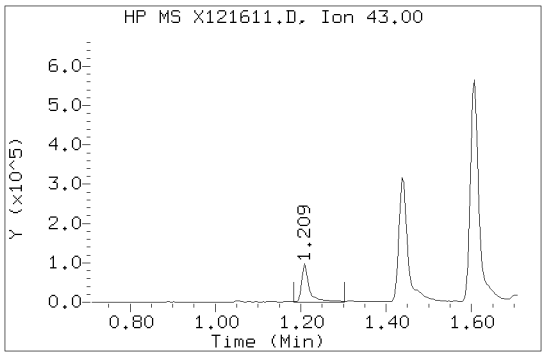

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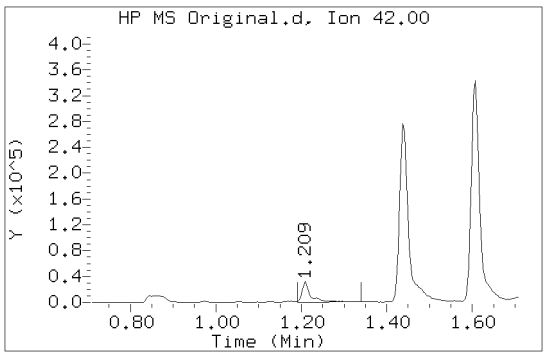

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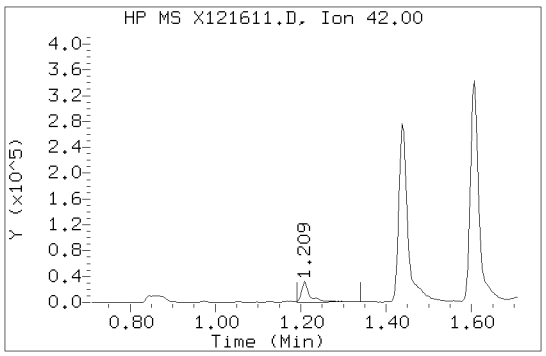

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D Page 1
Report Date: 13-Feb-2023 13:08

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

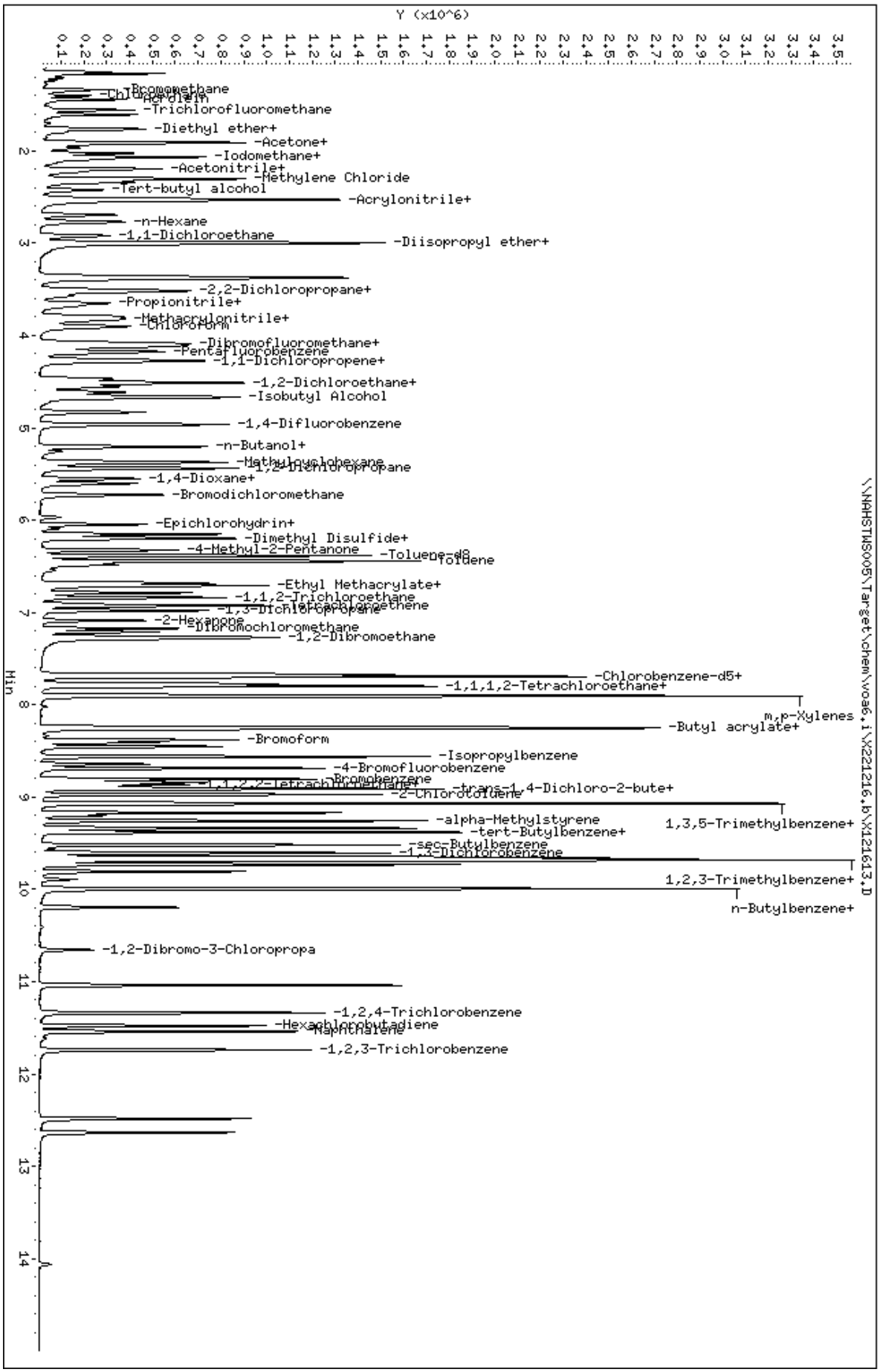
			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	417137	47.9449	47.94
	2	Dichlorodifluoromethane	85	0.972	0.969	(0.233)	166984	52.1924	52.19
	3	Chloromethane	50	1.077	1.077	(0.258)	207623	50.1741	50.17
	5	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

	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

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

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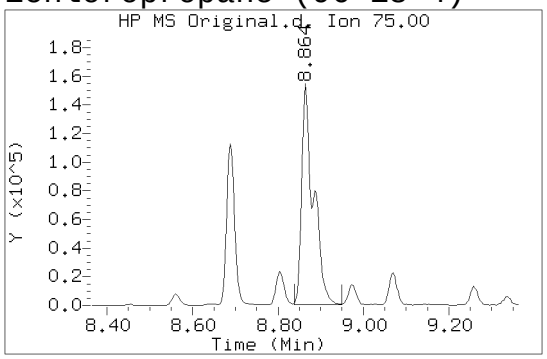
HEIGHT
154590
27-Dec-2022
16:04
linh
pham



AFTER

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13-Feb-2023
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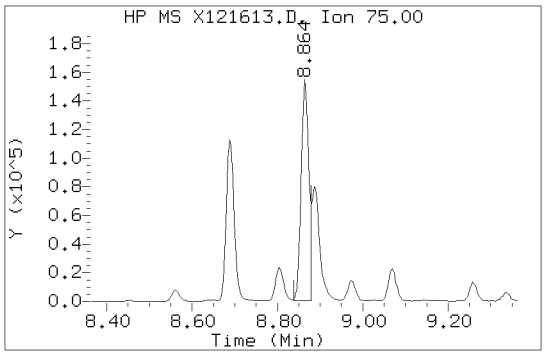

BEFORE

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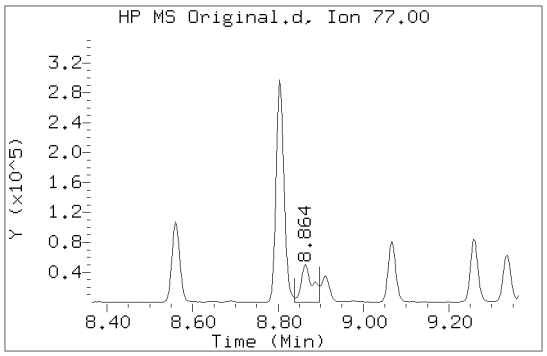

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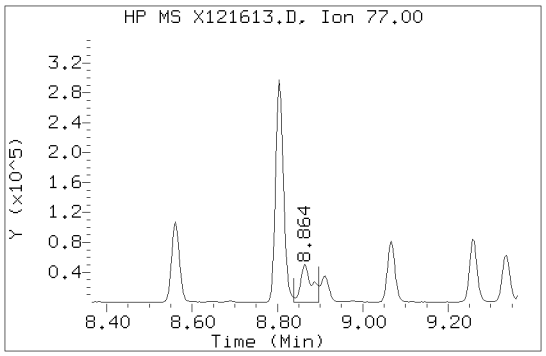

Chloroprene (126-99-8)

Reason Code:

BEFORE

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27-Dec-2022
16:04
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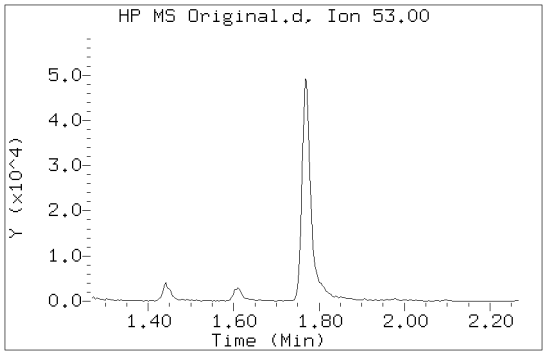

AFTER

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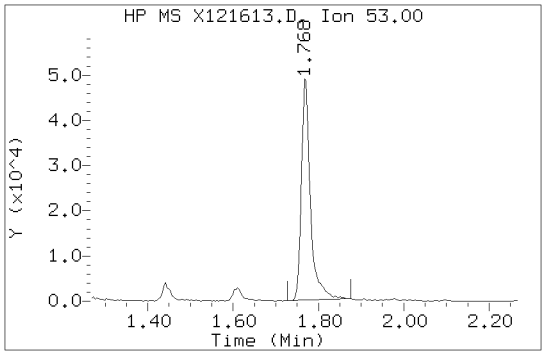

BEFORE

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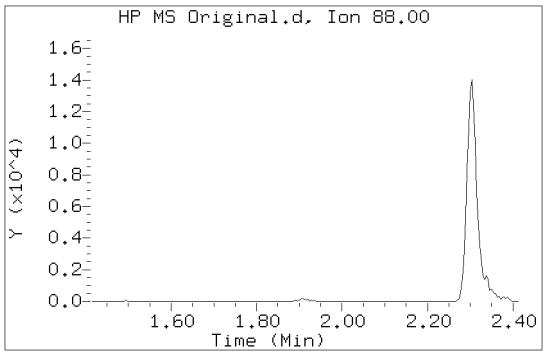

AFTER

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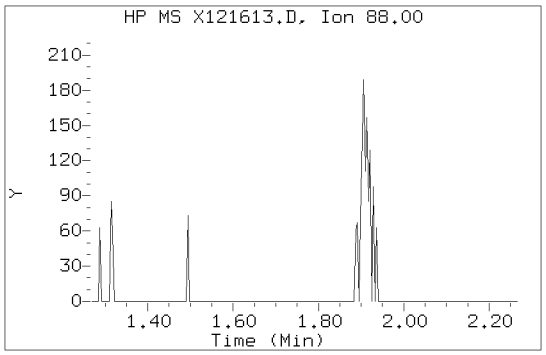
pham



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Inj Date : 16-DEC-2022 15:49
InstruID : voa6.i
LabSampID : ICV

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
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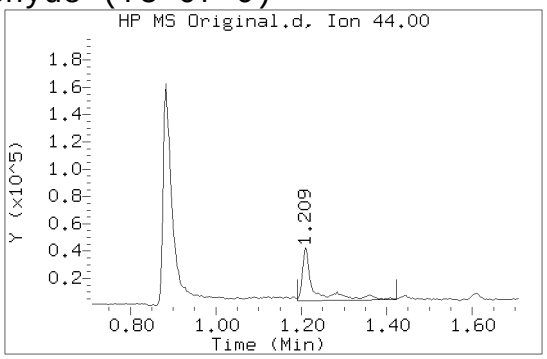
HEIGHT
39303
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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AREA
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13-Feb-2023
13:08
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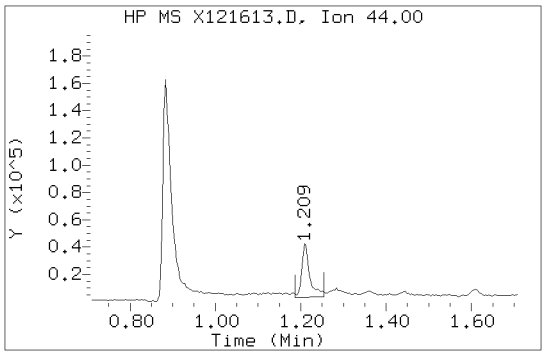

BEFORE

MASS
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AREA
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27-Dec-2022
16:04
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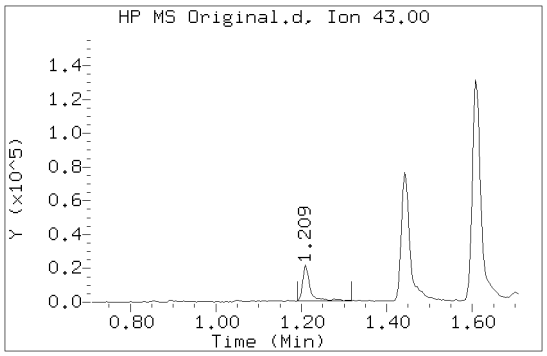
pham



AFTER

MASS
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AREA
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HEIGHT
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13:08
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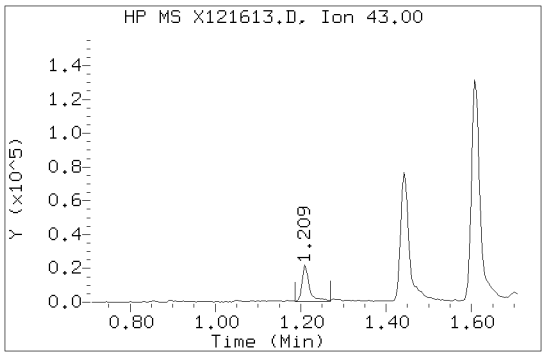

BEFORE

MASS
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AREA
8969
HEIGHT
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27-Dec-2022
16:04
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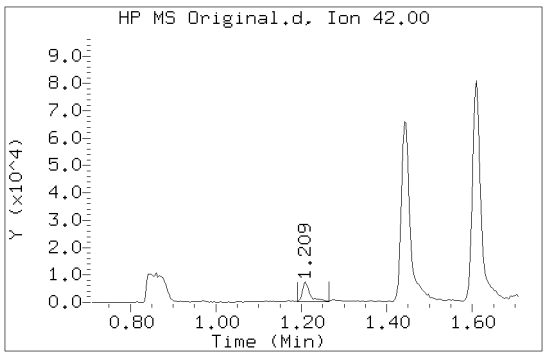

AFTER

MASS
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AREA
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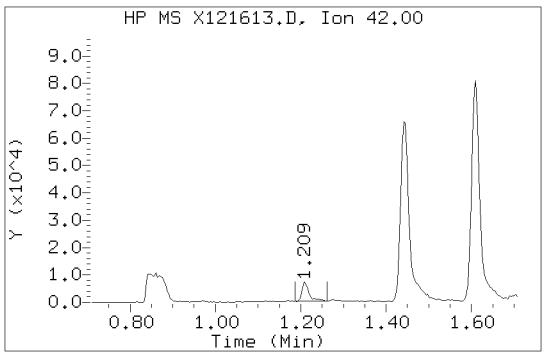
HEIGHT
7027
13-Feb-2023
13:08
linh
pham



right solutions.
right partner.

Raw Data VOA6 427420

Volatiles by by EPA 8260

Workorder

HS23011514

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\X230206.b\X020601.D Page 1
Report Date: 06-Feb-2023 10:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-FEB-2023 10:39
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\X230206.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	46832			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	7745			15.00- 40.00	16.54
8.691	8.889	(0.000)	75	22928			30.00- 60.00	48.96
8.691	8.889	(0.000)	96	3409			5.00- 9.00	7.28
8.691	8.889	(0.000)	173	226			0.00- 2.00	0.59
8.691	8.889	(0.000)	174	38568			50.00- 0.00	82.35
8.691	8.889	(0.000)	175	3128			5.00- 9.00	8.11
8.691	8.889	(0.000)	176	37464			95.00- 101.00	97.14
8.691	8.889	(0.000)	177	2783			5.00- 9.00	7.43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.54
75	30.00 - 60.00% of mass 95	48.96
96	5.00 - 9.00% of mass 95	7.28
173	Less than 2.00% of mass 174	0.48 (0.59)
174	Greater than 50.00% of mass 95	82.35
175	5.00 - 9.00% of mass 174	6.68 (8.11)
176	95.00 - 101.00% of mass 174	80.00 (97.14)
177	5.00 - 9.00% of mass 176	5.94 (7.43)

Data File: X020601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	370	62.00	1914	85.00	131	118.90	195
37.10	1942	63.00	1467	86.90	1509	122.90	56
38.10	2008	63.90	320	87.90	1992	127.90	283
39.00	1457	64.90	109	89.00	71	128.90	96
40.00	1446	65.90	81	90.90	315	129.70	158
41.00	1011	66.80	149	91.90	885	130.80	66
42.10	1354	68.00	4757	93.00	1853	131.10	70
43.00	683	69.00	5275	94.00	5691	136.80	80
44.10	1172	70.00	966	95.00	46832	141.00	224
45.00	833	71.00	179	96.00	3409	142.70	291
46.80	377	71.90	258	96.80	162	146.90	52
47.60	197	73.00	1900	98.20	778	154.90	105
48.10	342	74.00	7202	99.00	51	156.70	153
49.00	1787	75.00	22928	103.10	82	158.90	63
50.00	7745	76.00	2323	104.00	317	172.90	226
51.00	2385	76.90	457	104.90	112	173.90	38568
51.90	322	77.90	281	105.60	66	174.90	3128
52.90	193	78.90	1567	106.10	135	175.90	37464
55.00	1629	79.90	508	106.70	129	176.90	2783
56.10	1089	80.90	1470	109.00	100	177.80	66
57.10	1994	82.10	321	114.90	155	186.10	133
58.00	275	82.70	172	115.90	193	235.40	59
59.90	534	83.30	82	116.80	218	262.10	84
60.90	2109	83.90	93	117.70	190		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020601.D

Date : 06-FEB-2023 10:39

Client ID: BFB

Instrument: voa6.i

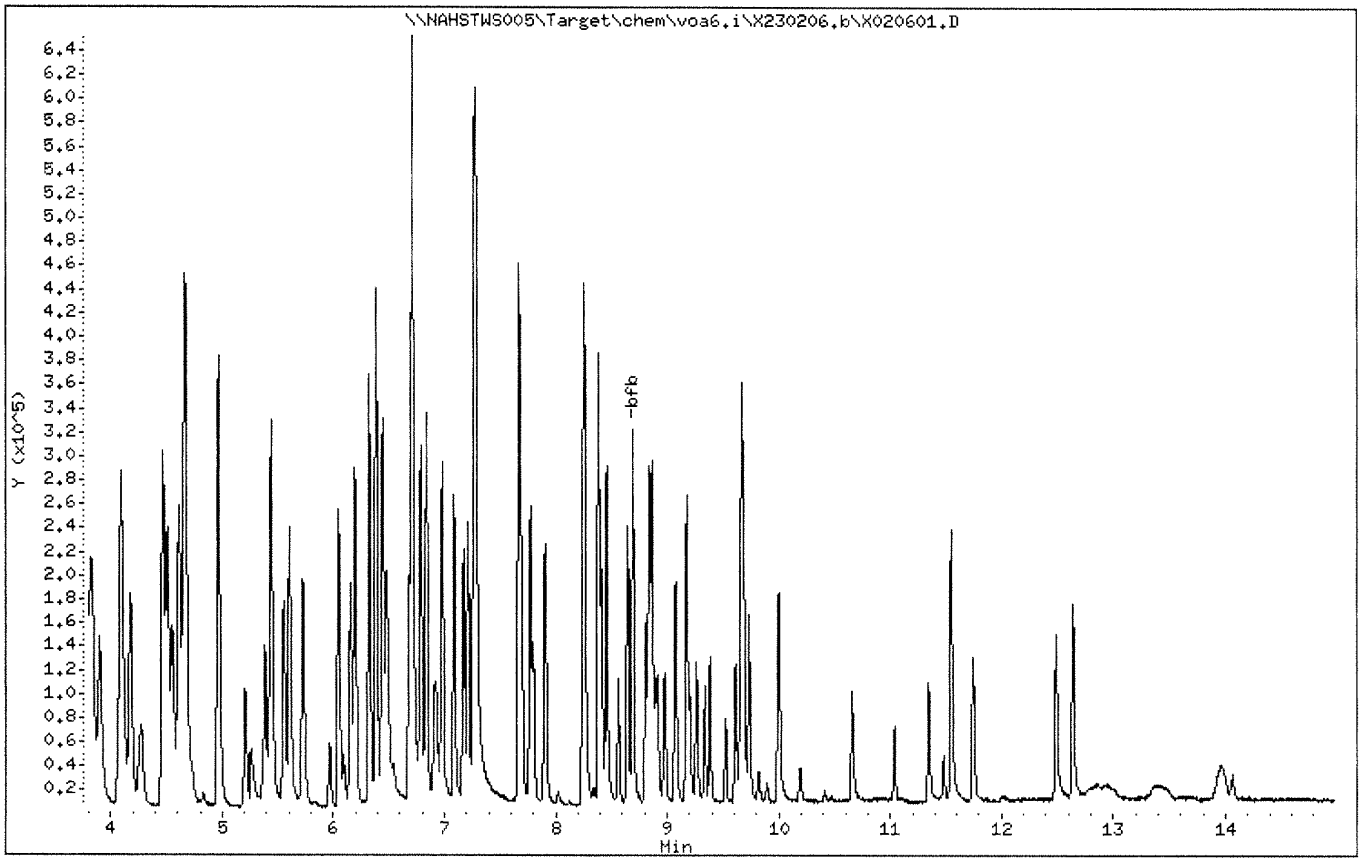
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020601.D

Date : 06-FEB-2023 10:39

Client ID: BFB

Instrument: voa6.i

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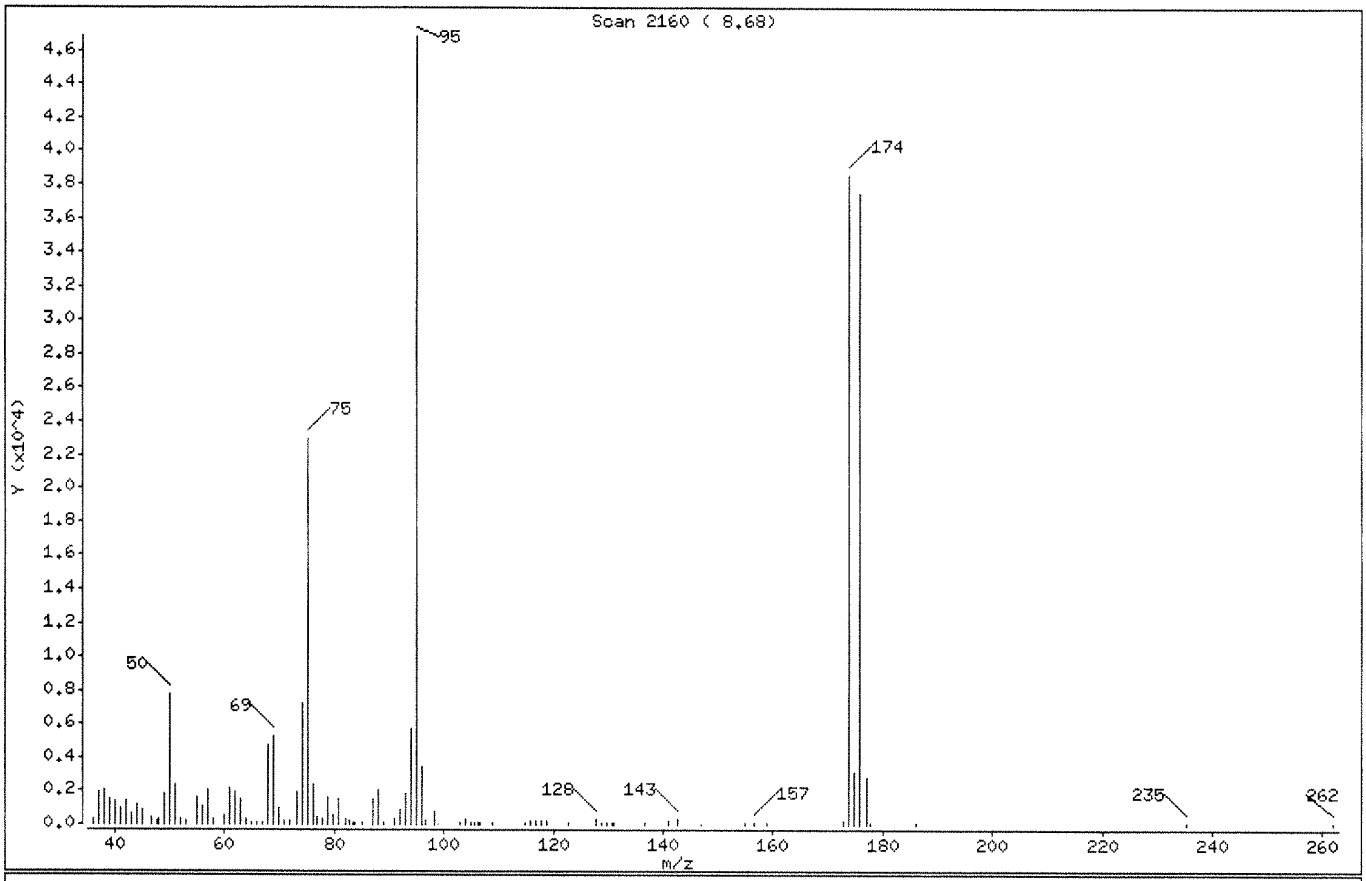
Volume Injected (uL): 2.0

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
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96	5.00 - 9.00% of mass 95	7.28
173	Less than 2.00% of mass 174	0.48 (0.59)
174	Greater than 50.00% of mass 95	82.35
175	5.00 - 9.00% of mass 174	6.68 (8.11)
176	95.00 - 101.00% of mass 174	80.00 (97.14)
177	5.00 - 9.00% of mass 176	5.94 (7.43)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020601.D

Date : 06-FEB-2023 10:39

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: X020601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	370	62.00	1914	85.00	131	118.90	195
37.10	1942	63.00	1467	86.90	1509	122.90	56
38.10	2008	63.90	320	87.90	1992	127.90	283
39.00	1457	64.90	109	89.00	71	128.90	96
40.00	1446	65.90	81	90.90	315	129.70	158
41.00	1011	66.80	149	91.90	885	130.80	66
42.10	1354	68.00	4757	93.00	1853	131.10	70
43.00	683	69.00	5275	94.00	5691	136.80	80
44.10	1172	70.00	966	95.00	46832	141.00	224
45.00	833	71.00	179	96.00	3409	142.70	291
46.80	377	71.90	258	96.80	162	146.90	52
47.60	197	73.00	1900	98.20	778	154.90	105
48.10	342	74.00	7202	99.00	51	156.70	153
49.00	1787	75.00	22928	103.10	82	158.90	63
50.00	7745	76.00	2323	104.00	317	172.90	226
51.00	2385	76.90	457	104.90	112	173.90	38568
51.90	322	77.90	281	105.60	66	174.90	3128
52.90	193	78.90	1567	106.10	135	175.90	37464
55.00	1629	79.90	508	106.70	129	176.90	2783
56.10	1089	80.90	1470	109.00	100	177.80	66
57.10	1994	82.10	321	114.90	155	186.10	133
58.00	275	82.70	172	115.90	193	235.40	59
59.90	534	83.30	82	116.80	218	262.10	84
60.90	2109	83.90	93	117.70	190		

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020601.D
Inj Date : 06-FEB-2023 10:39
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020602.D Page 1
Report Date: 13-Feb-2023 14:13

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020602.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 06-FEB-2023 11:00
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 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: 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)	589502	50.0000	
135	1,4-Dioxane	88	5.594	5.594	(1.339)	63170	1000.00	1172.27
140	1,3-Butadiene	54	1.160	1.160	(0.278)	181262	50.0000	44.80
25	Methacrylonitrile	41	3.814	3.814	(0.913)	243900	50.0000	58.43
12	Isobutyl Alcohol	43	4.672	4.672	(1.118)	783640	1000.00	1181.85
13	Acetonitrile	39	2.194	2.194	(0.525)	265430	500.000	494.72
14	Allyl Chloride	41	2.194	2.194	(0.525)	579498	50.0000	56.71
4	Propionitrile	54	3.645	3.645	(0.873)	359257	500.000	597.26
139	Diethyl ether	59	1.752	1.752	(0.419)	181854	50.0000	46.16
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	84886	100.000	116.33
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	492929	50.0000	49.83
156	Diisopropyl ether	45	2.997	2.997	(0.717)	804964	50.0000	52.63
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1049153	50.0000	48.80
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	330771	50.0000	79.98
3	Chloromethane	50	1.074	1.074	(0.257)	217320	50.0000	41.15
5	Vinyl Chloride	62	1.141	1.141	(0.273)	219787	50.0000	42.68
6	Bromomethane	94	1.336	1.336	(0.320)	154710	50.0000	40.08(M)
7	Chloroethane	64	1.400	1.400	(0.335)	151248	50.0000	42.19
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	318528	50.0000	44.20
9	Acrolein	56	1.441	1.441	(0.345)	30793	100.000	77.04

10 Acetone	43	1.970	1.970 (0.472)	174006	100.000	105.19
11 1,1-Dichloroethene	96	1.910	1.910 (0.457)	181618	50.0000	40.59

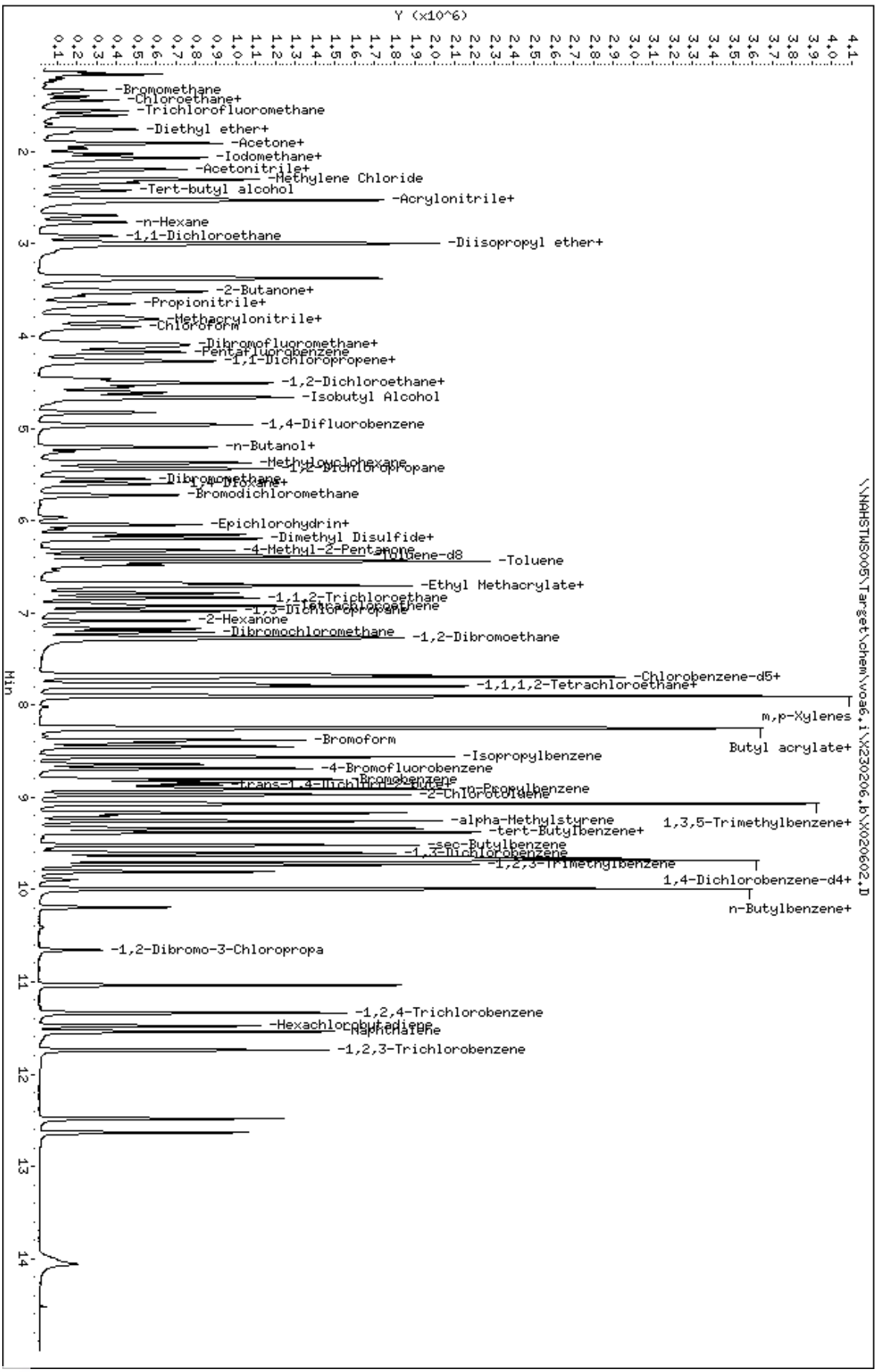
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	15	Iodomethane	142	2.026	2.026	(0.485)	508842	100.000	87.22
	16	Acrylonitrile	53	2.528	2.528	(0.605)	172059	100.000	113.38
	17	Methylene Chloride	84	2.299	2.299	(0.550)	291011	50.0000	47.41
	18	Methyl tert-butyl ether	73	2.528	2.528	(0.605)	785689	50.0000	53.65
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	1069599	100.000	91.37
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	243073	50.0000	48.54
	21	Vinyl Acetate	43	2.993	2.993	(0.716)	1504830	100.000	117.05
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	447076	50.0000	50.87
	24	2-Butanone	43	3.570	3.570	(0.855)	209801	100.000	118.98
	26	2,2-Dichloropropane	77	3.503	3.503	(0.838)	403917	50.0000	54.13
	27	cis-1,2-Dichloroethene	96	3.521	3.521	(0.843)	293537	50.0000	48.16
	28	Chloroform	83	3.900	3.900	(0.934)	496917	50.0000	50.45
	29	Bromochloromethane	128	3.788	3.788	(0.907)	157243	50.0000	47.12
$	30	Dibromofluoromethane	113	4.095	4.095	(0.980)	249986	50.0000	44.14
	31	1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	391847	50.0000	50.14
	32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	339146	50.0000	53.42
	33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	407394	50.0000	55.60
	34	Carbon Tetrachloride	117	4.260	4.260	(0.859)	319657	50.0000	47.15
$	35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	284443	50.0000	47.62
*	36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	894149	50.0000	
	37	Benzene	78	4.507	4.507	(0.909)	1094399	50.0000	51.25
	38	Trichloroethene	130	5.205	5.205	(1.049)	306557	50.0000	50.61
	39	Bromodichloromethane	83	5.722	5.722	(1.153)	409717	50.0000	51.12
	41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	317627	100.000	139.32
	42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	295021	50.0000	51.94
	44	Dibromomethane	93	5.549	5.549	(1.119)	188795	50.0000	48.90
	45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	544985	100.000	123.28
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	524296	50.0000	55.71
*	47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	827037	50.0000	
$	48	Toluene-d8	98	6.382	6.382	(0.832)	946977	50.0000	46.33
	50	Toluene	91	6.442	6.442	(0.840)	1164381	50.0000	50.93
	51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	456566	50.0000	58.45
	52	2-Hexanone	43	7.083	7.083	(0.924)	382789	100.000	127.27
	53	1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	239694	50.0000	52.26
	54	1,3-Dichloropropane	76	6.978	6.978	(0.910)	493370	50.0000	54.65
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	351471	50.0000	53.10
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	231234	50.0000	48.88
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	313135	50.0000	54.61
	58	1-Chlorohexane	55	7.694	7.694	(1.551)	219570	50.0000	50.81
	59	Chlorobenzene	112	7.694	7.694	(1.003)	808256	50.0000	49.84
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	311333	50.0000	51.59
	61	Ethylbenzene	106	7.799	7.799	(1.017)	388098	50.0000	50.81
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	974714	100.000	98.99
	63	o-Xylene	106	8.241	8.241	(1.075)	484433	50.0000	49.85
	64	Styrene	104	8.256	8.256	(1.077)	851141	50.0000	52.25
	66	Bromoform	173	8.410	8.410	(1.097)	246882	50.0000	53.84
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	1120764	50.0000	50.48
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	392203	50.0000	55.11
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	365114	50.0000	47.79
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	446442	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	287748	50.0000	57.92(M)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	1330299	50.0000	53.79

74 Bromobenzene	156	8.803	8.803 (0.911)	375183	50.0000	51.22
75 1,3,5-Trimethylbenzene	105	9.066	9.066 (0.938)	978030	50.0000	53.53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	871648	50.0000	53.71	
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	1010454	50.0000	54.62	
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	783960	50.0000	52.42	
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1010250	50.0000	52.55	
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1079738	50.0000	54.26	
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	982928	50.0000	55.13	
	83 1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	626913	50.0000	51.56	
	84 1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	648394	50.0000	48.87	
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	863633	50.0000	50.25	
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	620469	50.0000	49.55	
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	66084	50.0000	58.07	
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	441060	50.0000	55.81	
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	193079	50.0000	55.07	
	92 Naphthalene	128	11.540	11.540	(1.194)	1013277	50.0000	56.36	
	93 1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	405501	50.0000	53.58	
M	94 1,2-Dichloroethylene (total)	96				536610	100.000		(a)
	141 Cyclohexane	56	4.121	4.121	(0.987)	291333	50.0000	49.05	
	138 Freon TF	101	1.913	1.913	(0.458)	178951	50.0000	41.35	
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	622983	50.0000	56.91	
	146 Methyl Acetate	43	2.228	2.228	(0.533)	158774	50.0000	59.85	
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	544077	1000.00	1332.90	
	149 Isopropyl Alcohol	45	2.086	2.086	(0.499)	303279	1000.00	1422.66	

QC Flag Legend

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



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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\X230206.b\X020602.D
Inj Date : 06-FEB-2023 11:00
InstruID : voa6.i
LabSampID : CCV

Bromomethane (74-83-9)

Reason Code:

BEFORE

MASS
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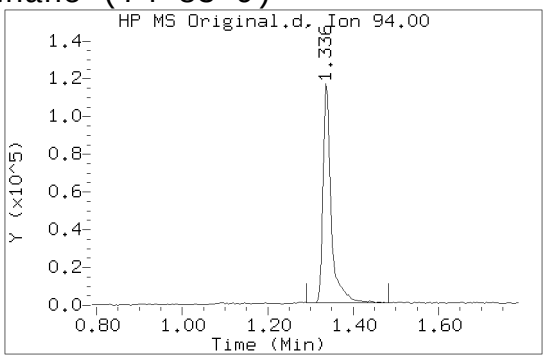
AREA
154710
HEIGHT
116066
13-Feb-2023
14:13
linh
pham



AFTER

MASS
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AREA
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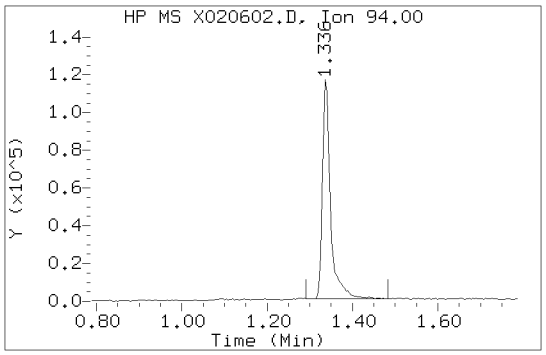

BEFORE

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13-Feb-2023
14:13
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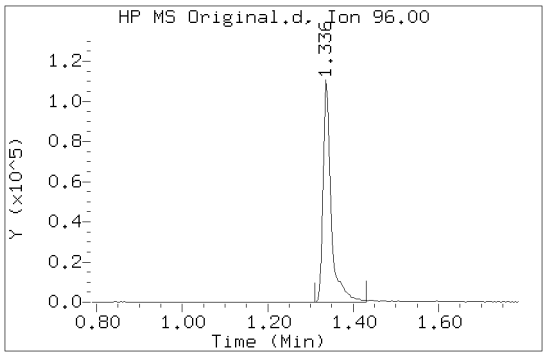

AFTER

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13-Feb-2023
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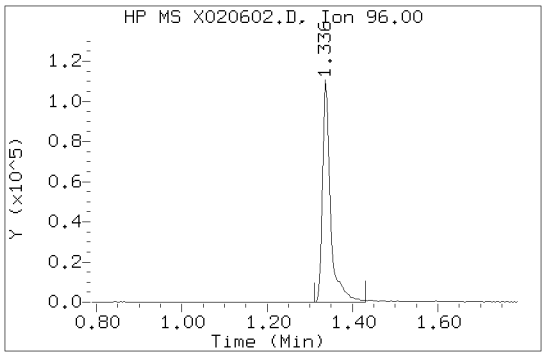

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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HEIGHT
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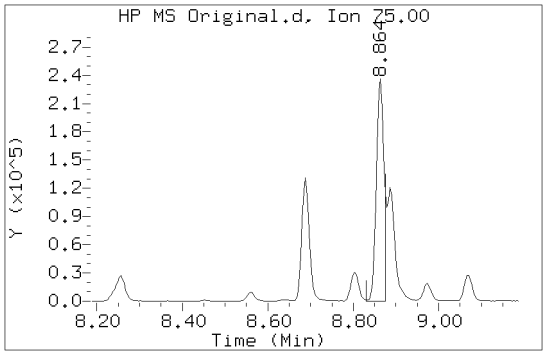
14:13
linh
pham



AFTER

MASS
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AREA
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HEIGHT
235908
13-Feb-2023
14:13
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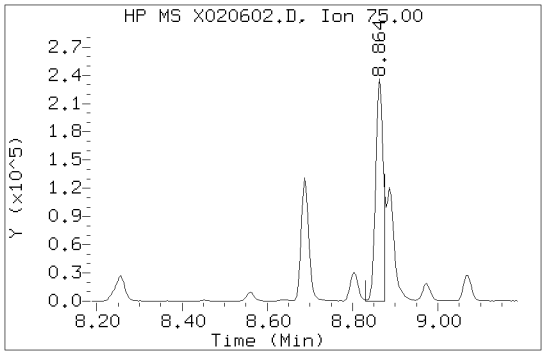
pham



BEFORE

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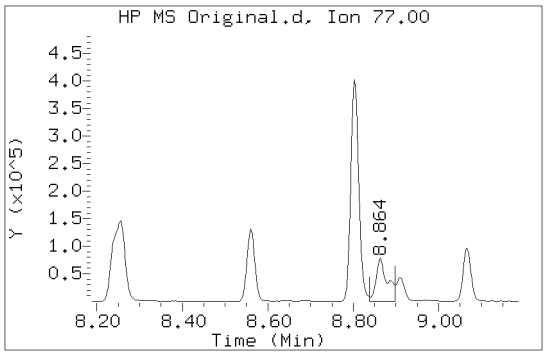
78818
13-Feb-2023
14:13
linh
pham



AFTER

MASS
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AREA
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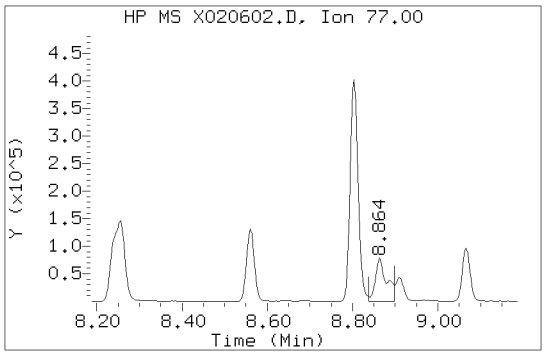
HEIGHT
78818
13-Feb-2023
14:13
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020604.D Page 1
Report Date: 06-Feb-2023 20:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020604.D
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Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 06-Feb-2023 20:35 pcabasca 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: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.177	(1.000)	725523	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	316909	45.4757	45.47
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	351842	47.8619	47.86
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1032987	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	942618	50.0000	
$ 48 Toluene-d8	98	6.386	6.382	(0.833)	1210656	51.9756	51.97
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	462239	53.0873	53.08
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	497779	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020605.D Page 1
Report Date: 13-Feb-2023 14:13

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020605.D
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Inj Date : 06-FEB-2023 12:03
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230206;VLCSW-230206;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 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	4.174	4.177	(1.000)	592141	50.0000	
135 1,4-Dioxane	88	5.598	5.594	(1.341)	26555	490.598	490.59(a)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	73897	18.1834	18.18
25 Methacrylonitrile	41	3.821	3.814	(0.916)	97148	23.1699	23.16
12 Isobutyl Alcohol	43	4.672	4.672	(1.119)	319654	479.941	479.94
13 Acetonitrile	39	2.194	2.194	(0.526)	110404	204.861	204.86
14 Allyl Chloride	41	2.194	2.194	(0.526)	235310	22.9254	22.92
4 Propionitrile	54	3.649	3.645	(0.874)	146052	241.729	241.72(a)
139 Diethyl ether	59	1.752	1.752	(0.420)	74201	18.7539	18.75
142 Tetrahydrofuran	42	3.840	3.840	(0.920)	32157	41.9005	41.90
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	203444	20.7382	20.73
156 Diisopropyl ether	45	2.993	2.997	(0.717)	328831	21.4073	21.40
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	441067	20.6873	20.68
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	142549	34.5422	34.54
3 Chloromethane	50	1.074	1.074	(0.257)	92798	18.7668	18.76
5 Vinyl Chloride	62	1.141	1.141	(0.273)	89061	17.2176	17.21
6 Bromomethane	94	1.336	1.336	(0.320)	64690	17.7155	17.71
7 Chloroethane	64	1.400	1.400	(0.335)	61983	17.2158	17.21
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	131869	18.2174	18.21
9 Acrolein	56	1.441	1.441	(0.345)	12705	33.3095	33.30

10 Acetone	43	1.970	1.970 (0.472)	73834	44.4192	44.41
11 1,1-Dichloroethene	96	1.910	1.910 (0.458)	74845	16.6541	16.65

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020605.D Page 2
Report Date: 13-Feb-2023 14:13

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	15	Iodomethane	142	2.026	2.026	(0.485)	178884	33.3650	33.36
	16	Acrylonitrile	53	2.532	2.528	(0.607)	68948	45.2351	45.23
	17	Methylene Chloride	84	2.299	2.299	(0.551)	123457	20.0273	20.02
	18	Methyl tert-butyl ether	73	2.532	2.528	(0.607)	322208	21.9039	21.90
	19	Carbon Disulfide	76	2.067	2.067	(0.495)	438438	37.2880	37.28
	20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	101291	20.1386	20.13
	21	Vinyl Acetate	43	2.993	2.993	(0.717)	608817	47.1476	47.14
	22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	184362	20.8857	20.88
	24	2-Butanone	43	3.578	3.570	(0.857)	80532	47.3382	47.33
	26	2,2-Dichloropropane	77	3.503	3.503	(0.839)	165923	22.1384	22.13
	27	cis-1,2-Dichloroethene	96	3.525	3.521	(0.845)	121455	19.8422	19.84
	28	Chloroform	83	3.904	3.900	(0.935)	203398	20.5584	20.55
	29	Bromochloromethane	128	3.791	3.788	(0.908)	64387	19.2119	19.21
$	30	Dibromofluoromethane	113	4.095	4.095	(0.981)	251318	44.1823	44.18
	31	1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	162240	20.6683	20.66
	32	1,1-Dichloropropene	75	4.275	4.279	(0.861)	135196	21.3952	21.39
	33	1,2-Dichloroethane	62	4.556	4.552	(0.918)	159980	21.9374	21.93
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	134201	19.8882	19.88
$	35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	287713	47.9538	47.95
*	36	1,4-Difluorobenzene	114	4.965	4.961	(1.000)	890062	50.0000	
	37	Benzene	78	4.507	4.507	(0.908)	445184	20.9454	20.94
	38	Trichloroethene	130	5.205	5.205	(1.048)	123760	20.5293	20.52
	39	Bromodichloromethane	83	5.722	5.722	(1.153)	164822	20.6631	20.66
	41	2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	124224	54.7407	54.74
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	120147	21.2506	21.25
	44	Dibromomethane	93	5.553	5.549	(1.119)	77816	20.2493	20.24
	45	4-Methyl-2-Pentanone	43	6.325	6.322	(0.825)	222370	50.5959	50.59
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	208736	22.2820	22.28
*	47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	822267	50.0000	
$	48	Toluene-d8	98	6.385	6.382	(0.833)	940830	46.3034	46.30
	50	Toluene	91	6.445	6.442	(0.841)	474173	20.8632	20.86
	51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	180522	23.2204	23.22
	52	2-Hexanone	43	7.086	7.083	(0.924)	152269	50.9222	50.92
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	97882	21.4674	21.46
	54	1,3-Dichloropropane	76	6.981	6.978	(0.911)	199142	22.1893	22.18
	55	Dibromochloromethane	129	7.176	7.173	(0.936)	141827	21.5518	21.55
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	93272	19.8348	19.83
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	126295	22.1539	22.15
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	85652	19.9127	19.91
	59	Chlorobenzene	112	7.694	7.694	(1.003)	332460	20.6232	20.62
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	127873	21.3148	21.31
	61	Ethylbenzene	106	7.799	7.799	(1.017)	159099	20.9516	20.95
	62	m,p-Xylenes	106	7.904	7.904	(1.031)	399772	40.8385	40.83
	63	o-Xylene	106	8.241	8.241	(1.075)	199013	20.5980	20.59
	64	Styrene	104	8.260	8.256	(1.077)	351909	21.7304	21.73
	66	Bromoform	173	8.410	8.410	(1.097)	98111	21.5202	21.52
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	459209	20.8036	20.80
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	161614	22.9019	22.90
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	364695	48.0211	48.02
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	442749	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	121949	24.7536	24.75(M)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	546149	22.2696	22.26

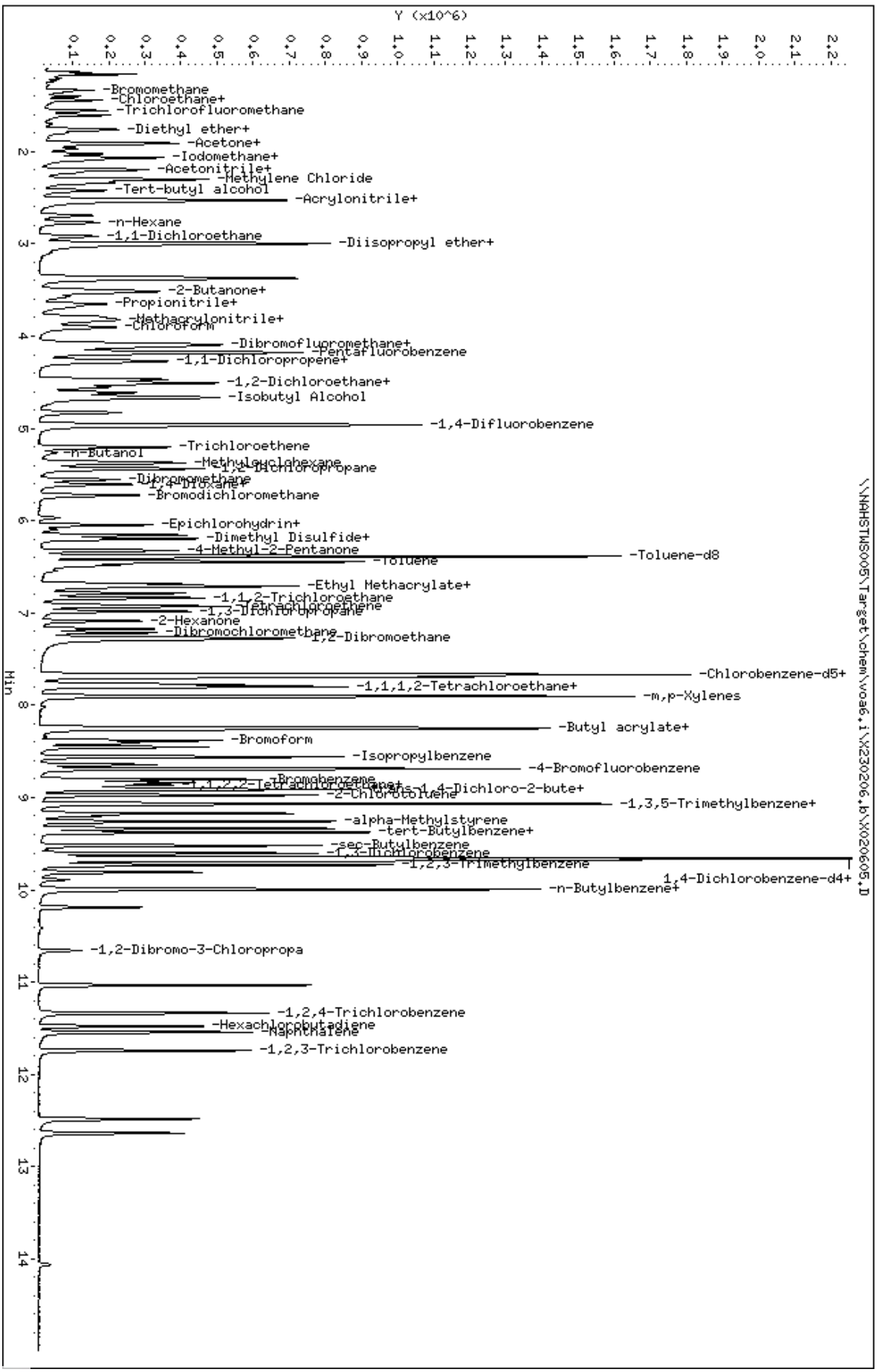
74 Bromobenzene	156	8.807	8.803 (0.912)	156916	21.6020	21.60
75 1,3,5-Trimethylbenzene	105	9.066	9.066 (0.938)	406455	22.4351	22.43

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020605.D Page 3
Report Date: 13-Feb-2023 14:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	362628	22.5331	22.53
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	425491	23.1926	23.19
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	324047	21.8509	21.85
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	422567	22.1672	22.16
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	437428	22.1688	22.16
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	399005	22.5662	22.56
	83 1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	266308	22.0883	22.08
	84 1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	278574	21.1740	21.17
	87 n-Butylbenzene	91	9.995	9.992	(1.035)	351507	21.6708	21.67
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	265766	21.4036	21.40
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	27279	24.2267	24.22
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	186745	23.8312	23.83
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	77961	22.5674	22.56
	92 Naphthalene	128	11.544	11.540	(1.195)	425982	23.8924	23.89
	93 1,2,3-Trichlorobenzene	180	11.742	11.738	(1.215)	173234	23.0824	23.08
M	94 1,2-Dichloroethylene (total)	96				222746	39.9808	39.98
M	95 Xylenes (total)	106				598785	61.4365	61.43
	141 Cyclohexane	56	4.121	4.121	(0.987)	121568	21.1150	21.11
	138 Freon TF	101	1.910	1.913	(0.458)	71568	16.4650	16.46
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	251951	23.1252	23.12
	146 Methyl Acetate	43	2.228	2.228	(0.534)	61426	23.0535	23.05
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	219205	534.623	534.62
	149 Isopropyl Alcohol	45	2.089	2.086	(0.501)	119497	558.056	558.05

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa6.i\X230206.b\X020605.D
Date : 06-FEB-2023 12:03
Client ID: VLCSW-230206
Sample Info: VLCSW-230206;VLCSW-230206;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

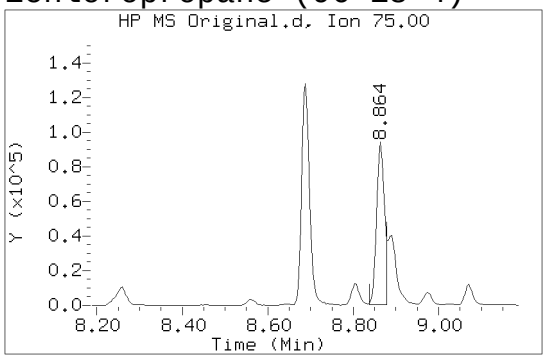
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020605.D
Inj Date : 06-FEB-2023 12:03
InstruID : voa6.i
LabSampID : VLCSW-230206

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

Reason Code:

BEFORE

MASS
75
AREA
121949
HEIGHT
94218
13-Feb-2023
14:13
linh
pham



AFTER

MASS
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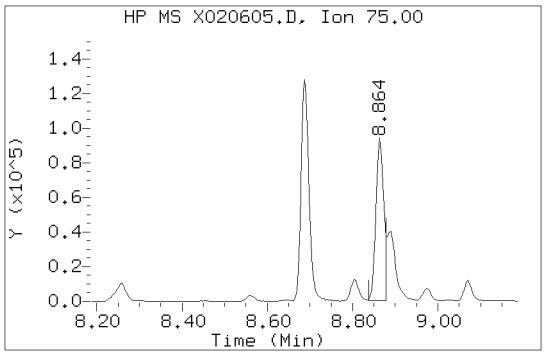
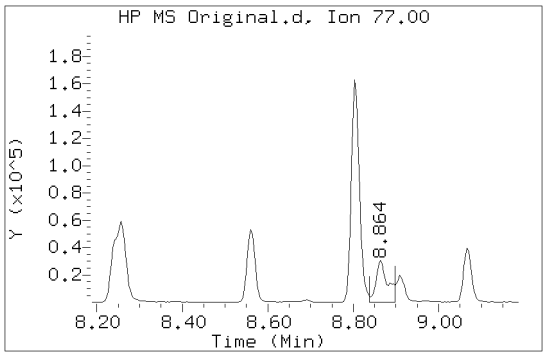
AREA
121949
HEIGHT
94218
13-Feb-2023
14:13
linh
pham



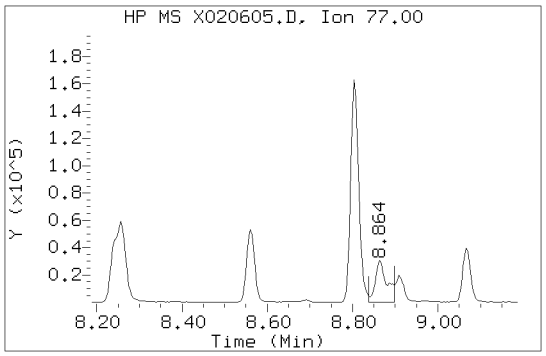
BEFORE

MASS
77
AREA
57657
HEIGHT
30297
13-Feb-2023
14:13
linh
pham



AFTER

MASS
77
AREA
57657
HEIGHT
30297
13-Feb-2023
14:13
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020607.D Page 1
Report Date: 13-Feb-2023 14:13

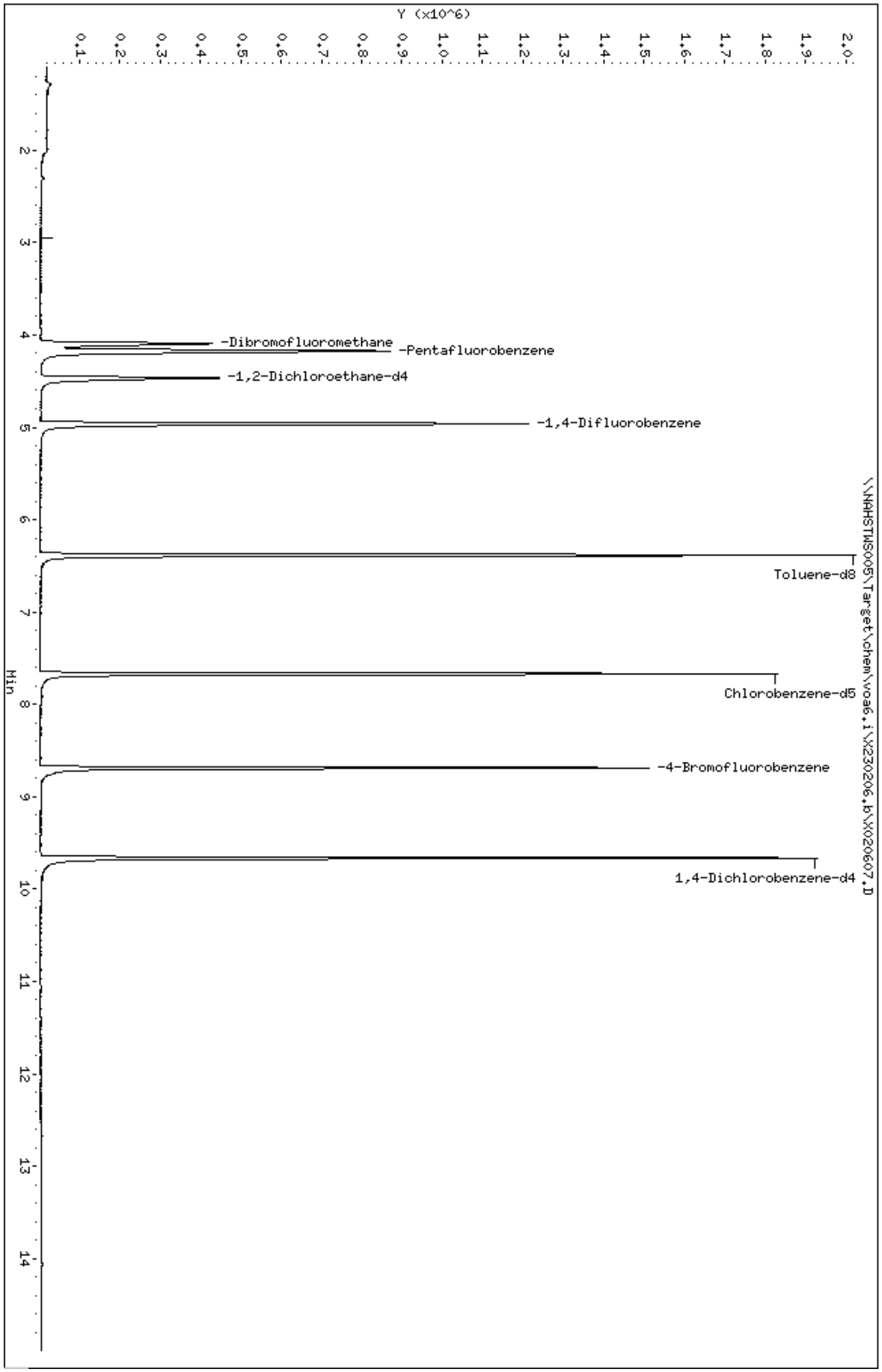
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020607.D
Lab Smp Id: VBLKW-230206 Client Smp ID: VBLKW-230206
Inj Date : 06-FEB-2023 12:45
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230206;VBLKW-230206;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 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	4.177	4.177	(1.000)	723934	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	318542	45.8116	45.81
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	357939	48.7929	48.79
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1024052	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	925329	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1203062	52.6146	52.61
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	448868	52.5155	52.51
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	480030	50.0000	


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020607.D
Date : 06-FEB-2023 12:45
Client ID: VBLKW-230206
Sample Info: VBLKW-230206;VBLKW-230206;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020607.D

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020607.D
Inj Date : 06-FEB-2023 12:45
InstruID : voa6.i
LabSampID : VBLKW-230206

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020608.D Page 1
Report Date: 13-Feb-2023 14:14

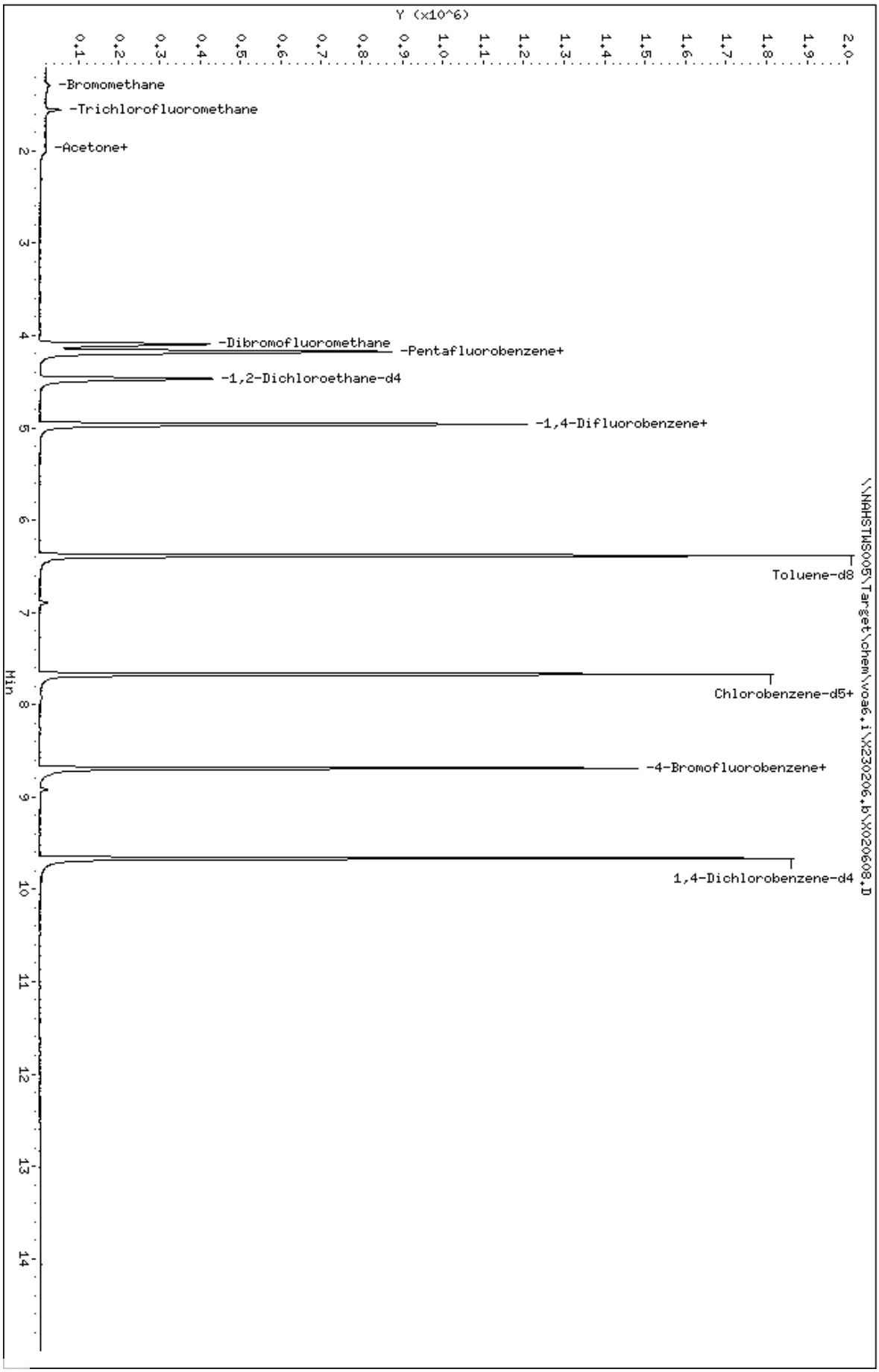
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020608.D
Lab Smp Id: HS23011514-08 Client Smp ID: HS23011514-08
Inj Date : 06-FEB-2023 13:06
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-08;HS23011514-08;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.177	(1.000)	720916	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	314351	45.3966	45.39
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	351415	48.1079	48.10
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1030405	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	918120	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1189282	52.4204	52.42
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	447027	52.7106	52.71
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	480161	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020608.D
Date : 06-FEB-2023 13:06
Client ID: HS23011514-08
Sample Info: HS23011514-08;HS23011514-08;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020608.D
Inj Date : 06-FEB-2023 13:06
InstruID : voa6.i
LabSampID : HS23011514-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020609.D Page 1
Report Date: 13-Feb-2023 14:14

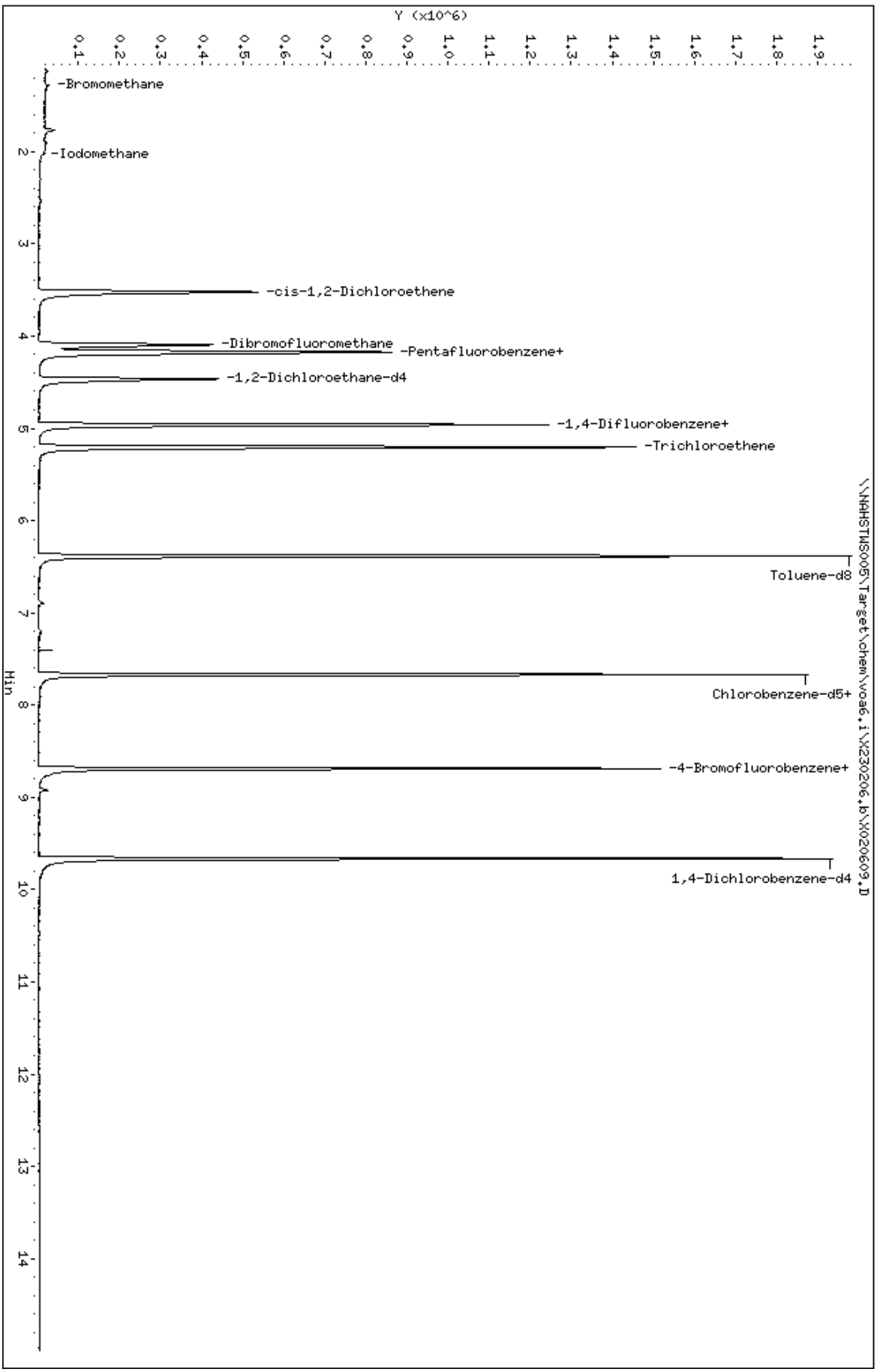
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020609.D
Lab Smp Id: HS23011514-05 Client Smp ID: HS23011514-05
Inj Date : 06-FEB-2023 13:27
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-05;HS23011514-05;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 9
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	4.177	(1.000)	718899	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	313754	45.4377	45.43
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	356629	48.9539	48.95
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1023621	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	911432	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1187160	52.7108	52.71
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	447290	53.1281	53.12
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	486480	50.0000	
27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.844)	301273	40.5407	40.54
38 Trichloroethene	130	5.201	5.205	(1.048)	506956	73.1216	73.12



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Date : 06-FEB-2023 13:27
Client ID: HS23011514-05
Sample Info: HS23011514-05;HS23011514-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020609.D Page 2

Date : 06-FEB-2023 13:27

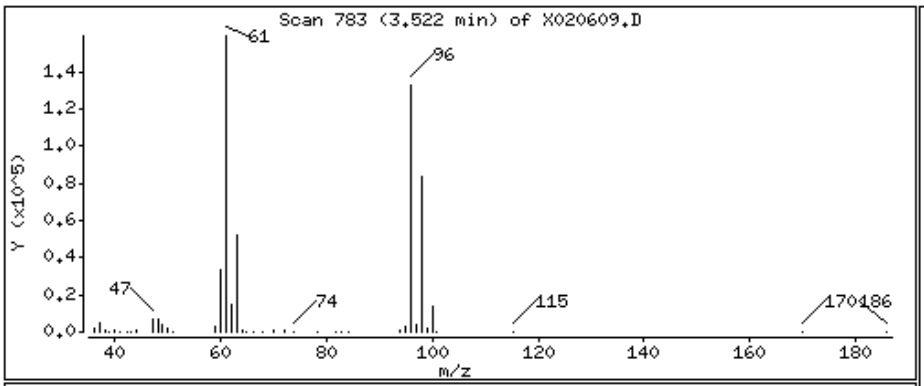
Client ID: HS23011514-05 Instrument: voa6.i

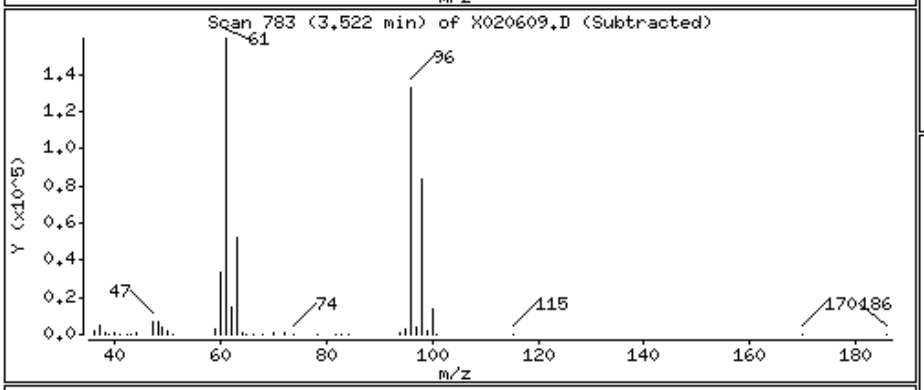
Sample Info: HS23011514-05;HS23011514-05;;;

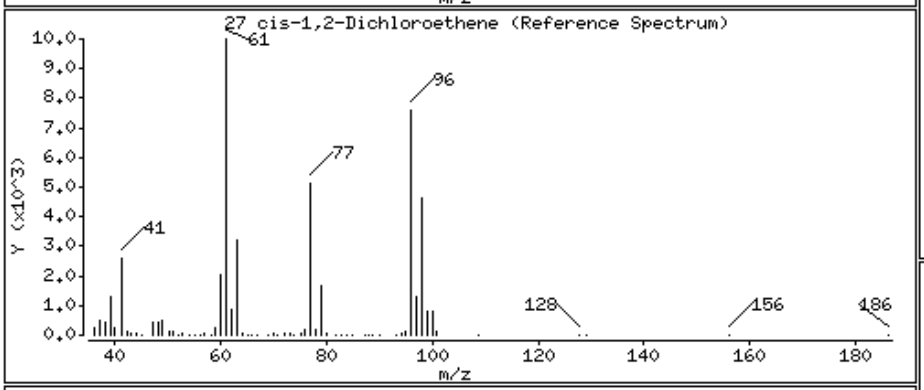
Purge Volume: 5.0 Operator: PC

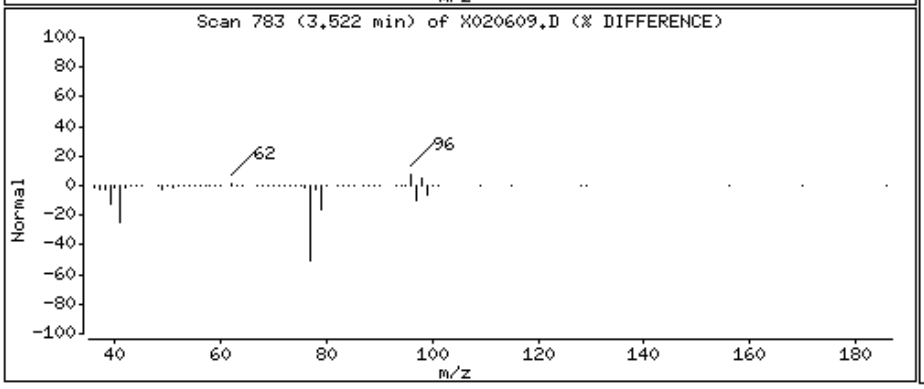
Column phase: DB624 Column diameter: 0.18

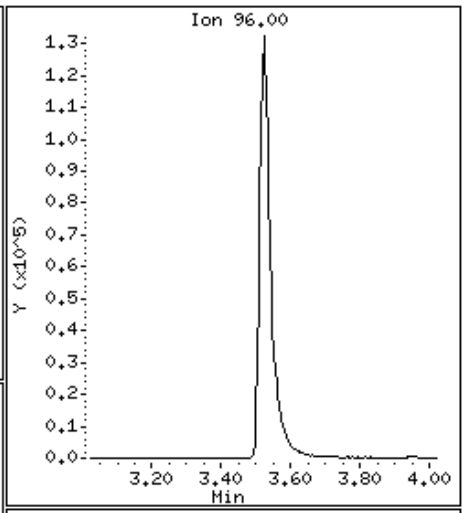
27 cis-1,2-Dichloroethene Concentration: 40.54 ug/l

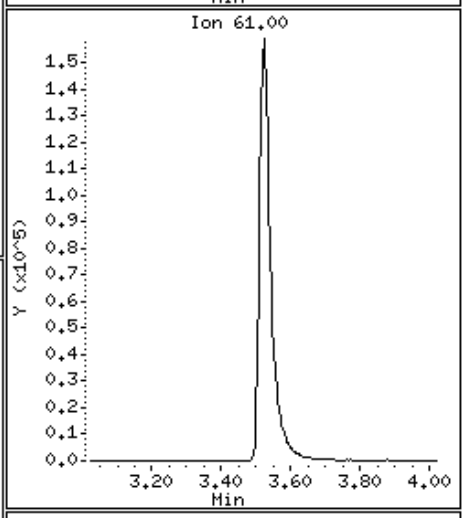


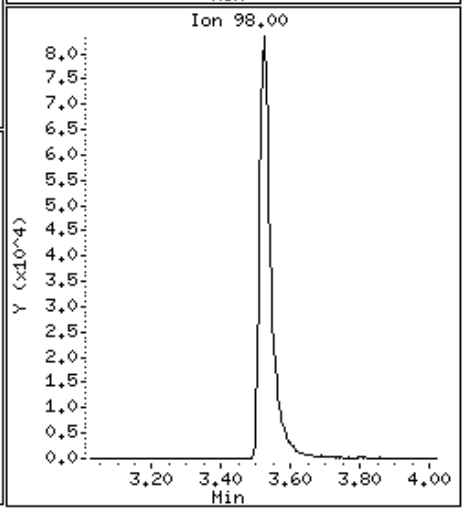












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020609.D Page 3

Date : 06-FEB-2023 13:27

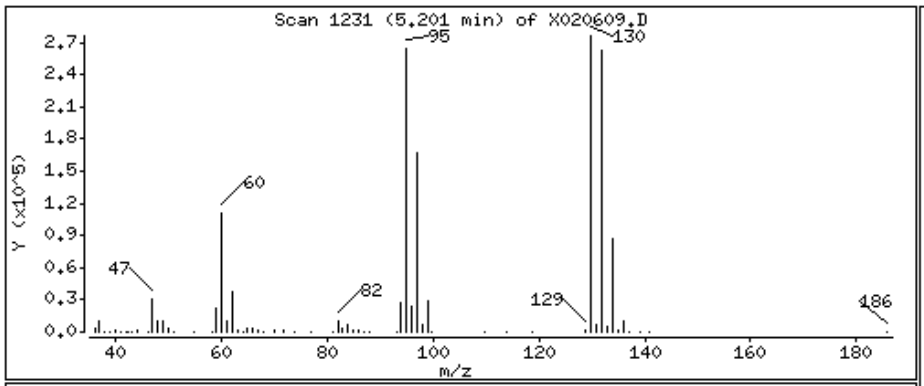
Client ID: HS23011514-05 Instrument: voa6.i

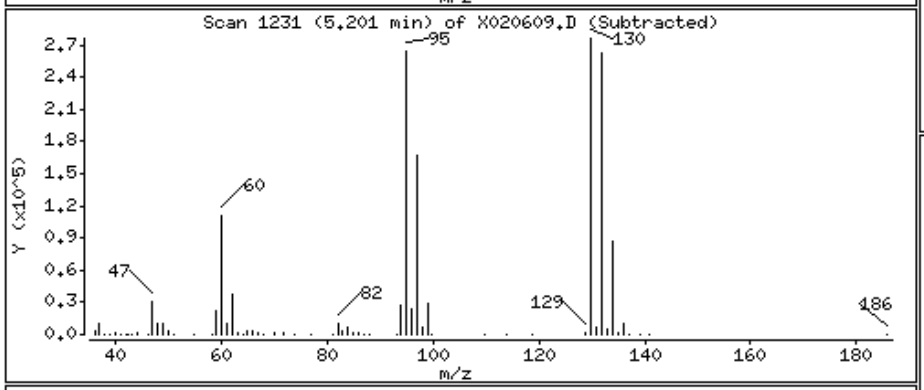
Sample Info: HS23011514-05;HS23011514-05;;;

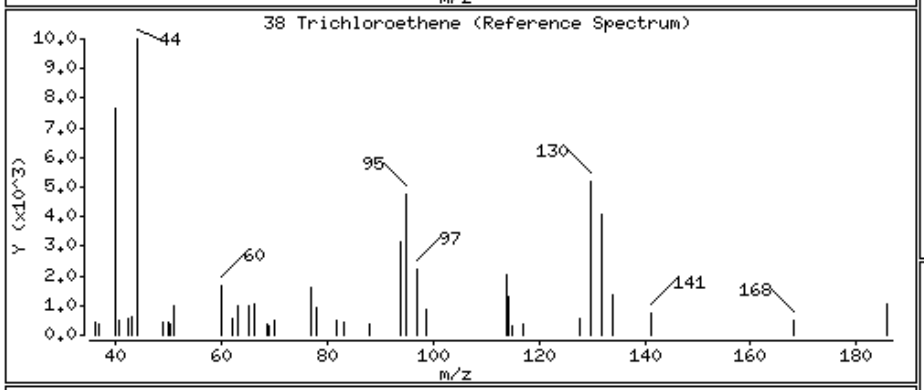
Purge Volume: 5.0 Operator: PC

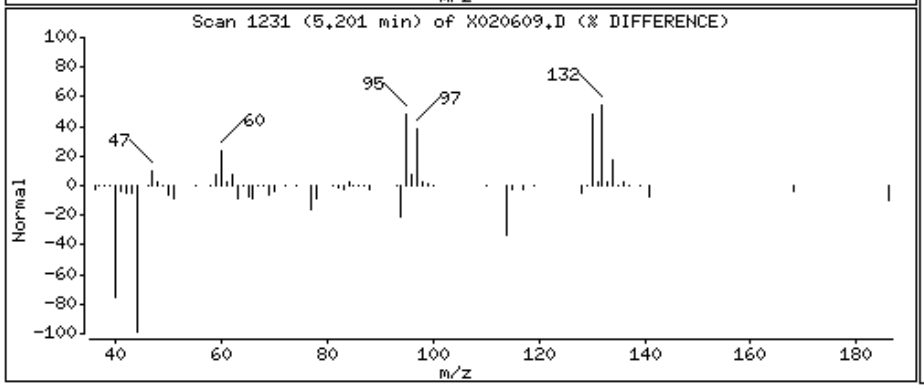
Column phase: DB624 Column diameter: 0.18

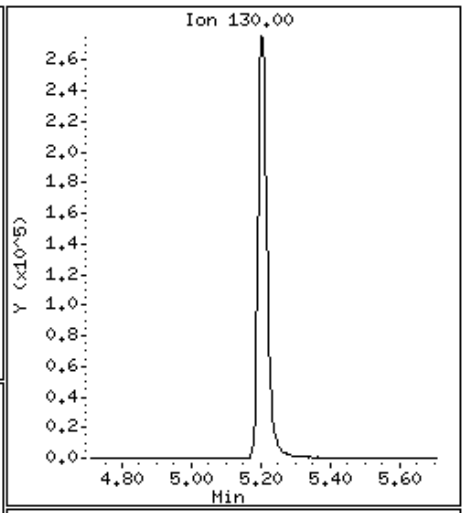
38 Trichloroethene Concentration: 73.12 ug/l

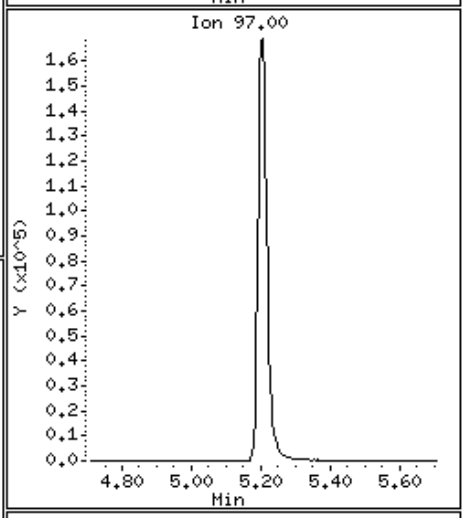


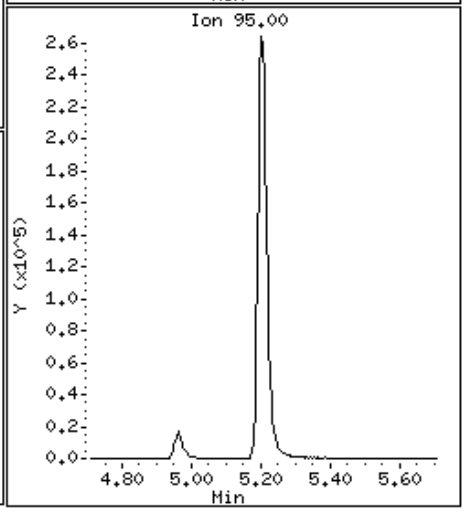












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020609.D
Inj Date : 06-FEB-2023 13:27
InstruID : voa6.i
LabSampID : HS23011514-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020610.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020610.D
Lab Smp Id: HS23011514-03 Client Smp ID: HS23011514-03
Inj Date : 06-FEB-2023 13:48
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-03;HS23011514-03;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

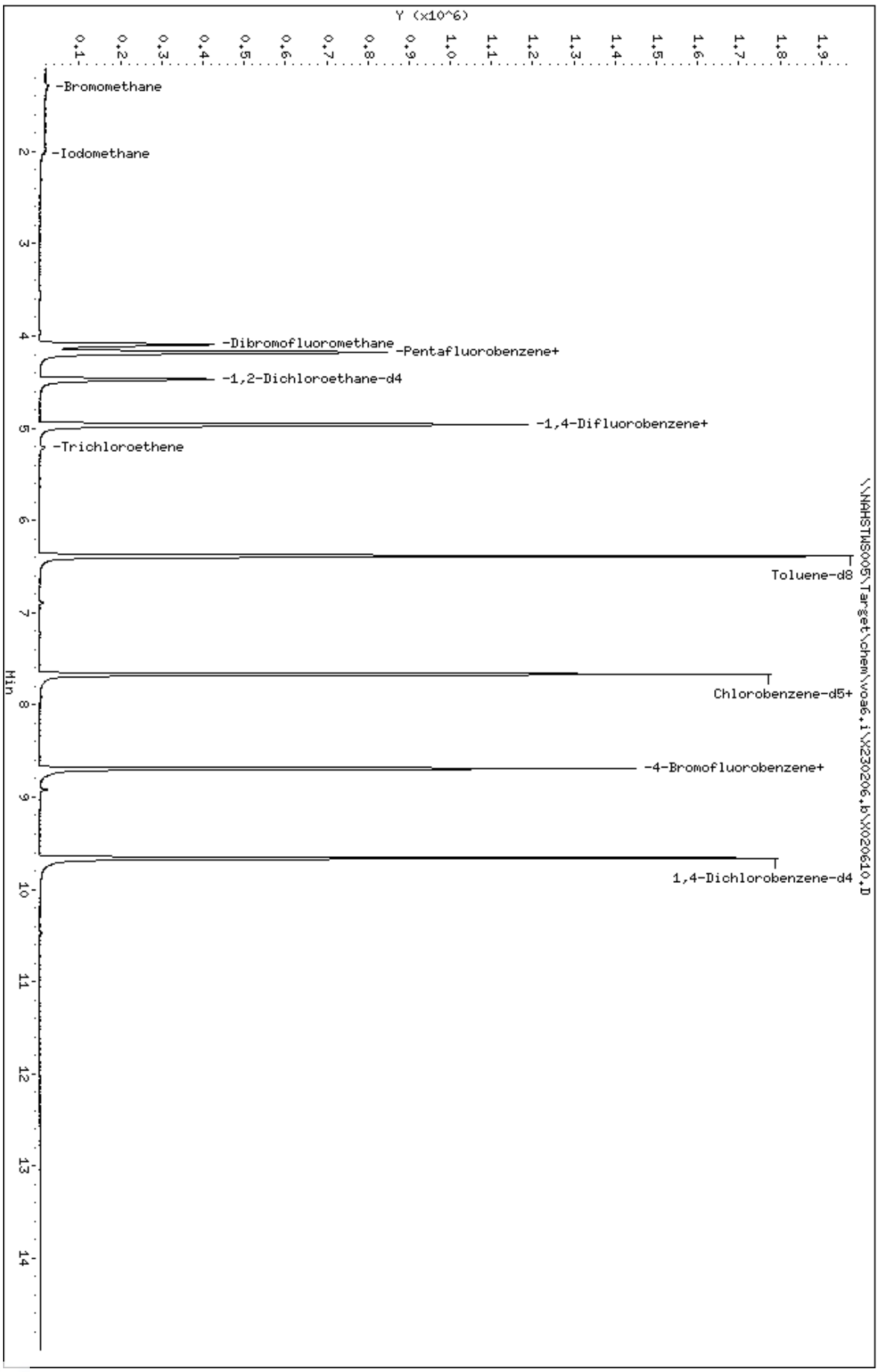
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.177	(1.000)	701513	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	305694	45.3674	45.36
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	346383	48.7271	48.72
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	999738	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	892876	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1166414	52.8660	52.86
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	435107	52.7555	52.75
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	460722	50.0000	
38 Trichloroethene	130	5.212	5.205	(1.051)	4774	0.70503	0.70(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020610.D
Date : 06-FEB-2023 13:48
Client ID: HS23011514-03
Sample Info: HS23011514-03;HS23011514-03;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020610.D Page 2

Date : 06-FEB-2023 13:48

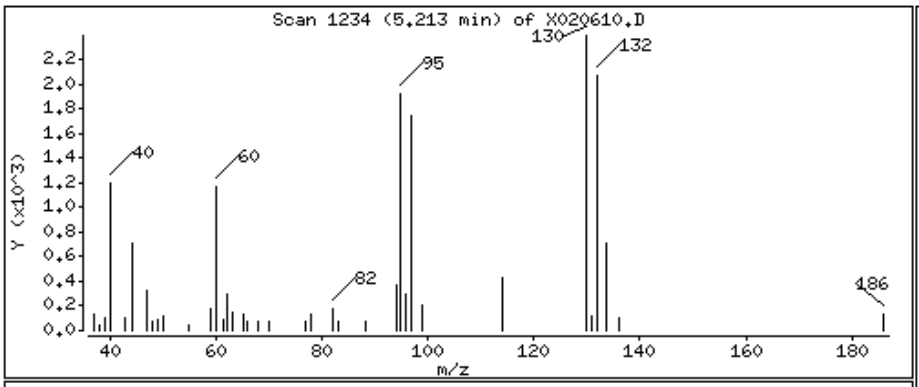
Client ID: HS23011514-03 Instrument: voa6.i

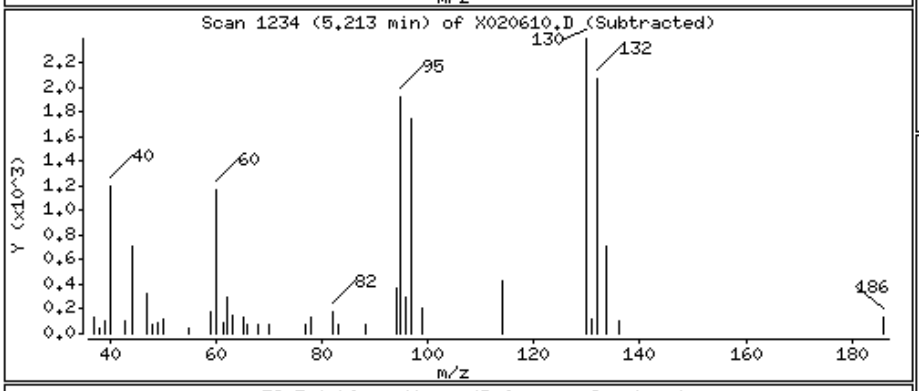
Sample Info: HS23011514-03;HS23011514-03;;;

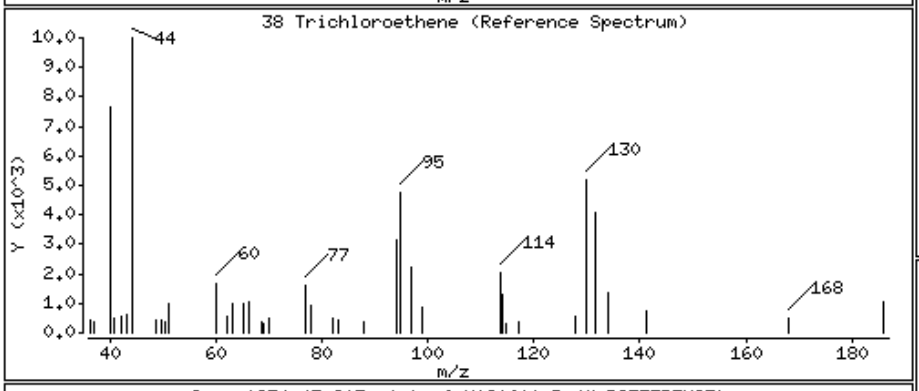
Purge Volume: 5.0 Operator: PC

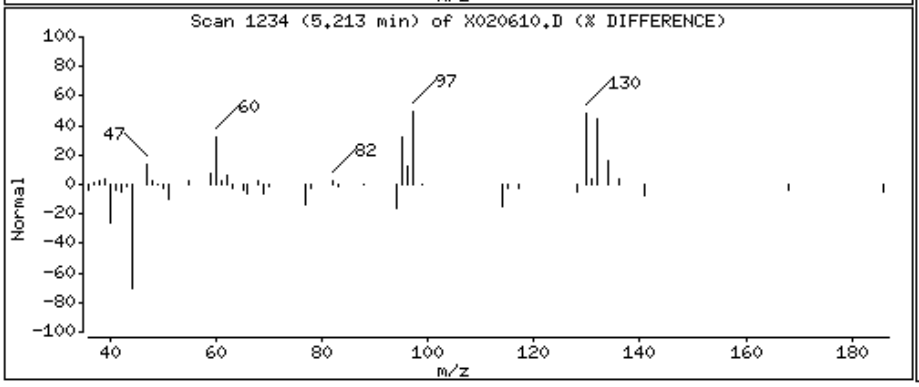
Column phase: DB624 Column diameter: 0.18

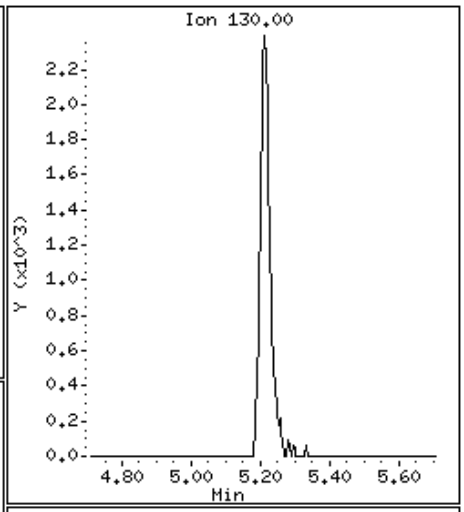
38 Trichloroethene Concentration: 0.70 ug/l

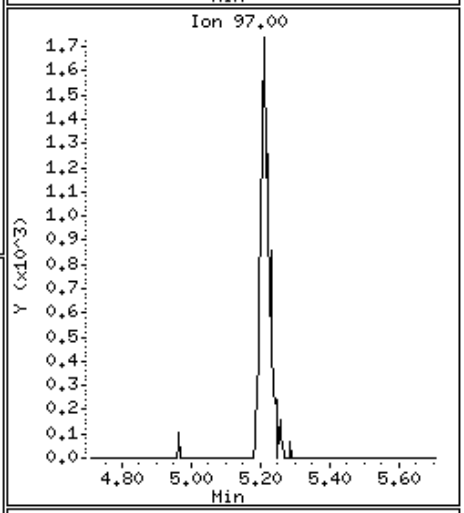


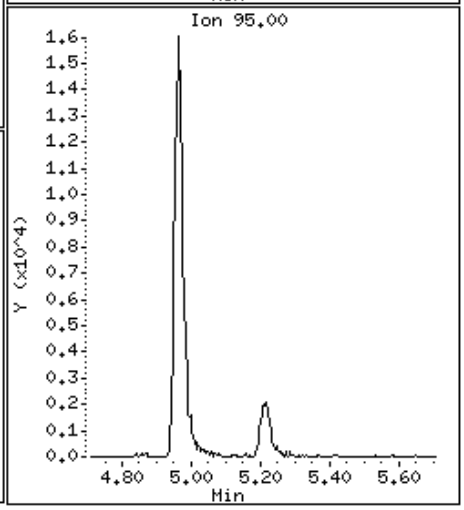












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Inj Date : 06-FEB-2023 13:48
InstruID : voa6.i
LabSampID : HS23011514-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D
Lab Smp Id: HS23011514-01 Client Smp ID: HS23011514-01
Inj Date : 06-FEB-2023 14:09
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-01;HS23011514-01;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.177	(1.000)	722750	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	312733	45.0471	45.04
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	350001	47.7946	47.79
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1032413	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	907637	50.0000	
$ 48 Toluene-d8	98	6.386	6.382	(0.833)	1184943	52.8324	52.83
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	443319	52.8769	52.87
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	478229	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	449257	71.1567	71.15
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	26092	4.75667	4.75(a)
27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	1295848	173.446	173.44
38 Trichloroethene	130	5.205	5.205	(1.049)	4894020	699.885	699.88(A)
20 trans-1,2-Dichloroethene	96	2.536	2.524	(0.607)	5772	0.94020	0.94(a)

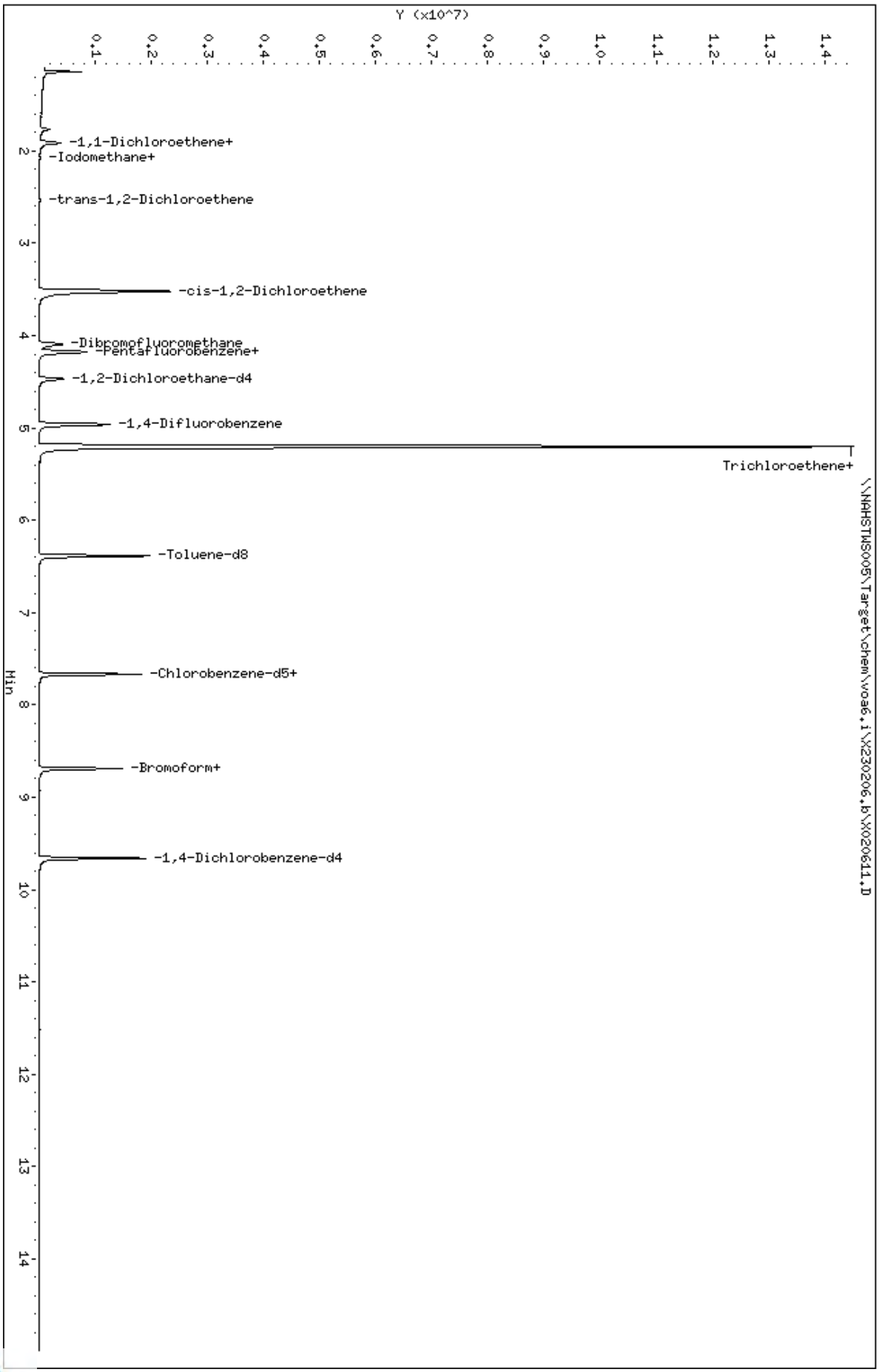
QC Flag Legend

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

exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D
Date : 06-FEB-2023 14:09
Client ID: HS230411514-01
Sample Info: HS230411514-01;HS230411514-01;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D Page 2

Date : 06-FEB-2023 14:09

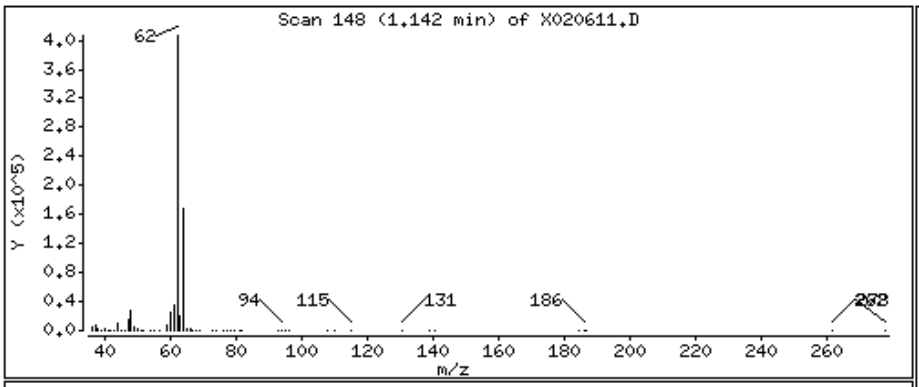
Client ID: HS23011514-01 Instrument: voa6.i

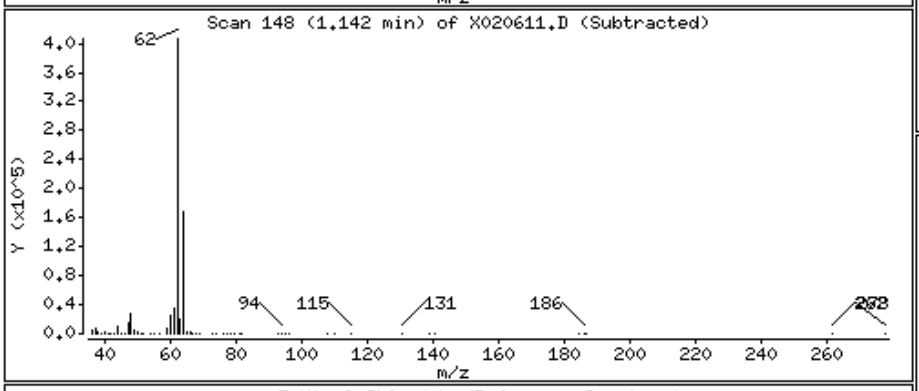
Sample Info: HS23011514-01;HS23011514-01;;;

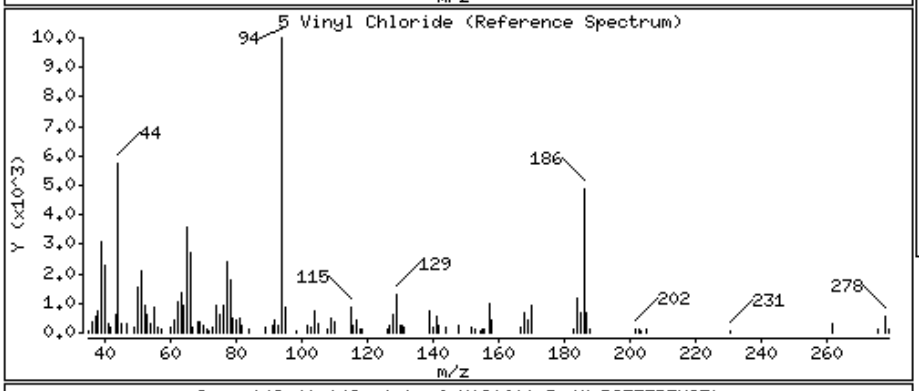
Purge Volume: 5.0 Operator: PC

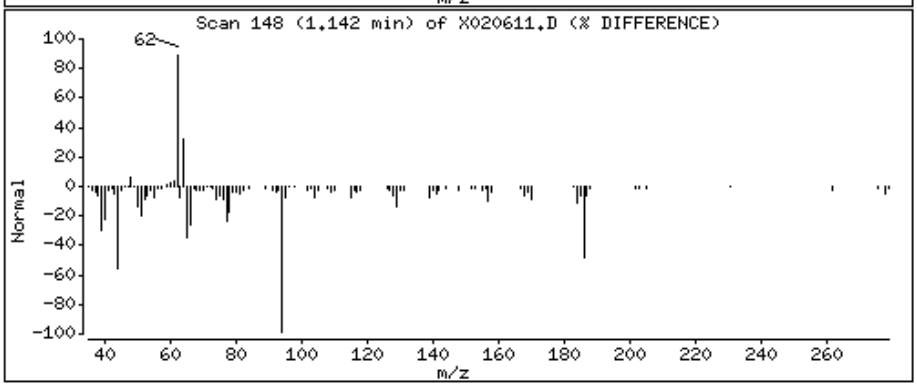
Column phase: DB624 Column diameter: 0.18

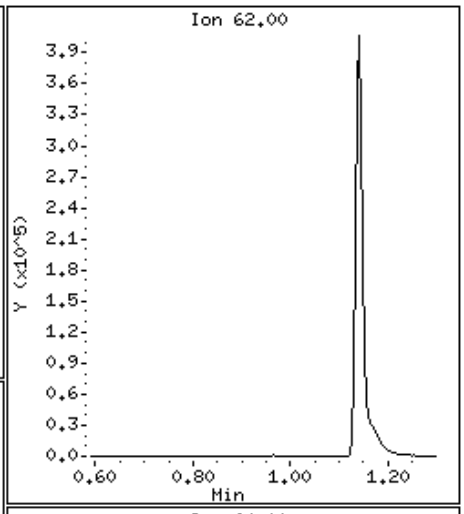
5 Vinyl Chloride Concentration: 71.15 ug/l

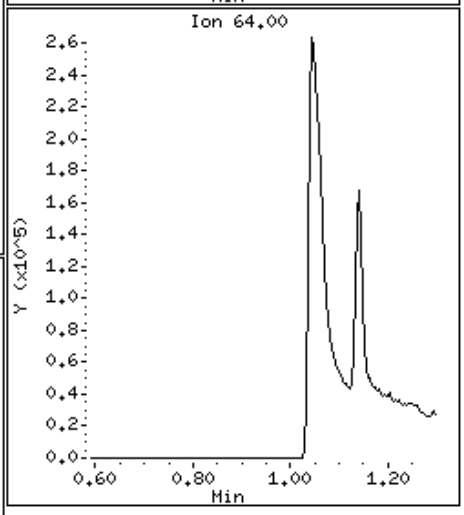












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D Page 3

Date : 06-FEB-2023 14:09

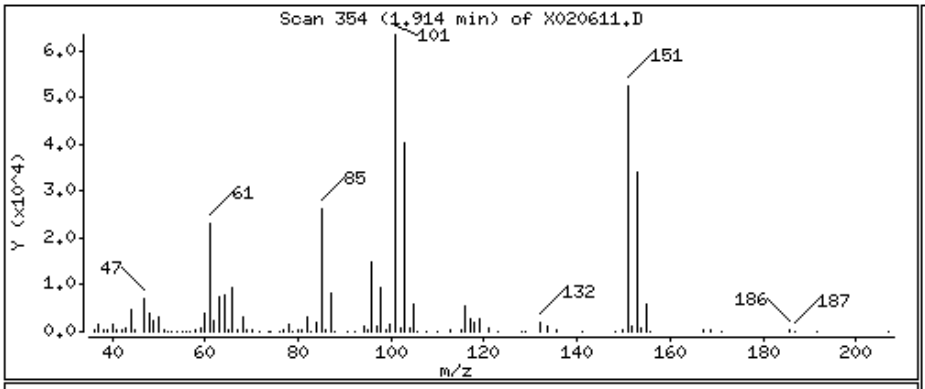
Client ID: HS23011514-01 Instrument: voa6.i

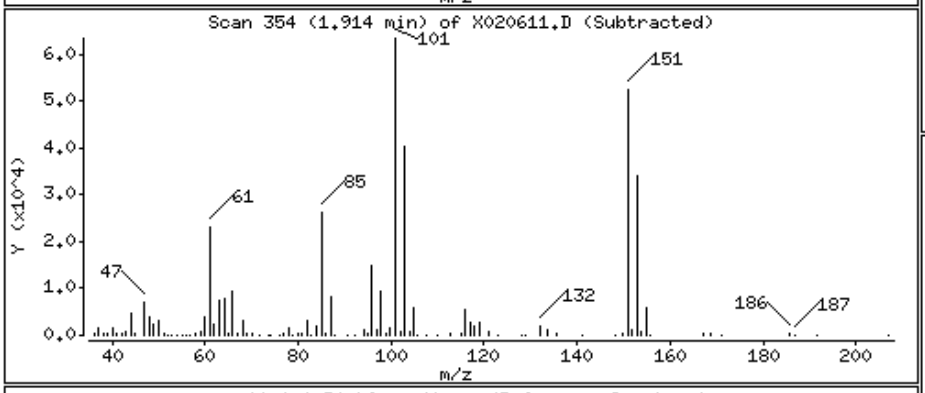
Sample Info: HS23011514-01;HS23011514-01;;;

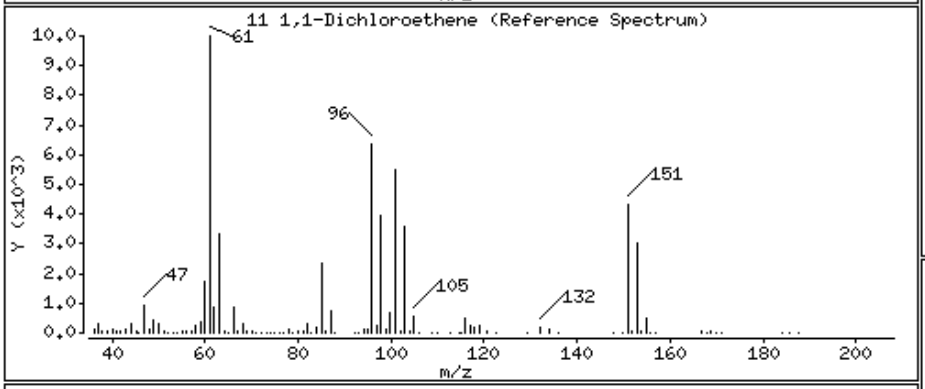
Purge Volume: 5.0 Operator: PC

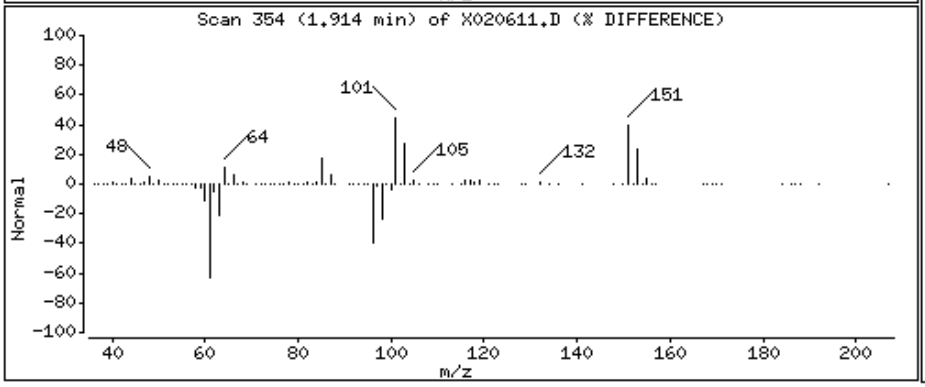
Column phase: DB624 Column diameter: 0.18

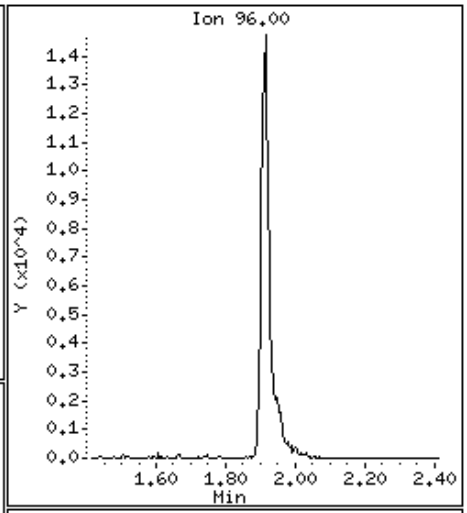
11 1,1-Dichloroethene Concentration: 4.75 ug/l

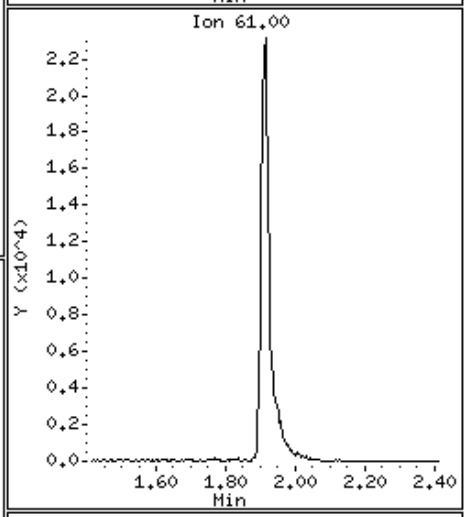


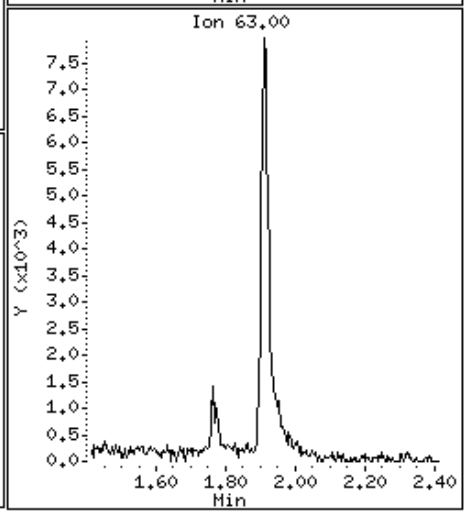












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D Page 4

Date : 06-FEB-2023 14:09

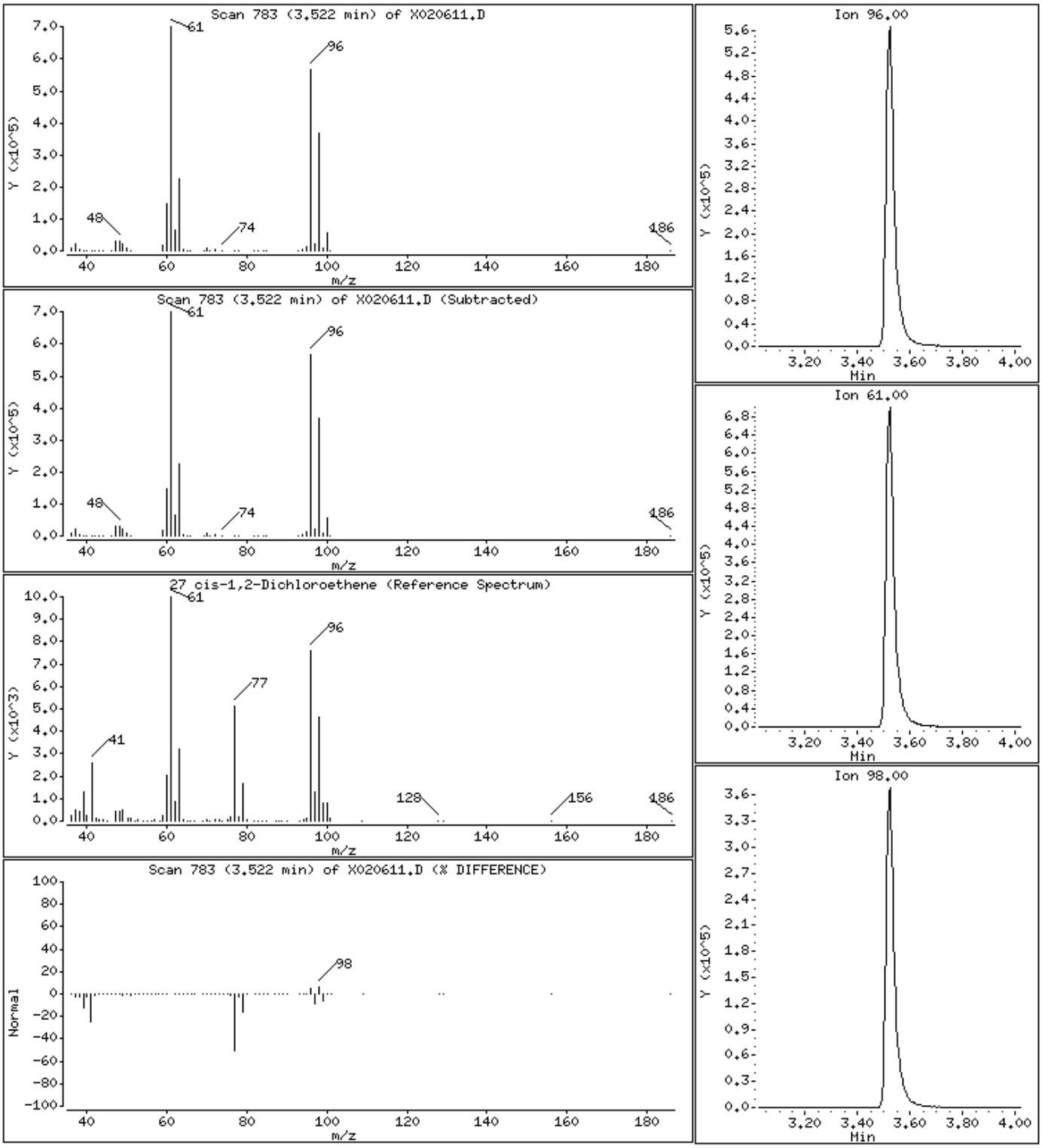
Client ID: HS23011514-01 Instrument: voa6.i

Sample Info: HS23011514-01;HS23011514-01;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

27 cis-1,2-Dichloroethene Concentration: 173.44 ug/l



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D Page 5

Date : 06-FEB-2023 14:09

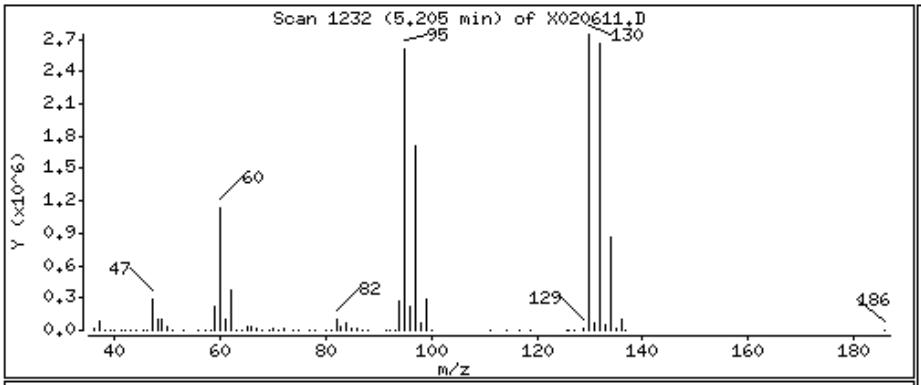
Client ID: HS23011514-01 Instrument: voa6.i

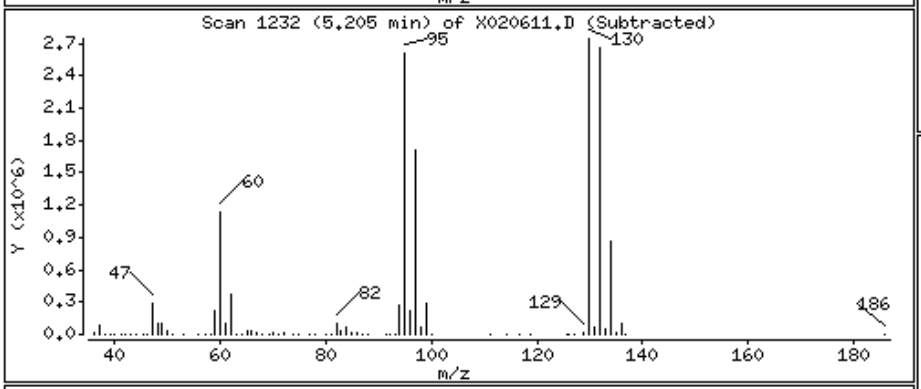
Sample Info: HS23011514-01;HS23011514-01;;;

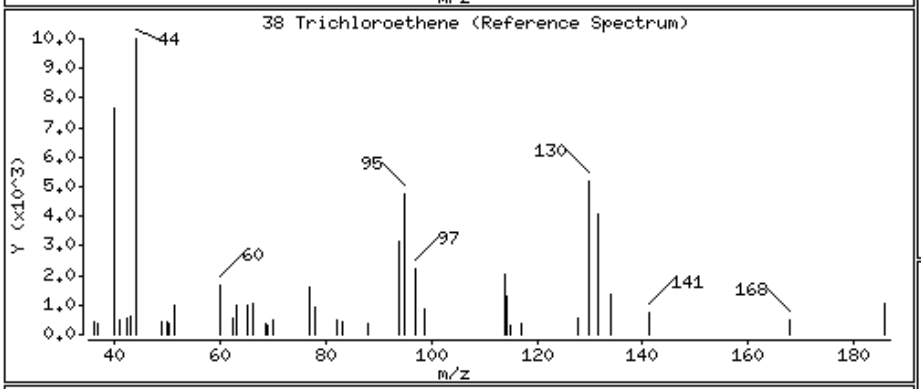
Purge Volume: 5.0 Operator: PC

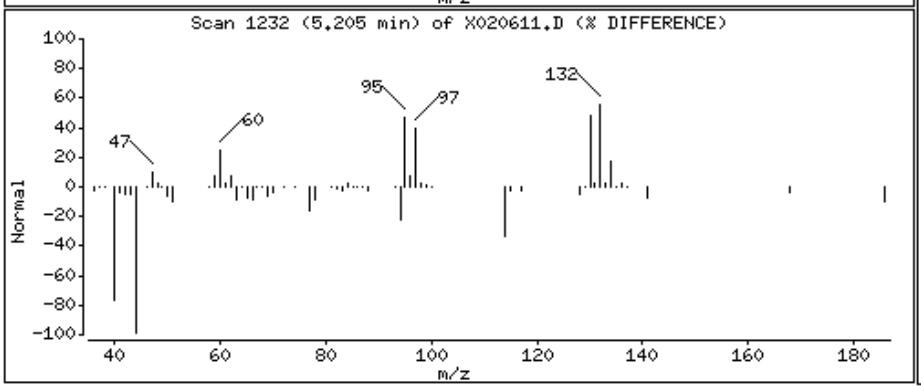
Column phase: DB624 Column diameter: 0.18

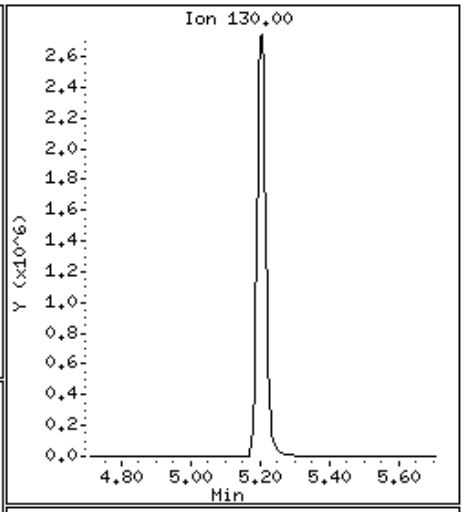
38 Trichloroethene Concentration: 699.88 ug/l

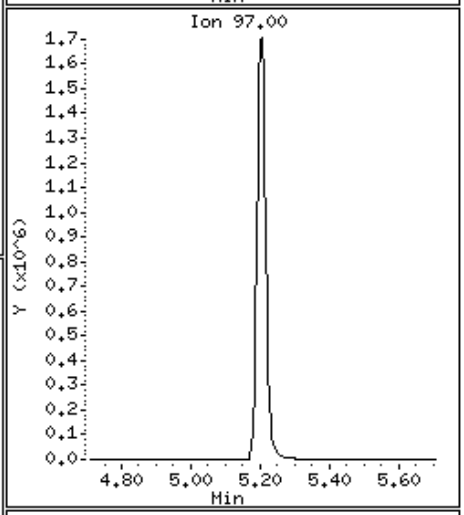


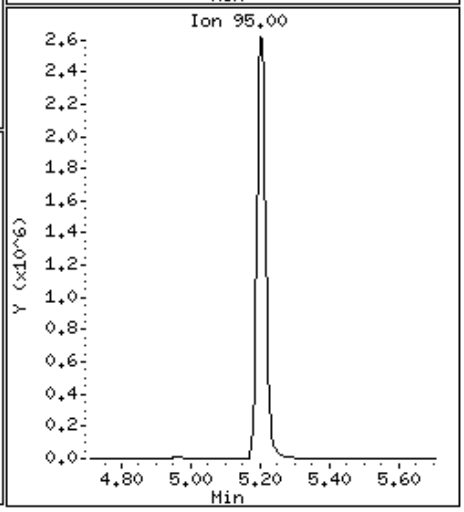












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D Page 6

Date : 06-FEB-2023 14:09

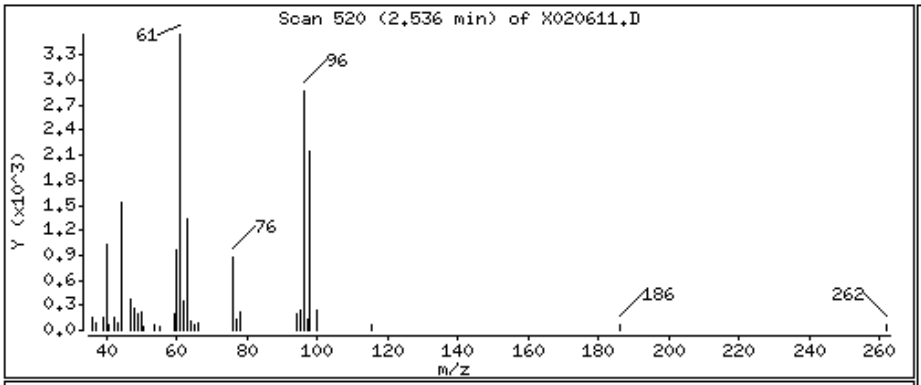
Client ID: HS23011514-01 Instrument: voa6.i

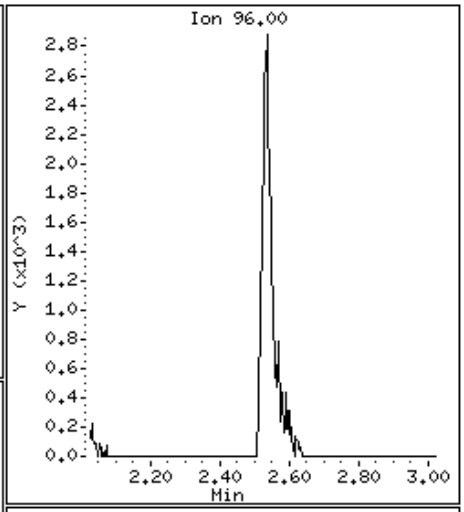
Sample Info: HS23011514-01;HS23011514-01;;;

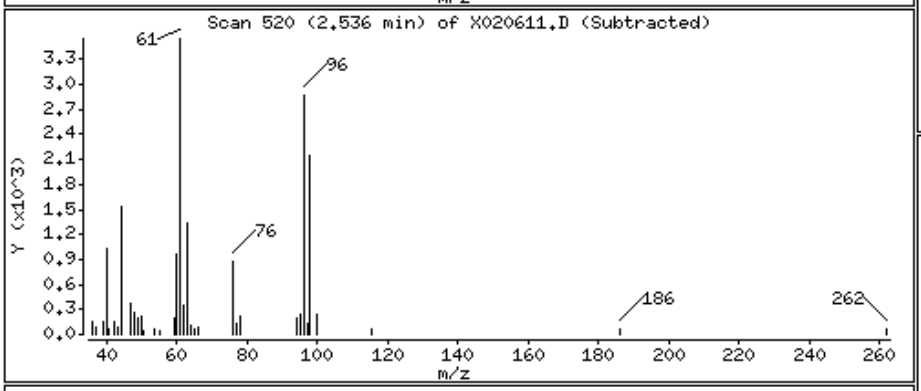
Purge Volume: 5.0 Operator: PC

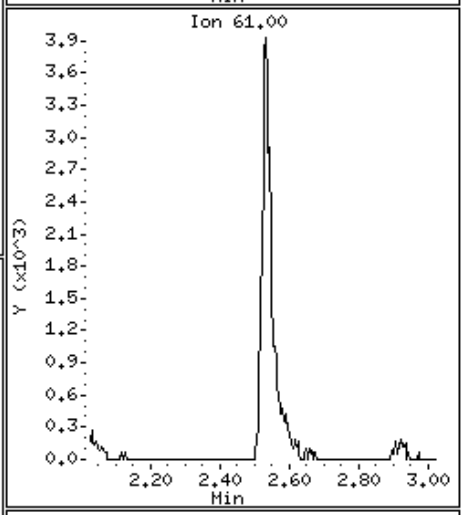
Column phase: DB624 Column diameter: 0.18

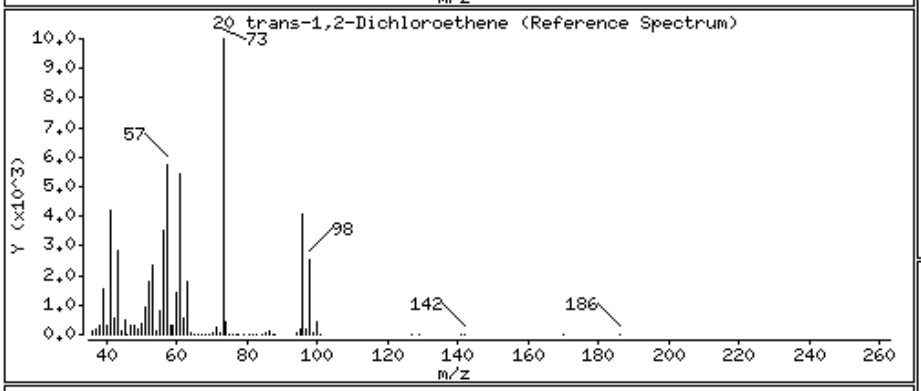
20 trans-1,2-Dichloroethene Concentration: 0.94 ug/l

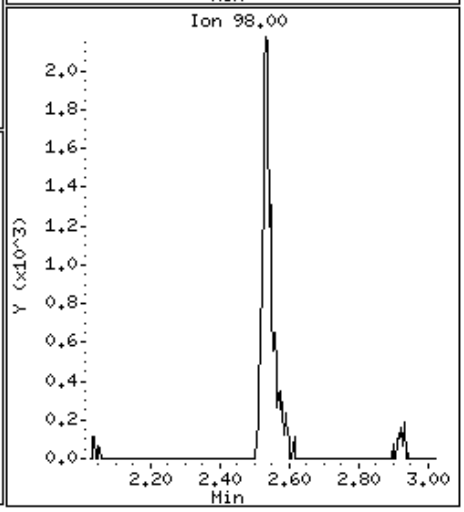


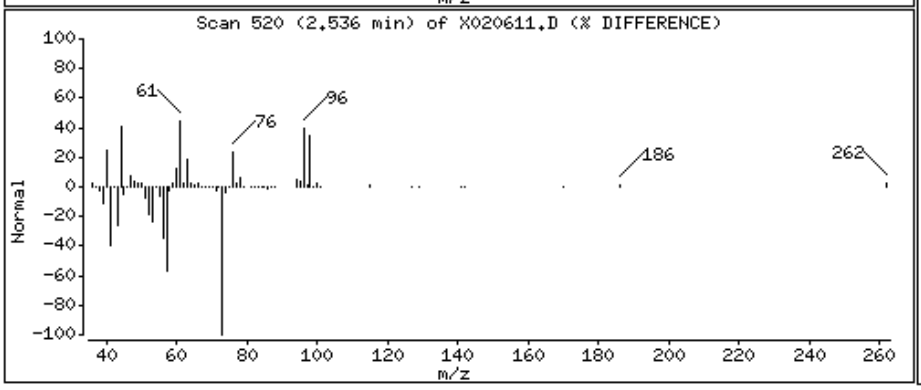












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020611.D
Inj Date : 06-FEB-2023 14:09
InstruID : voa6.i
LabSampID : HS23011514-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D
Lab Smp Id: HS23011514-02 Client Smp ID: HS23011514-02
Inj Date : 06-FEB-2023 14:30
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-02;HS23011514-02;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 12
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

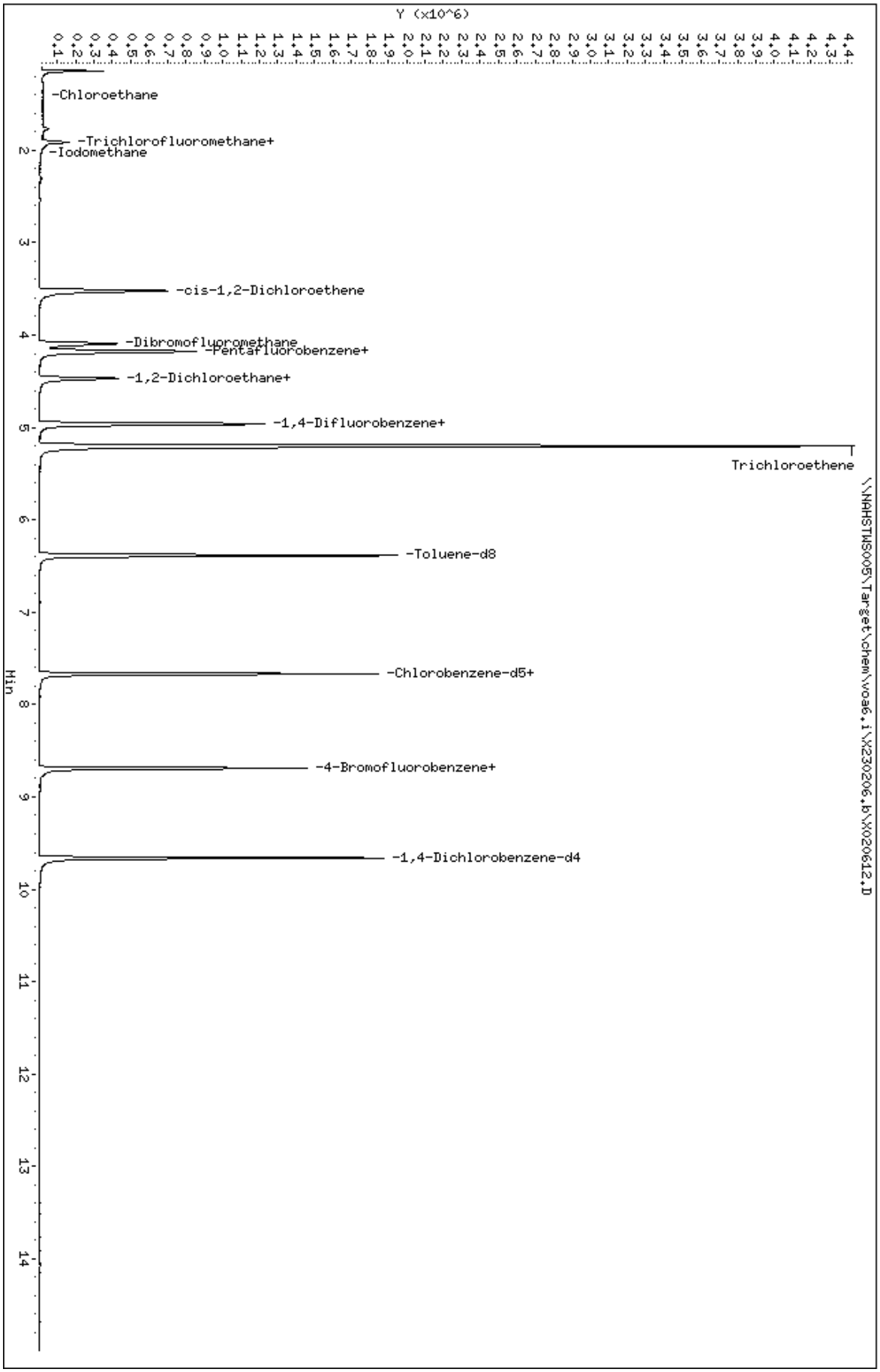
Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.177	(1.000)	712320	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	313538	45.8272	45.82
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	348196	48.2417	48.24
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1017064	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	907028	50.0000	
$ 48 Toluene-d8	98	6.386	6.382	(0.833)	1171629	52.2738	52.27
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	442278	52.7883	52.78
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	471719	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	227034	36.4859	182.42
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	35212	6.51327	32.56
27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.844)	389833	52.9422	264.71
33 1,2-Dichloroethane	62	4.564	4.552	(0.920)	5112	0.61345	3.06(a)
38 Trichloroethene	130	5.201	5.205	(1.048)	1511206	219.376	1096.88(A)

QC Flag Legend

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

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D
Date : 06-FEB-2023 14:30
Client ID: HS23011514-02
Sample Info: HS23011514-02;HS23011514-02;;;
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\X230206.b\X020612.D

Date : 06-FEB-2023 14:30

Client ID: HS23011514-02

Instrument: voa6.i

Sample Info: HS23011514-02;HS23011514-02;;;

Purge Volume: 5.0

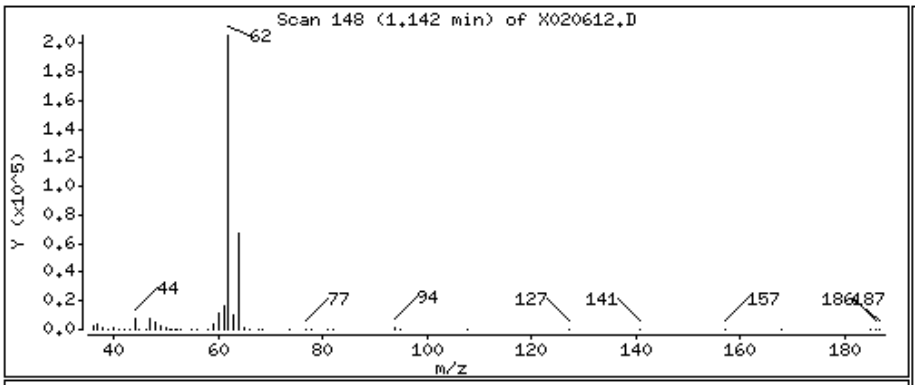
Operator: PC

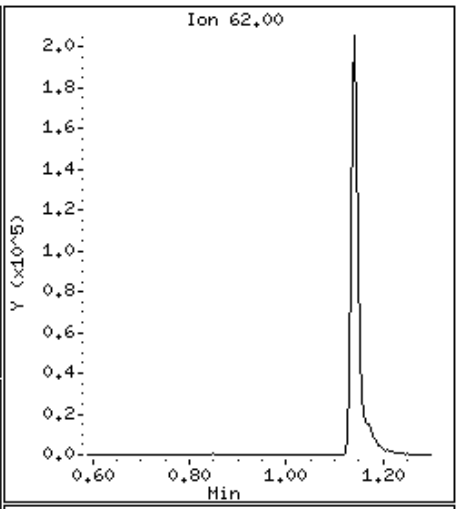
Column phase: DB624

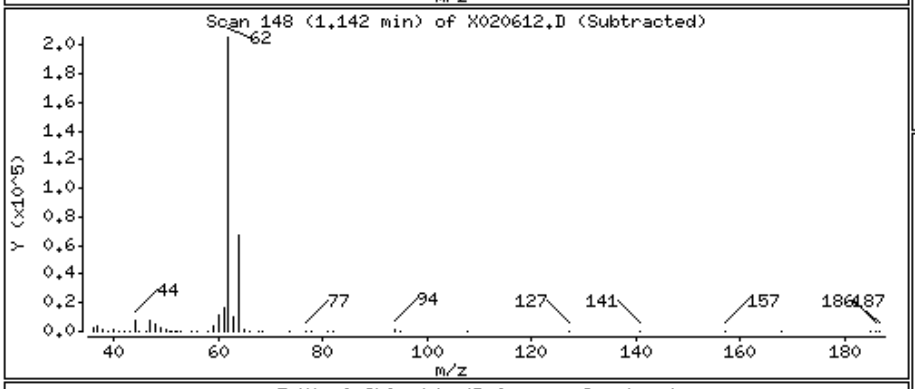
Column diameter: 0.18

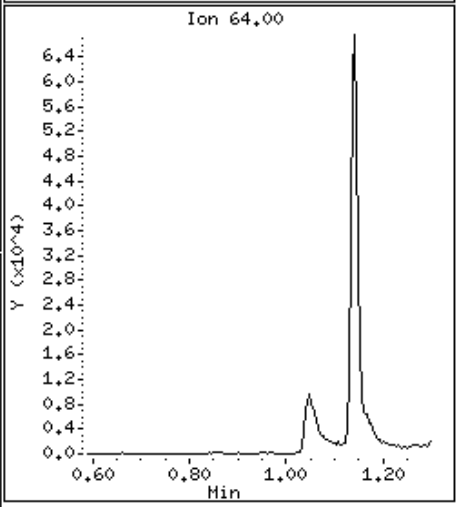
5 Vinyl Chloride

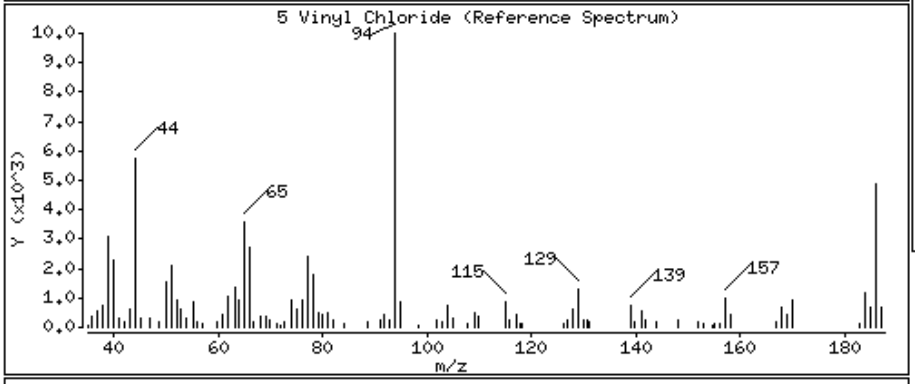
Concentration: 182.42 ug/l

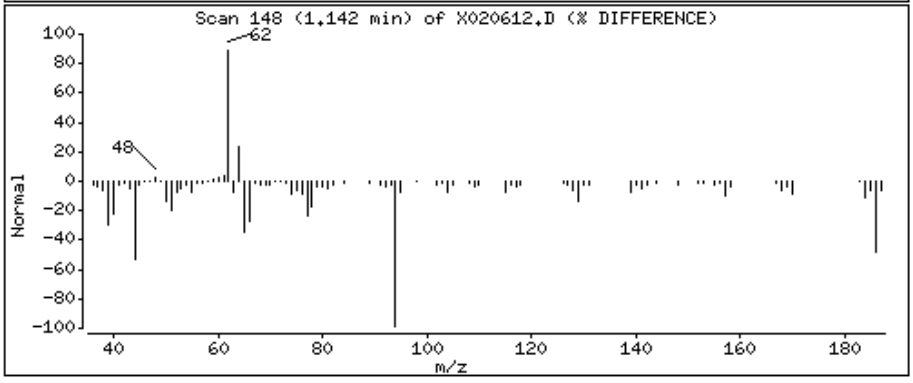












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D Page 3

Date : 06-FEB-2023 14:30

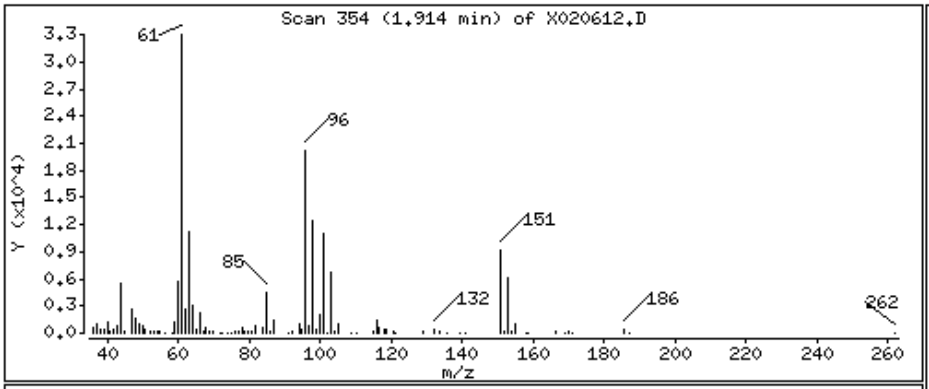
Client ID: HS23011514-02 Instrument: voa6.i

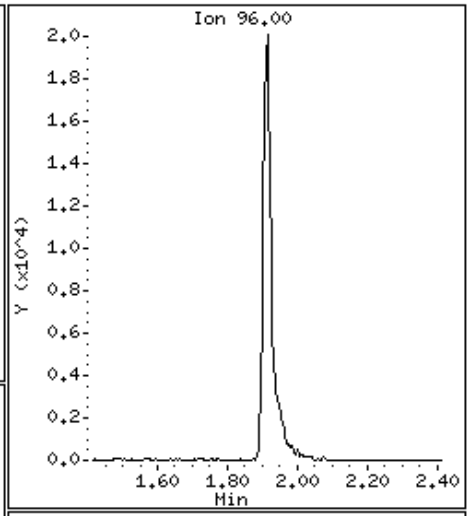
Sample Info: HS23011514-02;HS23011514-02;;;

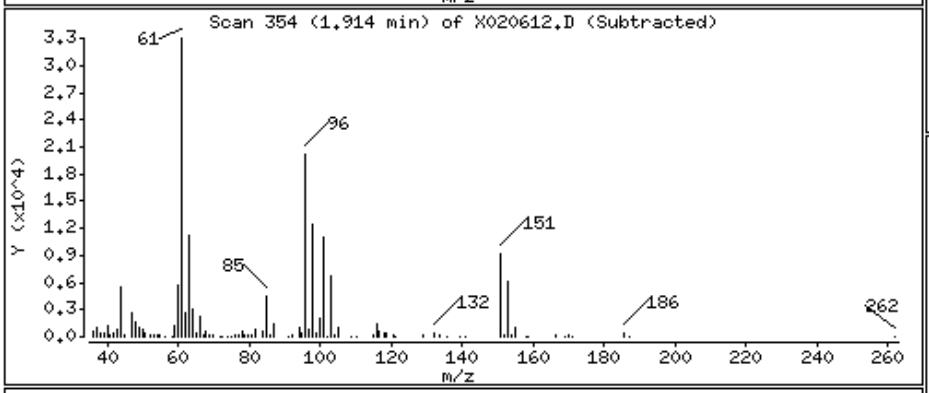
Purge Volume: 5.0 Operator: PC

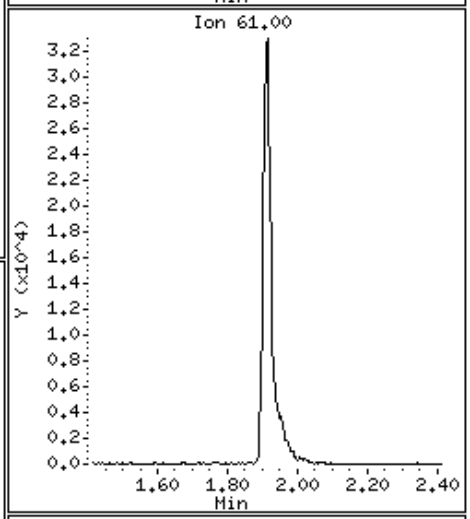
Column phase: DB624 Column diameter: 0.18

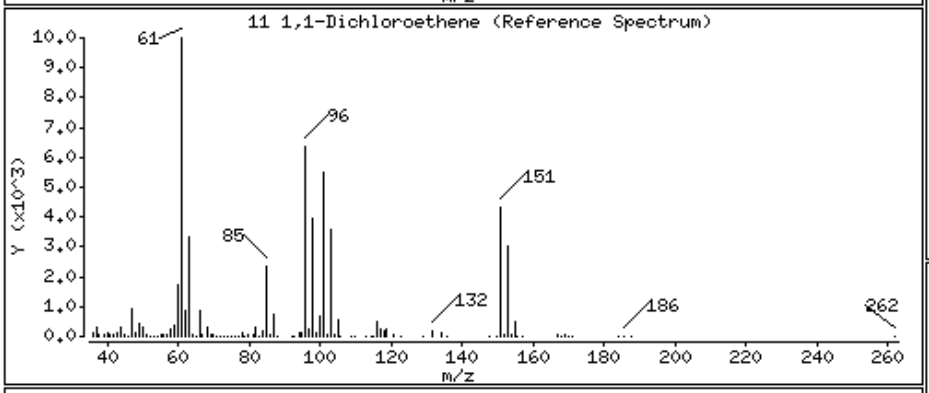
11 1,1-Dichloroethene Concentration: 32.56 ug/l

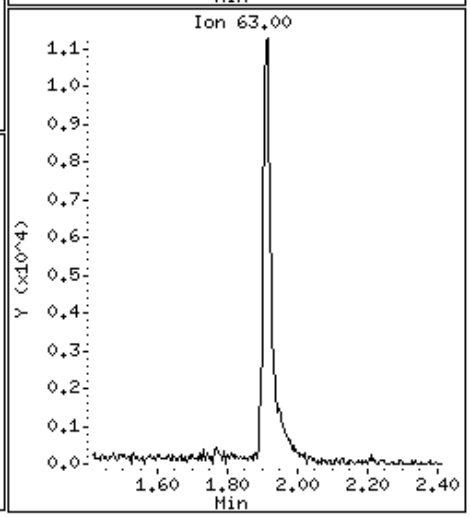


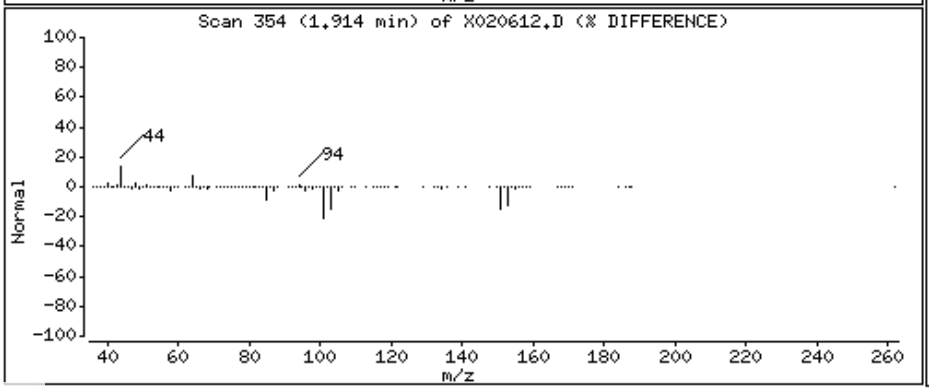












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D Page 4

Date : 06-FEB-2023 14:30

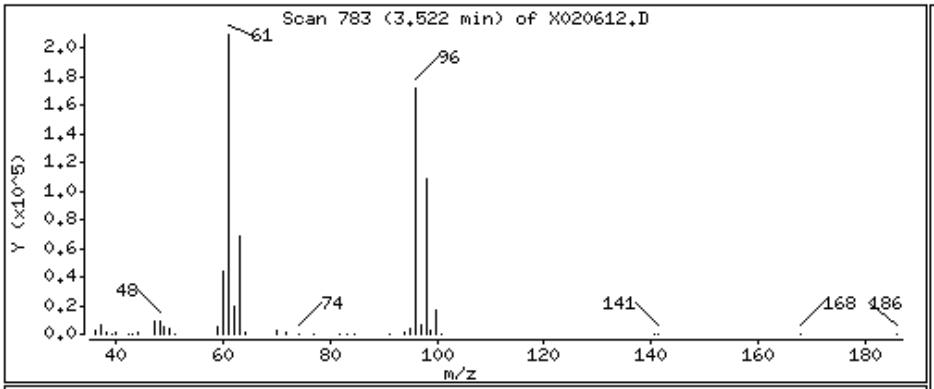
Client ID: HS23011514-02 Instrument: voa6.i

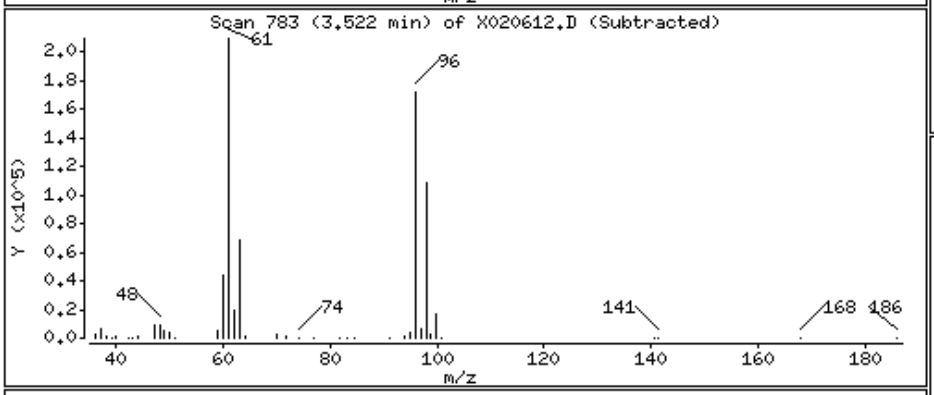
Sample Info: HS23011514-02;HS23011514-02;;;

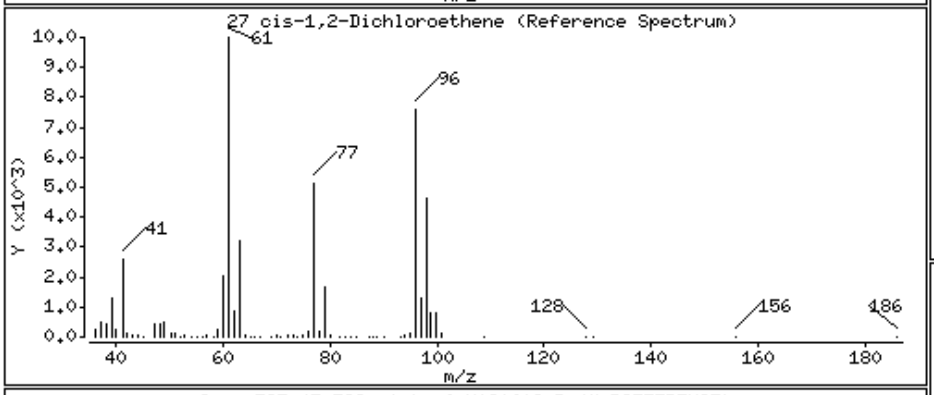
Purge Volume: 5.0 Operator: PC

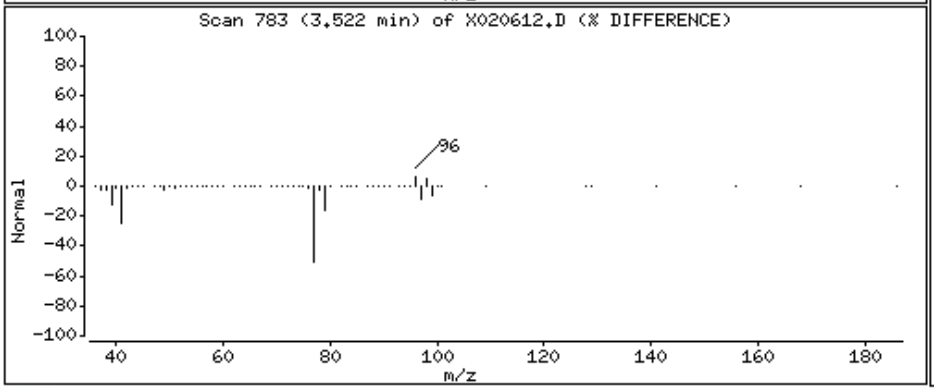
Column phase: DB624 Column diameter: 0.18

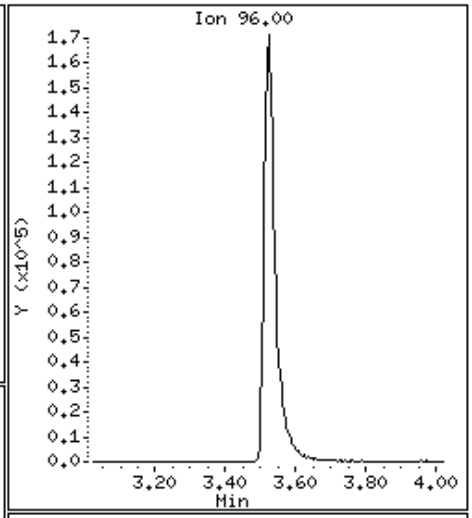
27 cis-1,2-Dichloroethene Concentration: 264.71 ug/l

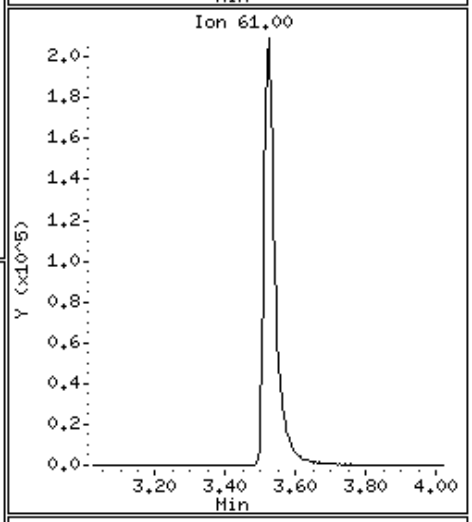


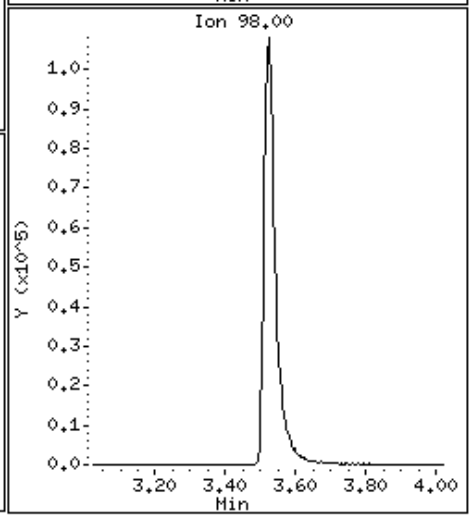












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D Page 5

Date : 06-FEB-2023 14:30

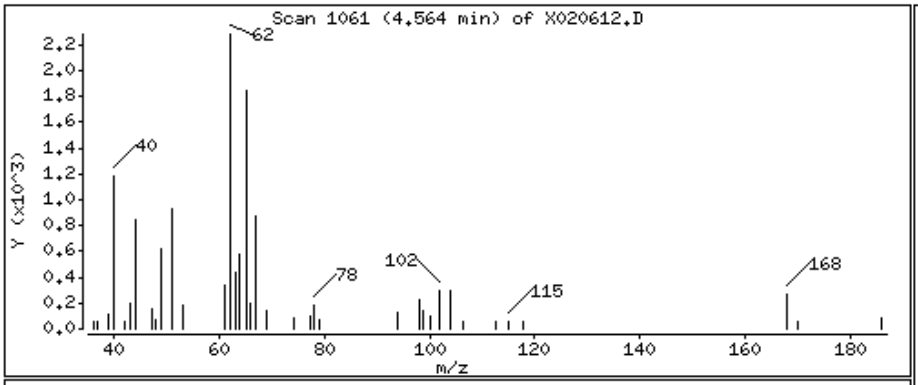
Client ID: HS23011514-02 Instrument: voa6.i

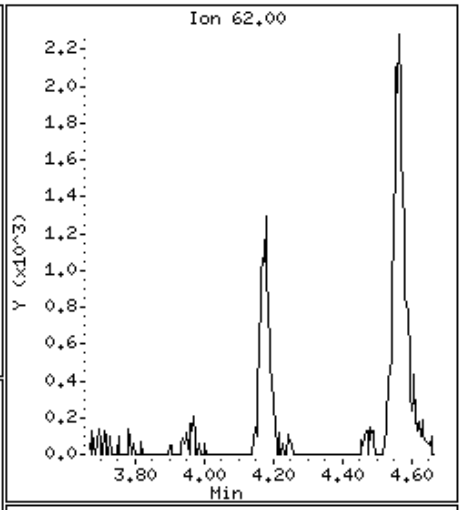
Sample Info: HS23011514-02;HS23011514-02;;;

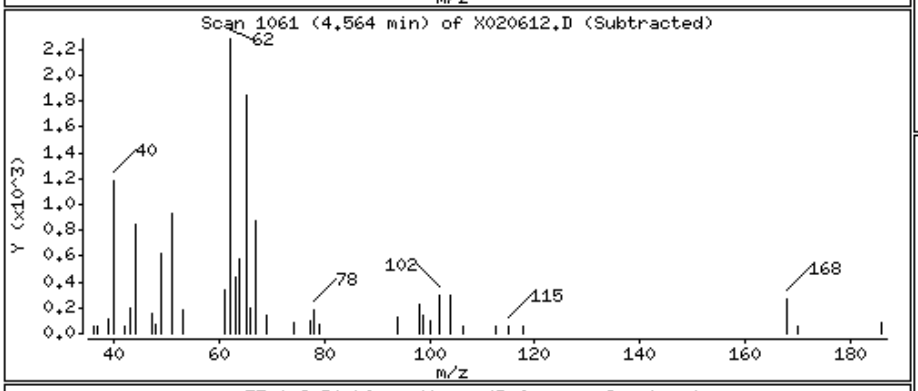
Purge Volume: 5.0 Operator: PC

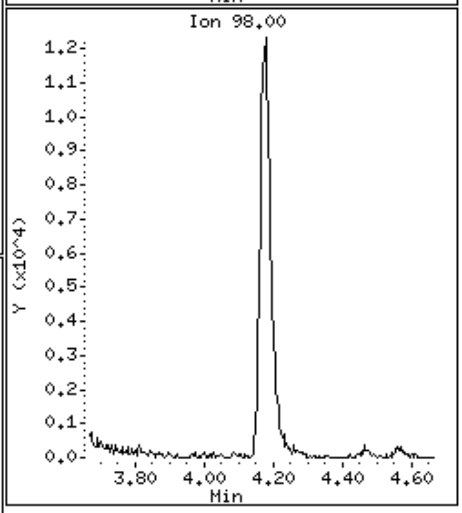
Column phase: DB624 Column diameter: 0.18

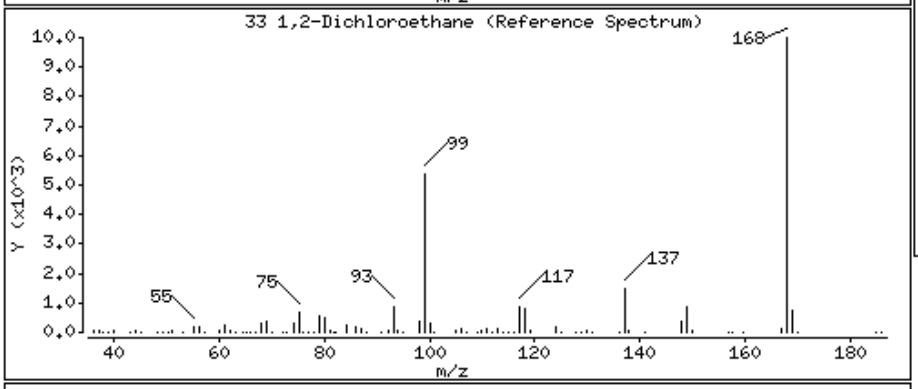
33 1,2-Dichloroethane Concentration: 3.06 ug/l

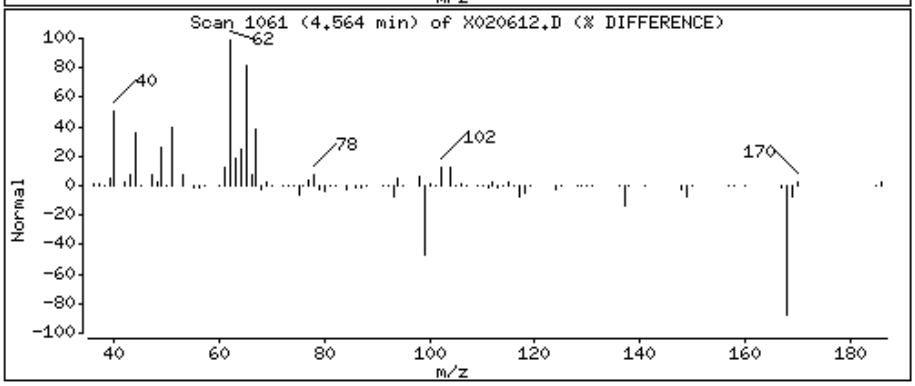












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D Page 6

Date : 06-FEB-2023 14:30

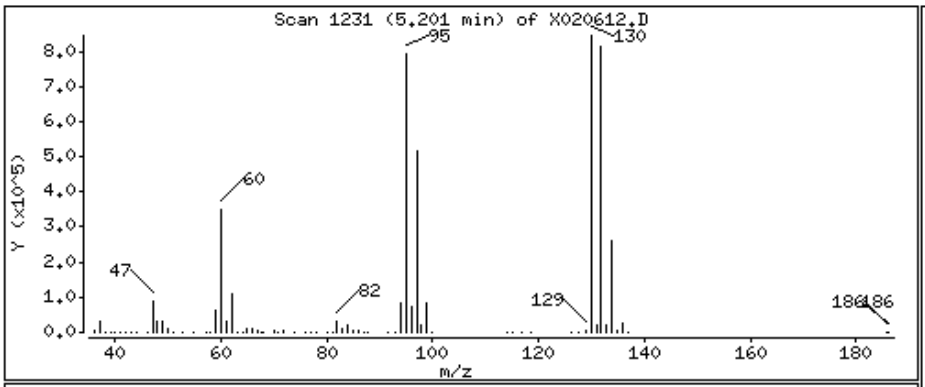
Client ID: HS23011514-02 Instrument: voa6.i

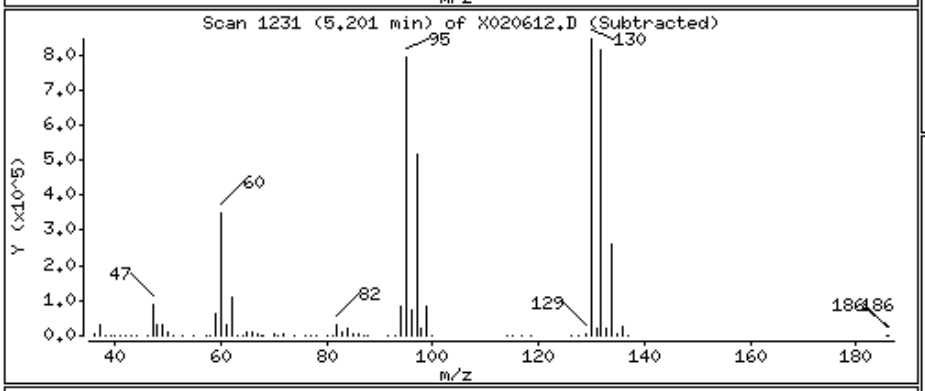
Sample Info: HS23011514-02;HS23011514-02;;;

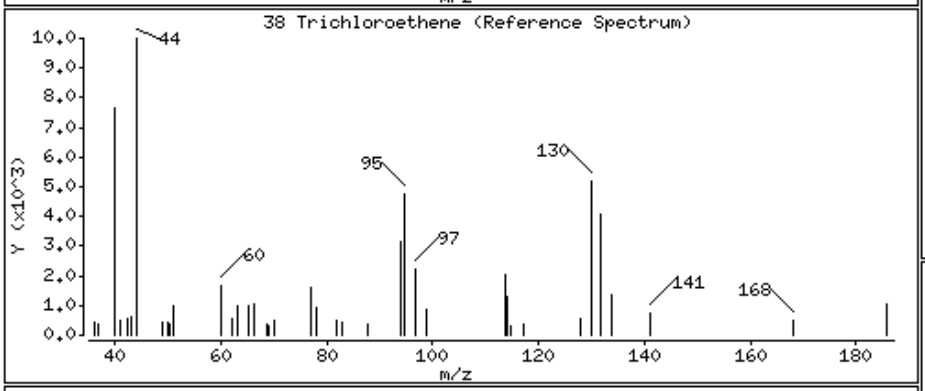
Purge Volume: 5.0 Operator: PC

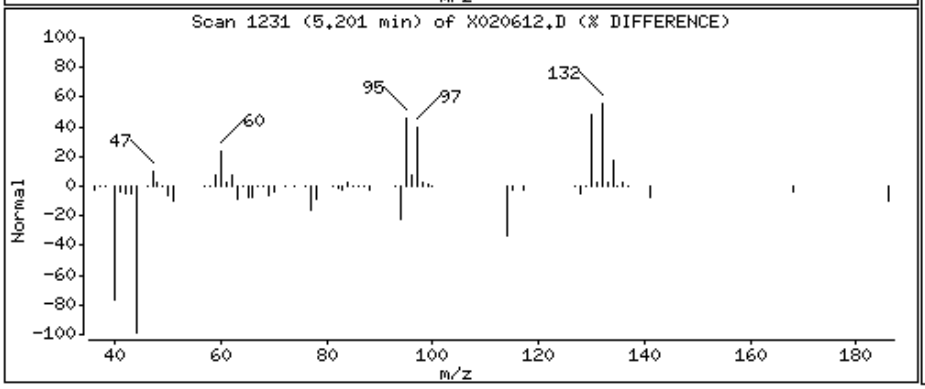
Column phase: DB624 Column diameter: 0.18

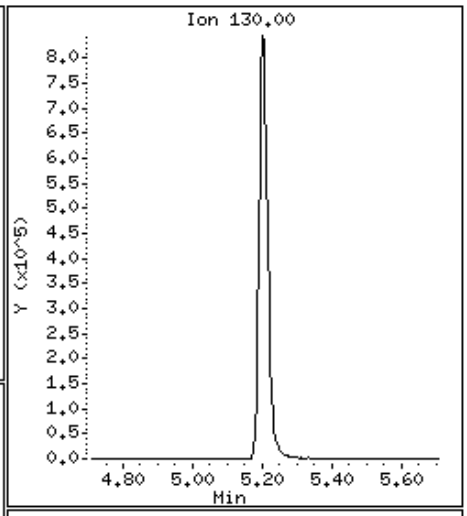
38 Trichloroethene Concentration: 1096.88 ug/l

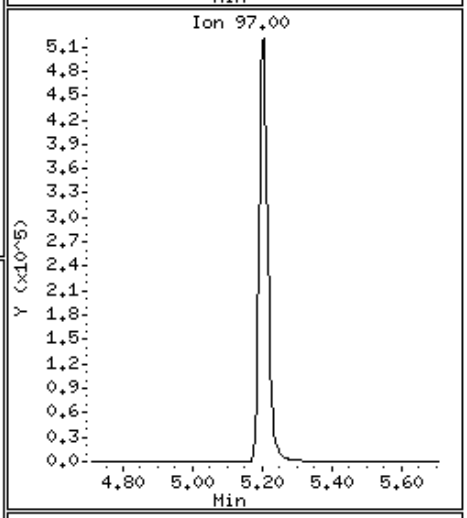


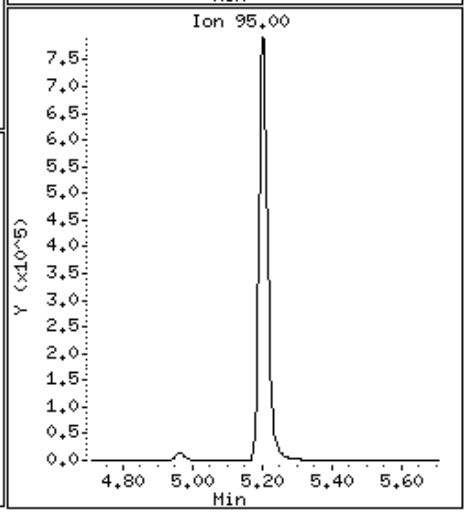












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020612.D
Inj Date : 06-FEB-2023 14:30
InstruID : voa6.i
LabSampID : HS23011514-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D
Lab Smp Id: HS23011514-04 Client Smp ID: HS23011514-04
Inj Date : 06-FEB-2023 14:51
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-04;HS23011514-04;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 13
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

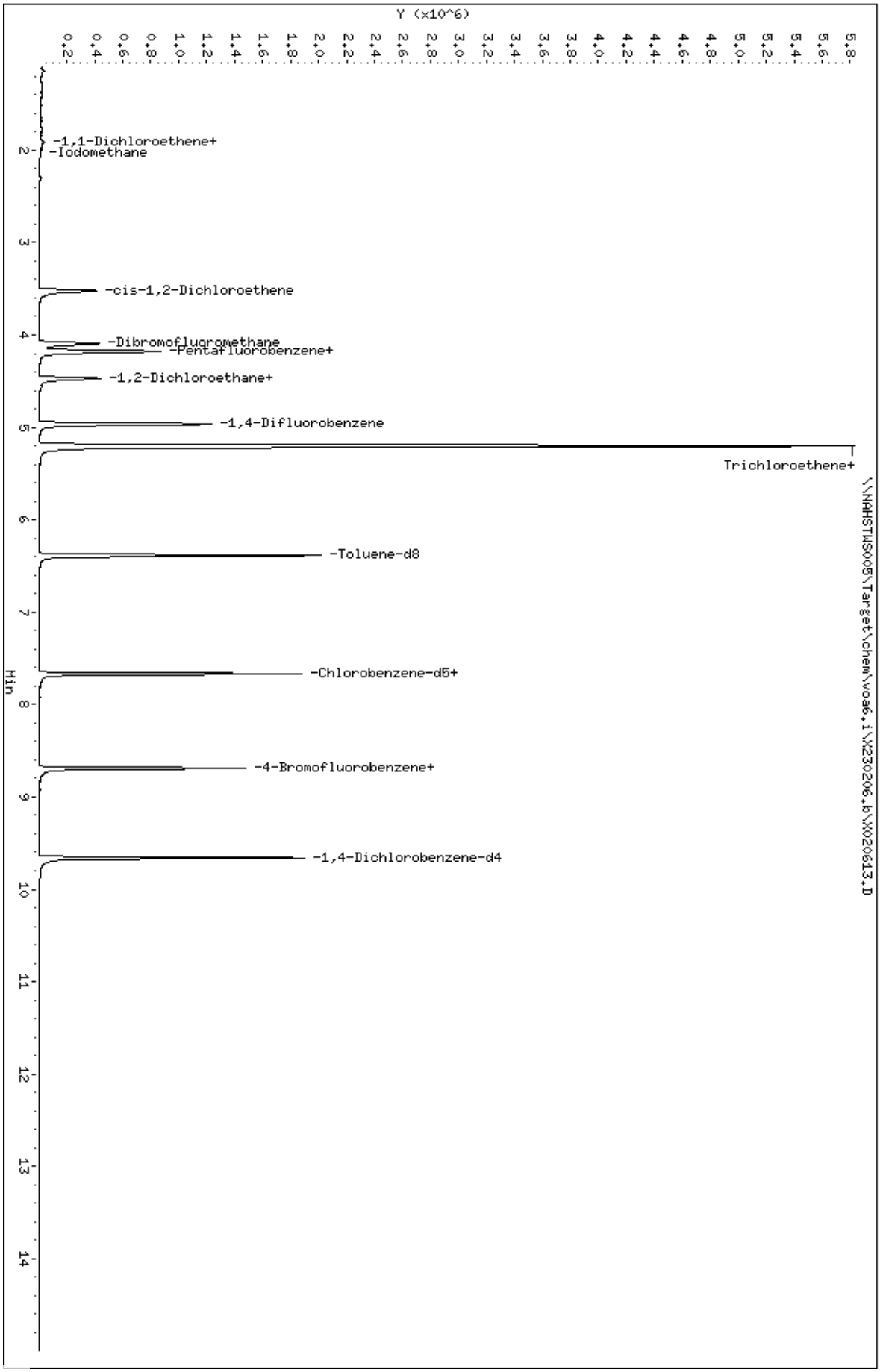
Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.177	(1.000)	721079	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	314171	45.3602	45.36
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	352528	48.2486	48.24
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1036167	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	917353	50.0000	
$ 48 Toluene-d8	98	6.386	6.382	(0.833)	1187548	52.3877	52.38
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	445052	52.5218	52.52
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	477943	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	19615	3.11397	15.56(a)
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	4360	0.79669	3.98(a)
27 cis-1,2-Dichloroethene	96	3.525	3.521	(0.844)	238571	32.0061	160.03
33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	8559	1.00817	5.04(a)
38 Trichloroethene	130	5.201	5.205	(1.048)	1950858	277.978	1389.88(A)

QC Flag Legend

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

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230206,b\X020613.D
Date : 06-FEB-2023 14:51
Client ID: HS23011514-04
Sample Info: HS23011514-04;HS23011514-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D Page 2

Date : 06-FEB-2023 14:51

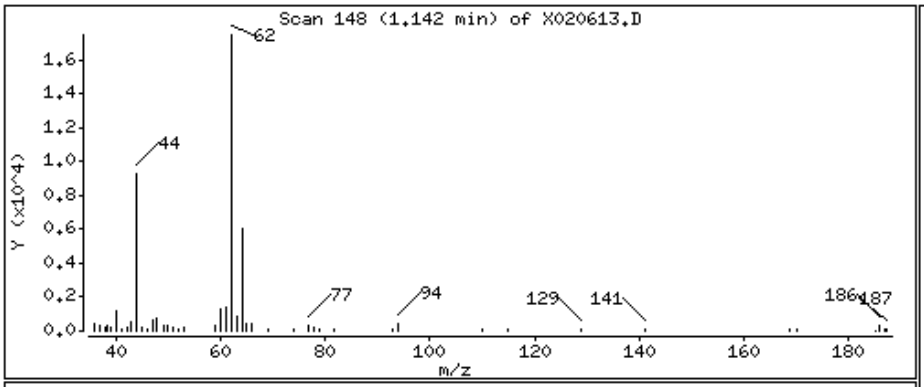
Client ID: HS23011514-04 Instrument: voa6.i

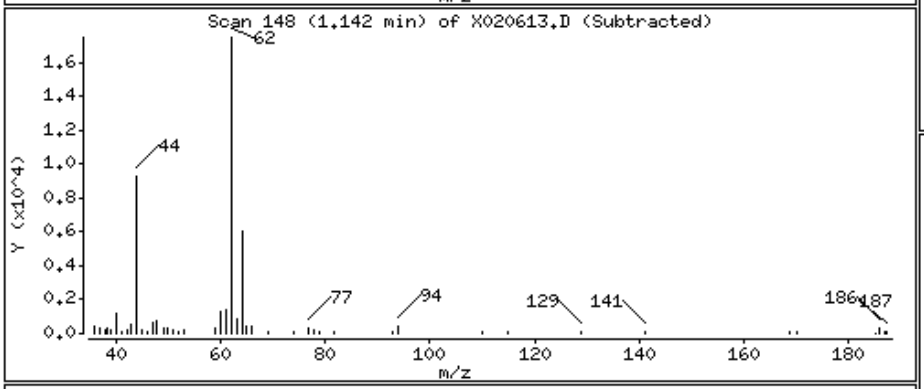
Sample Info: HS23011514-04;HS23011514-04;;;

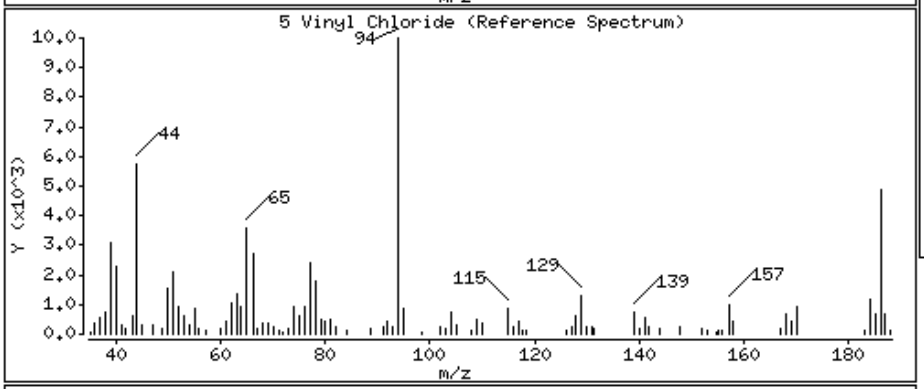
Purge Volume: 5.0 Operator: PC

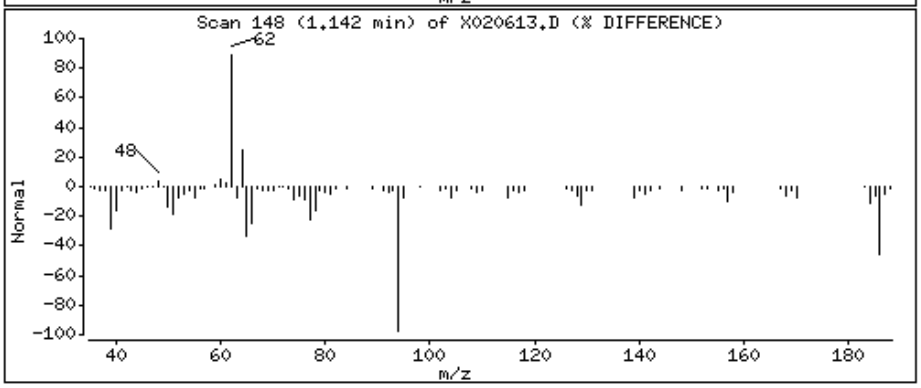
Column phase: DB624 Column diameter: 0.18

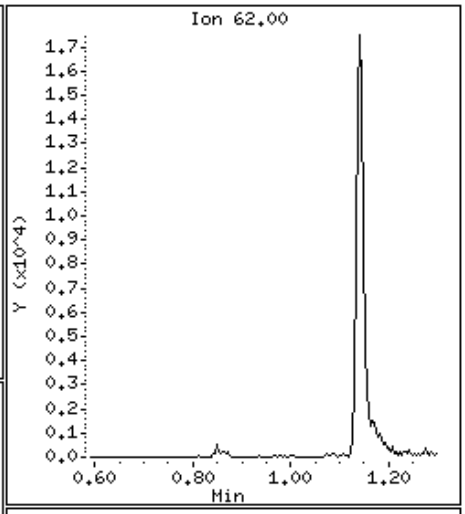
5 Vinyl Chloride Concentration: 15.56 ug/l

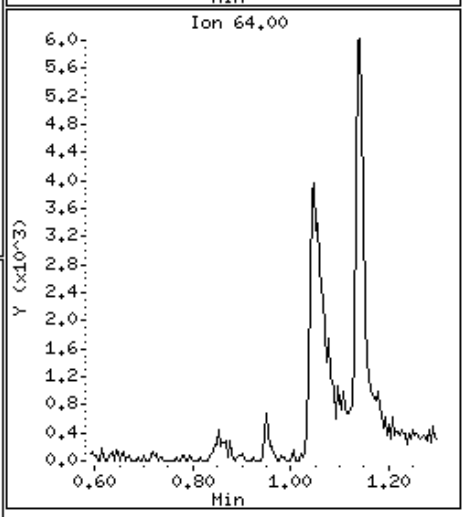












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D Page 3

Date : 06-FEB-2023 14:51

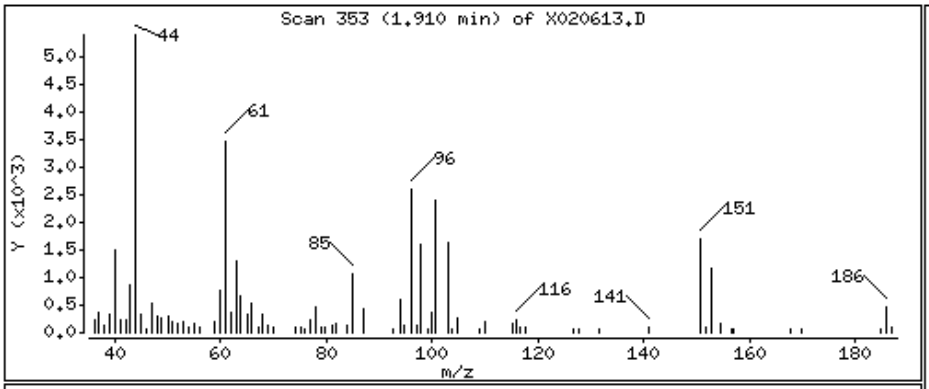
Client ID: HS23011514-04 Instrument: voa6.i

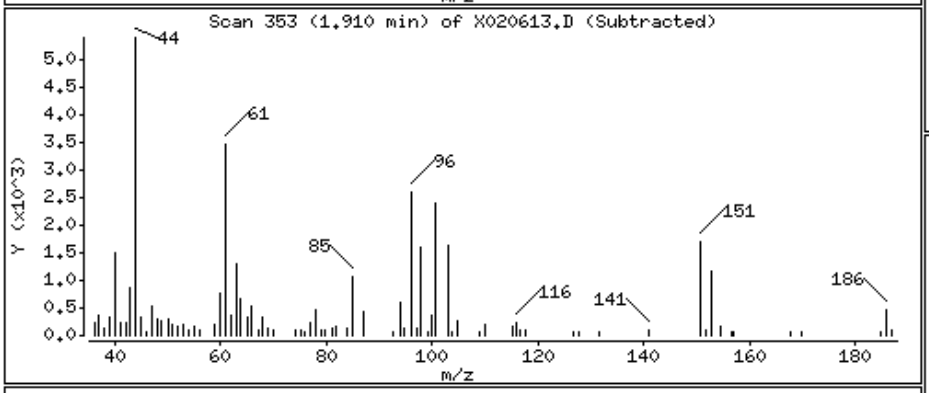
Sample Info: HS23011514-04;HS23011514-04;;;

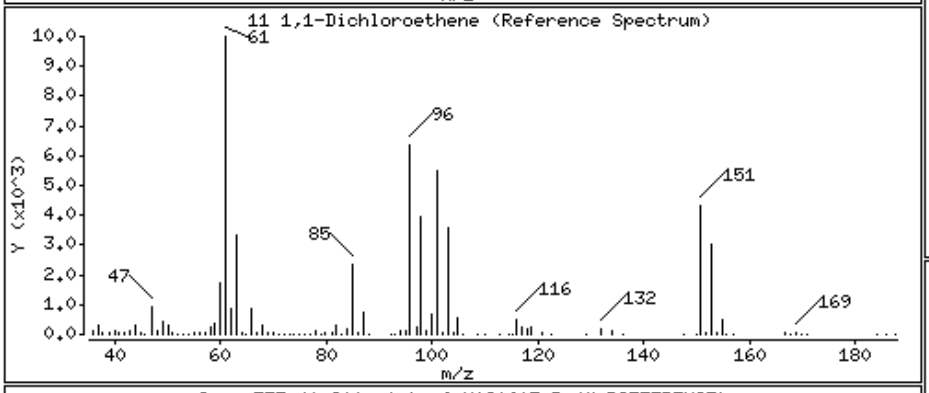
Purge Volume: 5.0 Operator: PC

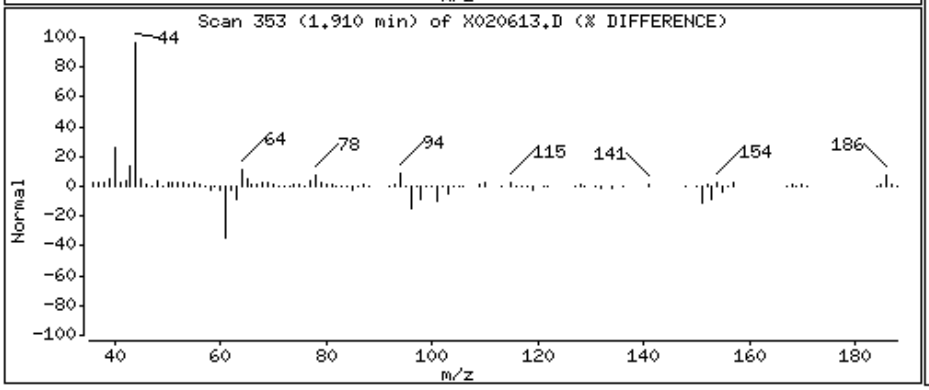
Column phase: DB624 Column diameter: 0.18

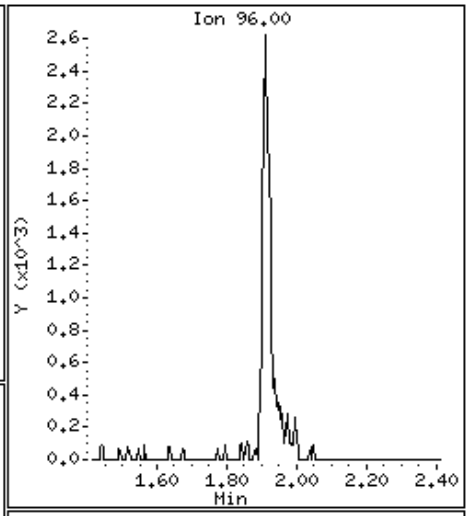
11 1,1-Dichloroethene Concentration: 3.98 ug/l

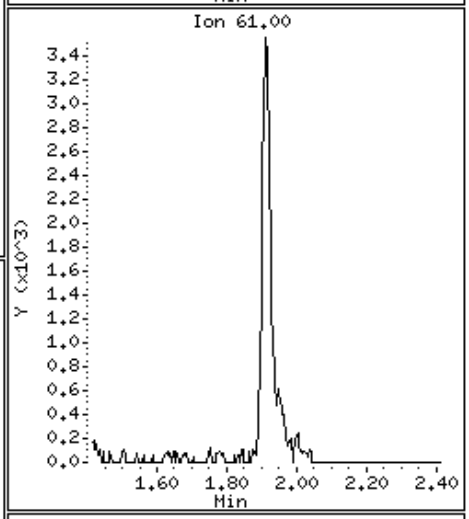


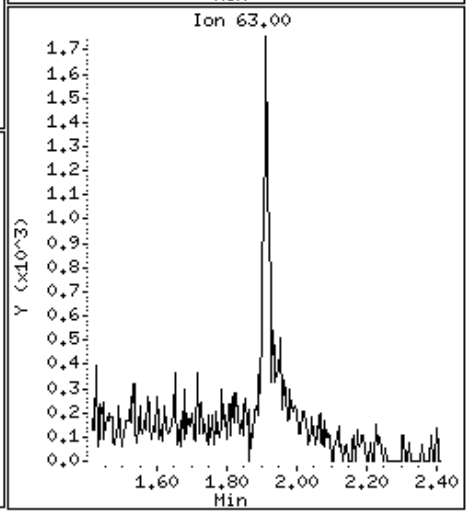












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D Page 4

Date : 06-FEB-2023 14:51

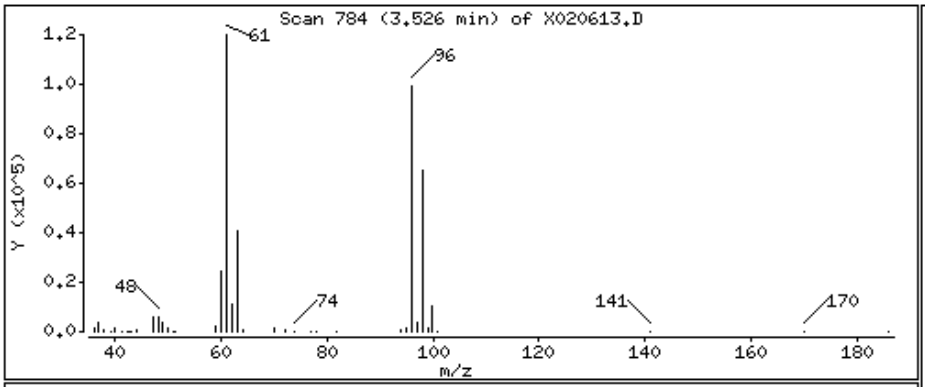
Client ID: HS23011514-04 Instrument: voa6.i

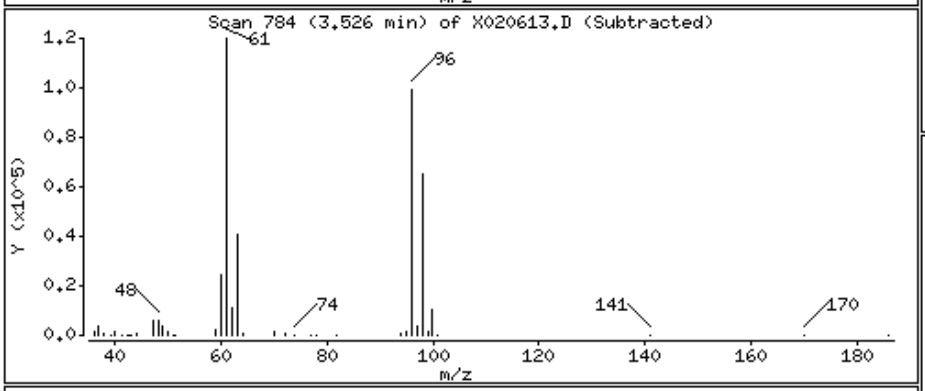
Sample Info: HS23011514-04;HS23011514-04;;;

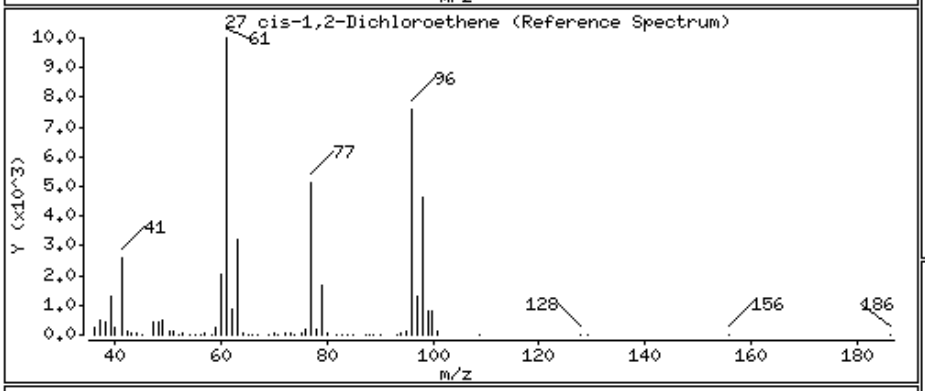
Purge Volume: 5.0 Operator: PC

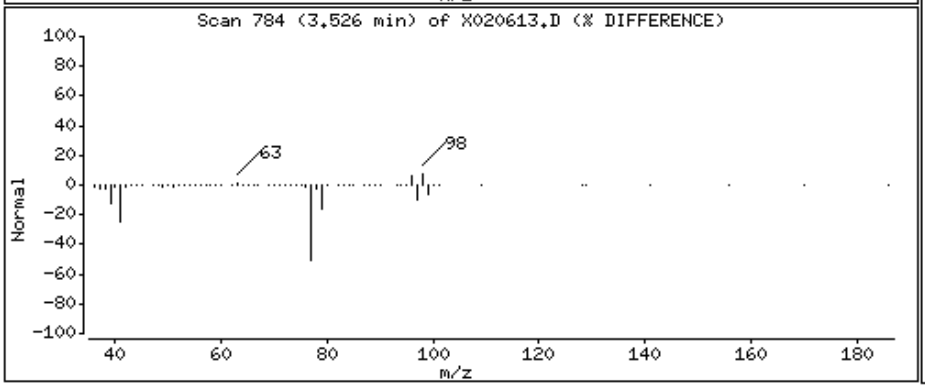
Column phase: DB624 Column diameter: 0.18

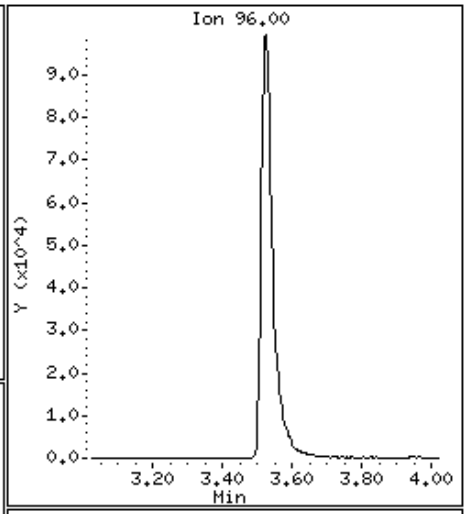
27 cis-1,2-Dichloroethene Concentration: 160.03 ug/l

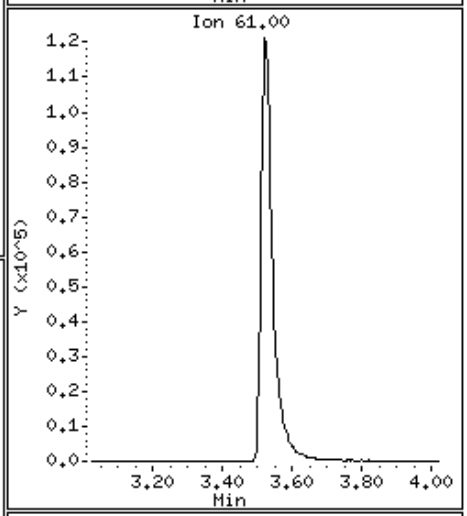


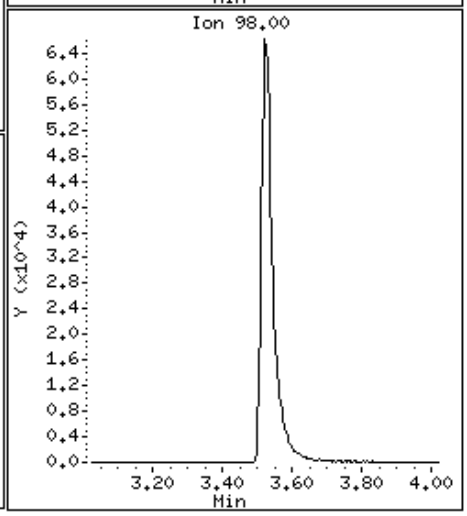












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D Page 5

Date : 06-FEB-2023 14:51

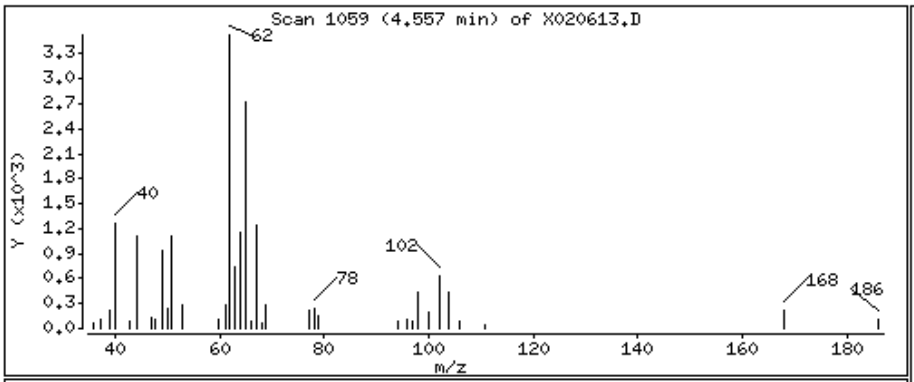
Client ID: HS23011514-04 Instrument: voa6.i

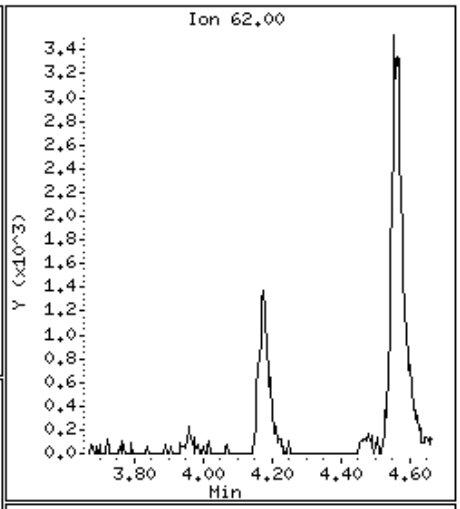
Sample Info: HS23011514-04;HS23011514-04;;;

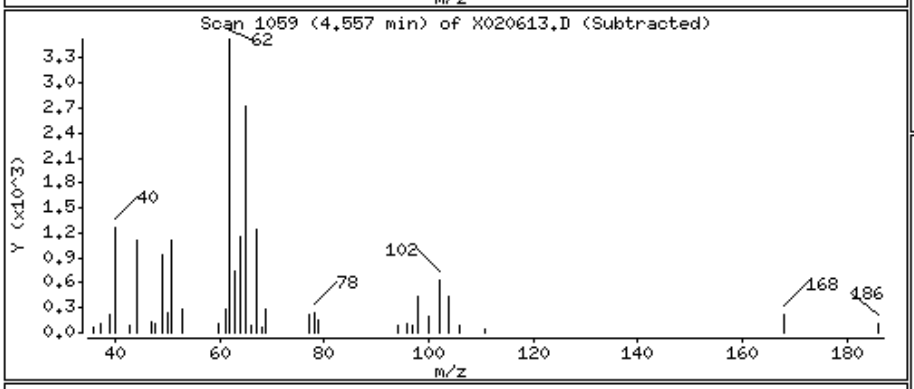
Purge Volume: 5.0 Operator: PC

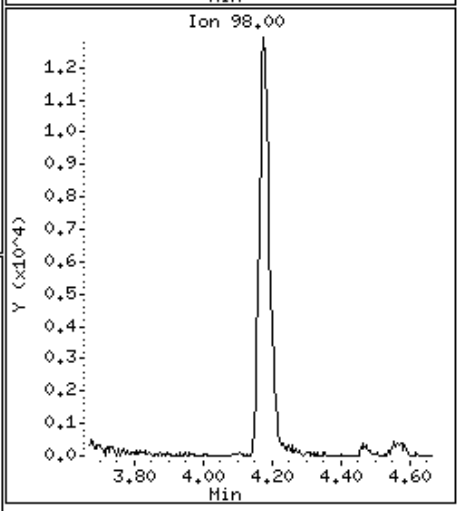
Column phase: DB624 Column diameter: 0.18

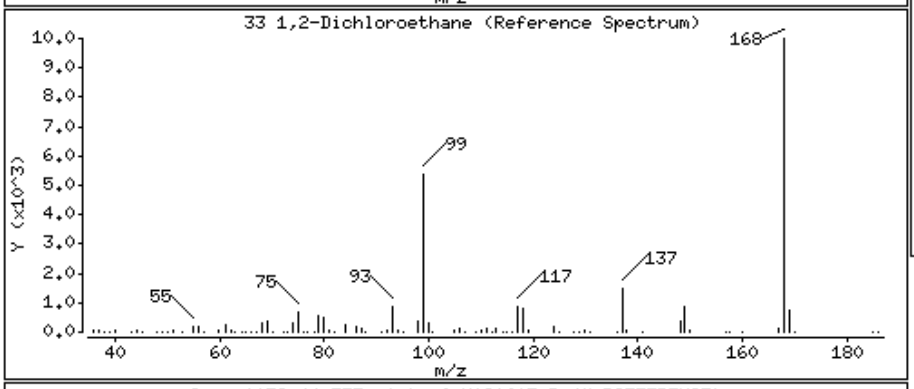
33 1,2-Dichloroethane Concentration: 5.04 ug/l

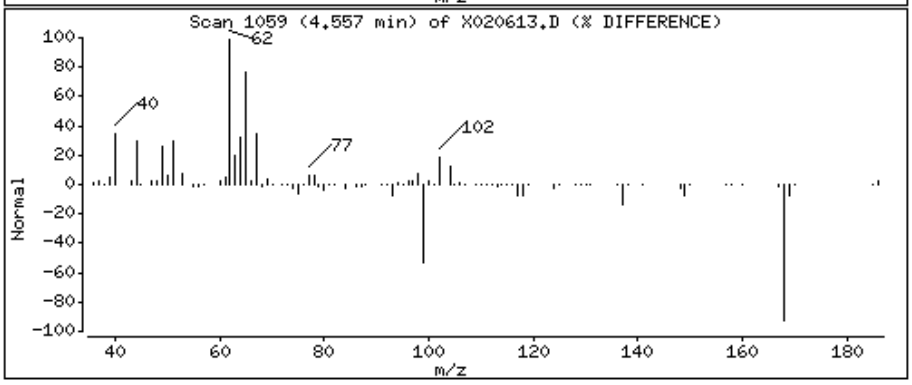












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D Page 6

Date : 06-FEB-2023 14:51

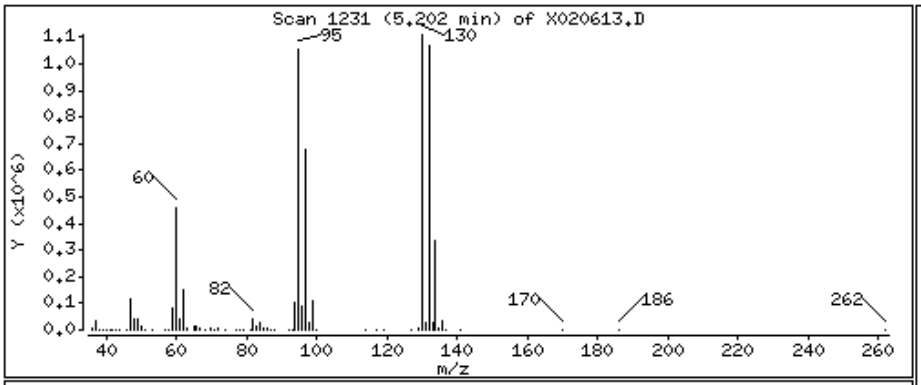
Client ID: HS23011514-04 Instrument: voa6.i

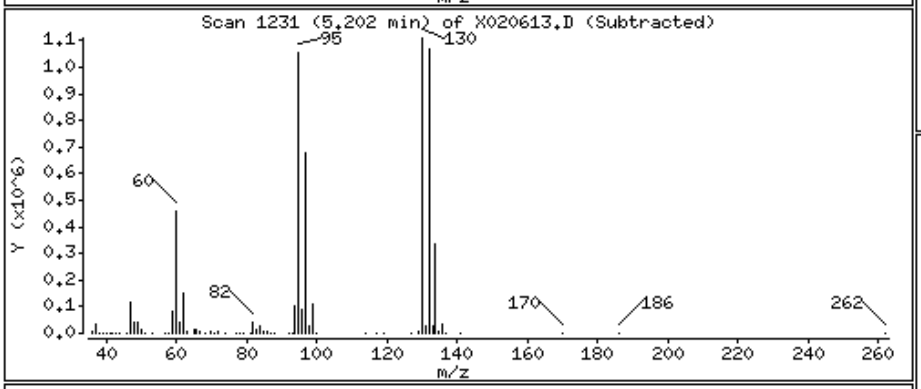
Sample Info: HS23011514-04;HS23011514-04;;;

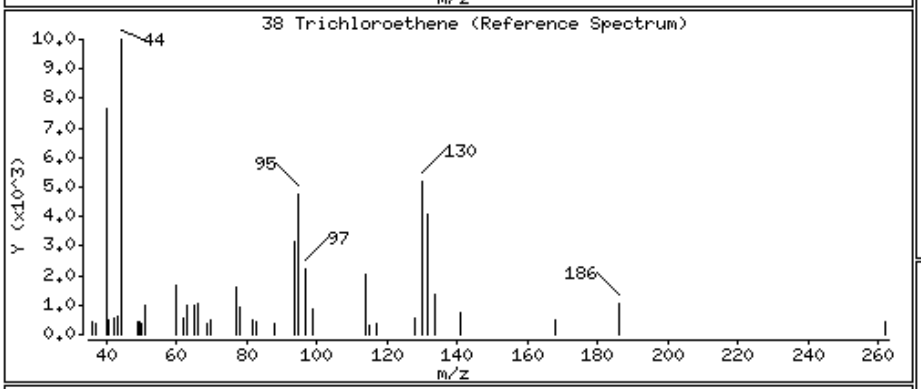
Purge Volume: 5.0 Operator: PC

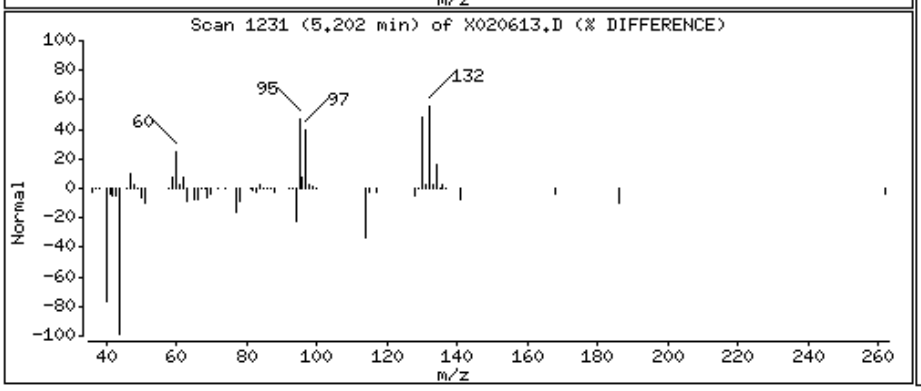
Column phase: DB624 Column diameter: 0.18

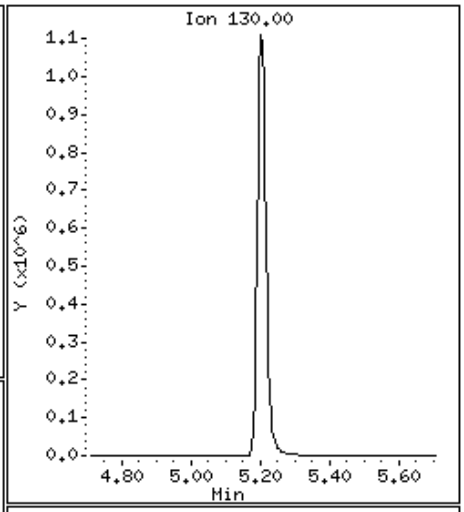
38 Trichloroethene Concentration: 1389.88 ug/l

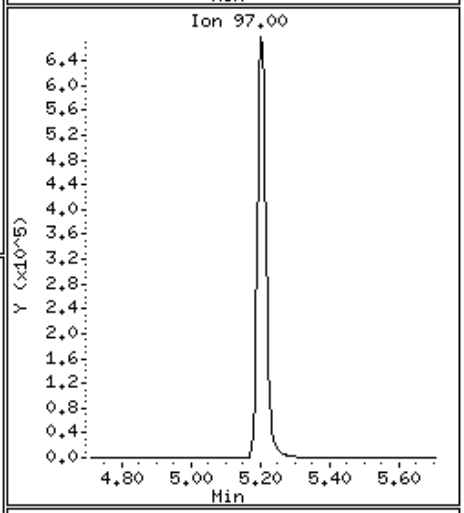


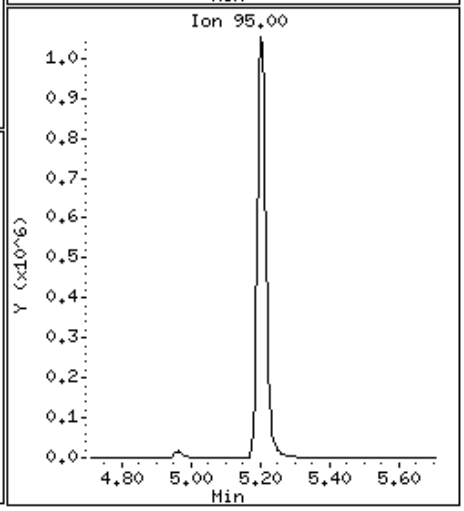












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020613.D
Inj Date : 06-FEB-2023 14:51
InstruID : voa6.i
LabSampID : HS23011514-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020614.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020614.D
Lab Smp Id: HS23011514-06 Client Smp ID: HS23011514-06
Inj Date : 06-FEB-2023 15:12
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-06;HS23011514-06;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 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: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

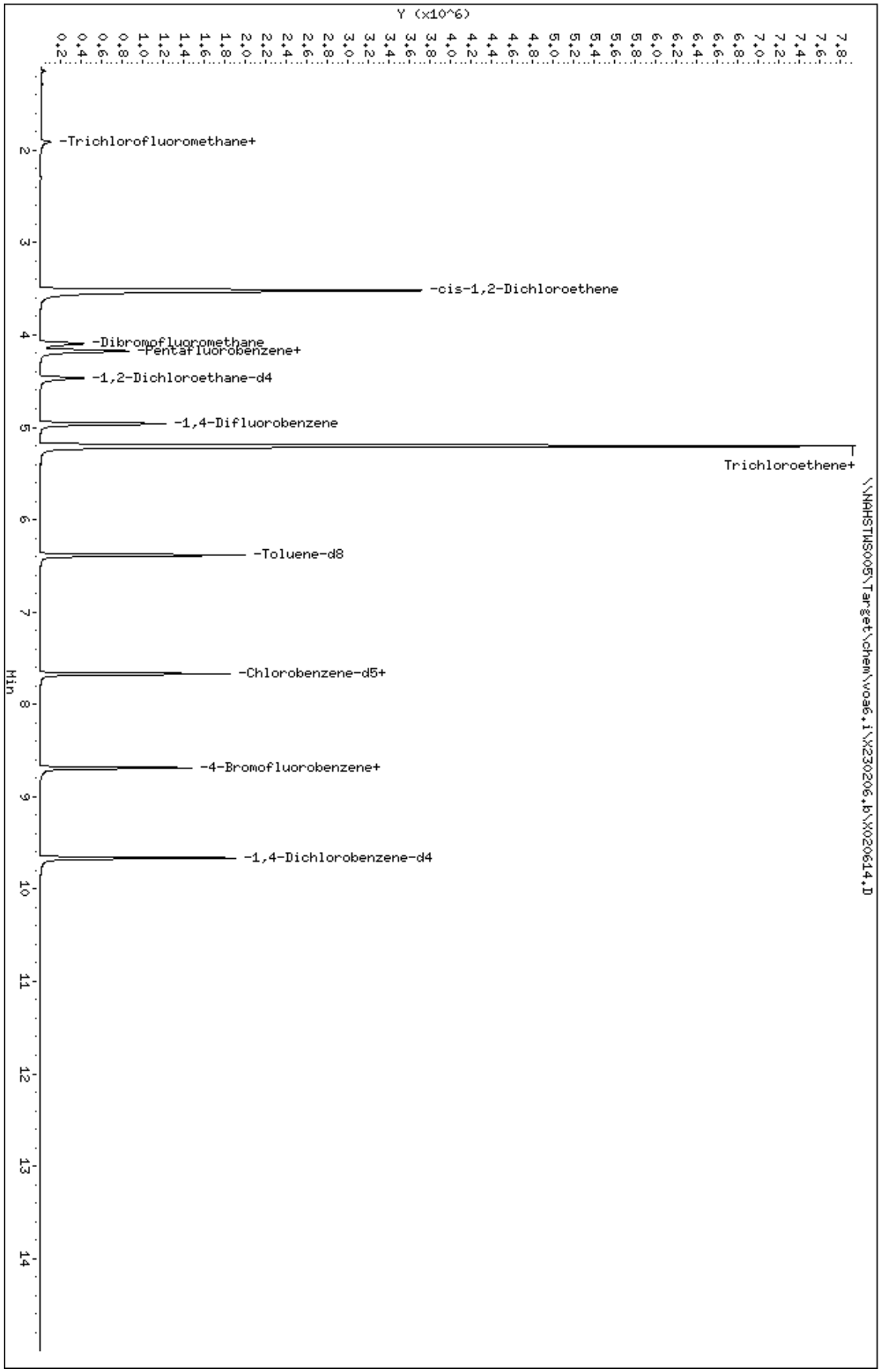
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.177	(1.000)	718111	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	319391	46.3080	46.30
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	355820	48.8968	48.89
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1033624	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	922657	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1177838	51.6607	51.66
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	450094	52.8111	52.81
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	482298	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	23848	3.80163	190.08(a)
11 1,1-Dichloroethene	96	1.909	1.910	(0.457)	15657	2.87277	143.63(a)
27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.843)	2070626	278.939	13946.92(A)
38 Trichloroethene	130	5.205	5.205	(1.049)	2675400	382.156	19107.79(A)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020614.D
Date : 06-FEB-2023 15:12
Client ID: HS23011514-06
Sample Info: HS23011514-06;HS23011514-06;;;
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\X230206.b\X020614.D

Date : 06-FEB-2023 15:12

Client ID: HS23011514-06

Instrument: voa6.i

Sample Info: HS23011514-06;HS23011514-06;;;

Purge Volume: 5.0

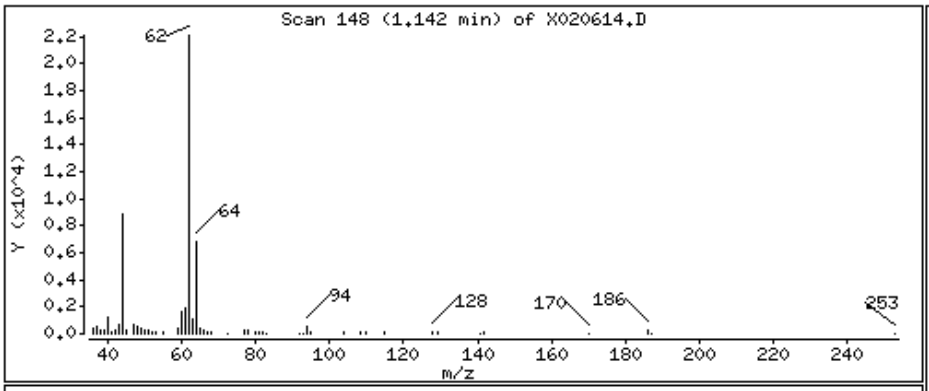
Operator: PC

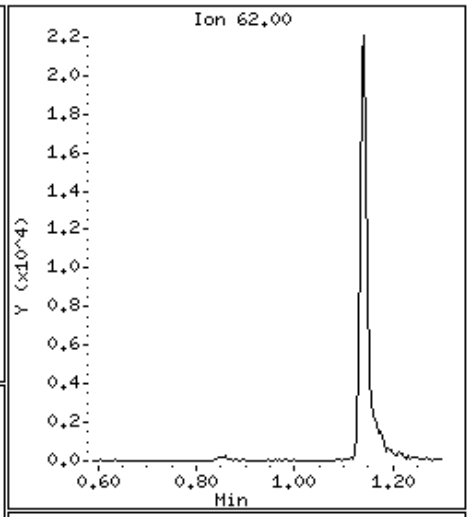
Column phase: DB624

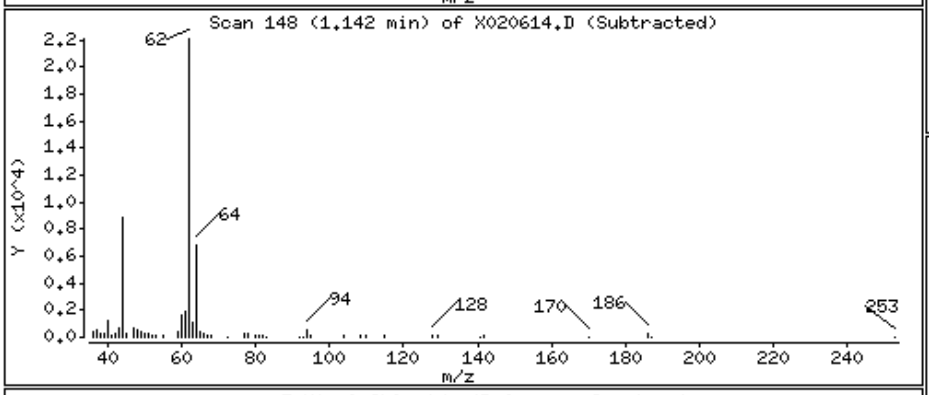
Column diameter: 0.18

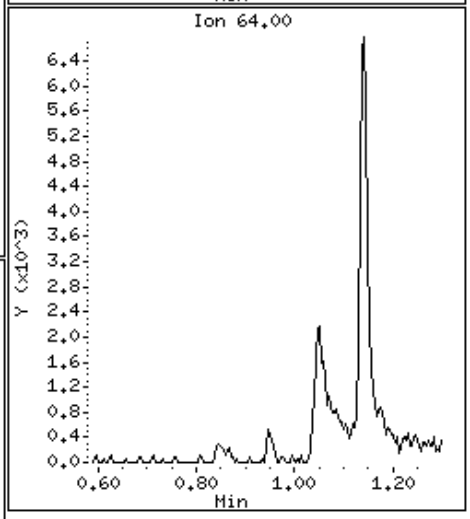
5 Vinyl Chloride

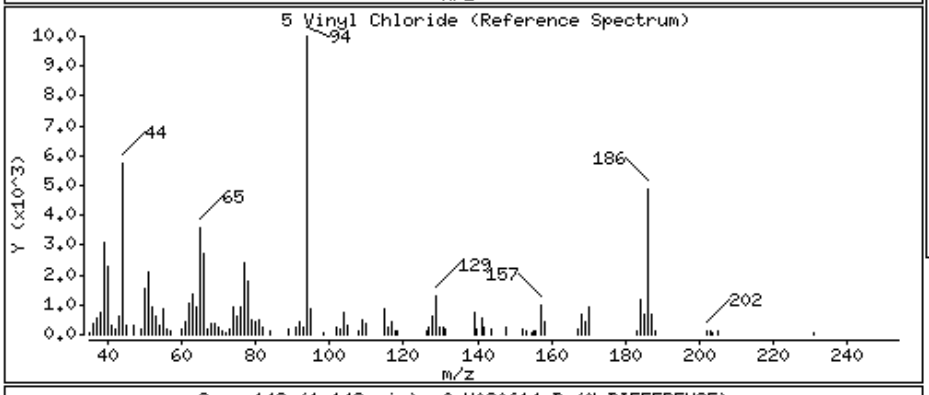
Concentration: 190.08 ug/l

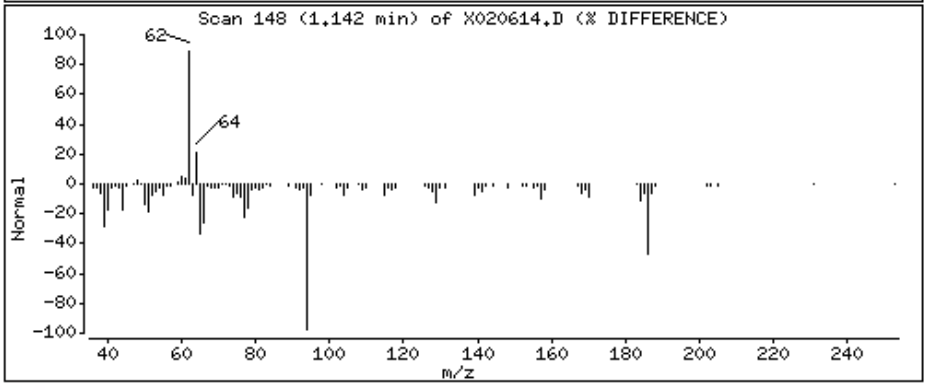












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020614.D Page 3

Date : 06-FEB-2023 15:12

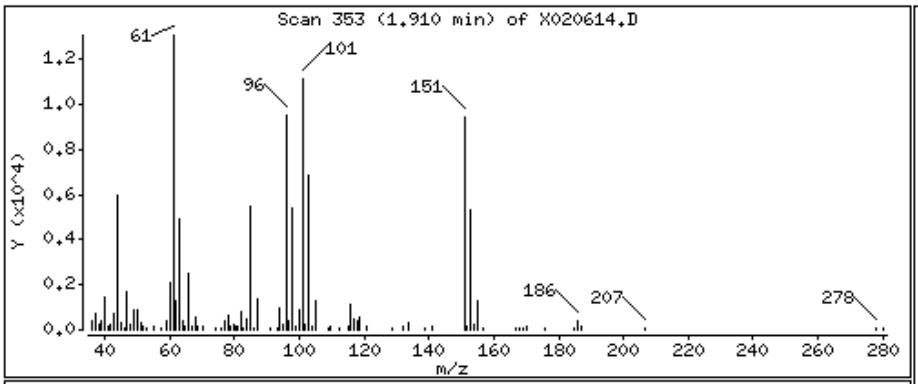
Client ID: HS23011514-06 Instrument: voa6.i

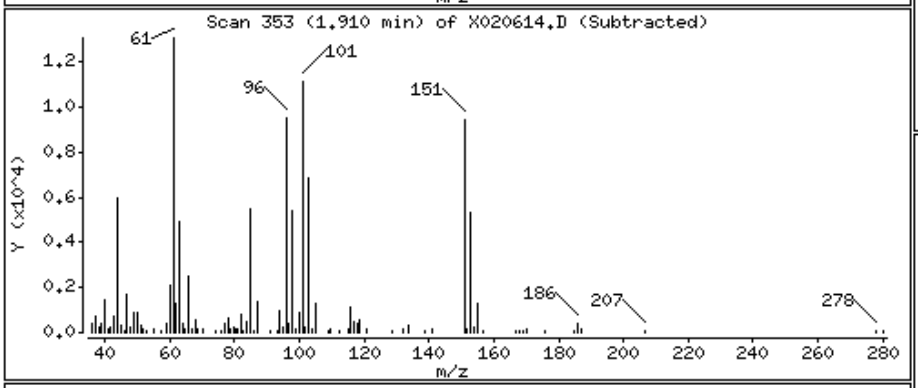
Sample Info: HS23011514-06;HS23011514-06;;;

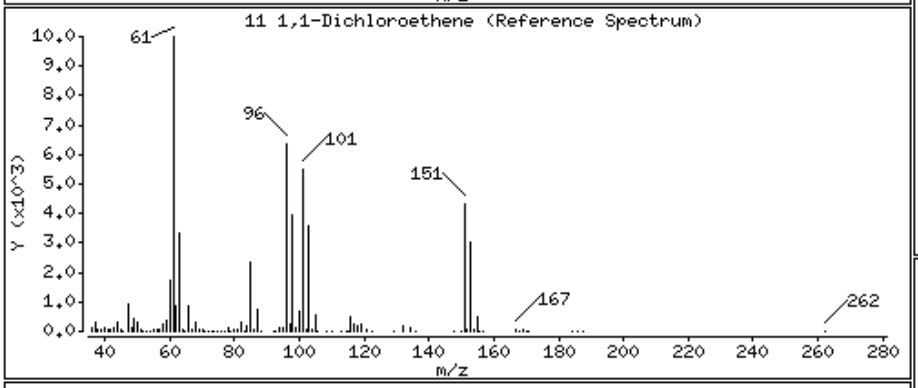
Purge Volume: 5.0 Operator: PC

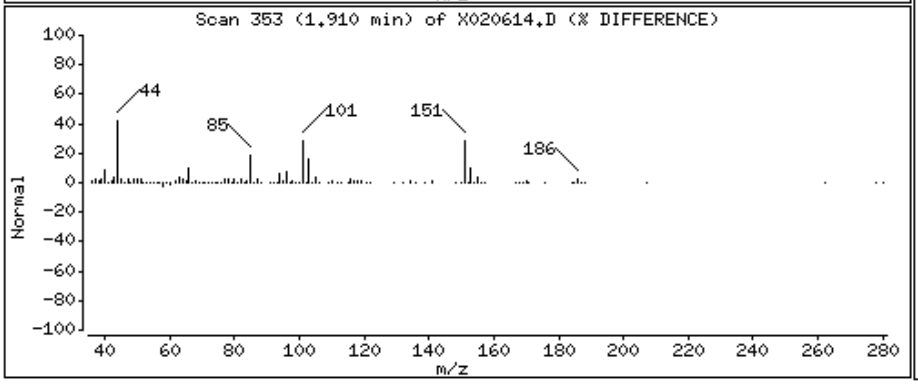
Column phase: DB624 Column diameter: 0.18

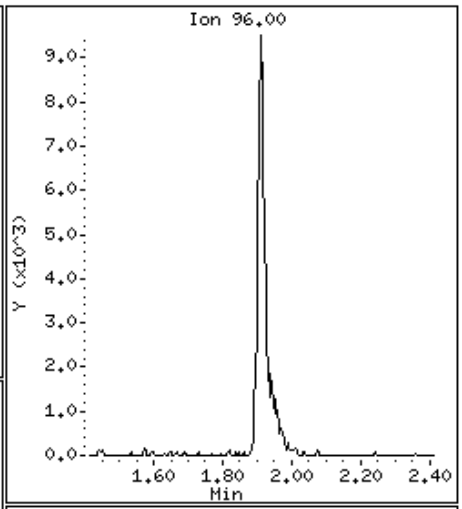
11 1,1-Dichloroethene Concentration: 143.63 ug/l

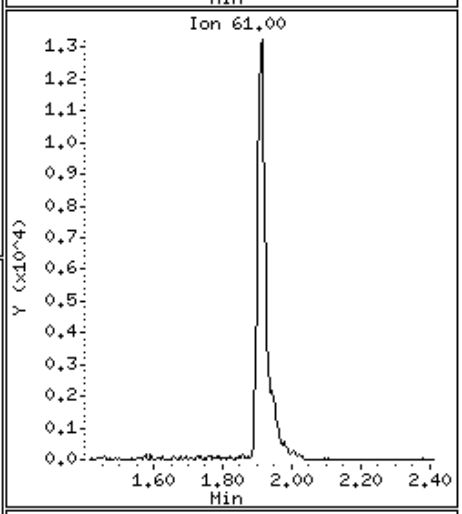


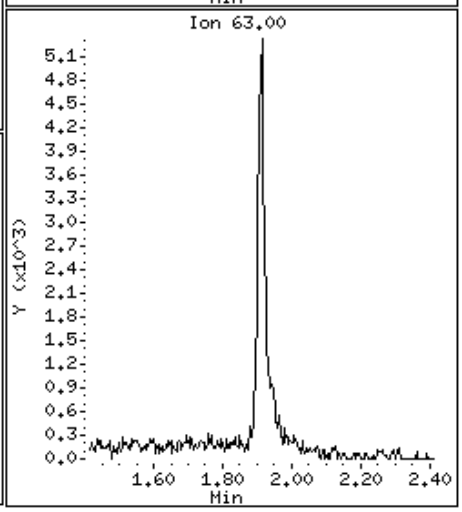












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020614.D Page 4

Date : 06-FEB-2023 15:12

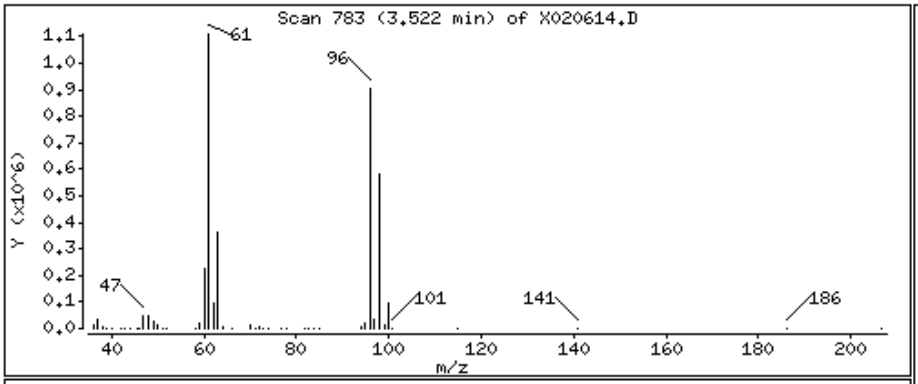
Client ID: HS23011514-06 Instrument: voa6.i

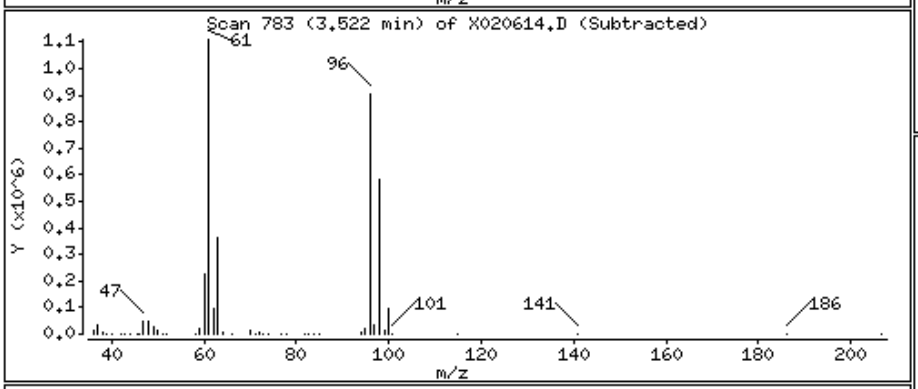
Sample Info: HS23011514-06;HS23011514-06;;;

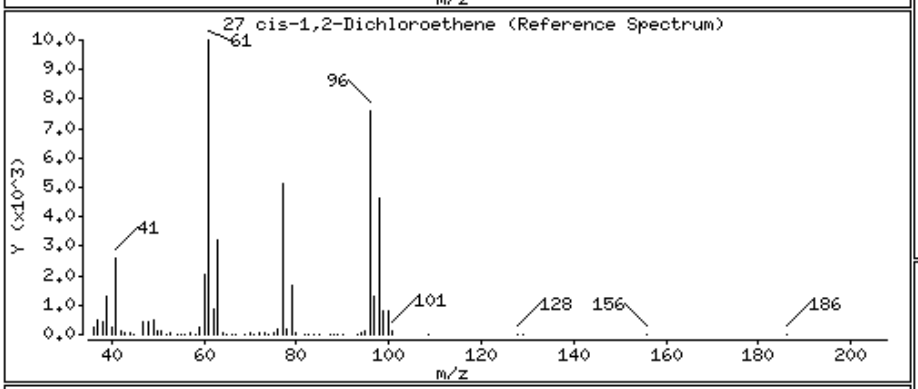
Purge Volume: 5.0 Operator: PC

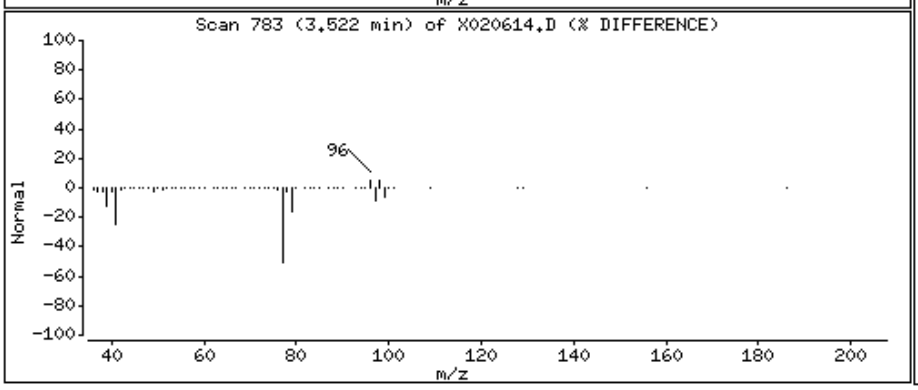
Column phase: DB624 Column diameter: 0.18

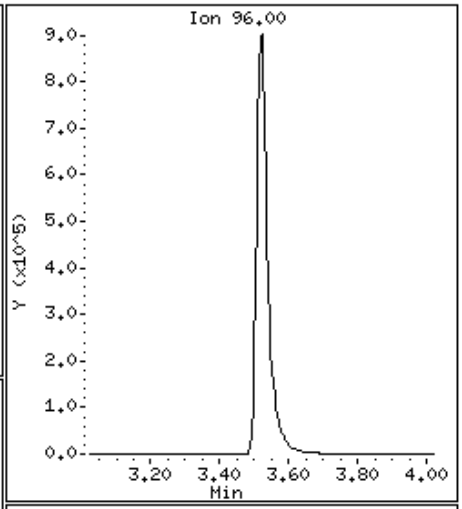
27 cis-1,2-Dichloroethene Concentration: 13946.92 ug/l

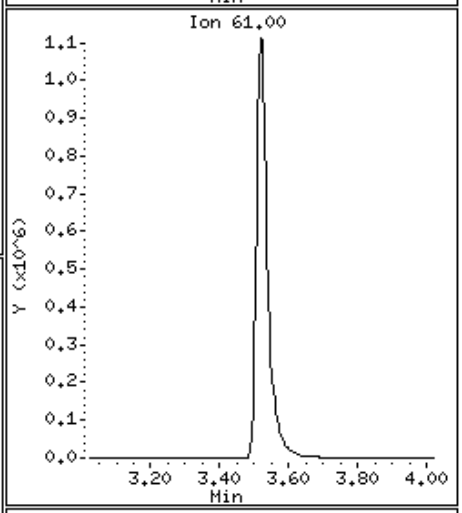


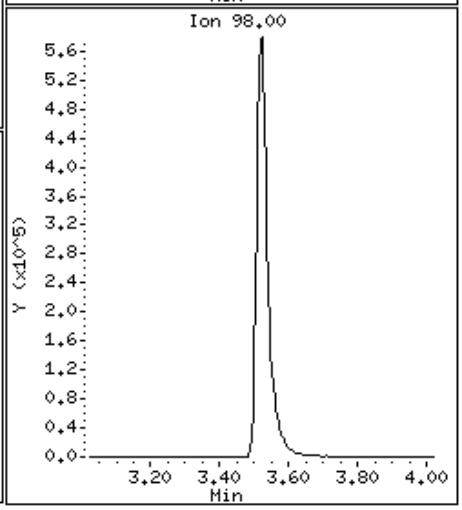












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020614.D Page 5

Date : 06-FEB-2023 15:12

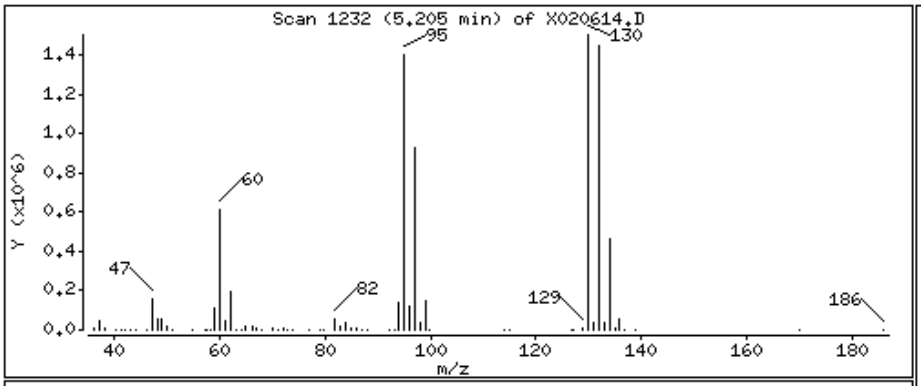
Client ID: HS23011514-06 Instrument: voa6.i

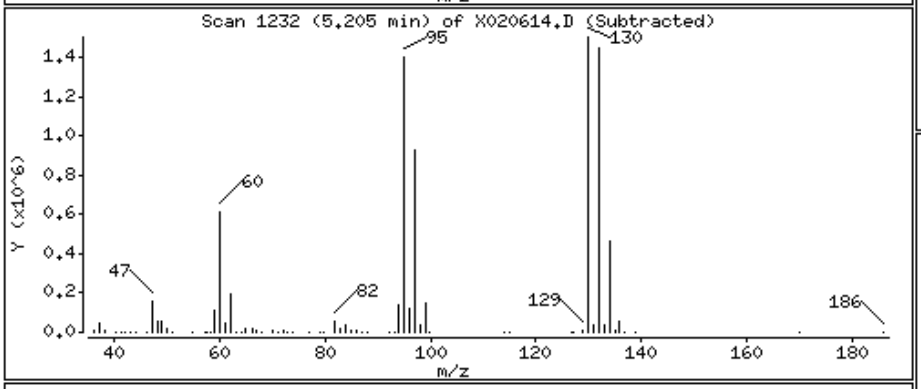
Sample Info: HS23011514-06;HS23011514-06;;;

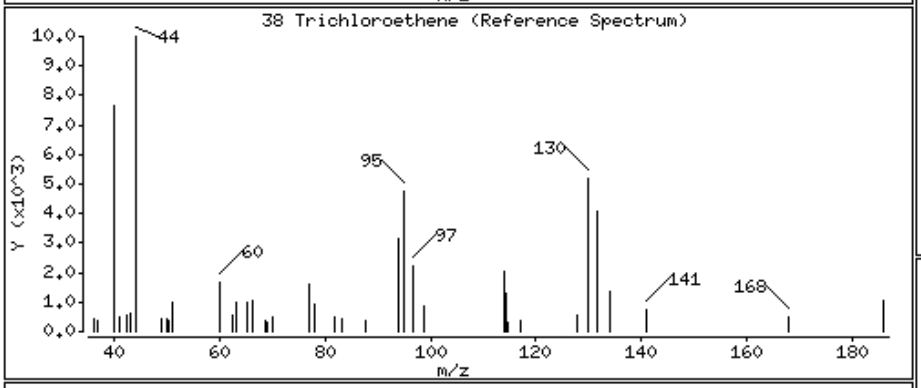
Purge Volume: 5.0 Operator: PC

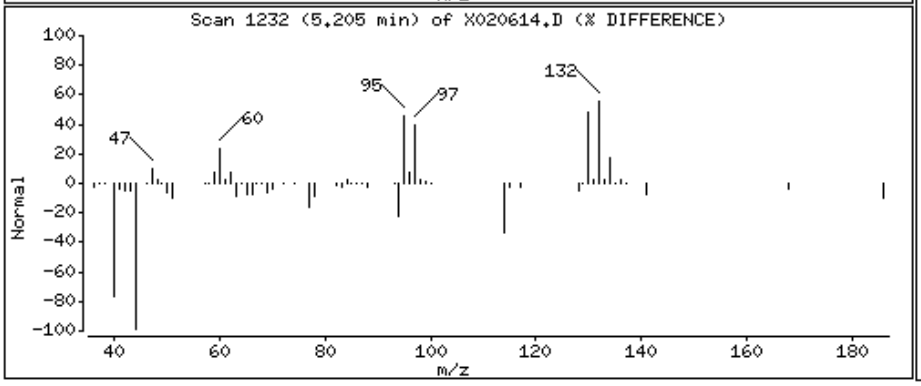
Column phase: DB624 Column diameter: 0.18

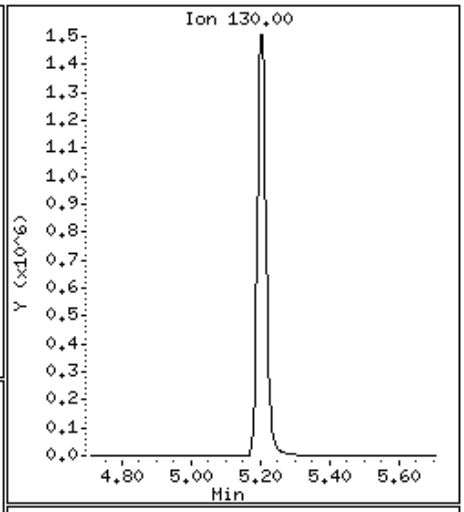
38 Trichloroethene Concentration: 19107.79 ug/l

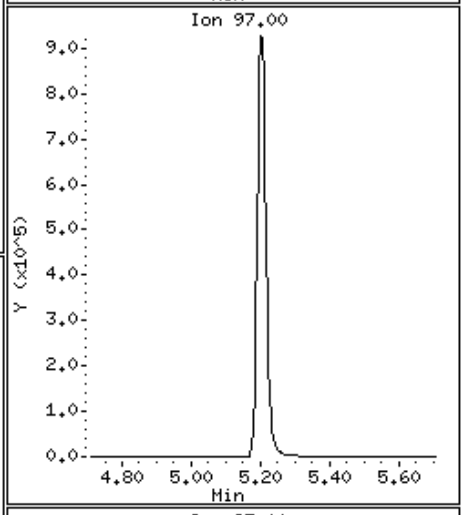


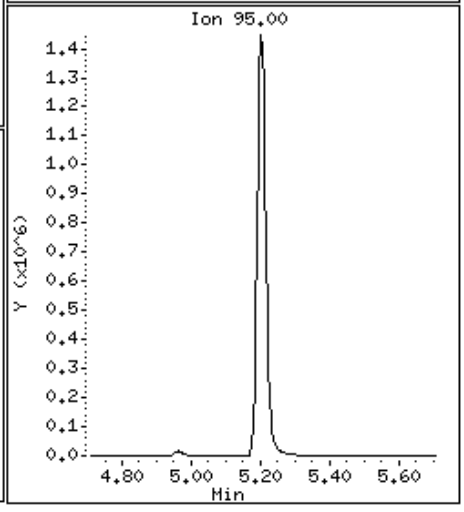












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020614.D
Inj Date : 06-FEB-2023 15:12
InstruID : voa6.i
LabSampID : HS23011514-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020615.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020615.D
Lab Smp Id: HS23011514-07 Client Smp ID: HS23011514-07
Inj Date : 06-FEB-2023 15:33
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-07;HS23011514-07;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 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: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

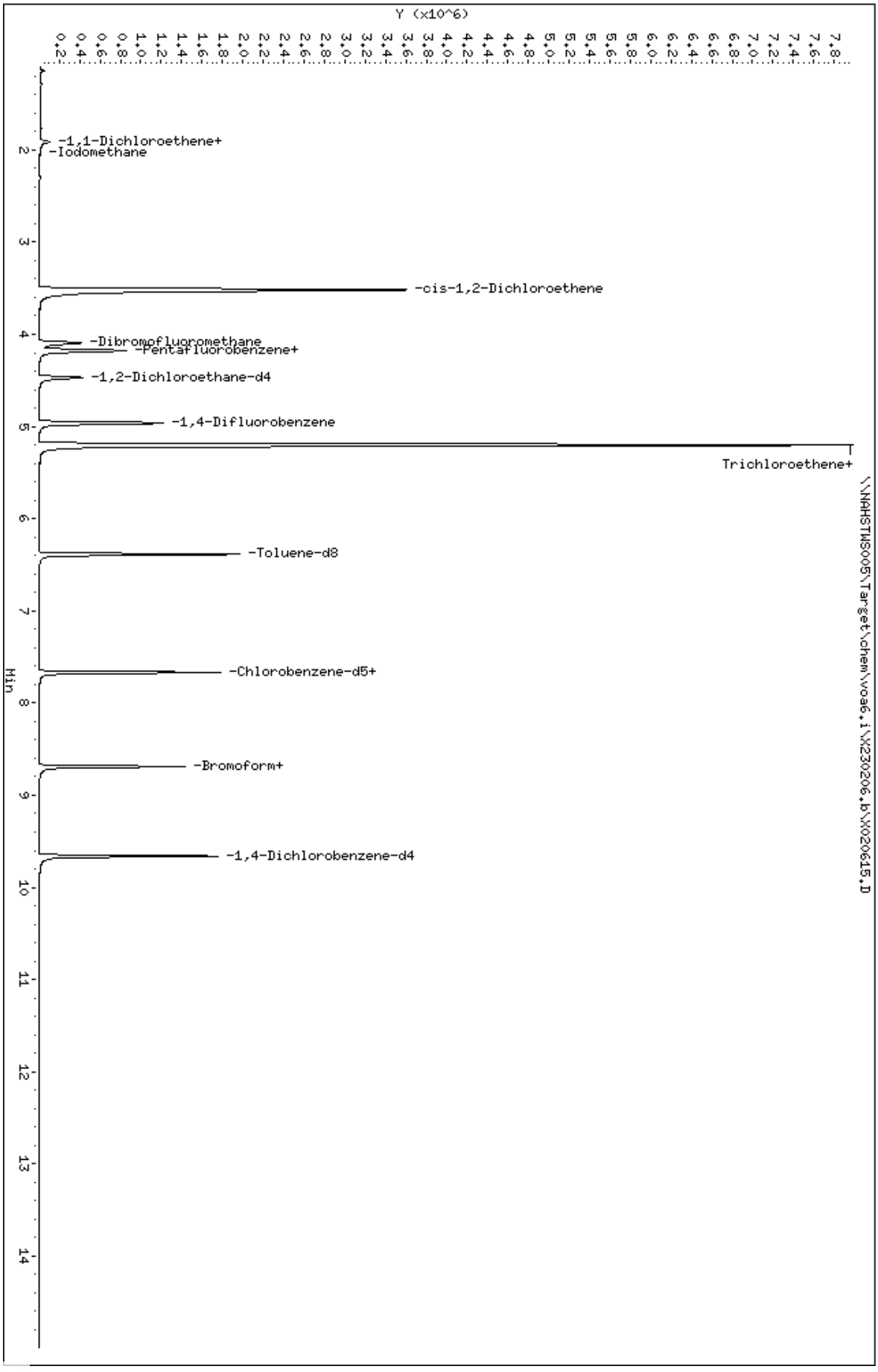
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.177	(1.000)	708688	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	311263	45.7275	45.72
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	349125	48.6162	48.61
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1016878	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	895881	50.0000	
$ 48 Toluene-d8	98	6.386	6.382	(0.833)	1167215	52.7248	52.72
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	430697	52.0465	52.04
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	453240	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	25456	4.11192	205.59(a)
11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	15231	2.83176	141.58(a)
27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	2031608	277.321	13866.06(A)
38 Trichloroethene	130	5.201	5.205	(1.048)	2693294	391.047	19552.36(A)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230206,b\X020615.D
Date : 06-FEB-2023 15:33
Client ID: HS23011514-07
Sample Info: HS23011514-07;HS23011514-07;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020615.D Page 2

Date : 06-FEB-2023 15:33

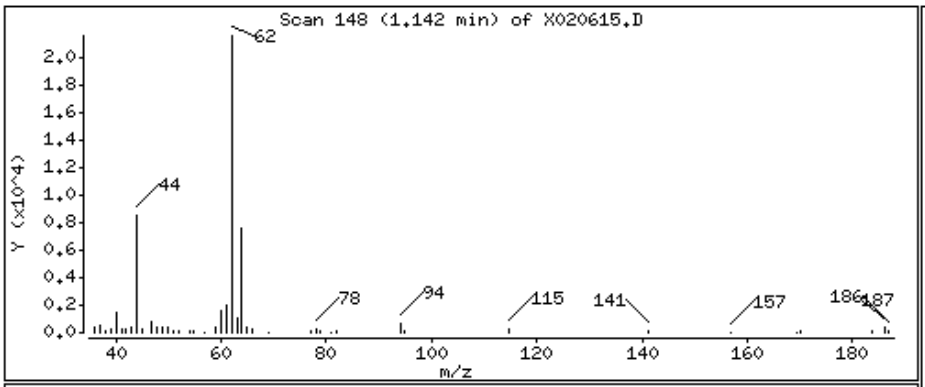
Client ID: HS23011514-07 Instrument: voa6.i

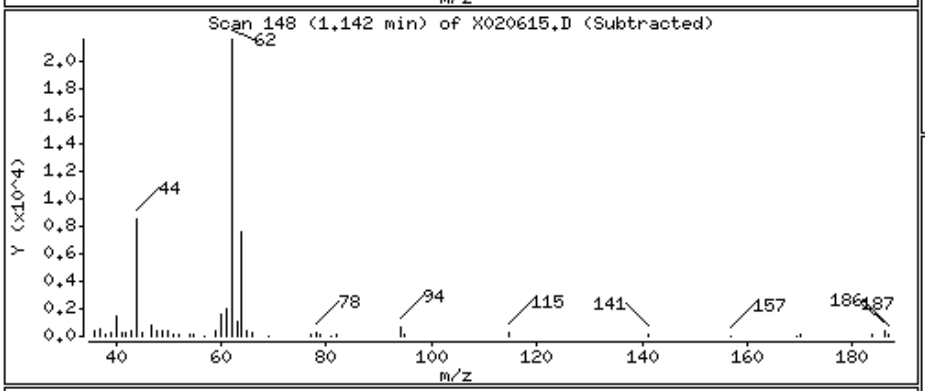
Sample Info: HS23011514-07;HS23011514-07;;;

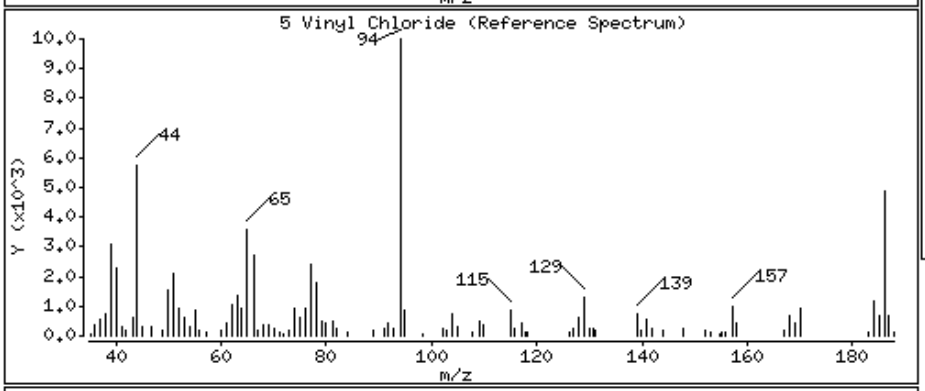
Purge Volume: 5.0 Operator: PC

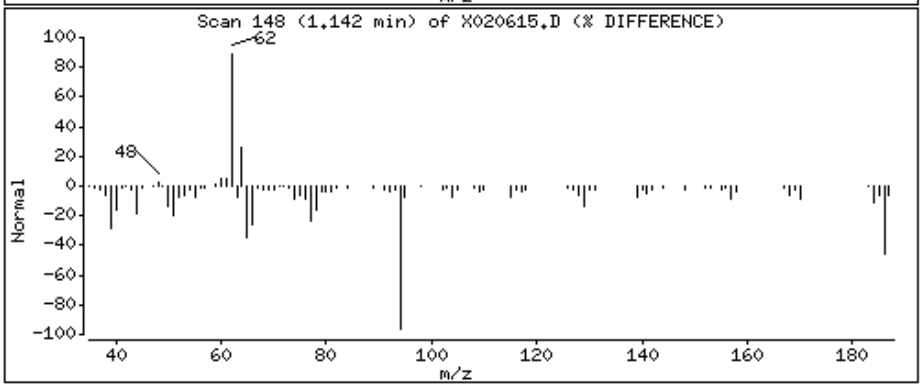
Column phase: DB624 Column diameter: 0.18

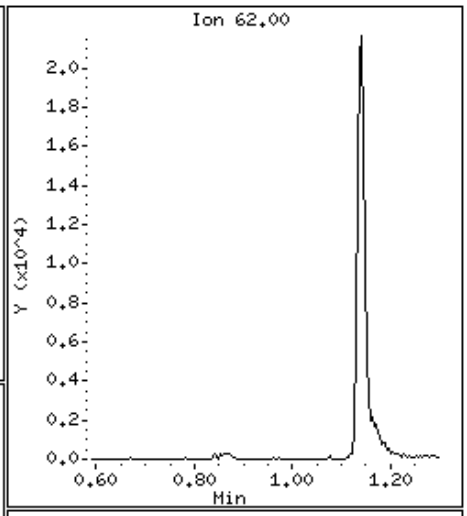
5 Vinyl Chloride Concentration: 205.59 ug/l

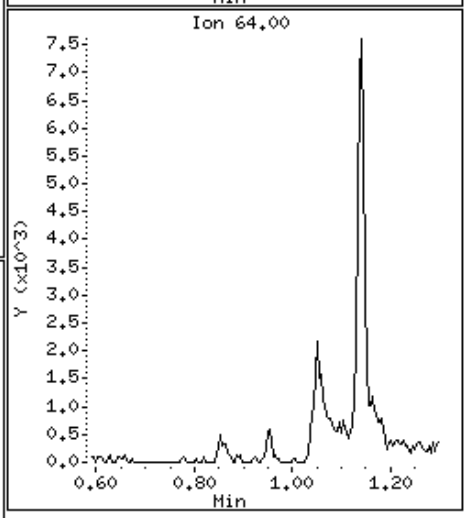












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020615.D Page 3

Date : 06-FEB-2023 15:33

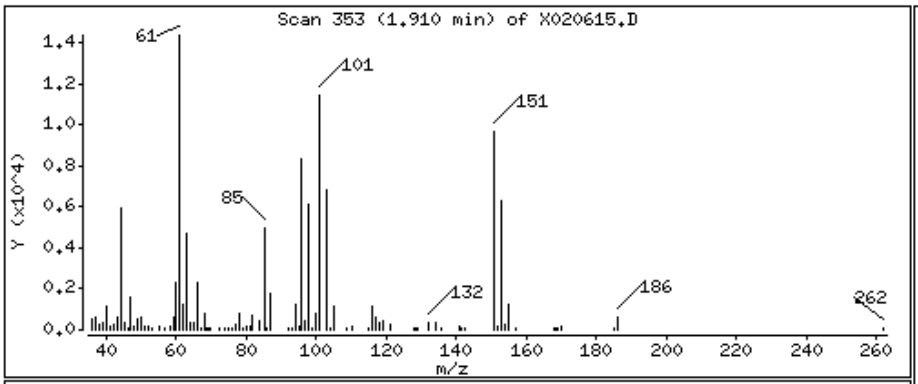
Client ID: HS23011514-07 Instrument: voa6.i

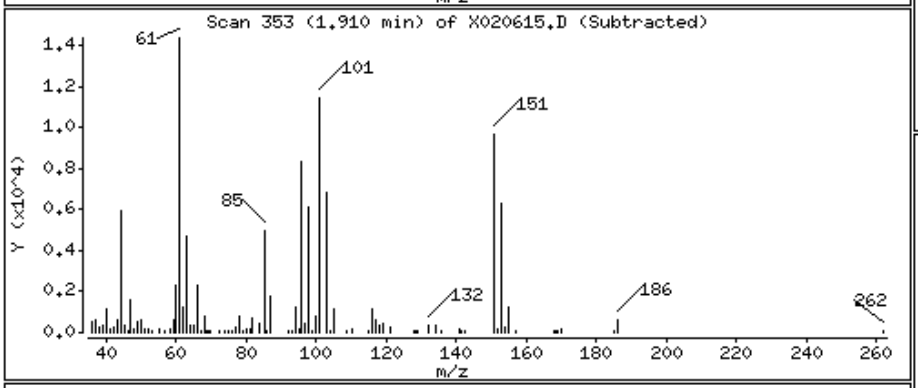
Sample Info: HS23011514-07;HS23011514-07;;;

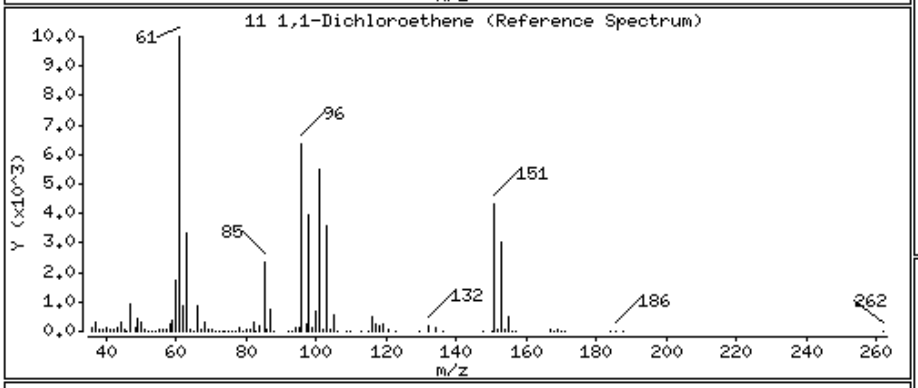
Purge Volume: 5.0 Operator: PC

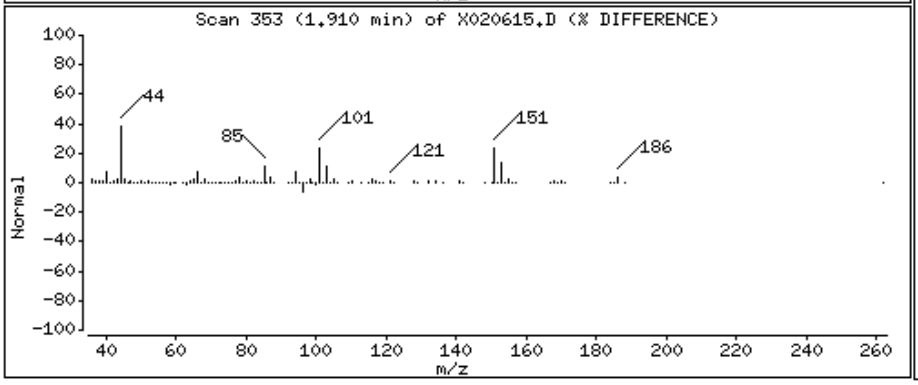
Column phase: DB624 Column diameter: 0.18

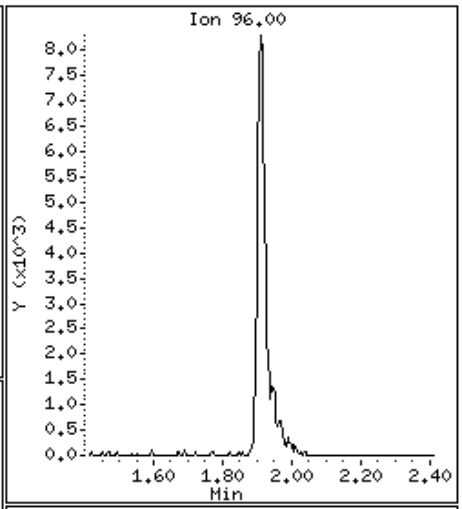
11 1,1-Dichloroethene Concentration: 141.58 ug/l

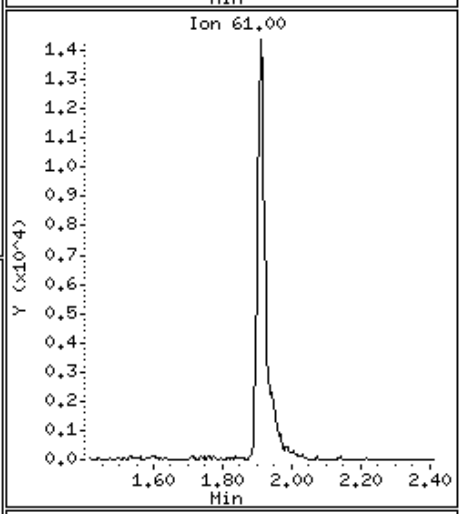


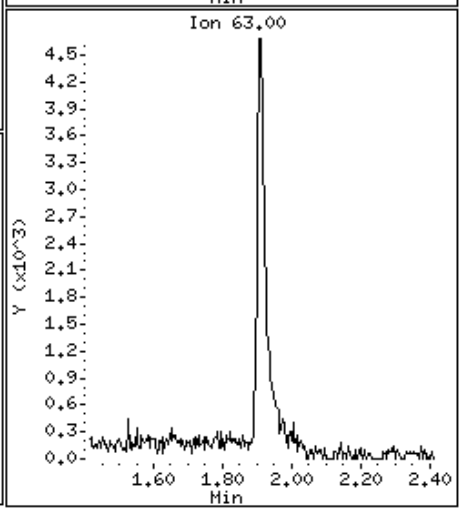












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Date : 06-FEB-2023 15:33

Client ID: HS23011514-07

Instrument: voa6.i

Sample Info: HS23011514-07;HS23011514-07;;;

Purge Volume: 5.0

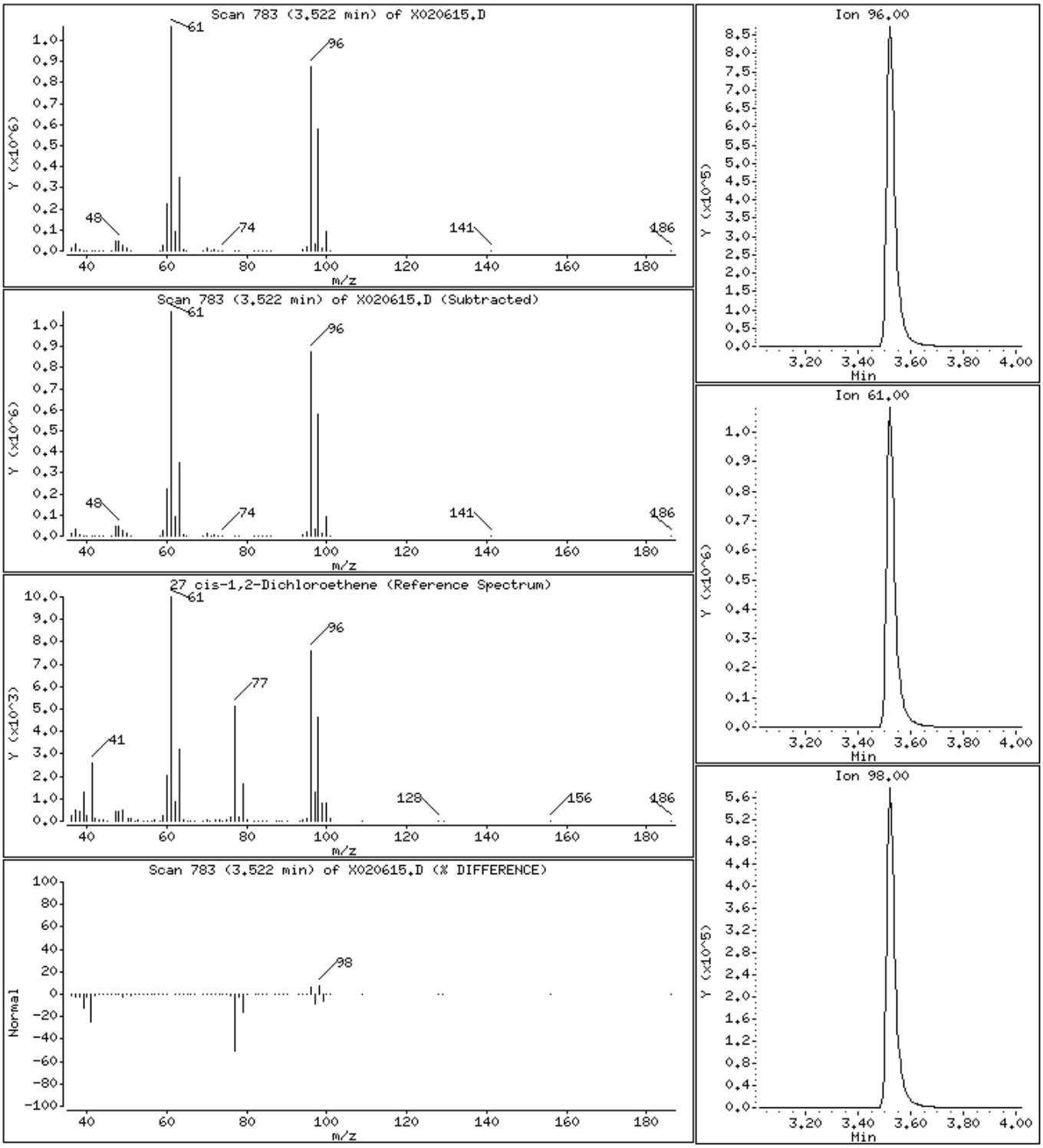
Operator: PC

Column phase: DB624

Column diameter: 0.18

27 cis-1,2-Dichloroethene

Concentration: 13866.06 ug/l



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020615.D Page 5

Date : 06-FEB-2023 15:33

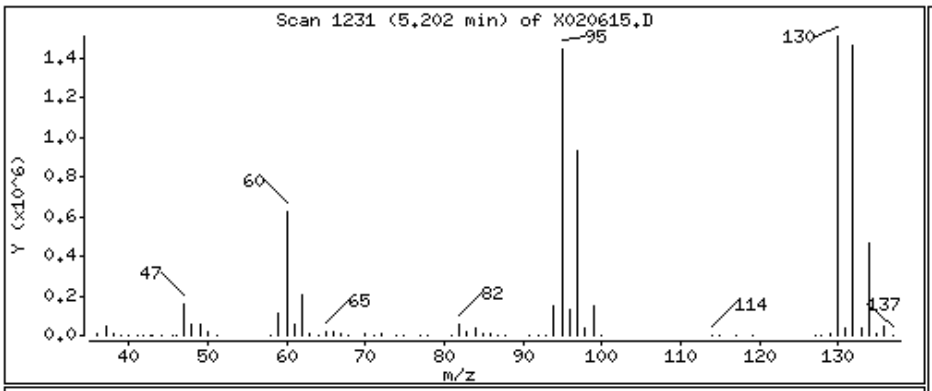
Client ID: HS23011514-07 Instrument: voa6.i

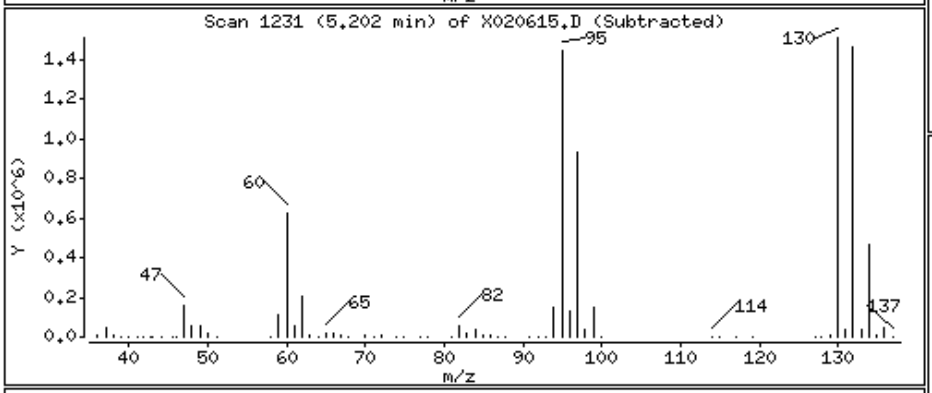
Sample Info: HS23011514-07;HS23011514-07;;;

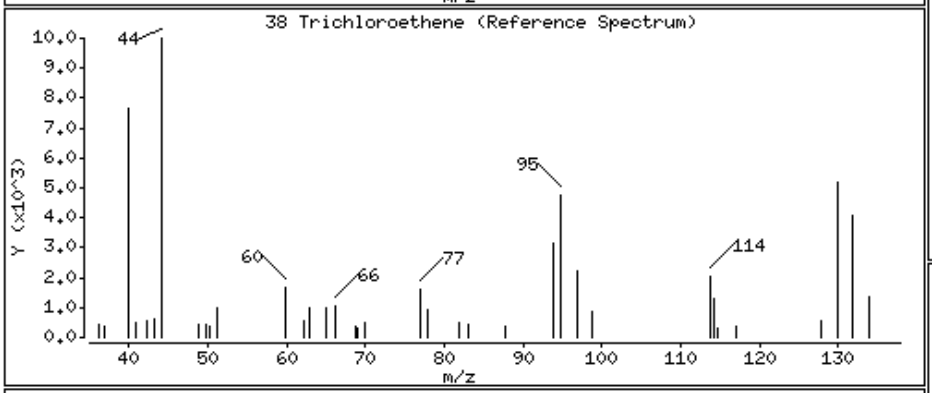
Purge Volume: 5.0 Operator: PC

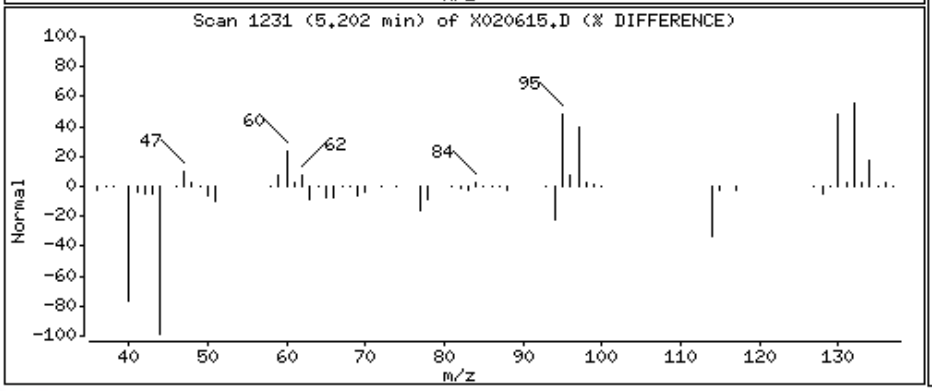
Column phase: DB624 Column diameter: 0.18

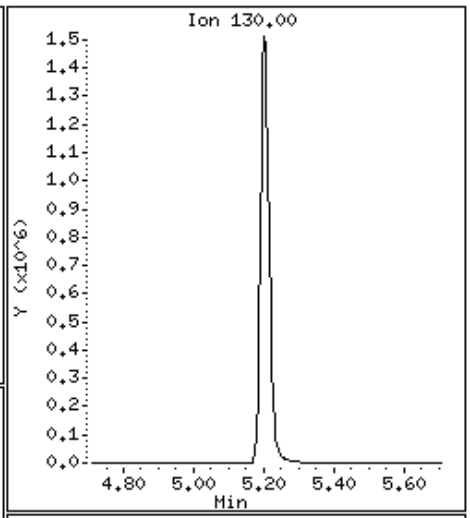
38 Trichloroethene Concentration: 19552.36 ug/l

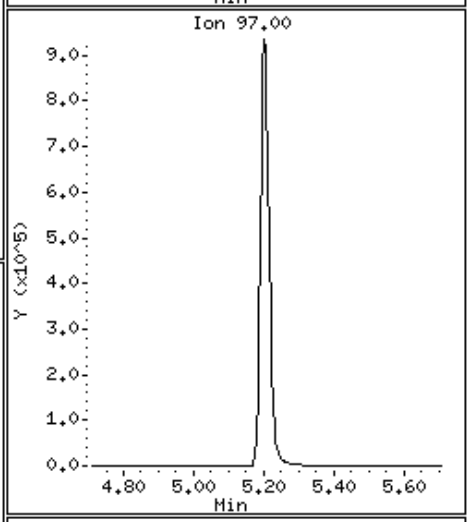


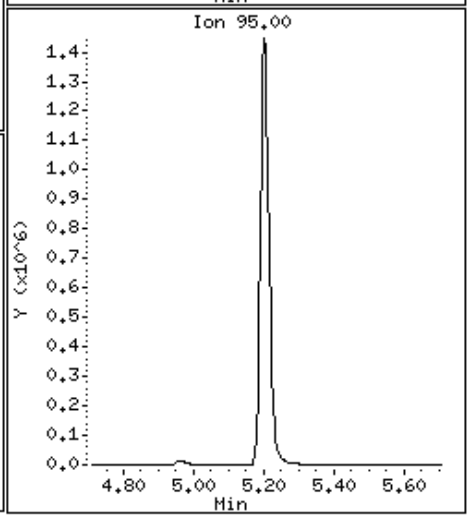












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Inj Date : 06-FEB-2023 15:33
InstruID : voa6.i
LabSampID : HS23011514-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020618.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020618.D
Lab Smp Id: HS23011590-04MS Client Smp ID: HS23011590-04MS
Inj Date : 06-FEB-2023 16:36
Operator : PC Inst ID: voa6.i
Smp Info : HS23011590-04MS;HS23011590-04MS;3;;MS
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 18 QC Sample: MS
Dil Factor: 5.00000
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	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	4.178	4.177	(1.000)	707773	50.0000	
135	1,4-Dioxane	88	5.598	5.594	(1.340)	26494	409.504	2047.51(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	83173	17.1223	85.61
25	Methacrylonitrile	41	3.825	3.814	(0.916)	98261	19.6066	98.03
12	Isobutyl Alcohol	43	4.672	4.672	(1.118)	337682	424.176	2120.88
13	Acetonitrile	39	2.195	2.194	(0.525)	133654	207.485	1037.42
14	Allyl Chloride	41	2.198	2.194	(0.526)	267080	21.7696	108.84
4	Propionitrile	54	3.649	3.645	(0.873)	151303	209.508	1047.53(a)
139	Diethyl ether	59	1.752	1.752	(0.420)	82190	17.3793	86.89
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	36163	39.2347	196.17
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	244585	22.6356	113.17
156	Diisopropyl ether	45	2.997	2.997	(0.717)	383060	20.8635	104.31
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	528593	22.5092	112.54
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	51257	10.6659	53.32
3	Chloromethane	50	1.074	1.074	(0.257)	91359	15.8473	79.23
5	Vinyl Chloride	62	1.141	1.141	(0.273)	103617	16.7589	83.79
6	Bromomethane	94	1.336	1.336	(0.320)	67963	15.7846	78.92
7	Chloroethane	64	1.400	1.400	(0.335)	72211	16.7799	83.89
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	172913	19.9849	99.92
9	Acrolein	56	1.441	1.441	(0.345)	18511	39.9849	199.92

10 Acetone	43	1.970	1.970 (0.472)	55655	27.9997	139.99
11 1,1-Dichloroethene	96	1.910	1.910 (0.457)	94420	17.5774	87.88

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	15 Iodomethane	142	2.026	2.026	(0.485)	183019	29.0827	145.41
	16 Acrylonitrile	53	2.528	2.528	(0.605)	78556	43.1186	215.59
	17 Methylene Chloride	84	2.300	2.299	(0.550)	129056	17.5153	87.57
	18 Methyl tert-butyl ether	73	2.532	2.528	(0.606)	361386	20.5536	102.76
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	550201	39.1483	195.74
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	118288	19.6757	98.37
	21 Vinyl Acetate	43	2.997	2.993	(0.717)	639978	41.4637	207.31
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	202000	19.1452	95.72
	24 2-Butanone	43	3.574	3.570	(0.856)	76255	38.1296	190.64
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	187675	20.9497	104.74
	27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	134555	18.3910	91.95
	28 Chloroform	83	3.904	3.900	(0.935)	223509	18.9003	94.50
	29 Bromochloromethane	128	3.791	3.788	(0.908)	67877	16.9444	84.72
$	30 Dibromofluoromethane	113	4.091	4.095	(0.979)	303257	44.6049	44.60
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	204756	21.8230	109.11
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	177614	24.7711	123.85
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	173560	20.9741	104.87
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	173972	22.7213	113.60
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	348112	48.5383	48.53
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1009963	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	503171	20.8632	104.31
	38 Trichloroethene	130	5.205	5.205	(1.049)	150389	21.9849	109.92
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	172844	19.0963	95.48
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	126863	19.7746	98.87
	44 Dibromomethane	93	5.553	5.549	(1.119)	81051	18.5872	92.93
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	223718	46.1167	230.58
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	212953	20.0334	100.16
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	907600	50.0000	
$	48 Toluene-d8	98	6.382	6.382	(0.832)	1189223	53.0254	53.02
	50 Toluene	91	6.446	6.442	(0.841)	551916	22.0007	110.00
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	181331	20.5555	102.77
	52 2-Hexanone	43	7.087	7.083	(0.924)	146803	44.4784	222.39
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	100769	20.0226	100.11
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	207871	20.9842	104.92
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	145562	20.0397	100.19
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	128740	24.8032	124.01
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	128850	20.4770	102.38
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	135028	27.6650	138.32
	59 Chlorobenzene	112	7.694	7.694	(1.003)	369055	20.7409	103.70
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	139208	21.0225	105.11
	61 Ethylbenzene	106	7.799	7.799	(1.017)	193823	23.1245	115.62
	62 m,p-Xylenes	106	7.900	7.904	(1.030)	495697	45.8767	229.38
	63 o-Xylene	106	8.241	8.241	(1.075)	235709	22.1023	110.51
	64 Styrene	104	8.260	8.256	(1.077)	394512	22.0707	110.35
	66 Bromoform	173	8.410	8.410	(1.097)	98994	19.6723	98.36
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	810066	33.2481	166.24
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	162758	20.9398	104.69
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	447640	53.3938	53.39
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	487663	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	123078	22.6818	113.40(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	883429	32.7048	163.52
	74 Bromobenzene	156	8.803	8.803	(0.911)	175263	21.9056	109.52

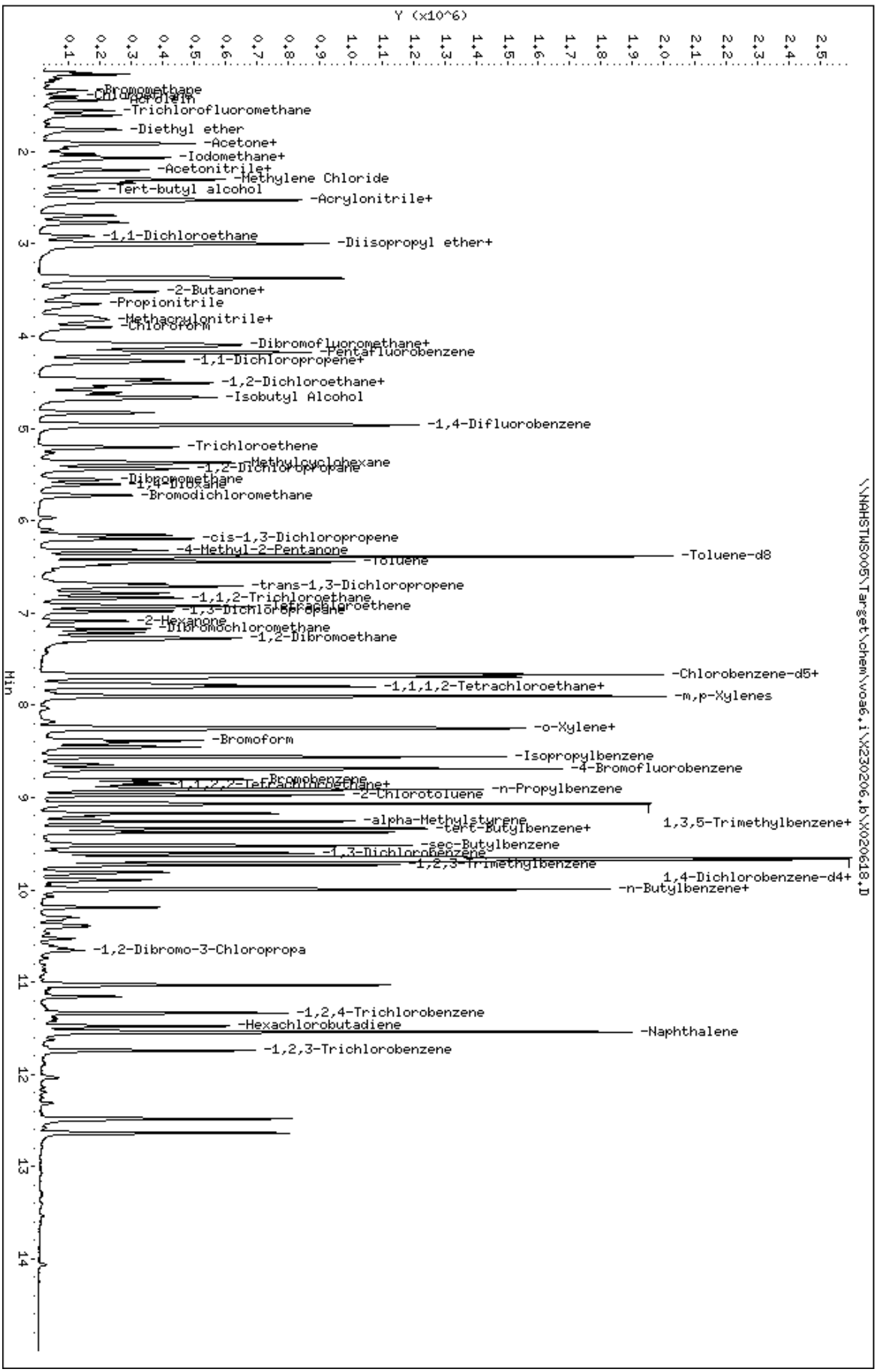
75	1,3,5-Trimethylbenzene	105	9.066	9.066 (0.938)	518984	26.0080	130.04
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	440604	24.8568	124.28

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020618.D Page 3
Report Date: 13-Feb-2023 14:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	77 4-Chlorotoluene	91	9.070	9.069	(0.939)	498005	24.6451	123.22
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	496147	30.3746	151.87
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	521929	24.8579	124.28
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	671749	30.9087	154.54
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	547121	28.0933	140.46
	83 1,3-Dichlorobenzene	146	9.602	9.605	(0.994)	304314	22.9159	114.57
	84 1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	315497	21.7719	108.85
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	477638	26.3199	131.59
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	298198	21.8036	109.01
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	26642	21.4922	107.46
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	217064	25.1491	125.74
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	104257	27.3797	136.89
	92 Naphthalene	128	11.540	11.540	(1.194)	1322791	67.3592	336.79
	93 1,2,3-Trichlorobenzene	180	11.742	11.738	(1.215)	195056	23.5964	117.98
M	94 1,2-Dichloroethylene (total)	96				252843	38.0667	190.33
M	95 Xylenes (total)	106				731406	67.9790	339.89
	141 Cyclohexane	56	4.118	4.121	(0.986)	200207	28.6161	143.08
	138 Freon TF	101	1.913	1.913	(0.458)	105920	20.3869	101.93
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	323519	26.1688	130.84
	146 Methyl Acetate	43	2.228	2.228	(0.533)	67407	21.1651	105.82
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	220176	449.261	2246.30
	149 Isopropyl Alcohol	45	2.090	2.086	(0.500)	121139	473.299	2366.49

QC Flag Legend

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



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Column phase: DB624

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

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Inj Date : 06-FEB-2023 16:36
InstruID : voa6.i
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1,2,3-Trichloropropane (96-18-4)

Reason Code:

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13-Feb-2023
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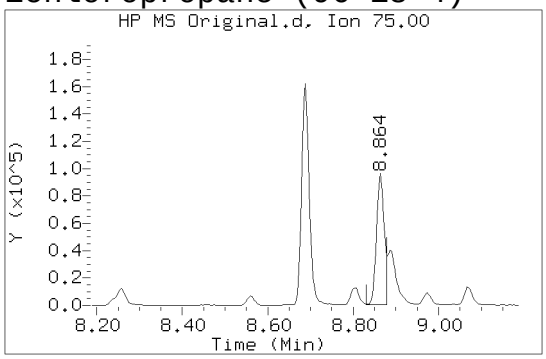

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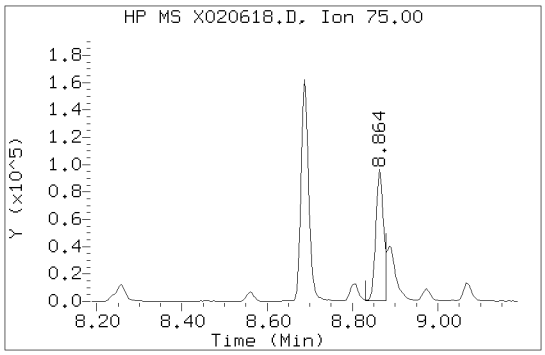

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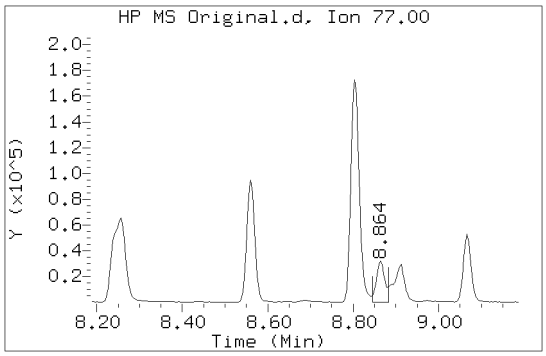

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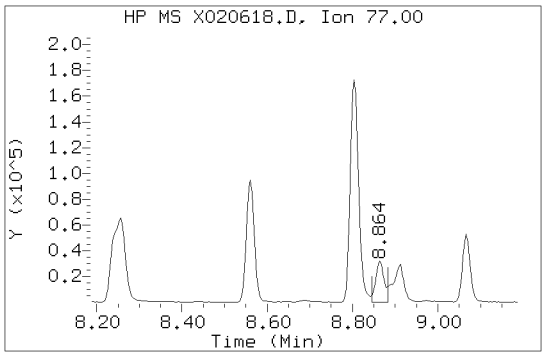

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Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020619.D
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Inj Date : 06-FEB-2023 16:57
Operator : PC Inst ID: voa6.i
Smp Info : HS23011590-04MSD;HS23011590-04MSD;3;;MSD
Misc Info : V6;WATER;0;5;
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Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 18 QC Sample: MSD
Dil Factor: 5.00000
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	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	4.178	4.177	(1.000)	695840	50.0000	
135	1,4-Dioxane	88	5.598	5.594	(1.340)	26951	423.711	2118.55(a)
140	1,3-Butadiene	54	1.164	1.160	(0.279)	80870	16.9337	84.66
25	Methacrylonitrile	41	3.818	3.814	(0.914)	99416	20.1772	100.88
12	Isobutyl Alcohol	43	4.672	4.672	(1.118)	339323	433.547	2167.73
13	Acetonitrile	39	2.195	2.194	(0.525)	131038	206.912	1034.56
14	Allyl Chloride	41	2.195	2.194	(0.525)	270263	22.4068	112.03
4	Propionitrile	54	3.649	3.645	(0.873)	148678	209.404	1047.01(a)
139	Diethyl ether	59	1.752	1.752	(0.420)	83796	18.0227	90.11
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	34764	38.2934	191.46
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	242844	22.1368	110.68
156	Diisopropyl ether	45	2.997	2.997	(0.717)	382693	21.2010	106.00
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	519872	21.8052	109.02
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	49169	10.4164	52.08
3	Chloromethane	50	1.074	1.074	(0.257)	91800	16.1481	80.74
5	Vinyl Chloride	62	1.141	1.141	(0.273)	100425	16.5212	82.60
6	Bromomethane	94	1.336	1.336	(0.320)	67439	15.9151	79.57
7	Chloroethane	64	1.400	1.400	(0.335)	67900	16.0487	80.24
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	166818	19.6111	98.05
9	Acrolein	56	1.445	1.441	(0.346)	19149	41.9250	209.62

10 Acetone	43	1.970	1.970 (0.472)	56062	28.6890	143.44
11 1,1-Dichloroethene	96	1.913	1.910 (0.458)	93636	17.7303	88.65

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020619.D Page 2
Report Date: 13-Feb-2023 14:14

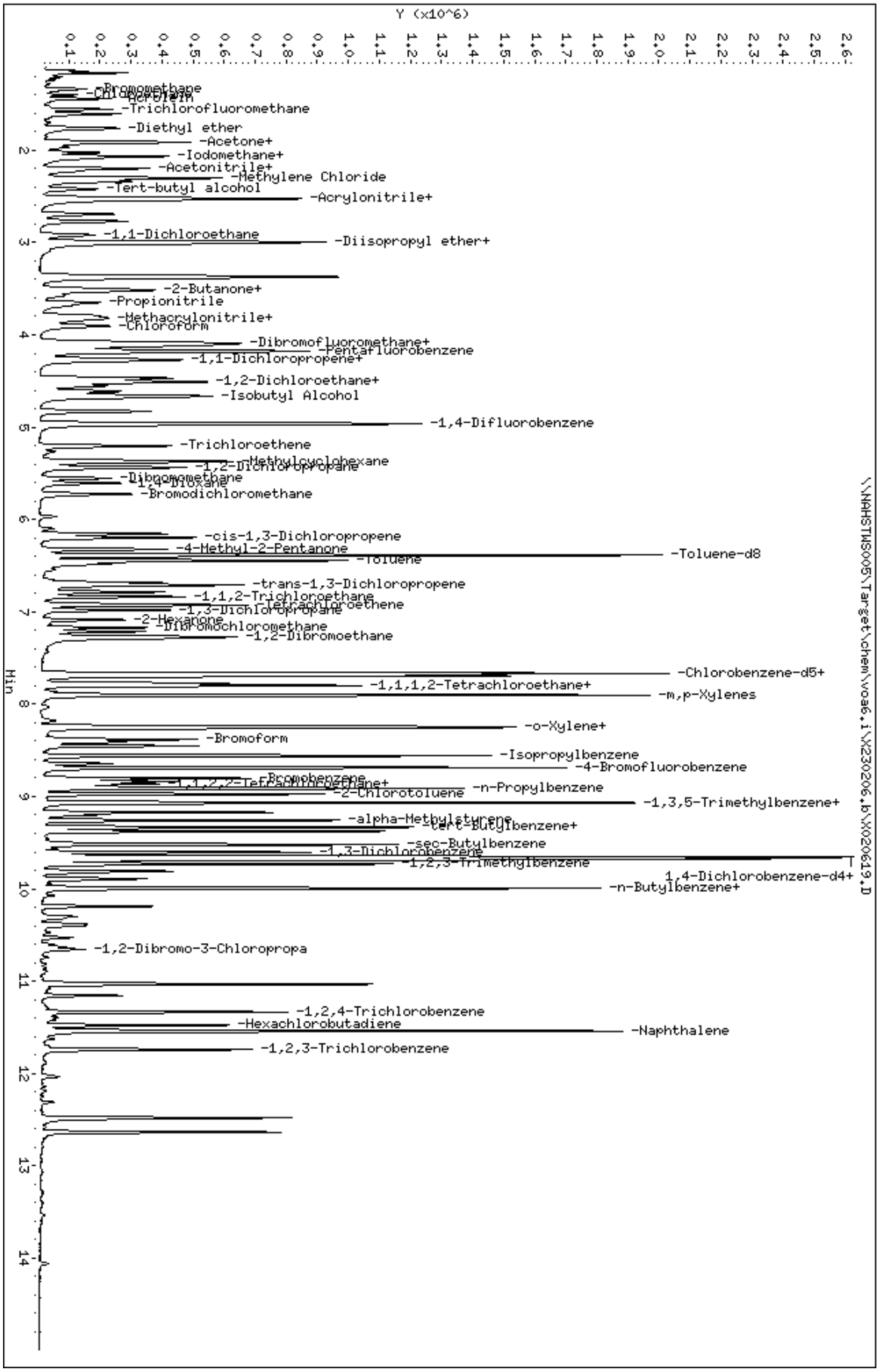
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	15 Iodomethane	142	2.026	2.026	(0.485)	201424	32.1238	160.61
	16 Acrylonitrile	53	2.532	2.528	(0.606)	78067	43.5850	217.92
	17 Methylene Chloride	84	2.300	2.299	(0.550)	128576	17.7494	88.74
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	361341	20.9035	104.51
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	529207	38.3003	191.50
	20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	115528	19.5462	97.73
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	646477	42.6031	213.01
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	198731	19.1584	95.79
	24 2-Butanone	43	3.574	3.570	(0.856)	73851	37.6060	188.02
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	183348	20.8177	104.08
	27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	131563	18.2904	91.45
	28 Chloroform	83	3.904	3.900	(0.935)	218348	18.7806	93.90
	29 Bromochloromethane	128	3.795	3.788	(0.908)	66859	16.9765	84.88
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	306195	45.8138	45.81
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	196622	21.3154	106.57
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	172844	24.2228	121.11
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	176925	21.4845	107.42
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	170591	22.3879	111.93
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	351182	49.7990	49.79
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1005084	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	493858	20.5764	102.88
	38 Trichloroethene	130	5.205	5.205	(1.049)	146855	21.5725	107.86
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	174209	19.3405	96.70
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	127026	19.8962	99.48
	44 Dibromomethane	93	5.550	5.549	(1.119)	80350	18.5159	92.57
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	223279	45.3888	226.94
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	211704	20.0126	100.06
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	920347	50.0000	
$	48 Toluene-d8	98	6.386	6.382	(0.833)	1183736	52.0497	52.04
	50 Toluene	91	6.446	6.442	(0.841)	544269	21.3954	106.97
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	181785	20.7070	103.53
	52 2-Hexanone	43	7.087	7.083	(0.924)	148098	44.2493	221.24
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	101513	19.8911	99.45
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	206732	20.5802	102.90
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	144744	19.6511	98.25
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	125583	23.8599	119.29
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	130130	20.3940	101.96
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	133296	27.4427	137.21
	59 Chlorobenzene	112	7.694	7.694	(1.003)	362586	20.0951	100.47
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	138352	20.6039	103.01
	61 Ethylbenzene	106	7.799	7.799	(1.017)	191000	22.4721	112.36
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	480198	43.8267	219.13
	63 o-Xylene	106	8.241	8.241	(1.075)	228848	21.1618	105.80
	64 Styrene	104	8.260	8.256	(1.077)	386824	21.3409	106.70
	66 Bromoform	173	8.410	8.410	(1.097)	97848	19.1753	95.87
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	782175	31.6587	158.29
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	160839	20.3820	101.91
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	460467	54.1622	54.16
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	495102	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	121263	22.0116	110.05(M)
	73 n-Propylbenzene	91	8.908	8.912	(0.922)	867015	31.6149	158.07
	74 Bromobenzene	156	8.803	8.803	(0.911)	171009	21.0527	105.26

75	1,3,5-Trimethylbenzene	105	9.066	9.066 (0.938)	507749	25.0627	125.31
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	428858	23.8306	119.15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	77 4-Chlorotoluene	91	9.070	9.069	(0.939)	490702	23.9188	119.59
	78 tert-Butylbenzene	119	9.332	9.336	(0.966)	481583	29.0400	145.19
	79 1,2,4-Trimethylbenzene	105	9.381	9.377	(0.971)	510586	23.9523	119.76
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	656901	29.7713	148.85
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	535376	27.0771	135.38
	83 1,3-Dichlorobenzene	146	9.606	9.605	(0.994)	302162	22.4120	112.05
	84 1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	312418	21.2355	106.17
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	464463	25.2843	126.42
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	296115	21.3260	106.63
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	26953	21.4167	107.08
	90 1,2,4-Trichlorobenzene	180	11.338	11.337	(1.173)	215970	24.6463	123.23
	91 Hexachlorobutadiene	225	11.476	11.480	(1.188)	104349	26.9939	134.96
	92 Naphthalene	128	11.540	11.540	(1.194)	1318583	66.1361	330.68
	93 1,2,3-Trichlorobenzene	180	11.742	11.738	(1.215)	199191	23.7346	118.67
M	94 1,2-Dichloroethylene (total)	96				247091	37.8365	189.18
M	95 Xylenes (total)	106				709046	64.9885	324.94
	141 Cyclohexane	56	4.118	4.121	(0.986)	198723	28.8790	144.39
	138 Freon TF	101	1.910	1.913	(0.457)	103546	20.2717	101.35
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	317868	25.8365	129.18
	146 Methyl Acetate	43	2.228	2.228	(0.533)	68542	21.8906	109.45
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	216719	449.790	2248.95
	149 Isopropyl Alcohol	45	2.090	2.086	(0.500)	118485	470.868	2354.34

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 : 06-FEB-2023 16:57
Client ID: HS23011590-04HSD
Sample Info: HS23011590-04HSD;HS23011590-04HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

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

Page 1

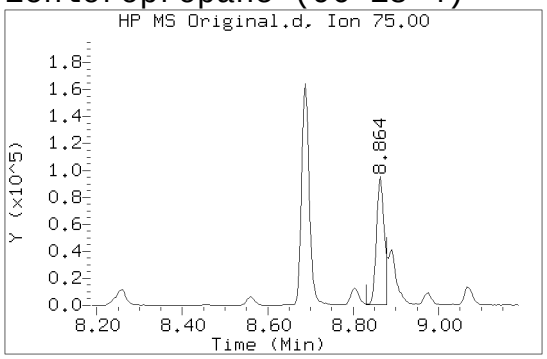
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020619.D
Inj Date : 06-FEB-2023 16:57
InstruID : voa6.i
LabSampID : HS23011590-04MSD

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

Reason Code:

BEFORE

MASS
75
AREA
121263
HEIGHT
95202
13-Feb-2023
14:13
linh
pham



AFTER

MASS
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121263
HEIGHT
95202
13-Feb-2023
14:13
linh
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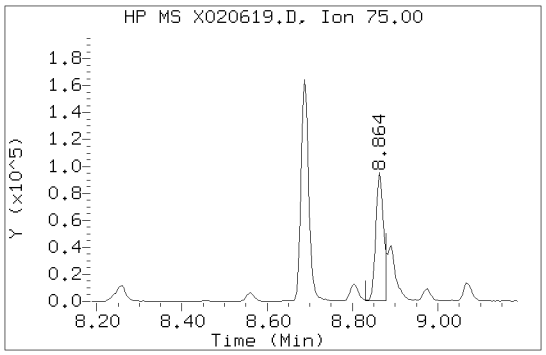

BEFORE

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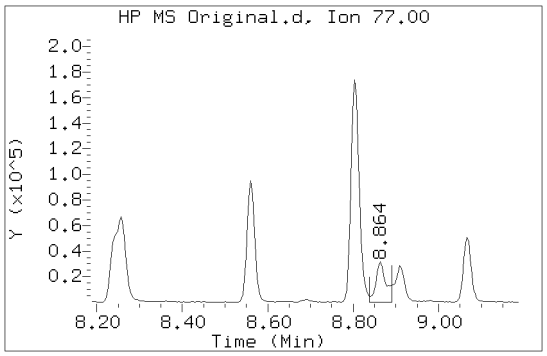
AREA
52416
HEIGHT
31657
13-Feb-2023
14:13
linh
pham



AFTER

MASS
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AREA
52416
HEIGHT
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13-Feb-2023
14:13
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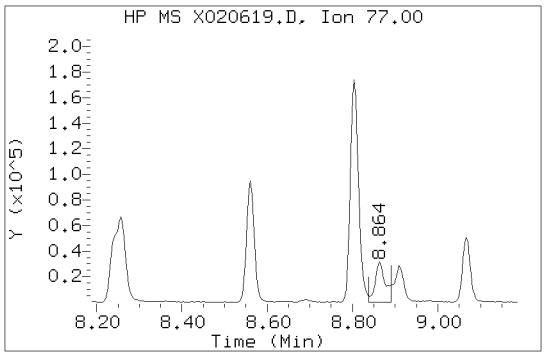


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020620.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020620.D
Lab Smp Id: HS23011514-02 Client Smp ID: HS23011514-02
Inj Date : 06-FEB-2023 17:18
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-02;HS23011514-02;;;
Misc Info : V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 19
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

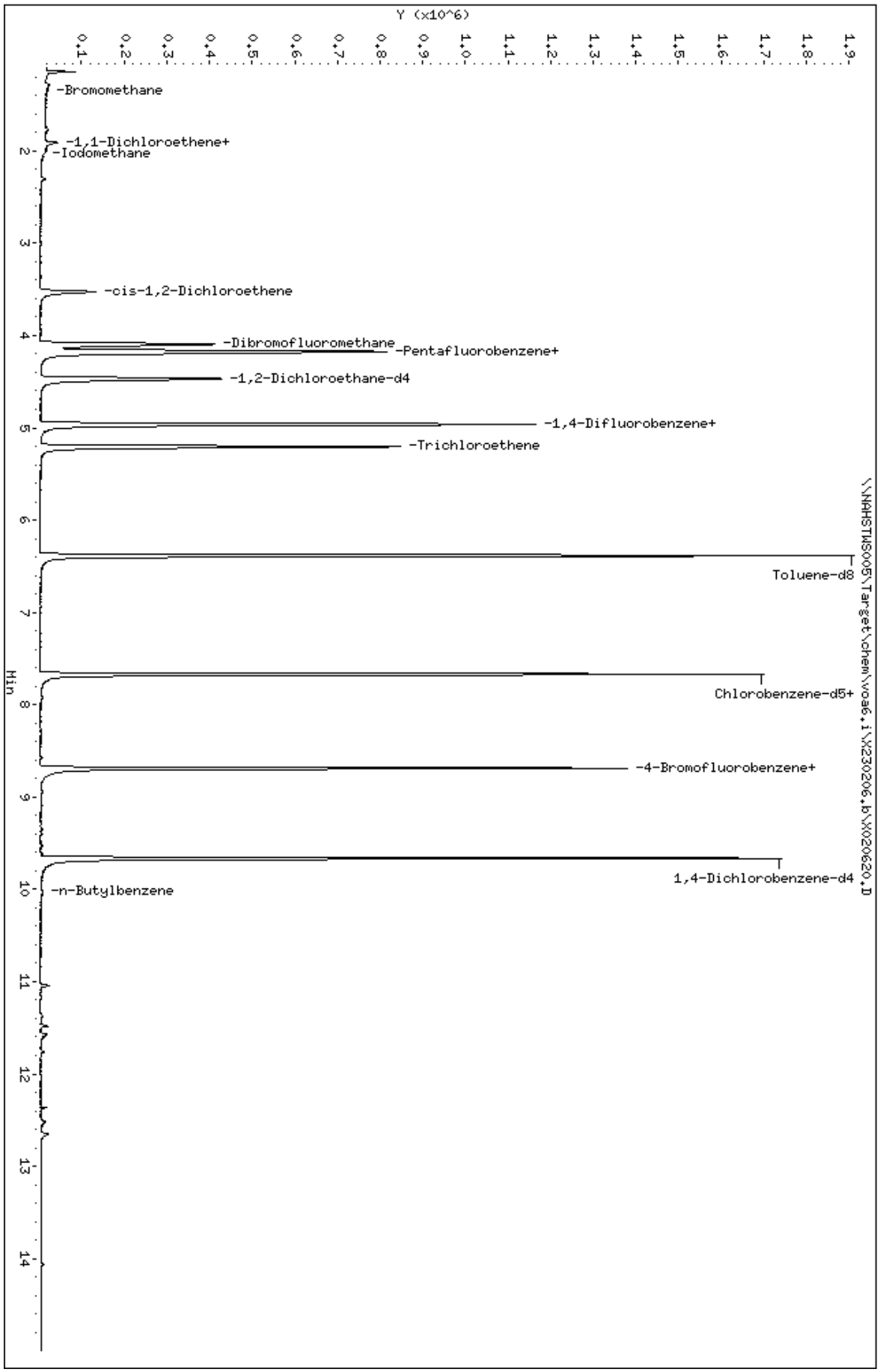
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.177	(1.000)	685316	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	301772	45.8455	45.84
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	340047	48.9650	48.96
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	981658	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	864214	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1137938	53.2859	53.28
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	417157	52.2572	52.25
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	437989	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	44729	7.47150	186.78
11 1,1-Dichloroethene	96	1.913	1.910	(0.458)	7613	1.46369	36.59(a)
27 cis-1,2-Dichloroethene	96	3.525	3.521	(0.844)	74273	10.4843	262.10
38 Trichloroethene	130	5.205	5.205	(1.049)	293966	44.2131	1105.32

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa6.i\X230206.b\X020620.D
Date : 06-FEB-2023 17:18
Client ID: HS23011514-02
Sample Info: HS23011514-02;HS23011514-02;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020620.D Page 2

Date : 06-FEB-2023 17:18

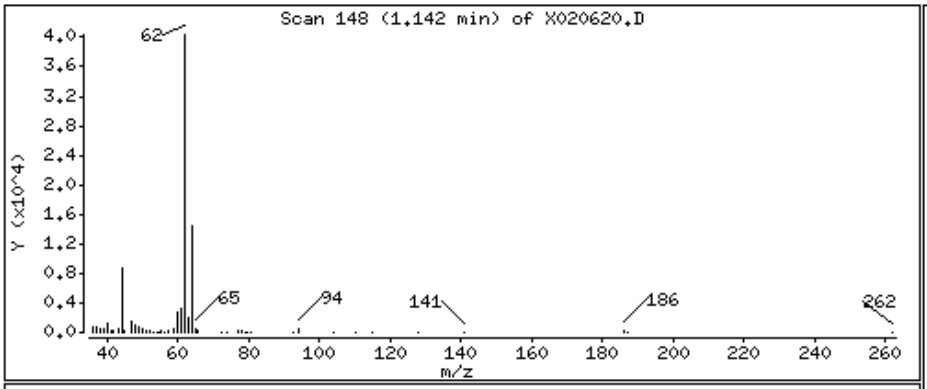
Client ID: HS23011514-02 Instrument: voa6.i

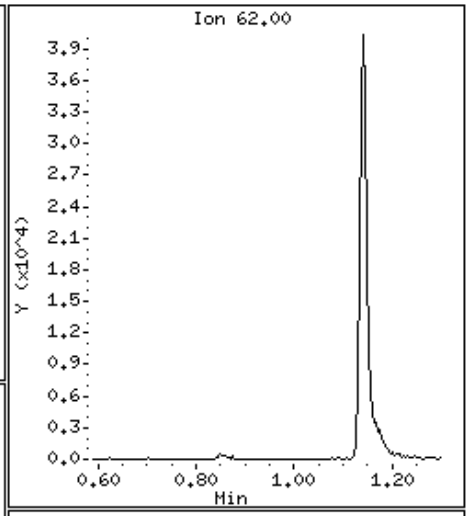
Sample Info: HS23011514-02;HS23011514-02;;;

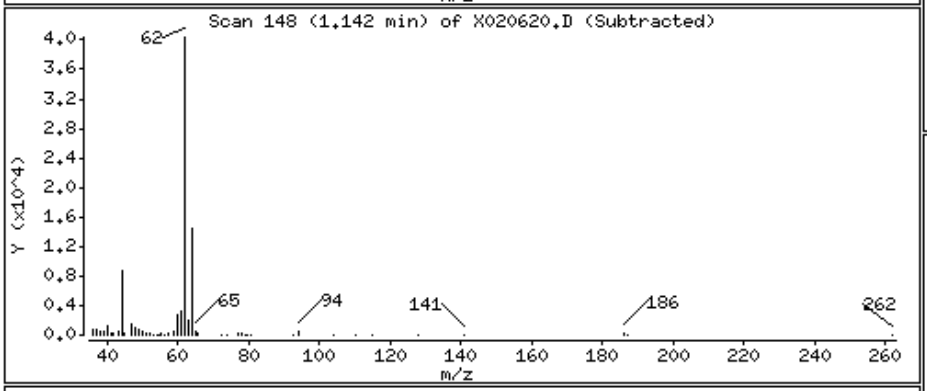
Purge Volume: 5.0 Operator: PC

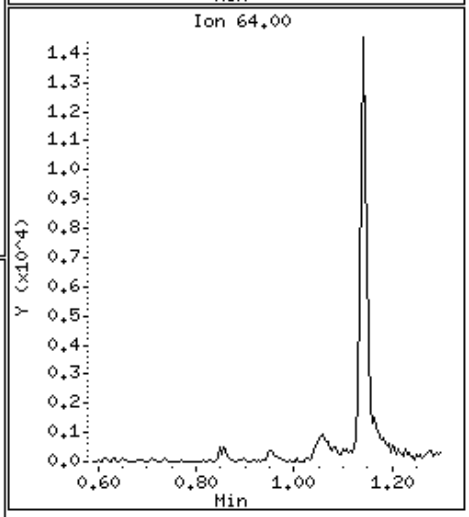
Column phase: DB624 Column diameter: 0.18

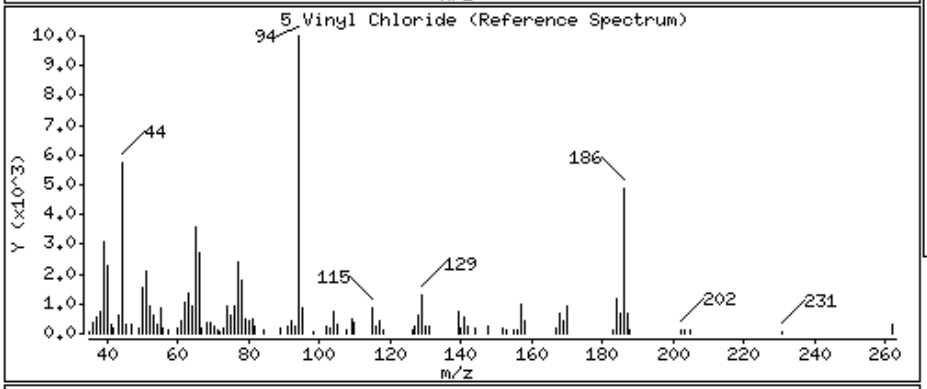
5 Vinyl Chloride Concentration: 186.78 ug/l

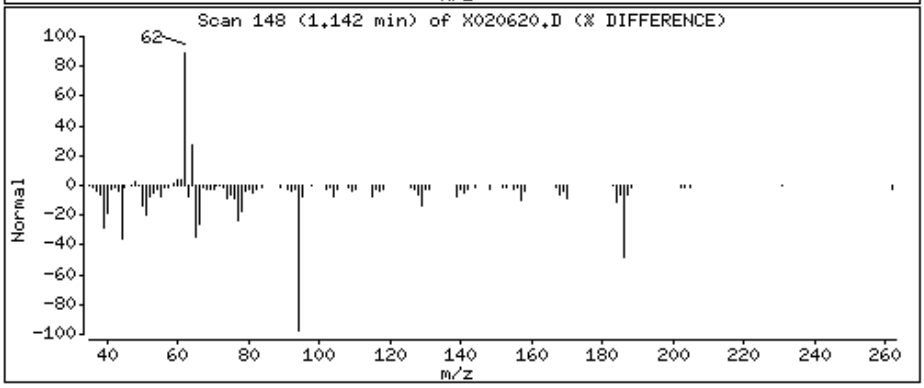












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020620.D Page 3

Date : 06-FEB-2023 17:18

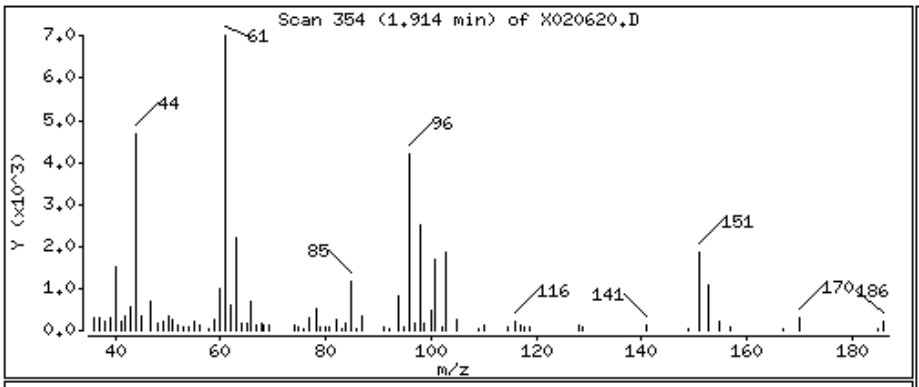
Client ID: HS23011514-02 Instrument: voa6.i

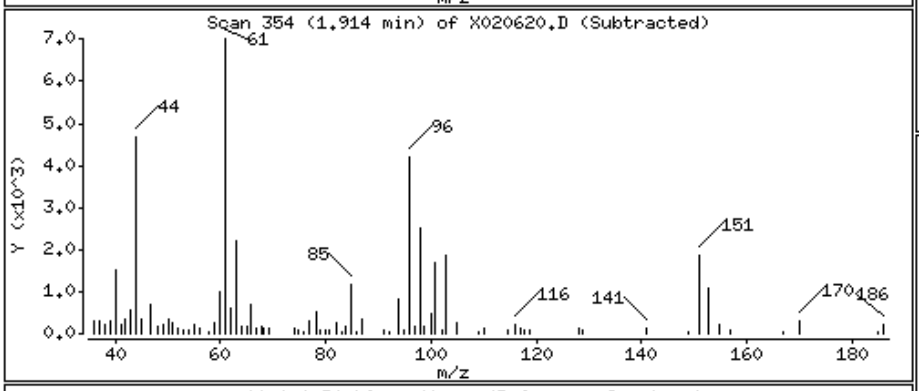
Sample Info: HS23011514-02;HS23011514-02;;;

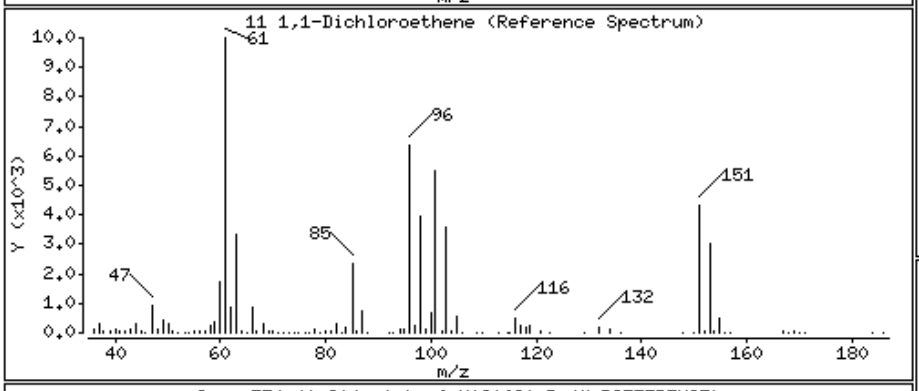
Purge Volume: 5.0 Operator: PC

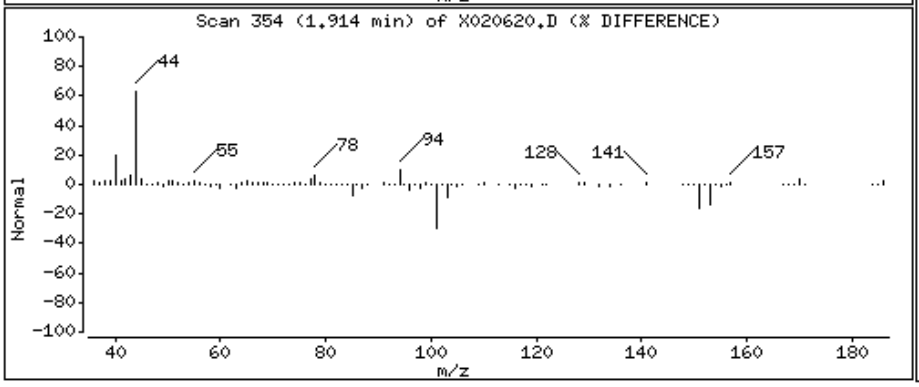
Column phase: DB624 Column diameter: 0.18

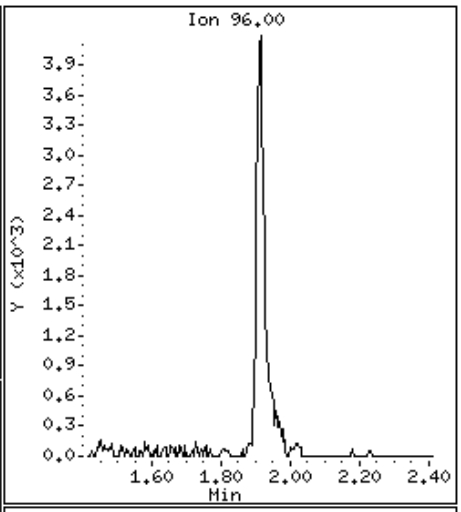
11 1,1-Dichloroethene Concentration: 36.59 ug/l

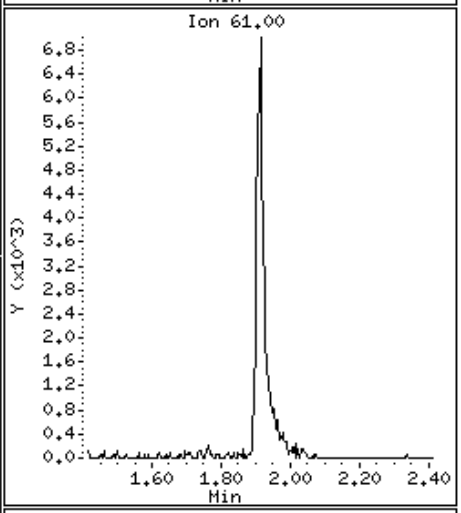


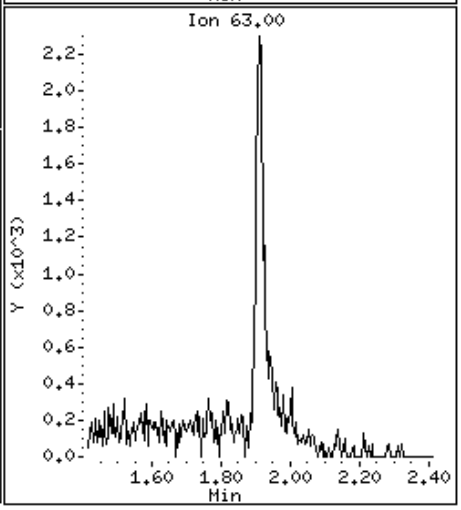












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020620.D Page 4

Date : 06-FEB-2023 17:18

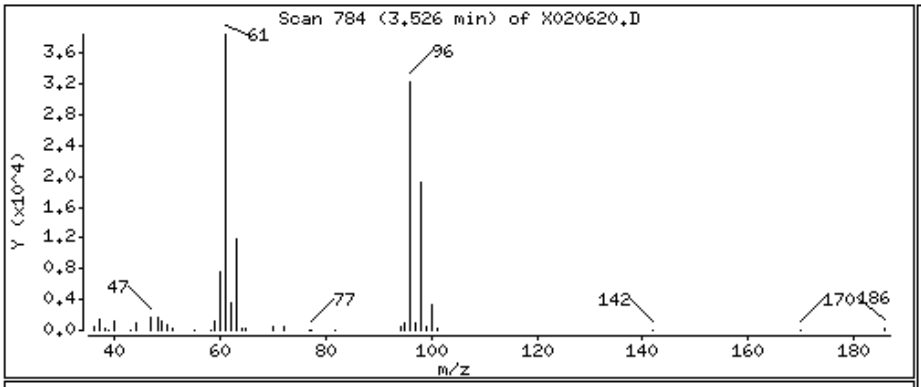
Client ID: HS23011514-02 Instrument: voa6.i

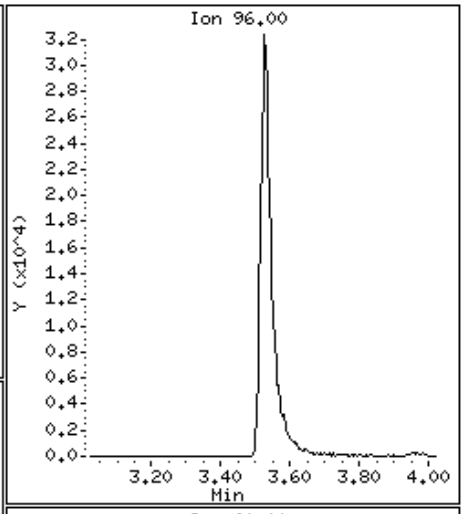
Sample Info: HS23011514-02;HS23011514-02;;;

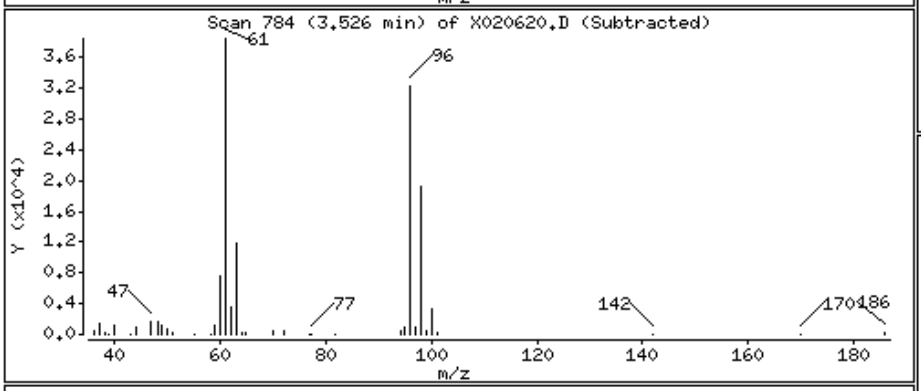
Purge Volume: 5.0 Operator: PC

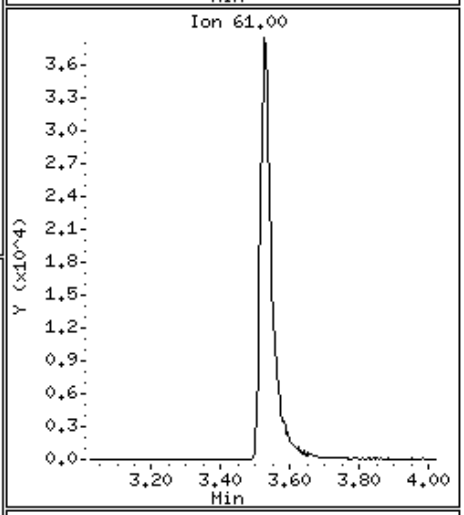
Column phase: DB624 Column diameter: 0.18

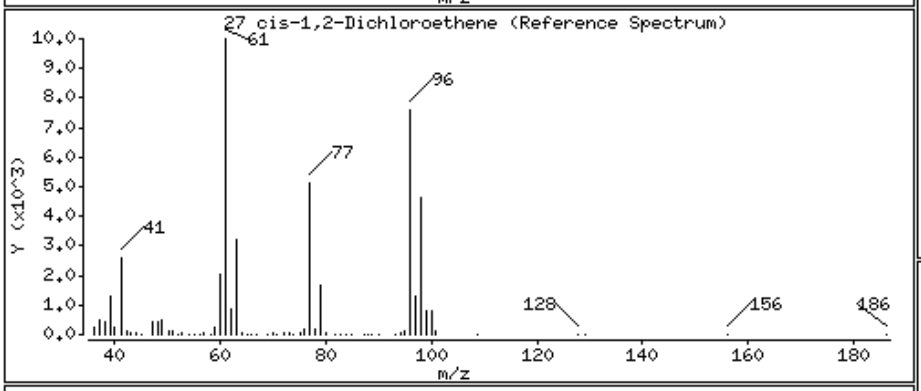
27 cis-1,2-Dichloroethene Concentration: 262.10 ug/l

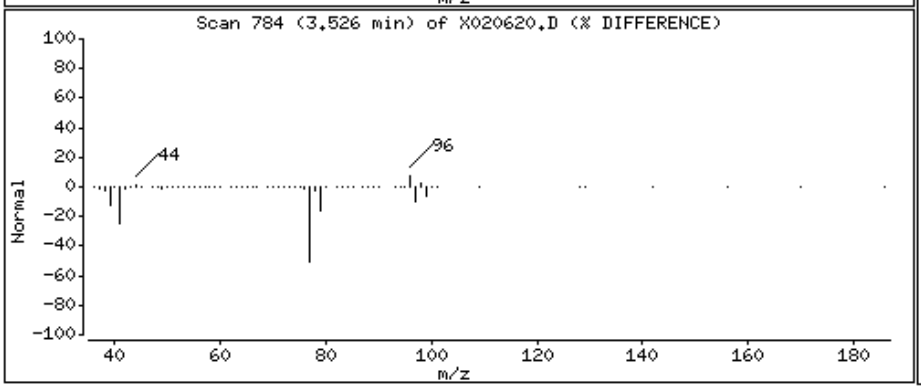


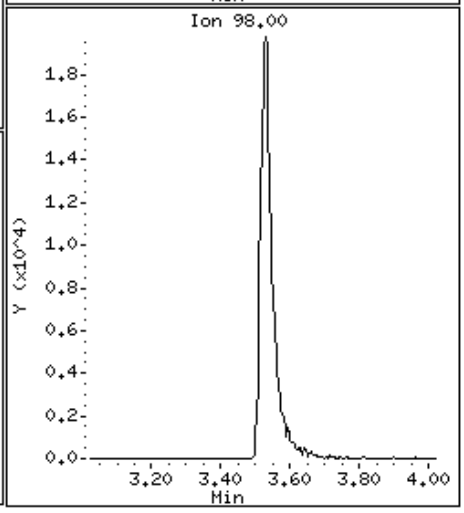












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020620.D Page 5

Date : 06-FEB-2023 17:18

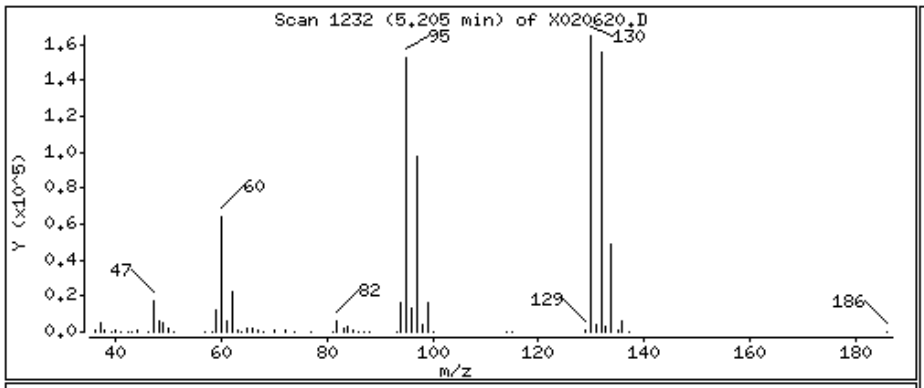
Client ID: HS23011514-02 Instrument: voa6.i

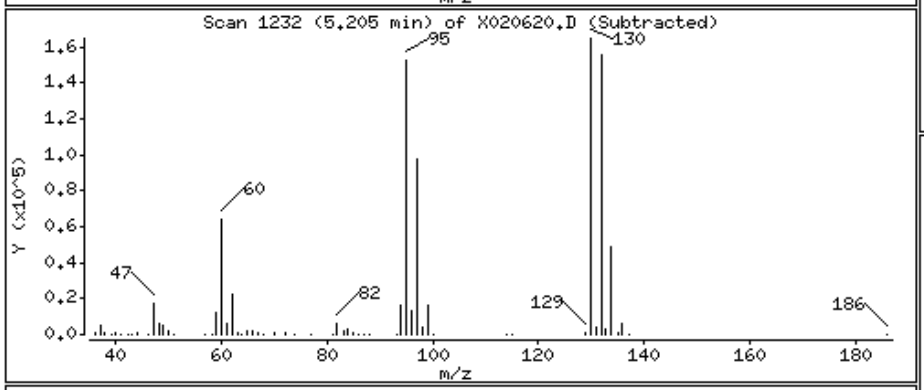
Sample Info: HS23011514-02;HS23011514-02;;;

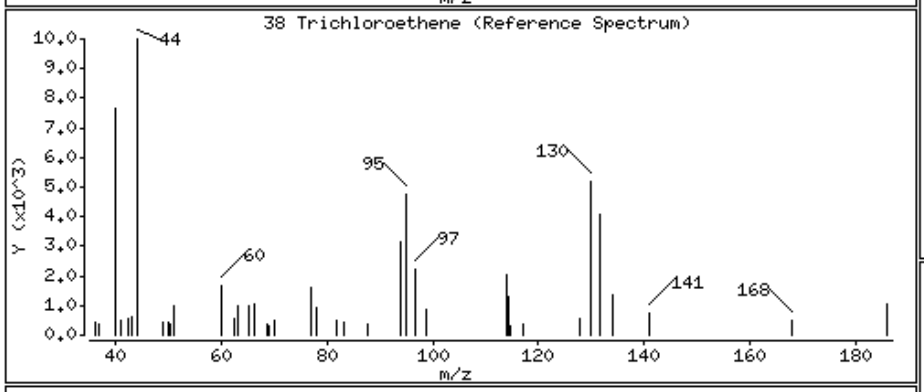
Purge Volume: 5.0 Operator: PC

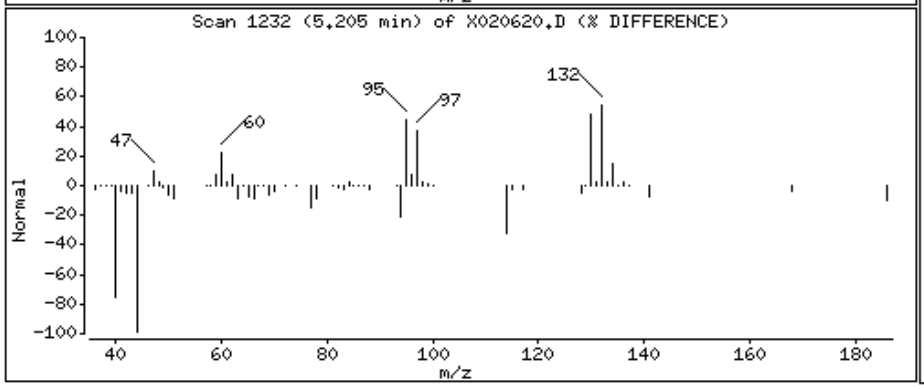
Column phase: DB624 Column diameter: 0.18

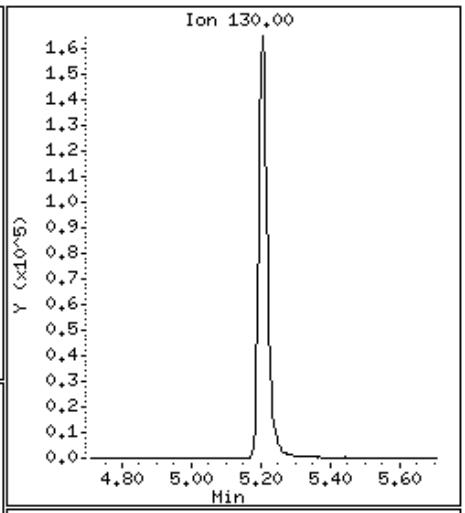
38 Trichloroethene Concentration: 1105.32 ug/l

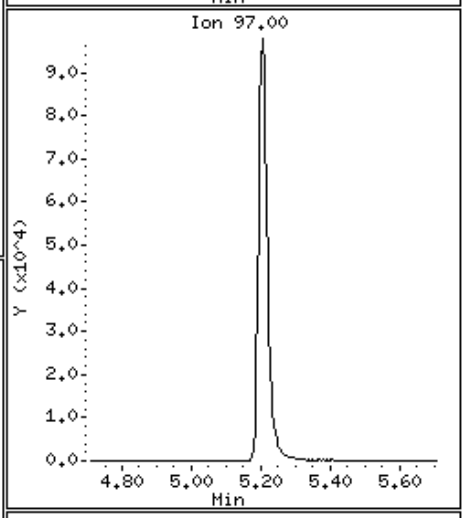


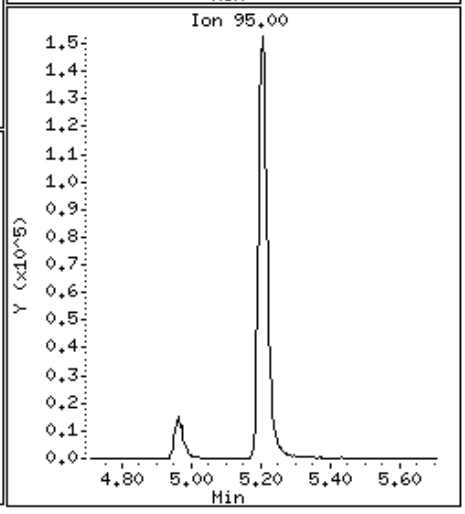












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020620.D
Inj Date : 06-FEB-2023 17:18
InstruID : voa6.i
LabSampID : HS23011514-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020621.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020621.D
Lab Smp Id: HS23011514-04 Client Smp ID: HS23011514-04
Inj Date : 06-FEB-2023 17:39
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-04;HS23011514-04;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 20
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

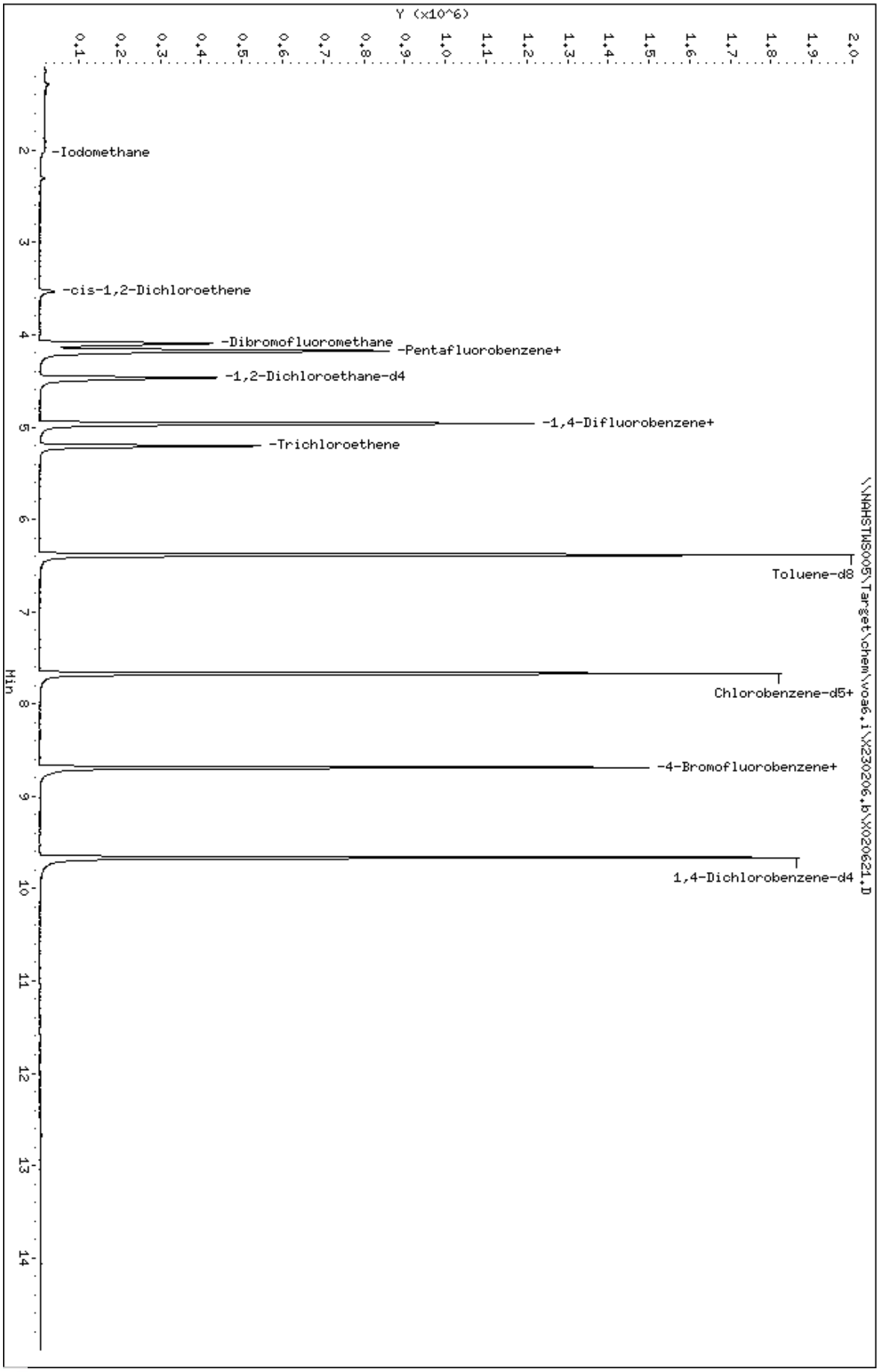
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.177	(1.000)	711305	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	311405	45.5795	45.57
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.070)	355122	49.2657	49.26
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1023882	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	923641	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1178115	51.6178	51.61
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	446606	52.3466	52.34
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	478692	50.0000	
27 cis-1,2-Dichloroethene	96	3.529	3.521	(0.846)	22552	3.06710	153.35(a)
38 Trichloroethene	130	5.205	5.205	(1.049)	189676	27.3512	1367.56

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230206,b\X020621.D
Date : 06-FEB-2023 17:39
Client ID: HS23011514-04
Sample Info: HS23011514-04;HS23011514-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020621.D

Date : 06-FEB-2023 17:39

Client ID: HS23011514-04

Instrument: voa6.i

Sample Info: HS23011514-04;HS23011514-04;;;

Purge Volume: 5.0

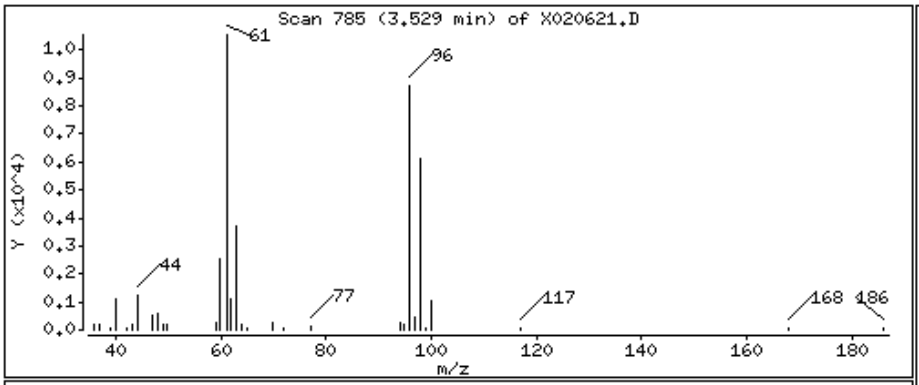
Operator: PC

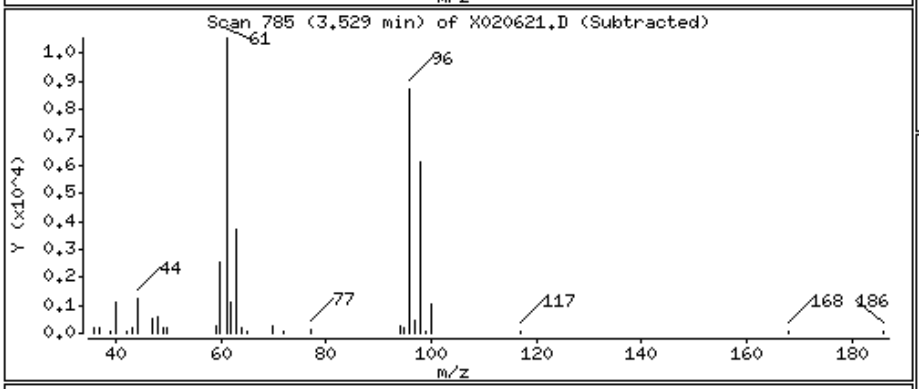
Column phase: DB624

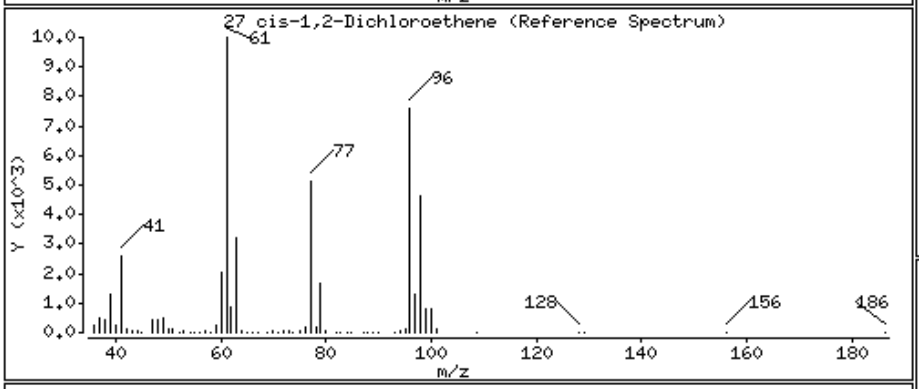
Column diameter: 0.18

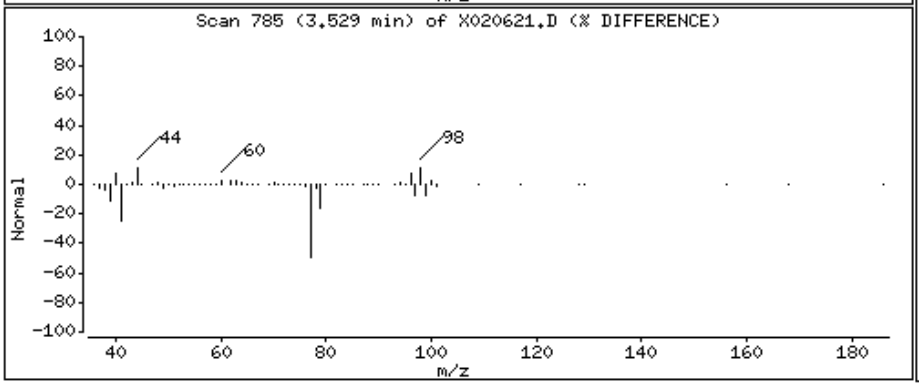
27 cis-1,2-Dichloroethene

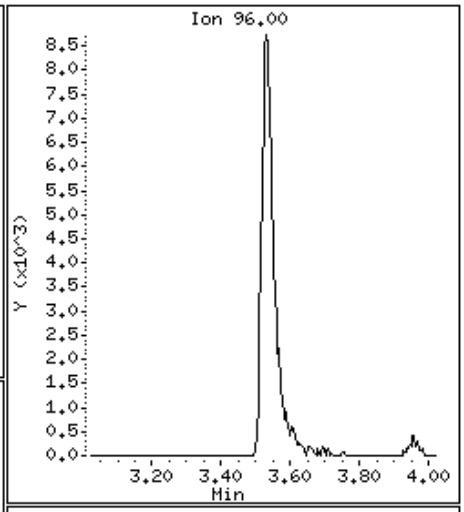
Concentration: 153.35 ug/l

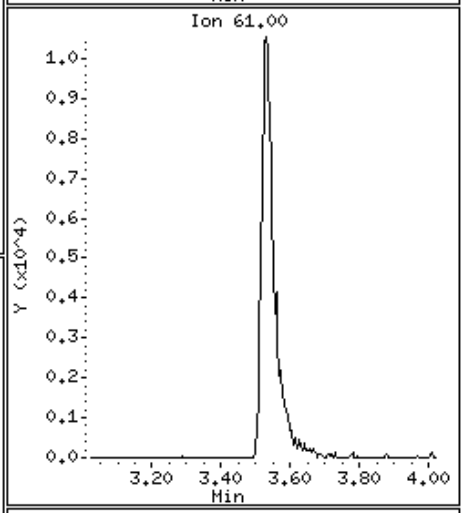


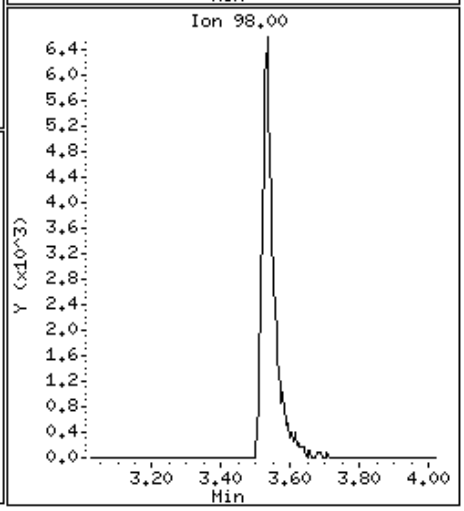












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020621.D Page 3

Date : 06-FEB-2023 17:39

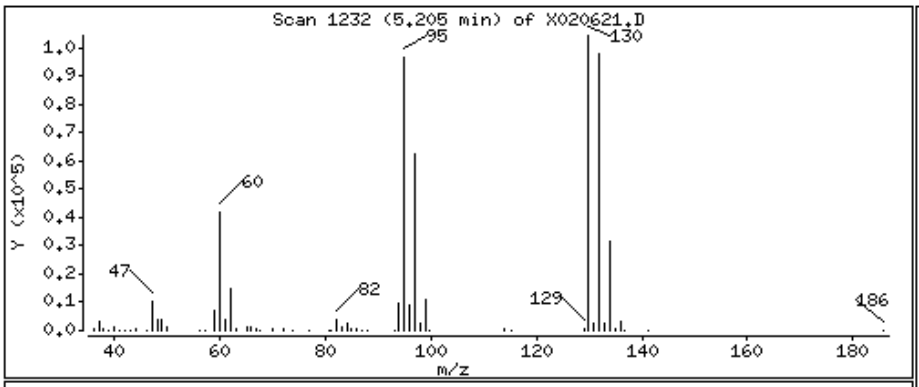
Client ID: HS23011514-04 Instrument: voa6.i

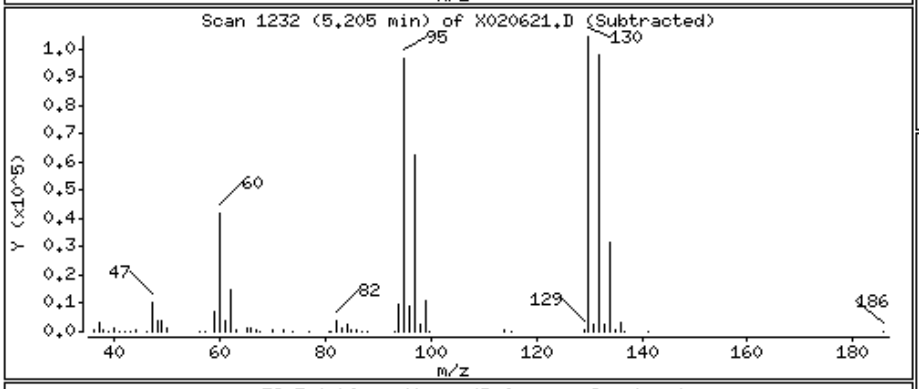
Sample Info: HS23011514-04;HS23011514-04;;;

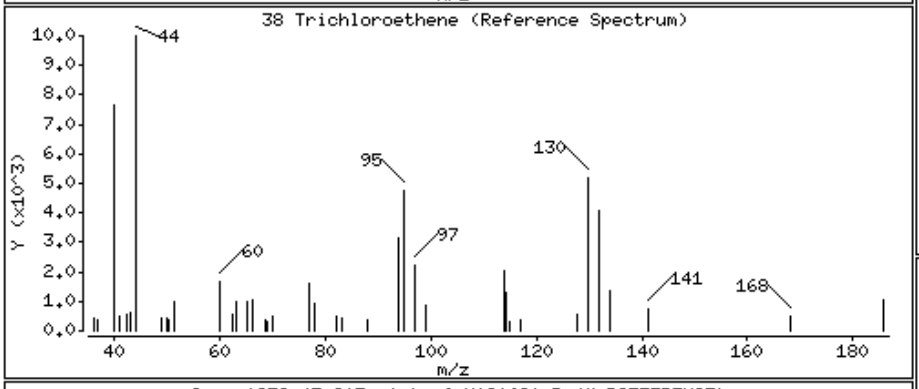
Purge Volume: 5.0 Operator: PC

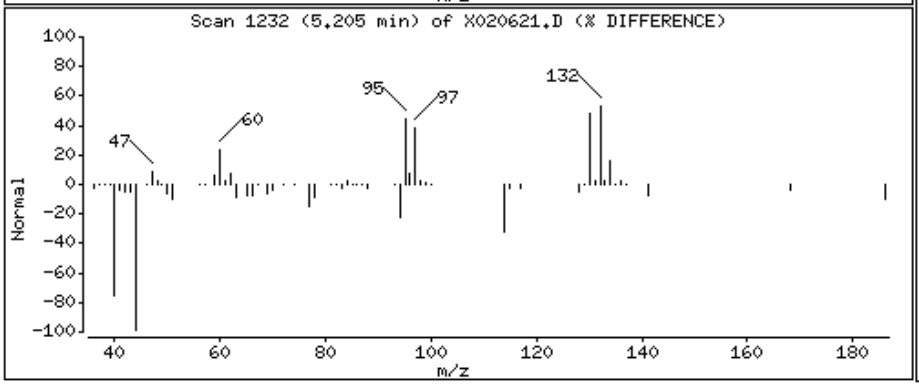
Column phase: DB624 Column diameter: 0.18

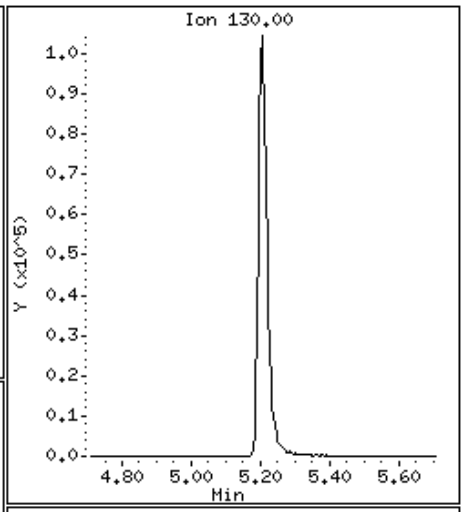
38 Trichloroethene Concentration: 1367.56 ug/l

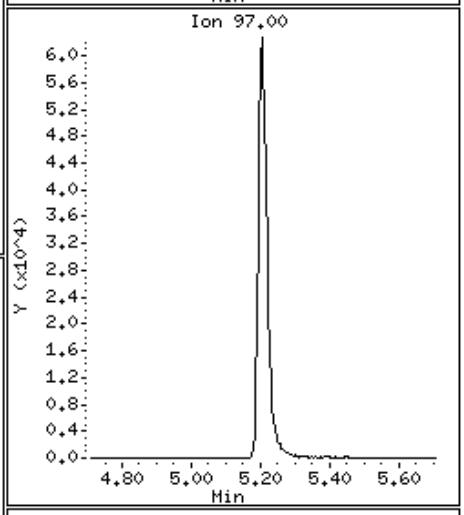


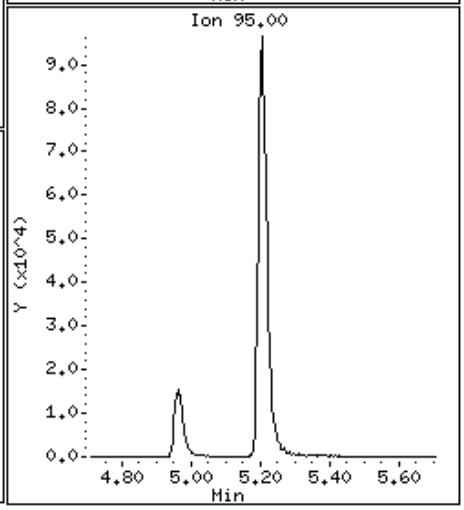












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020621.D
Inj Date : 06-FEB-2023 17:39
InstruID : voa6.i
LabSampID : HS23011514-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020622.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020622.D
Lab Smp Id: HS23011514-06 Client Smp ID: HS23011514-06
Inj Date : 06-FEB-2023 18:00
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-06;HS23011514-06;;;
Misc Info : V6;WATER;0;500;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 21
Dil Factor: 500.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

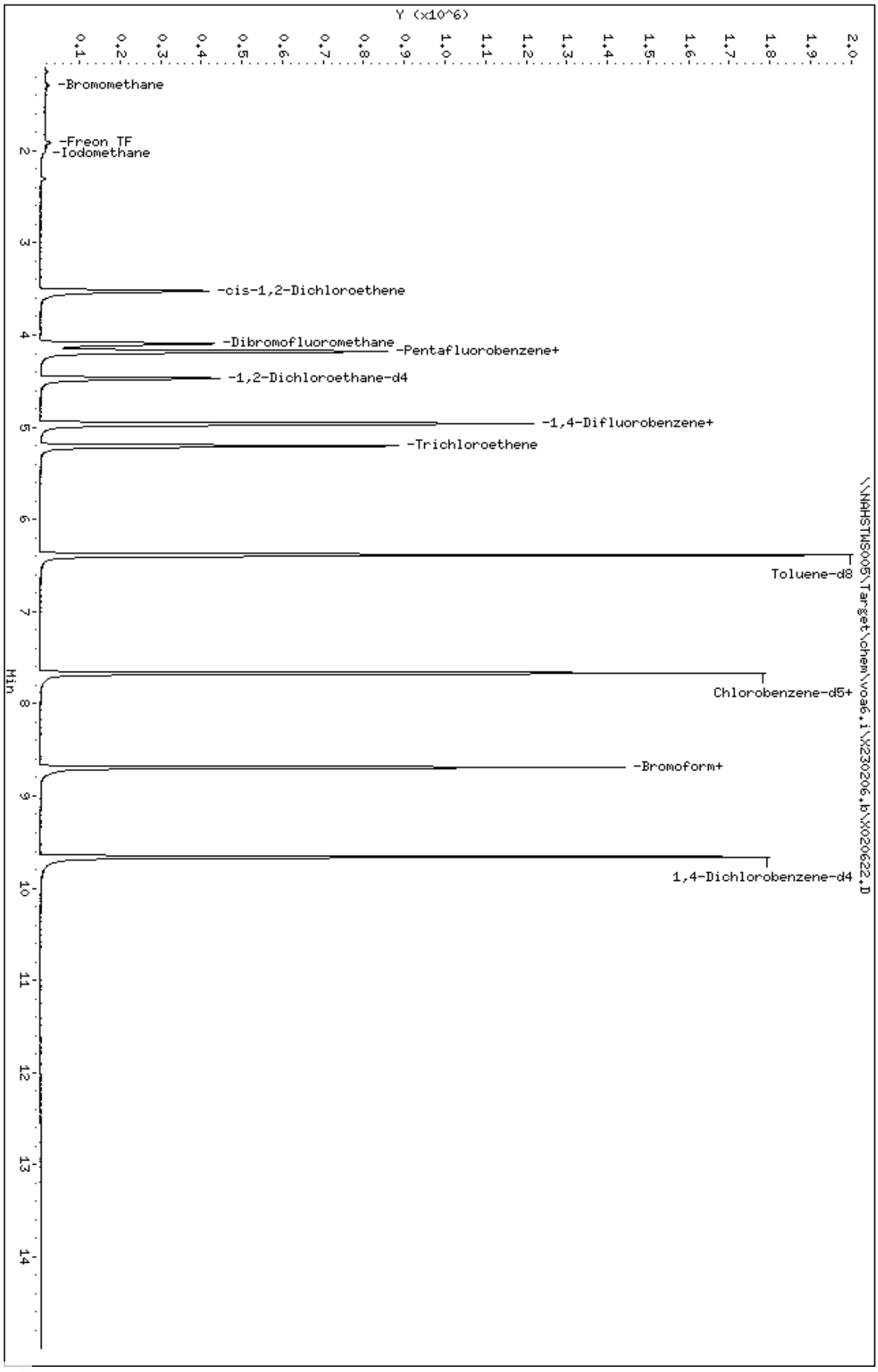
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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	4.177	(1.000)	708196	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	318165	46.7777	46.77
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	358151	49.9006	49.90
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1026275	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	904701	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1173272	52.4818	52.48
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	436905	52.2817	52.28
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	457299	50.0000	
5 Vinyl Chloride	62	1.137	1.141	(0.272)	3236	0.52308	261.53(a)
27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.843)	237229	32.4051	16202.53
38 Trichloroethene	130	5.205	5.205	(1.048)	306157	44.0448	22022.41

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020622.D
Date : 06-FEB-2023 18:00
Client ID: HS23011514-06
Sample Info: HS23011514-06;HS23011514-06;;;
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\X230206.b\X020622.D

Date : 06-FEB-2023 18:00

Client ID: HS23011514-06

Instrument: voa6.i

Sample Info: HS23011514-06;HS23011514-06;;;

Purge Volume: 5.0

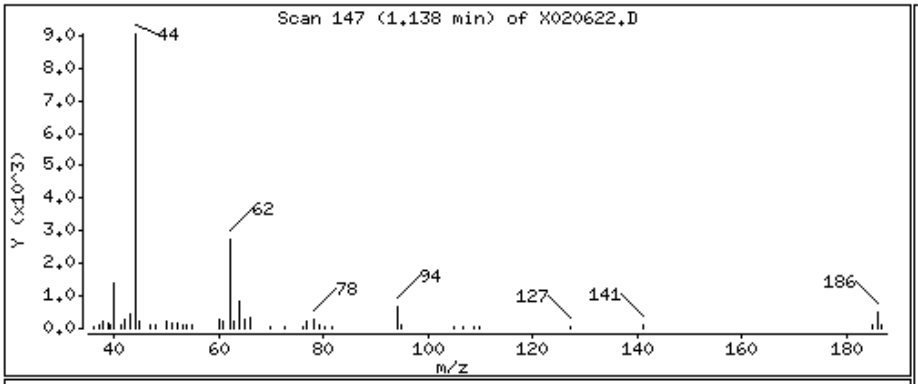
Operator: PC

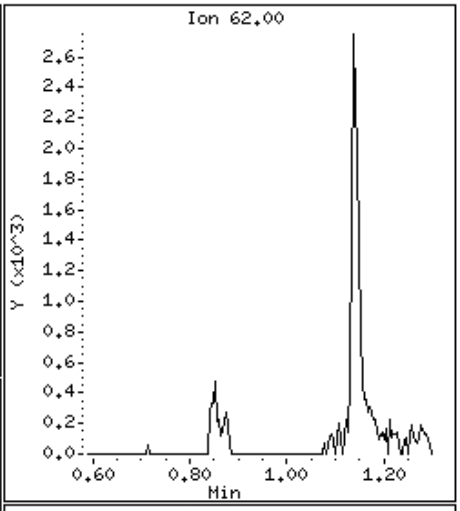
Column phase: DB624

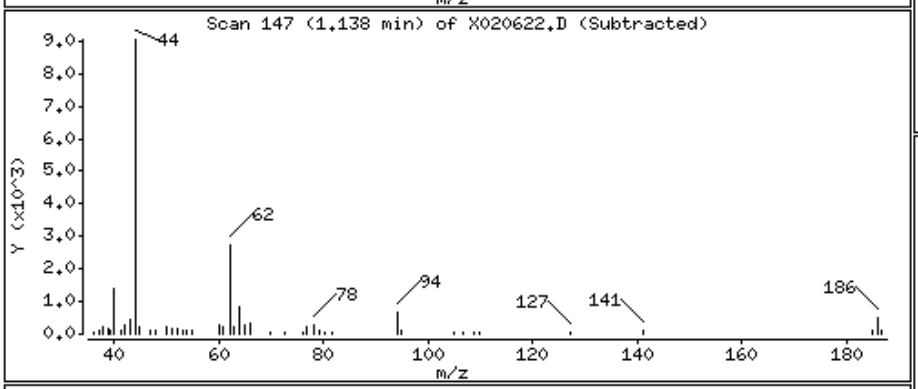
Column diameter: 0.18

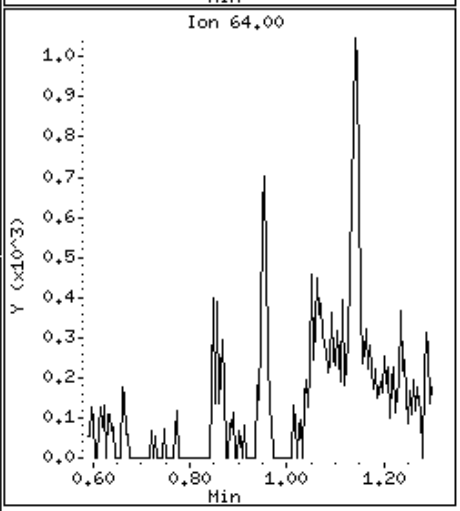
5 Vinyl Chloride

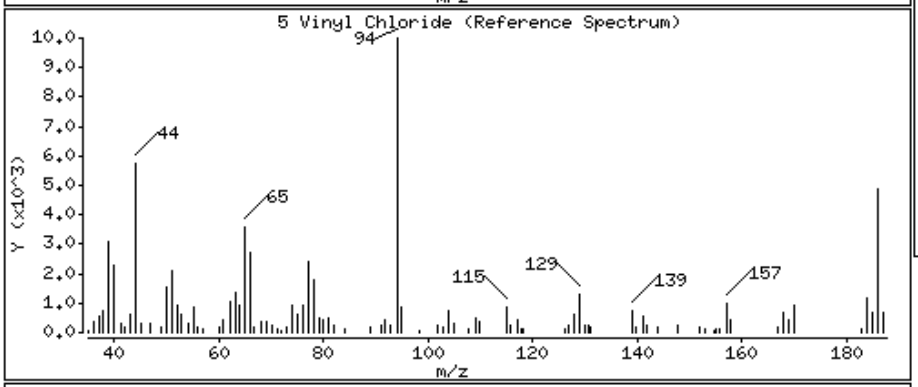
Concentration: 261.53 ug/l

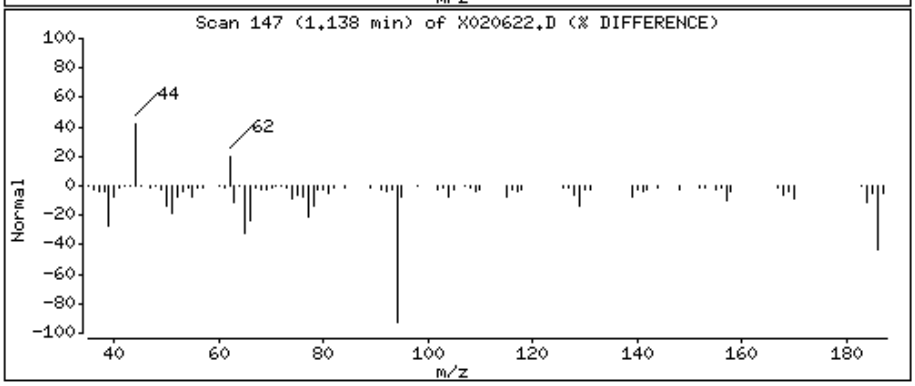












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020622.D Page 3

Date : 06-FEB-2023 18:00

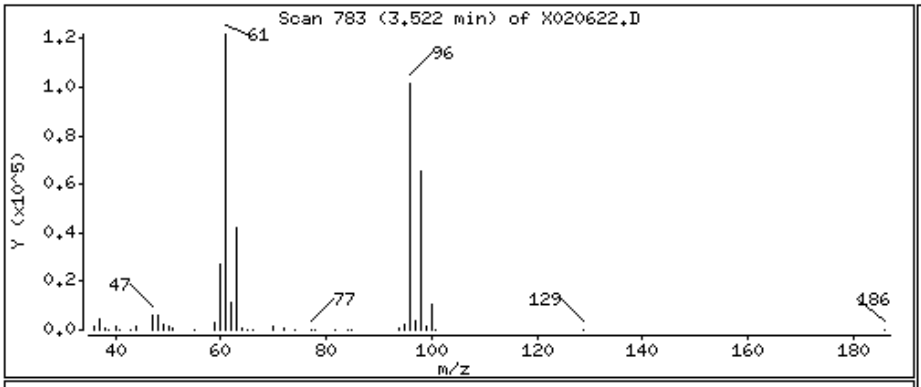
Client ID: HS23011514-06 Instrument: voa6.i

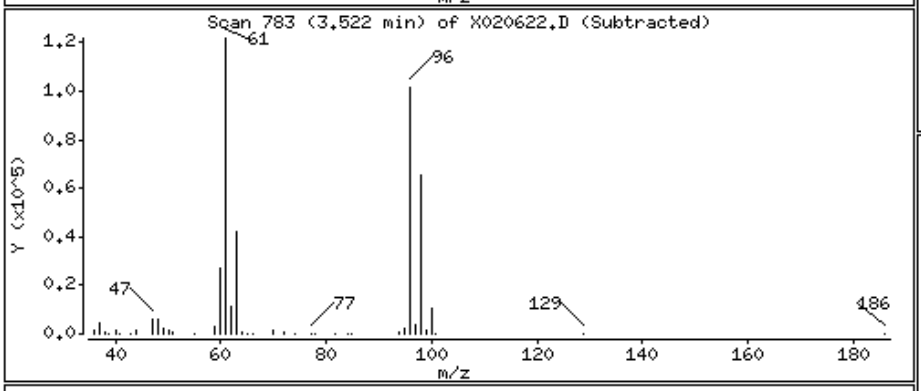
Sample Info: HS23011514-06;HS23011514-06;;;

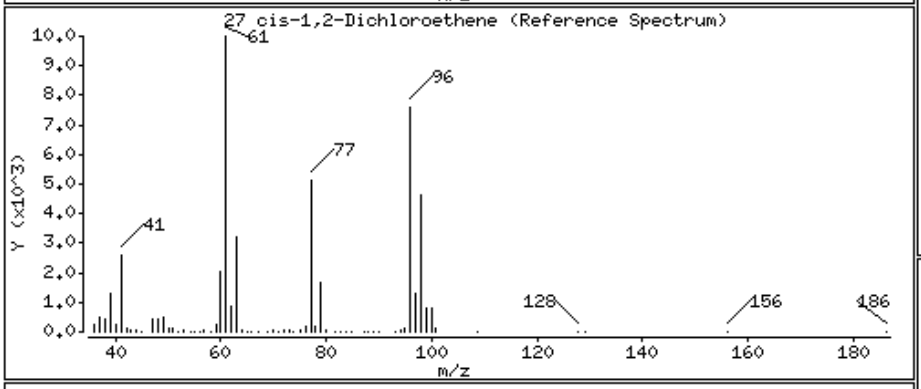
Purge Volume: 5.0 Operator: PC

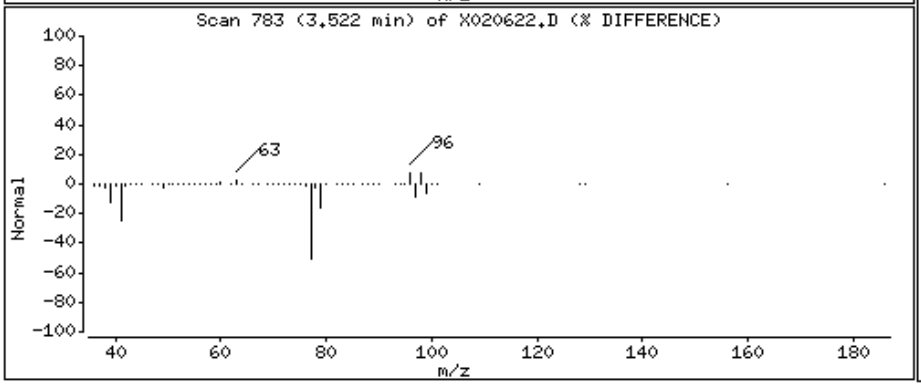
Column phase: DB624 Column diameter: 0.18

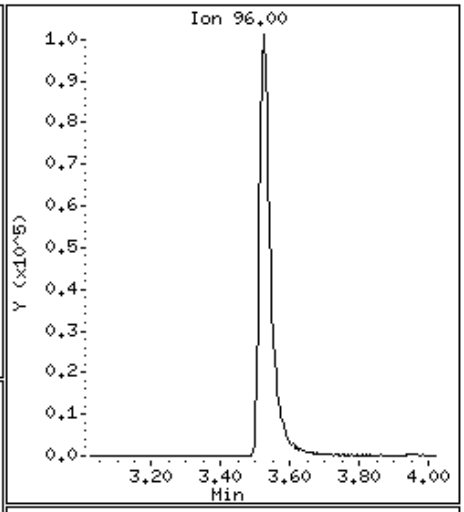
27 cis-1,2-Dichloroethene Concentration: 16202.53 ug/l

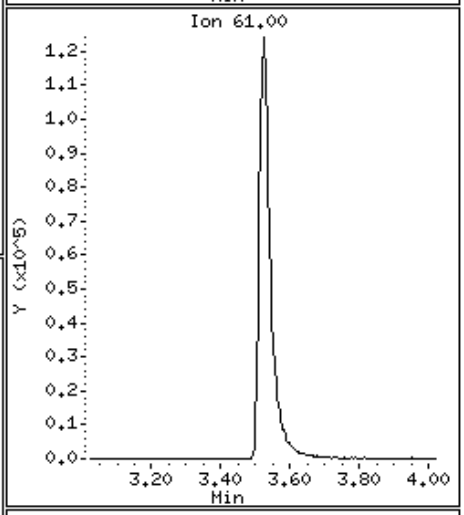


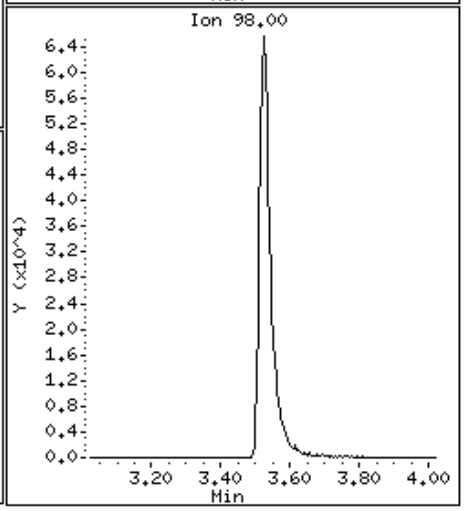












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020622.D Page 4

Date : 06-FEB-2023 18:00

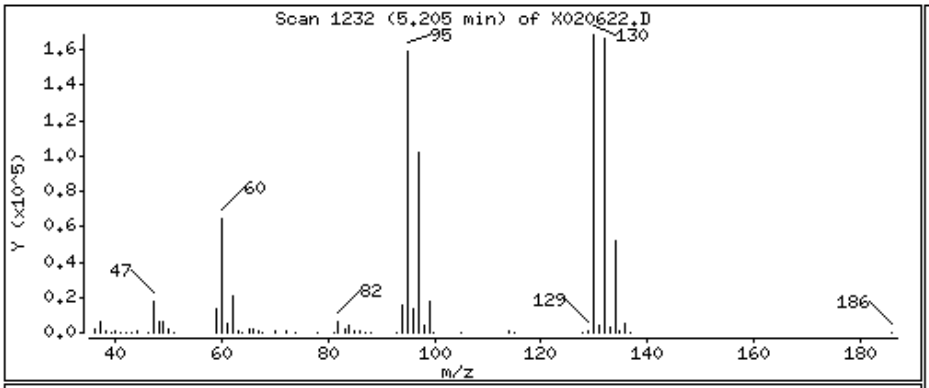
Client ID: HS23011514-06 Instrument: voa6.i

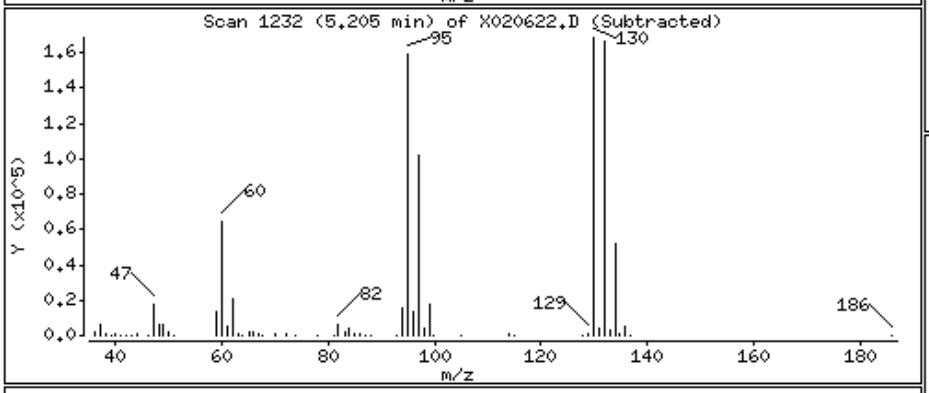
Sample Info: HS23011514-06;HS23011514-06;;;

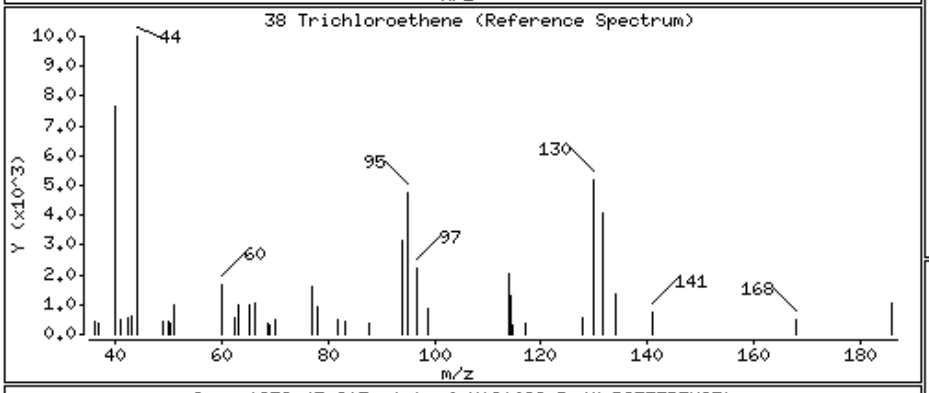
Purge Volume: 5.0 Operator: PC

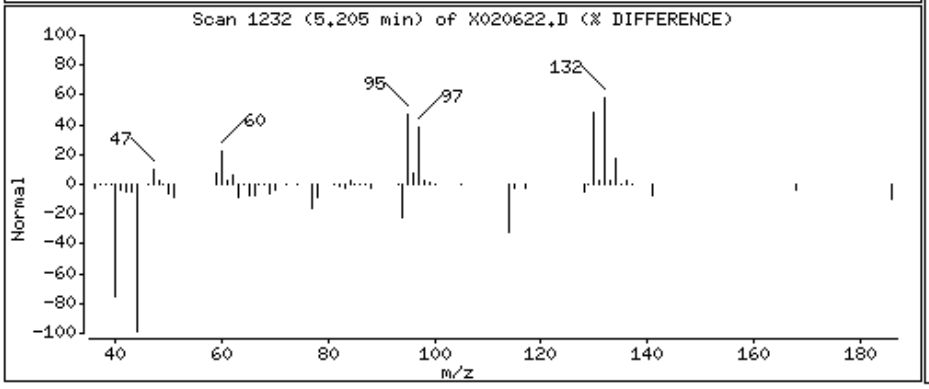
Column phase: DB624 Column diameter: 0.18

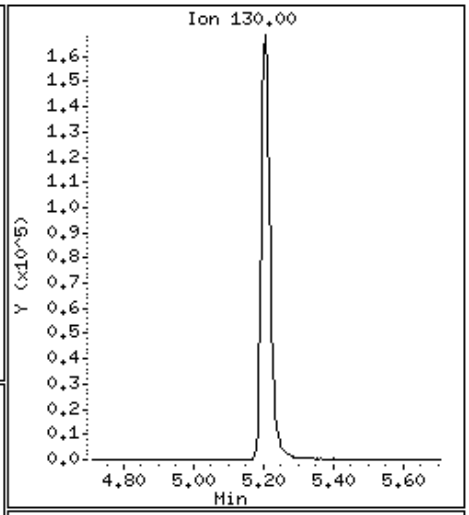
38 Trichloroethene Concentration: 22022.41 ug/l

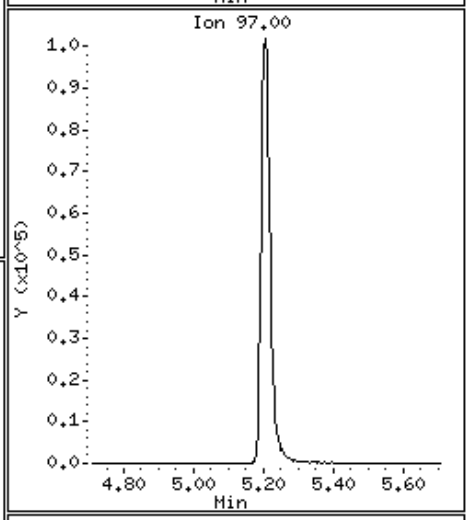


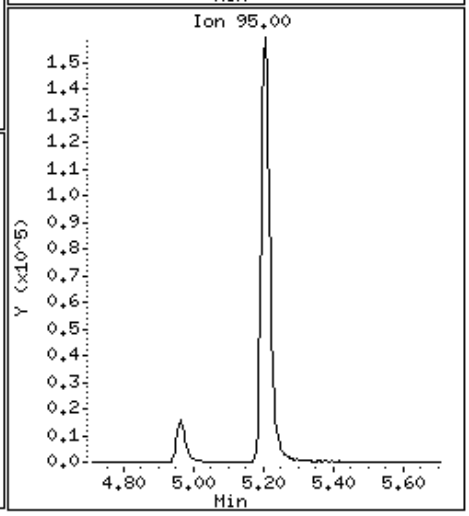












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020622.D
Inj Date : 06-FEB-2023 18:00
InstruID : voa6.i
LabSampID : HS23011514-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020623.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020623.D
Lab Smp Id: HS23011514-07 Client Smp ID: HS23011514-07
Inj Date : 06-FEB-2023 18:22
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-07;HS23011514-07;;;
Misc Info : V6;WATER;0;500;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 22
Dil Factor: 500.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

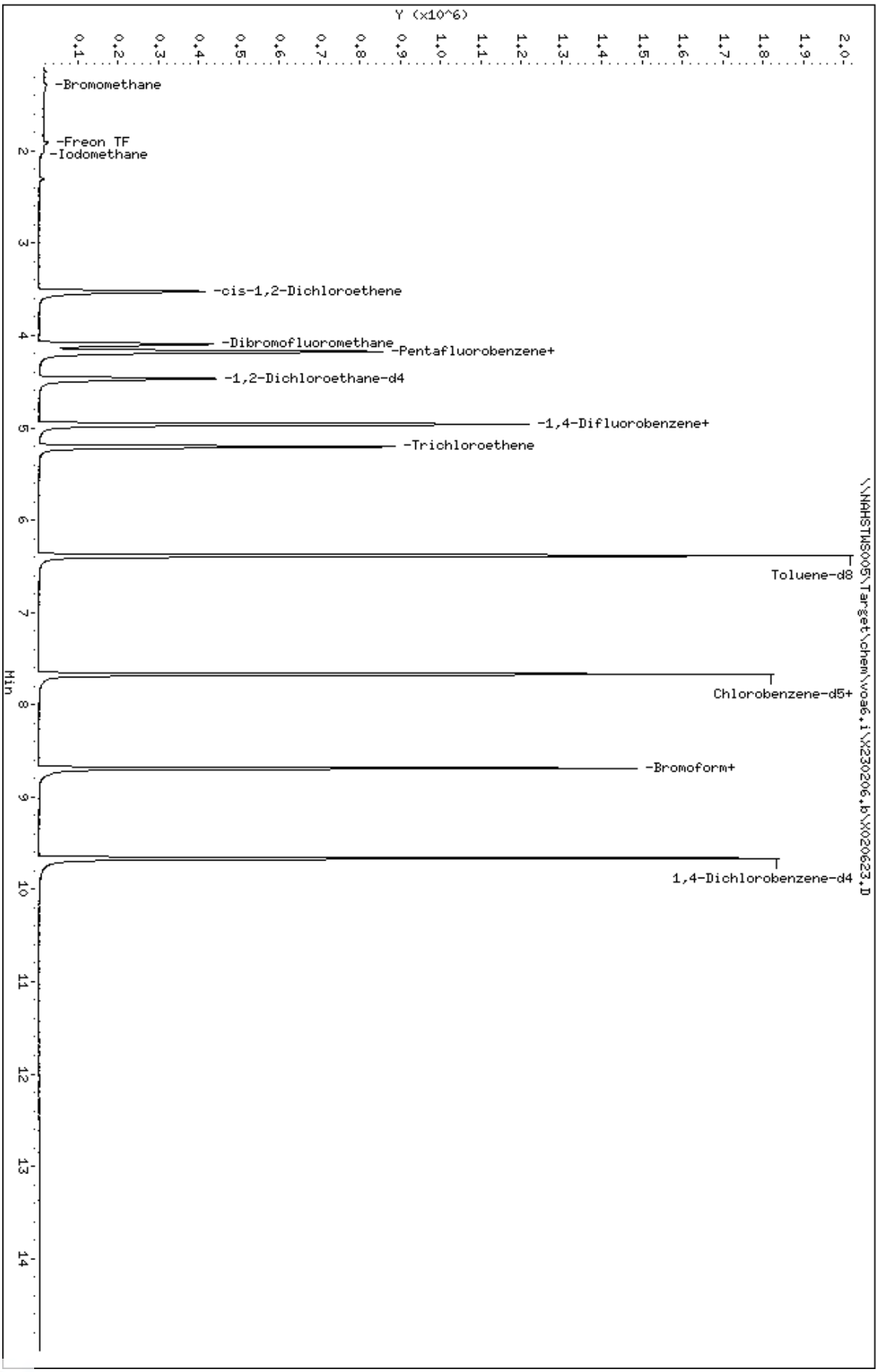
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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	4.177	(1.000)	716248	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	314810	45.7605	45.76
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	353624	48.7224	48.72
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1021047	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	915247	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1186234	52.4502	52.45
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	444788	52.6113	52.61
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	470712	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	2954	0.47212	236.06(a)
27 cis-1,2-Dichloroethene	96	3.525	3.521	(0.844)	235619	31.8233	15911.65
38 Trichloroethene	130	5.205	5.205	(1.049)	309067	44.6911	22345.56

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020623.D
Date : 06-FEB-2023 18:22
Client ID: HS23011514-07
Sample Info: HS23011514-07;HS23011514-07;;;
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\X230206.b\X020623.D Page 2

Date : 06-FEB-2023 18:22

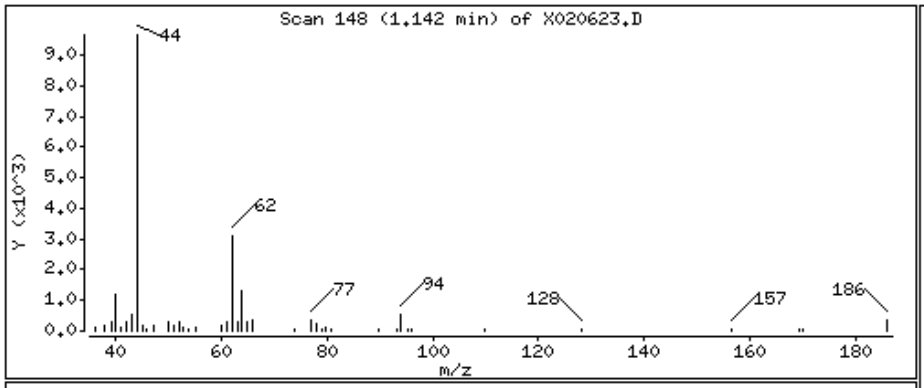
Client ID: HS23011514-07 Instrument: voa6.i

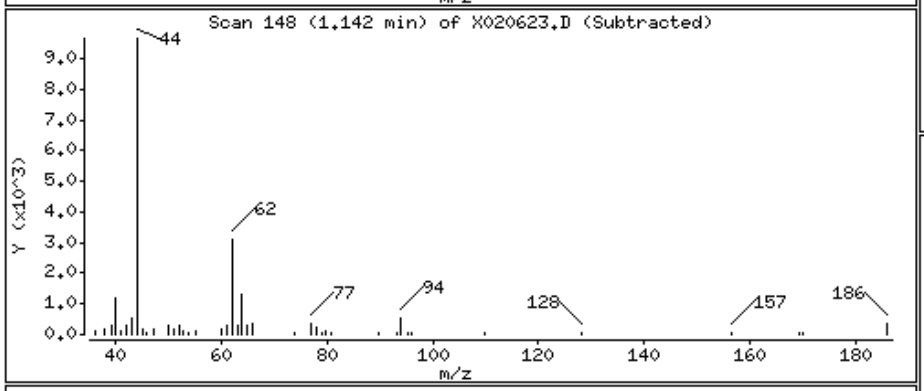
Sample Info: HS23011514-07;HS23011514-07;;;

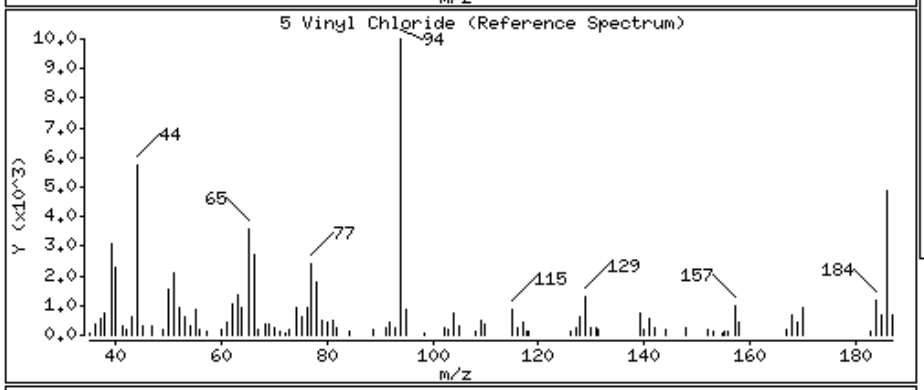
Purge Volume: 5.0 Operator: PC

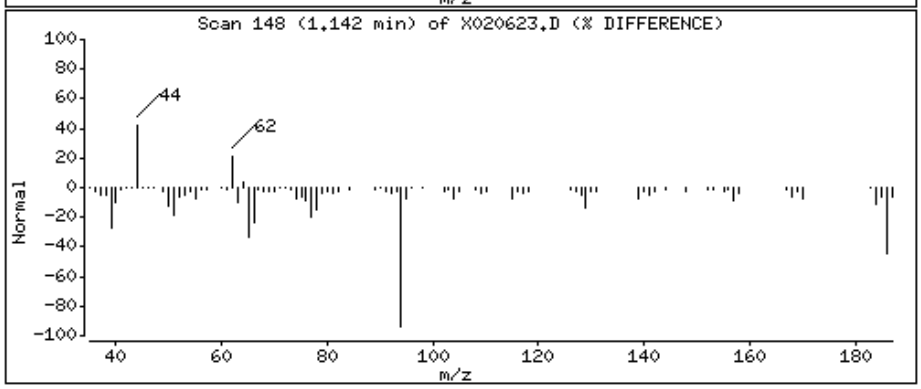
Column phase: DB624 Column diameter: 0.18

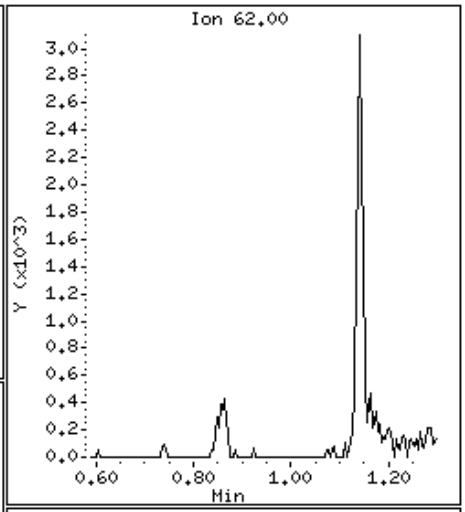
5 Vinyl Chloride Concentration: 236.06 ug/l

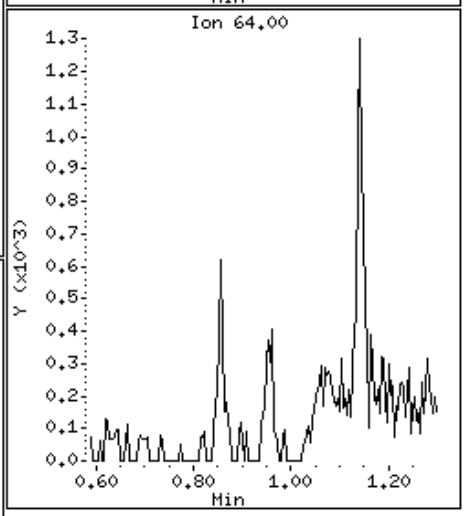












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020623.D Page 3

Date : 06-FEB-2023 18:22

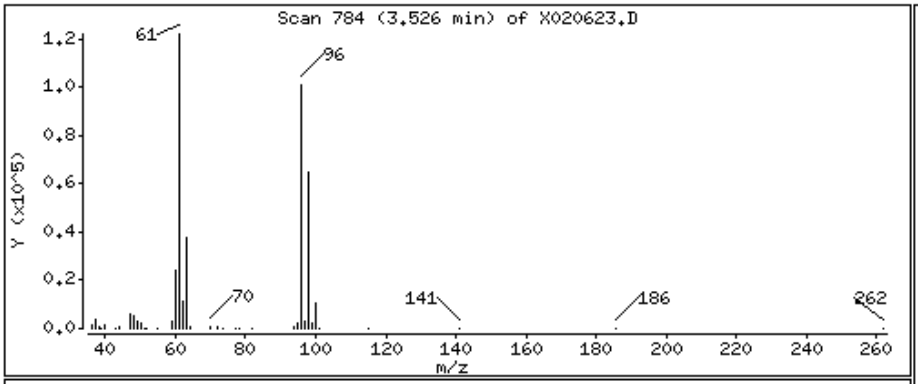
Client ID: HS23011514-07 Instrument: voa6.i

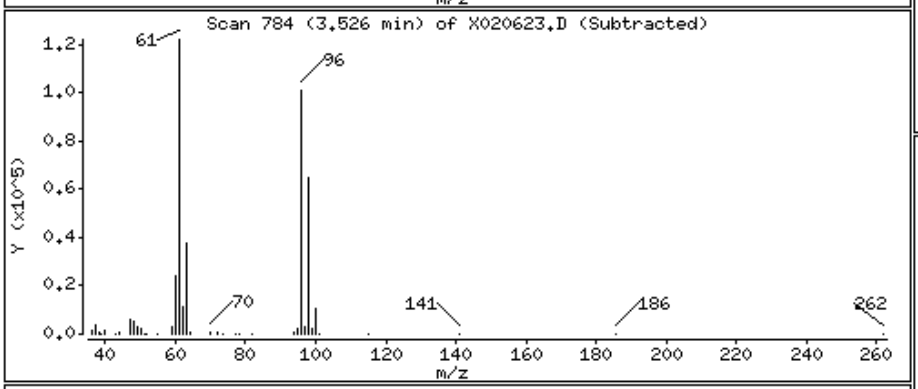
Sample Info: HS23011514-07;HS23011514-07;;;

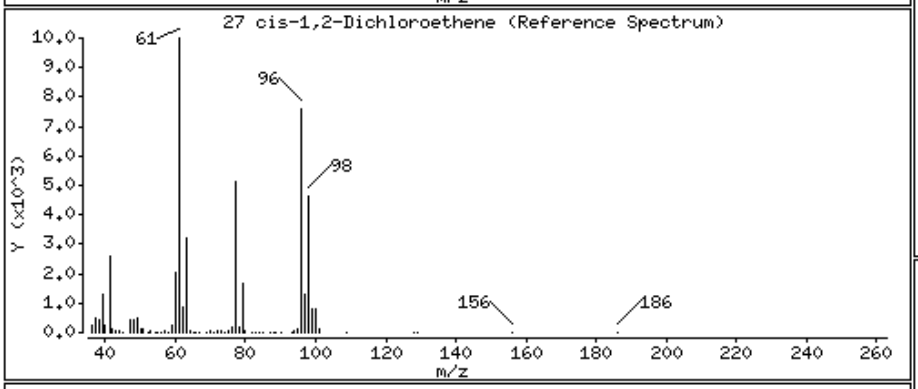
Purge Volume: 5.0 Operator: PC

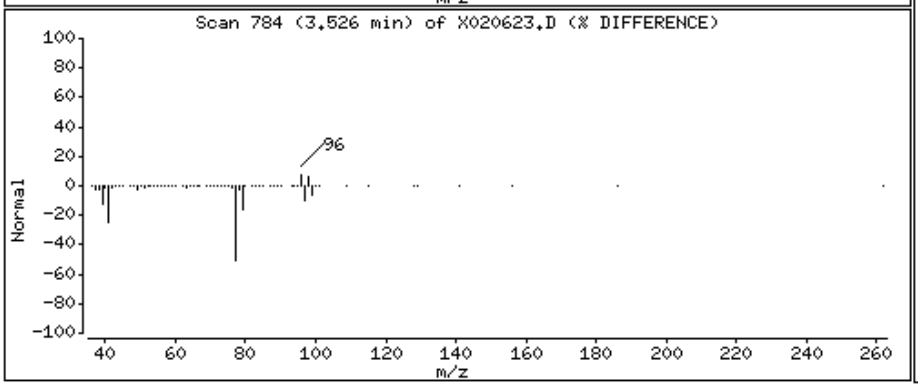
Column phase: DB624 Column diameter: 0.18

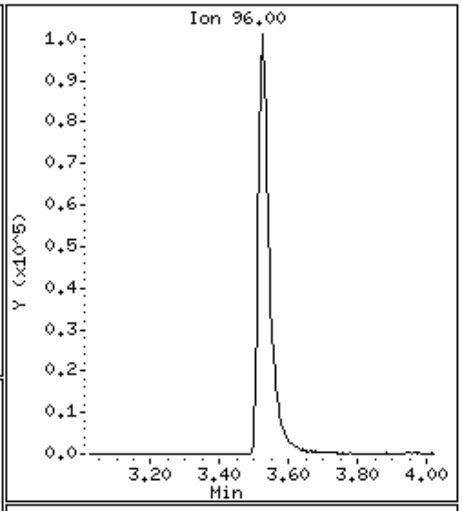
27 cis-1,2-Dichloroethene Concentration: 15911.65 ug/l

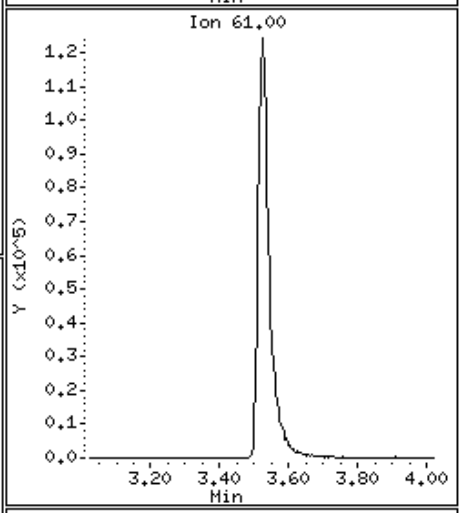


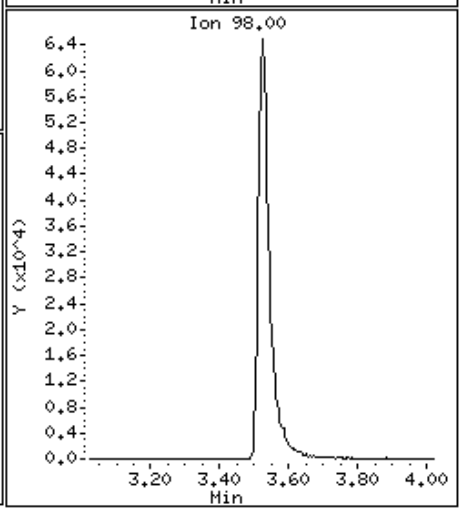












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Date : 06-FEB-2023 18:22

Client ID: HS23011514-07

Instrument: voa6.i

Sample Info: HS23011514-07;HS23011514-07;;;

Purge Volume: 5.0

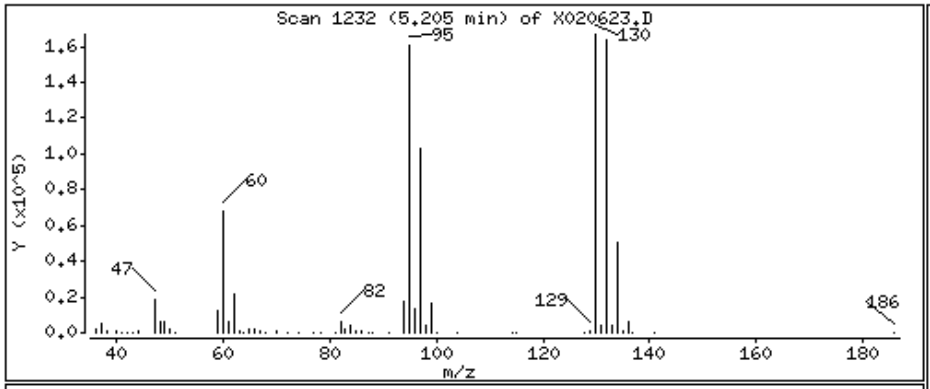
Operator: PC

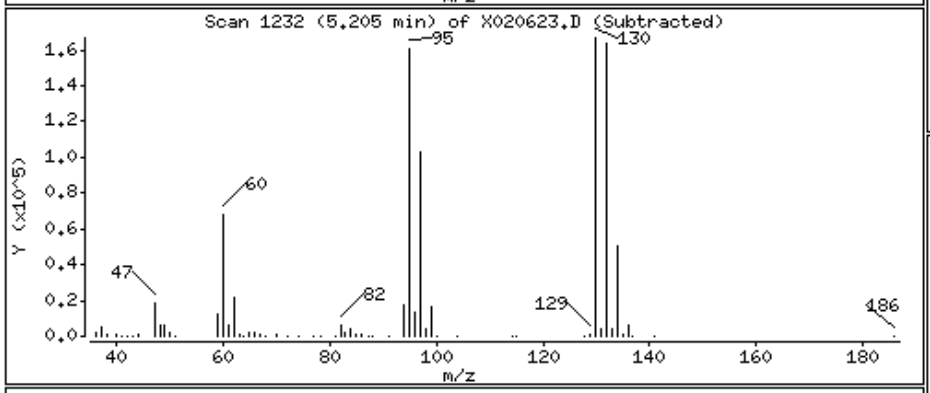
Column phase: DB624

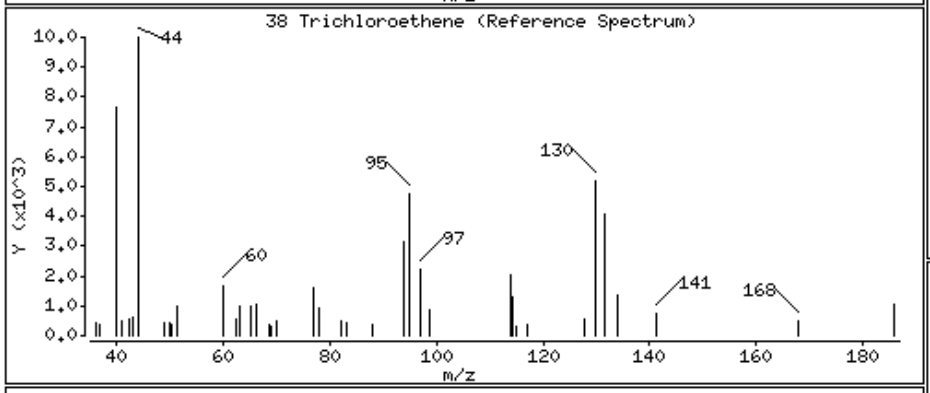
Column diameter: 0.18

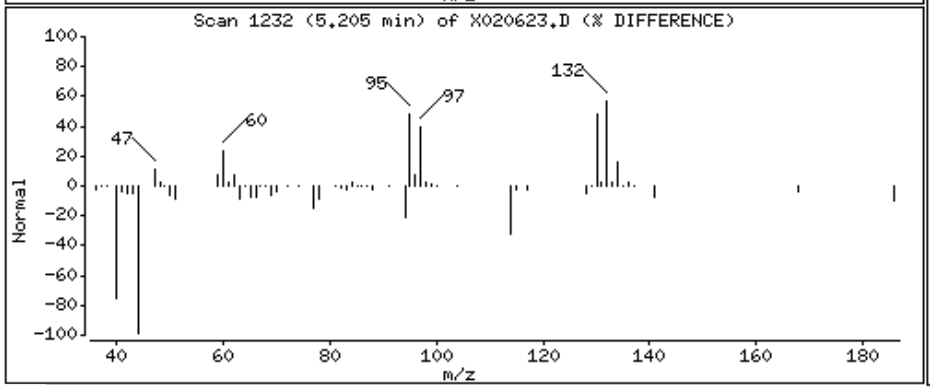
38 Trichloroethene

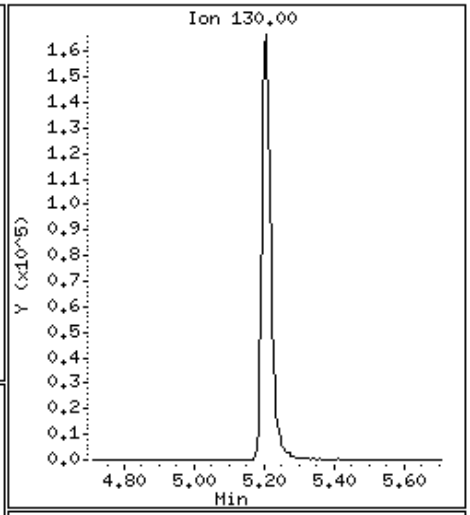
Concentration: 22345.56 ug/l

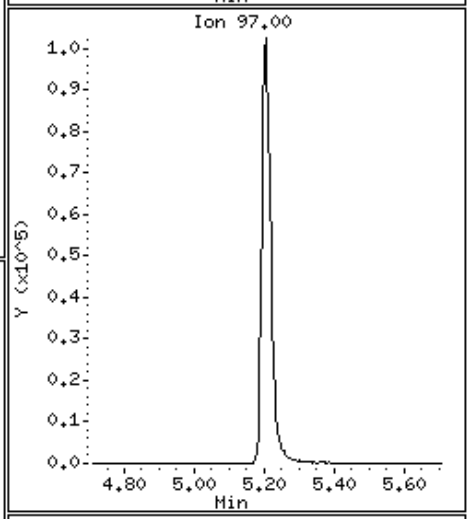


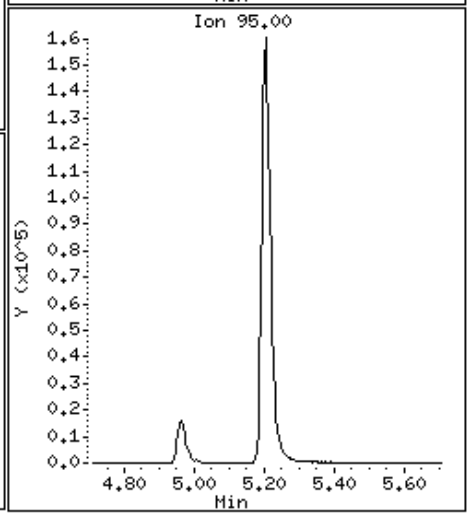












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020623.D
Inj Date : 06-FEB-2023 18:22
InstruID : voa6.i
LabSampID : HS23011514-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020629.D Page 1
Report Date: 13-Feb-2023 14:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020629.D
Lab Smp Id: HS23011514-01 Client Smp ID: HS23011514-01
Inj Date : 06-FEB-2023 20:28
Operator : PC Inst ID: voa6.i
Smp Info : HS23011514-01;HS23011514-01;;;
Misc Info : V6;WATER;0;20;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:13 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 28
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

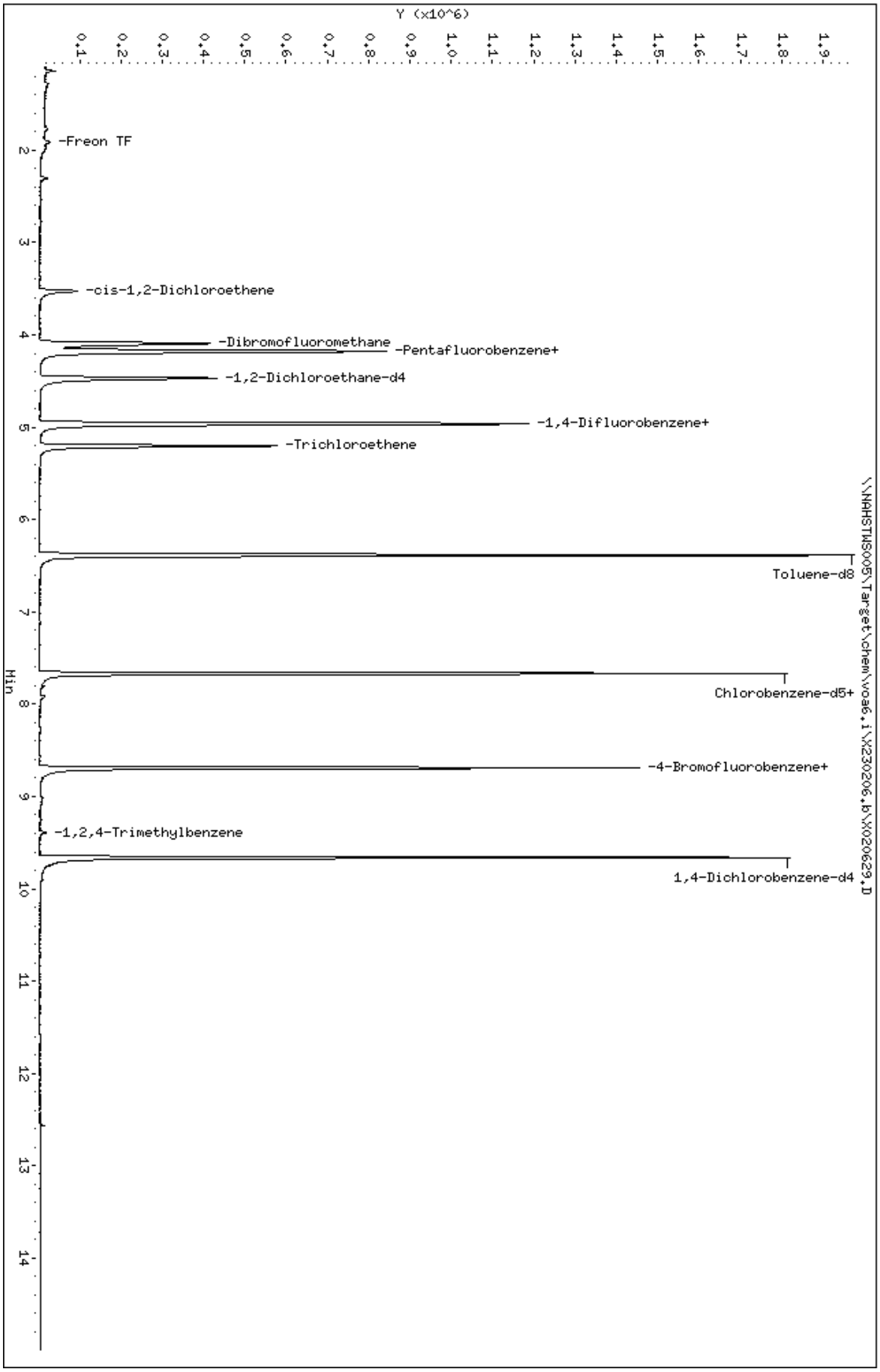
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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	4.178	4.177	(1.000)	704509	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	305878	45.2010	45.20
$ 35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	349997	49.0245	49.02
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1008530	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	906633	50.0000	
$ 48 Toluene-d8	98	6.385	6.382	(0.833)	1164508	51.9787	51.97
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	433207	51.7294	51.72
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	459932	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	17812	2.89425	57.88(a)
27 cis-1,2-Dichloroethene	96	3.525	3.521	(0.844)	55059	7.56032	151.20
38 Trichloroethene	130	5.205	5.205	(1.049)	201249	29.4618	589.23

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230206,b\X020629,D
Date : 06-FEB-2023 20:28
Client ID: HS23011514-01
Sample Info: HS23011514-01;HS23011514-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020629.D Page 2

Date : 06-FEB-2023 20:28

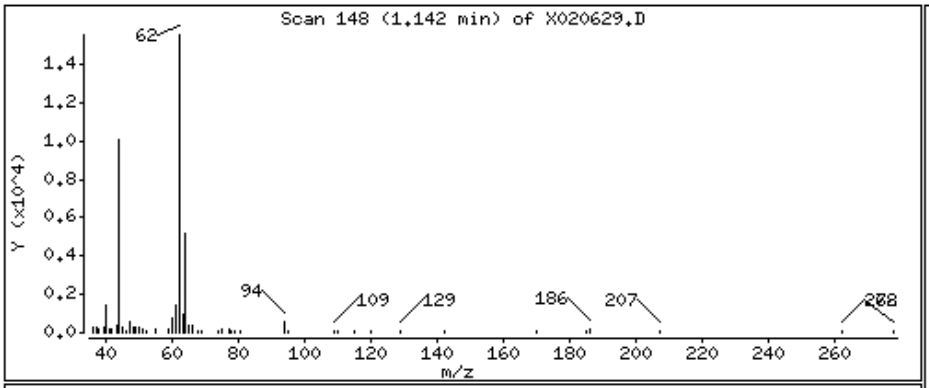
Client ID: HS23011514-01 Instrument: voa6.i

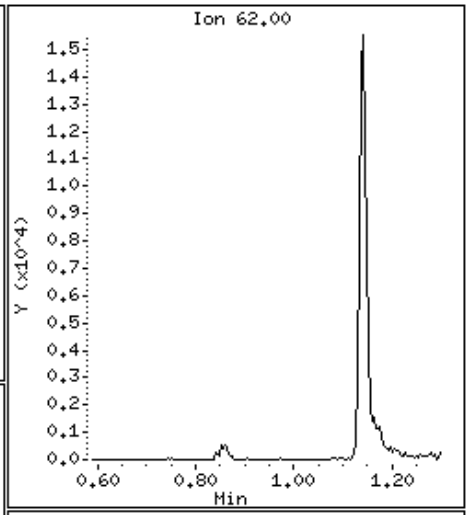
Sample Info: HS23011514-01;HS23011514-01;;;

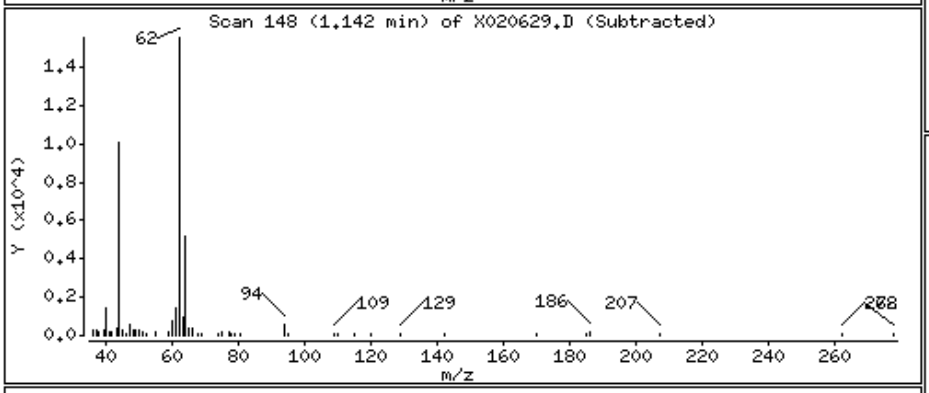
Purge Volume: 5.0 Operator: PC

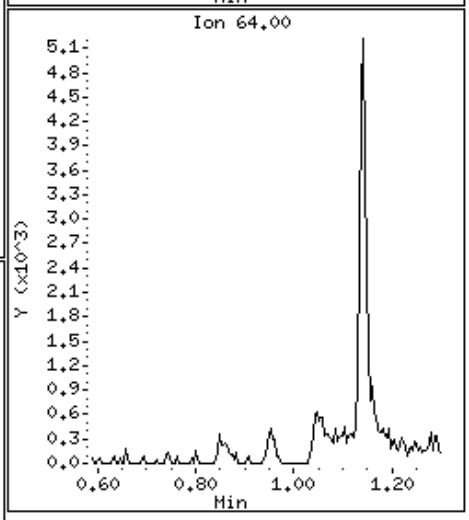
Column phase: DB624 Column diameter: 0.18

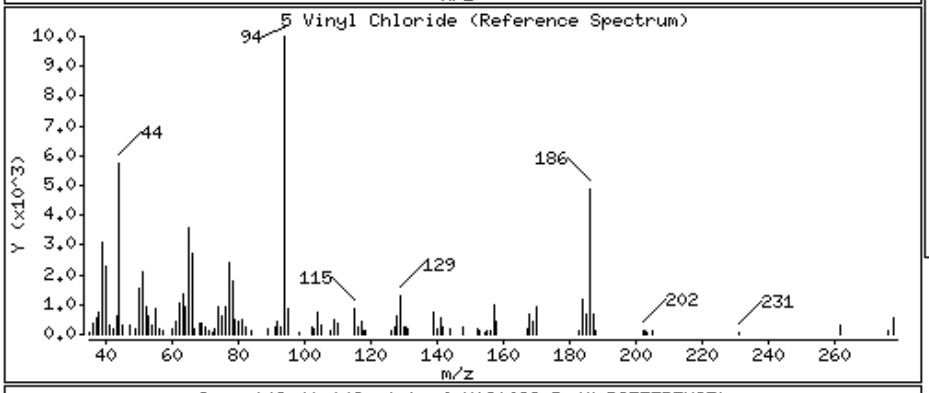
5 Vinyl Chloride Concentration: 57.88 ug/l

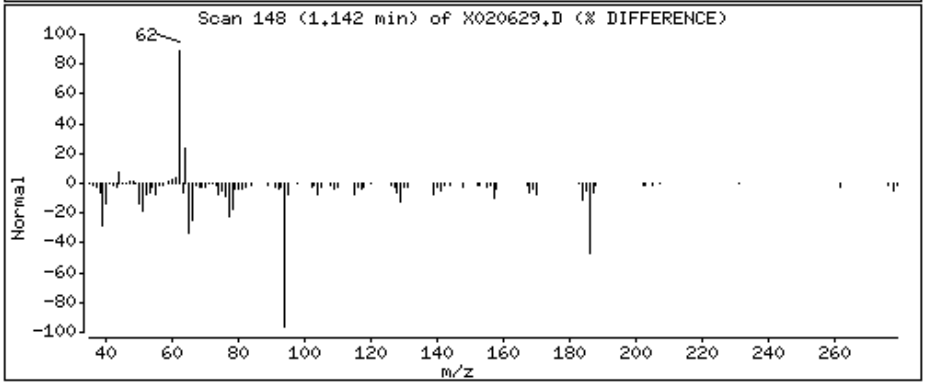












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020629.D Page 3

Date : 06-FEB-2023 20:28

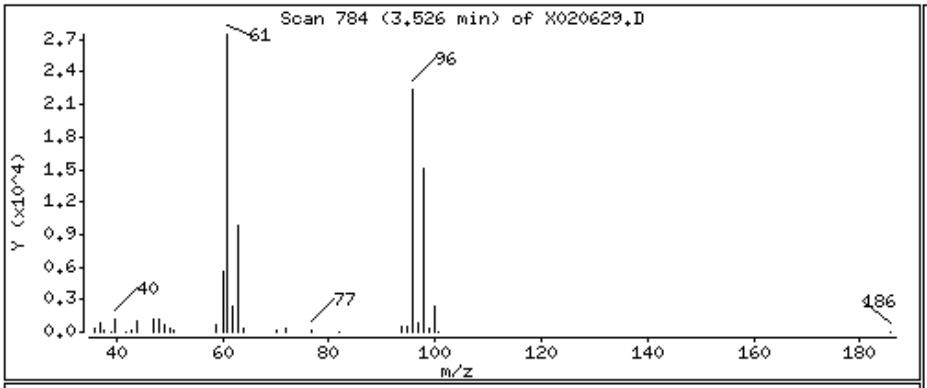
Client ID: HS23011514-01 Instrument: voa6.i

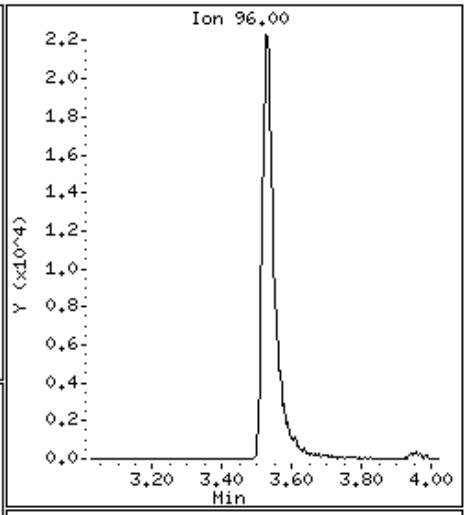
Sample Info: HS23011514-01;HS23011514-01;;;

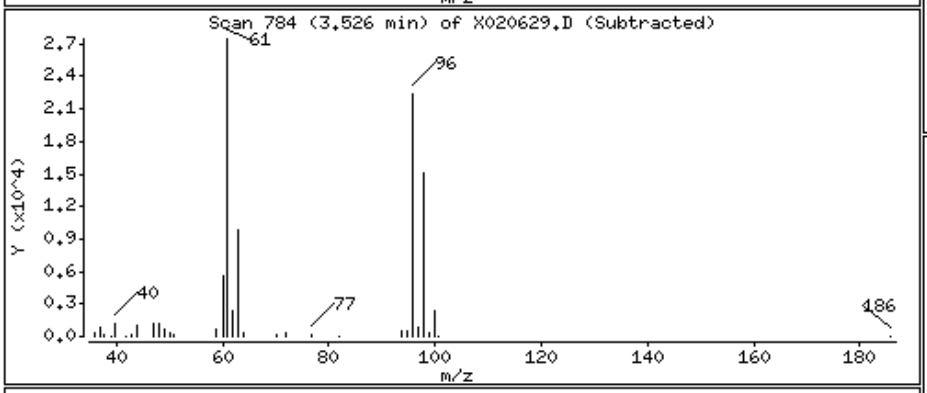
Purge Volume: 5.0 Operator: PC

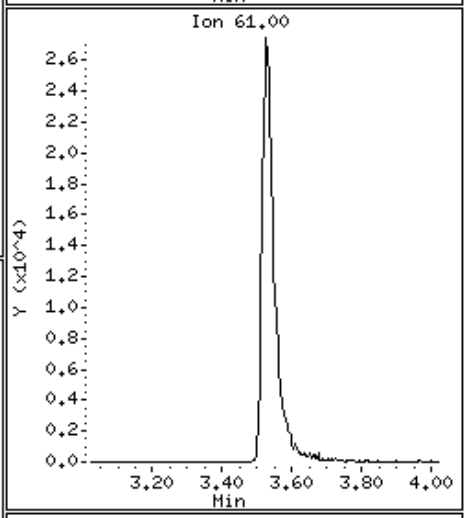
Column phase: DB624 Column diameter: 0.18

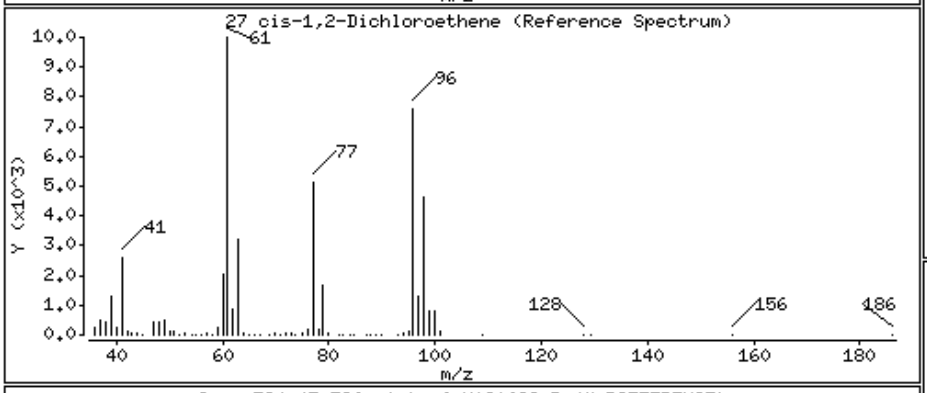
27 cis-1,2-Dichloroethene Concentration: 151.20 ug/l

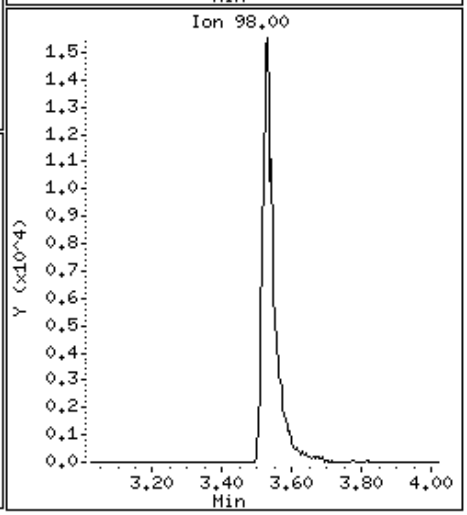


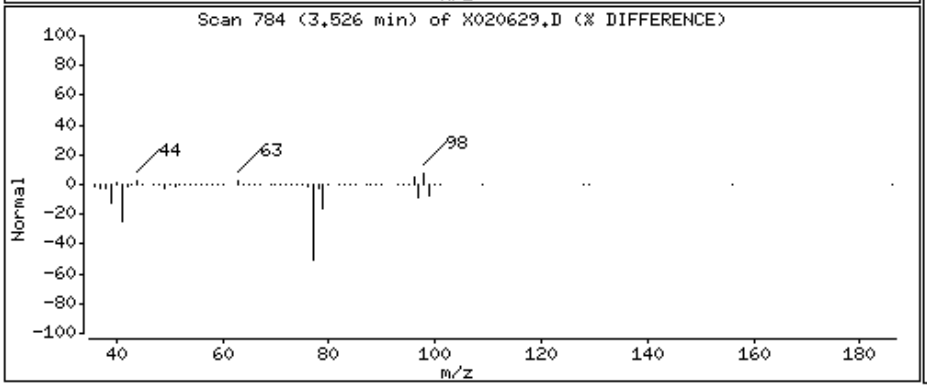












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020629.D Page 4

Date : 06-FEB-2023 20:28

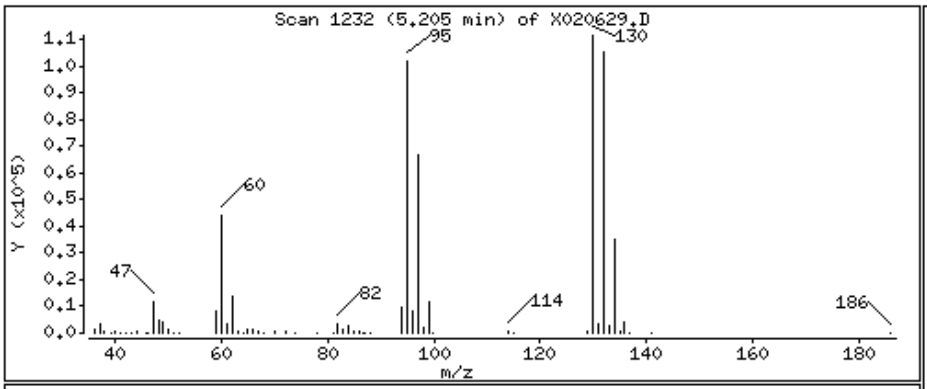
Client ID: HS23011514-01 Instrument: voa6.i

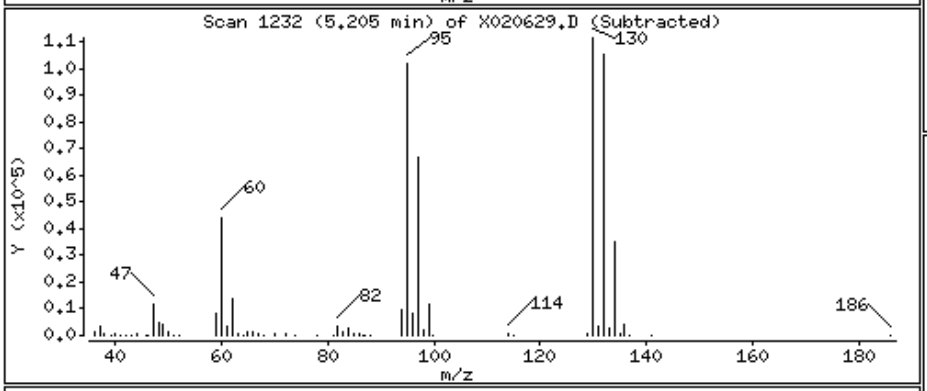
Sample Info: HS23011514-01;HS23011514-01;;;

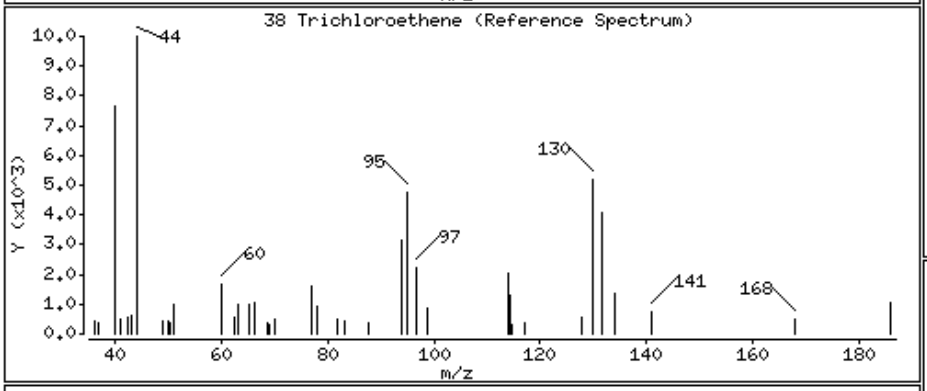
Purge Volume: 5.0 Operator: PC

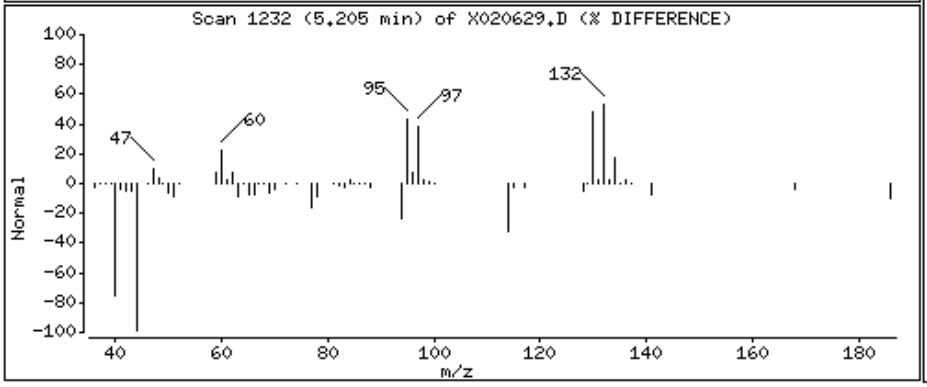
Column phase: DB624 Column diameter: 0.18

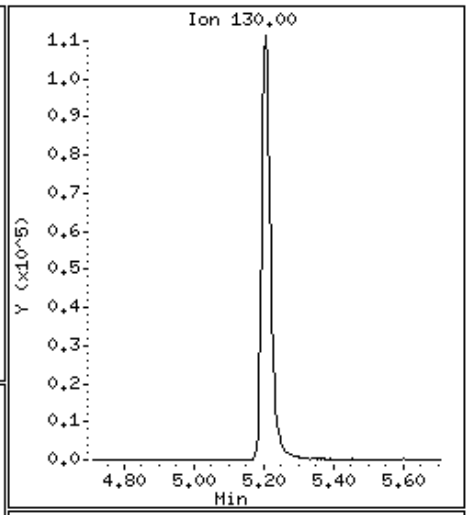
38 Trichloroethene Concentration: 589.23 ug/l

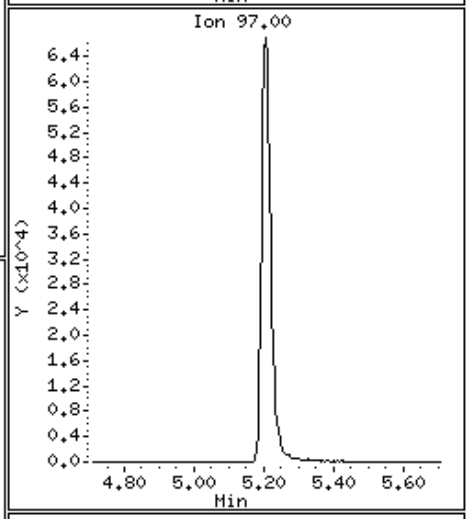


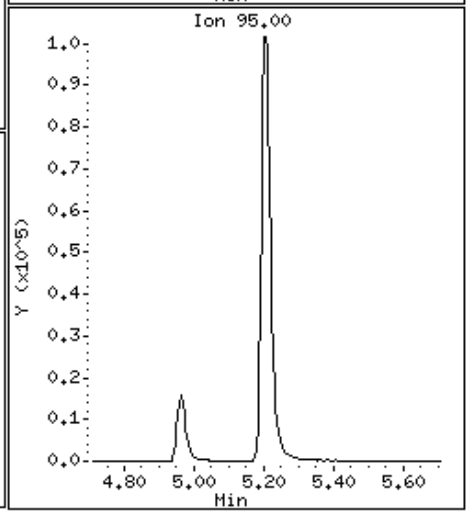












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020629.D
Inj Date : 06-FEB-2023 20:28
InstruID : voa6.i
LabSampID : HS23011514-01

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020630.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 06-FEB-2023 20:49
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\8260W.m
Meth Date : 13-Feb-2023 14:14 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 29 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)	556412	50.0000	
135 1,4-Dioxane	88	5.594	5.594	(1.339)	67332	1000.00	1323.82
140 1,3-Butadiene	54	1.163	1.163	(0.279)	189148	50.0000	49.53
25 Methacrylonitrile	41	3.814	3.814	(0.913)	241128	50.0000	61.20
12 Isobutyl Alcohol	43	4.668	4.668	(1.118)	764070	1000.00	1220.86
13 Acetonitrile	39	2.194	2.194	(0.525)	268963	500.000	531.12
14 Allyl Chloride	41	2.194	2.194	(0.525)	573310	50.0000	59.44
4 Propionitrile	54	3.645	3.645	(0.873)	355782	500.000	626.66
139 Diethyl ether	59	1.752	1.752	(0.419)	178212	50.0000	47.93
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	79080	100.000	114.77
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	546944	50.0000	56.15
156 Diisopropyl ether	45	2.997	2.997	(0.717)	799100	50.0000	55.36
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1107300	50.0000	52.31
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	370707	50.0000	94.90
3 Chloromethane	50	1.074	1.074	(0.257)	218421	50.0000	43.67
5 Vinyl Chloride	62	1.141	1.141	(0.273)	228110	50.0000	46.93
6 Bromomethane	94	1.336	1.336	(0.320)	159759	50.0000	43.68
7 Chloroethane	64	1.400	1.400	(0.335)	153704	50.0000	45.43
8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	340580	50.0000	50.07
9 Acrolein	56	1.445	1.445	(0.346)	34021	100.000	89.70

10 Acetone	43	1.966	1.966 (0.471)	168963	100.000	108.22
11 1,1-Dichloroethene	96	1.913	1.913 (0.458)	192510	50.0000	45.58

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020630.D Page 2
Report Date: 13-Feb-2023 14:14

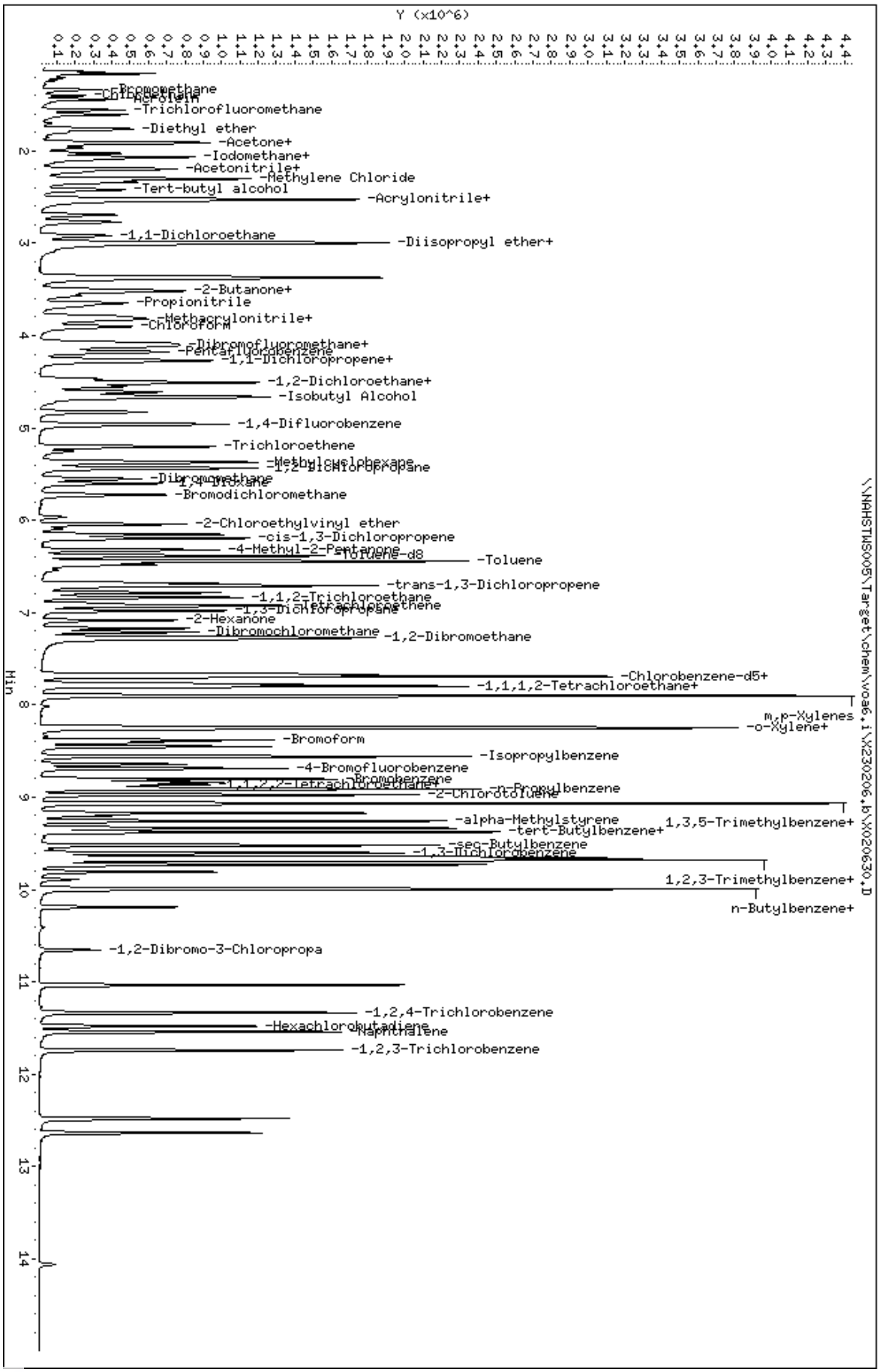
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	15 Iodomethane	142	2.026	2.026	(0.485)	462784	100.000	84.26
	16 Acrylonitrile	53	2.528	2.528	(0.605)	177416	100.000	123.87
	17 Methylene Chloride	84	2.299	2.299	(0.550)	289001	50.0000	49.89
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	762786	50.0000	55.18
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	1073435	100.000	97.15
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	246696	50.0000	52.19
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	1296871	100.000	106.88
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	439422	50.0000	52.97
	24 2-Butanone	43	3.570	3.570	(0.855)	207282	100.000	124.40
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	353566	50.0000	50.20
	27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.843)	294971	50.0000	51.28
	28 Chloroform	83	3.900	3.900	(0.934)	490918	50.0000	52.80
	29 Bromochloromethane	128	3.791	3.791	(0.908)	153014	50.0000	48.58
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	232413	50.0000	43.47
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	411870	50.0000	55.83
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	357932	50.0000	58.47
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	391068	50.0000	55.35
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	339878	50.0000	51.99
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	269366	50.0000	47.77
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	862225	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	1116971	50.0000	54.24
	38 Trichloroethene	130	5.205	5.205	(1.048)	327020	50.0000	55.99
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	405906	50.0000	52.52
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	311041	100.000	141.48
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	294263	50.0000	53.72
	44 Dibromomethane	93	5.549	5.549	(1.118)	188045	50.0000	50.51
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	540921	100.000	124.99
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	500607	50.0000	55.16
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	809665	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	895972	50.0000	44.78
	50 Toluene	91	6.442	6.442	(0.840)	1212592	50.0000	54.18
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	433402	50.0000	57.54
	52 2-Hexanone	43	7.083	7.083	(0.924)	379730	100.000	128.96
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	238798	50.0000	53.18
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	490761	50.0000	55.53
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	352171	50.0000	54.34
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	251635	50.0000	54.34
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	314931	50.0000	56.10
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	239095	50.0000	57.38
	59 Chlorobenzene	112	7.690	7.690	(1.003)	836436	50.0000	52.69
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	322626	50.0000	54.61
	61 Ethylbenzene	106	7.799	7.799	(1.017)	419319	50.0000	56.07
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1060394	100.000	110.00
	63 o-Xylene	106	8.241	8.241	(1.075)	522393	50.0000	54.90
	64 Styrene	104	8.256	8.256	(1.077)	902452	50.0000	56.59
	66 Bromoform	173	8.410	8.410	(1.097)	245521	50.0000	54.69
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1260174	50.0000	57.97
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	392657	50.0000	56.04
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	353695	50.0000	47.29
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	439564	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	314835	50.0000	64.36(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1494069	50.0000	61.36

74 Bromobenzene	156	8.803	8.803 (0.911)	399016	50.0000	55.32
75 1,3,5-Trimethylbenzene	105	9.066	9.066 (0.938)	1108318	50.0000	61.61

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
76	2-Chlorotoluene	91	8.972	8.972	(0.929)	957184	50.0000	59.90	
77	4-Chlorotoluene	91	9.069	9.069	(0.939)	1098849	50.0000	60.32	
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	902969	50.0000	61.32	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1129478	50.0000	59.68	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1234284	50.0000	63.00	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1107597	50.0000	63.09	
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	686405	50.0000	57.34	
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	712933	50.0000	54.58	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	942133	50.0000	55.48	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	683319	50.0000	55.43	
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	69866	50.0000	62.35	
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	497079	50.0000	63.89	
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	201052	50.0000	58.20	
92	Naphthalene	128	11.540	11.540	(1.194)	1141051	50.0000	64.46	
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	455716	50.0000	61.16	
M 94	1,2-Dichloroethylene (total)	96				541667	100.000		(a)
141	Cyclohexane	56	4.117	4.117	(0.986)	318294	50.0000	56.58	
138	Freon TF	101	1.913	1.913	(0.458)	191077	50.0000	46.78	
147	Methylcyclohexane	55	5.377	5.377	(1.083)	658487	50.0000	62.39	
146	Methyl Acetate	43	2.224	2.224	(0.533)	156121	50.0000	62.35	
148	Tert-Butyl alcohol	59	2.423	2.423	(0.580)	538577	1000.00	1397.89	
149	Isopropyl Alcohol	45	2.089	2.089	(0.500)	297881	1000.00	1480.44	

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\X230206.b\X020630.D
Date : 06-FEB-2023 20:49
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

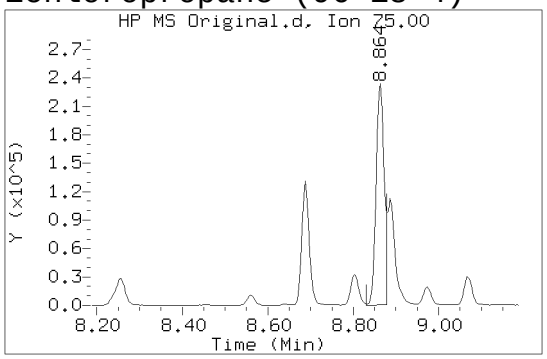
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230206.b\X020630.D
Inj Date : 06-FEB-2023 20:49
InstruID : voa6.i
LabSampID : CCV-END

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

Reason Code:

BEFORE

MASS
75
AREA
314835
HEIGHT
233583
13-Feb-2023
14:13
linh
pham



AFTER

MASS
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AREA
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HEIGHT
233583
13-Feb-2023
14:13
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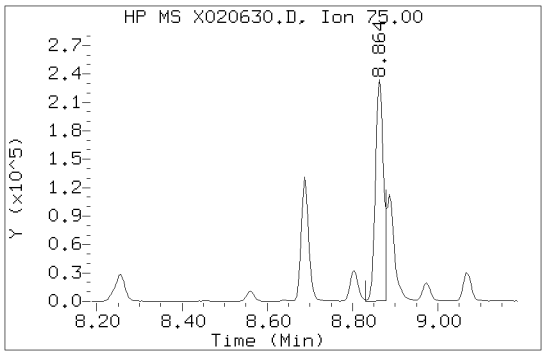

BEFORE

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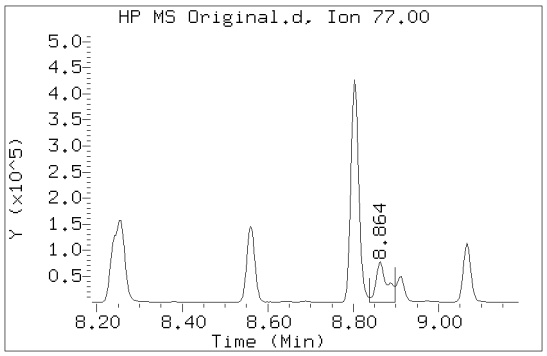
HEIGHT
77017
13-Feb-2023
14:13
linh
pham



AFTER

MASS
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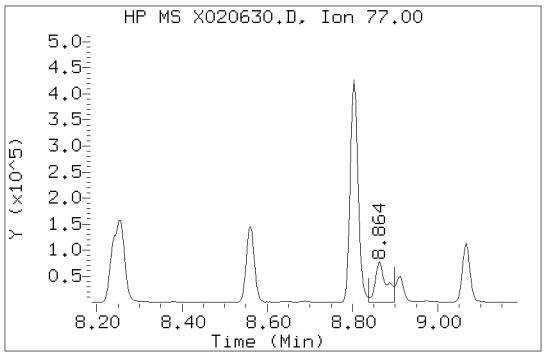
AREA
144434
HEIGHT
77017
13-Feb-2023
14:13
linh
pham



HS23011514-GCSEMI-RSK-175

ALS WO# HS23011514

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Form 1

Organic Analysis Data Sheet

Semi-Volatiles by RSK-175

Workorder

HS23011514

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
HS23011514

Semi-Volatiles by RSK-175

HS23011514-01

16RW09-230125

Collected	Received	Matrix	Basis
01/25/23 07:45	01/26/23 10:15	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	02/07/23 10:01	FID-4_427470	005
Ethene	mg/L	0.0261		0.000234	0.00100	0.00100	1	02/07/23 10:01	FID-4_427470	005
Methane	mg/L	1.06		0.00535	0.0250	0.0250	50	02/07/23 10:37	FID-4_427470	008

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Semi-Volatiles by RSK-175

HS23011514-02		Collected	Received	Matrix	Basis
16RW10-230125		01/25/23 08:30	01/26/23 10:15	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	02/07/23 10:21	FID-4_427470	006
Ethene	mg/L	0.0193		0.000234	0.00100	0.00100	1	02/07/23 10:21	FID-4_427470	006
Methane	mg/L	0.655		0.00535	0.0250	0.0250	50	02/07/23 10:48	FID-4_427470	009

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Semi-Volatiles by RSK-175

MBLK-230207

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

MBLK-230207

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	02/07/23 09:25	FID-4_427470	002
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	02/07/23 09:25	FID-4_427470	002
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	02/07/23 09:25	FID-4_427470	002

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Form 3B

Laboratory Control Sample Recovery

Semi-Volatiles by RSK-175

Workorder

HS23011514

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011514

Semi-Volatiles by RSK-175

FID-4_427470		QC ID	LCS-230207			LCS-230207					
QC Matrix Aqueous	Units	Run Date	02/07/23			02/07/23					
	mg/L	Run Time	09:38			09:46					
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	0.01804	0.0201	111		0.0193	107.0		30	4.02	
Ethene	75-125	0.0168	0.0181	108		0.0179	106.0		30	1.06	
Methane	75-125	0.009647	0.00880	91		0.00817	85.0		30	7.41	

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

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Form 4

Method Blank Summary

Semi-Volatiles by RSK-175

Workorder

HS23011514

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
HS23011514

Semi-Volatiles by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230207	002.D	02/07/23 09:25	FID-4_427470
LCS-230207	LCS	LCS-230207	003.D	02/07/23 09:38	FID-4_427470
LCSD-230207	LCSD	LCSD-230207	004.D	02/07/23 09:46	FID-4_427470
16RW09-230125	SAMP	HS23011514-01	005.D	02/07/23 10:01	FID-4_427470
16RW10-230125	SAMP	HS23011514-02	006.D	02/07/23 10:21	FID-4_427470
16RW09-230125	SAMP	HS23011514-01	008.D	02/07/23 10:37	FID-4_427470
16RW10-230125	SAMP	HS23011514-02	009.D	02/07/23 10:48	FID-4_427470

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Form 6

Initial Calibration Data

Semi-Volatiles by RSK-175

Workorder

HS23011514

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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Initial Calibration Data

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

Workorder HS23011514

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

HS23011514

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
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Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23011514

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

HS23011514

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 HS23011514

RunID FID-4_427470

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 07-FEB-2023 0904
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	873	873	0.010	10.50157	20.0	Averaged	
Ethene	586	629	629	0.010	-7.33467	20.0	Averaged	
Ethane	719	777	777	0.010	-8.02086	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011514

RunID FID-4_427470

Semi-Volatiles by RSK-175

Instrument ID FID-4.i Injection Date 07-FEB-2023 1121
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	804	804	0.010	17.50792	20.0	Averaged	
Ethene	586	617	617	0.010	-5.35900	20.0	Averaged	
Ethane	719	777	777	0.010	-7.92842	20.0	Averaged	

right solutions.
right partner.

Analysis Run Log

Semi-Volatiles by RSK-175

Workorder

HS23011514

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
HS23011514

RUNID
FID-4_427470

Semi-Volatiles by RSK-175

Run ID FID-4_427470 **Start Date** 02/07/23 **EndDate** 02/07/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
RSK-CCV	CCV	RSK-CCV	001.D	02/07/23 09:04	1
MBLK-230207	MBLK	MBLK-230207	002.D	02/07/23 09:25	1
LCS-230207	LCS	LCS-230207	003.D	02/07/23 09:38	1
LCSD-230207	LCSD	LCSD-230207	004.D	02/07/23 09:46	1
16RW09-230125	SAMP	HS23011514-01	005.D	02/07/23 10:01	1
16RW10-230125	SAMP	HS23011514-02	006.D	02/07/23 10:21	1
16RW09-230125	SAMP	HS23011514-01	008.D	02/07/23 10:37	50
16RW10-230125	SAMP	HS23011514-02	009.D	02/07/23 10:48	50
RSK-CCV	CCV	RSK-CCV	011.D	02/07/23 11:21	1

right solutions.
right partner.

Raw Data FID-4 322102

Semi-Volatiles by RSK-175

Workorder

HS23011514

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

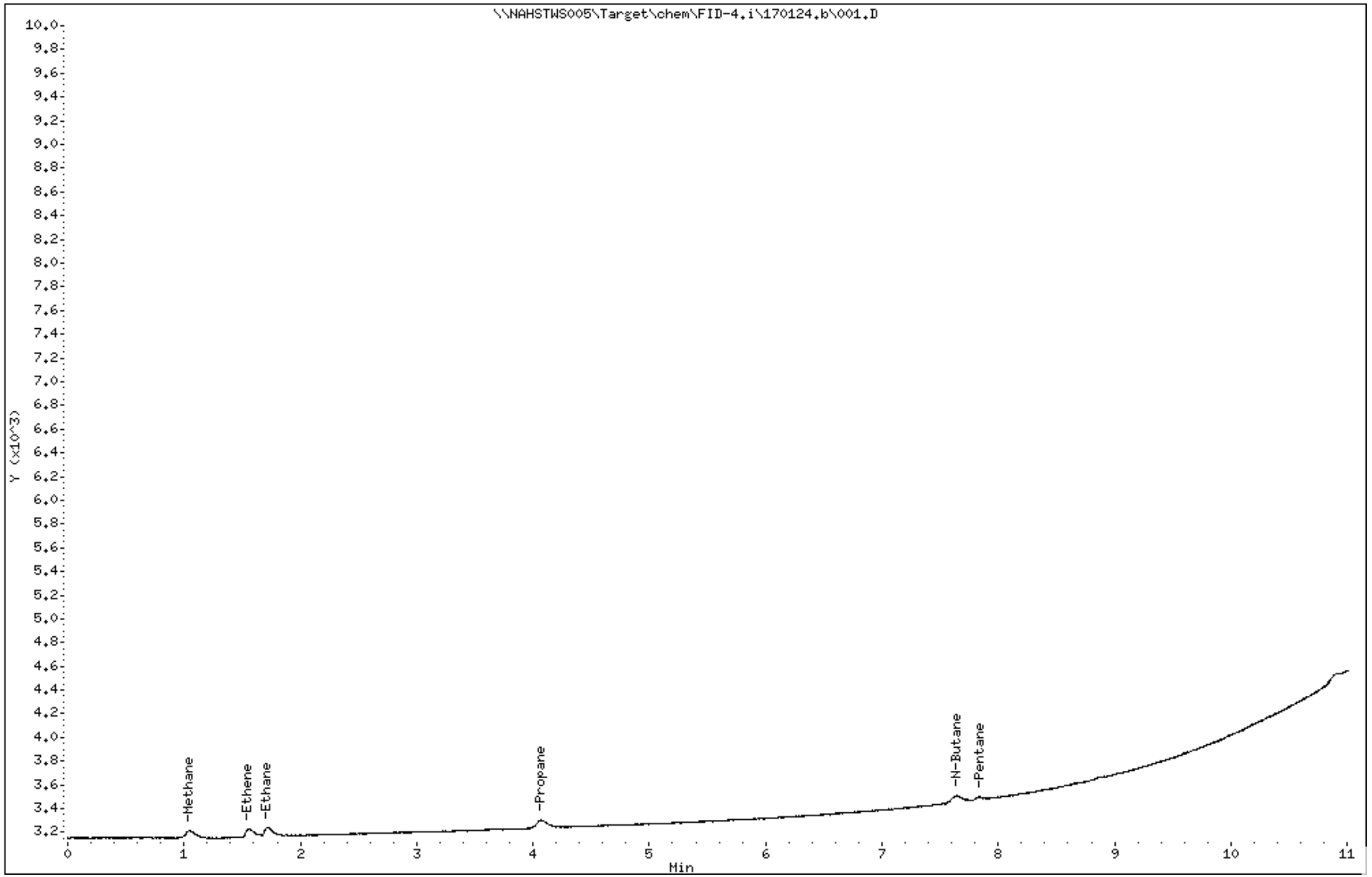
Instrument: FID-4.i

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

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

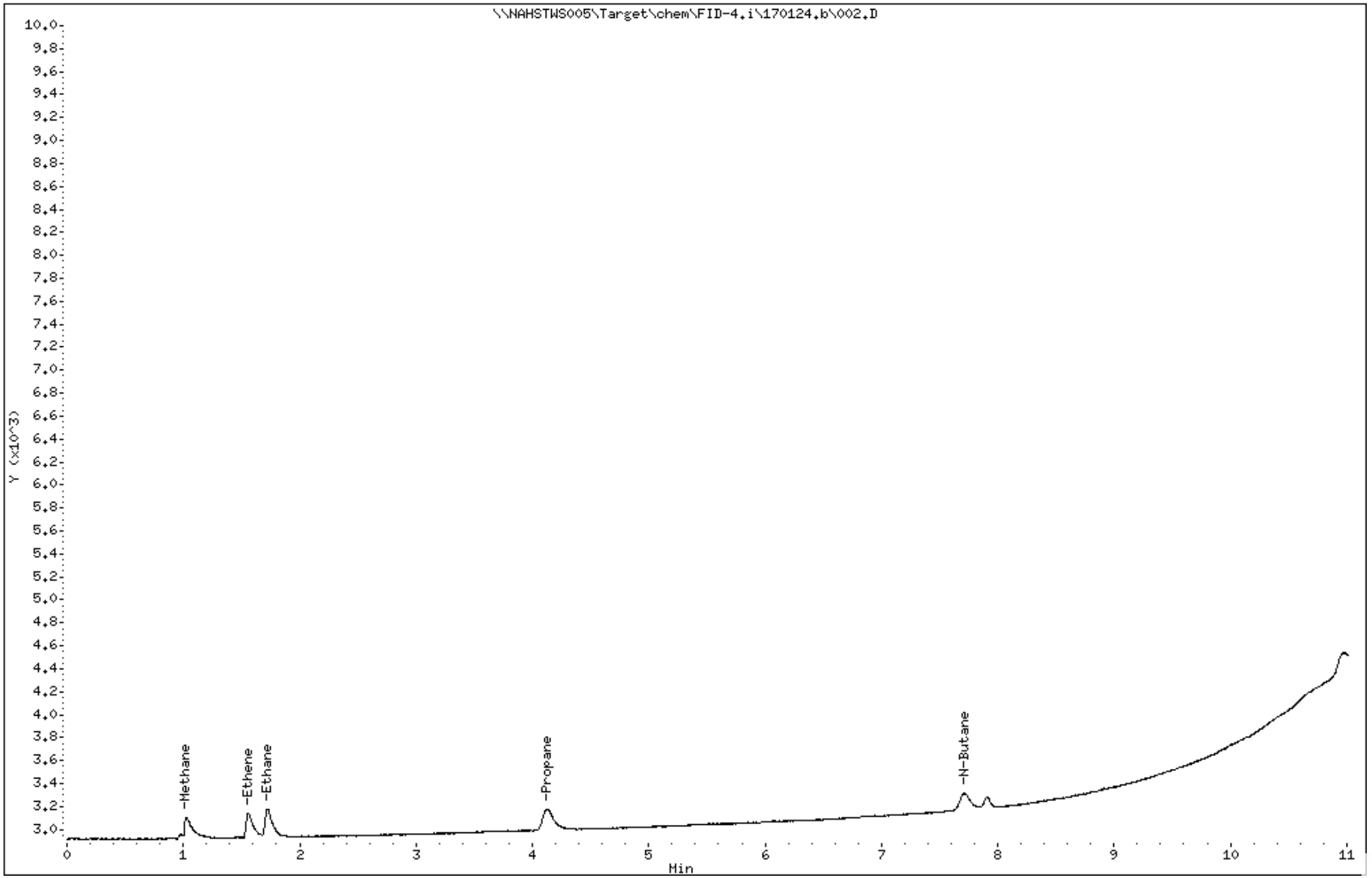
Instrument: FID-4.i

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)	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

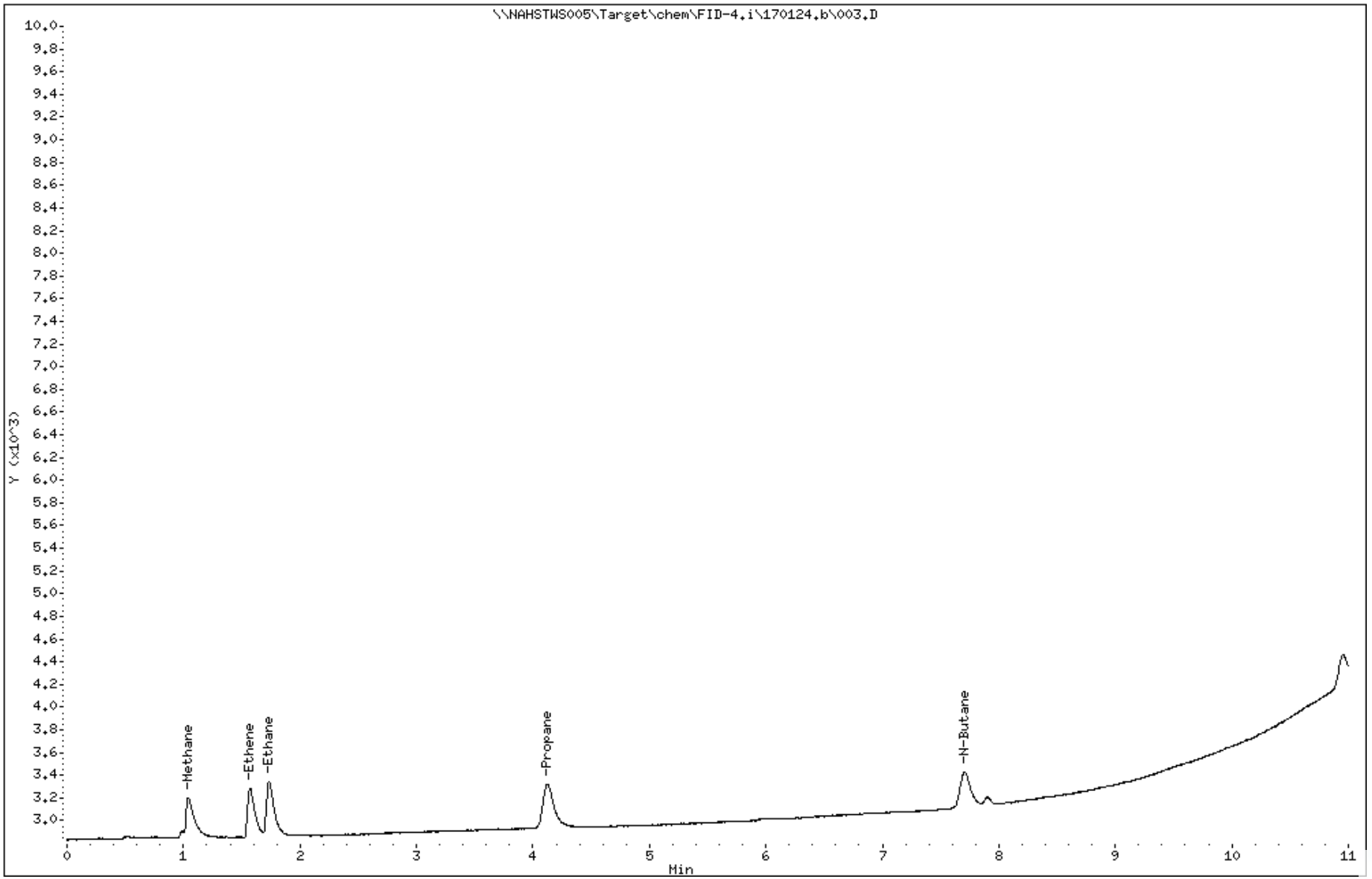
Instrument: FID-4.i

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

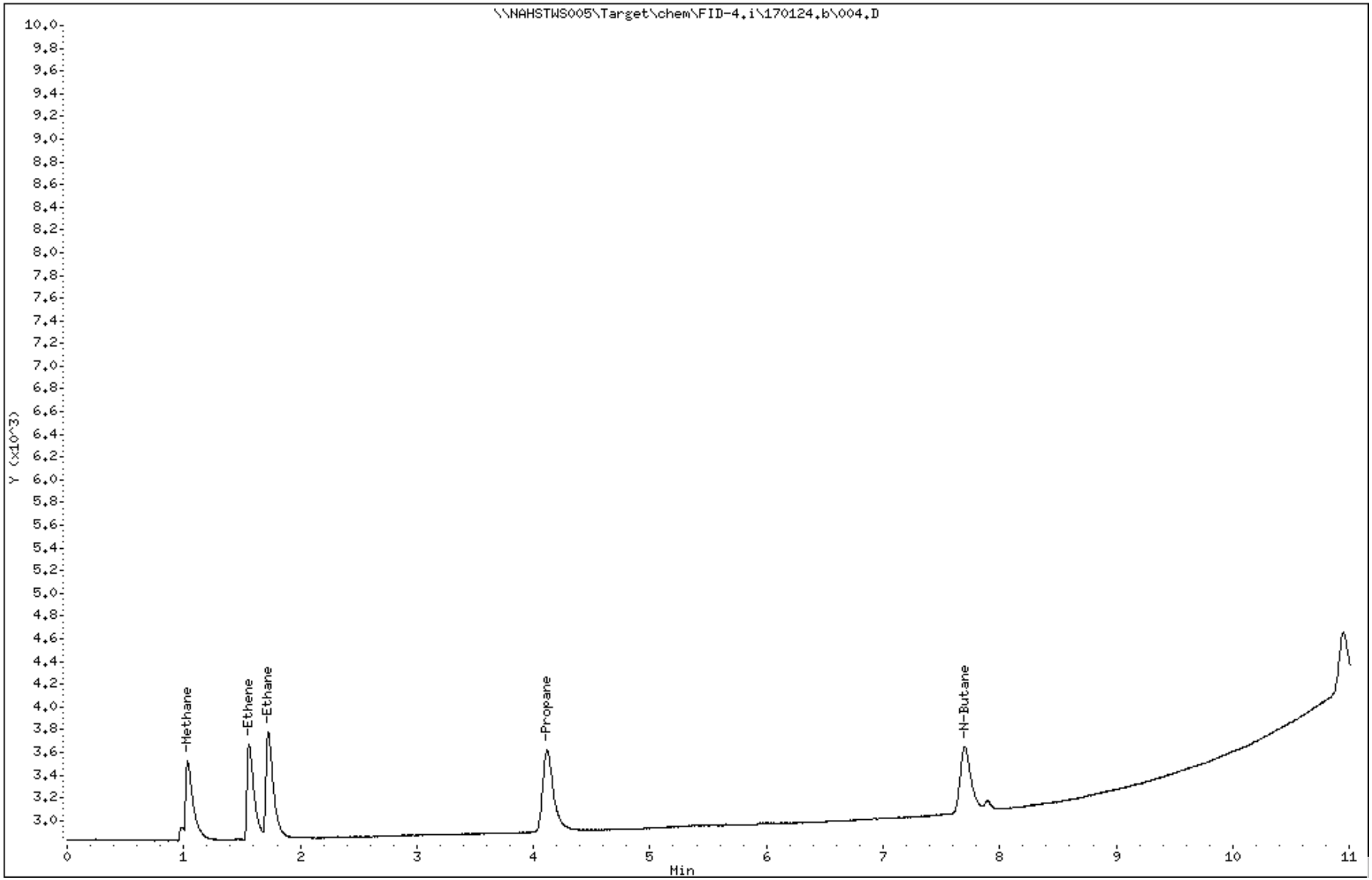
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



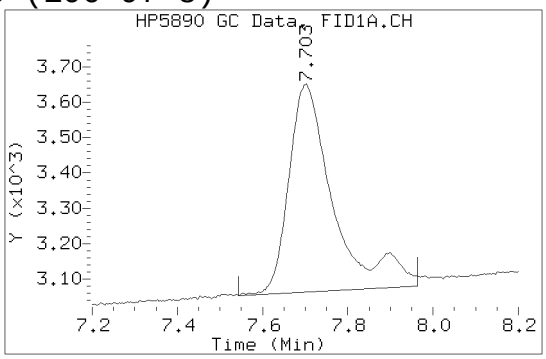
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

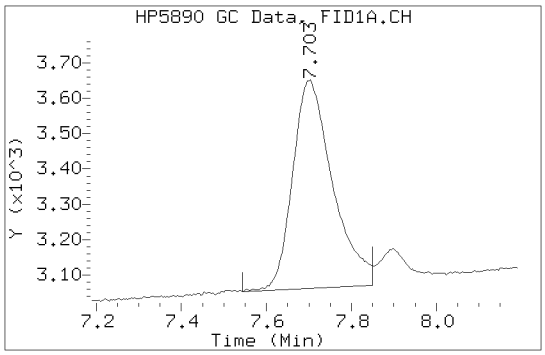
BEFORE

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

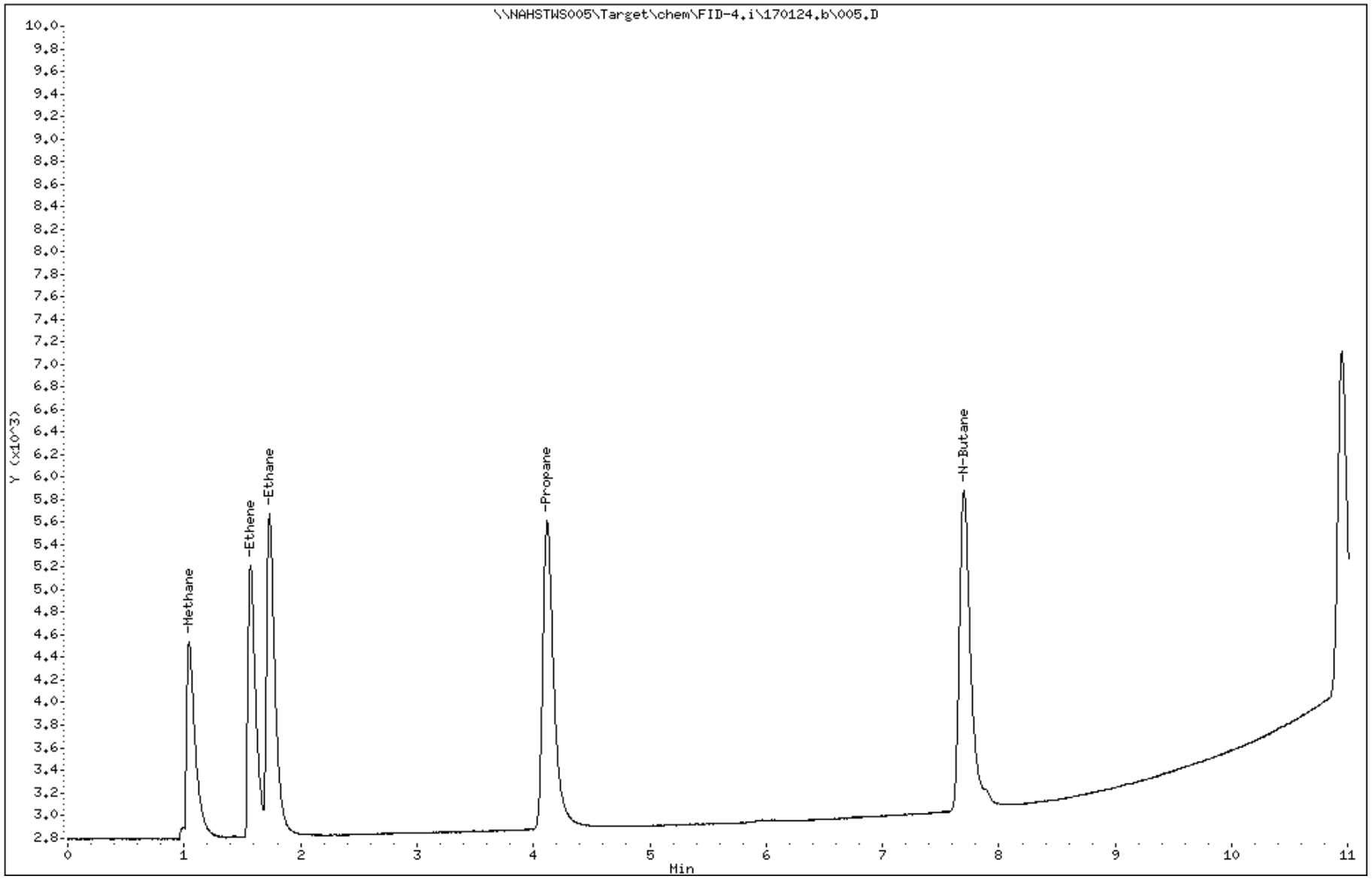
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



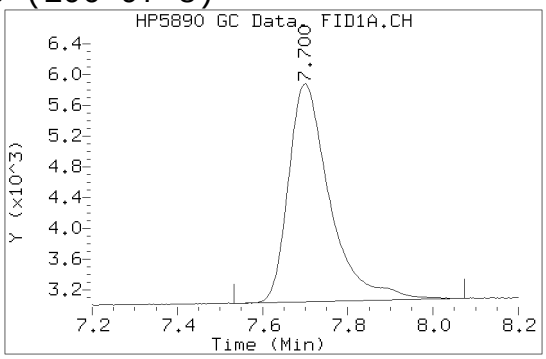
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

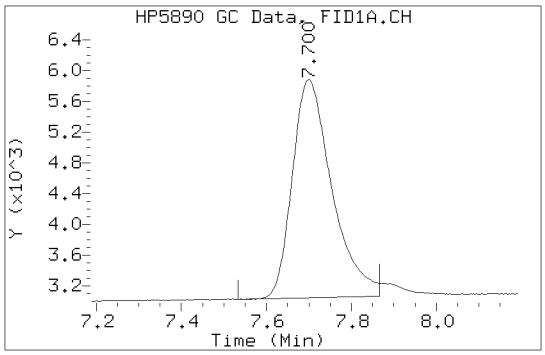
BEFORE

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

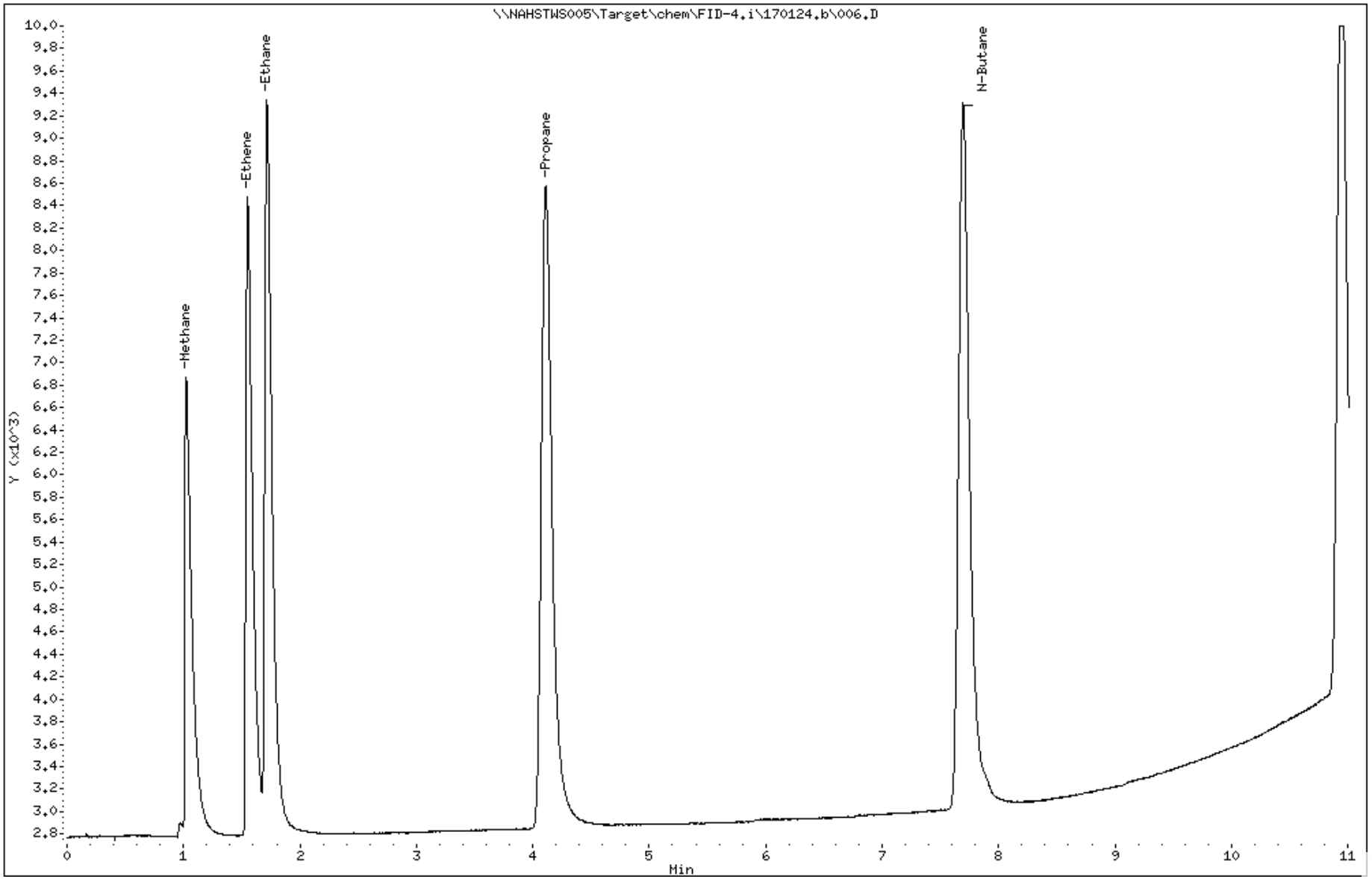
Instrument: FID-4.i

Sample Info: ICAL6;ICAL6;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

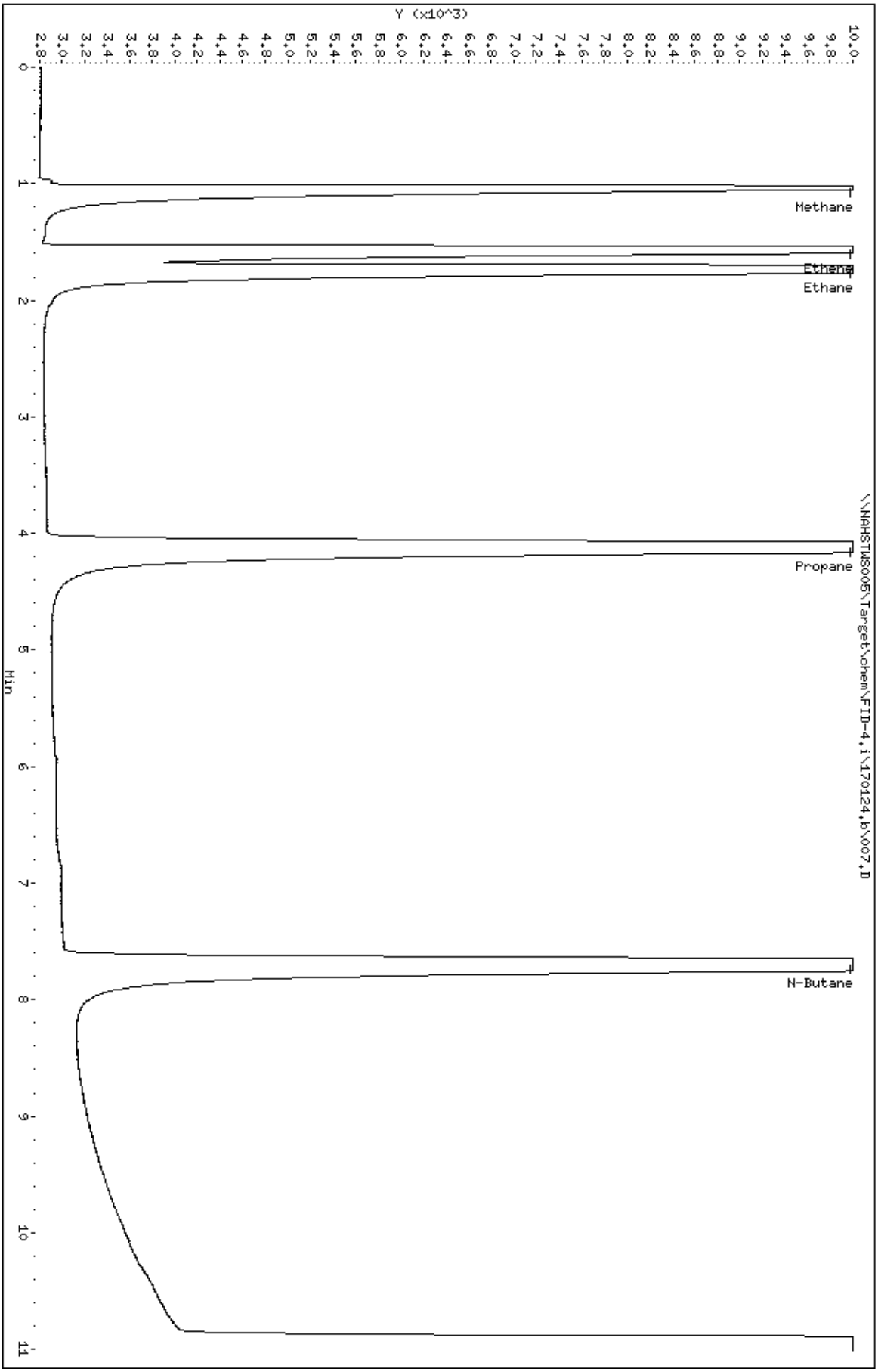
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	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

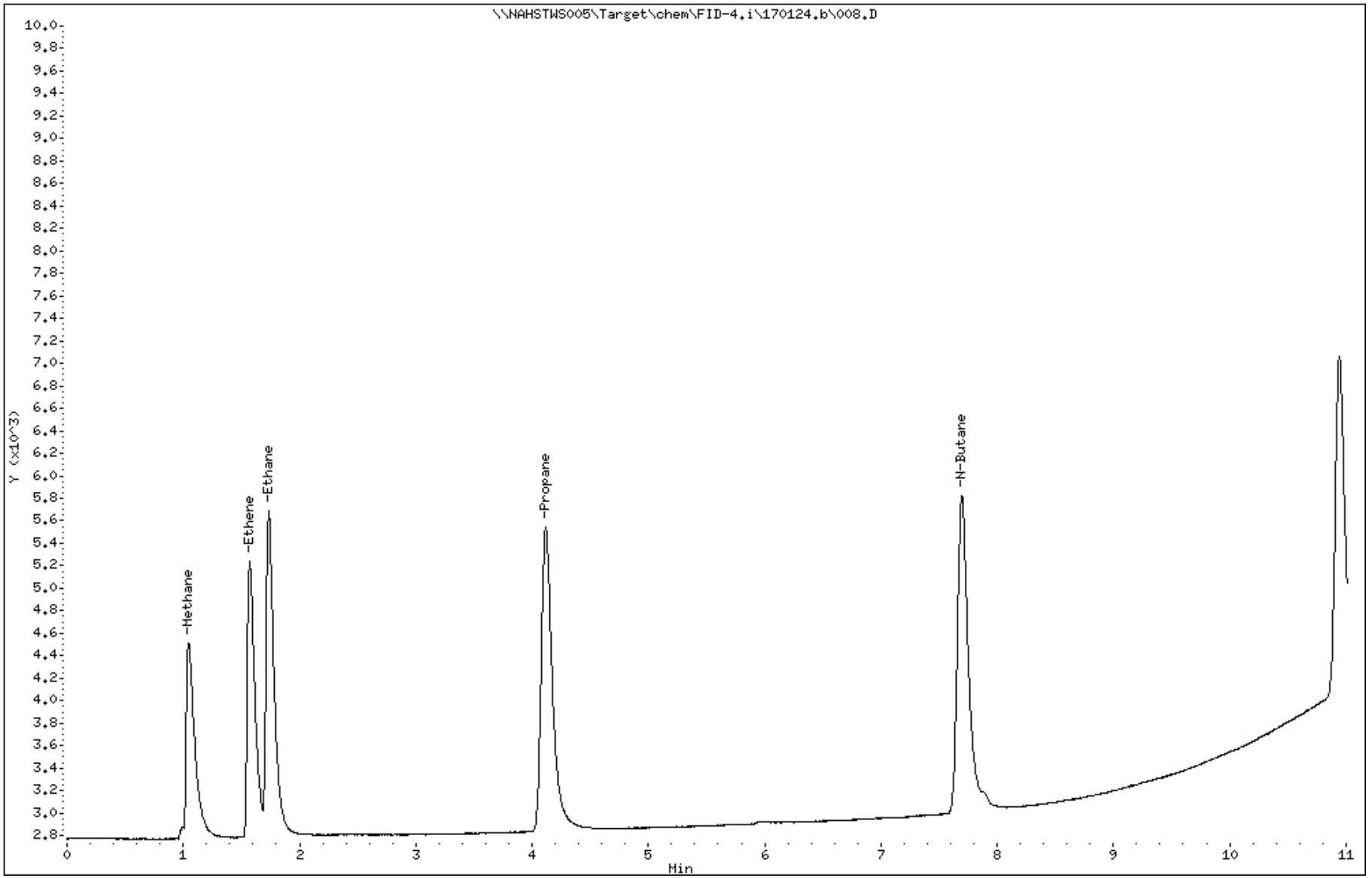
Instrument: FID-4.i

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 427470

Semi-Volatiles by RSK-175

Workorder

HS23011514

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\230207.b\001.D Page 1
Report Date: 07-Feb-2023 12:44

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230207.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 07-FEB-2023 09:04
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\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 12:42 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.443	0.443	0.000	8418	9.64700	8.633
2 Ethene	0.663	0.663	0.000	10594	16.8500	18.085
3 Ethane	0.733	0.733	0.000	14023	18.0430	19.490

Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\001.D

Date : 07-FEB-2023 09:04

Client ID: RSK-CCV

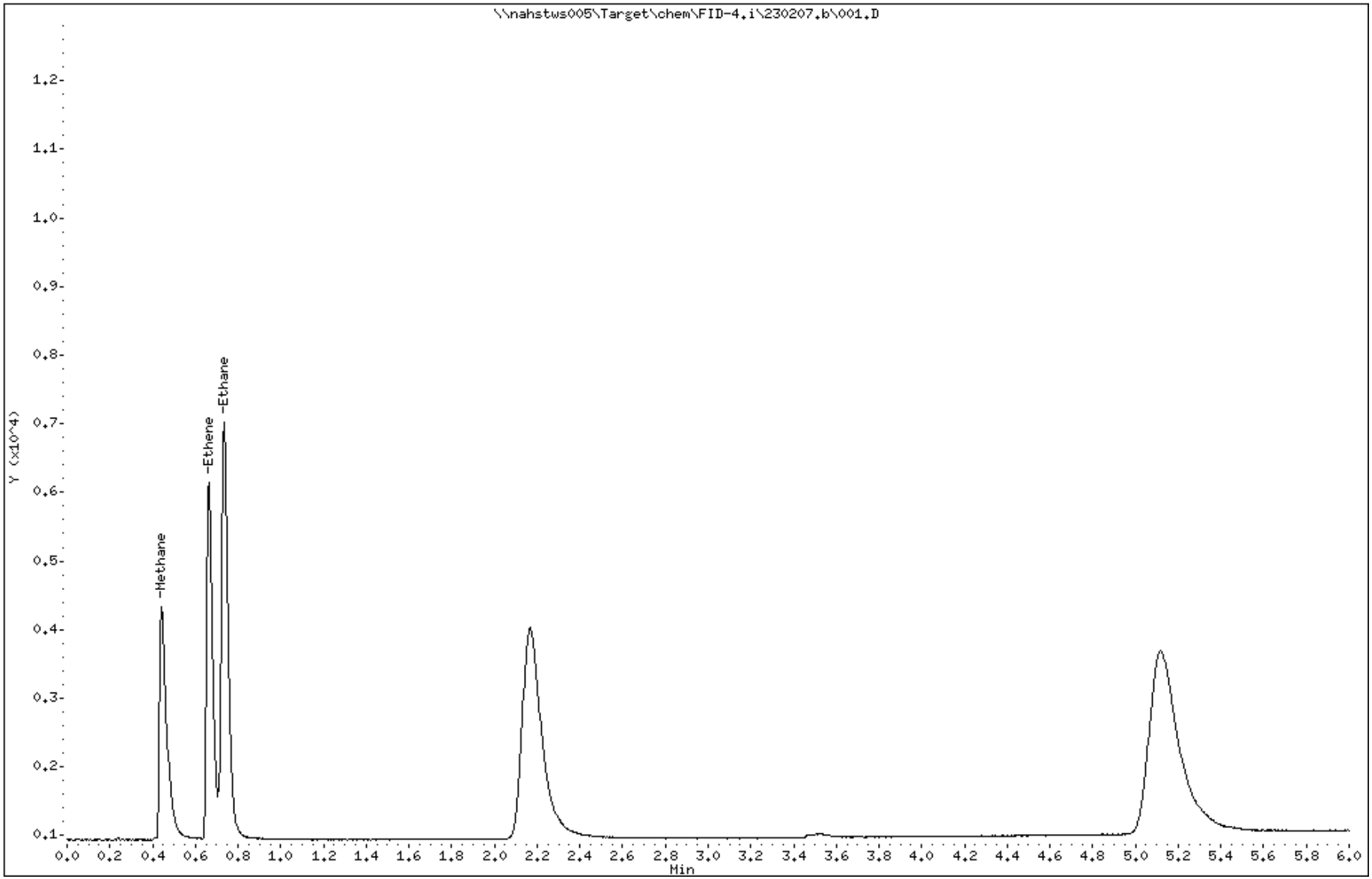
Instrument: FID-4.i

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\230207.b\001.D
Inj Date : 07-FEB-2023 09:04
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230207.b\002.D
Lab Smp Id: MBLK-230207 Client Smp ID: MBLK-230207
Inj Date : 07-FEB-2023 09:25
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230207;MBLK-230207;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 12:42 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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)

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230207.b\002.D

Date : 07-FEB-2023 09:25

Client ID: MBLK-230207

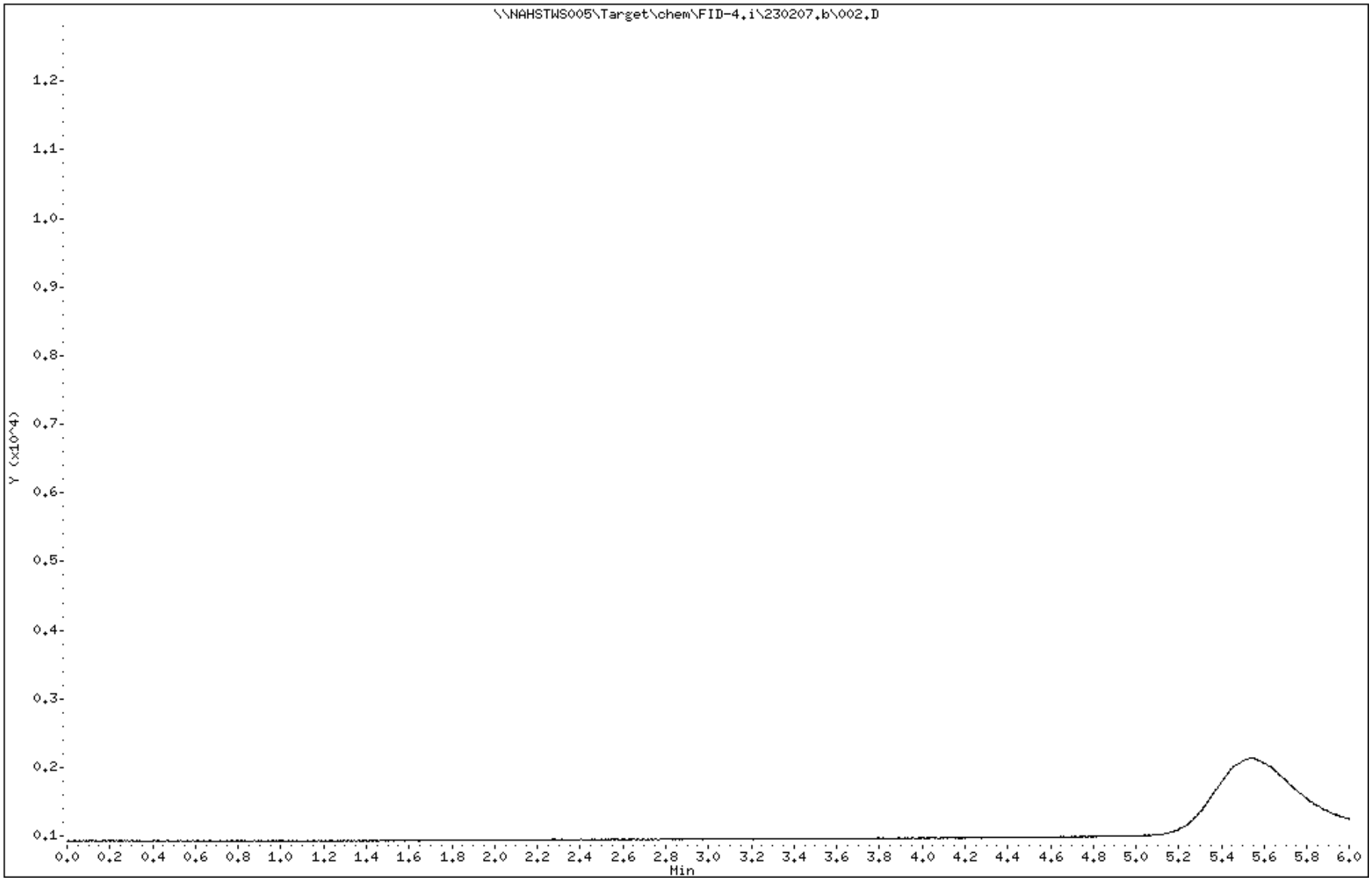
Instrument: FID-4.i

Sample Info: MBLK-230207;MBLK-230207;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230207.b\002.D
Inj Date : 07-FEB-2023 09:25
InstruID : FID-4.i
LabSampID : MBLK-230207

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230207.b\003.D
Lab Smp Id: LCS-230207 Client Smp ID: LCS-230207
Inj Date : 07-FEB-2023 09:38
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-230207;LCS-230207;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 12:42 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.443	-0.003	8578	8.79802	8.798
2 Ethene	0.660	0.663	-0.003	10579	18.0603	18.060(M)
3 Ethane	0.730	0.733	-0.003	14456	20.0920	20.092(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\003.D

Date : 07-FEB-2023 09:38

Client ID: LCS-230207

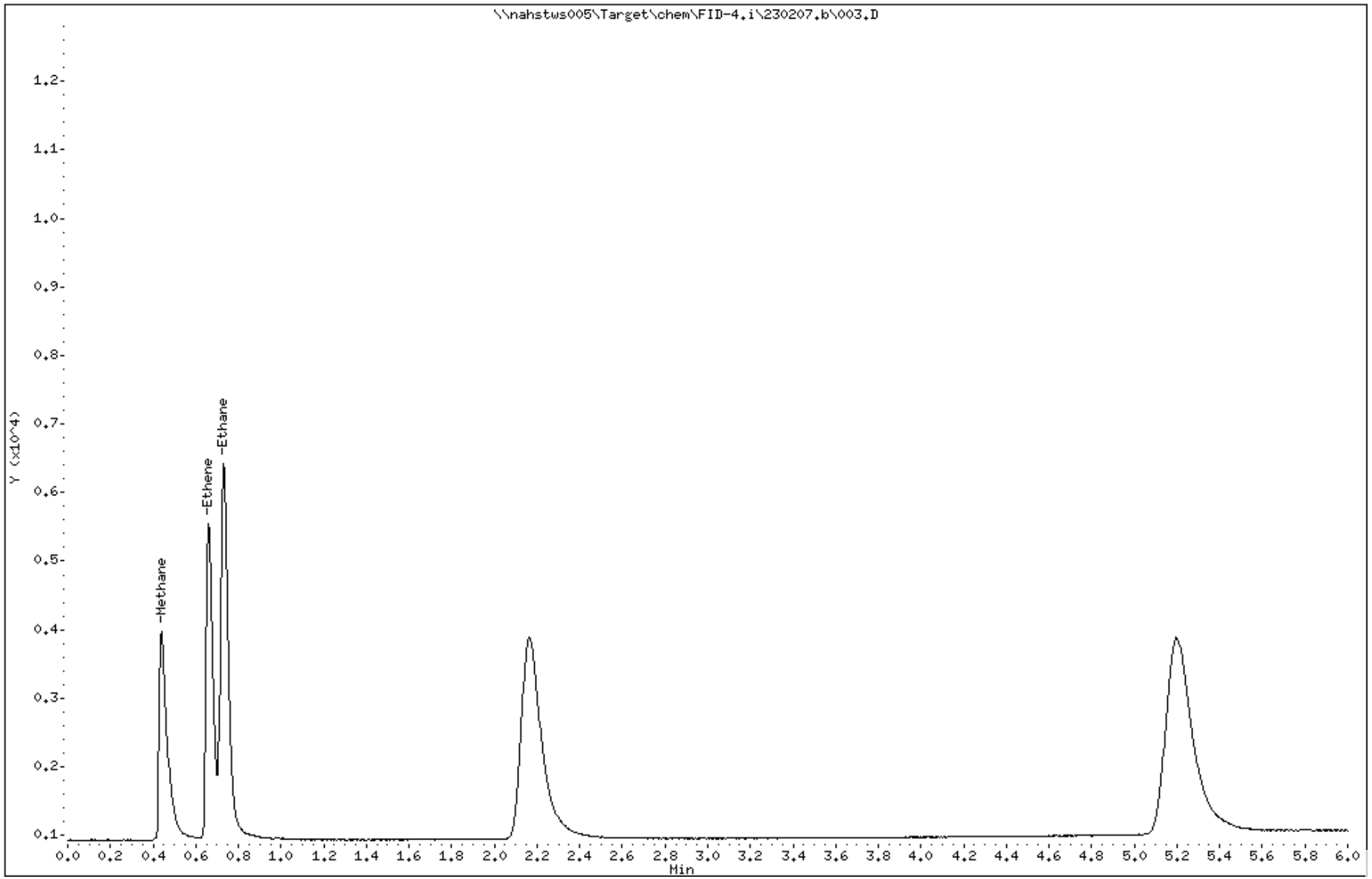
Instrument: FID-4.i

Sample Info: LCS-230207;LCS-230207;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



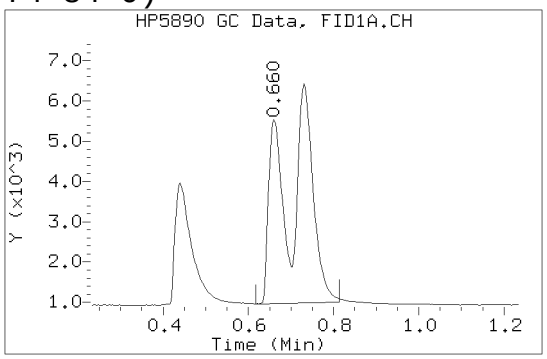
Data File : \\nahstws005\Target\chem\FID-4.i\230207.b\003.D
Inj Date : 07-FEB-2023 09:38
InstruID : FID-4.i
LabSampID : LCS-230207

Ethane (74-84-0)

Reason Code:

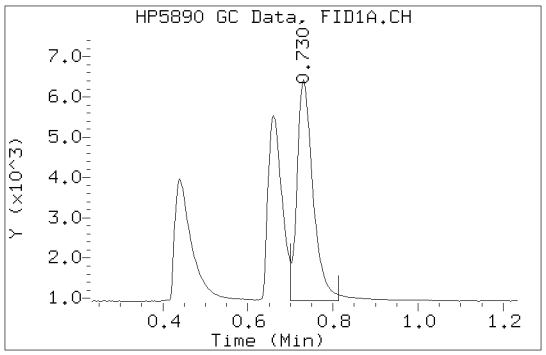
BEFORE

MASS
44
AREA
24213
HEIGHT
4575
07-Feb-2023
09:47
ALSHS
Server



AFTER

MASS
44
AREA
14456
HEIGHT
5496
07-Feb-2023
12:45
ALSHS
Ser

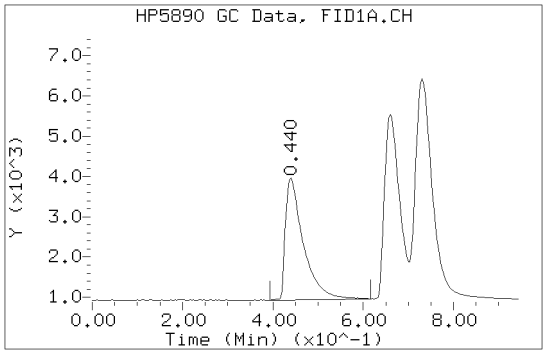


Ethene (74-85-1)

Reason Code:

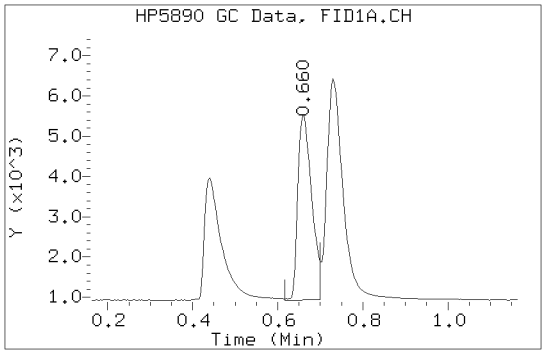
BEFORE

MASS
100
AREA
0
HEIGHT
0
07-Feb-2023
09:47
ALSHS
Server



AFTER

MASS
100
AREA
10579
HEIGHT
4614
07-Feb-2023
12:45
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\230207.b\004.D Page 1
Report Date: 16-Feb-2023 13:31

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\230207.b\004.D
Lab Smp Id: LCSD-230207 Client Smp ID: LCSD-230207
Inj Date : 07-FEB-2023 09:46
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-230207;LCSD-230207;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 12:42 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 4 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	0.433	0.443	-0.010	7965	8.16929	8.169
2 Ethene	0.656	0.663	-0.007	10467	17.8691	17.869
3 Ethane	0.726	0.733	-0.007	13887	19.3012	19.301

Data File: \\NAHSTWS005\Target\chem\FID-4.i\230207.b\004.D

Date : 07-FEB-2023 09:46

Client ID: LCSD-230207

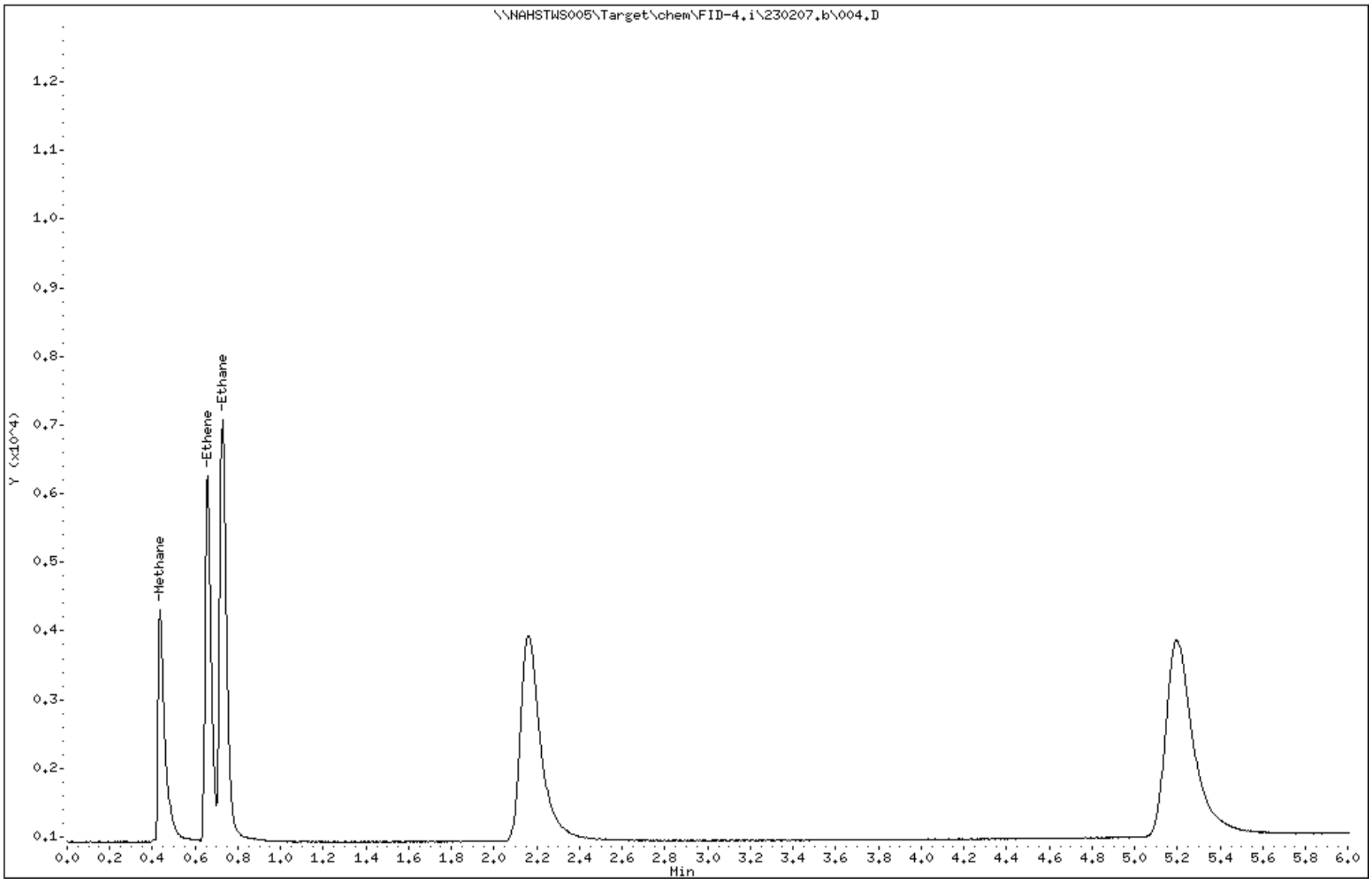
Instrument: FID-4.i

Sample Info: LCSD-230207;LCSD-230207;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\230207.b\004.D
Inj Date : 07-FEB-2023 09:46
InstruID : FID-4.i
LabSampID : LCSD-230207

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230207.b\005.D
Lab Smp Id: HS23011514-01 Client Smp ID: HS23011514-01
Inj Date : 07-FEB-2023 10:01
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011514-01;HS23011514-01
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 09:12 samy.mata 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: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.443	-0.010	1076083	1103.68	1103.683(A)
2 Ethene	0.650	0.663	-0.013	15273	26.0738	26.073

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\005.D

Date : 07-FEB-2023 10:01

Client ID: HS23011514-01

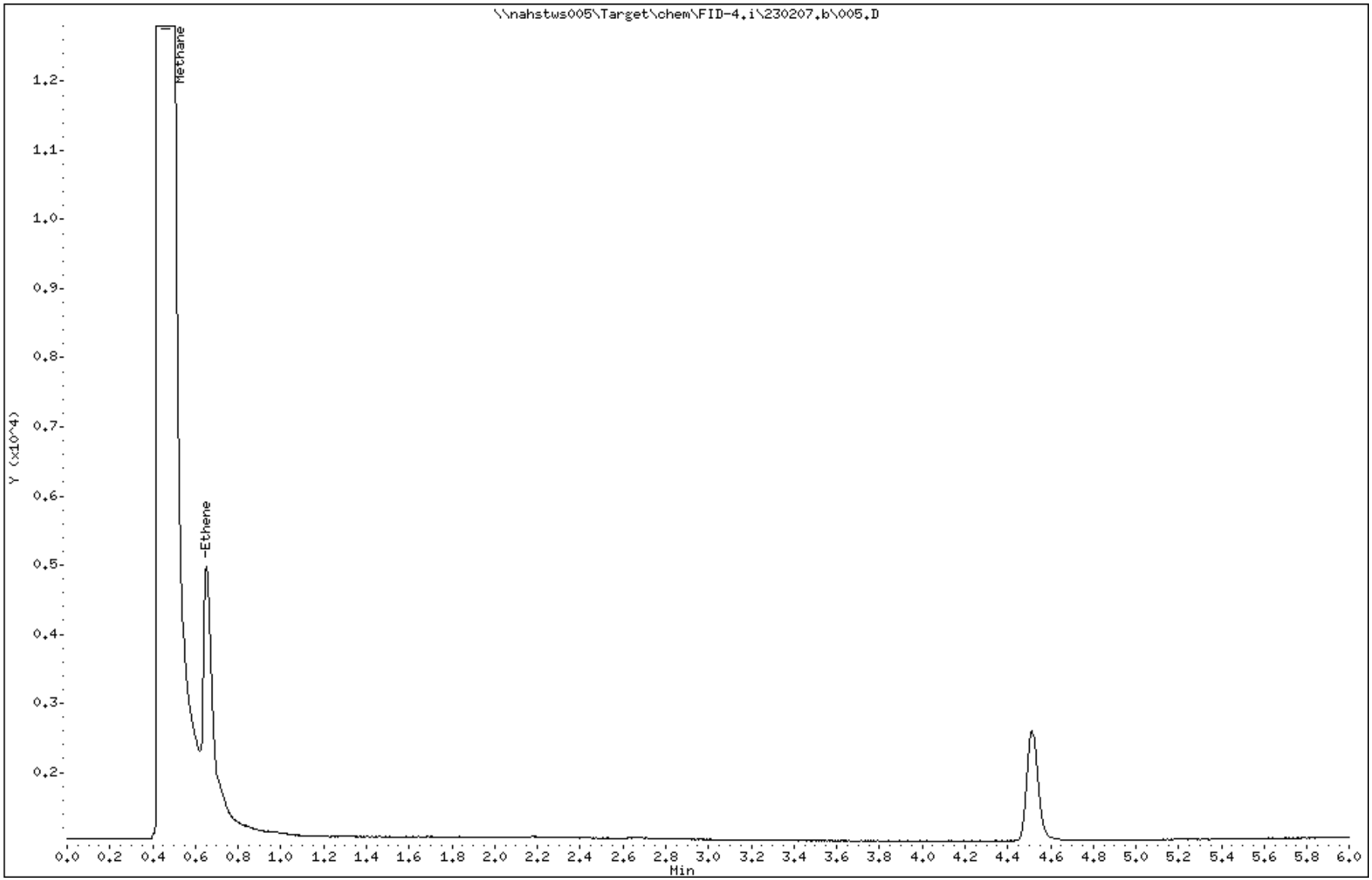
Instrument: FID-4.i

Sample Info: HS23011514-01;HS23011514-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230207.b\005.D
Inj Date : 07-FEB-2023 10:01
InstruID : FID-4.i
LabSampID : HS23011514-01

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230207.b\006.D
Lab Smp Id: HS23011514-02 Client Smp ID: HS23011514-02
Inj Date : 07-FEB-2023 10:21
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011514-02;HS23011514-02
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 12:42 samy.mata 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: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.443	-0.013	664966	682.022	682.021(A)
2 Ethene	0.646	0.663	-0.017	13912	23.7503	23.750(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\230207.b\006.D

Page 1

Date : 07-FEB-2023 10:21

Client ID: HS23011514-02

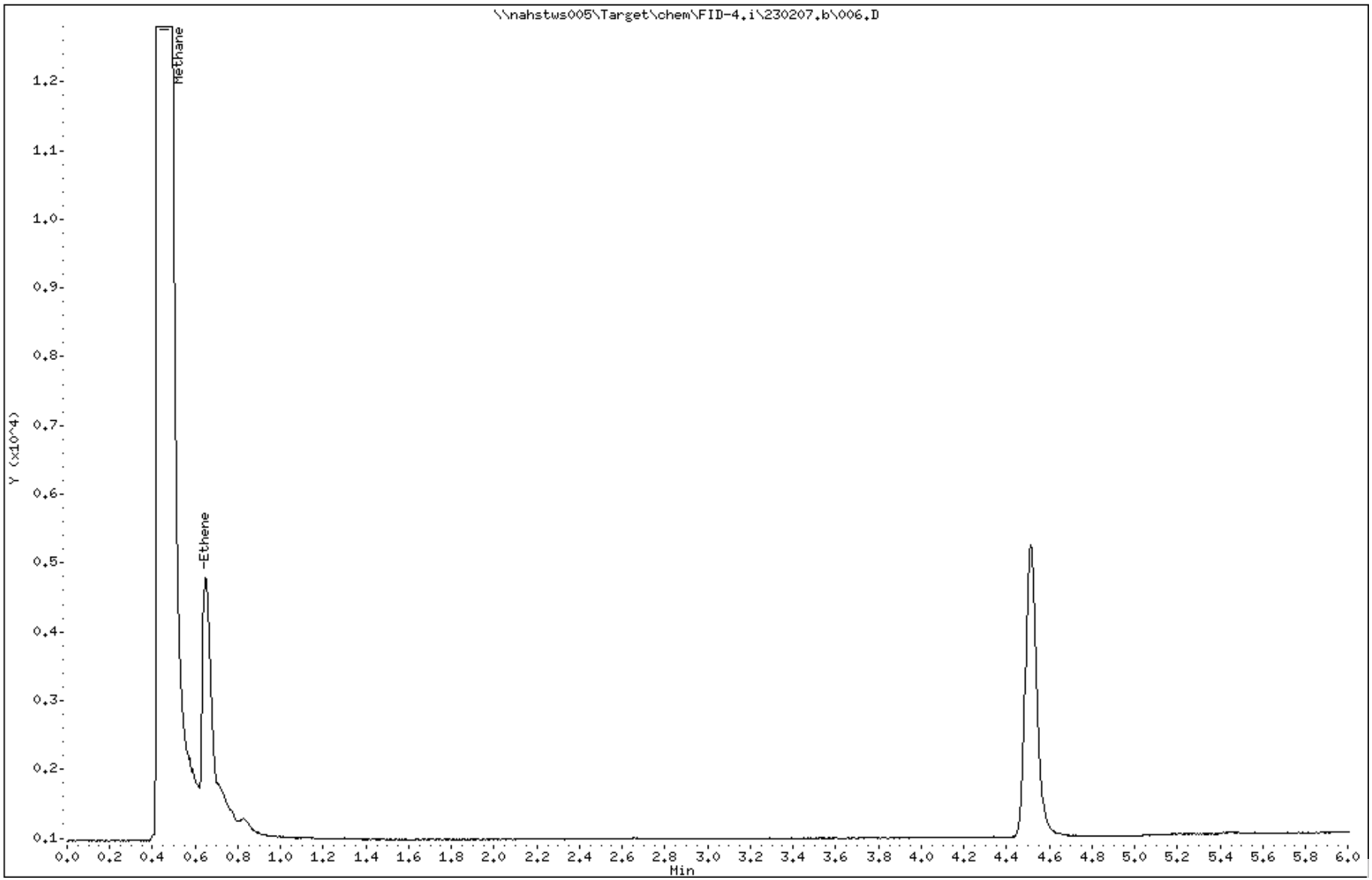
Instrument: FID-4.i

Sample Info: HS23011514-02;HS23011514-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



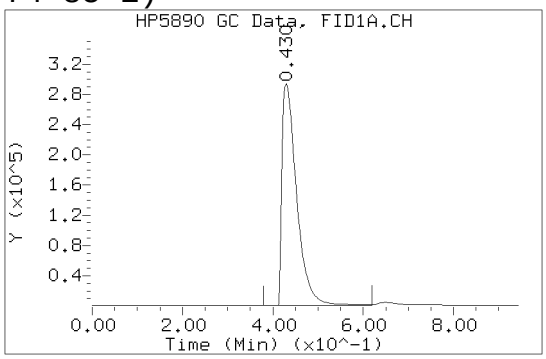
Data File : \\nahstws005\Target\chem\FID-4.i\230207.b\006.D
Inj Date : 07-FEB-2023 10:21
InstruID : FID-4.i
LabSampID : HS23011514-02

Ethene (74-85-1)

Reason Code:

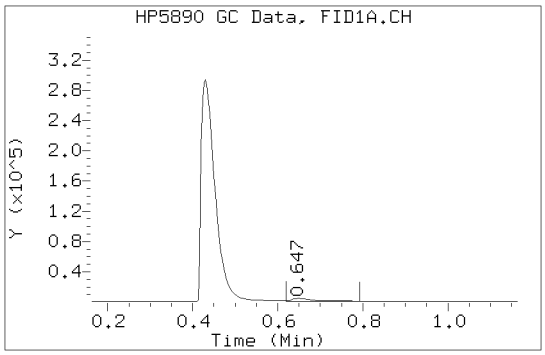
BEFORE

MASS
100
AREA
0
HEIGHT
0
07-Feb-2023
10:27
ALSHS
Server



AFTER

MASS
100
AREA
13912
HEIGHT
3796
07-Feb-2023
12:46
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230207.b\008.D
Lab Smp Id: HS23011514-01 Client Smp ID: HS23011514-01
Inj Date : 07-FEB-2023 10:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011514-01;HS23011514-01
Misc Info : ;1;0;50
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 09:12 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 8
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.443	0.003	20661	21.1909	1059.546(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\008.D

Date : 07-FEB-2023 10:37

Client ID: HS23011514-01

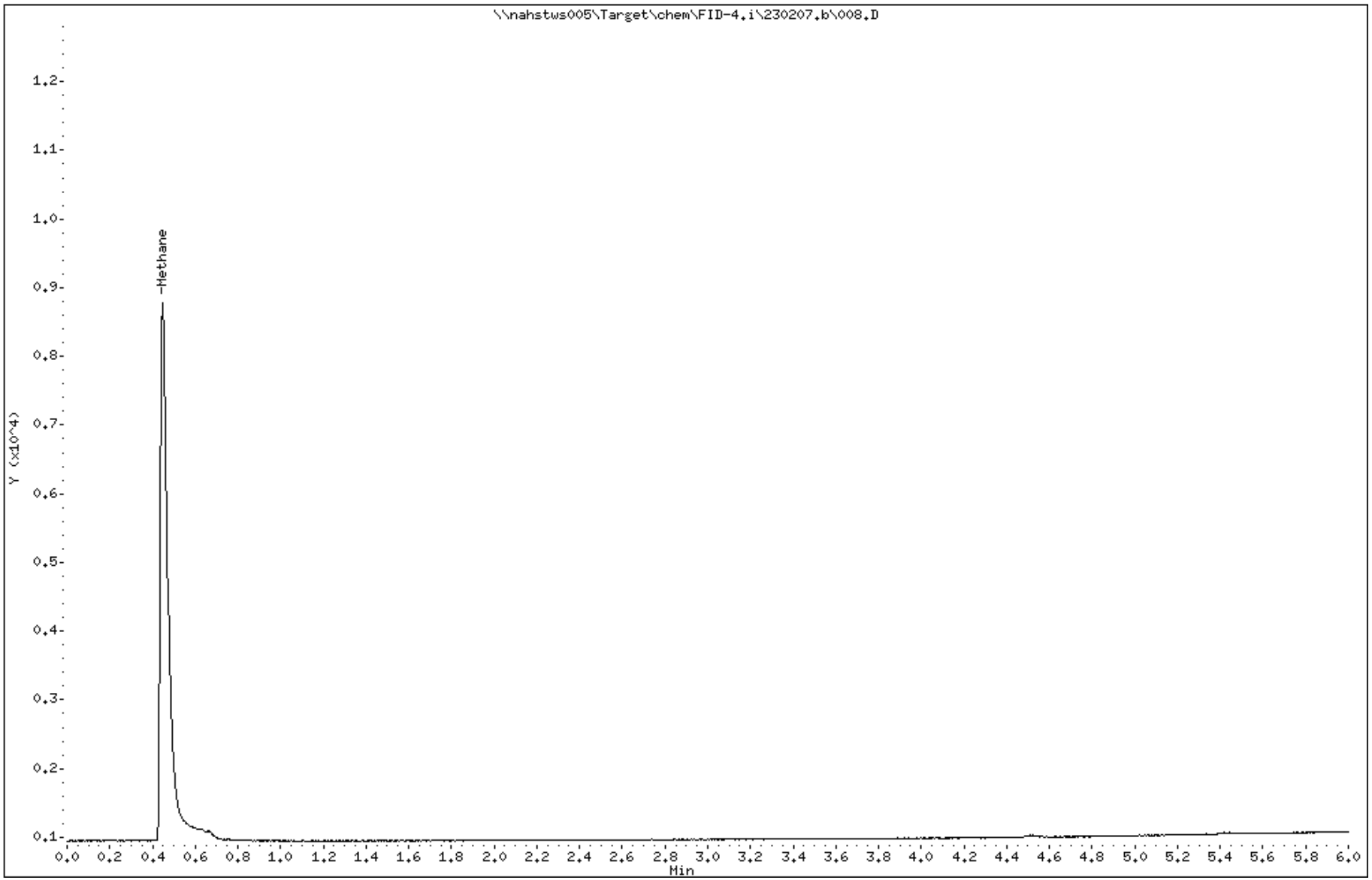
Instrument: FID-4.i

Sample Info: HS23011514-01;HS23011514-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



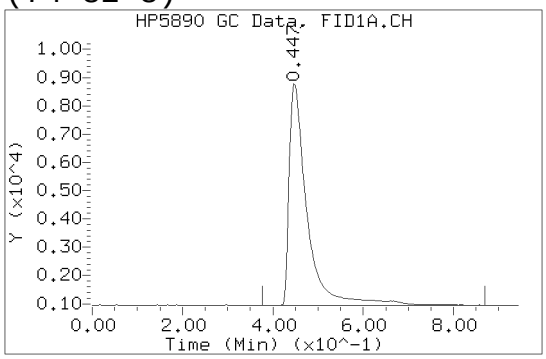
Data File : \\nahstws005\Target\chem\FID-4.i\230207.b\008.D
Inj Date : 07-FEB-2023 10:37
InstruID : FID-4.i
LabSampID : HS23011514-01

Methane (74-82-8)

Reason Code:

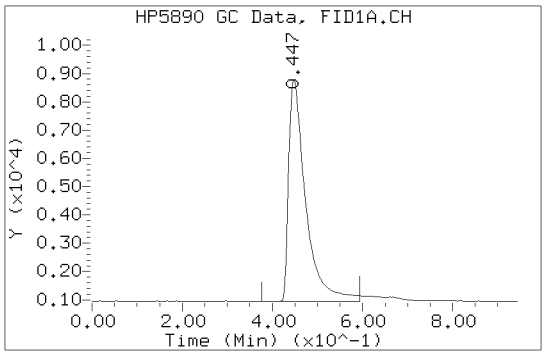
BEFORE

MASS
100
AREA
0
HEIGHT
0
07-Feb-2023
10:45
ALSHS
Server



AFTER

MASS
100
AREA
20661
HEIGHT
7837
07-Feb-2023
10:50
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\009.D Page 1
Report Date: 07-Feb-2023 12:47

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230207.b\009.D
Lab Smp Id: HS23011514-02 Client Smp ID: HS23011514-02
Inj Date : 07-FEB-2023 10:48
Operator : PL Inst ID: FID-4.i
Smp Info : HS23011514-02;HS23011514-02
Misc Info : ;1;0;50
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 12:42 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.443	0.007	12775	13.1027	655.133(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\009.D

Date : 07-FEB-2023 10:48

Client ID: HS23011514-02

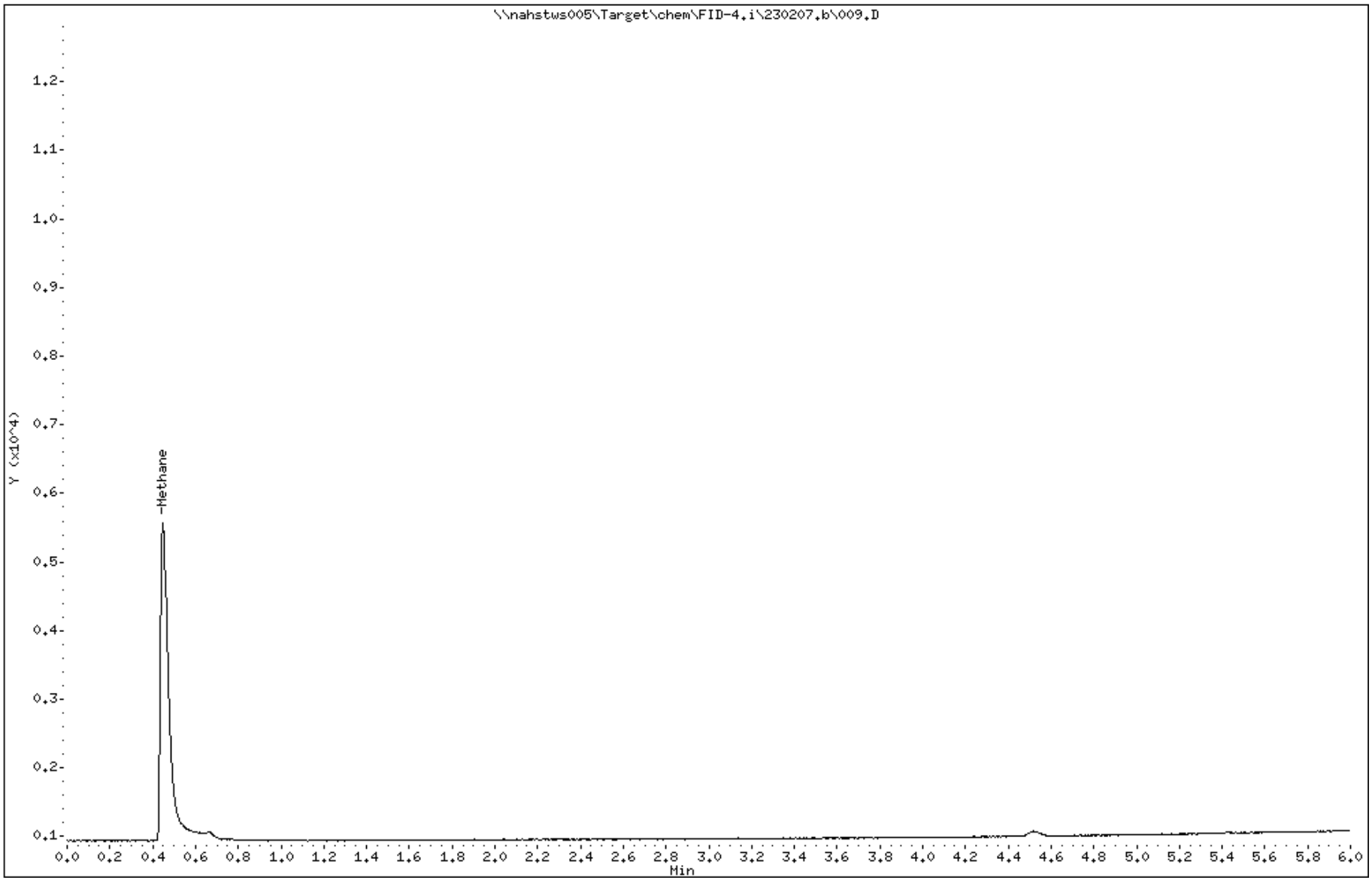
Instrument: FID-4.i

Sample Info: HS23011514-02;HS23011514-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



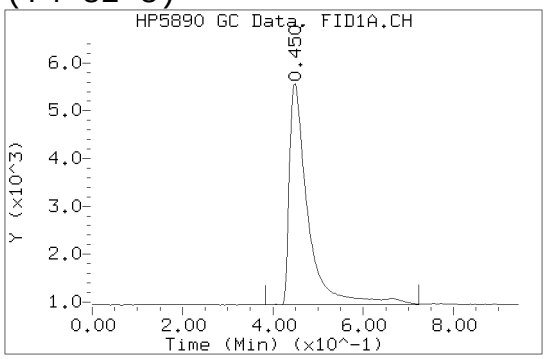
Data File : \\nahstws005\Target\chem\FID-4.i\230207.b\009.D
Inj Date : 07-FEB-2023 10:48
InstruID : FID-4.i
LabSampID : HS23011514-02

Methane (74-82-8)

Reason Code:

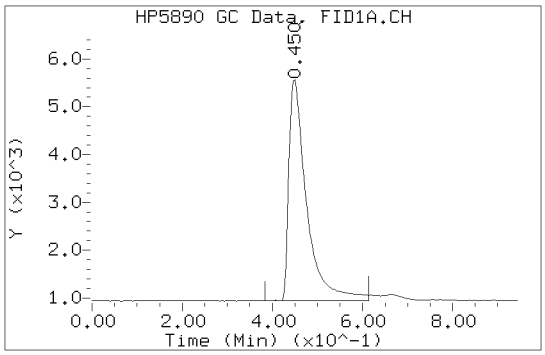
BEFORE

MASS
100
AREA
0
HEIGHT
0
07-Feb-2023
10:54
ALSHS
Server



AFTER

MASS
100
AREA
12775
HEIGHT
4628
07-Feb-2023
12:47
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\011.D Page 1
Report Date: 07-Feb-2023 12:43

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230207.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 07-FEB-2023 11:21
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\230207.b\RSKNI3.m
Meth Date : 07-Feb-2023 12:42 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.440	0.440	0.000	7759	9.64700	7.958
2 Ethene	0.660	0.660	0.000	10399	16.8500	17.752(M)
3 Ethane	0.733	0.733	0.000	14011	18.0430	19.473(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\230207.b\011.D

Date : 07-FEB-2023 11:21

Client ID: RSK-CCV

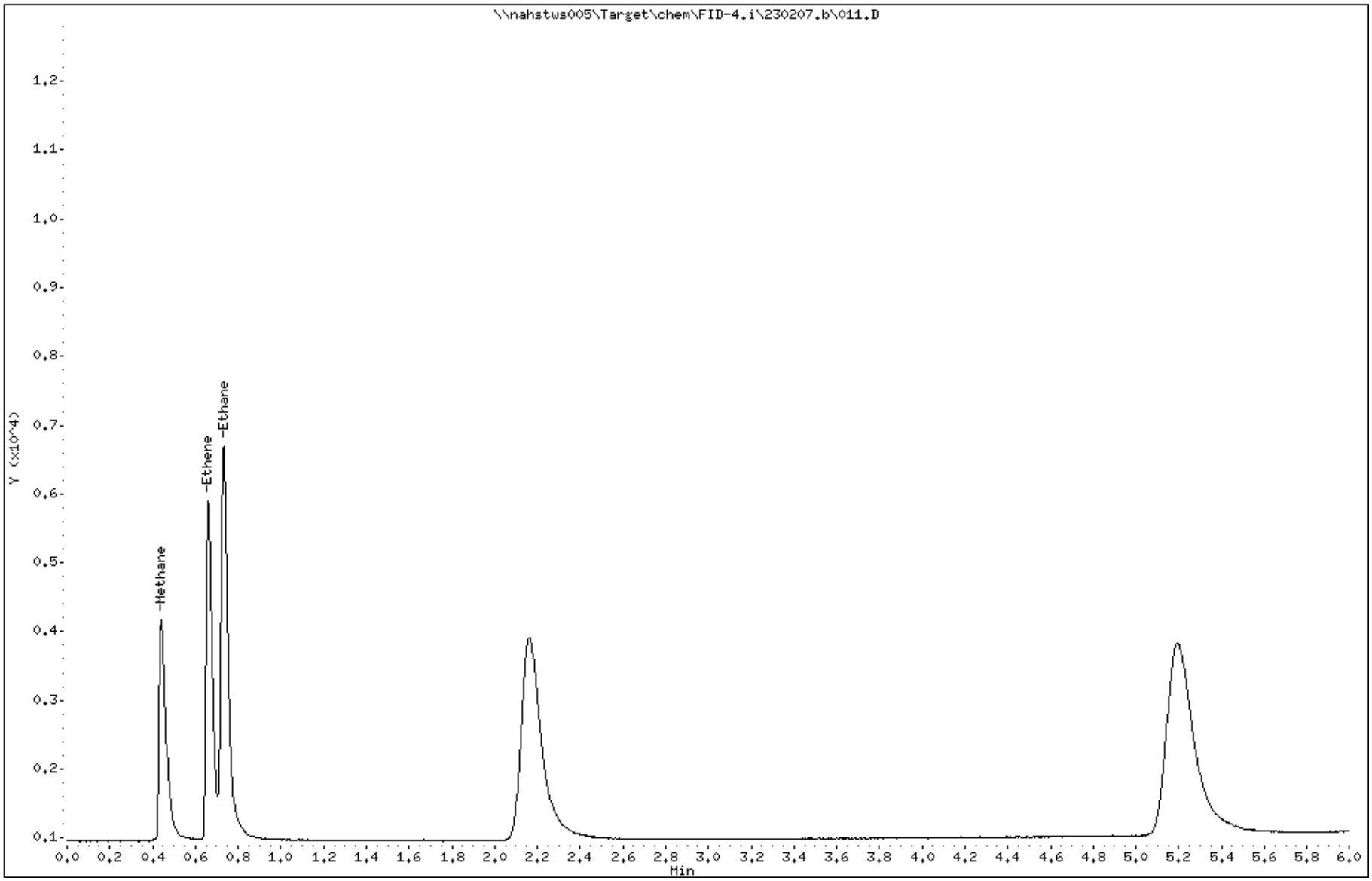
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



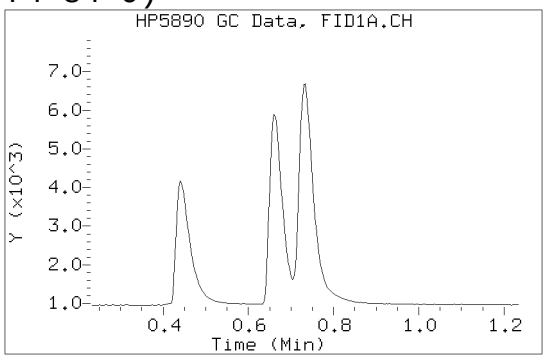
Data File : \\nahstws005\Target\chem\FID-4.i\230207.b\011.D
Inj Date : 07-FEB-2023 11:21
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

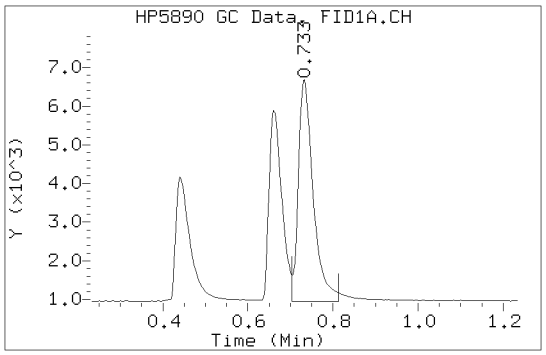
BEFORE

MASS
44
AREA
0
HEIGHT
0
07-Feb-2023
12:42
samy
mata



AFTER

MASS
44
AREA
14011
HEIGHT
5731
07-Feb-2023
12:43
samy
mata

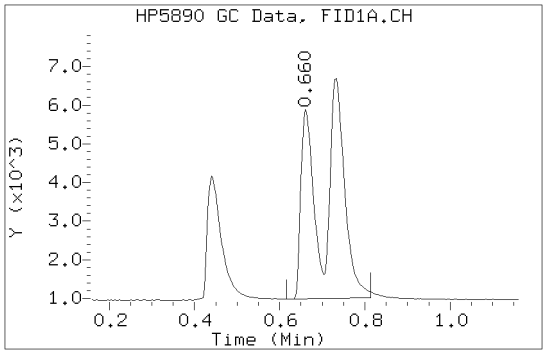


Ethene (74-85-1)

Reason Code:

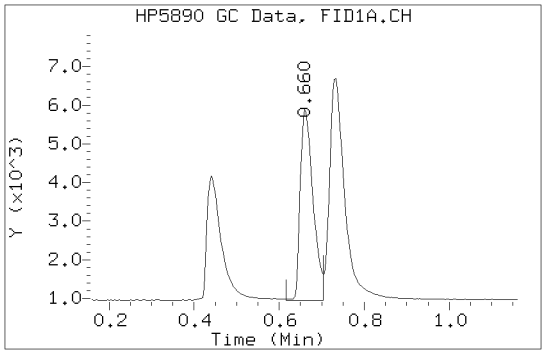
BEFORE

MASS
100
AREA
23700
HEIGHT
4902
07-Feb-2023
12:42
samy
mata



AFTER

MASS
100
AREA
10399
HEIGHT
4937
07-Feb-2023
12:43
samy
mata



HS23011514 Wet Chemistry

ALS WO# HS23011514

C:\TOC-L\Data\2022_12_22_001_CAL.tlx

HS2301151 4

	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

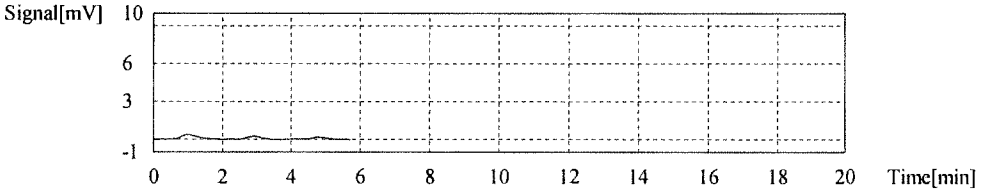
Sample Name:	CAL
Sample ID:	3100606518
Cal. Curve:	12_22_2022_CAL.2022_12_22_12_06_45.cal
Status	Completed

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

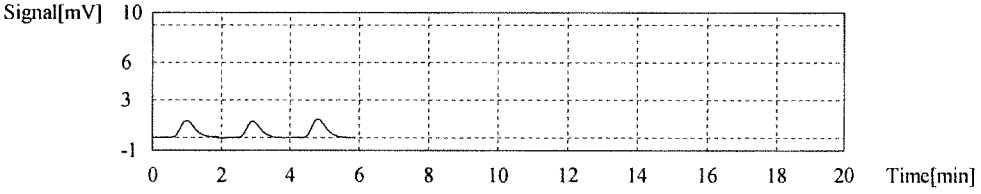
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.6964



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



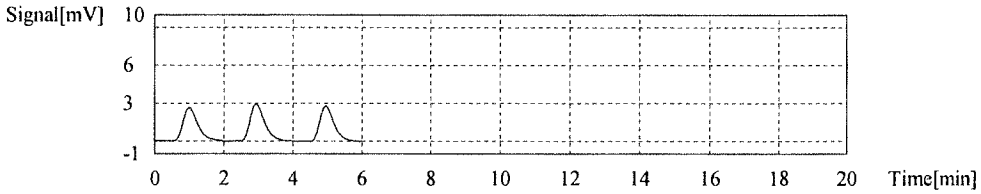
Conc: 2.000mg/L

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

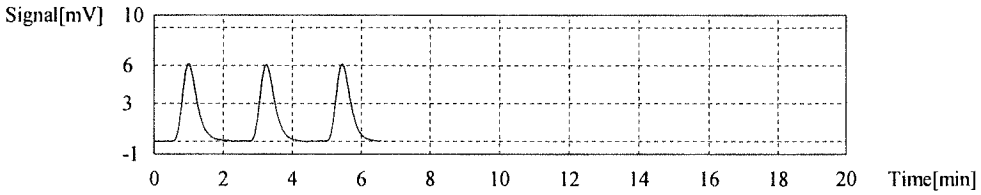
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	8.114



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

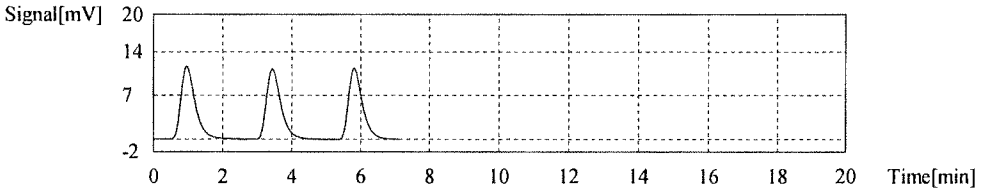
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	18.18



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

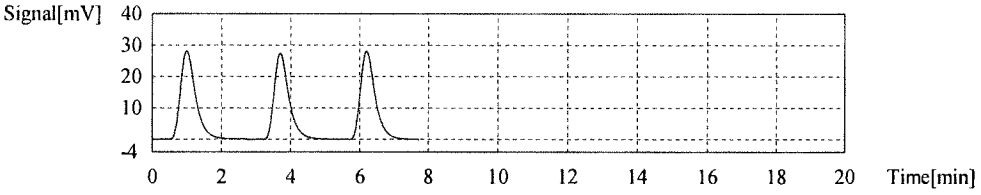
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	32.94



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



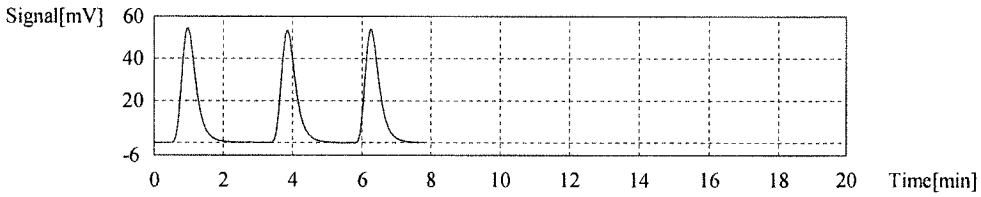
Conc: 50.00mg/L

TOC-Control L Report

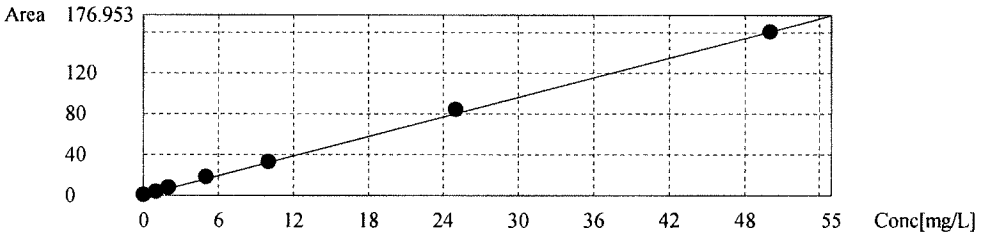
2022_12_22_001_CAL.tlx

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

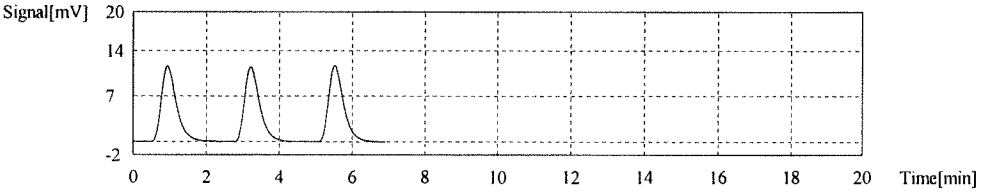
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.45mg/L

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

2022_12_22_001_CAL.tlx

Sample Name: ICB
Sample ID:
Ongin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

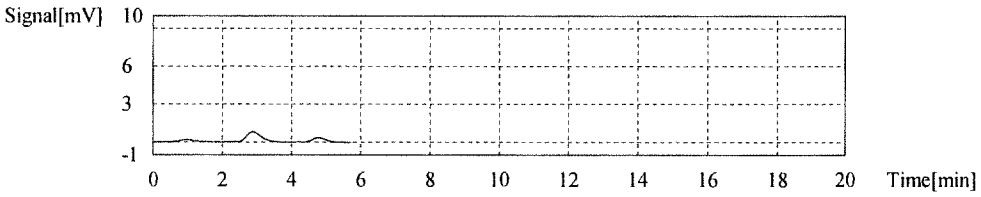
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3762mg/L

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_02_08_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Unknown	NPOC	CCV	321102607	12_22_2022	1.000	NPOC:24.17mg/L	
2	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.2617mg/	
3	Unknown	NPOC	MBLK-02082023		12_22_2022	1.000	NPOC:0.1122mg/	
4	Unknown	NPOC	LCS-02082023	3100606203	12_22_2022	1.000	NPOC:10.49mg/L	
5	Unknown	NPOC	LCSD-02082023		12_22_2022	1.000	NPOC:10.85mg/L	
6	Unknown	NPOC	HS23020214-01		12_22_2022	1.000	NPOC:2.947mg/L	
7	Unknown	NPOC	HS23020214-02		12_22_2022	1.000	NPOC:0.5711mg/	
8	Unknown	NPOC	HS23020306-01		12_22_2022	1.000	NPOC:214.1mg/L	
9	Unknown	NPOC	HS23011447-02		12_22_2022	1.000	NPOC:11.67mg/L	
10	Unknown	NPOC	HS23020079-01		12_22_2022	1.000	NPOC:11.80mg/L	
11	Unknown	NPOC	HS23020079-01MS		12_22_2022	1.000	NPOC:24.32mg/L	
12	Unknown	NPOC	HS23011442-05		12_22_2022	1.000	NPOC:57.20mg/L	
13	Unknown	NPOC	CCV	321102607	12_22_2022	1.000	NPOC:23.79mg/L	
14	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.3636mg/	
15	Unknown	NPOC	HS23020024-01		12_22_2022	1.000	NPOC:8.433mg/L	
16	Unknown	NPOC	HS23011514-01		12_22_2022	1.000	NPOC:4.101mg/L	
17	Unknown	NPOC	HS23011514-06		12_22_2022	1.000	NPOC:18.88mg/L	
18	Unknown	NPOC	HS23011514-07		12_22_2022	1.000	NPOC:19.01mg/L	
19	Unknown	NPOC	CCV	321102607	12_22_2022	1.000	NPOC:24.41mg/L	
20	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.3705mg/	
21	Unknown	NPOC	MBLK-02082023		12_22_2022	1.000	NPOC:0.2500mg/	
22	Unknown	NPOC	LCS-02082023	3100606203	12_22_2022	1.000	NPOC:10.83mg/L	
23	Unknown	NPOC	LCSD-02082023		12_22_2022	1.000	NPOC:10.89mg/L	
24	Unknown	NPOC	HS23020058-04		12_22_2022	1.000	NPOC:108.5mg/L	
25	Unknown	NPOC	HS23020058-04MS		12_22_2022	1.000	NPOC:115.4mg/L	
26	Unknown	NPOC	HS23020058-06		12_22_2022	1.000	NPOC:3.494mg/L	
27	Unknown	NPOC	HS23020058-07		12_22_2022	1.000	NPOC:3.861mg/L	
28	Unknown	NPOC	HS23020058-09		12_22_2022	1.000	NPOC:10.53mg/L	
29	Unknown	NPOC	HS23020058-11		12_22_2022	1.000	NPOC:11.62mg/L	
30	Unknown	NPOC	HS23020058-13		12_22_2022	1.000	NPOC:15.49mg/L	
31	Unknown	NPOC	CCV	321102607	12_22_2022	1.000	NPOC:23.80mg/L	
32	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.5166mg/	
33	Unknown	NPOC	HS23020091-01		12_22_2022	1.000	NPOC:3.035mg/L	
34	Unknown	NPOC	HS23020092-01		12_22_2022	1.000	NPOC:3.904mg/L	
35	Unknown	NPOC	HS23011639-01		12_22_2022	1.000	NPOC:1.864mg/L	
36	Unknown	NPOC	HS23020148-01		12_22_2022	1.000	NPOC:8.806mg/L	
37	Unknown	NPOC	CCV	321102607	12_22_2022	1.000	NPOC:23.98mg/L	
38	Unknown	NPOC	CCB		12_22_2022	1.000	NPOC:0.4928mg/	

C:\TOC-L\Data\2023_02_08_001.tlx

	Status	Date / Time	Vial
1	Completed	2/8/2023 12:59:35	1
2	Completed	2/8/2023 1:11:56 P	2
3	Completed	2/8/2023 1:42:57 P	3
4	Completed	2/8/2023 1:56:32 P	4
5	Completed	2/8/2023 2:10:21 P	5
6	Completed	2/8/2023 2:23:21 P	6
7	Completed	2/8/2023 2:35:41 P	7
8	Completed	2/8/2023 2:49:28 P	8
9	Completed	2/8/2023 3:03:19 P	9
10	Completed	2/8/2023 3:17:36 P	10
11	Completed	2/8/2023 3:32:19 P	11
12	Completed	2/8/2023 3:47:22 P	12
13	Completed	2/8/2023 4:01:57 P	1
14	Completed	2/8/2023 4:14:17 P	2
15	Completed	2/8/2023 4:27:58 P	13
16	Completed	2/8/2023 4:41:10 P	14
17	Completed	2/8/2023 4:56:10 P	15
18	Completed	2/8/2023 5:11:24 P	16
19	Completed	2/8/2023 5:26:44 P	1
20	Completed	2/8/2023 5:39:03 P	2
21	Completed	2/8/2023 5:51:22 P	3
22	Completed	2/8/2023 6:05:12 P	4
23	Completed	2/8/2023 6:19:03 P	5
24	Completed	2/8/2023 6:34:37 P	17
25	Completed	2/8/2023 6:49:46 P	18
26	Completed	2/8/2023 7:02:49 P	19
27	Completed	2/8/2023 7:16:17 P	20
28	Completed	2/8/2023 7:30:20 P	21
29	Completed	2/8/2023 7:44:27 P	22
30	Completed	2/8/2023 7:59:12 P	23
31	Completed	2/8/2023 8:13:31 P	24
32	Completed	2/8/2023 8:25:51 P	25
33	Completed	2/8/2023 8:38:40 P	26
34	Completed	2/8/2023 8:56:36 P	27
35	Completed	2/8/2023 9:09:27 P	28
36	Completed	2/8/2023 9:23:06 P	29
37	Completed	2/8/2023 9:38:10 P	24
38	Completed	2/8/2023 9:50:27 P	25

TOC-Control L Report

2023_02_08_001.tlx

Instr.Information

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

Sample

Sample Name: CCV
Sample ID: 321102607
Origin: 12_22_2022_CAL.cal
Status: Completed
Chk. Result:

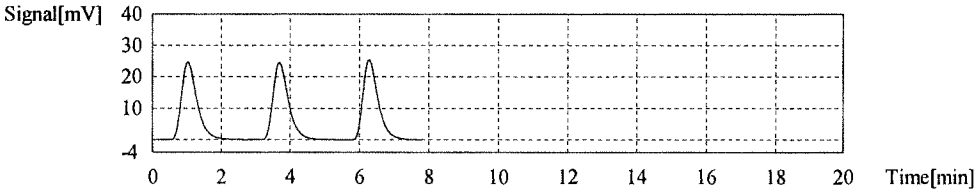
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.70	24.19mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 12:53:59 PM
2	77.15	24.02mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 12:56:53 PM
3	78.07	24.31mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 12:59:35 PM

Mean Area: 77.64
Mean Conc.: 24.17mg/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:0.2617mg/L

1. Det

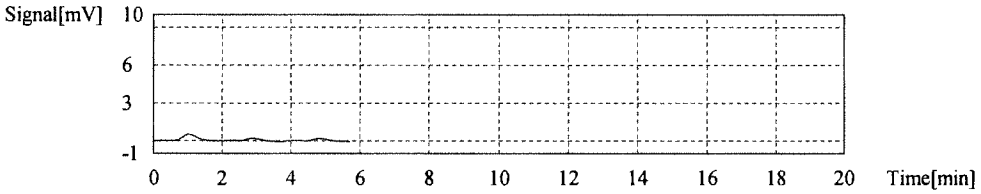
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.411	0.4393mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:07:39 PM
2	0.5791	0.1803mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:09:47 PM
3	0.5318	0.1656mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:11:56 PM

TOC-Control L Report

2023_02_08_001.tlx

Mean Area 0.8406
Mean Conc. 0.2617mg/L



Sample

Sample Name: MBLK-02082023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

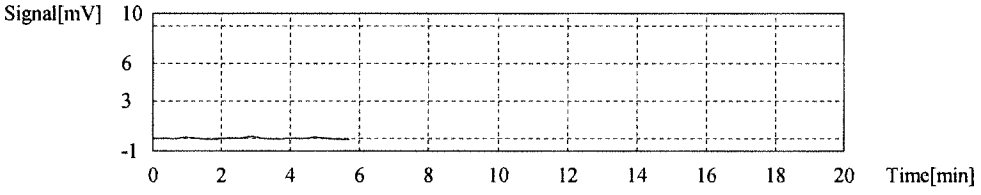
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1122mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3627	0.1129mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:38:38 PM
2	0.4126	0.1285mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:40:47 PM
3	0.3058	0.09521mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:42:57 PM

Mean Area 0.3604
Mean Conc. 0.1122mg/L



Sample

Sample Name: LCS-02082023
Sample ID: 3100606203
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.49mg/L

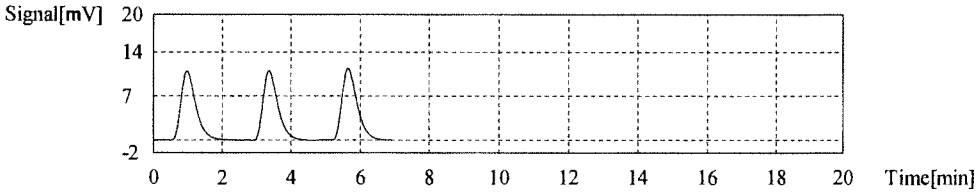
1. Det

Anal.: NPOC

TOC-Control L Report

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.02	10.28mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:51:30 PM
2	33.52	10.44mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:54:02 PM
3	34.54	10.75mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 1:56:32 PM

Mean Area 33.69
Mean Conc. 10.49mg/L



Sample

Sample Name: LCSD-02082023
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

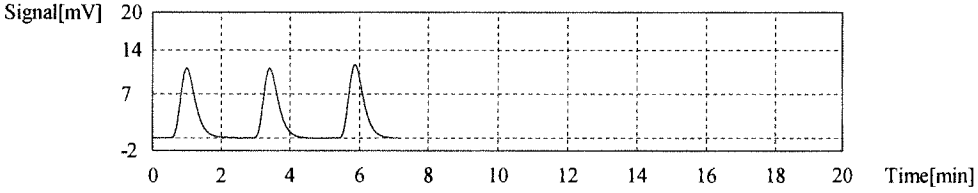
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.27	10.67mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 2:05:07 PM
2	34.38	10.70mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 2:07:49 PM
3	35.85	11.16mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 2:10:21 PM

Mean Area 34.83
Mean Conc. 10.85mg/L



Sample

Sample Name: HS23020079-01
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.80mg/L

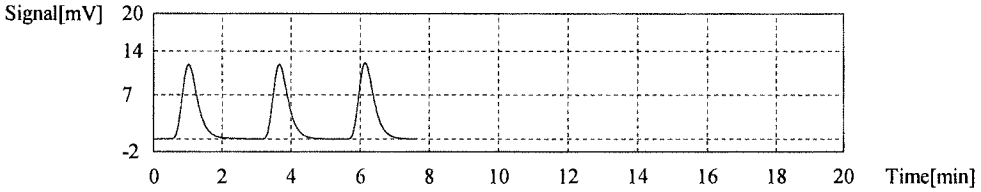
1. Det

TOC-Control L Report

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.96	11.82mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:12:09 PM
2	37.17	11.57mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:14:52 PM
3	38.59	12.01mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:17:36 PM

Mean Area 37.91
Mean Conc. 11.80mg/L



Sample

Sample Name: HS23020079-01MS
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

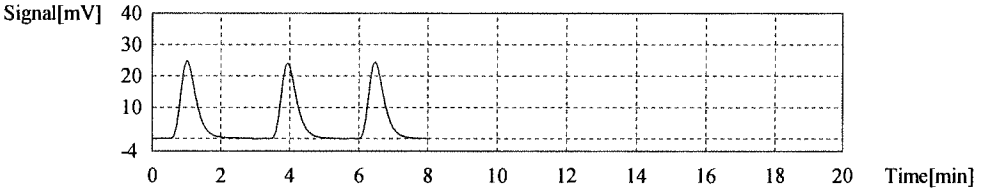
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	79.42	24.73mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:26:41 PM
2	76.69	23.88mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:29:28 PM
3	78.22	24.35mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:32:19 PM

Mean Area 78.11
Mean Conc. 24.32mg/L



Sample

Sample Name: CCV
Sample ID: 321102607
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.79mg/L

TOC-Control L Report

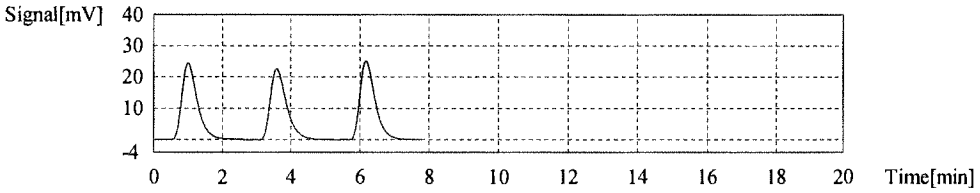
2023_02_08_001.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.54	23.83mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:56:18 PM
2	75.53	23.52mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 3:59:09 PM
3	77.15	24.02mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:01:57 PM

Mean Area 76.41
Mean Conc. 23.79mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

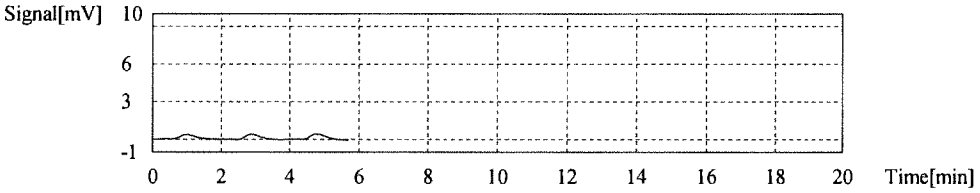
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3636mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9996	0.3112mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:10:01 PM
2	1.207	0.3758mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:12:09 PM
3	1.297	0.4038mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:14:17 PM

Mean Area 1.168
Mean Conc. 0.3636mg/L



Sample

Sample Name: HS23011514-01
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

2023_02_08_001.tlx

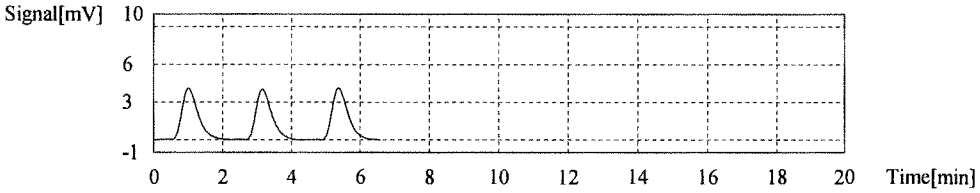
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.101mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.17	4.100mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:36:17 PM
2	12.86	4.004mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:38:43 PM
3	13.49	4.200mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:41:10 PM

Mean Area 13.17
Mean Conc. 4.101mg/L



Sample

Sample Name: HS23011514-06
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

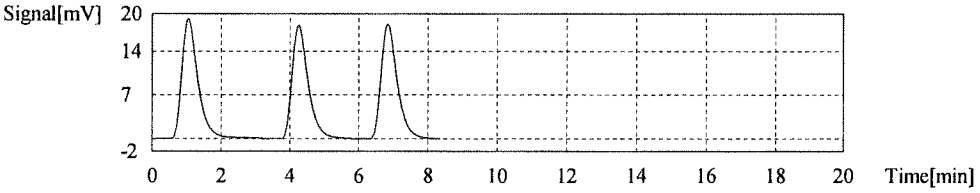
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.18	19.36mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:50:31 PM
2	59.51	18.53mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:53:22 PM
3	60.22	18.75mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 4:56:10 PM

Mean Area 60.64
Mean Conc. 18.88mg/L



Sample

TOC-Control L Report

Sample Name: HS23011514-07
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

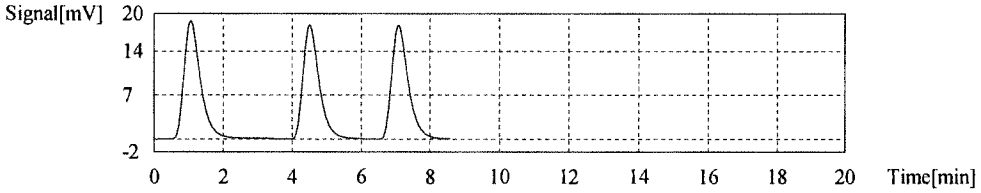
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.85	19.57mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:05:47 PM
2	59.41	18.50mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:08:38 PM
3	60.89	18.96mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:11:24 PM

Mean Area 61.05
Mean Conc. 19.01mg/L



Sample

Sample Name: CCV
Sample ID: 321102607
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

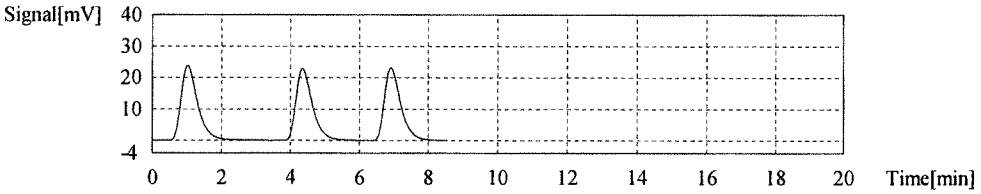
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.84	25.17mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:21:01 PM
2	76.38	23.78mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:23:51 PM
3	77.96	24.27mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:26:44 PM

Mean Area 78.39
Mean Conc. 24.41mg/L



TOC-Control L Report

2023_02_08_001.tlx

Sample

Sample Name: CCB
Sample ID:
Origin: 12_22_2022_CAL.cal
Status Completed
Chk. Result

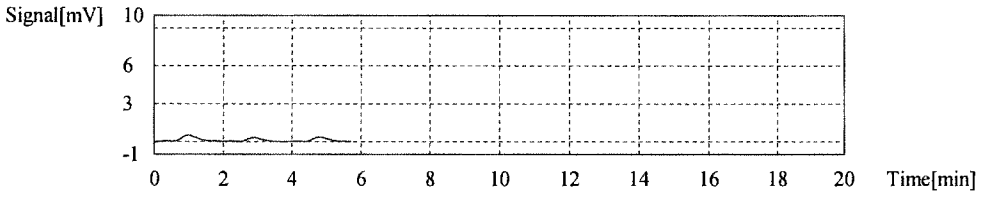
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3705mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.579	0.4916mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:34:47 PM
2	0.9371	0.2918mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:36:56 PM
3	1.054	0.3282mg/L	50uL	1.000		12_22_2022_CAL.2022_12_22_12_06_45.cal	2/8/2023 5:39:03 PM

Mean Area 1.190
Mean Conc. 0.3705mg/L



HS23011514-E2300096 Perchlorate Level IV Report

ALS WO# HS23011514

February 03, 2023 Service Request No:E2300096

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

Laboratory Results for: HS23011514

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 31, 2023
For your reference, these analyses have been assigned our service request number **E2300096.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston 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.:**	E2300094
Project:	HS23011514	**Date Received:**	01/31/23
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 01/31/23.

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:

EQ2300047: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

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

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

Client: ALS Environmental - US **Service Request:**E2300096
Project: HS23011514

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300096-001	16RW09-230125	1/25/2023	0745
E2300096-002	16RW10-230125	1/25/2023	0830
E2300096-003	16WW46-230125	1/25/2023	0920
E2300096-004	16WW12-230125	1/25/2023	1010
E2300096-005	16WW49-230125	1/25/2023	1055
E2300096-006	16WW36-230125	1/25/2023	1145
E2300096-007	16WW36-230125-FD	1/25/2023	1145

Service Request Summary

Folder #: **E2300096**
Client Name: ALS Environmental - US
Project Name: HS23011514
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: 01/31/23
Internal Due Date: 2/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011514
EDD: EQUIS
EFWEDD_LHAAP

7 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300096-001	16RW09-230125	Ground Water	01/25/23 0745	**IV**
E2300096-002	16RW10-230125	Ground Water	01/25/23 0830	**IV**
E2300096-003	16WW46-230125	Ground Water	01/25/23 0920	**IV**
E2300096-004	16WW12-230125	Ground Water	01/25/23 1010	**IV**
E2300096-005	16WW49-230125	Ground Water	01/25/23 1055	**IV**
E2300096-006	16WW36-230125	Ground Water	01/25/23 1145	**IV**
E2300096-007	16WW36-230125-FD	Ground Water	01/25/23 1145	**IV**

Service Request Summary

Folder #: **E2300096**
Client Name: ALS Environmental - US
Project Name: HS23011514
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: 01/31/23
Internal Due Date: 2/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011514
EDD: EQUIS
EFWEDD_LHAAP

7 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	7	IV Due 2/16

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

Chain of Custody

ALS Environmental - Houston HRMS
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F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 20859**

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:	HS23011514
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23011514-01**	**16RW09-230125**	**Groundwater**	**25 Jan 2023 07:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
2.	**HS23011514-02**	**16RW10-230125**	**Groundwater**	**25 Jan 2023 08:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
3.	**HS23011514-03**	**16WW46-230125**	**Groundwater**	**25 Jan 2023 09:20**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
4.	**HS23011514-04**	**16WW12-230125**	**Groundwater**	**25 Jan 2023 10:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
5.	**HS23011514-05**	**16WW49-230125**	**Groundwater**	**25 Jan 2023 10:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
6.	**HS23011514-06**	**16WW36-230125**	**Groundwater**	**25 Jan 2023 11:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023
7.	**HS23011514-07**	**16WW36-230125-FD**	**Groundwater**	**25 Jan 2023 11:45**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			09 Feb 2023

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **20859**

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

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

ALS Environmental

Cooler Receipt Form

Project Chemist JG

Client/Project ALS-HI

Thermometer ID IR21

Date/Time Received: 1-31-23 Initials: CA

Date/Time Logged in: 1-31-23 Initials CA

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		1-31-23	0800	CA	0.9	☒
						☐
						☐
						☐

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

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

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

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

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

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 413900 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/1/23 10:18

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300092-001	CTC-44_0123	.01	6850/ClO4			Water	10mL	
2	E2300092-002	EA-100_0123	.01	6850/ClO4			Water	10mL	
3	E2300092-003	EA-110_0123	.01	6850/ClO4			Water	10mL	
4	E2300092-004	CTC-14_0123	.01	6850/ClO4			Water	10mL	
5	E2300094-001	16WW39-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300094-002	16WW31-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300094-003	16WW32-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300094-004	16WW33-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300094-005	16WW34-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300096-001	16RW09-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300096-002	16RW10-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300096-003	16WW46-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300096-004	16WW12-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300096-005	16WW49-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300096-006	16WW36-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300096-007	16WW36-230125-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
17	EQ2300047-01	MB		6850/ClO4			Liquid	10mL	
18	EQ2300047-02	LCS		6850/ClO4			Liquid	10mL	
19	EQ2300047-03	DLCS		6850/ClO4			Liquid	10mL	
20	R2300589-005	2301231019A JP-3-509	.01	6850/ClO4			Water	10mL	
21	R2300589-010	2301231439A JP-3-689	.01	6850/ClO4			Water	10mL	
22	R2300648-018	2301241035A 100-F-358	.01	6850/ClO4			Water	10mL	
23	R2300648-025	2301241437A 100-G-223	.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

E2300092-001	100.00µL	E2300092-002	100.00µL	E2300092-003	100.00µL	E2300092-004	100.00µL	E2300094-001	100.00µL	E2300094-002	100.00µL
E2300094-003	100.00µL	E2300094-004	100.00µL	E2300094-005	100.00µL	E2300096-001	100.00µL	E2300096-002	100.00µL	E2300096-003	100.00µL
E2300096-004	100.00µL	E2300096-005	100.00µL	E2300096-006	100.00µL	E2300096-007	100.00µL	EQ2300047-01	100.00µL	EQ2300047-01	100.00µL
EQ2300047-02	100.00µL	EQ2300047-02	100.00µL	EQ2300047-03	100.00µL	EQ2300047-03	100.00µL	R2300589-005	100.00µL	R2300589-010	100.00µL
R2300648-018	100.00µL	R2300648-025	100.00µL								

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

EQ2300047-02	1.00µL	EQ2300047-02	1.00µL	EQ2300047-03	1.00µL	EQ2300047-03	1.00µL

Preparation Information Benchsheet

Prep Run#: 413900 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/1/23 10:18

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: 2/1/23 10:18
Finished: 2/1/23 11:50
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 02/01/23

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:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 0745
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW09-230125	**Units:**	µg/L
Lab Code:	E2300096-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:21	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 0830
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16RW10-230125	**Units:**	µg/L
Lab Code:	E2300096-002	**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	**3.39**		0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:27	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 0920
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW46-230125	**Units:**	µg/L
Lab Code:	E2300096-003	**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	2/ 1/23	2/1/23 17:33	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1010
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW12-230125	**Units:**	µg/L
Lab Code:	E2300096-004	**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	**21.9**		0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:39	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1055
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW49-230125	**Units:**	µg/L
Lab Code:	E2300096-005	**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	2/ 1/23	2/1/23 17:45	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1145
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW36-230125	**Units:**	µg/L
Lab Code:	E2300096-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:51	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	1/25/23 1145
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW36-230125-FD	**Units:**	µg/L
Lab Code:	E2300096-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 17:56	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300047-01	**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	2/ 1/23	2/1/23 15:30	413900	793296	

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: HS23011514
Sample Matrix: Ground Water

Service Request: E2300096
Date Analyzed: 2/ 1/23

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: 413900

	Lab Control Sample EQ2300047-02			Duplicate Lab Control Sample EQ2300047-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.0948	0.100	95	84 - 119	5	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:**	E2300096
Project:	HS23011514	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300047-02	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 15:36	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300047-03	**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	**0.0948**	J	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 15:41	413900	793296	

Initial Calibration

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230201-793296

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XMI
2nd Review: Kneir

ICAL Date: 2/1/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300002

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	PERCHLORATE1		20230201-003	Perchlorate6850c.lcm	1x	☒	227245	2/1/2023 11:50
2	PERCHLORATE2		20230201-004	Perchlorate6850c.lcm	1x	☒	227246	2/1/2023 11:55
3	PERCHLORATE3		20230201-005	Perchlorate6850c.lcm	1x	☒	227247	2/1/2023 12:01
4	PERCHLORATE4		20230201-006	Perchlorate6850c.lcm	1x	☒	227248	2/1/2023 12:07
5	PERCHLORATE5		20230201-007	Perchlorate6850c.lcm	1x	☒	227249	2/1/2023 12:13
6	PERCHLORATE6		20230201-008	Perchlorate6850c.lcm	1x	☒	227250	2/1/2023 12:19
7	PERCHLORATE7		20230201-009	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 12:25
8	PERCHLORATE8		20230201-010	Perchlorate6850c.lcm	1x	☒	227252	2/1/2023 12:30
9	PERCHLORATE9		20230201-011	Perchlorate6850c.lcm	1x	☒	227253	2/1/2023 12:36
10	PERCHLORATE10		20230201-012	Perchlorate6850c.lcm	1x	☒	227254	2/1/2023 12:42
11	PERCHLORATEICV		20230201-013	Perchlorate6850c.lcm	1x	☒	227256	2/1/2023 12:48
12	LODV		20230201-014	Perchlorate6850c.lcm	1x	☒	225199	2/1/2023 12:54
13	ICS		20230201-015	Perchlorate6850c.lcm	1x	☒	32103024	2/1/2023 13:00
14	PERCHLORATE7		20230201-016	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 15:24
15	EQ2300047-01		20230201-017	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:30
16	EQ2300047-02		20230201-018	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:36
17	EQ2300047-03		20230201-019	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:41
18	R2300589-005		20230201-020	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:48
19	R2300589-010		20230201-021	Perchlorate6850c.lcm	1x	☒	DNU-BAD PEAK SHAPE	2/1/2023 15:54
20	R2300648-018		20230201-022	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:00
21	R2300648-025		20230201-023	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:06
22	PERCHLORATE7		20230201-024	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 16:17
23	E2300092-001		20230201-025	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:23
24	E2300092-002		20230201-026	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:29
25	E2300092-003		20230201-027	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:35
26	E2300092-004		20230201-028	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:41
27	E2300094-001		20230201-029	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:47
28	E2300094-002		20230201-030	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:52
29	E2300094-003		20230201-031	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:58
30	E2300094-004		20230201-032	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:04
31	E2300094-005		20230201-033	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:10
32	PERCHLORATE7		20230201-034	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 17:16
33	E2300096-001		20230201-035	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:21
34	E2300096-002		20230201-036	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:27
35	E2300096-003		20230201-037	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:33
36	E2300096-004		20230201-038	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:39
37	E2300096-005		20230201-039	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:45
38	E2300096-006		20230201-040	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:51
39	E2300096-007		20230201-041	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:56
40	PERCHLORATE7		20230201-042	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 18:02

Initial Calibration - Detailed Report

Calibration ID: EC2300002 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300002-01	PERCHLORATE1	20230201-003	02/01/2023 11:50
02	EC2300002-02	PERCHLORATE2	20230201-004	02/01/2023 11:55
03	EC2300002-03	PERCHLORATE3	20230201-005	02/01/2023 12:01
04	EC2300002-04	PERCHLORATE4	20230201-006	02/01/2023 12:07
05	EC2300002-05	PERCHLORATE5	20230201-007	02/01/2023 12:13
06	EC2300002-06	PERCHLORATE6	20230201-008	02/01/2023 12:19
07	EC2300002-07	PERCHLORATE7	20230201-009	02/01/2023 12:25
08	EC2300002-08	PERCHLORATE8	20230201-010	02/01/2023 12:30
09	EC2300002-09	PERCHLORATE9	20230201-011	02/01/2023 12:36
10	EC2300002-10	PERCHLORATE10	20230201-012	02/01/2023 12:42

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

Perchlorate **Average RF** **RSD = 4.86** **Average RF = 0.1385**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1253	02	0.5000	0.13	03	0.7000	0.1346	04	1.0000	0.1399
05	2.0000	0.1406	06	5.0000	0.1404	07	10.0000	0.1416	08	20.0000	0.1407
09	30.0000	0.1447	10	50.0000	0.1477						

Analyte

Perchlorate RSE = 4.86

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.0904	-9.6	02	0.5000	0.469	-6.1	03	0.7000	0.680	-2.8
04	1.0000	1.01	0.9	05	2.0000	2.03	1.5	06	5.0000	5.07	1.3
07	10.0000	10.2	2.2	08	20.0000	20.3	1.5	09	30.0000	31.3	4.5
10	50.0000	53.3	6.6								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300002	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230201-013	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300002-11	T	Average RF	10	10.538	ng/mL	5.4	<= 15

Insight Report

Printed at 2/1/2023 2:06:14 PM

Method File: I:\LCMS01\DATA\02012023\20230201.lcm
Project File: I:\LCMS01\DATA\02012023\20230201.damlp

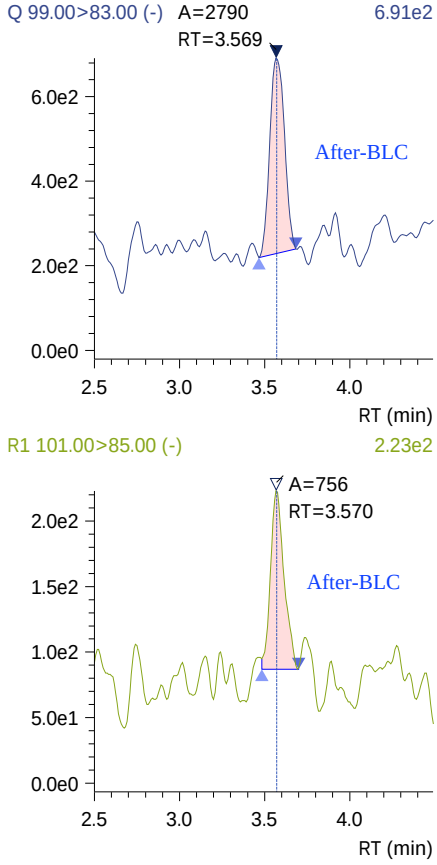
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 2/1/2023 11:50:11 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-003.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	M	3.569	2790	222693	0.0904	ng/mL	101.00 >85.00	27.11	24.11 -44.78
Sodium Perchlorate-18O4 _IS	Auto	3.568	222693	222693	1.0000	ng/mL	----	----	

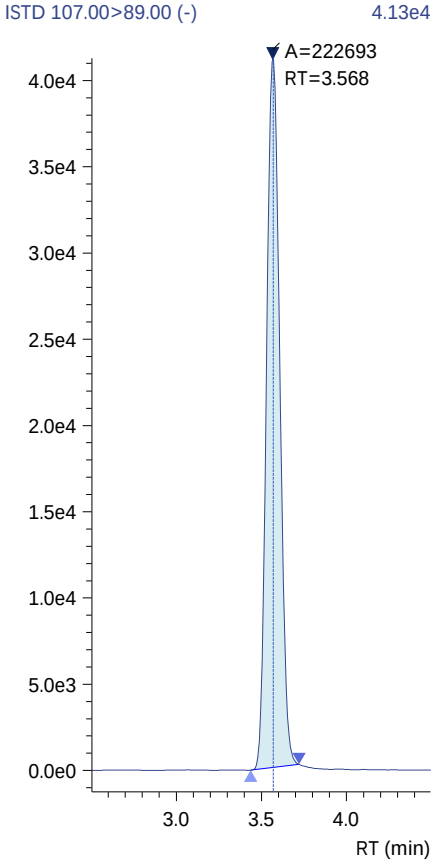
Perchlorate

Conc 0.0904
R#1 27.11 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 1:30:25 PM

Method File: I:\LCMS01\DATA\20230201\20230201ICAL.lcm
Project File: I:\LCMS01\DATA\20230201\20230201ICAL.damIp

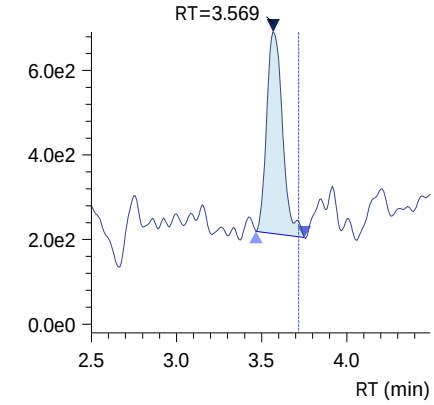
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 2/1/2023 11:50:11 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-003.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 1

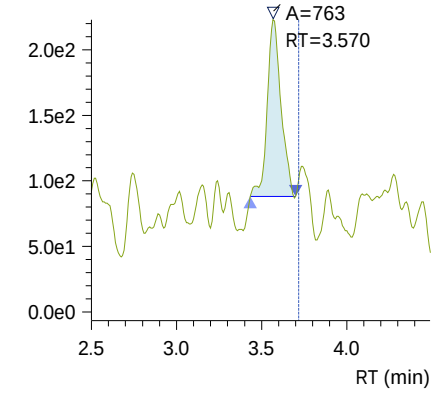
Perchlorate

Conc 0.0996
R#1 24.56 (34.45)

Q 99.00>83.00 (-) A=3105 6.91e2



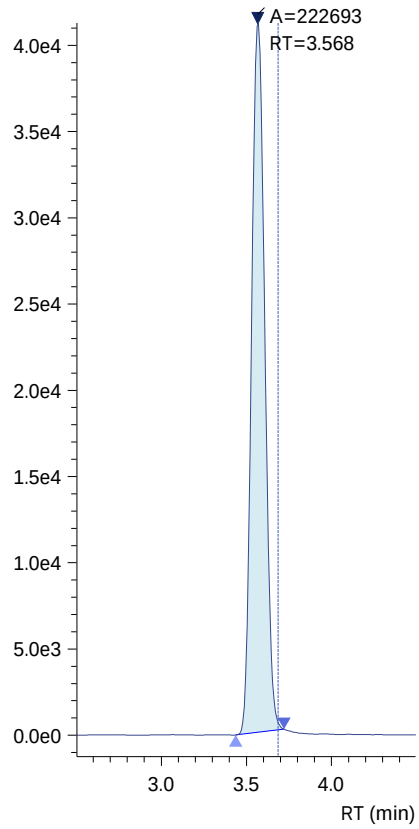
R1 101.00>85.00 (-) 2.23e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.13e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

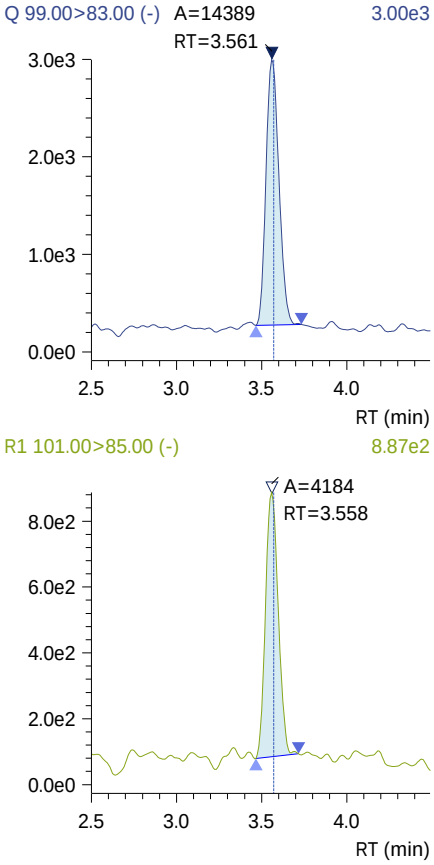
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 2/1/2023 11:55:59 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-004.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	3.561	14389	221291	0.4694	ng/mL	101.00 >85.00	29.08	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.558	221291	221291	1.0000	ng/mL	----	----	

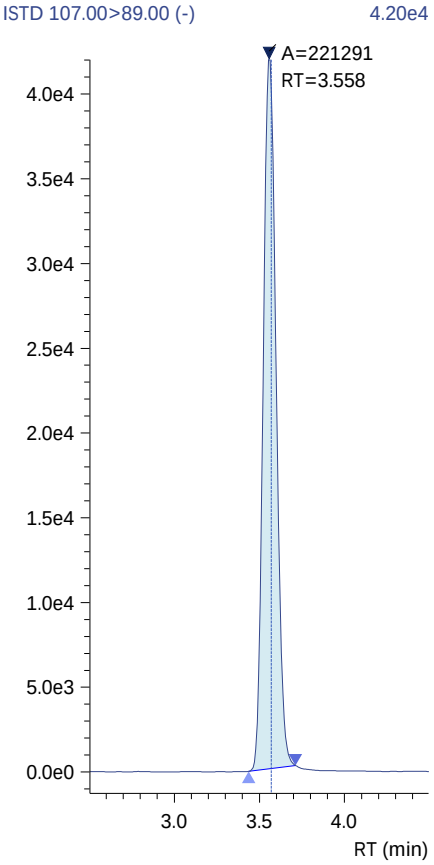
Perchlorate

Conc 0.4694
R#1 29.08 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

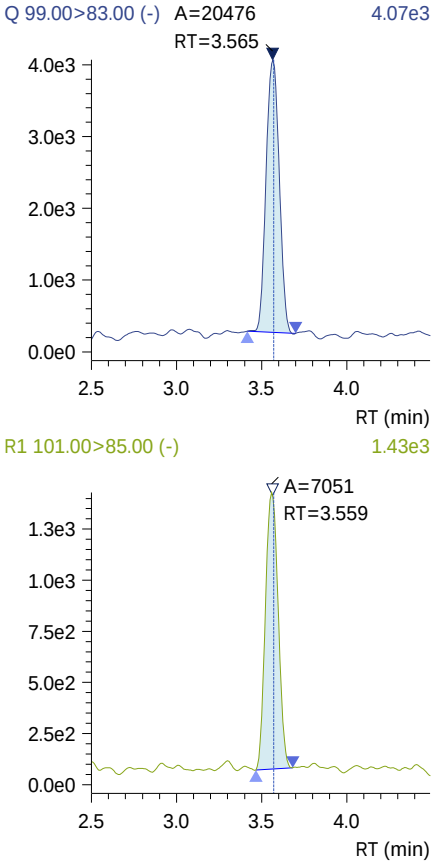
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 2/1/2023 12:01:49 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-005.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	3.565	20476	217325	0.6801	ng/mL	101.00 >85.00	34.44	24.11 -44.78
Sodium Perchlorate-18O4 _IS	Auto	3.559	2173 25	217325	1.0000	ng/mL	----	----	

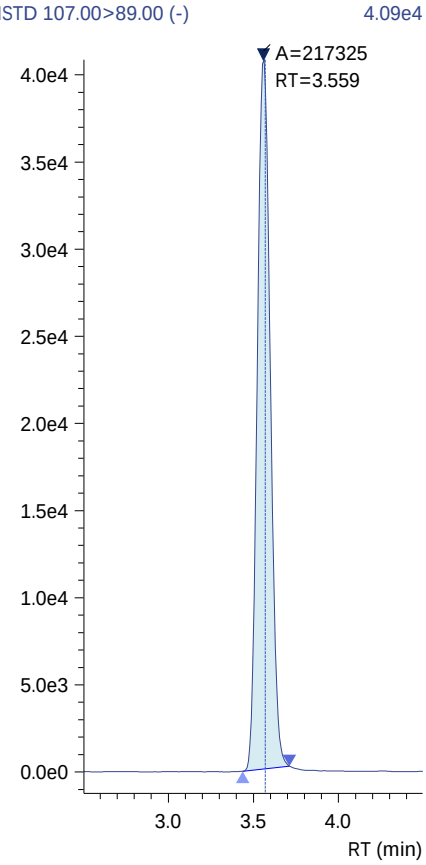
Perchlorate

Conc 0.6801
R#1 34.44 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

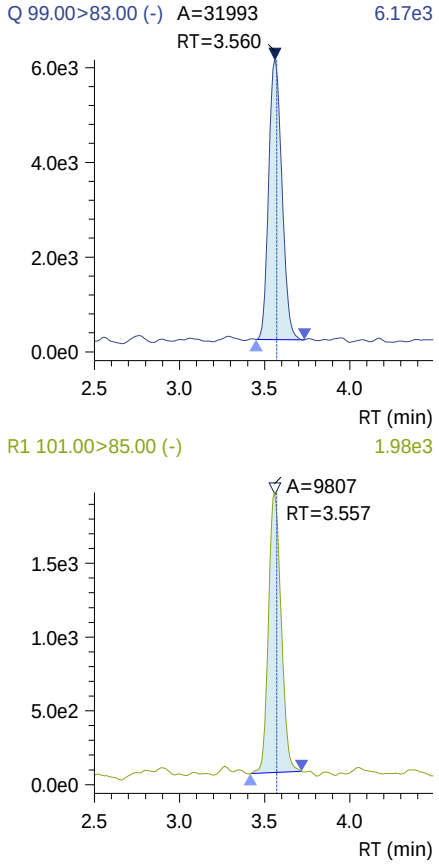
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 2/1/2023 12:07:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-006.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	3.560	31993	228763	1.0095	ng/mL	101.00 >85.00	30.65	24.11 -44.78
Sodium Perchlorate-18O4 _IS	Auto	3.557	228763	228763	1.0000	ng/mL	----	----	

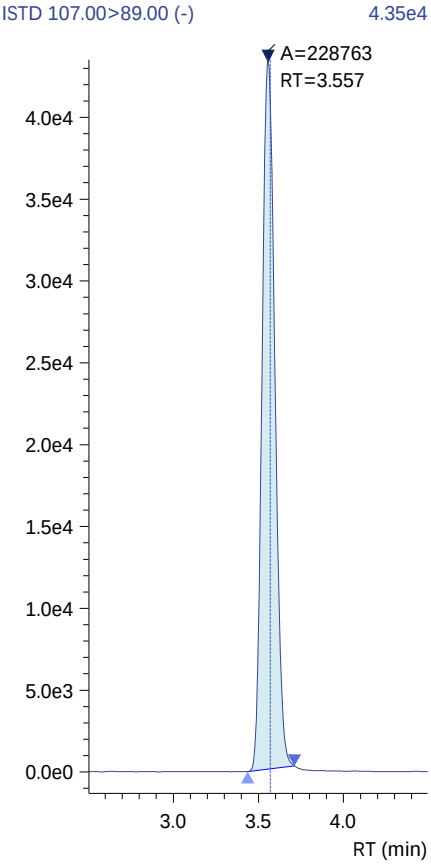
Perchlorate

Conc 1.0095
R#1 30.65 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

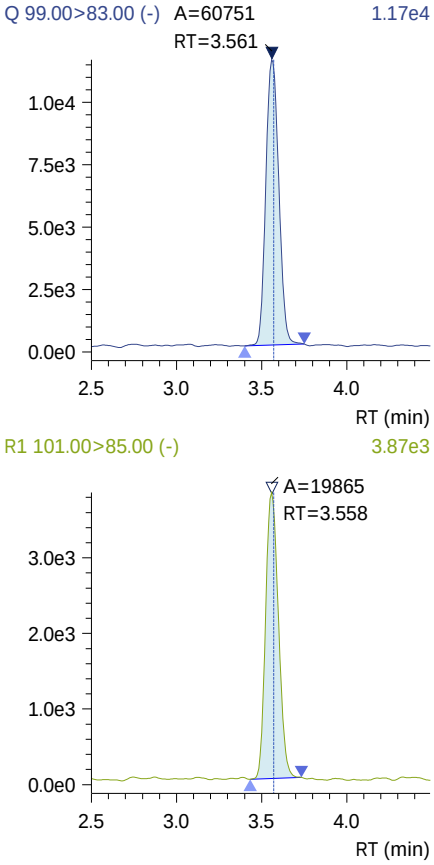
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 2/1/2023 12:13:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-007.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	3.561	60751	216066	2.0296	ng/mL	101.00 >85.00	32.70	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.557	216066	216066	1.0000	ng/mL	----	----	

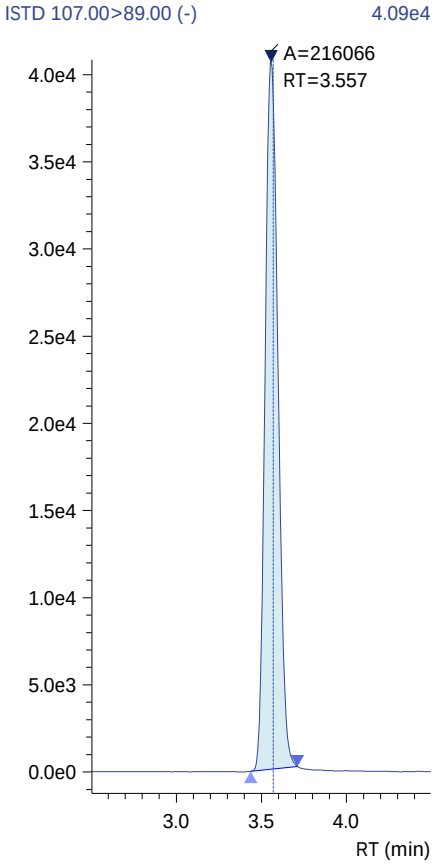
Perchlorate

Conc 2.0296
R#1 32.70 (31.99)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE6

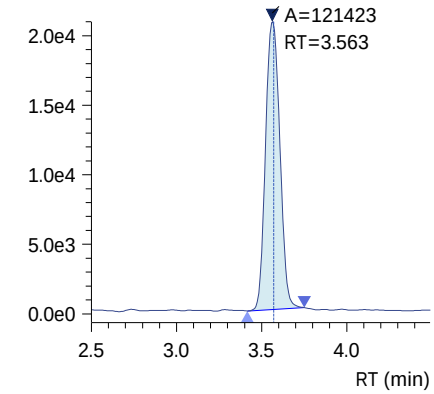
Sample ID: PERCHLORATE6
Date Acquired: 2/1/2023 12:19:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-008.lcd
Vial: 6 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.563	121423	172986	5.0667	ng/mL	101.00	32.55	24.11
							>85.00		-44.78
Sodium Perchlorate-18O4_IS	Auto	3.558	172986	172986	1.0000	ng/mL	----	----	

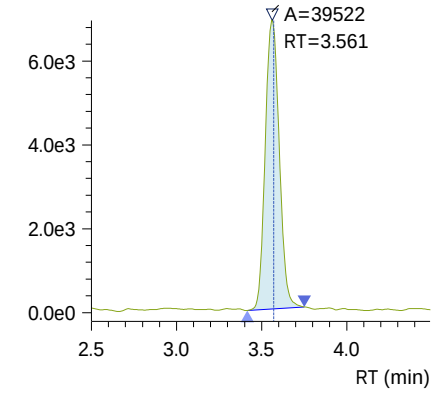
Perchlorate

Conc 5.0667
R#1 32.55 (31.99)

Q 99.00>83.00 (-) 2.10e4



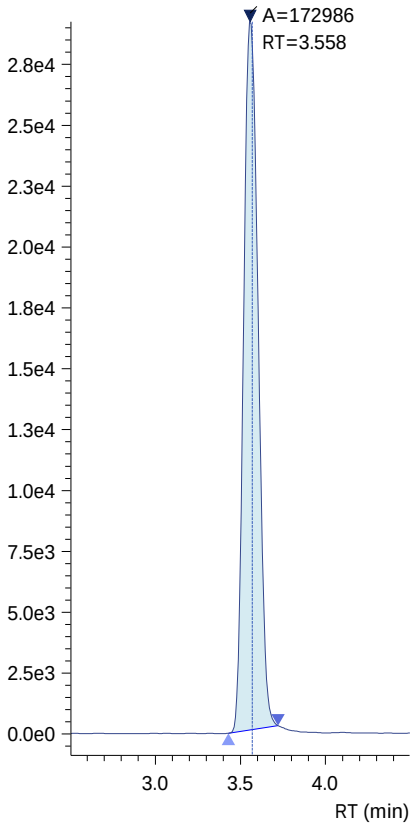
R1 101.00>85.00 (-) 6.97e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.93e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE7

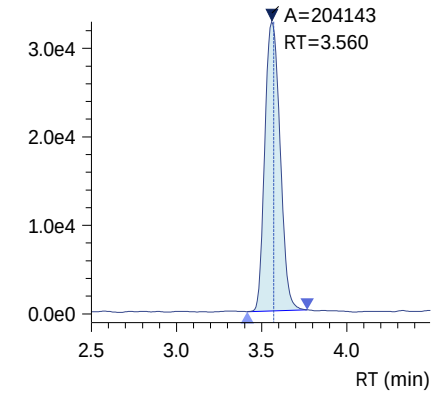
Sample ID: PERCHLORATE7
Date Acquired: 2/1/2023 12:25:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-009.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	2041 43	144196	10.2 192	ng/mL	101.00 >85.00	31.99	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.555	144196	144196	1.0000	ng/mL	----	----	

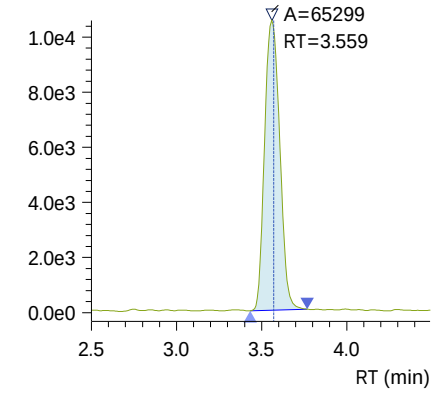
Perchlorate

Conc 10.2192
R#1 31.99 (31.99)

Q 99.00>83.00 (-) 3.30e4



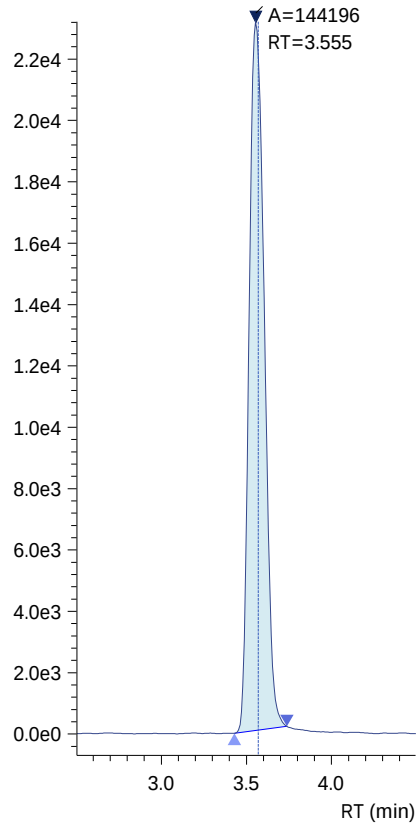
R1 101.00>85.00 (-) 1.06e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.32e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE8

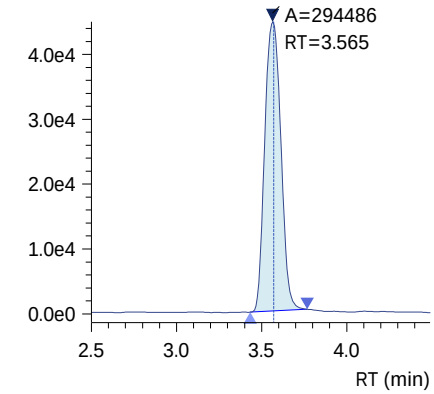
Sample ID: PERCHLORATE8
Date Acquired: 2/1/2023 12:30:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-010.lcd
Vial: 8 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.565	294486	104680	20.3065	ng/mL	101.00 >85.00	32.66	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.557	104680	104680	1.0000	ng/mL	----	----	

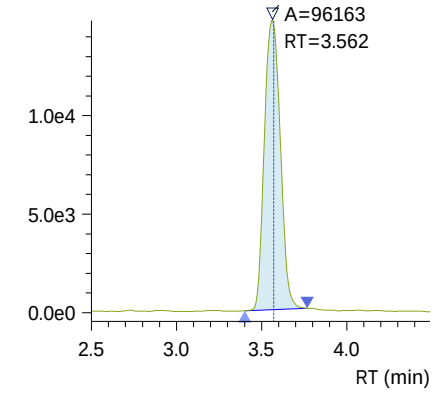
Perchlorate

Conc 20.3065
R#1 32.66 (31.99)

Q 99.00>83.00 (-) 4.50e4



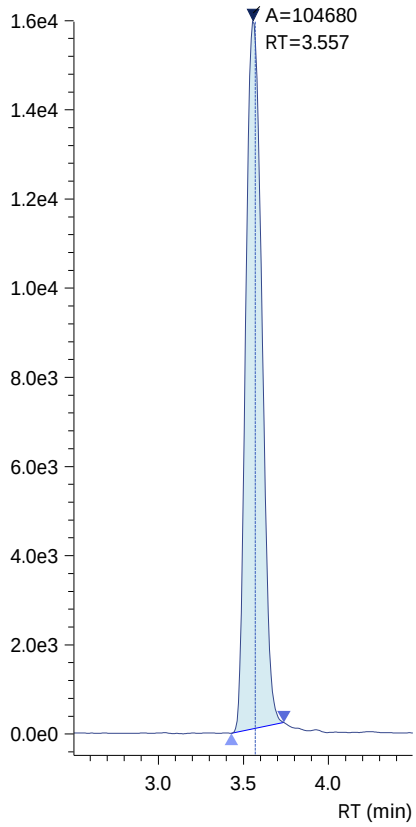
R1 101.00>85.00 (-) 1.48e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.60e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE9

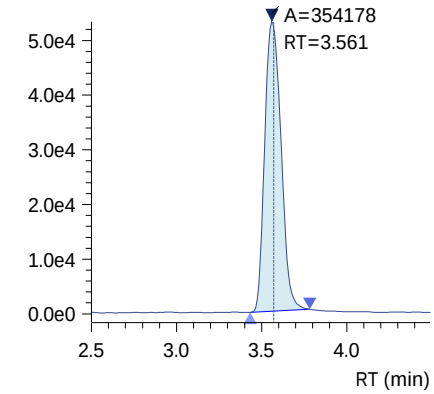
Sample ID: PERCHLORATE9
Date Acquired: 2/1/2023 12:36:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-011.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	3541	81577	31.3	ng/mL	101.00	31.89	24.11
			78		395		>85.00		-44.78
Sodium Perchlorate-18O4 _IS	Auto	3.557	81577	81577	1.0000	ng/mL	----	----	

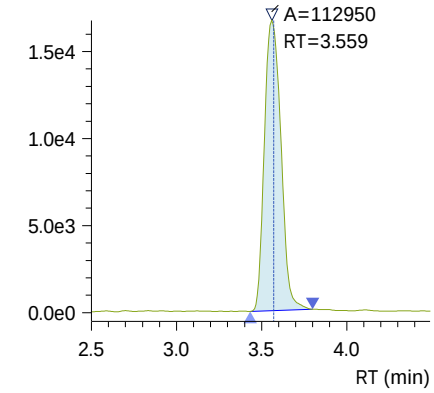
Perchlorate

Conc 31.3395
R#1 31.89 (31.99)

Q 99.00>83.00 (-) 5.34e4



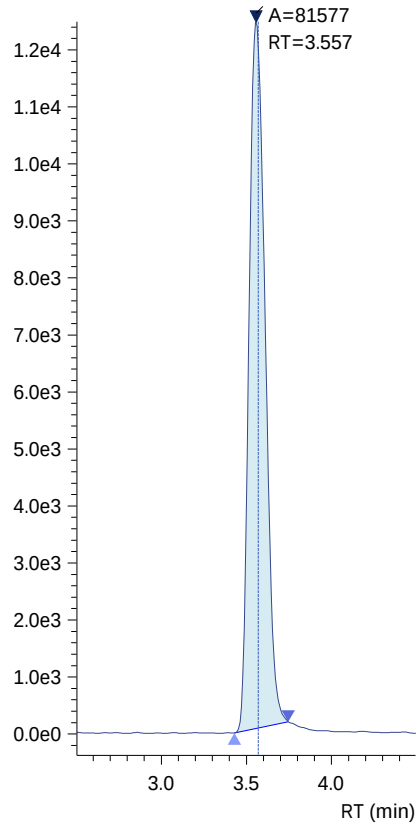
R1 101.00>85.00 (-) 1.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.25e4



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATE10

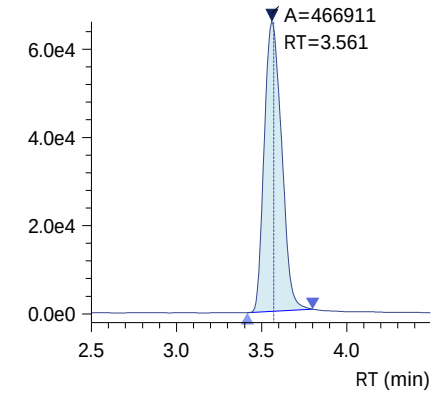
Sample ID: PERCHLORATE10
Date Acquired: 2/1/2023 12:42:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-012.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	4669	63237	53.2	ng/mL	101.00	32.40	24.11
			11		964		>85.00		-44.78
Sodium Perchlorate-18O4_IS	Auto	3.554	63237	63237	1.0000	ng/mL	----	----	

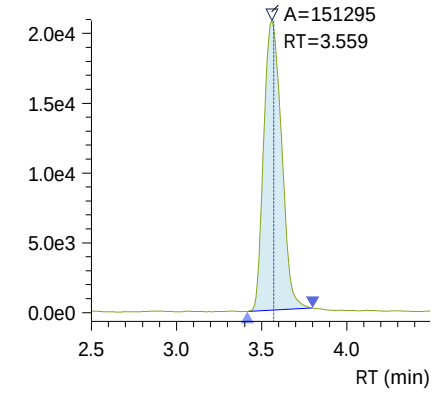
Perchlorate

Conc 53.2964
R#1 32.40 (31.99)

Q 99.00>83.00 (-) 6.62e4



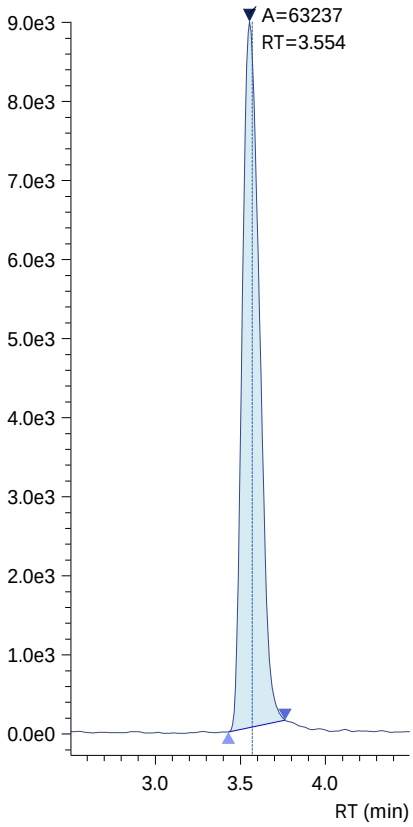
R1 101.00>85.00 (-) 2.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 9.01e3



Insight Report

Printed at 2/1/2023 2:06:14 PM

PERCHLORATEICV

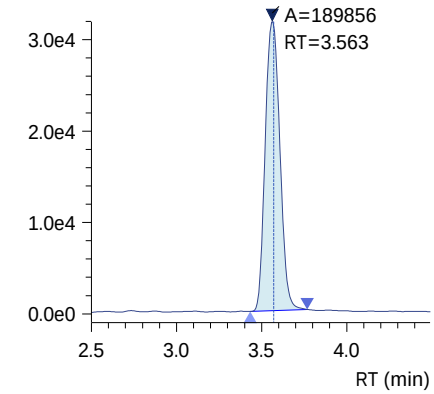
Sample ID: PERCHLORATEICV
Date Acquired: 2/1/2023 12:48:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-013.lcd
Vial: 11 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.563	189856 1898	130049	10.5 379	ng/mL	101.00 >85.00	32.76	24.11 -44.78
Sodium Perchlorate-18O4_IS	Auto	3.557	130049	130049	1.0000	ng/mL	----	----	

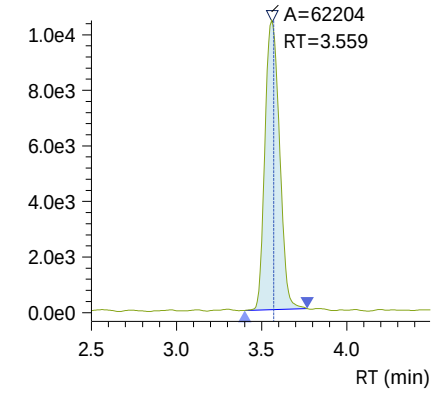
Perchlorate

Conc 10.5379
R#1 32.76 (31.99)

Q 99.00>83.00 (-) 3.20e4



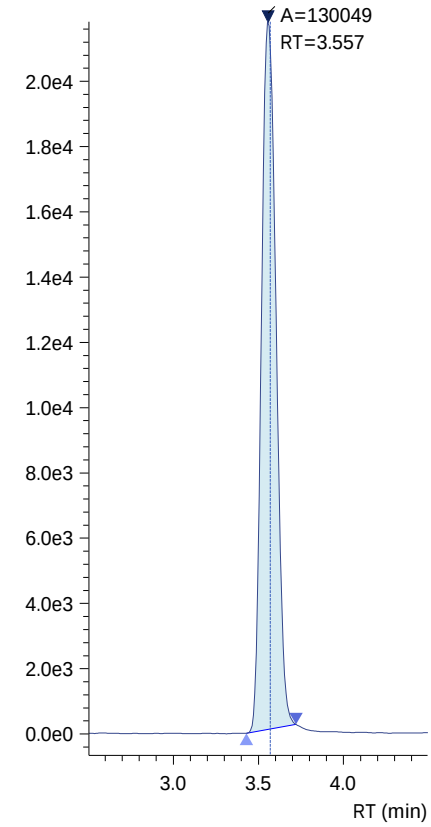
R1 101.00>85.00 (-) 1.05e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.18e4



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

20230201-793296

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XMI
2nd Review: Kneir

ICAL Date: 2/1/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300002

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	PERCHLORATE1		20230201-003	Perchlorate6850c.lcm	1x	☒	227245	2/1/2023 11:50
2	PERCHLORATE2		20230201-004	Perchlorate6850c.lcm	1x	☒	227246	2/1/2023 11:55
3	PERCHLORATE3		20230201-005	Perchlorate6850c.lcm	1x	☒	227247	2/1/2023 12:01
4	PERCHLORATE4		20230201-006	Perchlorate6850c.lcm	1x	☒	227248	2/1/2023 12:07
5	PERCHLORATE5		20230201-007	Perchlorate6850c.lcm	1x	☒	227249	2/1/2023 12:13
6	PERCHLORATE6		20230201-008	Perchlorate6850c.lcm	1x	☒	227250	2/1/2023 12:19
7	PERCHLORATE7		20230201-009	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 12:25
8	PERCHLORATE8		20230201-010	Perchlorate6850c.lcm	1x	☒	227252	2/1/2023 12:30
9	PERCHLORATE9		20230201-011	Perchlorate6850c.lcm	1x	☒	227253	2/1/2023 12:36
10	PERCHLORATE10		20230201-012	Perchlorate6850c.lcm	1x	☒	227254	2/1/2023 12:42
11	PERCHLORATEICV		20230201-013	Perchlorate6850c.lcm	1x	☒	227256	2/1/2023 12:48
12	LODV		20230201-014	Perchlorate6850c.lcm	1x	☒	225199	2/1/2023 12:54
13	ICS		20230201-015	Perchlorate6850c.lcm	1x	☒	32103024	2/1/2023 13:00
14	PERCHLORATE7		20230201-016	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 15:24
15	EQ2300047-01		20230201-017	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:30
16	EQ2300047-02		20230201-018	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:36
17	EQ2300047-03		20230201-019	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:41
18	R2300589-005		20230201-020	Perchlorate6850c.lcm	1x	☒		2/1/2023 15:48
19	R2300589-010		20230201-021	Perchlorate6850c.lcm	1x	☒	DNU-BAD PEAK SHAPE	2/1/2023 15:54
20	R2300648-018		20230201-022	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:00
21	R2300648-025		20230201-023	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:06
22	PERCHLORATE7		20230201-024	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 16:17
23	E2300092-001		20230201-025	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:23
24	E2300092-002		20230201-026	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:29
25	E2300092-003		20230201-027	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:35
26	E2300092-004		20230201-028	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:41
27	E2300094-001		20230201-029	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:47
28	E2300094-002		20230201-030	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:52
29	E2300094-003		20230201-031	Perchlorate6850c.lcm	1x	☒		2/1/2023 16:58
30	E2300094-004		20230201-032	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:04
31	E2300094-005		20230201-033	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:10
32	PERCHLORATE7		20230201-034	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 17:16
33	E2300096-001		20230201-035	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:21
34	E2300096-002		20230201-036	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:27
35	E2300096-003		20230201-037	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:33
36	E2300096-004		20230201-038	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:39
37	E2300096-005		20230201-039	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:45
38	E2300096-006		20230201-040	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:51
39	E2300096-007		20230201-041	Perchlorate6850c.lcm	1x	☒		2/1/2023 17:56
40	PERCHLORATE7		20230201-042	Perchlorate6850c.lcm	1x	☒	227251	2/1/2023 18:02

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300096
Project:	HS23011514	**Date Analyzed:**	2/1/23 15:24

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\02012023\20230201-016	**Lab Code:**	EQ2300054-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793296
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300054-01	133,036	3.56
Method Blank	EQ2300047-01	204,878	3.56
Lab Control Sample	EQ2300047-02	194,142	3.56
Duplicate Lab Control Sample	EQ2300047-03	196,445	3.56

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:**	E2300096
Project:	HS23011514	**Date Analyzed:**	2/1/23 16:17

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\02012023\20230201-024	**Lab Code:**	EQ2300054-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793296
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300054-02	124,928	3.55

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:**	E2300096
Project:	HS23011514	**Date Analyzed:**	2/1/23 17:16

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\02012023\20230201-034	**Lab Code:**	EQ2300054-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793296
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300054-03	126,057	3.55
16RW09-230125	E2300096-001	158,052	3.44
16RW10-230125	E2300096-002	130,106	3.44
16WW46-230125	E2300096-003	232,287	3.52
16WW12-230125	E2300096-004	102,857	3.47
16WW49-230125	E2300096-005	84,202	3.45
16WW36-230125	E2300096-006	162,599	3.46
16WW36-230125-FD	E2300096-007	176,124	3.46

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:**	E2300096
Project:	HS23011514	**Date Analyzed:**	2/1/23 18:02

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\02012023\20230201-042	**Lab Code:**	EQ2300054-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	793296
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	163,897	3.56
	Upper Limit ==>	245,846	5.56
	Lower Limit ==>	81,949	1.56
Associated Analyses			
Continuing Calibration Verification	EQ2300054-04	134,643	3.55

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: HS23011514

Service Request: E2300096
Date Analyzed: 2/ 1/23

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\02012023\20230201-016

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793296
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1392	0.1392	0.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011514

Service Request: E2300096
Date Analyzed: 2/ 1/23

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\02012023\20230201-024

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793296
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1392	0.1420	2.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011514

Service Request: E2300096
Date Analyzed: 2/ 1/23

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\02012023\20230201-034

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793296
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1392	0.1405	0.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23011514

Service Request: E2300096
Date Analyzed: 2/ 1/23

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\02012023\20230201-042

Calibration Date: 2/1/23
Calibration ID: EC2300002
Analysis Lot: 793296
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1392	0.1398	0.4	NA	± 15 %	Average RF

Insight Report

Printed at 2/3/2023 11:09:16 AM

Method File: I:\LCMS01\DATA\02012023\20230201.lcm
Project File: I:\LCMS01\DATA\02012023\20230201.damlp

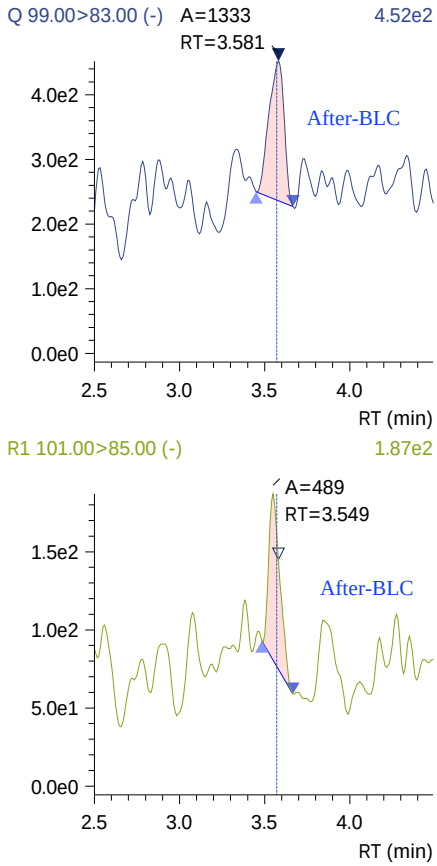
LODV

Sample ID: LODV
Date Acquired: 2/1/2023 12:54:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-014.lcd
Vial: 1 | 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	M	3.581	1333	214416	0.0449	ng/mL	101.00 >85.00	36.64	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.558	214416	214416	1.0000	ng/mL	----	----	

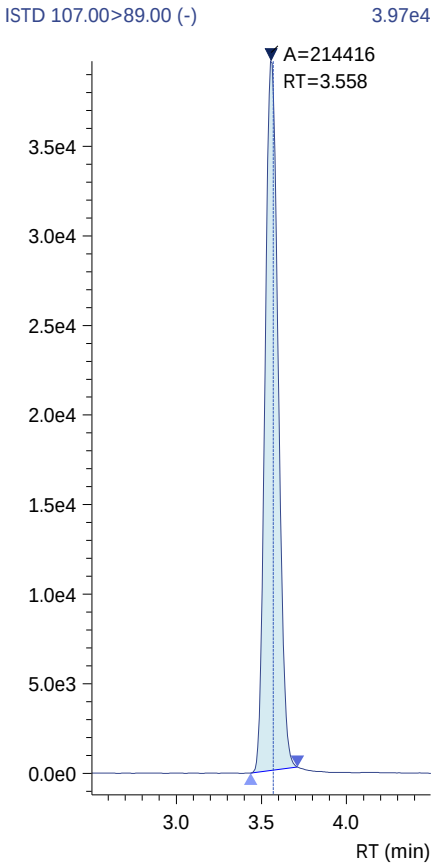
Perchlorate

Conc 0.0449
R#1 36.64 (32.22)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:11:02 AM

Method File: I:\LCMS01\DATA\02012023\20230201.lcm
Project File: I:\LCMS01\DATA\02012023\20230201.damlp

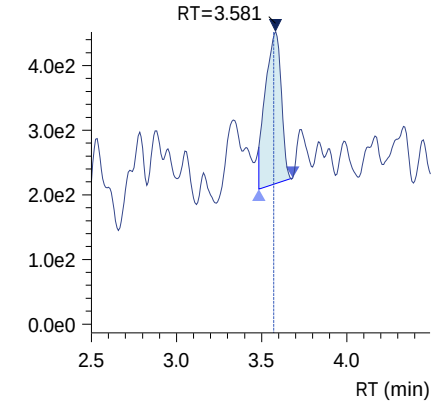
LODV

Sample ID: LODV
Date Acquired: 2/1/2023 12:54:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-014.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 0

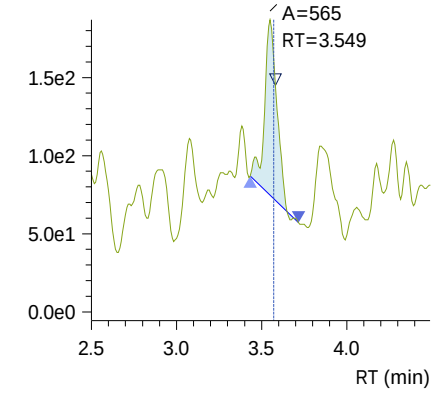
Perchlorate

Conc 0.0512
R#1 36.73 (32.22)

Q 99.00>83.00 (-) A=1537 4.52e2



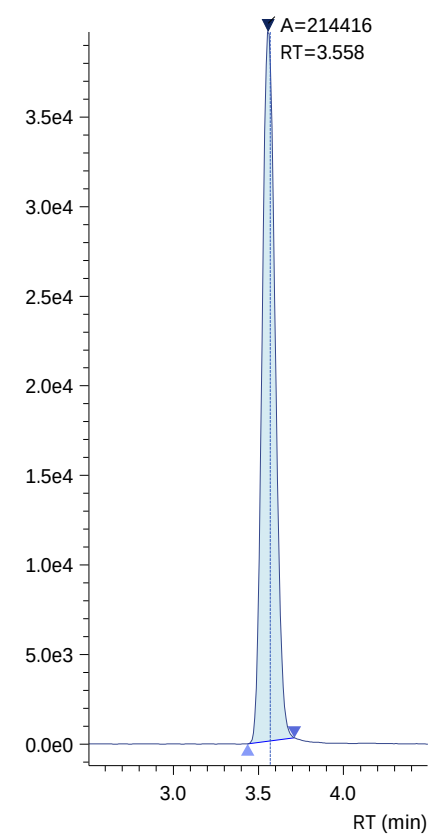
R1 101.00>85.00 (-) 1.87e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.97e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

ICS

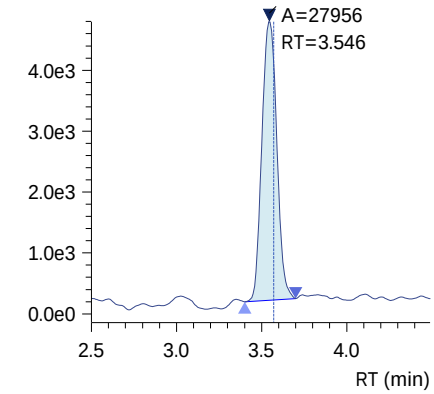
Sample ID: ICS
Date Acquired: 2/1/2023 1:00:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-015.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.546	27956	229557	0.8791	ng/mL	101.00 >85.00	32.47	22.55 -41.89
Sodium Perchlorate-18O4 _IS	Auto	3.540	229557	229557	1.0000	ng/mL	----	----	

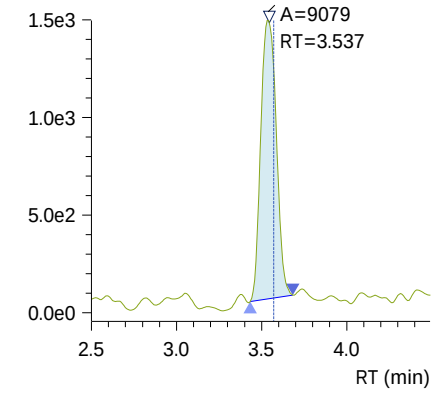
Perchlorate

Conc 0.8791
R#1 32.47 (32.22)

Q 99.00>83.00 (-) 4.80e3



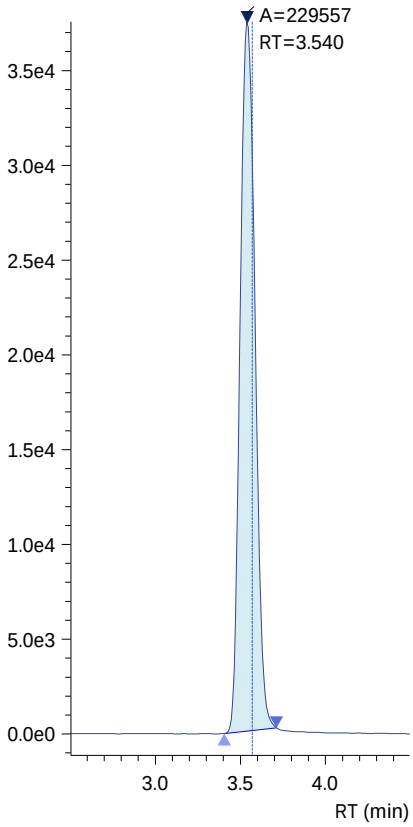
R1 101.00>85.00 (-) 1.50e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.76e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

PERCHLORATE7

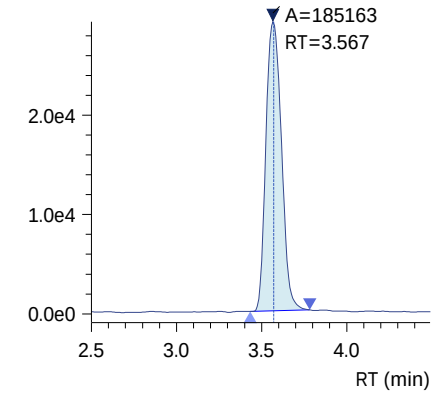
Sample ID: PERCHLORATE7
Date Acquired: 2/1/2023 3:24:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-016.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.567	1851 63	133036	10.0 466	ng/mL	101.00 >85.00	33.54	22.55 -41.89
Sodium Perchlorate-18O4 _IS	Auto	3.561	1330 36	133036	1.0000	ng/mL	----	----	

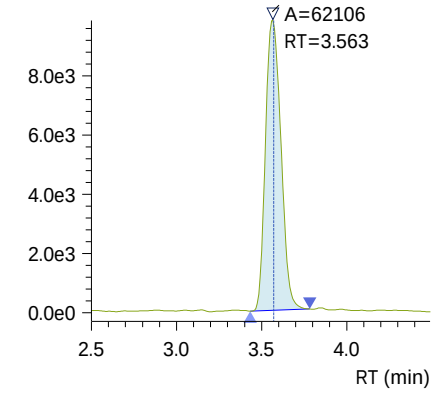
Perchlorate

Conc 10.0466
R#1 33.54 (32.22)

Q 99.00>83.00 (-) 2.94e4



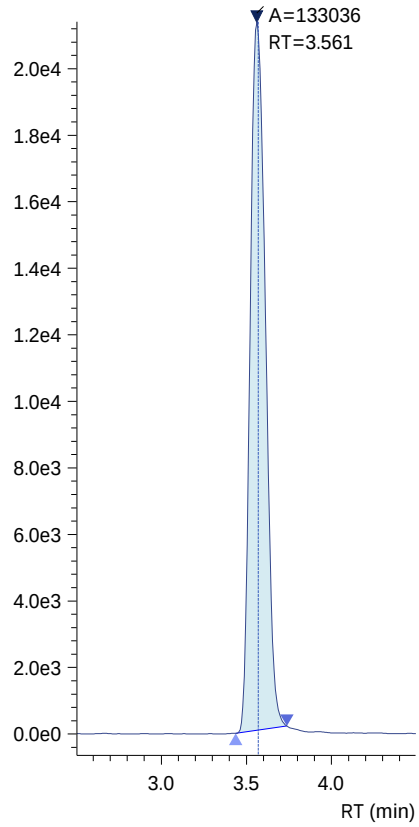
R1 101.00>85.00 (-) 9.87e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.14e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

EQ2300047-01

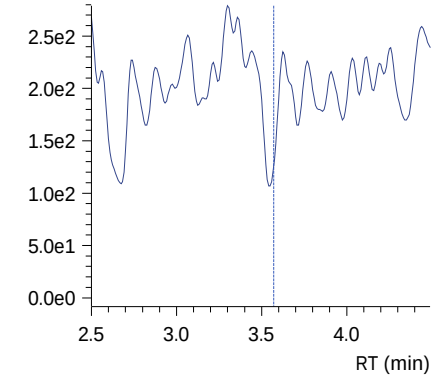
Sample ID: EQ2300047-01
Date Acquired: 2/1/2023 3:30:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-017.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	204878	----	ng/mL	101.00 >85.00	0.00	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.559	204878	204878	1.0000	ng/mL	----	----	

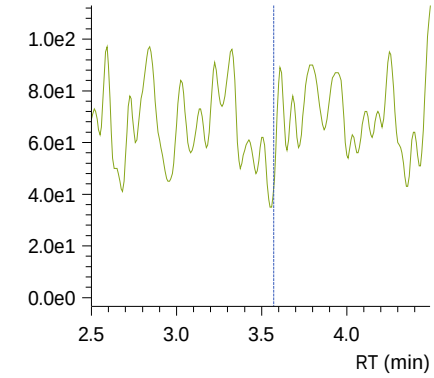
Perchlorate

Conc ----
R#1 0.00 (32.22)

Q 99.00>83.00 (-) 2.79e2



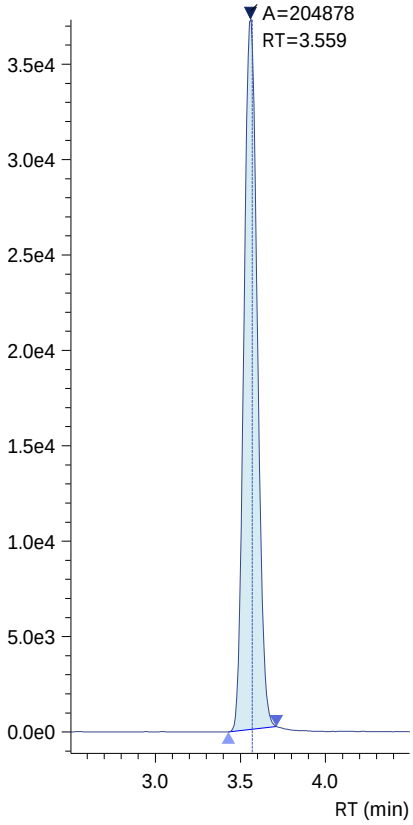
R1 101.00>85.00 (-) 1.13e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.73e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

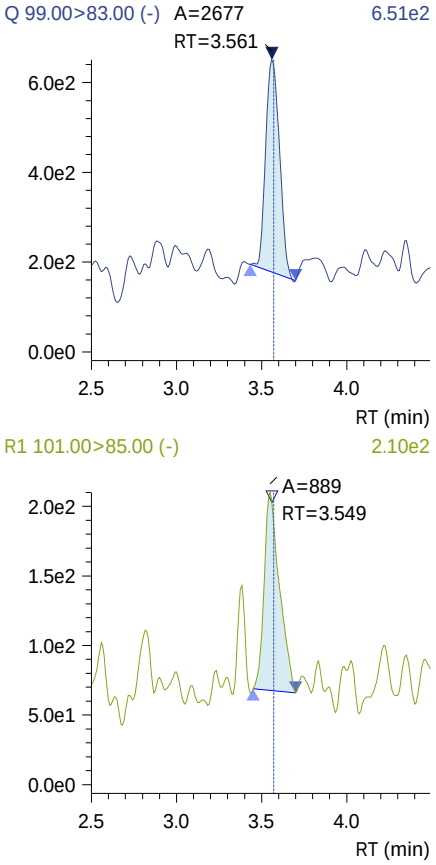
EQ2300047-02

Sample ID: EQ2300047-02
Date Acquired: 2/1/2023 3:36:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-018.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	3.561	2677	194142	0.0995	ng/mL	101.00 >85.00	33.22	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.558	194142	194142	1.0000	ng/mL	----	----	

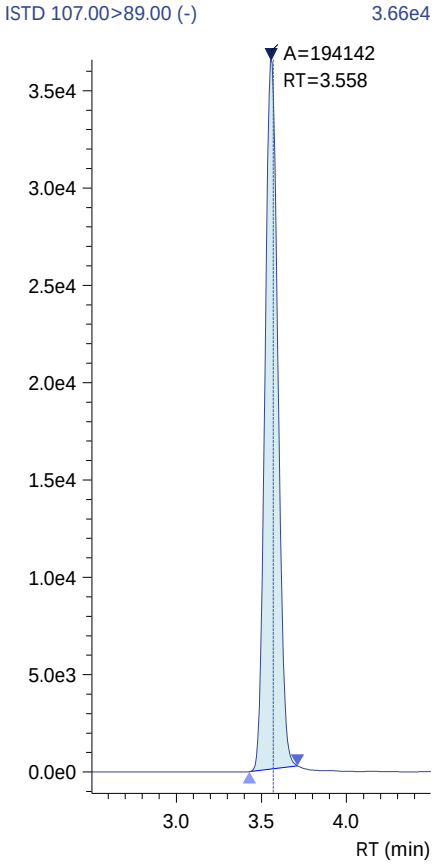
Perchlorate

Conc 0.0995
R#1 33.22 (32.22)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:09:16 AM

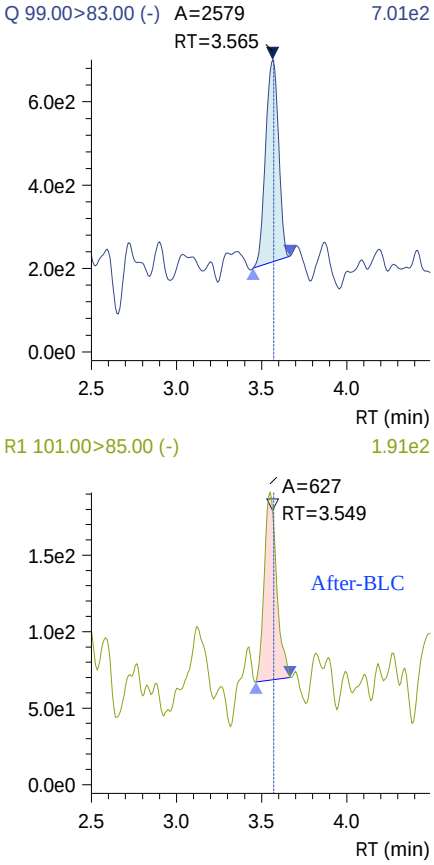
EQ2300047-03

Sample ID: EQ2300047-03
Date Acquired: 2/1/2023 3:41:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-019.lcd
Vial: 26 | 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	MI R1	3.565	2579	196445	0.0948	ng/mL	101.00 >85.00	24.30	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.558	196445	196445	1.0000	ng/mL	----	----	

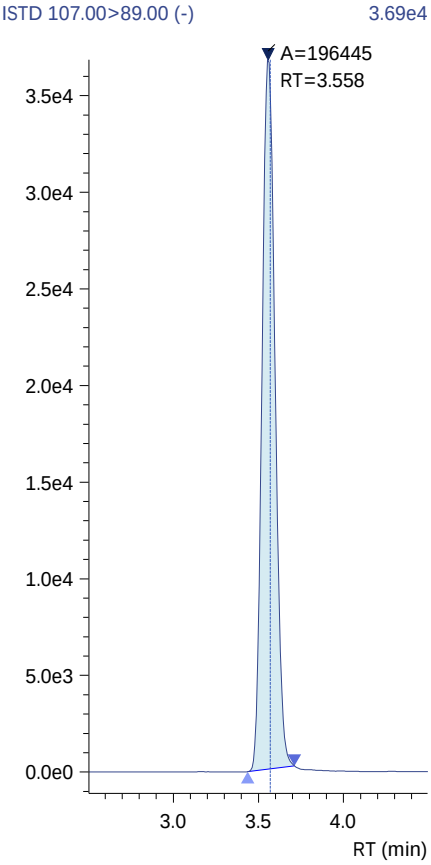
Perchlorate

Conc 0.0948
R#1 24.30 (32.22)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:11:02 AM

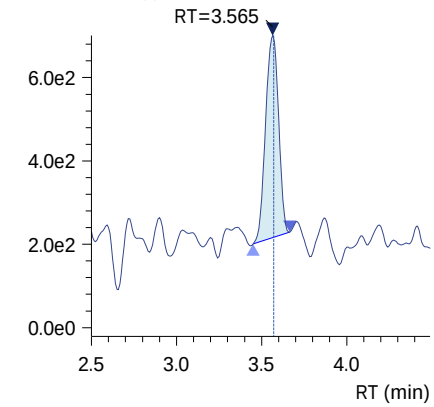
EQ2300047-03

Sample ID: EQ2300047-03
Date Acquired: 2/1/2023 3:41:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-019.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 4

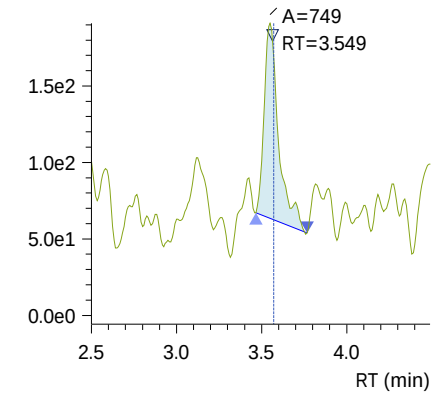
Perchlorate

Conc 0.0938
R#1 29.03 (32.22)

Q 99.00>83.00 (-) A=2579 7.01e2



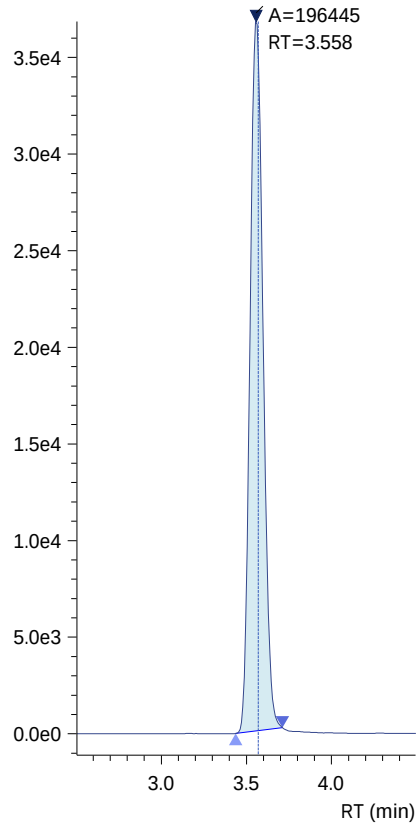
R1 101.00>85.00 (-) 1.91e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

PERCHLORATE7

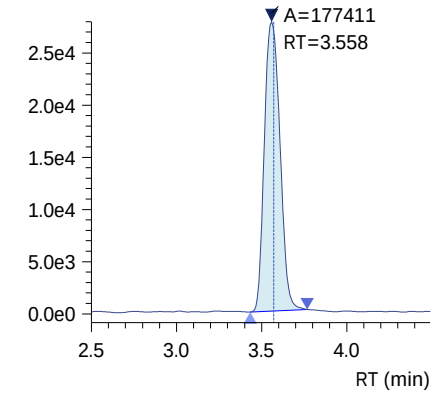
Sample ID: PERCHLORATE7
Date Acquired: 2/1/2023 4:17:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-024.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.558	1774 11	124928	10.2 508	ng/mL	101.00 >85.00	31.12	22.55 -41.89
Sodium Perchlorate-18O4 _IS	Auto	3.552	1249 28	124928	1.0000	ng/mL	----	----	

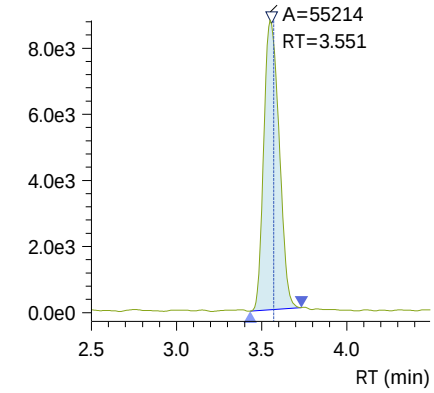
Perchlorate

Conc 10.2508
R#1 31.12 (32.22)

Q 99.00>83.00 (-) 2.80e4



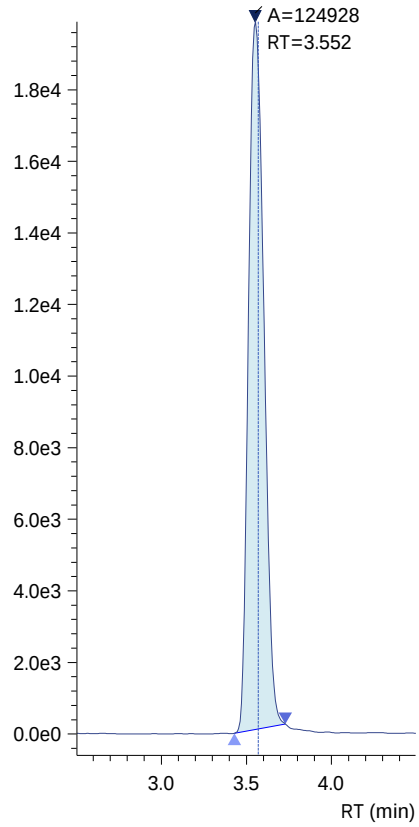
R1 101.00>85.00 (-) 8.84e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.99e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

PERCHLORATE7

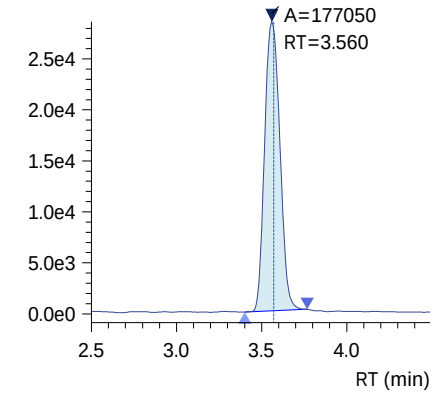
Sample ID: PERCHLORATE7
Date Acquired: 2/1/2023 5:16:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-034.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	1770 50	126057	10.1 383	ng/mL	101.00 >85.00	32.21	22.55 -41.89
Sodium Perchlorate-18O4 _IS	Auto	3.553	1260 57	126057	1.0000	ng/mL	----	----	

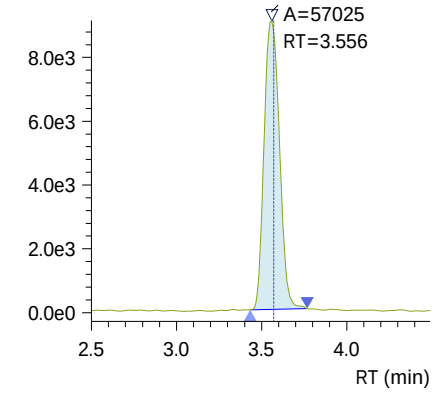
Perchlorate

Conc 10.1383
R#1 32.21 (32.22)

Q 99.00>83.00 (-) 2.86e4



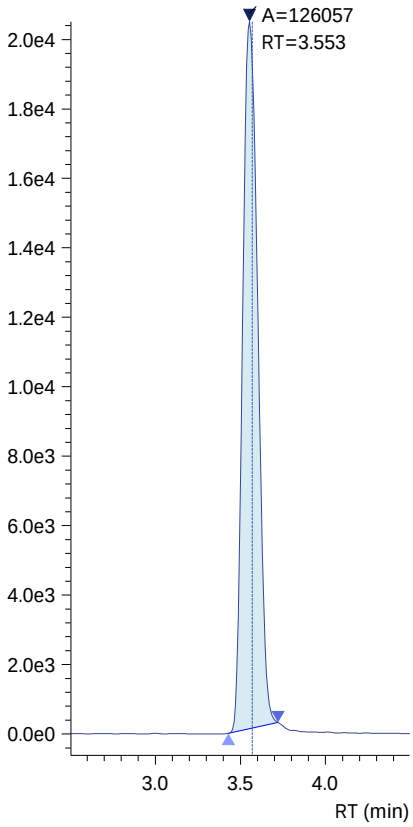
R1 101.00>85.00 (-) 9.16e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.05e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

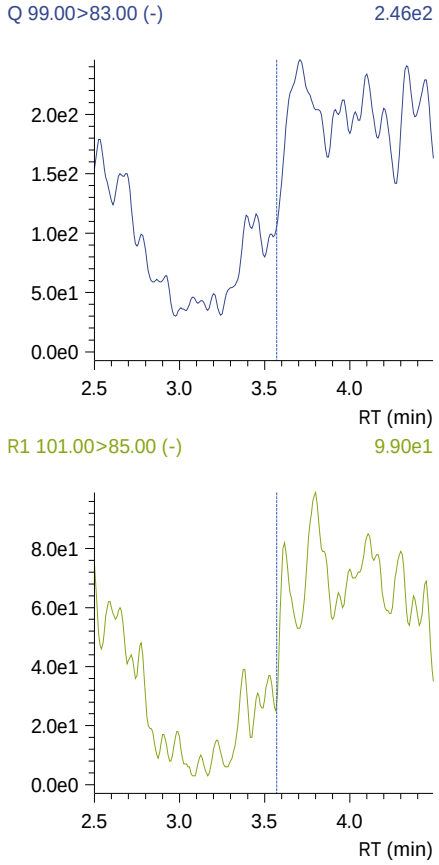
E2300096-001

Sample ID: E2300096-001
Date Acquired: 2/1/2023 5:21:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-035.lcd
Vial: 49 | 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)	----	----	158052	----	ng/mL	101.00 >85.00	0.00	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.436	158052	158052	1.0000	ng/mL	----	----	

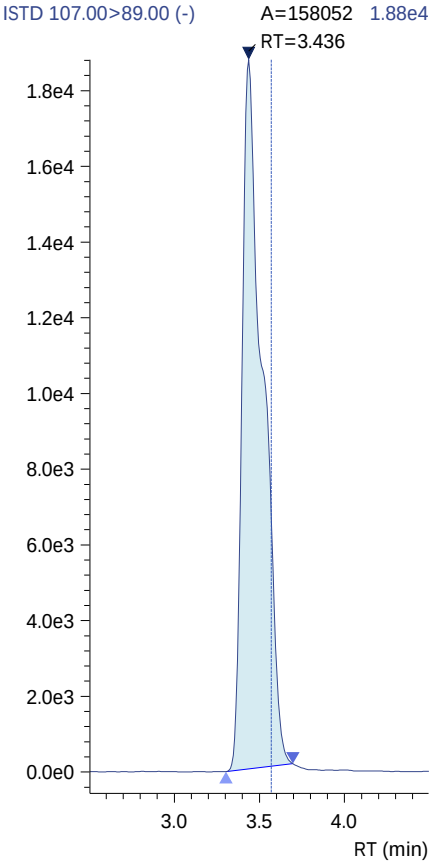
Perchlorate

Conc ----
R#1 0.00 (32.22)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:09:16 AM

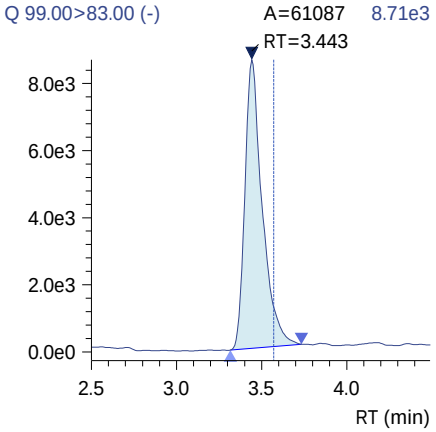
E2300096-002

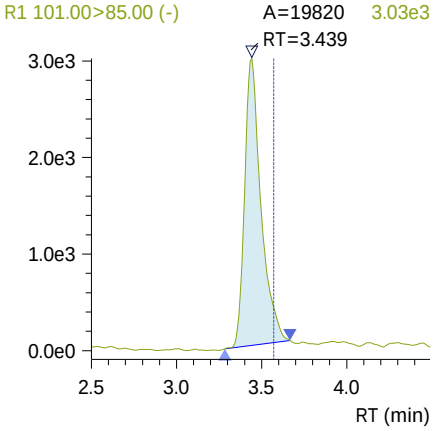
Sample ID: E2300096-002
Date Acquired: 2/1/2023 5:27:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-036.lcd
Vial: 50 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.443	61087	130106	3.3891	ng/mL	101.00 >85.00	32.45	22.55 -41.89
Sodium Perchlorate-18O4 _IS	Auto	3.441	130106	130106	1.0000	ng/mL	----	----	

Perchlorate

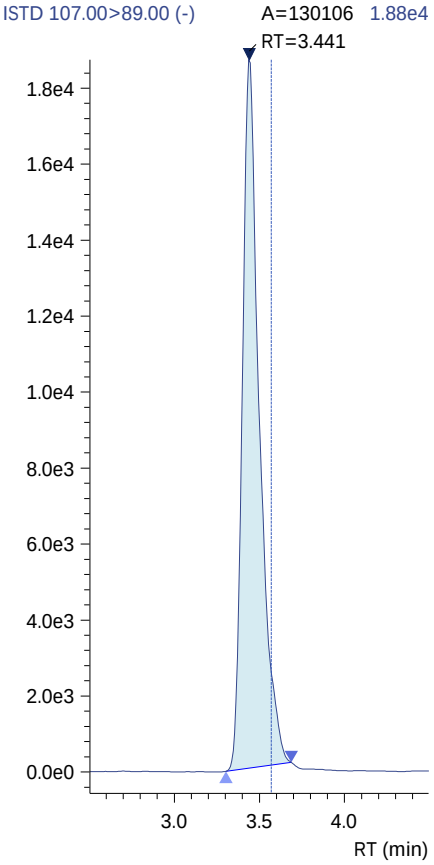
Conc 3.3891
R#1 32.45 (32.22)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:09:16 AM

E2300096-003

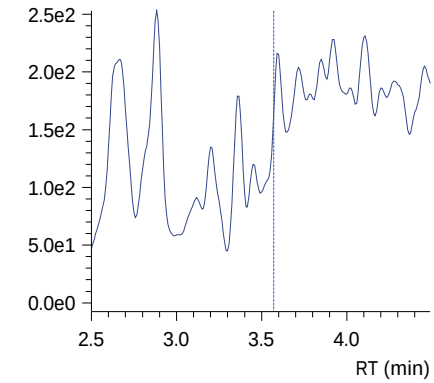
Sample ID: E2300096-003
Date Acquired: 2/1/2023 5:33:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-037.lcd
Vial: 51 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	232287	----	ng/mL	101.00 >85.00	0.00	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.517	232287	232287	1.0000	ng/mL	----	----	

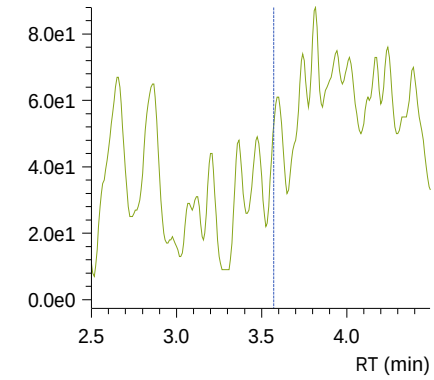
Perchlorate

Conc ----
R#1 0.00 (32.22)

Q 99.00>83.00 (-) 2.53e2



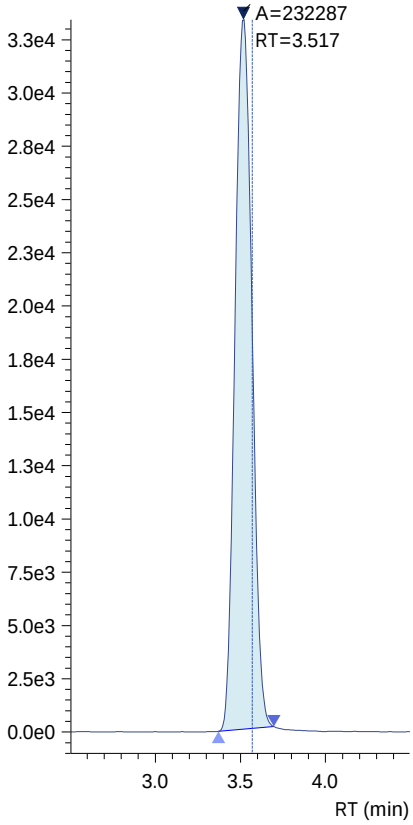
R1 101.00>85.00 (-) 8.80e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.34e4



Insight Report

Printed at 2/3/2023 11:09:16 AM

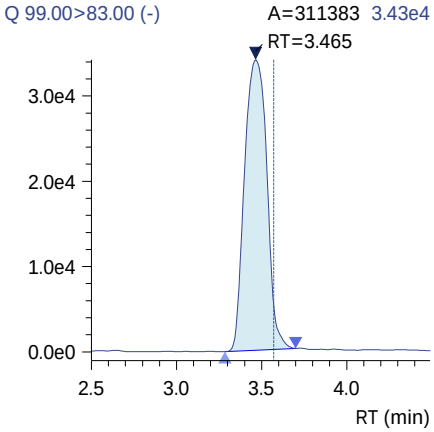
E2300096-004

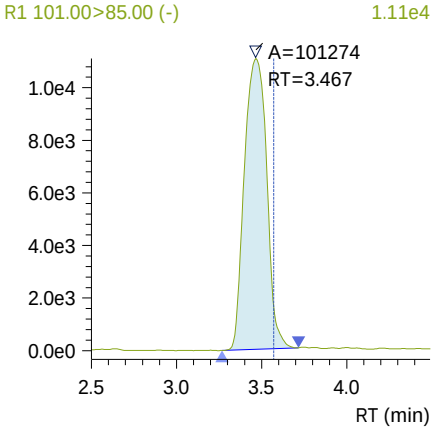
Sample ID: E2300096-004
Date Acquired: 2/1/2023 5:39:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-038.lcd
Vial: 52 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.465	3113 83	102857	21.8 523	ng/mL	101.00 >85.00	32.52	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.467	1028 57	102857	1.0000	ng/mL	----	----	

Perchlorate

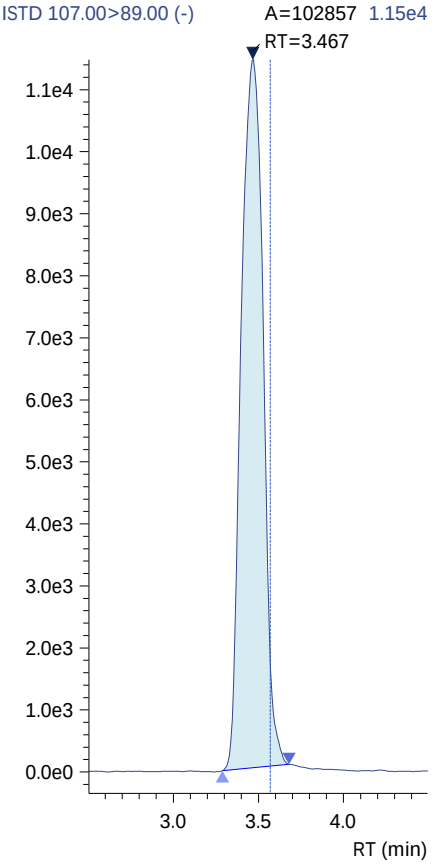
Conc 21.8523
R#1 32.52 (32.22)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:09:16 AM

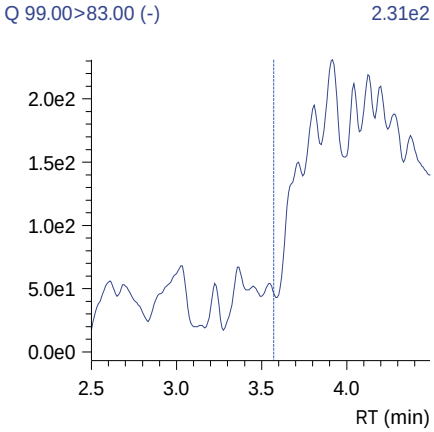
E2300096-005

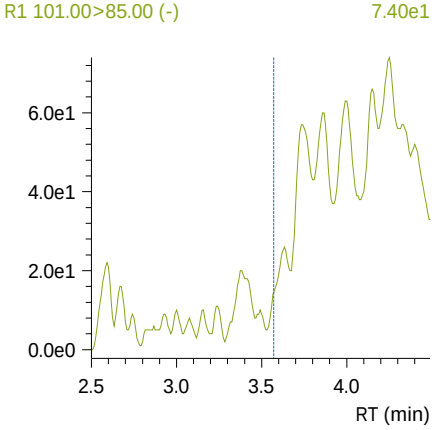
Sample ID: E2300096-005
Date Acquired: 2/1/2023 5:45:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-039.lcd
Vial: 53 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	84202	----	ng/mL	101.00 >85.00	0.00	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.453	84202	84202	1.0000	ng/mL	----	----	

Perchlorate

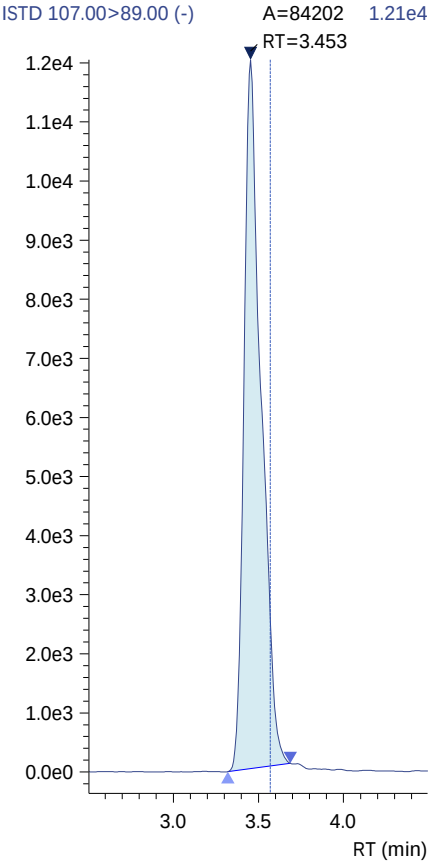
Conc ----
R#1 0.00 (32.22)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:09:16 AM

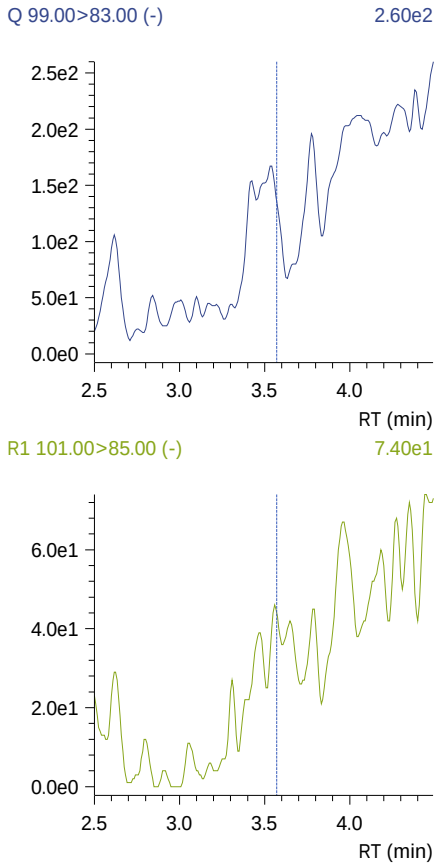
E2300096-006

Sample ID: E2300096-006
Date Acquired: 2/1/2023 5:51:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-040.lcd
Vial: 54 | 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)	----	----	162599	----	ng/mL	101.00 >85.00	0.00	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.458	162599	162599	1.0000	ng/mL	----	----	

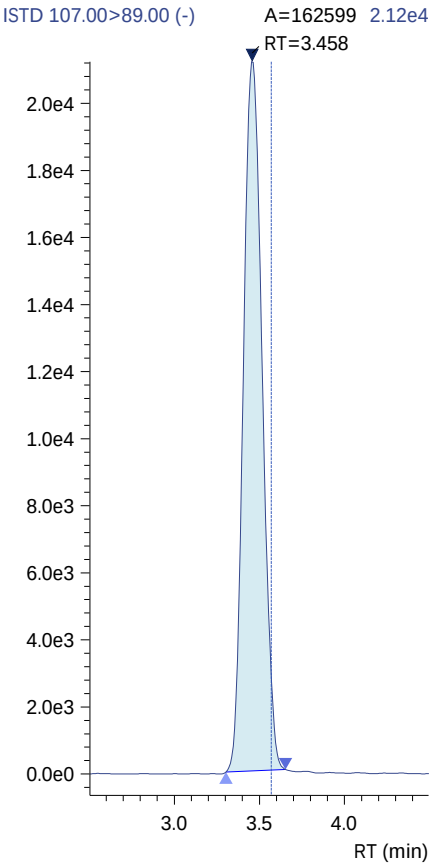
Perchlorate

Conc ----
R#1 0.00 (32.22)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:09:16 AM

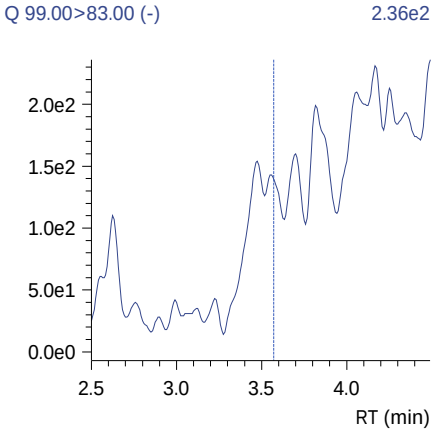
E2300096-007

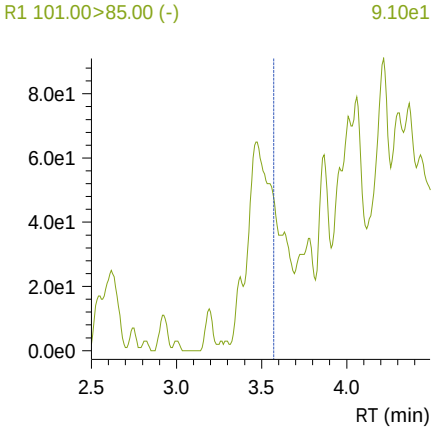
Sample ID: E2300096-007
Date Acquired: 2/1/2023 5:56:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-041.lcd
Vial: 1 | Inj. Volume: 25.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	176124	----	ng/mL	101.00 >85.00	0.00	22.55 -41.89
Sodium Perchlorate-18O4_IS	Auto	3.458	176124	176124	1.0000	ng/mL	----	----	

Perchlorate

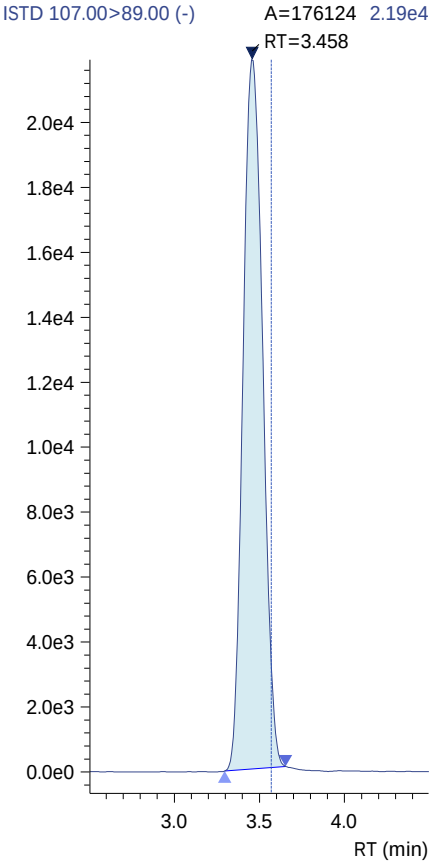
Conc ----
R#1 0.00 (32.22)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 2/3/2023 11:09:16 AM

PERCHLORATE7

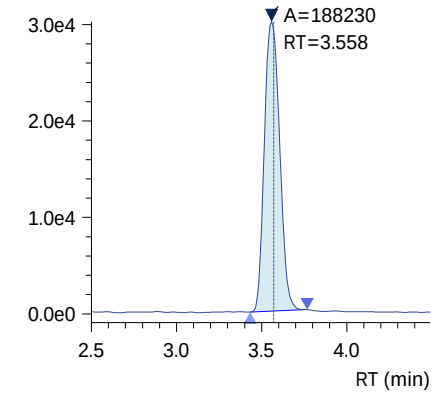
Sample ID: PERCHLORATE7
Date Acquired: 2/1/2023 6:02:41 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\02012023\20230201-042.lcd
Vial: 7 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.558	1882 30	134643	10.0 912	ng/mL	101.00 >85.00	32.01	22.55 -41.89
Sodium Perchlorate-18O4 _IS	Auto	3.552	1346 43	134643	1.0000	ng/mL	----	----	

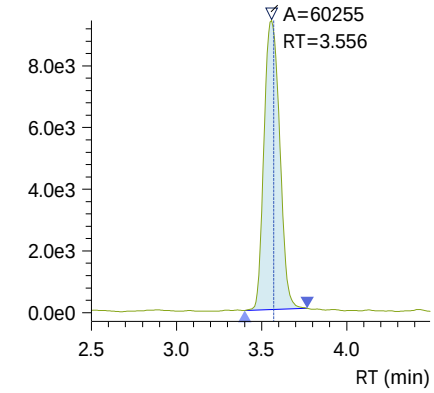
Perchlorate

Conc 10.0912
R#1 32.01 (32.22)

Q 99.00>83.00 (-) 3.03e4



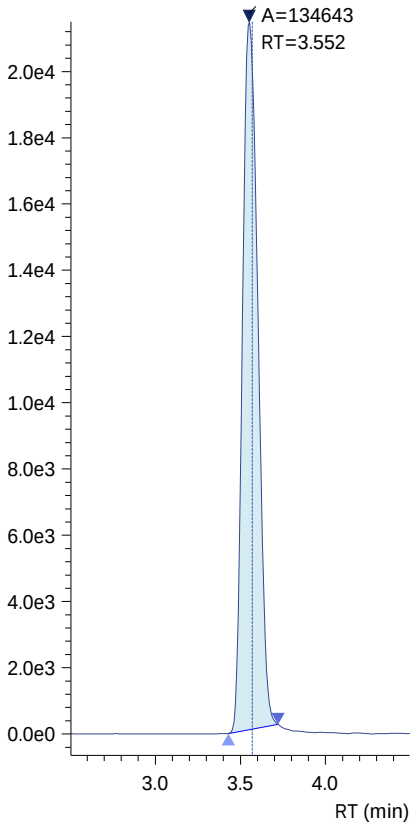
R1 101.00>85.00 (-) 9.47e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.15e4



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WorkOrder: HS23011525

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

16-Feb-2023

ALS Environmental
ALS Group USA, Corp
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Accuracy and Precision

Initial Calibration

Chromatograms and Selected Ion Monitoring

HS23011525 LHAAP 16 January 2023 Final

ALS WO# HS23011525

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February 07, 2023

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

Work Order: **HS23011525**

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

Dear Vicki Graves ,

ALS Environmental received 6 sample(s) on Jan 27, 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: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23011525

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23011525-01	Trip Blank-230125	Water		25-Jan-2023 08:30	27-Jan-2023 10:15	☐
HS23011525-02	16WW39-230125	Groundwater		25-Jan-2023 09:10	27-Jan-2023 10:15	☐
HS23011525-03	16WW31-230125	Groundwater		25-Jan-2023 10:05	27-Jan-2023 10:15	☐
HS23011525-04	16WW32-230125	Groundwater		25-Jan-2023 10:50	27-Jan-2023 10:15	☐
HS23011525-05	16WW33-230125	Groundwater		25-Jan-2023 11:40	27-Jan-2023 10:15	☐
HS23011525-06	16WW34-230125	Groundwater		25-Jan-2023 12:30	27-Jan-2023 10:15	☐

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23011525

Work Order Comments

- The analysis for Perchlorate was performed by ALS Houston Specialty Lab. The final report is appended.

GCMS Volatiles by Method SW8260

Batch ID: R427296

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

Batch ID: R427191

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: Trip Blank-230125
Collection Date: 25-Jan-2023 08:30

ANALYTICAL REPORT
WorkOrder:HS23011525
Lab ID:HS23011525-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	02-Feb-2023 16:35
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 16:35
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 16:35
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 16:35
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	02-Feb-2023 16:35
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 16:35
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 16:35
Surr: 1,2-Dichloroethane-d4	*94.7*			**0**	*81-118*	*%REC*	*1*	*02-Feb-2023 16:35*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*02-Feb-2023 16:35*
Surr: Dibromofluoromethane	*87.5*			**0**	*80-119*	*%REC*	*1*	*02-Feb-2023 16:35*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*02-Feb-2023 16:35*

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW39-230125
Collection Date: 25-Jan-2023 09:10

ANALYTICAL REPORT
WorkOrder:HS23011525
Lab ID:HS23011525-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	03-Feb-2023 16:28
1,1-Dichloroethene	**1.6**		**0.20**	**1.0**	**1.0**	**ug/L**	1	03-Feb-2023 16:28
1,2-Dichloroethane	**0.72**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	03-Feb-2023 16:28
cis-1,2-Dichloroethene	**40**		**0.20**	**1.0**	**1.0**	**ug/L**	1	03-Feb-2023 16:28
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	03-Feb-2023 16:28
Trichloroethene	**490**		**1.0**	**5.0**	**5.0**	**ug/L**	5	02-Feb-2023 23:56
Vinyl chloride	**5.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	03-Feb-2023 16:28
Surr: 1,2-Dichloroethane-d4	*94.0*			**0**	*81-118*	*%REC*	*5*	*02-Feb-2023 23:56*
Surr: 1,2-Dichloroethane-d4	*97.0*			**0**	*81-118*	*%REC*	*1*	*03-Feb-2023 16:28*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*5*	*02-Feb-2023 23:56*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*03-Feb-2023 16:28*
Surr: Dibromofluoromethane	*86.9*			**0**	*80-119*	*%REC*	*5*	*02-Feb-2023 23:56*
Surr: Dibromofluoromethane	*90.3*			**0**	*80-119*	*%REC*	*1*	*03-Feb-2023 16:28*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*5*	*02-Feb-2023 23:56*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*03-Feb-2023 16:28*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW31-230125
Collection Date: 25-Jan-2023 10:05

ANALYTICAL REPORT
WorkOrder:HS23011525
Lab ID:HS23011525-03
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	02-Feb-2023 22:32
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:32
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:32
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:32
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	02-Feb-2023 22:32
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:32
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:32
Surr: 1,2-Dichloroethane-d4	*95.7*			**0**	*81-118*	*%REC*	*1*	*02-Feb-2023 22:32*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*02-Feb-2023 22:32*
Surr: Dibromofluoromethane	*88.3*			**0**	*80-119*	*%REC*	*1*	*02-Feb-2023 22:32*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*02-Feb-2023 22:32*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW32-230125
Collection Date: 25-Jan-2023 10:50

ANALYTICAL REPORT
WorkOrder:HS23011525
Lab ID:HS23011525-04
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	02-Feb-2023 22:53
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:53
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:53
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:53
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	02-Feb-2023 22:53
Trichloroethene	**0.82**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	02-Feb-2023 22:53
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 22:53
Surr: 1,2-Dichloroethane-d4	*94.3*			**0**	*81-118*	*%REC*	*1*	*02-Feb-2023 22:53*
Surr: 4-Bromofluorobenzene	*104*			**0**	*85-114*	*%REC*	*1*	*02-Feb-2023 22:53*
Surr: Dibromofluoromethane	*87.7*			**0**	*80-119*	*%REC*	*1*	*02-Feb-2023 22:53*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*02-Feb-2023 22:53*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW33-230125
Collection Date: 25-Jan-2023 11:40

ANALYTICAL REPORT
WorkOrder:HS23011525
Lab ID:HS23011525-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	02-Feb-2023 23:14
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:14
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:14
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:14
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	02-Feb-2023 23:14
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:14
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:14
Surr: 1,2-Dichloroethane-d4	*95.8*			**0**	*81-118*	*%REC*	*1*	*02-Feb-2023 23:14*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*02-Feb-2023 23:14*
Surr: Dibromofluoromethane	*88.2*			**0**	*80-119*	*%REC*	*1*	*02-Feb-2023 23:14*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*02-Feb-2023 23:14*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW34-230125
Collection Date: 25-Jan-2023 12:30

ANALYTICAL REPORT
WorkOrder:HS23011525
Lab ID:HS23011525-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	02-Feb-2023 23:35
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:35
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:35
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:35
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	02-Feb-2023 23:35
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:35
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	02-Feb-2023 23:35
Surr: 1,2-Dichloroethane-d4	*94.6*			**0**	*81-118*	*%REC*	*1*	*02-Feb-2023 23:35*
Surr: 4-Bromofluorobenzene	*104*			**0**	*85-114*	*%REC*	*1*	*02-Feb-2023 23:35*
Surr: Dibromofluoromethane	*87.8*			**0**	*80-119*	*%REC*	*1*	*02-Feb-2023 23:35*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*02-Feb-2023 23:35*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	03-Feb-2023 16:12

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

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011525

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R427191 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23011525-02	16WW39-230125	25 Jan 2023 09:10			02 Feb 2023 23:56	5
HS23011525-03	16WW31-230125	25 Jan 2023 10:05			02 Feb 2023 22:32	1
HS23011525-04	16WW32-230125	25 Jan 2023 10:50			02 Feb 2023 22:53	1
HS23011525-05	16WW33-230125	25 Jan 2023 11:40			02 Feb 2023 23:14	1
HS23011525-06	16WW34-230125	25 Jan 2023 12:30			02 Feb 2023 23:35	1
Batch ID: R427191 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23011525-01	Trip Blank-230125	25 Jan 2023 08:30			02 Feb 2023 16:35	1
Batch ID: R427276 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23011525-02	16WW39-230125	25 Jan 2023 09:10			03 Feb 2023 16:12	1
HS23011525-03	16WW31-230125	25 Jan 2023 10:05			03 Feb 2023 16:12	1
HS23011525-04	16WW32-230125	25 Jan 2023 10:50			03 Feb 2023 16:12	1
HS23011525-05	16WW33-230125	25 Jan 2023 11:40			03 Feb 2023 16:12	1
HS23011525-06	16WW34-230125	25 Jan 2023 12:30			03 Feb 2023 16:12	1
Batch ID: R427296 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23011525-02	16WW39-230125	25 Jan 2023 09:10			03 Feb 2023 16:28	1

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011525

QC BATCH REPORT

Batch ID: R427191 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230202** Units: **ug/L** Analysis Date: **02-Feb-2023 16:13**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105061** 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	*48.13*	*1.0*	*50*	*0*	*96.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.46*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*44.9*	*1.0*	*50*	*0*	*89.8*	*80 - 119*				
Surr: Toluene-d8	*52.85*	*1.0*	*50*	*0*	*106*	*89 - 112*				

LCS Sample ID: **VLCSW-230202** Units: **ug/L** Analysis Date: **02-Feb-2023 15:10**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105060** 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	20.71	1.0	20	0	104	80 - 119				
1,1-Dichloroethene	18.71	1.0	20	0	93.5	71 - 131				
1,2-Dichloroethane	23.27	1.0	20	0	116	73 - 128				
cis-1,2-Dichloroethene	19.27	1.0	20	0	96.4	78 - 123				
Methylene chloride	19.48	2.0	20	0	97.4	74 - 124				
Trichloroethene	22.24	1.0	20	0	111	79 - 123				
Vinyl chloride	20.11	1.0	20	0	101	58 - 137				
Surr: 1,2-Dichloroethane-d4	*50.74*	*1.0*	*50*	*0*	*101*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.78*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*45.19*	*1.0*	*50*	*0*	*90.4*	*80 - 119*				
Surr: Toluene-d8	*48.09*	*1.0*	*50*	*0*	*96.2*	*89 - 112*				

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011525

QC BATCH REPORT

Batch ID: R427191 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MS Sample ID: **HS23011294-08MS** Units: **ug/L** Analysis Date: **02-Feb-2023 19:23**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105069** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.28	1.0	20	0	91.4	80 - 119				
1,1-Dichloroethene	16.4	1.0	20	0	82.0	71 - 131				
1,2-Dichloroethane	20.19	1.0	20	0	101	73 - 128				
cis-1,2-Dichloroethene	16.74	1.0	20	0	83.7	78 - 123				
Methylene chloride	16.13	2.0	20	0	80.6	74 - 124				
Trichloroethene	21.32	1.0	20	0	107	79 - 123				
Vinyl chloride	15.24	1.0	20	0	76.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*47.65*	*1.0*	*50*	*0*	*95.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.23*	*1.0*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*43.12*	*1.0*	*50*	*0*	*86.2*	*80 - 119*				
Surr: Toluene-d8	*51.75*	*1.0*	*50*	*0*	*103*	*89 - 112*				

MSD Sample ID: **HS23011294-08MSD** Units: **ug/L** Analysis Date: **02-Feb-2023 19:44**
Client ID: Run ID: **VOA6_427191** SeqNo: **7105070** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.61	1.0	20	0	93.1	80 - 119	18.28	1.82	20	
1,1-Dichloroethene	15.86	1.0	20	0	79.3	71 - 131	16.4	3.35	20	
1,2-Dichloroethane	19.66	1.0	20	0	98.3	73 - 128	20.19	2.66	20	
cis-1,2-Dichloroethene	16.3	1.0	20	0	81.5	78 - 123	16.74	2.65	20	
Methylene chloride	15.39	2.0	20	0	76.9	74 - 124	16.13	4.7	20	
Trichloroethene	20.13	1.0	20	0	101	79 - 123	21.32	5.72	20	
Vinyl chloride	14.73	1.0	20	0	73.7	58 - 137	15.24	3.39	20	
Surr: 1,2-Dichloroethane-d4	*47.49*	*1.0*	*50*	*0*	*95.0*	*81 - 118*	*47.65*	*0.337*	*20*	
Surr: 4-Bromofluorobenzene	*52.87*	*1.0*	*50*	*0*	*106*	*85 - 114*	*52.23*	*1.22*	*20*	
Surr: Dibromofluoromethane	*43.1*	*1.0*	*50*	*0*	*86.2*	*80 - 119*	*43.12*	*0.0325*	*20*	
Surr: Toluene-d8	*52.02*	*1.0*	*50*	*0*	*104*	*89 - 112*	*51.75*	*0.525*	*20*	

The following samples were analyzed in this batch: HS23011525-01 HS23011525-02 HS23011525-03 HS23011525-04 HS23011525-05 HS23011525-06

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011525

QC BATCH REPORT

Batch ID: R427296 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230203** Units: **ug/L** Analysis Date: **03-Feb-2023 12:26**
Client ID: Run ID: **VOA6_427296** SeqNo: **7107707** 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	*47.4*	*1.0*	*50*	*0*	*94.8*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.68*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*44.25*	*1.0*	*50*	*0*	*88.5*	*80 - 119*				
Surr: Toluene-d8	*52.32*	*1.0*	*50*	*0*	*105*	*89 - 112*				

LCS Sample ID: **VLCSW-230203** Units: **ug/L** Analysis Date: **03-Feb-2023 11:44**
Client ID: Run ID: **VOA6_427296** SeqNo: **7107706** 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	20.24	1.0	20	0	101	80 - 119				
1,1-Dichloroethene	16.88	1.0	20	0	84.4	71 - 131				
1,2-Dichloroethane	22.13	1.0	20	0	111	73 - 128				
cis-1,2-Dichloroethene	18.61	1.0	20	0	93.0	78 - 123				
Methylene chloride	19.26	2.0	20	0	96.3	74 - 124				
Vinyl chloride	17.84	1.0	20	0	89.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*49.56*	*1.0*	*50*	*0*	*99.1*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.54*	*1.0*	*50*	*0*	*99.1*	*85 - 114*				
Surr: Dibromofluoromethane	*45.61*	*1.0*	*50*	*0*	*91.2*	*80 - 119*				
Surr: Toluene-d8	*47.15*	*1.0*	*50*	*0*	*94.3*	*89 - 112*				

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23011525

QC BATCH REPORT

Batch ID: R427296 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23011233-07MS** Units: **ug/L** Analysis Date: **03-Feb-2023 15:25**
Client ID: Run ID: **VOA6_427296** SeqNo: **7107713** 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	19.07	1.0	20	0	95.4	80 - 119				
1,1-Dichloroethene	16.88	1.0	20	0	84.4	71 - 131				
1,2-Dichloroethane	19.86	1.0	20	0	99.3	73 - 128				
cis-1,2-Dichloroethene	17.95	1.0	20	0	89.8	78 - 123				
Methylene chloride	16.45	2.0	20	0	82.2	74 - 124				
Vinyl chloride	15.88	1.0	20	0	79.4	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.2*	*1.0*	*50*	*0*	*96.4*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.37*	*1.0*	*50*	*0*	*105*	*85 - 114*				
Surr: Dibromofluoromethane	*44.06*	*1.0*	*50*	*0*	*88.1*	*80 - 119*				
Surr: Toluene-d8	*51.86*	*1.0*	*50*	*0*	*104*	*89 - 112*				

MSD Sample ID: **HS23011233-07MSD** Units: **ug/L** Analysis Date: **03-Feb-2023 15:46**
Client ID: Run ID: **VOA6_427296** SeqNo: **7107714** 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	19.19	1.0	20	0	96.0	80 - 119	19.07	0.633	20	
1,1-Dichloroethene	16.18	1.0	20	0	80.9	71 - 131	16.88	4.29	20	
1,2-Dichloroethane	20.39	1.0	20	0	102	73 - 128	19.86	2.65	20	
cis-1,2-Dichloroethene	17.48	1.0	20	0	87.4	78 - 123	17.95	2.67	20	
Methylene chloride	15.76	2.0	20	0	78.8	74 - 124	16.45	4.26	20	
Vinyl chloride	15.18	1.0	20	0	75.9	58 - 137	15.88	4.53	20	
Surr: 1,2-Dichloroethane-d4	*48.01*	*1.0*	*50*	*0*	*96.0*	*81 - 118*	*48.2*	*0.403*	*20*	
Surr: 4-Bromofluorobenzene	*52.74*	*1.0*	*50*	*0*	*105*	*85 - 114*	*52.37*	*0.695*	*20*	
Surr: Dibromofluoromethane	*43.79*	*1.0*	*50*	*0*	*87.6*	*80 - 119*	*44.06*	*0.6*	*20*	
Surr: Toluene-d8	*52.04*	*1.0*	*50*	*0*	*104*	*89 - 112*	*51.86*	*0.342*	*20*	

The following samples were analyzed in this batch: HS23011525-02

ALS Houston, US Date: 07-Feb-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23011525**

QUALIFIERS, ACRONYMS, UNITS

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

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

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2023	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: 07-Feb-23

Sample Receipt Checklist

Work Order ID: HS23011525 **Date/Time Received:** 27-Jan-2023 10:15

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

Completed By:	/S/ Corey Grandits	30-Jan-2023 14:48	**Reviewed by:**	/S/ Dane J. Wacasey	06-Feb-2023 09:48
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

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

Temperature(s)/Thermometer(s):	1.9UC/1.4C	IR31
Cooler(s)/Kit(s):	50242	
Date/Time sample(s) sent to storage:	1/30/23	

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 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
Trip Blank-230125/0830	GW	01-25-23	TB	2	✓						
16WW39-230125/0910	GW	1-25-23	N	4	✓					✓	
16WW31-230125/1005	GW	1-25-23	N	4	✓					✓	
16WW32-230125/1050	GW	1-25-23	N	4	✓					✓	
16WW33-230125/1140	GW	1-25-23	N	4	✓					✓	
16WW34-230125/1230	GW	1-25-23	N	4	✓					✓	

Analyses

Aptim Environmental & Infrastucture, Inc.
LHAAP 16 January 2023

HS23011525

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
	1-25-23	1400		01/27/2023	1015						

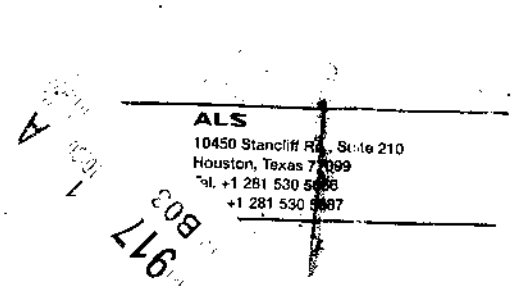
For Lab Use Only

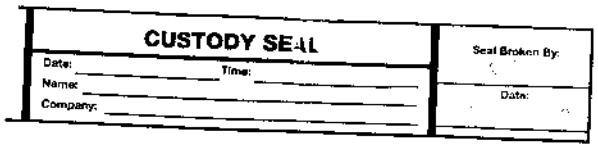
Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

5.242

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


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
+1 281 530 5887


CUSTODY SEAL
Date:
Time:
Name:
Company:
Seal Broken By:
Date:

SHIPPING
ALS LABORATORY
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
REF: PERFORMANCE MONITORING - BO 98113 - DW
FedEx
Express
FedEx
TRK# 5789 2002 8375
THU - 26 JAN 10:30A
PRIORITY OVERNIGHT

February 03, 2023 Service Request No:E2300094

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

Laboratory Results for: HS23011525

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory January 31, 2023
For your reference, these analyses have been assigned our service request number **E2300094.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston 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.:**	E2300094
Project:	HS23011525	**Date Received:**	01/31/23
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 II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Five samples were received for analysis at ALS Environmental in Houston on 01/31/23.

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:

EQ2300047: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

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

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

Client: ALS Environmental - US **Service Request:**E2300094
Project: HS23011525

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300094-001	16WW39-230125	1/25/2023	0910
E2300094-002	16WW31-230125	1/25/2023	1005
E2300094-003	16WW32-230125	1/25/2023	1050
E2300094-004	16WW33-230125	1/25/2023	1140
E2300094-005	16WW34-230125	1/25/2023	1230

Service Request Summary

Folder #: **E2300094**
Client Name: ALS Environmental - US
Project Name: HS23011525
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: 01/31/23
Internal Due Date: 2/10/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011525
EDD: EQUIS
EFWEDD_LHAAP

5 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300094-001	16WW39-230125	Ground Water	01/25/23 0910	**IV**
E2300094-002	16WW31-230125	Ground Water	01/25/23 1005	**IV**
E2300094-003	16WW32-230125	Ground Water	01/25/23 1050	**IV**
E2300094-004	16WW33-230125	Ground Water	01/25/23 1140	**IV**
E2300094-005	16WW34-230125	Ground Water	01/25/23 1230	**IV**

Service Request Summary

Folder #: **E2300094**
Client Name: ALS Environmental - US
Project Name: HS23011525
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: 01/31/23
Internal Due Date: 2/10/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23011525
EDD: EQUIS
EFWEDD_LHAAP

5 120 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 2/17

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

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:** 20861

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:	HS23011525
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23011525-02**	**16WW39-230125**	**Groundwater**	**25 Jan 2023 09:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			10 Feb 2023
2.	**HS23011525-03**	**16WW31-230125**	**Groundwater**	**25 Jan 2023 10:05**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			10 Feb 2023
3.	**HS23011525-04**	**16WW32-230125**	**Groundwater**	**25 Jan 2023 10:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			10 Feb 2023
4.	**HS23011525-05**	**16WW33-230125**	**Groundwater**	**25 Jan 2023 11:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			10 Feb 2023
5.	**HS23011525-06**	**16WW34-230125**	**Groundwater**	**25 Jan 2023 12:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			10 Feb 2023

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

QC Level: DOD IV (DoD Data Package)

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense

COC ID: 20861

Relinquished By: NR

Date/Time:

Received By:

Date/Time: 1-31-23 0800

Cooler ID(s):

Temperature(s):

ALS Environmental

Cooler Receipt Form

Project Chemist JG

Client/Project ALS-H

Thermometer ID IR31

Date/Time Received: 1-31-23 Initials: CG Date/Time Logged in: 1-31-23 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		1-31-23	0800	CG	0.9	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 413900 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/1/23 10:18

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300092-001	CTC-44_0123	.01	6850/ClO4			Water	10mL	
2	E2300092-002	EA-100_0123	.01	6850/ClO4			Water	10mL	
3	E2300092-003	EA-110_0123	.01	6850/ClO4			Water	10mL	
4	E2300092-004	CTC-14_0123	.01	6850/ClO4			Water	10mL	
5	E2300094-001	16WW39-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300094-002	16WW31-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300094-003	16WW32-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300094-004	16WW33-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300094-005	16WW34-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300096-001	16RW09-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300096-002	16RW10-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300096-003	16WW46-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300096-004	16WW12-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300096-005	16WW49-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300096-006	16WW36-230125	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300096-007	16WW36-230125-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
17	EQ2300047-01	MB		6850/ClO4			Liquid	10mL	
18	EQ2300047-02	LCS		6850/ClO4			Liquid	10mL	
19	EQ2300047-03	DLCS		6850/ClO4			Liquid	10mL	
20	R2300589-005	2301231019A JP-3-509	.01	6850/ClO4			Water	10mL	
21	R2300589-010	2301231439A JP-3-689	.01	6850/ClO4			Water	10mL	
22	R2300648-018	2301241035A 100-F-358	.01	6850/ClO4			Water	10mL	
23	R2300648-025	2301241437A 100-G-223	.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

E2300092-001	100.00µL	E2300092-002	100.00µL	E2300092-003	100.00µL	E2300092-004	100.00µL	E2300094-001	100.00µL	E2300094-002	100.00µL
E2300094-003	100.00µL	E2300094-004	100.00µL	E2300094-005	100.00µL	E2300096-001	100.00µL	E2300096-002	100.00µL	E2300096-003	100.00µL
E2300096-004	100.00µL	E2300096-005	100.00µL	E2300096-006	100.00µL	E2300096-007	100.00µL	EQ2300047-01	100.00µL	EQ2300047-01	100.00µL
EQ2300047-02	100.00µL	EQ2300047-02	100.00µL	EQ2300047-03	100.00µL	EQ2300047-03	100.00µL	R2300589-005	100.00µL	R2300589-010	100.00µL
R2300648-018	100.00µL	R2300648-025	100.00µL								

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

EQ2300047-02	1.00µL	EQ2300047-02	1.00µL	EQ2300047-03	1.00µL	EQ2300047-03	1.00µL

Preparation Information Benchsheet

Prep Run#: 413900 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 2/1/23 10:18

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: 2/1/23 10:18
Finished: 2/1/23 11:50
By: XMI
Comments

Comments: _____

Reviewed By: XMI Date: 02/01/23

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:**	E2300094
Project:	HS23011525	**Date Collected:**	1/25/23 0910
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW39-230125	**Units:**	µg/L
Lab Code:	E2300094-001	**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	**7.03**		0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 16:47	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300094
Project:	HS23011525	**Date Collected:**	1/25/23 1005
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW31-230125	**Units:**	µg/L
Lab Code:	E2300094-002	**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	2/ 1/23	2/1/23 16:52	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300094
Project:	HS23011525	**Date Collected:**	1/25/23 1050
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW32-230125	**Units:**	µg/L
Lab Code:	E2300094-003	**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	2/ 1/23	2/1/23 16:58	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300094
Project:	HS23011525	**Date Collected:**	1/25/23 1140
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW33-230125	**Units:**	µg/L
Lab Code:	E2300094-004	**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	2/ 1/23	2/1/23 17:04	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300094
Project:	HS23011525	**Date Collected:**	1/25/23 1230
Sample Matrix:	Ground Water	**Date Received:**	1/31/23
Sample Name:	16WW34-230125	**Units:**	µg/L
Lab Code:	E2300094-005	**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	2/ 1/23	2/1/23 17:10	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300094
Project:	HS23011525	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300047-01	**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	2/ 1/23	2/1/23 15:30	413900	793296	

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: HS23011525
Sample Matrix: Ground Water

Service Request: E2300094
Date Analyzed: 2/ 1/23

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: 413900

	Lab Control Sample EQ2300047-02			Duplicate Lab Control Sample EQ2300047-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.0948	0.100	95	84 - 119	5	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:**	E2300094
Project:	HS23011525	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300047-02	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 15:36	413900	793296	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300094
Project:	HS23011525	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300047-03	**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	**0.0948**	J	0.100	0.0500	0.0250	1	2/ 1/23	2/1/23 15:41	413900	793296	

HS23011525-MSVOA-SW8260

ALS WO# HS23011525

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Form 1

Organic Analysis Data Sheet

Volatiles by by EPA 8260

Workorder

HS23011525

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
HS23011525

Volatiles by EPA 8260

HS23011525-01	Collected	Received	Matrix	Basis
Trip Blank-230125	01/25/23 08:30	01/27/23 10:15	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	02/02/23 16:35	VOA6_427191	X020209
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:35	VOA6_427191	X020209
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:35	VOA6_427191	X020209
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:35	VOA6_427191	X020209
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 16:35	VOA6_427191	X020209
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:35	VOA6_427191	X020209
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:35	VOA6_427191	X020209

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

HS23011525-02

Collected	Received	Matrix	Basis
01/25/23 09:10	01/27/23 10:15	Groundwater	Wet

16WW39-230125

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	02/03/23 16:28	VOA6_427296	X020318
1,1-Dichloroethene	ug/L	1.6		0.20	1.0	1.0	1	02/03/23 16:28	VOA6_427296	X020318
1,2-Dichloroethane	ug/L	0.72	J	0.20	1.0	1.0	1	02/03/23 16:28	VOA6_427296	X020318
cis-1,2-Dichloroethene	ug/L	40		0.20	1.0	1.0	1	02/03/23 16:28	VOA6_427296	X020318
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/03/23 16:28	VOA6_427296	X020318
Trichloroethene	ug/L	490		1.0	5.0	5.0	5	02/02/23 23:56	VOA6_427191	X020230
Vinyl chloride	ug/L	5.3		0.20	1.0	1.0	1	02/03/23 16:28	VOA6_427296	X020318

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

HS23011525-03

Collected	Received	Matrix	Basis
01/25/23 10:05	01/27/23 10:15	Groundwater	Wet

16WW31-230125

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	02/02/23 22:32	VOA6_427191	X020226
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:32	VOA6_427191	X020226
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:32	VOA6_427191	X020226
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:32	VOA6_427191	X020226
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 22:32	VOA6_427191	X020226
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:32	VOA6_427191	X020226
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:32	VOA6_427191	X020226

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

HS23011525-04	Collected	Received	Matrix	Basis
16WW32-230125	01/25/23 10:50	01/27/23 10:15	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	02/02/23 22:53	VOA6_427191	X020227
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:53	VOA6_427191	X020227
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:53	VOA6_427191	X020227
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:53	VOA6_427191	X020227
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 22:53	VOA6_427191	X020227
Trichloroethene	ug/L	0.82	J	0.20	1.0	1.0	1	02/02/23 22:53	VOA6_427191	X020227
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 22:53	VOA6_427191	X020227

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

HS23011525-05				Collected	Received	Matrix	Basis
16WW33-230125				01/25/23 11:40	01/27/23 10:15	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	02/02/23 23:14	VOA6_427191	X020228
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:14	VOA6_427191	X020228
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:14	VOA6_427191	X020228
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:14	VOA6_427191	X020228
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 23:14	VOA6_427191	X020228
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:14	VOA6_427191	X020228
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:14	VOA6_427191	X020228

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

HS23011525-06

16WW34-230125

Collected	Received	Matrix	Basis
01/25/23 12:30	01/27/23 10:15	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	02/02/23 23:35	VOA6_427191	X020229
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:35	VOA6_427191	X020229
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:35	VOA6_427191	X020229
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:35	VOA6_427191	X020229
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 23:35	VOA6_427191	X020229
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:35	VOA6_427191	X020229
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 23:35	VOA6_427191	X020229

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

VBLKW-230202	Collected	Received	Matrix	Basis
VBLKW-230202	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	02/02/23 16:13	VOA6_427191	X020208
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/02/23 16:13	VOA6_427191	X020208
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/02/23 16:13	VOA6_427191	X020208

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

VBLKW-230203	Collected	Received	Matrix	Basis
VBLKW-230203	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	02/03/23 12:26	VOA6_427296	X020307
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/03/23 12:26	VOA6_427296	X020307
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/03/23 12:26	VOA6_427296	X020307
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/03/23 12:26	VOA6_427296	X020307
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/03/23 12:26	VOA6_427296	X020307
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/03/23 12:26	VOA6_427296	X020307

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Form 2

System Monitoring Compound Recovery

Volatiles by by EPA 8260

Workorder

HS23011525

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
HS23011525

RunID
VOA6_427191

Volatiles by EPA 8260

CCV	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50.4	50	101	80-120	
4-Bromofluorobenzene	51.2	50	102	80-120	
Dibromofluoromethane	46.85	50	93.7	80-120	
Toluene-d8	48.95	50	97.9	80-120	

CCB	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.01	50	94.0	80-120	
4-Bromofluorobenzene	50.64	50	101	80-120	
Dibromofluoromethane	43.94	50	87.9	80-120	
Toluene-d8	52.58	50	105	80-120	

VLCSW-230202	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	50.74	50	101	81-118	
4-Bromofluorobenzene	50.78	50	102	85-114	
Dibromofluoromethane	45.19	50	90.4	80-119	
Toluene-d8	48.09	50	96.2	89-112	

VBLKW-230202	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.13	50	96.3	81-118	
4-Bromofluorobenzene	51.46	50	103	85-114	
Dibromofluoromethane	44.9	50	89.8	80-119	
Toluene-d8	52.85	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
HS23011525

RunID
VOA6_427191

Volatiles by EPA 8260

HS23011525-01	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47	50	94.7	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	44	50	87.5	80-119	
Toluene-d8	52	50	105	89-112	

HS23011294-08MS	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.65	50	95.3	81-118	
4-Bromofluorobenzene	52.23	50	104	85-114	
Dibromofluoromethane	43.12	50	86.2	80-119	
Toluene-d8	51.75	50	103	89-112	

HS23011294-08MSD	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.49	50	95.0	81-118	
4-Bromofluorobenzene	52.87	50	106	85-114	
Dibromofluoromethane	43.1	50	86.2	80-119	
Toluene-d8	52.02	50	104	89-112	

HS23011525-03	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48	50	95.7	81-118	
4-Bromofluorobenzene	51	50	101	85-114	
Dibromofluoromethane	44	50	88.3	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
HS23011525

RunID
VOA6_427191

Volatiles by EPA 8260

HS23011525-04	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47	50	94.3	81-118	
4-Bromofluorobenzene	52	50	104	85-114	
Dibromofluoromethane	44	50	87.7	80-119	
Toluene-d8	52	50	105	89-112	

HS23011525-05	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48	50	95.8	81-118	
4-Bromofluorobenzene	51	50	101	85-114	
Dibromofluoromethane	44	50	88.2	80-119	
Toluene-d8	52	50	104	89-112	

HS23011525-06	Analyzed 02/02/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47	50	94.6	81-118	
4-Bromofluorobenzene	52	50	104	85-114	
Dibromofluoromethane	44	50	87.8	80-119	
Toluene-d8	53	50	106	89-112	

HS23011525-02	Analyzed 02/02/23		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	230	250	94.0	81-118	
4-Bromofluorobenzene	260	250	102	85-114	
Dibromofluoromethane	220	250	86.9	80-119	
Toluene-d8	260	250	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
HS23011525

RunID
VOA6_427296

Volatiles by EPA 8260

CCV	Analyzed 02/03/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.02	50	96.0	80-120	
4-Bromofluorobenzene	50.62	50	101	80-120	
Dibromofluoromethane	44.48	50	89.0	80-120	
Toluene-d8	48.24	50	96.5	80-120	

CCB	Analyzed 02/03/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.32	50	94.6	80-120	
4-Bromofluorobenzene	51.44	50	103	80-120	
Dibromofluoromethane	44.49	50	89.0	80-120	
Toluene-d8	52.35	50	105	80-120	

VLCSW-230203	Analyzed 02/03/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49.56	50	99.1	81-118	
4-Bromofluorobenzene	49.54	50	99.1	85-114	
Dibromofluoromethane	45.61	50	91.2	80-119	
Toluene-d8	47.15	50	94.3	89-112	

VBLKW-230203	Analyzed 02/03/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	47.4	50	94.8	81-118	
4-Bromofluorobenzene	51.68	50	103	85-114	
Dibromofluoromethane	44.25	50	88.5	80-119	
Toluene-d8	52.32	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
HS23011525

RunID
VOA6_427296

Volatiles by EPA 8260

HS23011233-07MS	Analyzed 02/03/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.2	50	96.4	81-118	
4-Bromofluorobenzene	52.37	50	105	85-114	
Dibromofluoromethane	44.06	50	88.1	80-119	
Toluene-d8	51.86	50	104	89-112	

HS23011233-07MSD	Analyzed 02/03/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	48.01	50	96.0	81-118	
4-Bromofluorobenzene	52.74	50	105	85-114	
Dibromofluoromethane	43.79	50	87.6	80-119	
Toluene-d8	52.04	50	104	89-112	

HS23011525-02	Analyzed 02/03/23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	Q
1,2-Dichloroethane-d4	49	50	97.0	81-118	
4-Bromofluorobenzene	51	50	102	85-114	
Dibromofluoromethane	45	50	90.3	80-119	
Toluene-d8	52	50	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

HS23011525

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

ALS Environmental–Houston Laboratory
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Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

		HS23011294-08		HS23011294-08MS				HS23011294-08MSD						
Sample Matrix	Aqueous	**Run Date**	02/02/23	02/02/23				02/02/23						
Units	µg/L	**Run Time**	16:55	19:23				19:44						
		Data File	X020210.D	X020217.D				X020218.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	1	0	18.28	20.00	91		18.61	20.00	93		20	1.80	
1,1-Dichloroethene	71-131	1	0	16.40	20.00	82		15.86	20.00	79		20	3.30	
1,2-Dichloroethane	73-128	1	0	20.19	20.00	101		19.66	20.00	98		20	2.70	
cis-1,2-Dichloroethene	78-123	1	0	16.74	20.00	84		16.3	20.00	82		20	2.70	
Methylene chloride	74-124	1	0	16.13	20.00	81		15.39	20.00	77		20	4.70	
Trichloroethene	79-123	1	0	21.32	20.00	107		20.13	20.00	101		20	5.70	
Vinyl chloride	58-137	1	0	15.24	20.00	76		14.73	20.00	74		20	3.40	

- %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
HS23011525

		HS23011233-07		HS23011233-07MS				HS23011233-07MSD						
Sample Matrix	Aqueous	**Run Date**	02/03/23	02/03/23				02/03/23						
Units	µg/L	**Run Time**	13:50	15:25				15:46						
		Data File	X020311.D	X020315.D				X020316.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	1	0	19.07	20.00	95		19.19	20.00	96		20	0.600	
1,1-Dichloroethene	71-131	1	0	16.88	20.00	84		16.18	20.00	81		20	4.30	
1,2-Dichloroethane	73-128	1	0	19.86	20.00	99		20.39	20.00	102		20	2.60	
cis-1,2-Dichloroethene	78-123	1	0	17.95	20.00	90		17.48	20.00	87		20	2.70	
Methylene chloride	74-124	1	0	16.45	20.00	82		15.76	20.00	79		20	4.30	
Vinyl chloride	58-137	1	0	15.88	20.00	79		15.18	20.00	76		20	4.50	

- %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

HS23011525

Client

Aptim Environmental & Infrastucture, Inc.

Project

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02/16/2023

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Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

VOA6_427191		QC ID	VLCSW-230202			
QC Matrix Aqueous	Units	Run Date	02/02/23			
	ug/L	Run Time	15:10			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	20.71	104		
1,1-Dichloroethene	71-131	20	18.71	94		
1,2-Dichloroethane	73-128	20	23.27	116		
1,2-Dichloroethane-d4	81-118	50	50.74	101		
4-Bromofluorobenzene	85-114	50	50.78	102		
cis-1,2-Dichloroethene	78-123	20	19.27	96		
Dibromofluoromethane	80-119	50	45.19	90		
Methylene chloride	74-124	20	19.48	97		
Toluene-d8	89-112	50	48.09	96		
Trichloroethene	79-123	20	22.24	111		
Vinyl chloride	58-137	20	20.11	101		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

VOA6_427296		QC ID	VLCSW-230203			
QC Matrix Aqueous	Units	Run Date	02/03/23			
	ug/L	Run Time	11:44			
Analyte	%R Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	20.24	101		
1,1-Dichloroethene	71-131	20	16.88	84		
1,2-Dichloroethane	73-128	20	22.13	111		
1,2-Dichloroethane-d4	81-118	50	49.56	99		
4-Bromofluorobenzene	85-114	50	49.54	99		
cis-1,2-Dichloroethene	78-123	20	18.61	93		
Dibromofluoromethane	80-119	50	45.61	91		
Methylene chloride	74-124	20	19.26	96		
Toluene-d8	89-112	50	47.15	94		
Vinyl chloride	58-137	20	17.84	89		

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

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Form 4

Method Blank Summary

Volatiles by by EPA 8260

Workorder

HS23011525

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
HS23011525

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	**MBLK**	**VBLKW-230202**	**X020208.D**	**02/02/23 16:13**	**VOA6_427191**
VLCSW-230202	LCS	VLCSW-230202	X020205.D	02/02/23 15:10	VOA6_427191
Trip Blank-230125	SAMP	HS23011525-01	X020209.D	02/02/23 16:35	VOA6_427191
BatchQC	MS	HS23011294-08MS	X020217.D	02/02/23 19:23	VOA6_427191
BatchQC	MSD	HS23011294-08MSD	X020218.D	02/02/23 19:44	VOA6_427191
16WW31-230125	SAMP	HS23011525-03	X020226.D	02/02/23 22:32	VOA6_427191
16WW32-230125	SAMP	HS23011525-04	X020227.D	02/02/23 22:53	VOA6_427191
16WW33-230125	SAMP	HS23011525-05	X020228.D	02/02/23 23:14	VOA6_427191
16WW34-230125	SAMP	HS23011525-06	X020229.D	02/02/23 23:35	VOA6_427191
16WW39-230125	SAMP	HS23011525-02	X020230.D	02/02/23 23:56	VOA6_427191

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230203	X020307.D	02/03/23 12:26	VOA6_427296
VLCSW-230203	LCS	VLCSW-230203	X020305.D	02/03/23 11:44	VOA6_427296
BatchQC	MS	HS23011233-07MS	X020315.D	02/03/23 15:25	VOA6_427296
BatchQC	MSD	HS23011233-07MSD	X020316.D	02/03/23 15:46	VOA6_427296
16WW39-230125	SAMP	HS23011525-02	X020318.D	02/03/23 16:28	VOA6_427296

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Form 5

Instrument Performance Check

Volatiles by by EPA 8260

Workorder

HS23011525

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
HS23011525

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
HS23011525

RunID
VOA6_427191

Tune File X020201.D 02/02/23 13:46

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	17.5 (17.5)
75	30.0 - 60.0% of mass 95	46.9 (46.9)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.1 (7.11)
173	Less than 2.0% of mass 174	0.4 (0.507) 1
174	50.0 - 120.0% of mass 95	82.6 (82.6)
175	4.0 - 9.0% of mass 174	6.5 (7.88) 1
176	93.0 - 101.0% of mass 174	81 (98.1) 1
177	5.0 - 9.0% of mass 176	5.2 (6.38) 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	02/02/23 14:28	X020203	CCV
2	CCB	02/02/23 14:49	X020204	CCB
3	LCS	02/02/23 15:10	X020205	VLCSW-230202
4	MBLK	02/02/23 16:13	X020208	VBLKW-230202
5	SAMP	02/02/23 16:35	X020209	Trip Blank-230125
6	MS	02/02/23 19:23	X020217	ZZZZZZMS
7	MSD	02/02/23 19:44	X020218	ZZZZZZMSD
8	SAMP	02/02/23 22:32	X020226	16WW31-230125
9	SAMP	02/02/23 22:53	X020227	16WW32-230125
10	SAMP	02/02/23 23:14	X020228	16WW33-230125
11	SAMP	02/02/23 23:35	X020229	16WW34-230125
12	SAMP	02/02/23 23:56	X020230	16WW39-230125
13	CCV_EN	02/03/23 00:17	X020231	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

RunID
VOA6_427296

Tune File X020301.D 02/03/23 10:20

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	17.6 (17.6)
75	30.0 - 60.0% of mass 95	49.1 (49.1)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.6 (6.59)
173	Less than 2.0% of mass 174	0.5 (0.677) 1
174	50.0 - 120.0% of mass 95	80.5 (80.5)
175	4.0 - 9.0% of mass 174	6.1 (7.55) 1
176	93.0 - 101.0% of mass 174	79.2 (98.4) 1
177	5.0 - 9.0% of mass 176	5 (6.33) 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	02/03/23 11:02	X020303	CCV
2	CCB	02/03/23 11:23	X020304	CCB
3	LCS	02/03/23 11:44	X020305	VLCSW-230203
4	MBLK	02/03/23 12:26	X020307	VBLKW-230203
5	MS	02/03/23 15:25	X020315	ZZZZZZMS
6	MSD	02/03/23 15:46	X020316	ZZZZZZMSD
7	SAMP	02/03/23 16:28	X020318	16WW39-230125
8	CCV_EN	02/03/23 20:40	X020330	CCV-END

right solutions.
right partner.

Form 6

Initial Calibration Data

Volatiles by by EPA 8260

Workorder

HS23011525

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 HS23011525

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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Volatiles by by EPA 8260

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

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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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Project LHAAP 16 January 2023

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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	

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

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Initial Calibration Data

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

Workorder HS23011525

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 HS23011525

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 HS23011525

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

HS23011525

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 HS23011525

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 HS23011525

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 HS23011525

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

HS23011525

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

02/16/2023

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

Workorder HS23011525

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 02-FEB-2023 1428
Lab File ID X020203.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	0.00525	0.00525	0.001	-14.77845	20.0	Averaged	
1,3-Butadiene	0.34316	0.29905	0.29905	0.100	12.85358	20.0	Averaged	
Methacrylonitrile	0.35404	0.36869	0.36869	0.100	-4.13839	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06279	0.06279	0.005	-11.64577	20.0	Averaged	
Acetonitrile	0.04551	0.04605	0.04605	0.005	-1.18855	20.0	Averaged	
Allyl Chloride	0.86670	0.91522	0.91522	0.100	-5.59876	20.0	Averaged	
Propionitrile	0.05102	0.05338	0.05338	0.010	-4.63368	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12219	0.12219	0.050	-13.20876	20.0	Averaged	
Acetaldehyde	200	128	0.02143	0.001	36.11303	20.0	Linear	<-
Chloroprene	0.17001	0.13938	0.13938	0.100	18.01277	20.0	Averaged	
Ethyl Acetate	0.39016	0.42945	0.42945	0.100	-10.06934	20.0	Averaged	
Methyl Methacrylate	0.34093	0.38083	0.38083	0.100	-11.70311	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.25590	0.25590	0.100	-8.68460	20.0	Averaged	
Tetrahydrofuran	100	96.92813	0.06031	0.001	3.07187	20.0	Linear	
alpha-Methylstyrene	1.10787	1.11200	1.11200	0.100	-0.37311	20.0	Averaged	
Diisopropyl ether	1.29704	1.30745	1.30745	0.100	-0.80231	20.0	Averaged	
Epichlorohydrin	200	216	0.02425	0.001	-8.17127	20.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.44547	2.44547	0.100	-1.56621	20.0	Averaged	
Dichlorodifluoromethane	50.0	108	0.75858	0.100	-116	20.0	Linear	<-
Chloromethane	50.0	50.72926	0.45928	0.100	-1.45852	20.0	Linear	
Vinyl Chloride	0.43678	0.37268	0.37268	0.100	14.67629	20.0	Averaged	
Bromomethane	50.0	41.54621	0.27246	0.100	16.90759	20.0	Linear	
Chloroethane	0.30401	0.24769	0.24769	0.100	18.52440	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.52104	0.52104	0.100	14.75486	20.0	Averaged	
Acrolein	100	83.93679	0.02854	0.010	16.06321	20.0	Linear	
Acetone	100	110	0.15436	0.100	-10.03153	20.0	Linear	
1,1-Dichloroethene	0.37948	0.31179	0.31179	0.100	17.83618	20.0	Averaged	
Iodomethane	100	97.15779	0.48483	0.100	2.84221	20.0	Quadratic	
Acrylonitrile	0.12870	0.14059	0.14059	0.050	-9.23750	20.0	Averaged	
Methylene Chloride	0.52052	0.46878	0.46878	0.100	9.94031	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.25088	1.25088	0.100	-0.70616	20.0	Averaged	
Carbon Disulfide	0.99285	0.86593	0.86593	0.100	12.78342	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.39534	0.39534	0.100	6.91376	20.0	Averaged	
Vinyl Acetate	1.09037	1.04709	1.04709	0.010	3.96944	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 02-FEB-2023 1428
Lab File ID X020203.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	0.70667	0.70667	0.200	5.19160	20.0	Averaged	
2-Butanone	100	113	0.16839	0.100	-12.75957	20.0	Linear	
2,2-Dichloropropane	0.63286	0.60721	0.60721	0.100	4.05189	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.47700	0.47700	0.100	7.71199	20.0	Averaged	
Chloroform	0.83541	0.81183	0.81183	0.200	2.82279	20.0	Averaged	
Bromochloromethane	0.28299	0.25777	0.25777	0.100	8.91218	20.0	Averaged	
Dibromofluoromethane	50.0	46.84827	0.44994	0.100	6.30347	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.64260	0.64260	0.100	3.05076	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.35571	0.35571	0.100	-0.20616	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.43413	0.43413	0.100	-5.97163	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.34588	0.34588	0.100	8.75334	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	50.39533	0.51076	0.100	-0.79066	20.0	Linear	
Benzene	1.19399	1.16425	1.16425	0.500	2.49043	20.0	Averaged	
Trichloroethene	0.33865	0.33723	0.33723	0.200	0.41998	20.0	Averaged	
Bromodichloromethane	0.44810	0.44826	0.44826	0.200	-0.03721	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.16992	0.16992	0.001	-33.28795	20.0	Averaged	<-
1,2-Dichloropropane	0.31761	0.31294	0.31294	0.100	1.46952	20.0	Averaged	
Dibromomethane	0.21588	0.20970	0.20970	0.100	2.86222	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.29775	0.29775	0.100	-11.41258	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.55453	0.55453	0.200	-5.37380	20.0	Averaged	
Toluene-d8	1.23554	1.20964	1.20964	0.100	2.09603	20.0	Averaged	
Toluene	1.38201	1.35807	1.35807	0.400	1.73292	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.48043	0.48043	0.100	-10.00722	20.0	Averaged	
2-Hexanone	0.18183	0.21835	0.21835	0.100	-20.08572	20.0	Averaged	<-
1,1,2-Trichloroethane	0.27726	0.27877	0.27877	0.100	-0.54721	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.56930	0.56930	0.100	-4.31876	20.0	Averaged	
Dibromochloromethane	0.40016	0.41428	0.41428	0.100	-3.52934	20.0	Averaged	
Tetrachloroethene	0.28594	0.27089	0.27089	0.200	5.26347	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.36865	0.36865	0.100	-6.34515	20.0	Averaged	
1-Chlorohexane	0.24163	0.22843	0.22843	0.100	5.46529	20.0	Averaged	
Chlorobenzene	0.98026	0.96041	0.96041	0.500	2.02413	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37469	0.37469	0.100	-2.71131	20.0	Averaged	
Ethylbenzene	0.46175	0.45557	0.45557	0.100	1.33879	20.0	Averaged	
m,p-Xylenes	0.59525	0.58228	0.58228	0.100	2.17844	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 02-FEB-2023 1428
Lab File ID X020203.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	0.58177	0.58177	0.300	0.97677	20.0	Averaged	
Styrene	0.98473	1.03694	1.03694	0.300	-5.30169	20.0	Averaged	
Bromoform	0.27722	0.28933	0.28933	0.100	-4.36552	20.0	Averaged	
Isopropylbenzene	1.34224	1.34808	1.34808	0.100	-0.43499	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.80876	0.80876	0.300	-1.48474	20.0	Averaged	
4-Bromofluorobenzene	50.0	51.19768	0.47290	0.100	-2.39536	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.64937	0.64937	0.100	-16.71859	20.0	Averaged	
n-Propylbenzene	2.76956	2.90096	2.90096	0.100	-4.74453	20.0	Averaged	
Bromobenzene	0.82033	0.84735	0.84735	0.100	-3.29381	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.18547	2.18547	0.100	-6.81868	20.0	Averaged	
2-Chlorotoluene	1.81741	1.92216	1.92216	0.100	-5.76352	20.0	Averaged	
4-Chlorotoluene	2.07183	2.25298	2.25298	0.100	-8.74354	20.0	Averaged	
tert-Butylbenzene	1.67475	1.72720	1.72720	0.100	-3.13156	20.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.26399	2.26399	0.100	-5.16640	20.0	Averaged	
sec-Butylbenzene	2.22832	2.36813	2.36813	0.100	-6.27456	20.0	Averaged	
p-Isopropyltoluene	1.99679	2.16035	2.16035	0.100	-8.19144	20.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.43567	1.43567	0.600	-5.44377	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.50670	1.50670	0.400	-1.40932	20.0	Averaged	
n-Butylbenzene	50.0	48.47542	1.86356	0.500	3.04917	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.44139	1.44139	0.400	-2.79078	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	56.54391	0.14412	0.040	-13.08782	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.01913	1.01913	0.100	-15.16360	20.0	Averaged	
Hexachlorobutadiene	50.0	49.07094	0.38484	0.100	1.85812	20.0	Quadratic	
Naphthalene	2.01347	2.34879	2.34879	0.200	-16.65413	20.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	0.95068	0.95068	0.010	-12.16852	20.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.43617	0.43617	0.200	7.35194	20.0	Averaged	
Xylenes (total)	0.56589	0.54279	0.54279	0.100	4.08275	20.0	Averaged	
Cyclohexane	50.0	44.30695	0.44512	0.100	11.38610	20.0	Linear	
Freon TF	0.36703	0.29364	0.29364	0.100	19.99727	20.0	Averaged	
Methylcyclohexane	0.61204	0.68816	0.68816	0.100	-12.43678	20.0	Averaged	
Methyl Acetate	0.22499	0.24551	0.24551	0.100	-9.11941	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.04072	0.04072	0.005	-17.60450	20.0	Averaged	
Isopropyl alcohol	0.01808	0.02193	0.02193	0.005	-21.30283	20.0	Averaged	<-

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 0017
Lab File ID X020231.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	0.00548	0.00548	0.001	-19.90665	50.0	Averaged	
1,3-Butadiene	0.34316	0.31163	0.31163	0.100	9.18696	50.0	Averaged	
Methacrylonitrile	0.35404	0.38555	0.38555	0.100	-8.90072	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.06188	0.06188	0.005	-10.03570	50.0	Averaged	
Acetonitrile	0.04551	0.04711	0.04711	0.005	-3.51903	50.0	Averaged	
Allyl Chloride	0.86670	0.93441	0.93441	0.100	-7.81302	50.0	Averaged	
Propionitrile	0.05102	0.05478	0.05478	0.010	-7.38265	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12033	0.12033	0.050	-11.48233	50.0	Averaged	
Acetaldehyde	200	244	0.03784	0.001	-21.75328	50.0	Linear	
Chloroprene	0.17001	0.14730	0.14730	0.100	13.35747	50.0	Averaged	
Ethyl Acetate	0.39016	0.42636	0.42636	0.100	-9.27740	50.0	Averaged	
Methyl Methacrylate	0.34093	0.39048	0.39048	0.100	-14.53465	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.27459	0.27459	0.100	-16.62347	50.0	Averaged	
Tetrahydrofuran	100	101	0.06261	0.001	-0.75206	50.0	Linear	
alpha-Methylstyrene	1.10787	1.16580	1.16580	0.100	-5.22964	50.0	Averaged	
Diisopropyl ether	1.29704	1.31016	1.31016	0.100	-1.01153	50.0	Averaged	
Epichlorohydrin	200	224	0.02515	0.001	-12.15314	50.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.54801	2.54801	0.100	-5.82529	50.0	Averaged	
Dichlorodifluoromethane	50.0	120	0.84077	0.100	-139	50.0	Linear	
Chloromethane	50.0	49.87399	0.45119	0.100	0.25203	50.0	Linear	
Vinyl Chloride	0.43678	0.39326	0.39326	0.100	9.96229	50.0	Averaged	
Bromomethane	50.0	41.81984	0.27434	0.100	16.36032	50.0	Linear	
Chloroethane	0.30401	0.25464	0.25464	0.100	16.23868	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.57250	0.57250	0.100	6.33492	50.0	Averaged	
Acrolein	100	91.23337	0.03111	0.010	8.76663	50.0	Linear	
Acetone	100	84.96921	0.11922	0.100	15.03079	50.0	Linear	
1,1-Dichloroethene	0.37948	0.32501	0.32501	0.100	14.35234	50.0	Averaged	
Iodomethane	100	92.87765	0.46184	0.100	7.12235	50.0	Quadratic	
Acrylonitrile	0.12870	0.14253	0.14253	0.050	-10.74606	50.0	Averaged	
Methylene Chloride	0.52052	0.47767	0.47767	0.100	8.23123	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.25726	1.25726	0.100	-1.21959	50.0	Averaged	
Carbon Disulfide	0.99285	0.88337	0.88337	0.100	11.02667	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.41188	0.41188	0.100	3.01910	50.0	Averaged	
Vinyl Acetate	1.09037	0.94008	0.94008	0.010	13.78356	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 0017
Lab File ID X020231.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	0.70854	0.70854	0.200	4.94065	50.0	Averaged	
2-Butanone	100	105	0.15632	0.100	-4.88960	50.0	Linear	
2,2-Dichloropropane	0.63286	0.57501	0.57501	0.100	9.13982	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.48521	0.48521	0.100	6.12233	50.0	Averaged	
Chloroform	0.83541	0.81463	0.81463	0.200	2.48734	50.0	Averaged	
Bromochloromethane	0.28299	0.25810	0.25810	0.100	8.79705	50.0	Averaged	
Dibromofluoromethane	50.0	44.79738	0.43031	0.100	10.40524	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.67560	0.67560	0.100	-1.92671	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.38653	0.38653	0.100	-8.88934	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.44524	0.44524	0.100	-8.68308	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.37581	0.37581	0.100	0.85676	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	49.00983	0.49665	0.100	1.98034	50.0	Linear	
Benzene	1.19399	1.21350	1.21350	0.500	-1.63435	50.0	Averaged	
Trichloroethene	0.33865	0.36693	0.36693	0.200	-8.34959	50.0	Averaged	
Bromodichloromethane	0.44810	0.44530	0.44530	0.200	0.62437	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.17102	0.17102	0.001	-34.15161	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.31464	0.31464	0.100	0.93368	50.0	Averaged	
Dibromomethane	0.21588	0.21073	0.21073	0.100	2.38645	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.30354	0.30354	0.100	-13.57923	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.54067	0.54067	0.200	-2.74024	50.0	Averaged	
Toluene-d8	1.23554	1.17468	1.17468	0.100	4.92559	50.0	Averaged	
Toluene	1.38201	1.39859	1.39859	0.400	-1.19954	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.47371	0.47371	0.100	-8.46800	50.0	Averaged	
2-Hexanone	0.18183	0.20948	0.20948	0.100	-15.20808	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.28196	0.28196	0.100	-1.69721	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.56750	0.56750	0.100	-3.98881	50.0	Averaged	
Dibromochloromethane	0.40016	0.41513	0.41513	0.100	-3.74194	50.0	Averaged	
Tetrachloroethene	0.28594	0.29533	0.29533	0.200	-3.28384	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.37233	0.37233	0.100	-7.40593	50.0	Averaged	
1-Chlorohexane	0.24163	0.25312	0.25312	0.100	-4.75447	50.0	Averaged	
Chlorobenzene	0.98026	0.98461	0.98461	0.500	-0.44398	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37973	0.37973	0.100	-4.09238	50.0	Averaged	
Ethylbenzene	0.46175	0.48449	0.48449	0.100	-4.92456	50.0	Averaged	
m,p-Xylenes	0.59525	0.60771	0.60771	0.100	-2.09350	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427191

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 0017
Lab File ID X020231.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	0.60615	0.60615	0.300	-3.17385	50.0	Averaged	
Styrene	0.98473	1.05962	1.05962	0.300	-7.60472	50.0	Averaged	
Bromoform	0.27722	0.29370	0.29370	0.100	-5.94305	50.0	Averaged	
Isopropylbenzene	1.34224	1.46789	1.46789	0.100	-9.36106	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.81186	0.81186	0.300	-1.87361	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.69367	0.46824	0.100	-1.38733	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.66285	0.66285	0.100	-19.14187	50.0	Averaged	
n-Propylbenzene	2.76956	3.11307	3.11307	0.100	-12.40293	50.0	Averaged	
Bromobenzene	0.82033	0.86073	0.86073	0.100	-4.92526	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.34208	2.34208	0.100	-14.47335	50.0	Averaged	
2-Chlorotoluene	1.81741	2.01911	2.01911	0.100	-11.09802	50.0	Averaged	
4-Chlorotoluene	2.07183	2.34487	2.34487	0.100	-13.17896	50.0	Averaged	
tert-Butylbenzene	1.67475	1.91886	1.91886	0.100	-14.57576	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.40132	2.40132	0.100	-11.54582	50.0	Averaged	
sec-Butylbenzene	2.22832	2.62210	2.62210	0.100	-17.67186	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.37358	2.37358	0.100	-18.87029	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.49717	1.49717	0.600	-9.96024	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.56881	1.56881	0.400	-5.58966	50.0	Averaged	
n-Butylbenzene	50.0	52.78886	2.03569	0.500	-5.57772	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.50894	1.50894	0.400	-7.60810	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	59.08015	0.15059	0.040	-18.16030	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.09738	1.09738	0.100	-24.00509	50.0	Averaged	
Hexachlorobutadiene	50.0	55.48490	0.43576	0.100	-10.96981	50.0	Quadratic	
Naphthalene	2.01347	2.53699	2.53699	0.200	-26.00101	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	1.05489	1.05489	0.010	-24.46357	50.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.44855	0.44855	0.200	4.72258	50.0	Averaged	
Xylenes (total)	0.56589	0.57757	0.57757	0.100	-2.06378	50.0	Averaged	
Cyclohexane	50.0	50.24704	0.50655	0.100	-0.49408	50.0	Linear	
Freon TF	0.36703	0.32638	0.32638	0.100	11.07593	50.0	Averaged	
Methylcyclohexane	0.61204	0.75086	0.75086	0.100	-22.68196	50.0	Averaged	
Methyl Acetate	0.22499	0.24711	0.24711	0.100	-9.83025	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.04276	0.04276	0.005	-23.50115	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02299	0.02299	0.005	-27.14244	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427296

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 1102
Lab File ID X020303.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
1,4-Dioxane	0.00457	0.00567	0.00567	0.001	-24.16017	20.0	Averaged	<-
1,3-Butadiene	0.34316	0.29800	0.29800	0.100	13.15865	20.0	Averaged	
Methacrylonitrile	0.35404	0.38160	0.38160	0.100	-7.78413	20.0	Averaged	
Isobutyl Alcohol	0.05624	0.06206	0.06206	0.005	-10.35237	20.0	Averaged	
Acetonitrile	0.04551	0.04797	0.04797	0.005	-5.41032	20.0	Averaged	
Allyl Chloride	0.86670	0.95174	0.95174	0.100	-9.81197	20.0	Averaged	
Propionitrile	0.05102	0.05672	0.05672	0.010	-11.16776	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.12596	0.12596	0.050	-16.69960	20.0	Averaged	
Acetaldehyde	200	243	0.03784	0.001	-21.72876	20.0	Linear	<-
Ethyl Acetate	0.39016	0.43872	0.43872	0.100	-12.44677	20.0	Averaged	
Methyl Methacrylate	0.34093	0.40441	0.40441	0.100	-18.61998	20.0	Averaged	
Ethyl Methacrylate	0.23545	0.27457	0.27457	0.100	-16.61380	20.0	Averaged	
Tetrahydrofuran	100	107	0.06615	0.001	-6.62988	20.0	Linear	
alpha-Methylstyrene	1.10787	1.14572	1.14572	0.100	-3.41710	20.0	Averaged	
Diisopropyl ether	1.29704	1.33060	1.33060	0.100	-2.58673	20.0	Averaged	
Dimethyl Disulfide	0.67671	0.72590	0.72590	0.100	-7.26927	20.0	Averaged	
Epichlorohydrin	200	242	0.02718	0.001	-21.10985	20.0	Linear	<-
1,2,3-Trimethylbenzene	2.40776	2.52658	2.52658	0.100	-4.93494	20.0	Averaged	
Dichlorodifluoromethane	50.0	115	0.80791	0.100	-130	20.0	Linear	<-
Chloromethane	50.0	49.92820	0.45170	0.100	0.14360	20.0	Linear	
Vinyl Chloride	0.43678	0.37424	0.37424	0.100	14.31792	20.0	Averaged	
Bromomethane	50.0	40.13823	0.26282	0.100	19.72354	20.0	Linear	
Chloroethane	0.30401	0.25026	0.25026	0.100	17.68061	20.0	Averaged	
Trichlorofluoromethane	0.61122	0.54516	0.54516	0.100	10.80802	20.0	Averaged	
Acrolein	100	99	0.03398	0.010	0.59701	20.0	Linear	
Acetone	100	105	0.14789	0.100	-5.41157	20.0	Linear	
1,1-Dichloroethene	0.37948	0.30468	0.30468	0.100	19.71166	20.0	Averaged	
Iodomethane	100	97.26423	0.48541	0.100	2.73577	20.0	Quadratic	
Acrylonitrile	0.12870	0.14537	0.14537	0.050	-12.94764	20.0	Averaged	
Methylene Chloride	0.52052	0.45514	0.45514	0.100	12.55961	20.0	Averaged	
Methyl tert-butyl ether	1.24211	1.26332	1.26332	0.100	-1.70805	20.0	Averaged	
Carbon Disulfide	0.99285	0.87271	0.87271	0.100	12.10036	20.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.39674	0.39674	0.100	6.58463	20.0	Averaged	
Vinyl Acetate	1.09037	1.20089	1.20089	0.010	-10.13607	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427296

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 1102
Lab File ID X020303.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	0.70115	0.70115	0.200	5.93159	20.0	Averaged	
2-Butanone	100	114	0.17082	0.100	-14.34058	20.0	Linear	
2,2-Dichloropropane	0.63286	0.64572	0.64572	0.100	-2.03356	20.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.46940	0.46940	0.100	9.18173	20.0	Averaged	
Chloroform	0.83541	0.78809	0.78809	0.200	5.66408	20.0	Averaged	
Bromochloromethane	0.28299	0.25121	0.25121	0.100	11.23012	20.0	Averaged	
Dibromofluoromethane	50.0	44.47858	0.42726	0.100	11.04285	20.0	Linear	
1,1,1-Trichloroethane	0.66283	0.64741	0.64741	0.100	2.32599	20.0	Averaged	
1,1-Dichloropropene	0.35497	0.37015	0.37015	0.100	-4.27644	20.0	Averaged	
1,2-Dichloroethane	0.40967	0.43500	0.43500	0.100	-6.18472	20.0	Averaged	
Carbon Tetrachloride	0.37906	0.36478	0.36478	0.100	3.76875	20.0	Averaged	
1,2-Dichloroethane-d4	50.0	48.01777	0.48654	0.100	3.96447	20.0	Linear	
Benzene	1.19399	1.18527	1.18527	0.500	0.73001	20.0	Averaged	
Trichloroethene	0.33865	0.34147	0.34147	0.200	-0.83182	20.0	Averaged	
Bromodichloromethane	0.44810	0.43847	0.43847	0.200	2.14732	20.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.17156	0.17156	0.001	-34.57682	20.0	Averaged	<-
1,2-Dichloropropane	0.31761	0.31565	0.31565	0.100	0.61729	20.0	Averaged	
Dibromomethane	0.21588	0.20526	0.20526	0.100	4.92029	20.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.30574	0.30574	0.100	-14.40185	20.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.55373	0.55373	0.200	-5.22073	20.0	Averaged	
Toluene-d8	1.23554	1.19205	1.19205	0.100	3.51950	20.0	Averaged	
Toluene	1.38201	1.38537	1.38537	0.400	-0.24282	20.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.48293	0.48293	0.100	-10.57982	20.0	Averaged	
2-Hexanone	0.18183	0.21702	0.21702	0.100	-19.35664	20.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.27763	0.27763	0.100	-0.13664	20.0	Averaged	
1,3-Dichloropropane	0.54573	0.57086	0.57086	0.100	-4.60488	20.0	Averaged	
Dibromochloromethane	0.40016	0.41048	0.41048	0.100	-2.57947	20.0	Averaged	
Tetrachloroethene	0.28594	0.29180	0.29180	0.200	-2.04685	20.0	Averaged	
1,2-Dibromoethane	0.34665	0.36722	0.36722	0.100	-5.93456	20.0	Averaged	
1-Chlorohexane	0.24163	0.25153	0.25153	0.100	-4.09570	20.0	Averaged	
Chlorobenzene	0.98026	0.97022	0.97022	0.500	1.02424	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.37538	0.37538	0.100	-2.90139	20.0	Averaged	
Ethylbenzene	0.46175	0.47787	0.47787	0.100	-3.49073	20.0	Averaged	
m,p-Xylenes	0.59525	0.60178	0.60178	0.100	-1.09676	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427296

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 1102
Lab File ID X020303.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	0.59331	0.59331	0.300	-0.98750	20.0	Averaged	
Styrene	0.98473	1.04362	1.04362	0.300	-5.97987	20.0	Averaged	
Bromoform	0.27722	0.29034	0.29034	0.100	-4.73313	20.0	Averaged	
Isopropylbenzene	1.34224	1.41958	1.41958	0.100	-5.76235	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.84664	0.84664	0.300	-6.23840	20.0	Averaged	
4-Bromofluorobenzene	50.0	50.62253	0.46758	0.100	-1.24506	20.0	Linear	
1,2,3-Trichloropropane	0.55636	0.66231	0.66231	0.100	-19.04421	20.0	Averaged	
n-Propylbenzene	2.76956	3.05398	3.05398	0.100	-10.26954	20.0	Averaged	
Bromobenzene	0.82033	0.85617	0.85617	0.100	-4.37010	20.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.25832	2.25832	0.100	-10.37929	20.0	Averaged	
2-Chlorotoluene	1.81741	1.98277	1.98277	0.100	-9.09837	20.0	Averaged	
4-Chlorotoluene	2.07183	2.29865	2.29865	0.100	-10.94770	20.0	Averaged	
tert-Butylbenzene	1.67475	1.83100	1.83100	0.100	-9.32942	20.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.32847	2.32847	0.100	-8.16170	20.0	Averaged	
sec-Butylbenzene	2.22832	2.52501	2.52501	0.100	-13.31480	20.0	Averaged	
p-Isopropyltoluene	1.99679	2.30838	2.30838	0.100	-15.60504	20.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.46319	1.46319	0.600	-7.46489	20.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.52418	1.52418	0.400	-2.58587	20.0	Averaged	
n-Butylbenzene	50.0	52.80059	2.03615	0.500	-5.60117	20.0	Linear	
1,2-Dichlorobenzene	1.40225	1.45861	1.45861	0.400	-4.01897	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	58.30588	0.14861	0.040	-16.61177	20.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.05986	1.05986	0.100	-19.76619	20.0	Averaged	
Hexachlorobutadiene	50.0	59.69568	0.46928	0.100	-19.39136	20.0	Quadratic	
Naphthalene	2.01347	2.47910	2.47910	0.200	-23.12594	20.0	Averaged	<-
1,2,3-Trichlorobenzene	0.84755	0.98745	0.98745	0.010	-16.50662	20.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.43307	0.43307	0.200	8.01028	20.0	Averaged	
Xylenes (total)	0.56589	0.55730	0.55730	0.100	1.51872	20.0	Averaged	
Cyclohexane	50.0	50.38361	0.50796	0.100	-0.76722	20.0	Linear	
Freon TF	0.36703	0.32108	0.32108	0.100	12.52023	20.0	Averaged	
Methylcyclohexane	0.61204	0.76612	0.76612	0.100	-25.17503	20.0	Averaged	<-
Methyl Acetate	0.22499	0.23902	0.23902	0.100	-6.23616	20.0	Averaged	
Tert-butyl alcohol	0.03462	0.04242	0.04242	0.005	-22.53515	20.0	Averaged	<-
Isopropyl alcohol	0.01808	0.02339	0.02339	0.005	-29.33639	20.0	Averaged	<-

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427296

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 2040
Lab File ID X020330.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	0.00513	0.00513	0.001	-12.22421	50.0	Averaged	
1,3-Butadiene	0.34316	0.35162	0.35162	0.100	-2.46640	50.0	Averaged	
Methacrylonitrile	0.35404	0.36406	0.36406	0.100	-2.83036	50.0	Averaged	
Isobutyl Alcohol	0.05624	0.05962	0.05962	0.005	-6.00951	50.0	Averaged	
Acetonitrile	0.04551	0.04376	0.04376	0.005	3.84727	50.0	Averaged	
Allyl Chloride	0.86670	0.87638	0.87638	0.100	-1.11767	50.0	Averaged	
Propionitrile	0.05102	0.05302	0.05302	0.010	-3.92812	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.10794	0.11675	0.11675	0.050	-8.16152	50.0	Averaged	
Acetaldehyde	200	255	0.03948	0.001	-27.53083	50.0	Linear	
Ethyl Acetate	0.39016	0.42640	0.42640	0.100	-9.28866	50.0	Averaged	
Methyl Methacrylate	0.34093	0.38045	0.38045	0.100	-11.59232	50.0	Averaged	
Ethyl Methacrylate	0.23545	0.27434	0.27434	0.100	-16.51388	50.0	Averaged	
Tetrahydrofuran	100	96.99420	0.06035	0.001	3.00580	50.0	Linear	
alpha-Methylstyrene	1.10787	1.20090	1.20090	0.100	-8.39739	50.0	Averaged	
Diisopropyl ether	1.29704	1.24340	1.24340	0.100	4.13582	50.0	Averaged	
Dimethyl Disulfide	0.67671	0.68277	0.68277	0.100	-0.89608	50.0	Averaged	
Epichlorohydrin	200	206	0.02311	0.001	-3.15813	50.0	Linear	
1,2,3-Trimethylbenzene	2.40776	2.38004	2.38004	0.100	1.15091	50.0	Averaged	
Dichlorodifluoromethane	50.0	114	0.80350	0.100	-129	50.0	Linear	
Chloromethane	50.0	50.43092	0.45646	0.100	-0.86185	50.0	Linear	
Vinyl Chloride	0.43678	0.42178	0.42178	0.100	3.43459	50.0	Averaged	
Bromomethane	50.0	43.43064	0.28537	0.100	13.13871	50.0	Linear	
Chloroethane	0.30401	0.26234	0.26234	0.100	13.70611	50.0	Averaged	
Trichlorofluoromethane	0.61122	0.60328	0.60328	0.100	1.29938	50.0	Averaged	
Acrolein	100	83.96934	0.02855	0.010	16.03066	50.0	Linear	
Acetone	100	81.84767	0.11484	0.100	18.15233	50.0	Linear	
1,1-Dichloroethene	0.37948	0.33414	0.33414	0.100	11.94827	50.0	Averaged	
Iodomethane	100	90.74382	0.45041	0.100	9.25618	50.0	Quadratic	
Acrylonitrile	0.12870	0.13757	0.13757	0.050	-6.88583	50.0	Averaged	
Methylene Chloride	0.52052	0.48337	0.48337	0.100	7.13801	50.0	Averaged	
Methyl tert-butyl ether	1.24211	1.19572	1.19572	0.100	3.73499	50.0	Averaged	
Carbon Disulfide	0.99285	0.93588	0.93588	0.100	5.73853	50.0	Averaged	
trans-1,2-Dichloroethene	0.42470	0.42049	0.42049	0.100	0.99132	50.0	Averaged	
Vinyl Acetate	1.09037	0.81175	0.81175	0.010	25.55238	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427296

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 2040
Lab File ID X020330.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	0.72742	0.72742	0.200	2.40784	50.0	Averaged	
2-Butanone	100	103	0.15331	0.100	-2.93072	50.0	Linear	
2,2-Dichloropropane	0.63286	0.59637	0.59637	0.100	5.76440	50.0	Averaged	
cis-1,2-Dichloroethene	0.51686	0.49864	0.49864	0.100	3.52545	50.0	Averaged	
Chloroform	0.83541	0.83700	0.83700	0.200	-0.19007	50.0	Averaged	
Bromochloromethane	0.28299	0.26330	0.26330	0.100	6.95930	50.0	Averaged	
Dibromofluoromethane	50.0	44.39622	0.42647	0.100	11.20756	50.0	Linear	
1,1,1-Trichloroethane	0.66283	0.69865	0.69865	0.100	-5.40488	50.0	Averaged	
1,1-Dichloropropene	0.35497	0.40455	0.40455	0.100	-13.96613	50.0	Averaged	
1,2-Dichloroethane	0.40967	0.43693	0.43693	0.100	-6.65433	50.0	Averaged	
Carbon Tetrachloride	0.37906	0.39256	0.39256	0.100	-3.56172	50.0	Averaged	
1,2-Dichloroethane-d4	50.0	48.62223	0.49270	0.100	2.75554	50.0	Linear	
Benzene	1.19399	1.22867	1.22867	0.500	-2.90450	50.0	Averaged	
Trichloroethene	0.33865	0.38713	0.38713	0.200	-14.31403	50.0	Averaged	
Bromodichloromethane	0.44810	0.45146	0.45146	0.200	-0.75114	50.0	Averaged	
2-Chloroethylvinyl ether	0.12748	0.16729	0.16729	0.001	-31.22510	50.0	Averaged	
1,2-Dichloropropane	0.31761	0.31856	0.31856	0.100	-0.29920	50.0	Averaged	
Dibromomethane	0.21588	0.20901	0.20901	0.100	3.18382	50.0	Averaged	
4-Methyl-2-Pentanone	0.26725	0.30388	0.30388	0.100	-13.70683	50.0	Averaged	
cis-1,3-Dichloropropene	0.52625	0.55092	0.55092	0.200	-4.68841	50.0	Averaged	
Toluene-d8	1.23554	1.17558	1.17558	0.100	4.85244	50.0	Averaged	
Toluene	1.38201	1.44092	1.44092	0.400	-4.26210	50.0	Averaged	
trans-1,3-Dichloropropene	0.43673	0.46984	0.46984	0.100	-7.58120	50.0	Averaged	
2-Hexanone	0.18183	0.20937	0.20937	0.100	-15.14940	50.0	Averaged	
1,1,2-Trichloroethane	0.27726	0.28439	0.28439	0.100	-2.57211	50.0	Averaged	
1,3-Dichloropropane	0.54573	0.57808	0.57808	0.100	-5.92771	50.0	Averaged	
Dibromochloromethane	0.40016	0.41954	0.41954	0.100	-4.84374	50.0	Averaged	
Tetrachloroethene	0.28594	0.30979	0.30979	0.200	-8.33790	50.0	Averaged	
1,2-Dibromoethane	0.34665	0.37336	0.37336	0.100	-7.70379	50.0	Averaged	
1-Chlorohexane	0.24163	0.26312	0.26312	0.100	-8.89405	50.0	Averaged	
Chlorobenzene	0.98026	1.00107	1.00107	0.500	-2.12316	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36480	0.38549	0.38549	0.100	-5.67107	50.0	Averaged	
Ethylbenzene	0.46175	0.50184	0.50184	0.100	-8.68193	50.0	Averaged	
m,p-Xylenes	0.59525	0.62897	0.62897	0.100	-5.66418	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23011525

RunID VOA6_427296

Volatiles by by EPA 8260

Instrument ID voa6.i Injection Date 03-FEB-2023 2040
Lab File ID X020330.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	0.61720	0.61720	0.300	-5.05435	50.0	Averaged	
Styrene	0.98473	1.07701	1.07701	0.300	-9.37115	50.0	Averaged	
Bromoform	0.27722	0.29104	0.29104	0.100	-4.98267	50.0	Averaged	
Isopropylbenzene	1.34224	1.51608	1.51608	0.100	-12.95162	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.79693	0.78679	0.78679	0.300	1.27184	50.0	Averaged	
4-Bromofluorobenzene	50.0	49.49678	0.45717	0.100	1.00644	50.0	Linear	
1,2,3-Trichloropropane	0.55636	0.65145	0.65145	0.100	-17.09321	50.0	Averaged	
n-Propylbenzene	2.76956	3.24977	3.24977	0.100	-17.33884	50.0	Averaged	
Bromobenzene	0.82033	0.88388	0.88388	0.100	-7.74727	50.0	Averaged	
1,3,5-Trimethylbenzene	2.04596	2.42134	2.42134	0.100	-18.34713	50.0	Averaged	
2-Chlorotoluene	1.81741	2.08134	2.08134	0.100	-14.52203	50.0	Averaged	
4-Chlorotoluene	2.07183	2.41537	2.41537	0.100	-16.58167	50.0	Averaged	
tert-Butylbenzene	1.67475	1.99180	1.99180	0.100	-18.93121	50.0	Averaged	
1,2,4-Trimethylbenzene	2.15277	2.46326	2.46326	0.100	-14.42303	50.0	Averaged	
sec-Butylbenzene	2.22832	2.72884	2.72884	0.100	-22.46188	50.0	Averaged	
p-Isopropyltoluene	1.99679	2.42762	2.42762	0.100	-21.57625	50.0	Averaged	
1,3-Dichlorobenzene	1.36155	1.52964	1.52964	0.600	-12.34500	50.0	Averaged	
1,4-Dichlorobenzene	1.48576	1.58433	1.58433	0.400	-6.63396	50.0	Averaged	
n-Butylbenzene	50.0	54.55835	2.10630	0.500	-9.11670	50.0	Linear	
1,2-Dichlorobenzene	1.40225	1.52309	1.52309	0.400	-8.61779	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	56.98634	0.14524	0.040	-13.97268	50.0	Linear	
1,2,4-Trichlorobenzene	0.88494	1.09305	1.09305	0.100	-23.51566	50.0	Averaged	
Hexachlorobutadiene	50.0	57.05138	0.44822	0.100	-14.10277	50.0	Quadratic	
Naphthalene	2.01347	2.43331	2.43331	0.200	-20.85166	50.0	Averaged	
1,2,3-Trichlorobenzene	0.84755	1.01156	1.01156	0.010	-19.35142	50.0	Averaged	
1,2-Dichloroethylene (total	0.47078	0.45957	0.45957	0.200	2.38240	50.0	Averaged	
Xylenes (total)	0.56589	0.58275	0.58275	0.100	-2.97843	50.0	Averaged	
Cyclohexane	50.0	53.62559	0.54148	0.100	-7.25118	50.0	Linear	
Freon TF	0.36703	0.34423	0.34423	0.100	6.21136	50.0	Averaged	
Methylcyclohexane	0.61204	0.67519	0.67519	0.100	-10.31813	50.0	Averaged	
Methyl Acetate	0.22499	0.23991	0.23991	0.100	-6.63169	50.0	Averaged	
Tert-butyl alcohol	0.03462	0.03934	0.03934	0.005	-13.63045	50.0	Averaged	
Isopropyl alcohol	0.01808	0.02131	0.02131	0.005	-17.88269	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by by EPA 8260

Workorder

HS23011525

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
HS23011525

RunID
VOA6_427191

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X020203	583476	#	4.18	#	880046	#	4.96	#	820599	#	7.67	#	451653	#	9.66	#
CCB	X020204	730612		4.18		1012385		4.96		908237		7.67		456862		9.66	
VLCSW-230202	X020205	594963		4.18		872700		4.97		823868		7.67		462872		9.66	
VBLKW-230202	X020208	709559		4.17		999005		4.96		876582		7.67		449203		9.66	
HS23011525-01	X020209	714642		4.17		1000725		4.97		884781		7.67		459330		9.66	
ZZZZZZMS	X020217	708429		4.18		994906		4.96		901784		7.67		491734		9.66	
ZZZZZZMSD	X020218	712554		4.18		1000871		4.96		904027		7.67		490817		9.66	
HS23011525-03	X020226	718176		4.18		1009663		4.97		884634		7.67		450225		9.66	
HS23011525-04	X020227	717575		4.18		1001948		4.96		889646		7.67		461114		9.66	
HS23011525-05	X020228	714792		4.18		1002352		4.96		897570		7.67		451626		9.66	
HS23011525-06	X020229	723680		4.18		1007550		4.96		891060		7.67		472734		9.66	
HS23011525-02	X020230	720373		4.18		1007923		4.96		885868		7.67		455447		9.66	
CCV-END	X020231	569105		4.17		851640		4.96		810096		7.67		447952		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
HS23011525

RunID
VOA6_427296

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X020303	594086	#	4.17	#	881142	#	4.96	#	819861	#	7.67	#	452221	#	9.66	#
CCB	X020304	723831		4.18		1024527		4.96		910274		7.67		466160		9.66	
VLCSW-230203	X020305	593012		4.17		878233		4.96		839324		7.67		463946		9.66	
VBLKW-230203	X020307	725153		4.17		1022005		4.96		915781		7.67		467996		9.66	
ZZZZZZMS	X020315	718397		4.17		1018697		4.97		918895		7.67		500812		9.66	
ZZZZZZMSD	X020316	713045		4.17		1009740		4.96		910244		7.67		494253		9.66	
HS23011525-02	X020318	707273		4.17		1007735		4.96		883058		7.67		451272		9.66	
CCV-END	X020330	581666		4.17		869515		4.96		810676		7.67		445256		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

HS23011525

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
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
HS23011525

Volatiles by EPA 8260

RUNID
VOA6_427191

Run ID VOA6_427191 **Start Date** 02/02/23 **EndDate** 02/02/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X020203.D	02/02/23 14:28	1
CCB	CCB	CCB	X020204.D	02/02/23 14:49	1
VLCSW-230202	LCS	VLCSW-230202	X020205.D	02/02/23 15:10	1
VBLKW-230202	MBLK	VBLKW-230202	X020208.D	02/02/23 16:13	1
Trip Blank-230125	SAMP	HS23011525-01	X020209.D	02/02/23 16:35	1
BatchQC	MS	HS23011294-08MS	X020217.D	02/02/23 19:23	1
BatchQC	MSD	HS23011294-08MSD	X020218.D	02/02/23 19:44	1
16WW31-230125	SAMP	HS23011525-03	X020226.D	02/02/23 22:32	1
16WW32-230125	SAMP	HS23011525-04	X020227.D	02/02/23 22:53	1
16WW33-230125	SAMP	HS23011525-05	X020228.D	02/02/23 23:14	1
16WW34-230125	SAMP	HS23011525-06	X020229.D	02/02/23 23:35	1
16WW39-230125	SAMP	HS23011525-02	X020230.D	02/02/23 23:56	5

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23011525

Volatiles by EPA 8260

RUNID
VOA6_427296

Run ID VOA6_427296 **Start Date** 02/03/23 **EndDate** 02/03/23 **Matrix** Aqueous

Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
CCV	CCV	CCV	X020303.D	02/03/23 11:02	1
CCB	CCB	CCB	X020304.D	02/03/23 11:23	1
VLCSW-230203	LCS	VLCSW-230203	X020305.D	02/03/23 11:44	1
VBLKW-230203	MBLK	VBLKW-230203	X020307.D	02/03/23 12:26	1
BatchQC	MS	HS23011233-07MS	X020315.D	02/03/23 15:25	1
BatchQC	MSD	HS23011233-07MSD	X020316.D	02/03/23 15:46	1
16WW39-230125	SAMP	HS23011525-02	X020318.D	02/03/23 16:28	1

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Raw Data VOA6 424237

Volatiles by by EPA 8260

Workorder

HS23011525

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)	FINAL (ug/l)	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

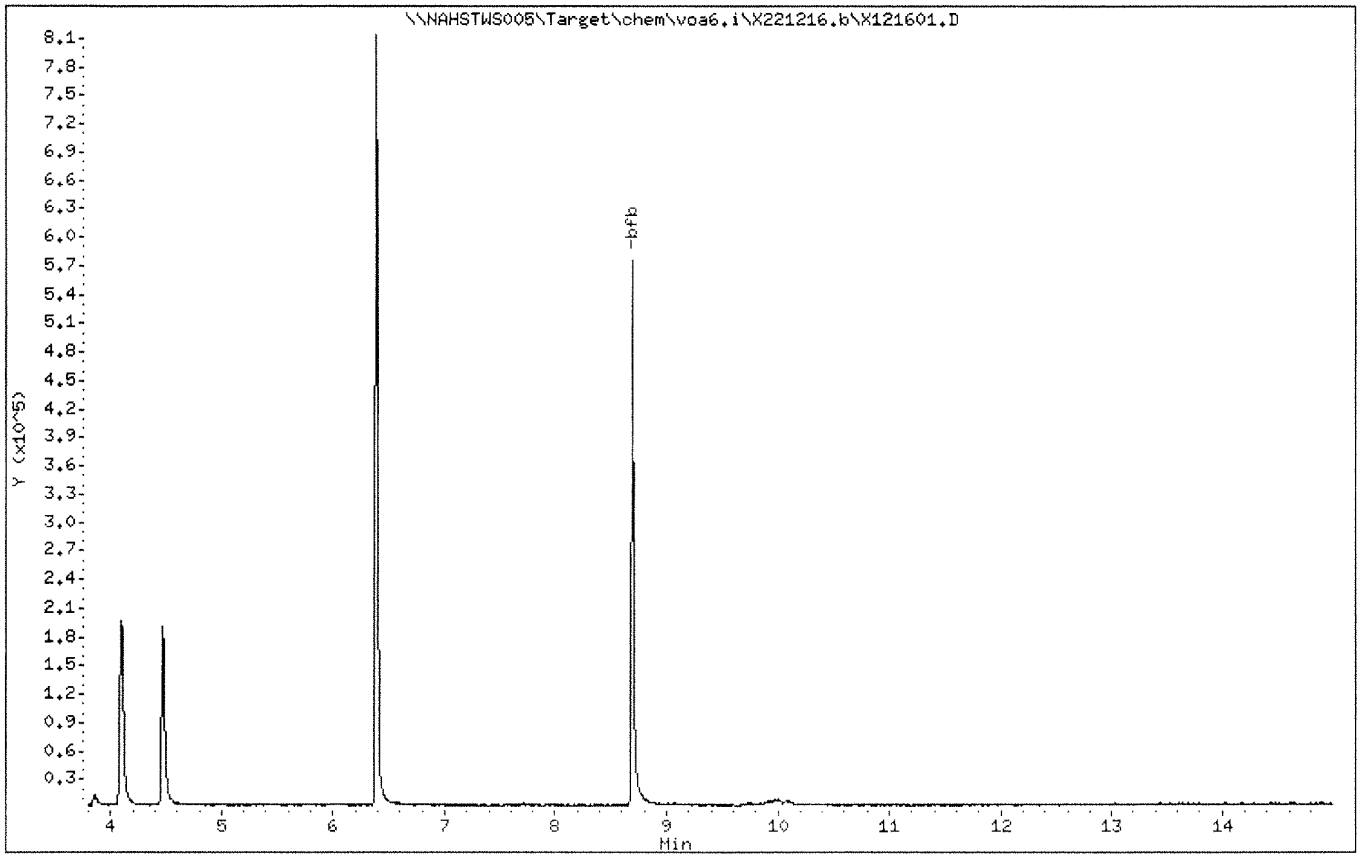
Date : 16-DEC-2022 11:17

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

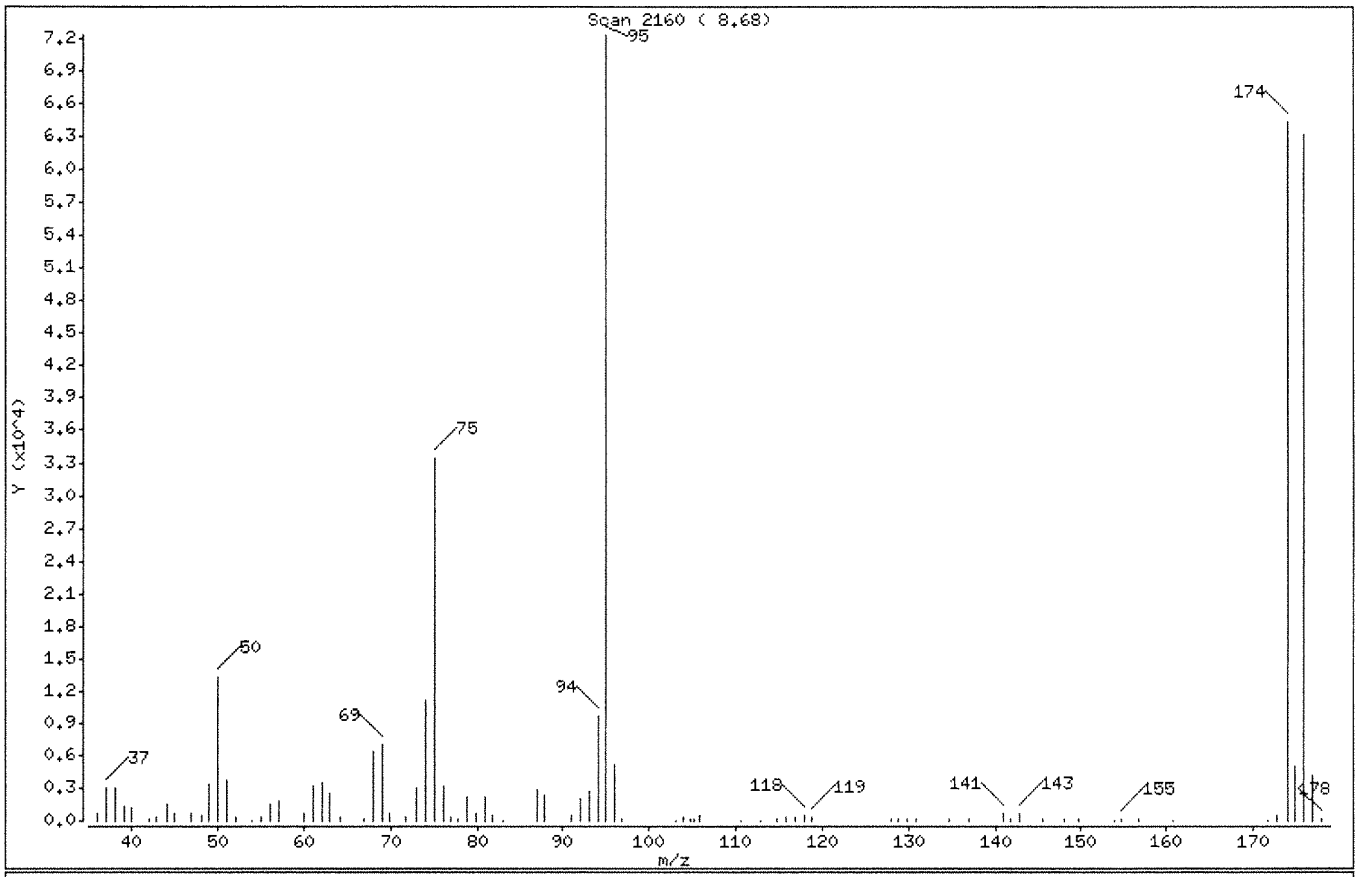
Client ID: BFB Instrument: voa6.i

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
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)

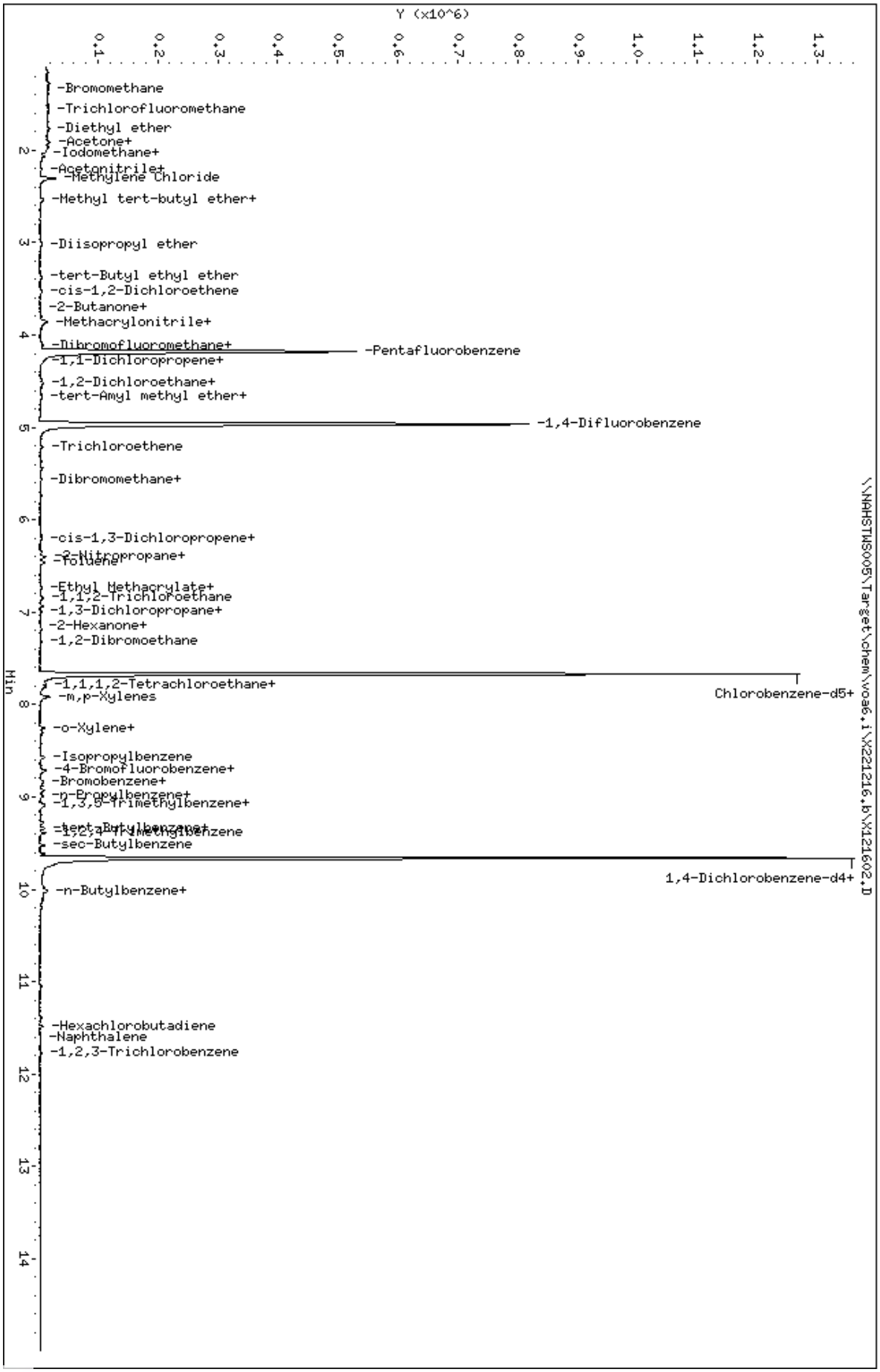
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	15 Iodomethane	142	2.026	2.026	(0.485)	1106	0.50000	3.56(T)
	17 Methylene Chloride	84	2.292	2.292	(0.549)	1436	0.25000	0.29(M)
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	2787	0.25000	0.24
	19 Carbon Disulfide	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

	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

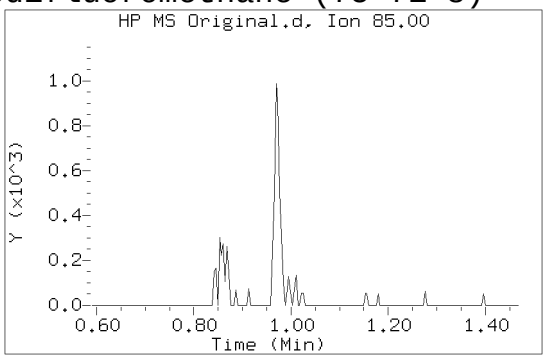
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Dichlorodifluoromethane (75-71-8)

Reason Code:

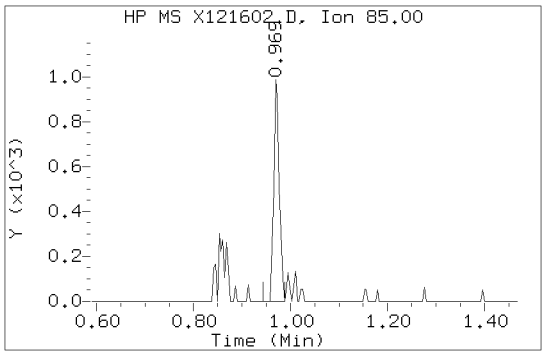
BEFORE

MASS
50
AREA
1420
HEIGHT
1809
16-Dec-2022
11:54
ALSHS
Server



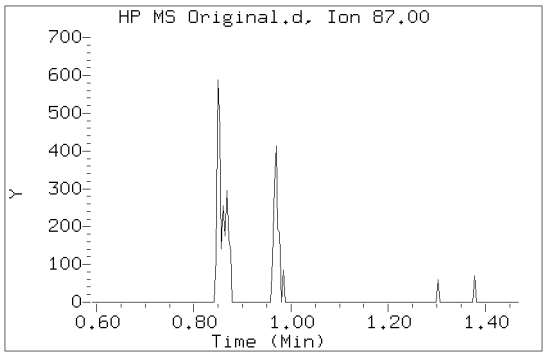
AFTER

MASS
85
AREA
801
HEIGHT
987
27-Dec-2022
16:07
ALSHS
Ser



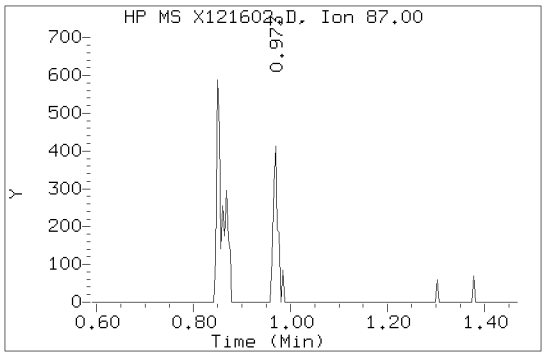
BEFORE

MASS
52
AREA
731
HEIGHT
740
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
87
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

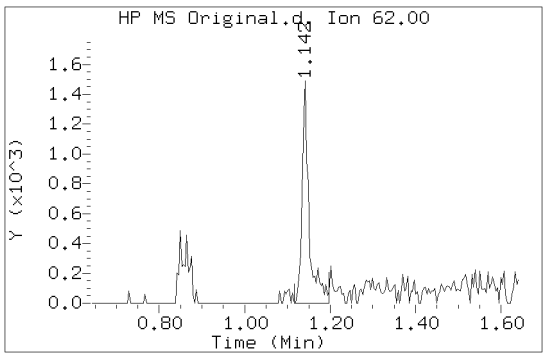


Vinyl Chloride (75-01-4)

Reason Code:

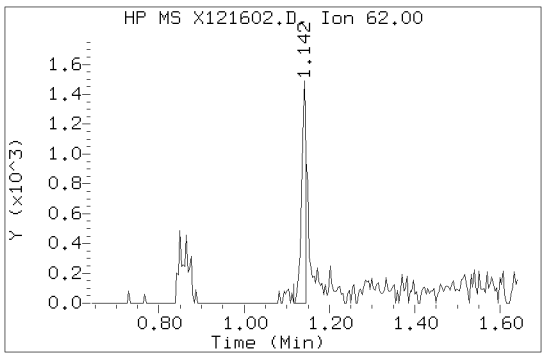
BEFORE

MASS
94
AREA
1572
HEIGHT
983
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
62
AREA
1134
HEIGHT
1490
27-Dec-2022
16:07
ALSHS
Ser



BEFORE

MASS
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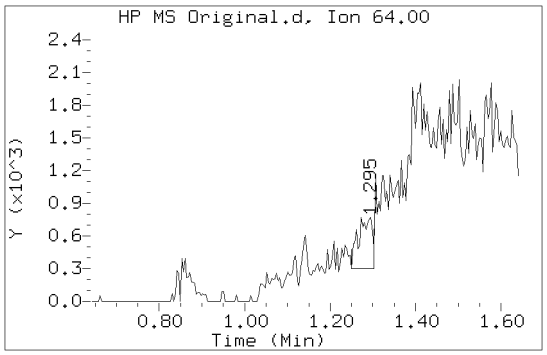
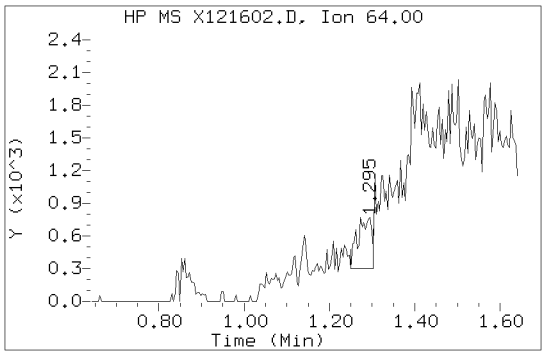
AREA
1330
HEIGHT
961
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
64
AREA
1053
HEIGHT
470
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

Bromomethane (74-83-9)

Reason Code:

BEFORE
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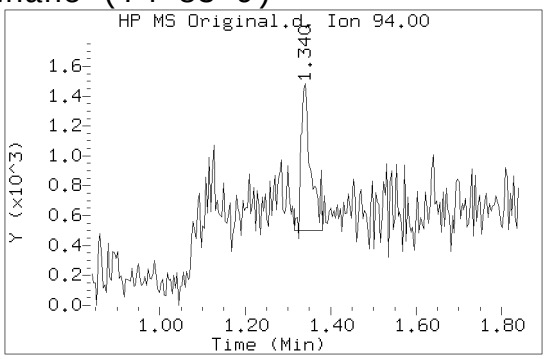
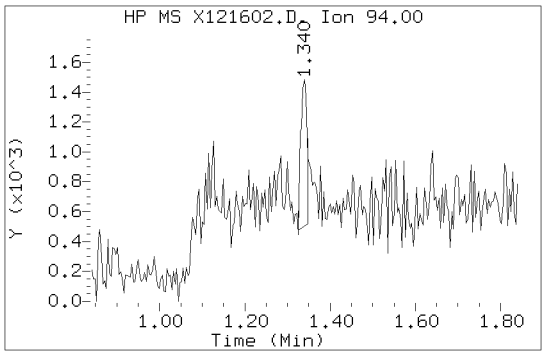
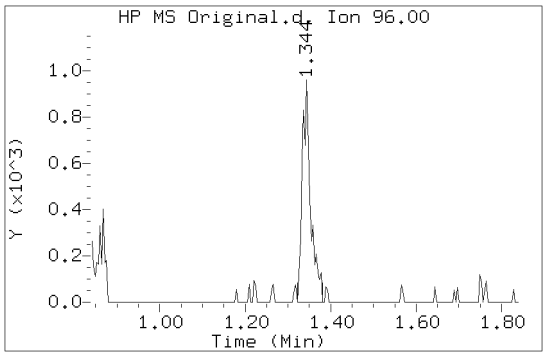
64
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



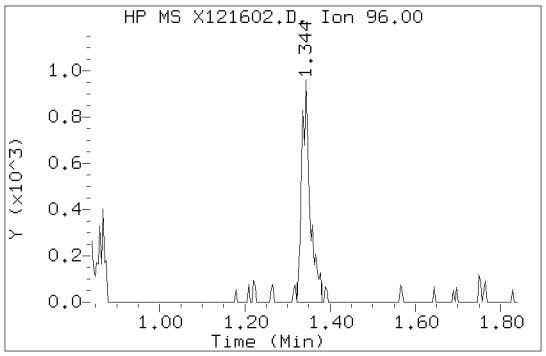
AFTER
MASS
94
AREA
1009
HEIGHT
977
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
66
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



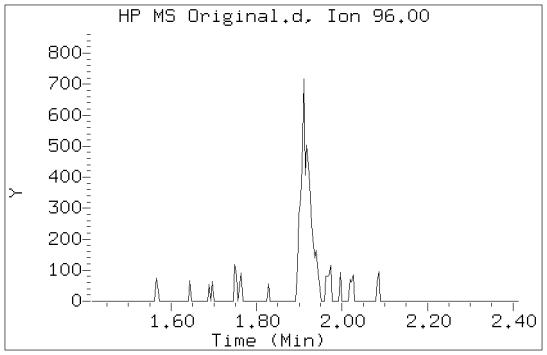
AFTER
MASS
96
AREA
1330
HEIGHT
961
27-Dec-2022
16:07
ALSHS
Ser



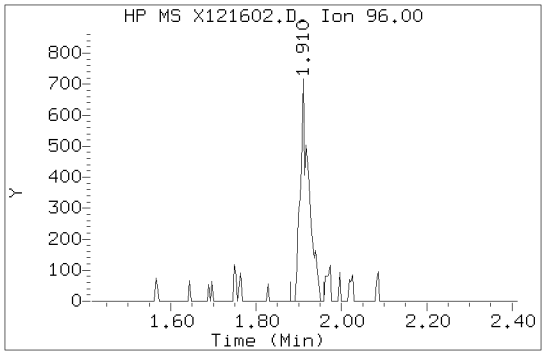
1,1-Dichloroethene (75-35-4)

Reason Code:

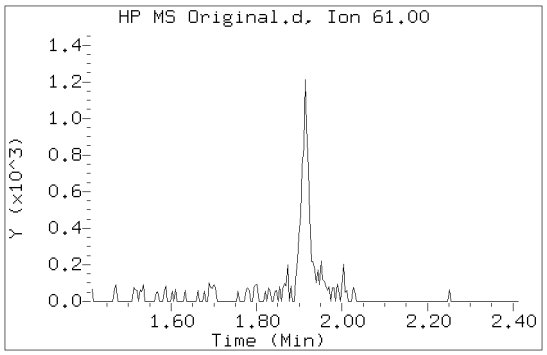
BEFORE
MASS
142
AREA
1106
HEIGHT
699
16-Dec-2022
11:54
ALSHS
Server



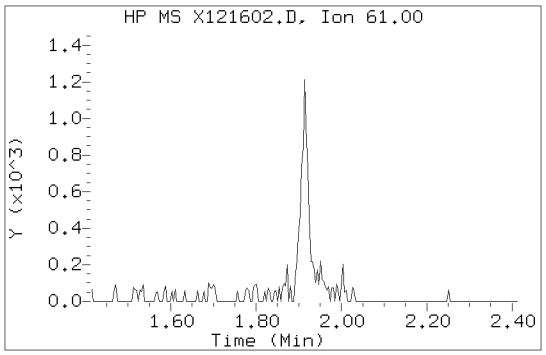
AFTER
MASS
96
AREA
1010
HEIGHT
717
27-Dec-2022
16:07
ALSHS
Ser



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



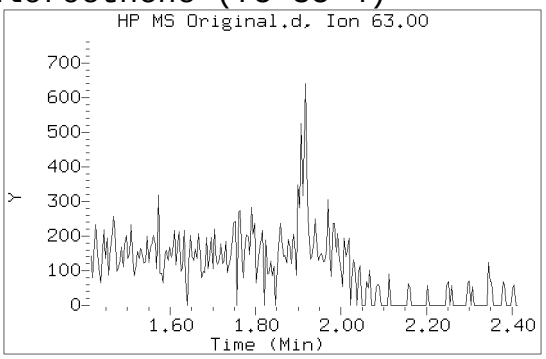
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

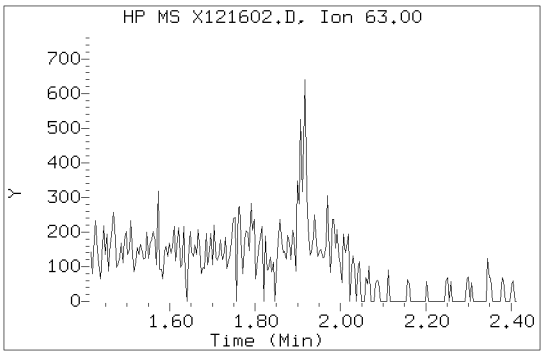
BEFORE

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

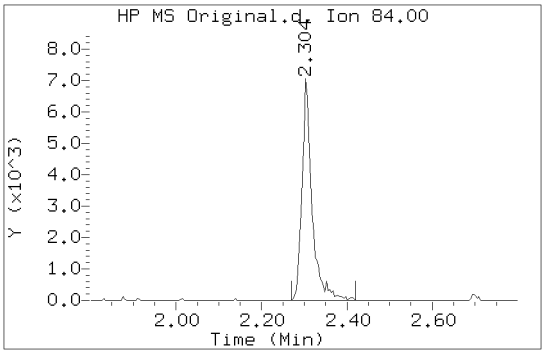


Methylene Chloride (75-09-2)

Reason Code:

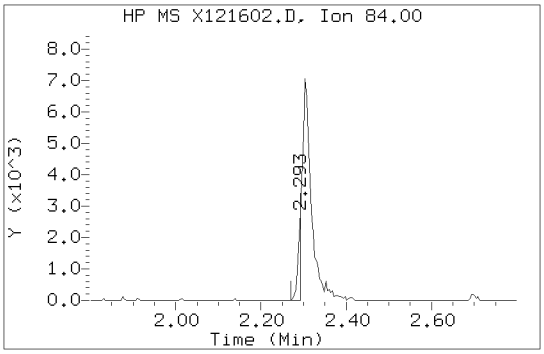
BEFORE

MASS
84
AREA
11777
HEIGHT
7057
16-Dec-2022
11:54
ALSHS
Server



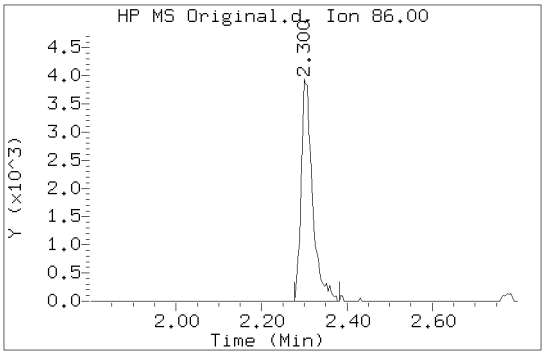
AFTER

MASS
84
AREA
1436
HEIGHT
2786
27-Dec-2022
16:07
ALSHS
Ser



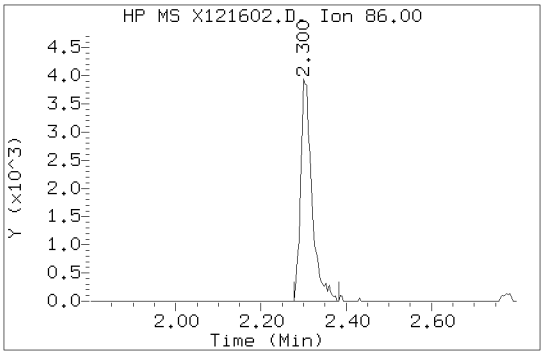
BEFORE

MASS
86
AREA
7453
HEIGHT
3944
16-Dec-2022
11:54
ALSHS
Server



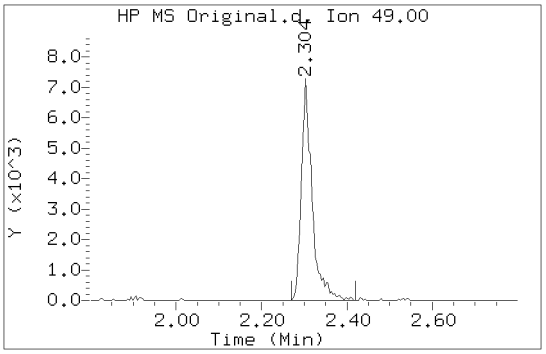
AFTER

MASS
86
AREA
7453
HEIGHT
3944
27-Dec-2022
16:07
ALSHS
Ser



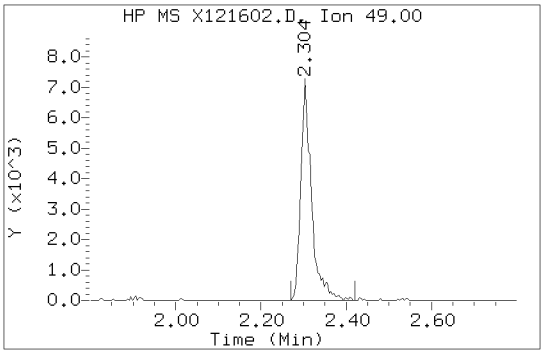
BEFORE

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



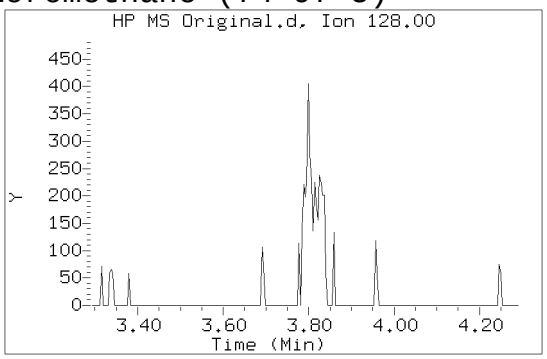
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Bromochloromethane (74-97-5)

Reason Code:

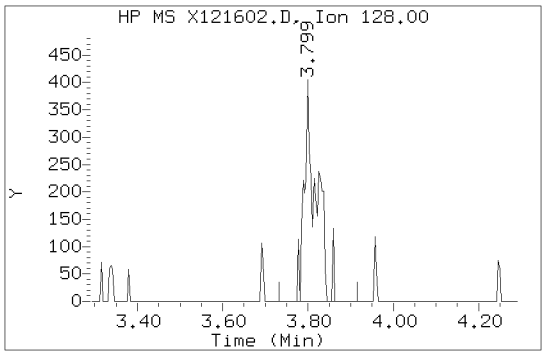
BEFORE

MASS
96
AREA
1402
HEIGHT
854
16-Dec-2022
11:54
ALSHS
Server



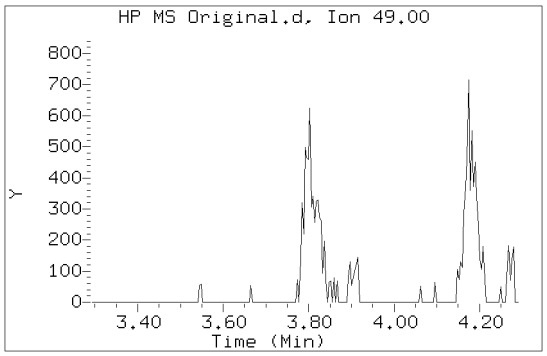
AFTER

MASS
128
AREA
802
HEIGHT
405
27-Dec-2022
16:07
ALSHS
Ser



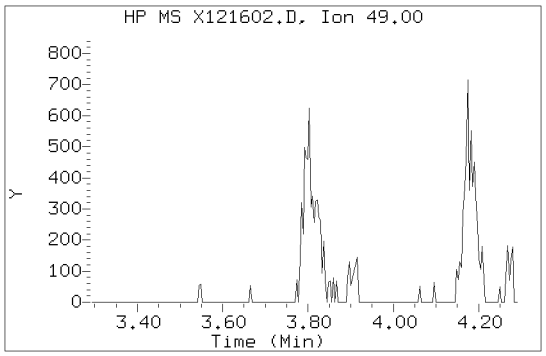
BEFORE

MASS
61
AREA
1975
HEIGHT
828
16-Dec-2022
11:54
ALSHS
Server



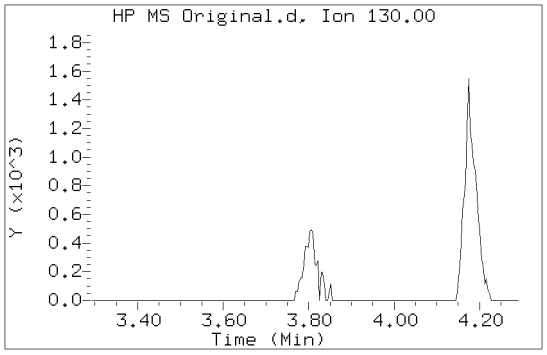
AFTER

MASS
49
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



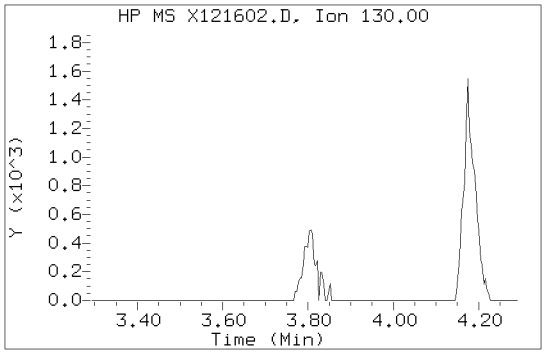
BEFORE

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

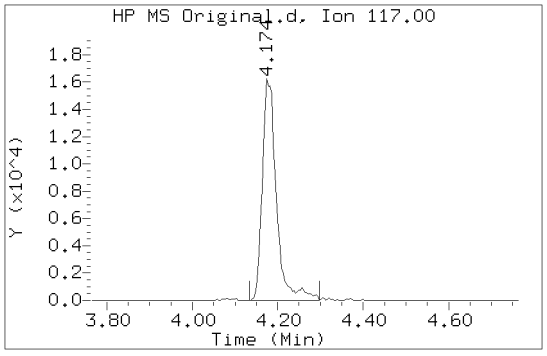


Carbon Tetrachloride (56-23-5)

Reason Code:

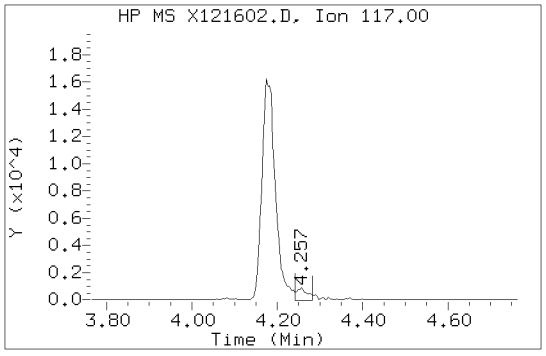
BEFORE

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



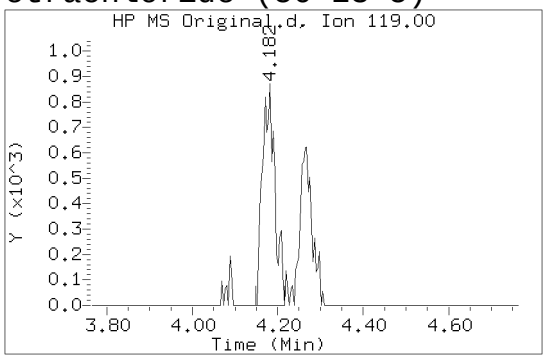
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Carbon Tetrachloride (56-23-5)

Reason Code:

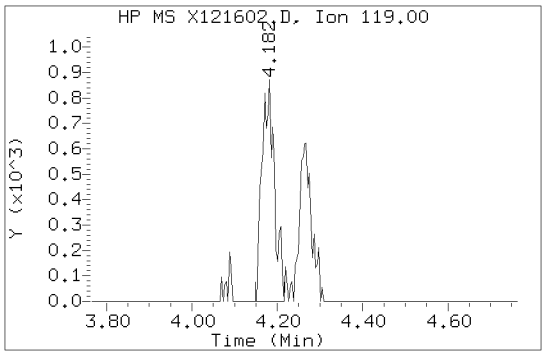
BEFORE

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

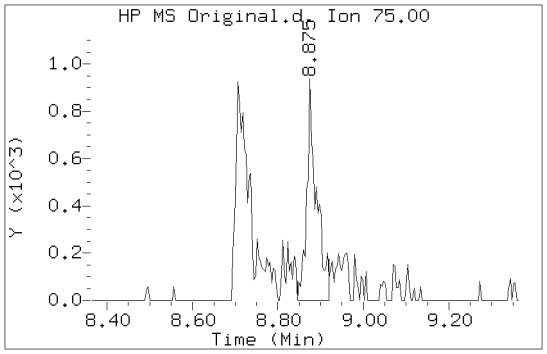


1,2,3-Trichloropropane (96-18-4)

Reason Code:

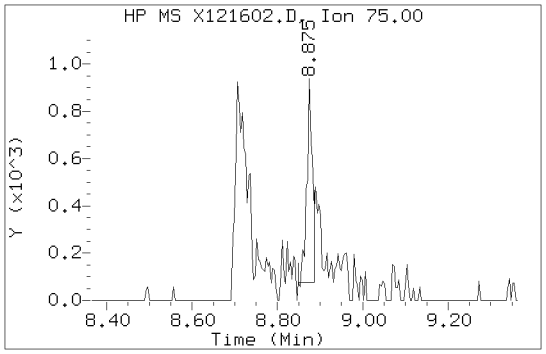
BEFORE

MASS
152
AREA
348702
HEIGHT
242350
16-Dec-2022
11:54
ALSHS
Server



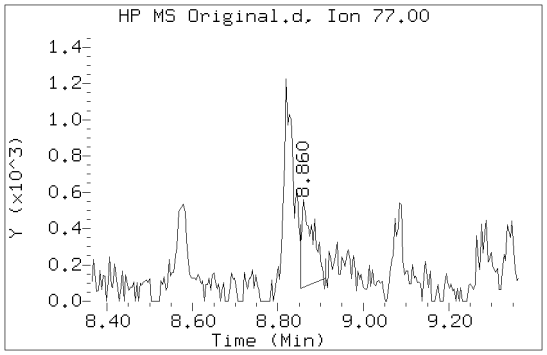
AFTER

MASS
75
AREA
766
HEIGHT
862
27-Dec-2022
16:07
ALSHS
Ser



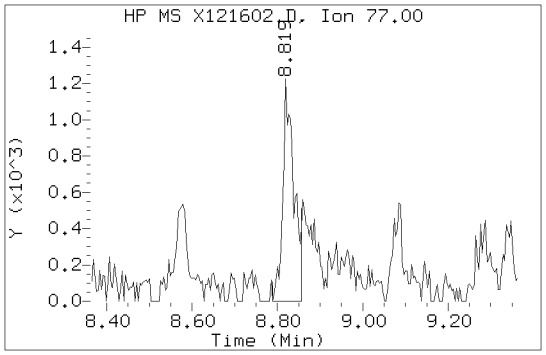
BEFORE

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

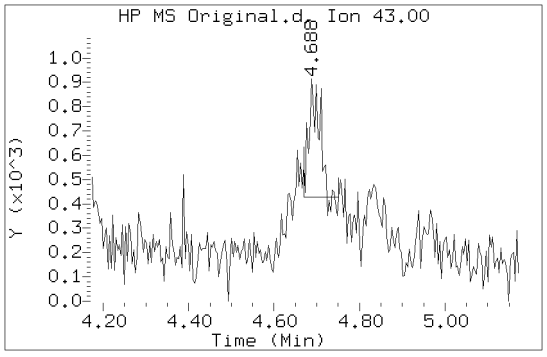


Isobutyl Alcohol (78-83-1)

Reason Code:

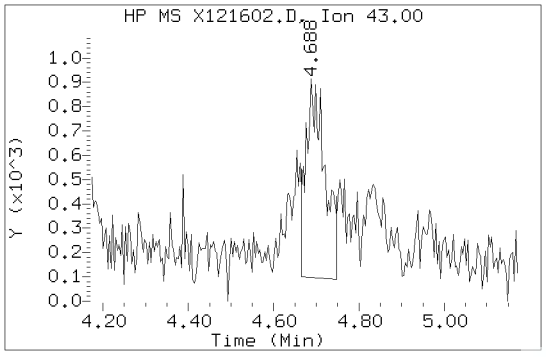
BEFORE

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

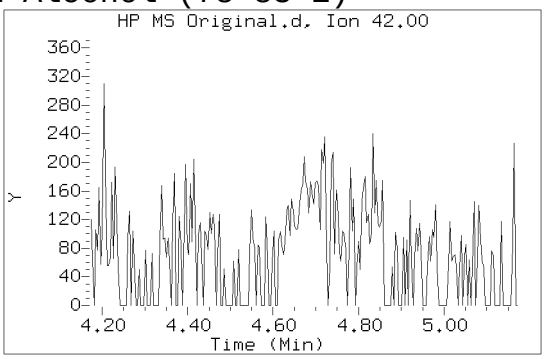


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Isobutyl Alcohol (78-83-1)

BEFORE

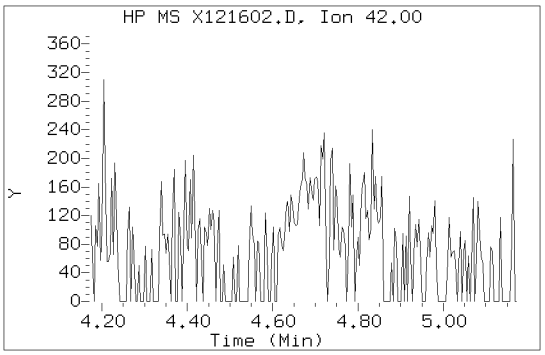
MASS
77
AREA
888
HEIGHT
483
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

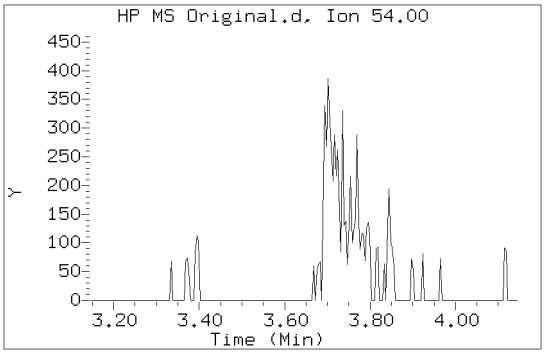
MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Propionitrile (107-12-0)

BEFORE

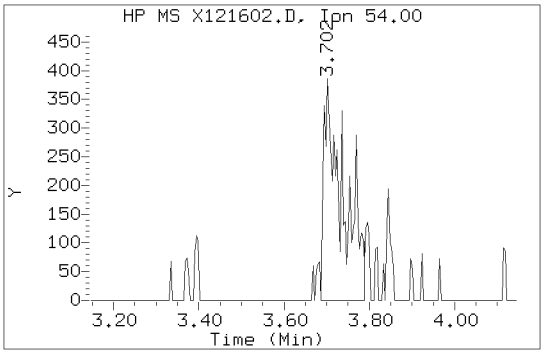
MASS
91
AREA
3881
HEIGHT
1822
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

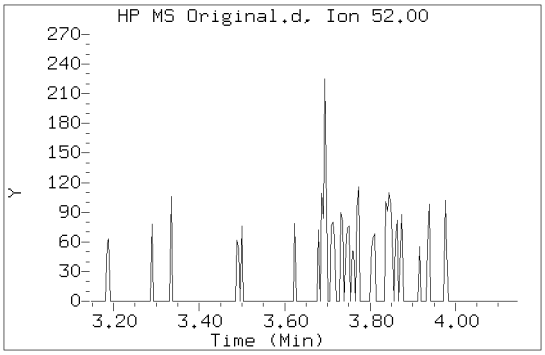
AFTER

MASS
54
AREA
1165
HEIGHT
386
27-Dec-2022
16:07
ALSHS
Ser



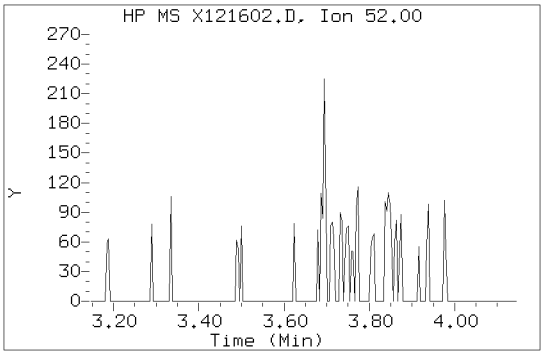
BEFORE

MASS
126
AREA
1511
HEIGHT
914
16-Dec-2022
11:54
ALSHS
Server



AFTER

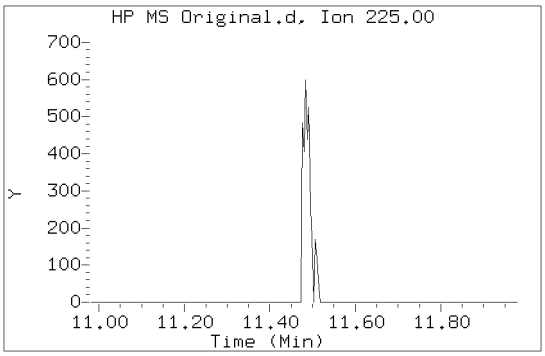
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser



Hexachlorobutadiene (87-68-3)

BEFORE

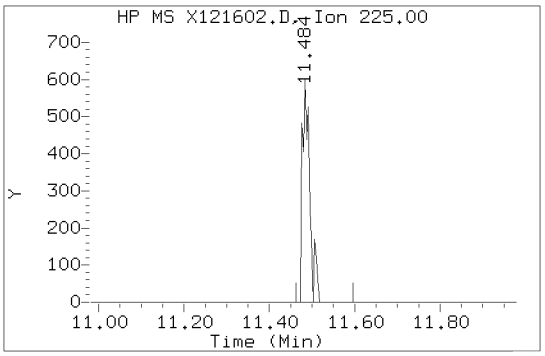
MASS
155
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



Reason Code:

AFTER

MASS
225
AREA
726
HEIGHT
599
27-Dec-2022
16:07
ALSHS
Ser

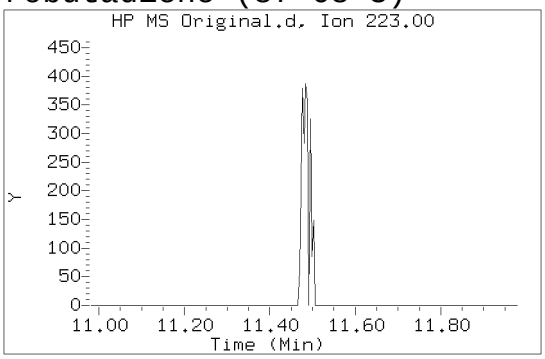


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

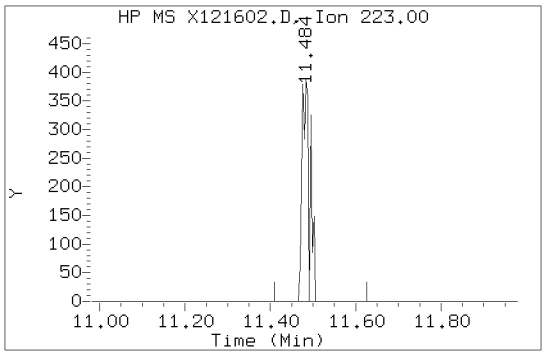
Hexachlorobutadiene (87-68-3)

Reason Code:

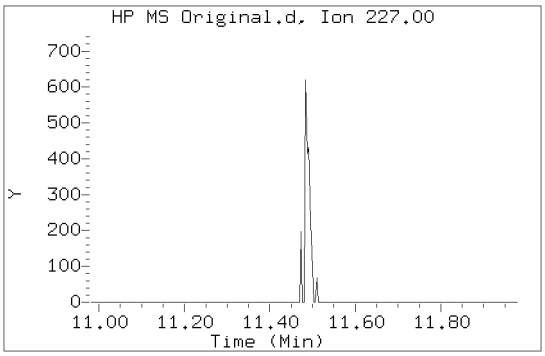
BEFORE
MASS
157
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



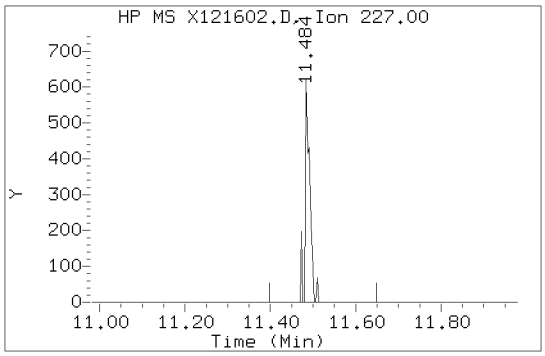
AFTER
MASS
223
AREA
502
HEIGHT
387
27-Dec-2022
16:07
ALSHS
Ser



BEFORE
MASS
75
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



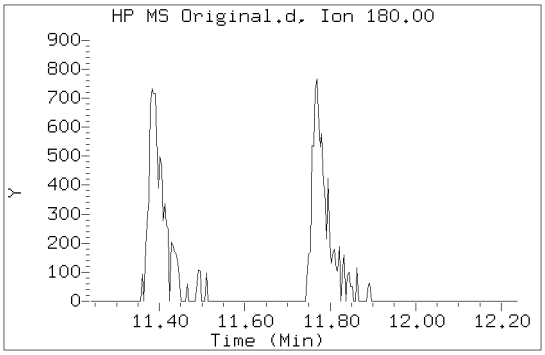
AFTER
MASS
227
AREA
469
HEIGHT
620
27-Dec-2022
16:07
ALSHS
Ser



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
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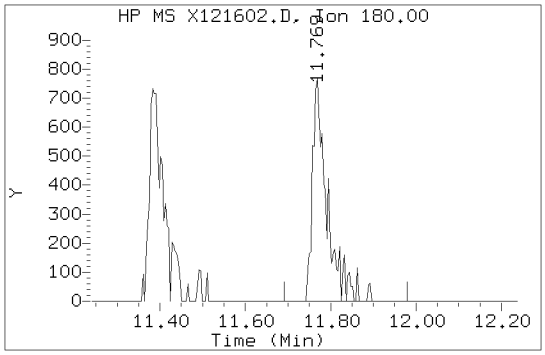
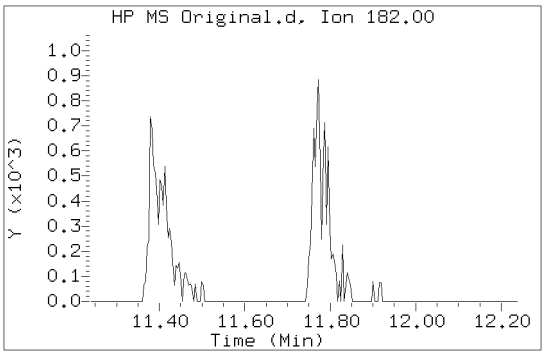
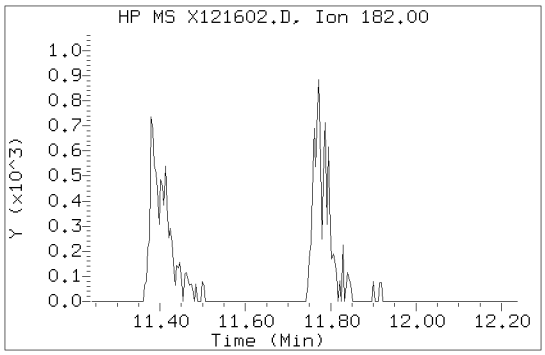
AREA
1816
HEIGHT
766
27-Dec-2022
16:07
ALSHS
Ser



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



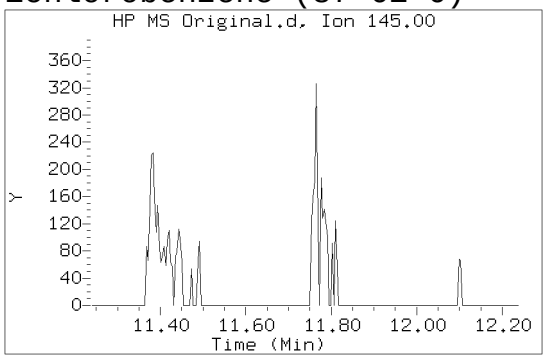
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

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
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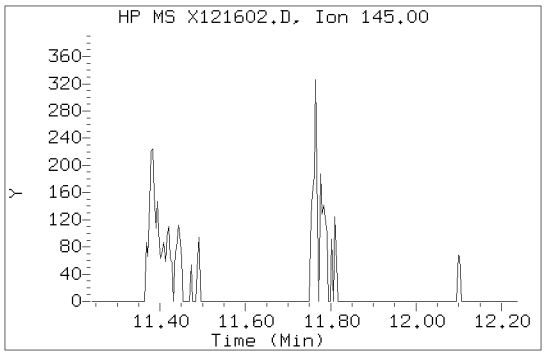
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

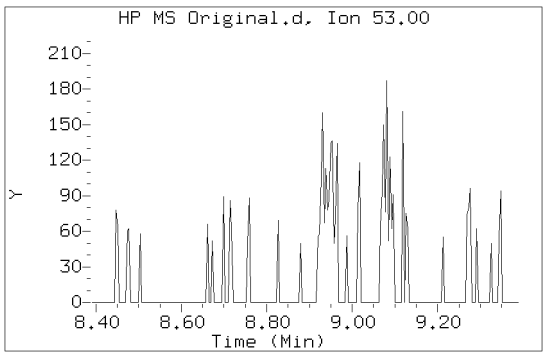


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

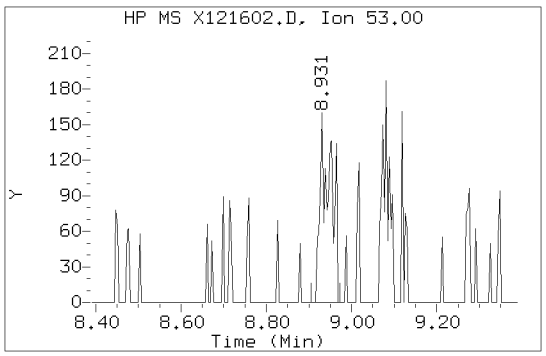
BEFORE

MASS
53
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



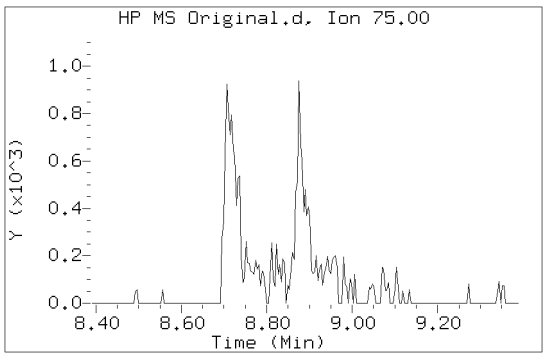
AFTER

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
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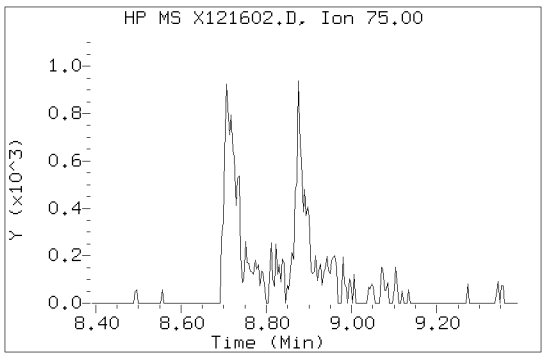
HEIGHT
0
27-Dec-2022
16:07
ALSHS
Ser

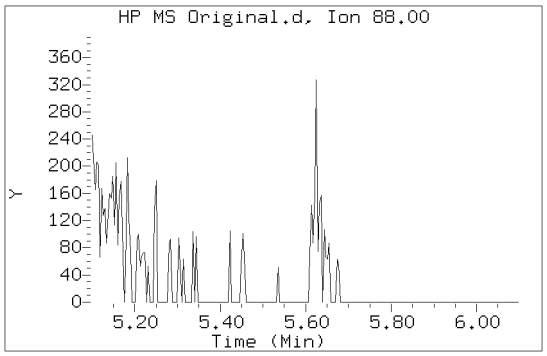


1,4-Dioxane ()

Reason Code:

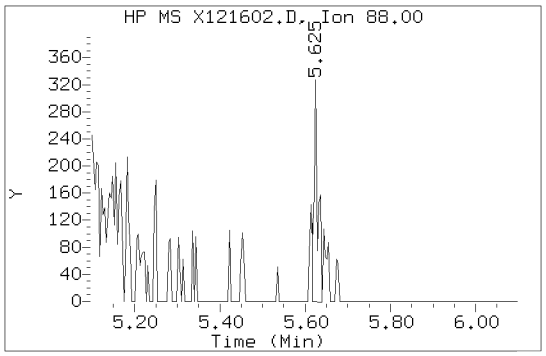
BEFORE

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



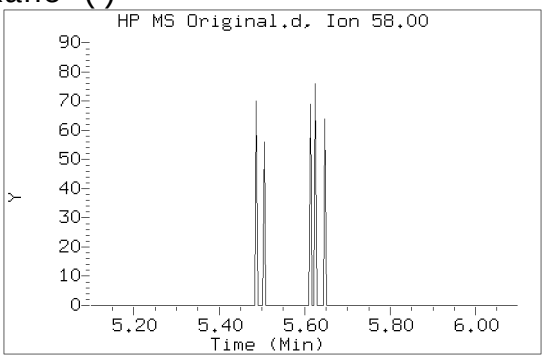
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

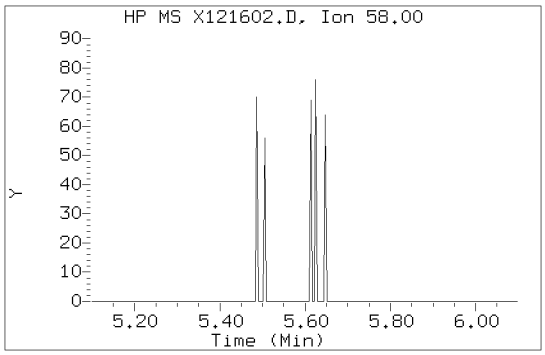
BEFORE

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

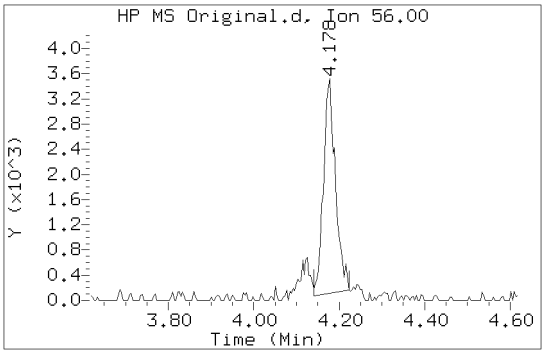


Cyclohexane (110-82-7)

Reason Code:

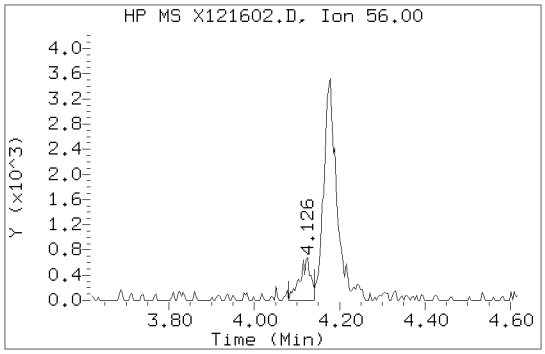
BEFORE

MASS
42
AREA
0
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



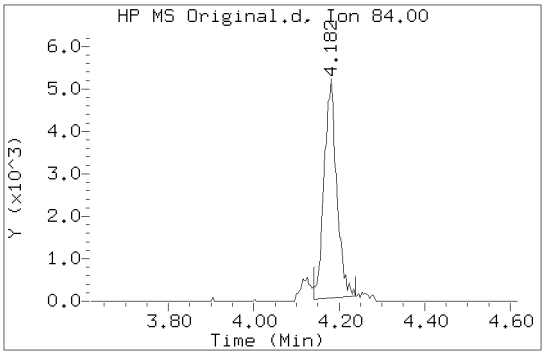
AFTER

MASS
56
AREA
1235
HEIGHT
682
27-Dec-2022
16:07
ALSHS
Ser



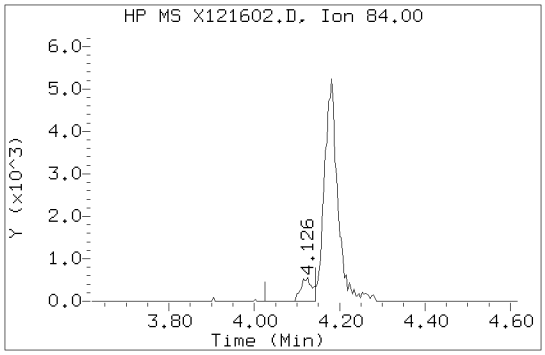
BEFORE

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

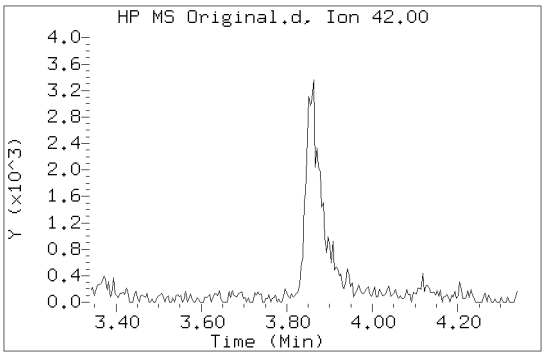


Tetrahydrofuran (109-99-9)

Reason Code:

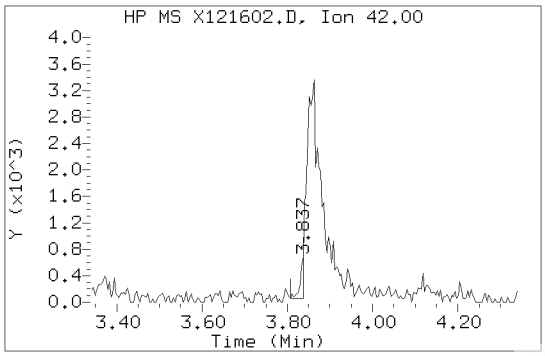
BEFORE

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



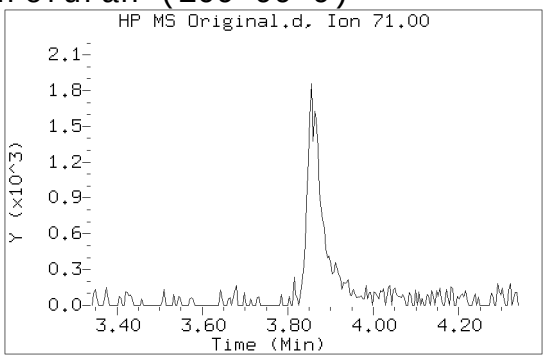
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121602.D
Inj Date : 16-DEC-2022 11:38
InstruID : voa6.i
LabSampID : VSTD000.25

Tetrahydrofuran (109-99-9)

Reason Code:

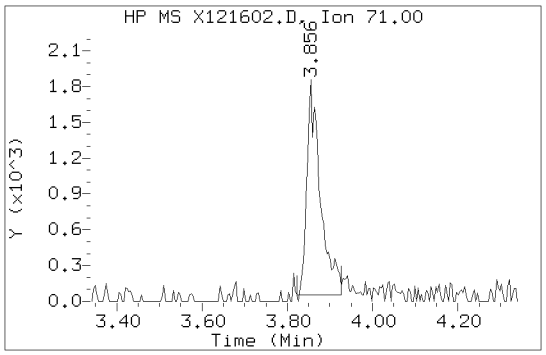
BEFORE

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
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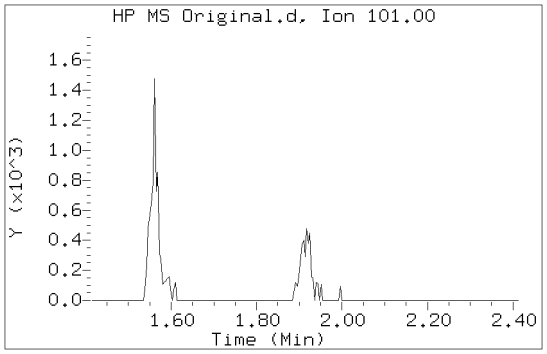
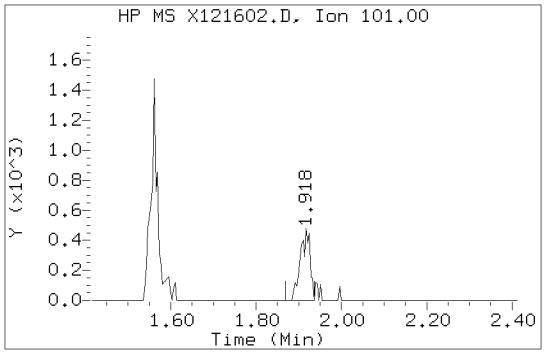
HEIGHT
0
16-Dec-2022
11:54
ALSHS
Server



AFTER

MASS
101
AREA
765
HEIGHT
479
27-Dec-2022
16:07
ALSHS
Ser



BEFORE

MASS
103
AREA
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HEIGHT
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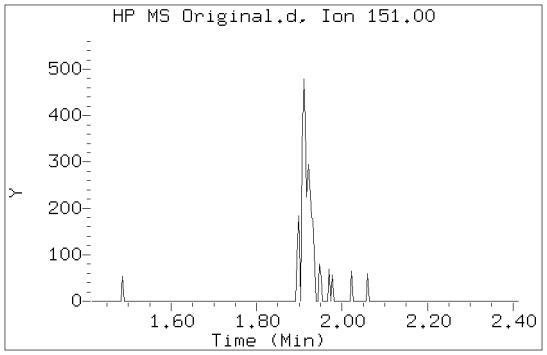
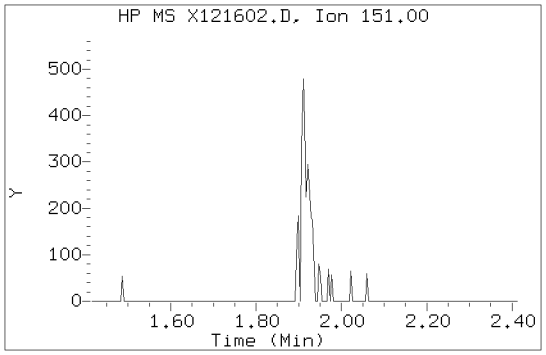
16-Dec-2022
11:54
ALSHS
Server



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)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D Page 2
Report Date: 27-Dec-2022 16:07

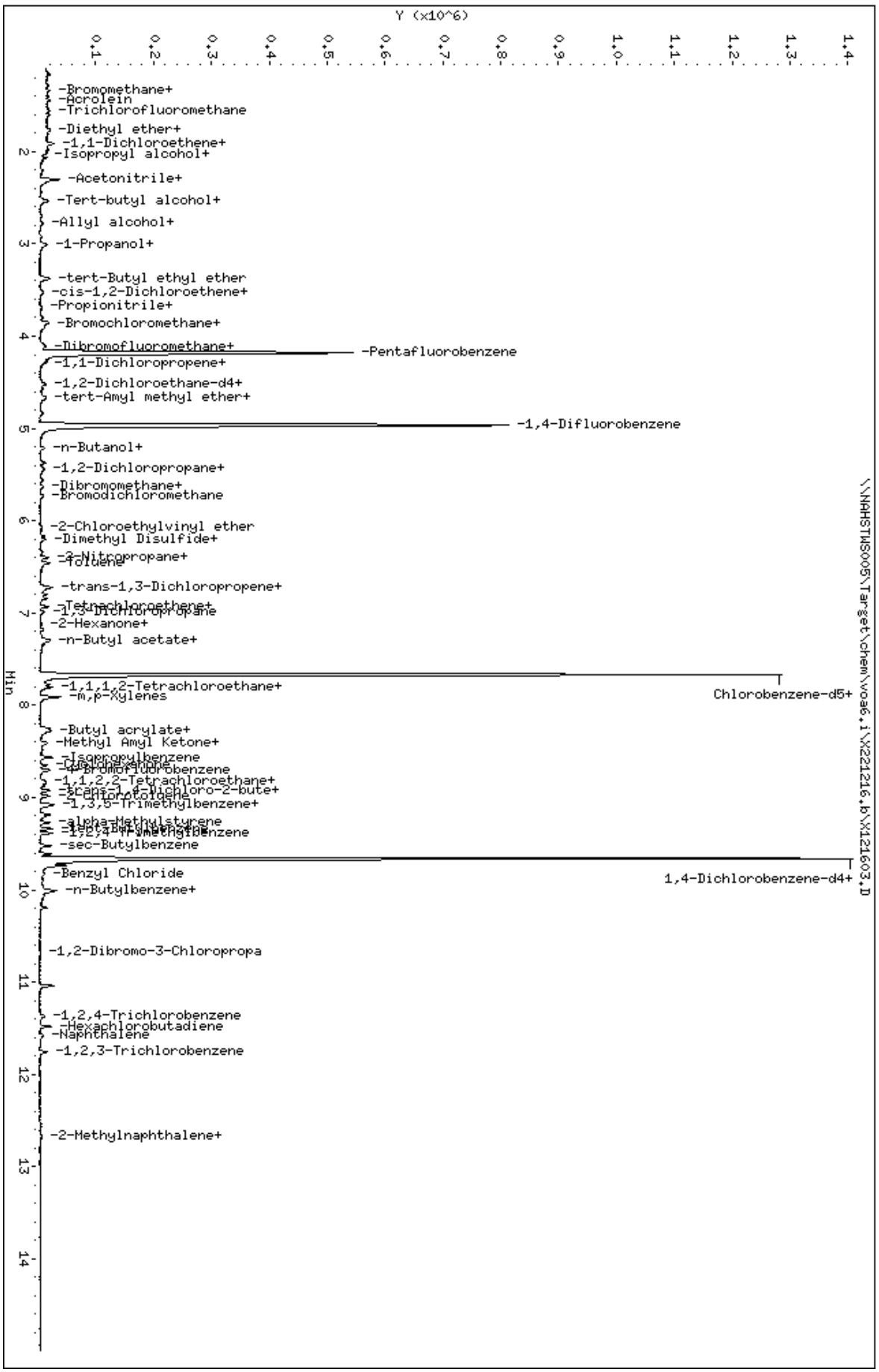
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	162	Butyl acrylate	55	8.271	8.271	(1.079)	4718	0.50000	0.55(M)
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1990	0.50000	1.00(M)
	3	Chloromethane	50	1.077	1.077	(0.258)	2466	0.50000	2.77(M)
	5	Vinyl Chloride	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)

	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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Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
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LabSampID : VSTD000.5

m,p-Xylenes ()

Reason Code:

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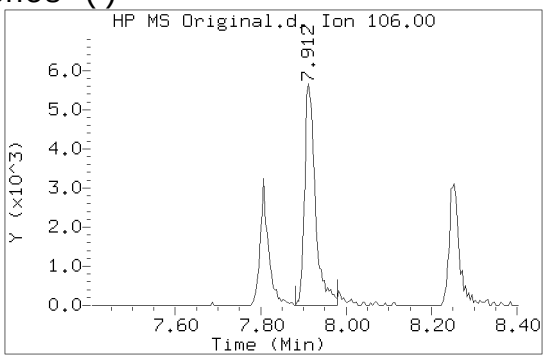
HEIGHT
5666
27-Dec-2022
16:03
linh
pham



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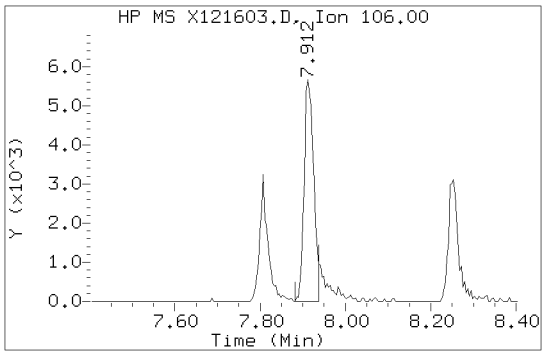

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27-Dec-2022
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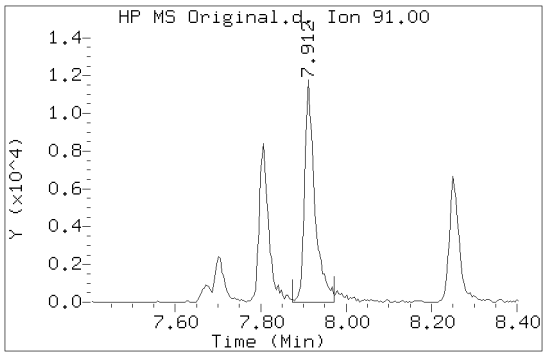

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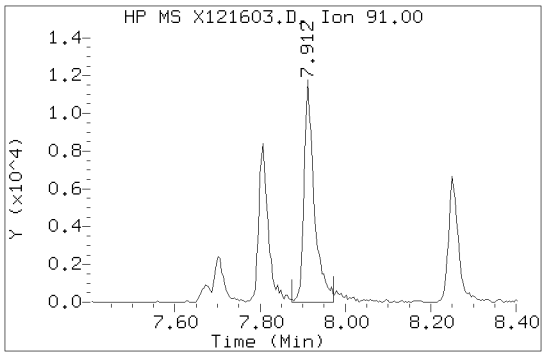

Dichlorodifluoromethane (75-71-8)

Reason Code:

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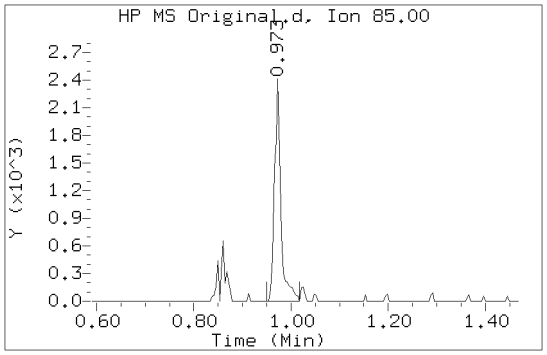

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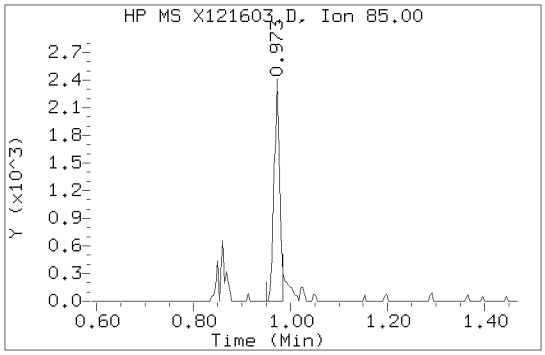

BEFORE
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87
AREA
713
HEIGHT
795
27-Dec-2022
16:03
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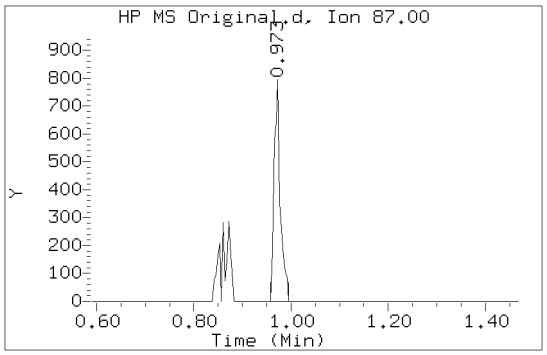
pham



AFTER
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713
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16:07
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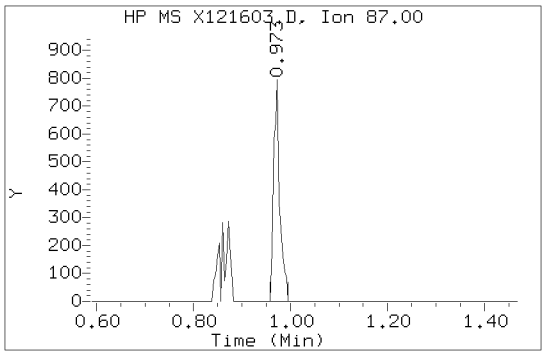

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloromethane (74-87-3)

BEFORE

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HEIGHT
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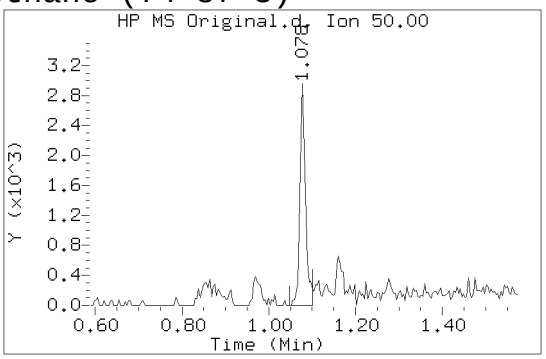
27-Dec-2022
16:03
linh
pham



BEFORE

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AREA
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HEIGHT
1164
27-Dec-2022
16:03
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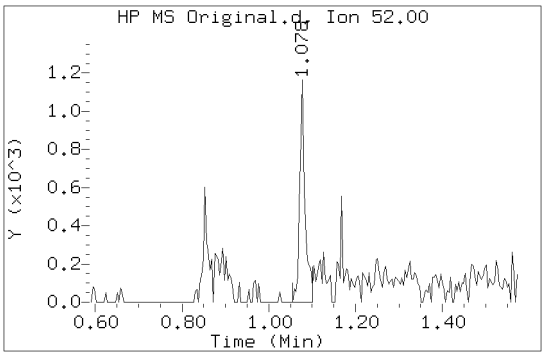
pham



Reason Code:

AFTER

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HEIGHT
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16:07
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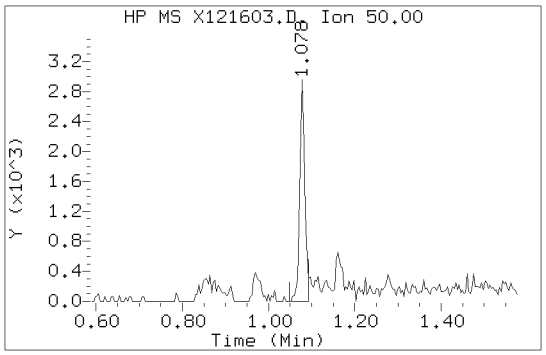

AFTER

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16:07
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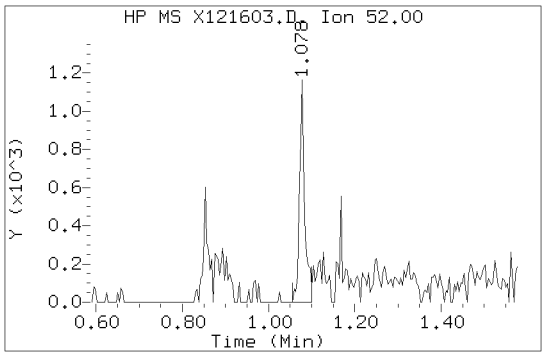

Vinyl Chloride (75-01-4)

BEFORE

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AREA
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27-Dec-2022
16:03
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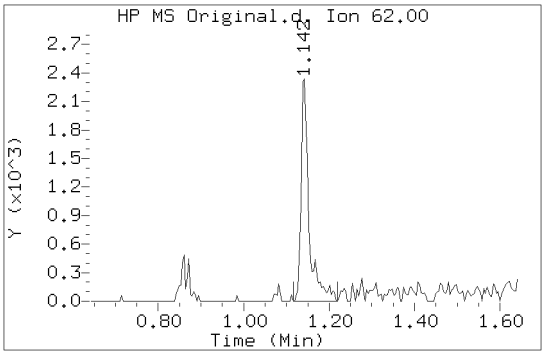

BEFORE

MASS
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AREA
1174
HEIGHT
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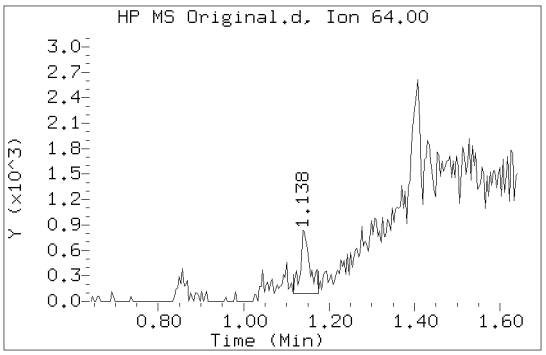
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

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62
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HEIGHT
2337
27-Dec-2022
16:07
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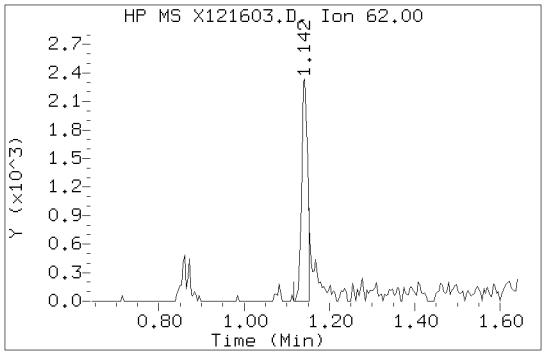

AFTER

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AREA
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27-Dec-2022
16:07
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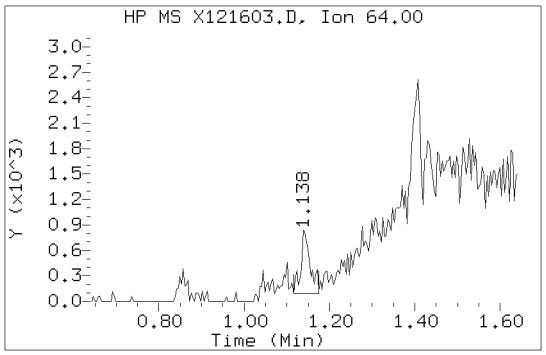

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE

MASS
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AREA
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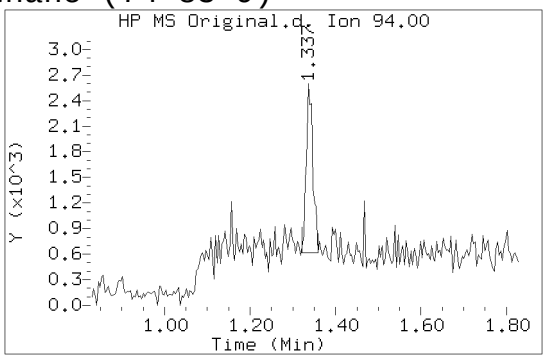
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



AFTER

MASS
94
AREA
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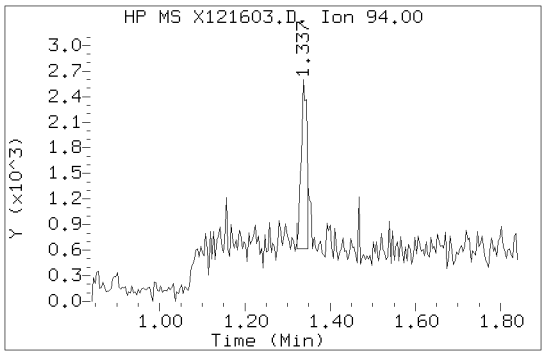
HEIGHT
1983
27-Dec-2022
16:07
linh
pham



BEFORE

MASS
96
AREA
2304
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2236
27-Dec-2022
16:03
linh
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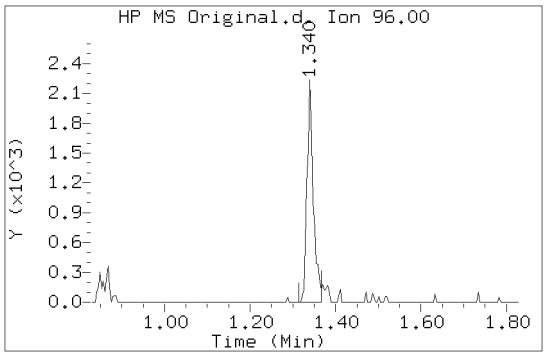

AFTER

MASS
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2236
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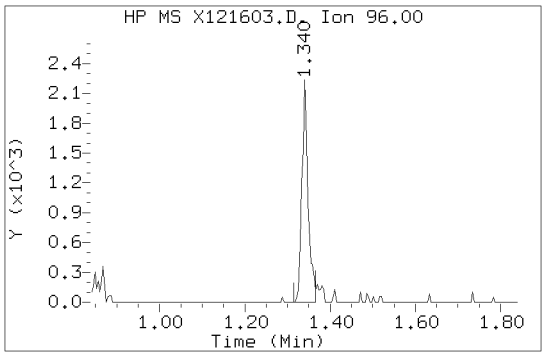

Chloroethane (75-00-3)

Reason Code:

BEFORE

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AREA
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HEIGHT
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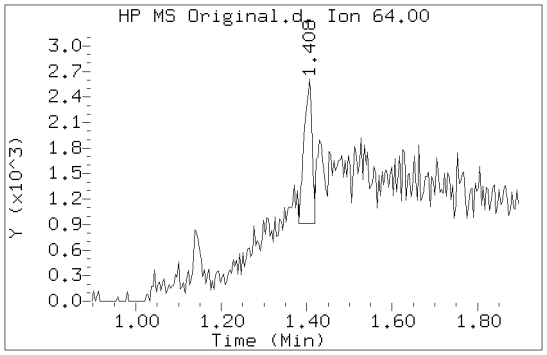
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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27-Dec-2022
16:07
linh
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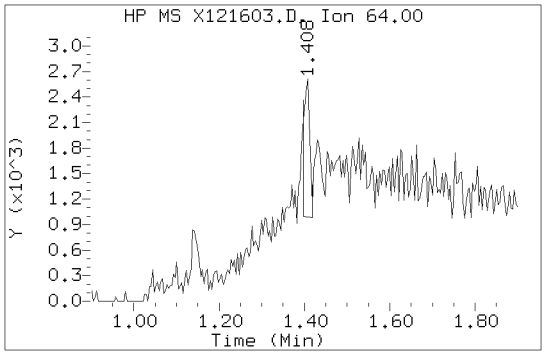

BEFORE

MASS
66
AREA
677
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340
27-Dec-2022
16:03
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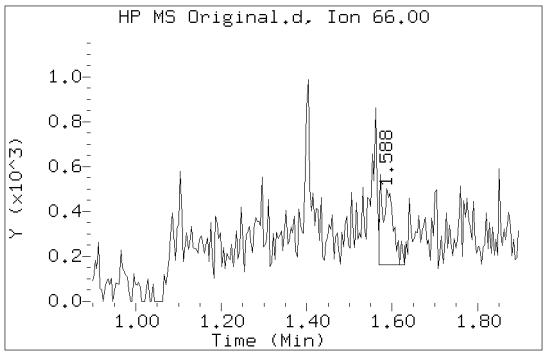

AFTER

MASS
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27-Dec-2022
16:07
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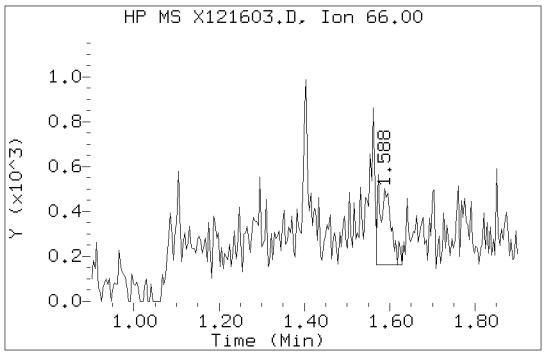

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Trichlorofluoromethane (75-69-4)

Reason Code:

BEFORE

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AREA
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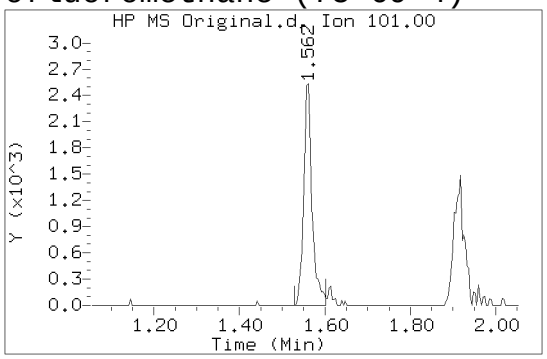
27-Dec-2022
16:03
linh
pham



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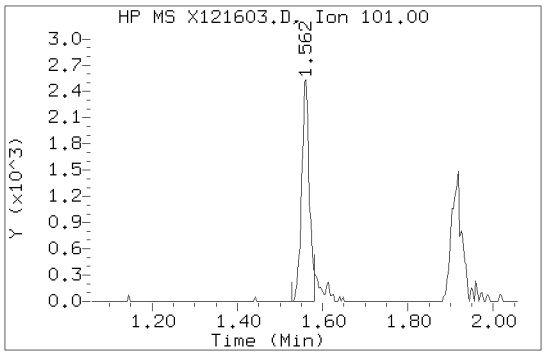

BEFORE

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27-Dec-2022
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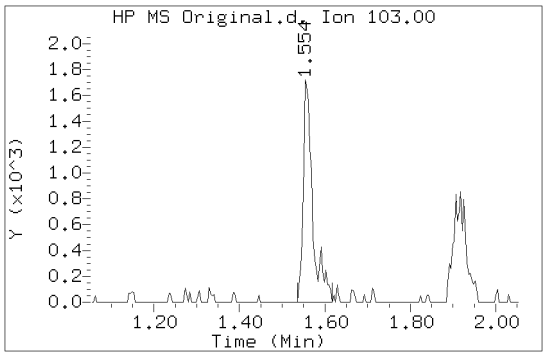
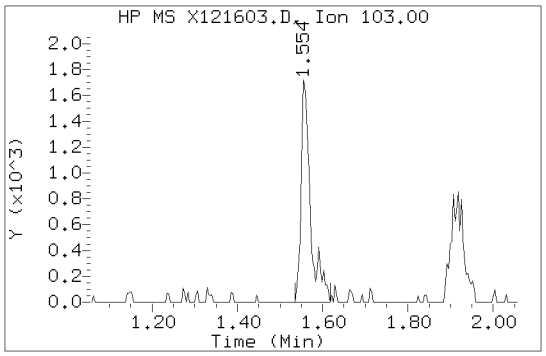
linh
pham



AFTER

MASS
103
AREA
2708
HEIGHT
1720
27-Dec-2022
16:07
linh
pham

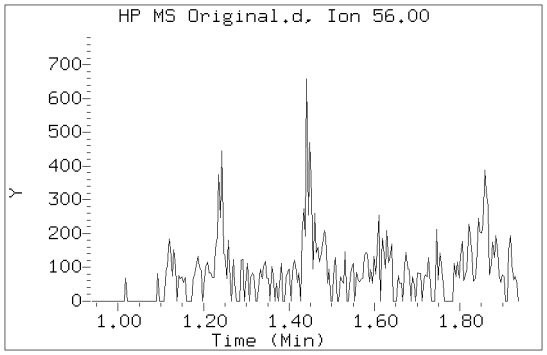


Acrolein (107-02-8)

Reason Code:

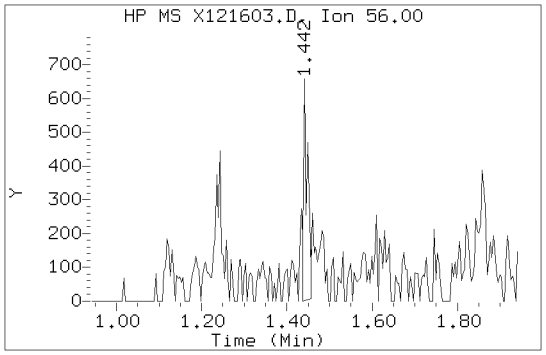
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



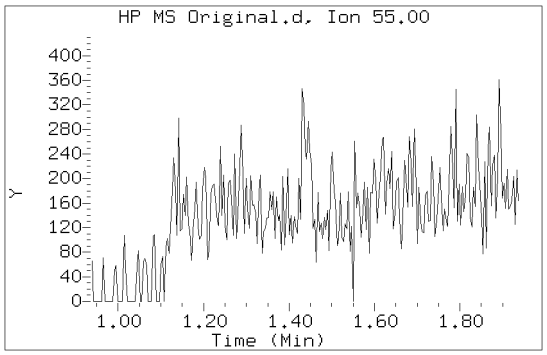
AFTER

MASS
56
AREA
440
HEIGHT
656
27-Dec-2022
16:07
linh
pham



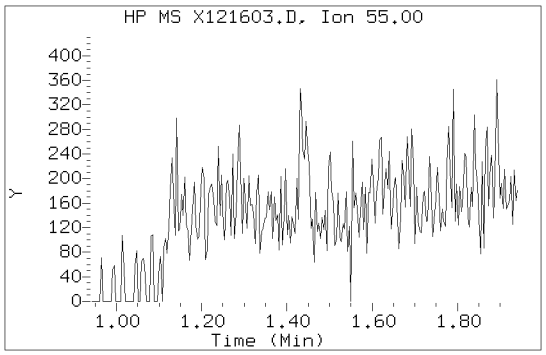
BEFORE

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



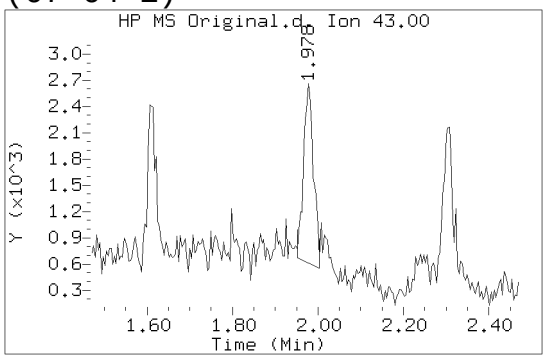
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acetone (67-64-1)

Reason Code:

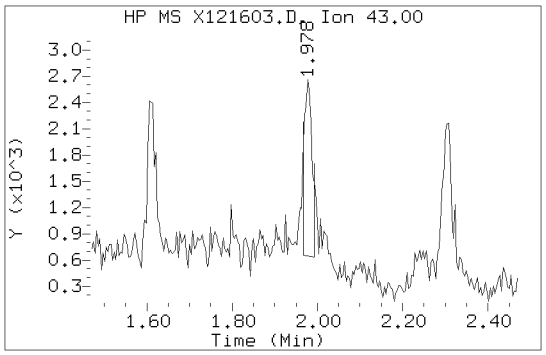
BEFORE

MASS
43
AREA
3388
HEIGHT
2046
27-Dec-2022
16:03
linh
pham



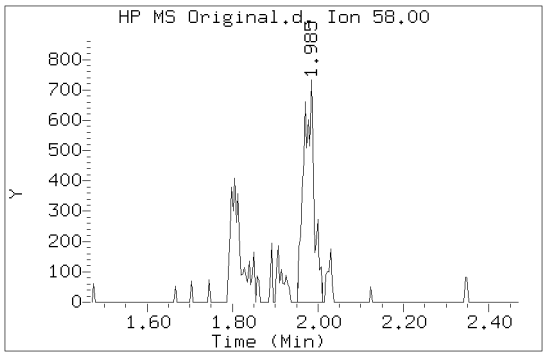
AFTER

MASS
43
AREA
2669
HEIGHT
2015
27-Dec-2022
16:07
linh
pham



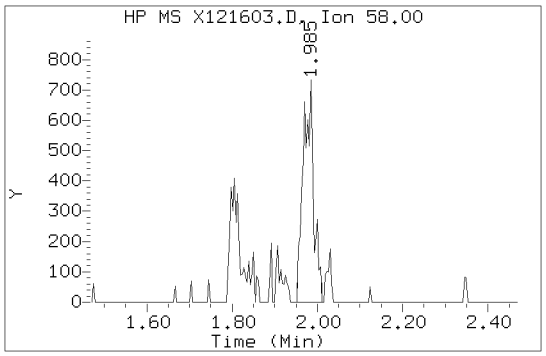
BEFORE

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

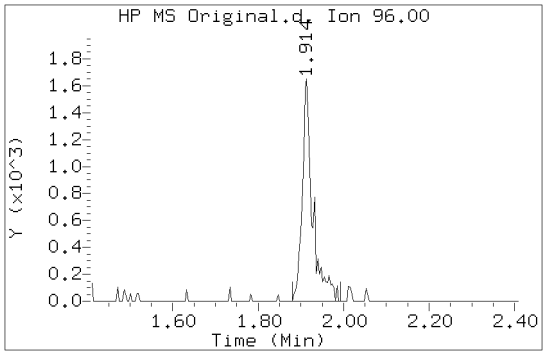


1,1-Dichloroethene (75-35-4)

Reason Code:

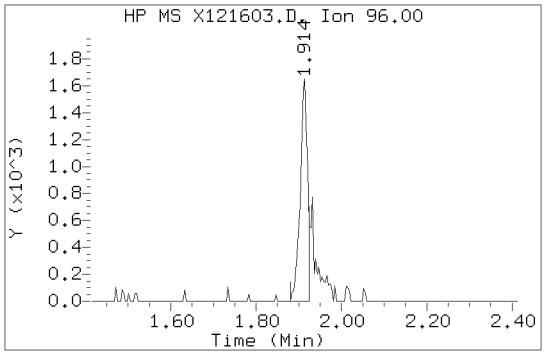
BEFORE

MASS
96
AREA
2836
HEIGHT
1651
27-Dec-2022
16:03
linh
pham



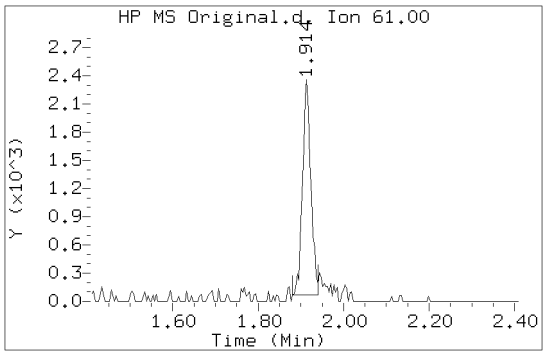
AFTER

MASS
96
AREA
2037
HEIGHT
1651
27-Dec-2022
16:07
linh
pham



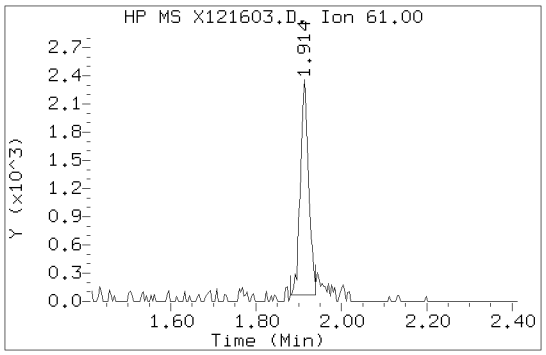
BEFORE

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



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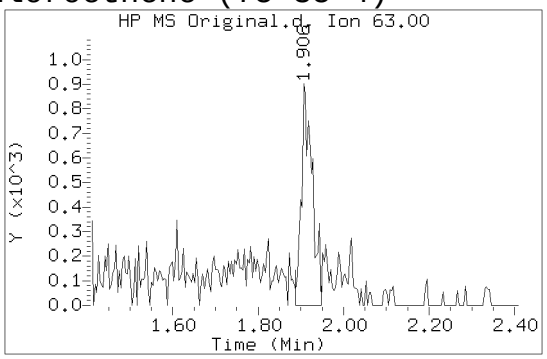
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

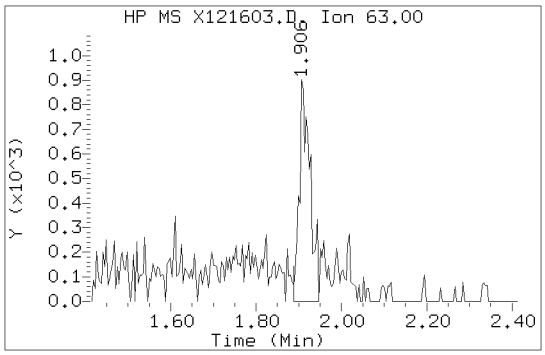
BEFORE

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

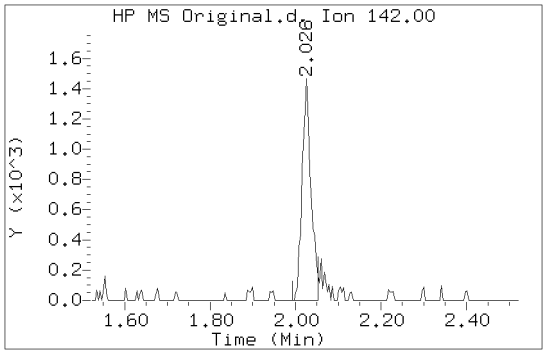


Iodomethane (74-88-4)

Reason Code:

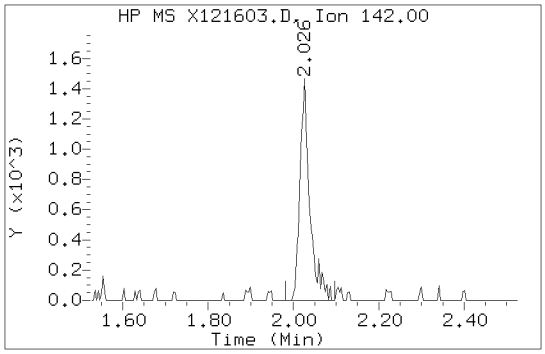
BEFORE

MASS
142
AREA
2166
HEIGHT
1466
27-Dec-2022
16:03
linh
pham



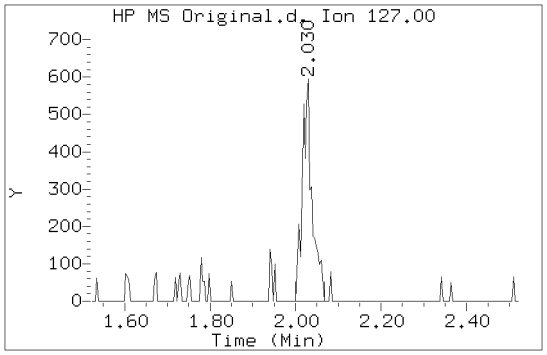
AFTER

MASS
142
AREA
2397
HEIGHT
1466
27-Dec-2022
16:07
linh
pham



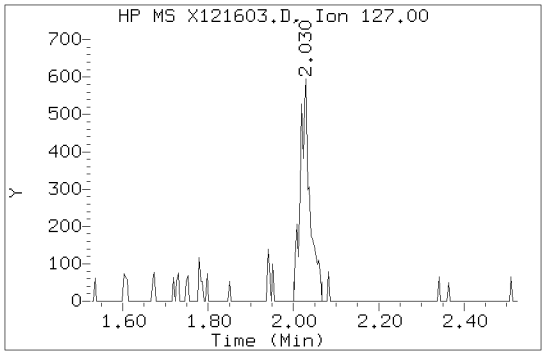
BEFORE

MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:03
linh
pham



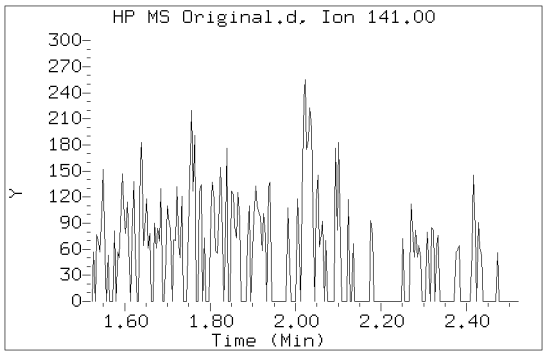
AFTER

MASS
127
AREA
958
HEIGHT
595
27-Dec-2022
16:07
linh
pham



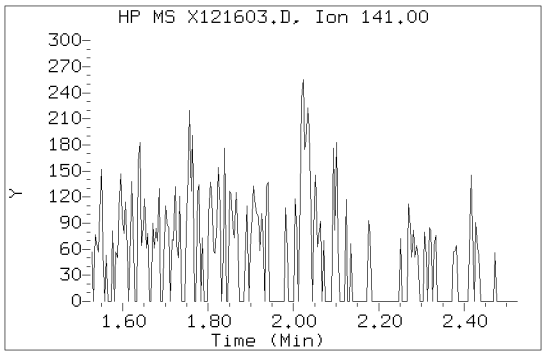
BEFORE

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



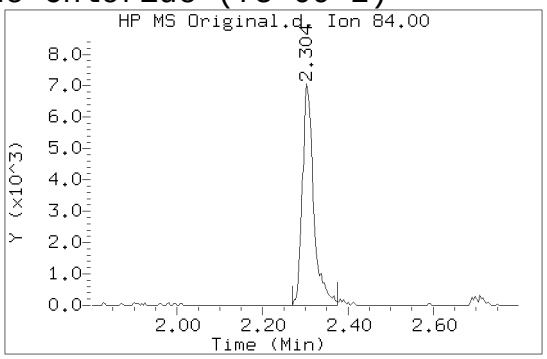
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

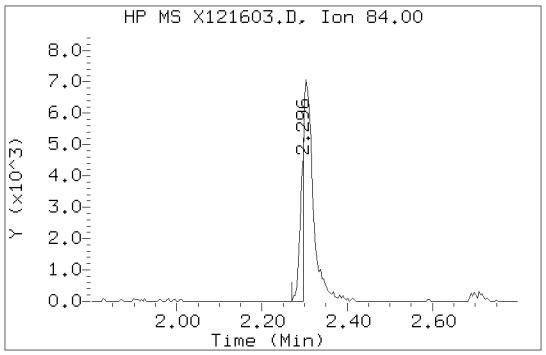
BEFORE

MASS
84
AREA
13307
HEIGHT
7067
27-Dec-2022
16:03
linh
pham



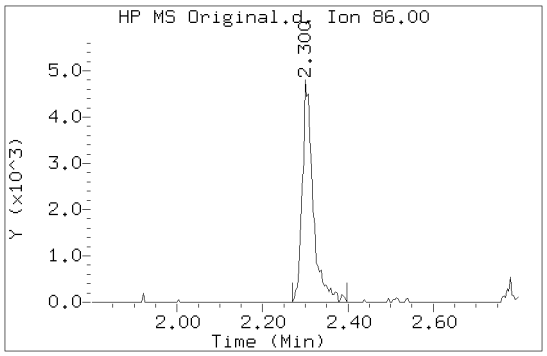
AFTER

MASS
84
AREA
2938
HEIGHT
4595
27-Dec-2022
16:07
linh
pham



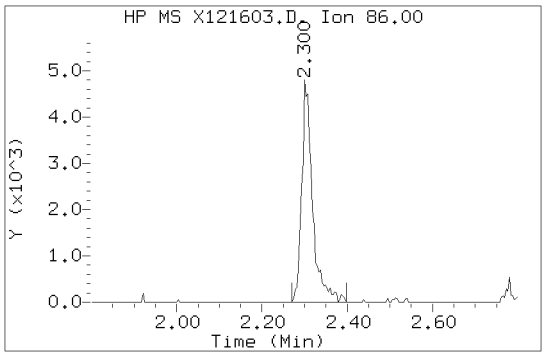
BEFORE

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:03
linh
pham



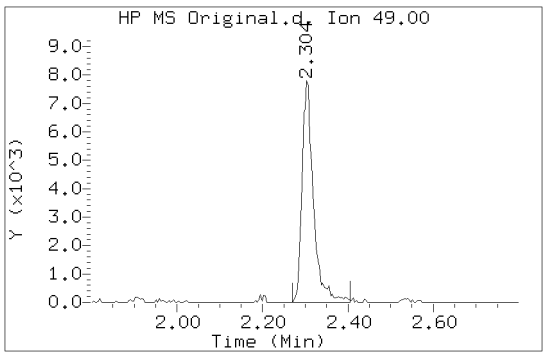
AFTER

MASS
86
AREA
8692
HEIGHT
4802
27-Dec-2022
16:07
linh
pham



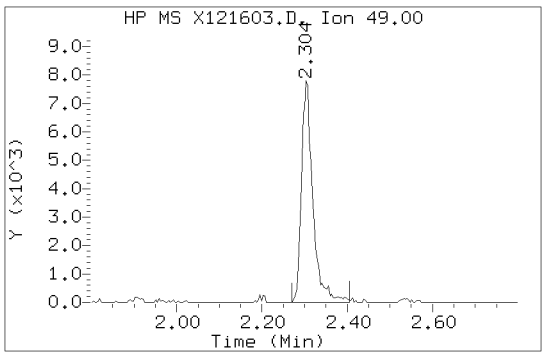
BEFORE

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

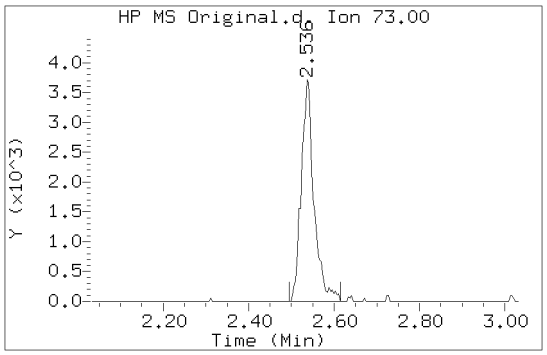


Methyl tert-butyl ether (1634-04-4)

Reason Code:

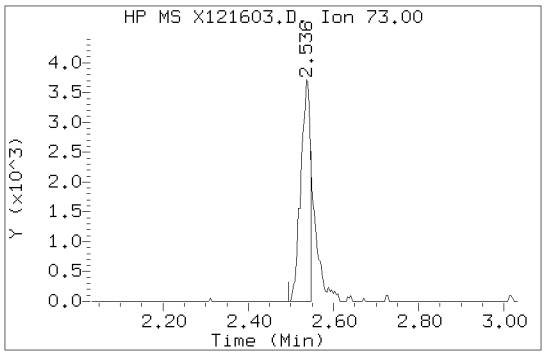
BEFORE

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

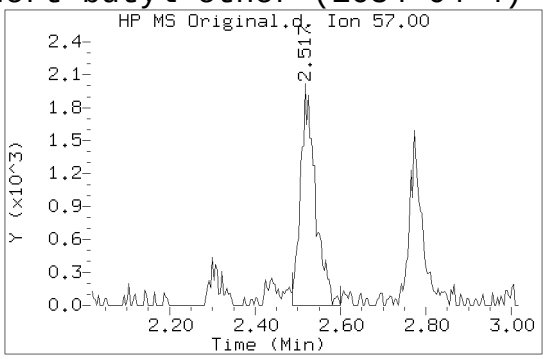


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl tert-butyl ether (1634-04-4)

BEFORE

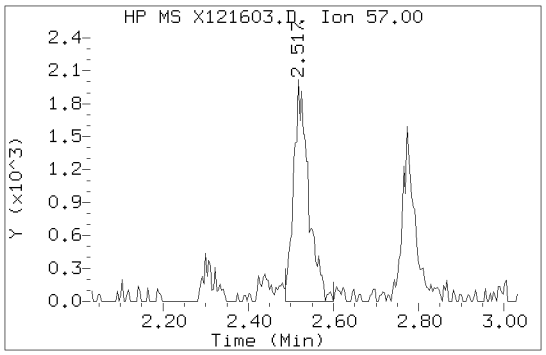
MASS
57
AREA
4915
HEIGHT
2019
27-Dec-2022
16:03
linh
pham



AFTER

MASS
57
AREA
4915
HEIGHT
2019
27-Dec-2022
16:07
linh
pham

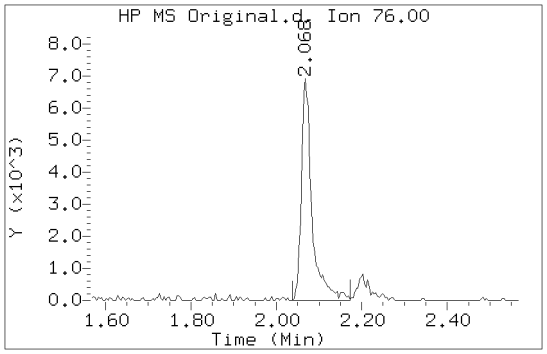
Reason Code:



Carbon Disulfide (75-15-0)

BEFORE

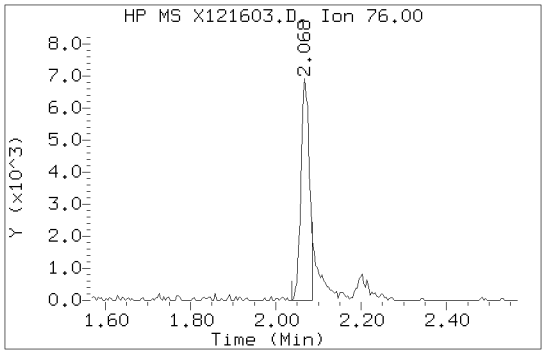
MASS
76
AREA
12313
HEIGHT
6923
27-Dec-2022
16:03
linh
pham



AFTER

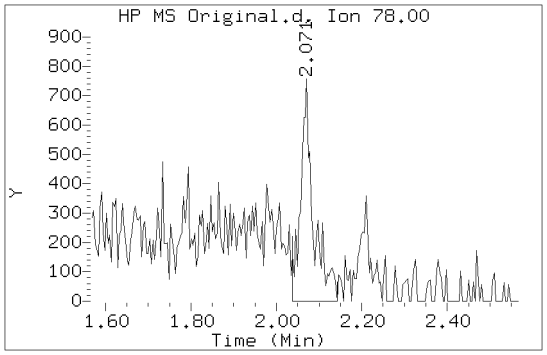
MASS
76
AREA
9921
HEIGHT
6923
27-Dec-2022
16:07
linh
pham

Reason Code:



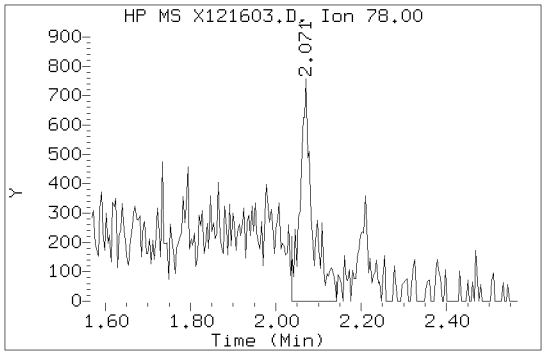
BEFORE

MASS
78
AREA
1586
HEIGHT
757
27-Dec-2022
16:03
linh
pham



AFTER

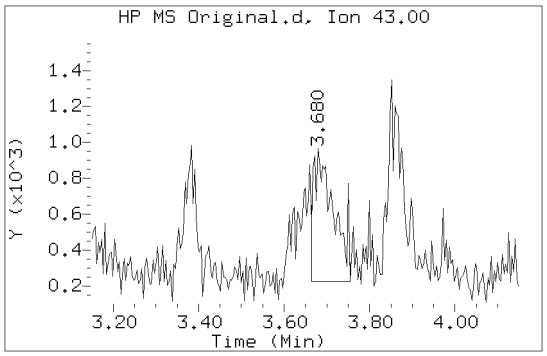
MASS
78
AREA
1586
HEIGHT
757
27-Dec-2022
16:07
linh
pham



2-Butanone (78-93-3)

BEFORE

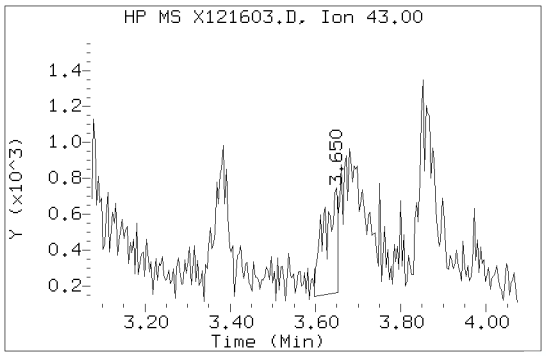
MASS
43
AREA
2415
HEIGHT
742
27-Dec-2022
16:03
linh
pham



AFTER

MASS
43
AREA
1292
HEIGHT
587
27-Dec-2022
16:07
linh
pham

Reason Code:



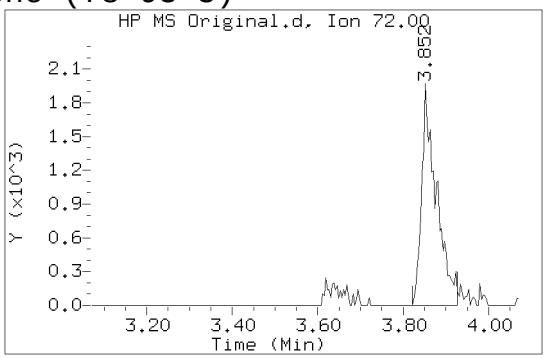
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

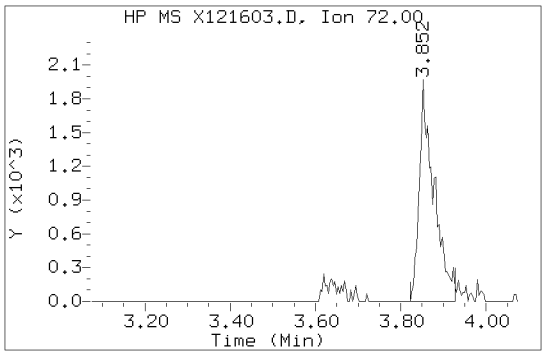
BEFORE

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

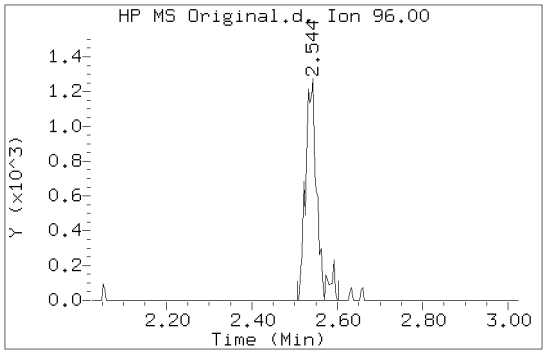


trans-1,2-Dichloroethene (156-60-5)

Reason Code:

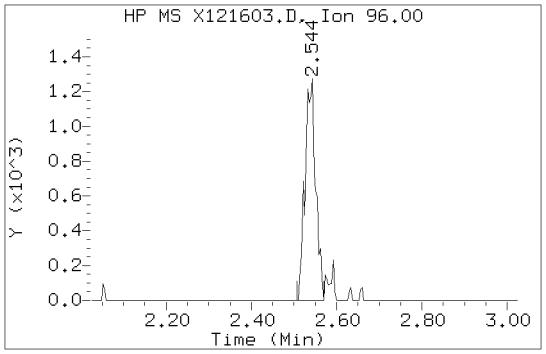
BEFORE

MASS
96
AREA
2404
HEIGHT
1274
27-Dec-2022
16:03
linh
pham



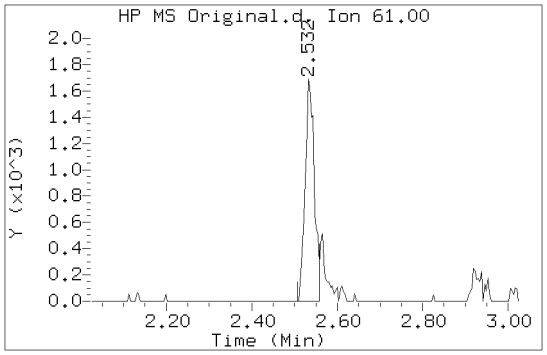
AFTER

MASS
96
AREA
2218
HEIGHT
1274
27-Dec-2022
16:07
linh
pham



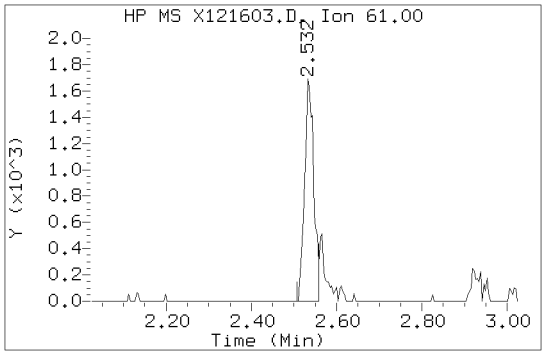
BEFORE

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:03
linh
pham



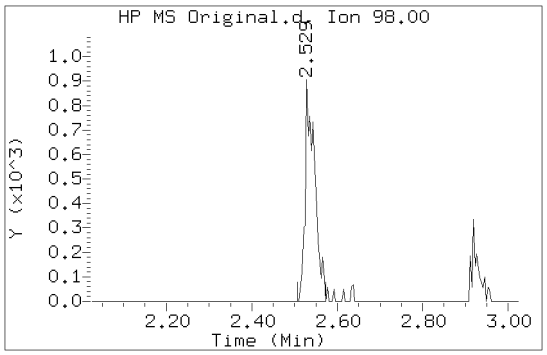
AFTER

MASS
61
AREA
2571
HEIGHT
1692
27-Dec-2022
16:07
linh
pham



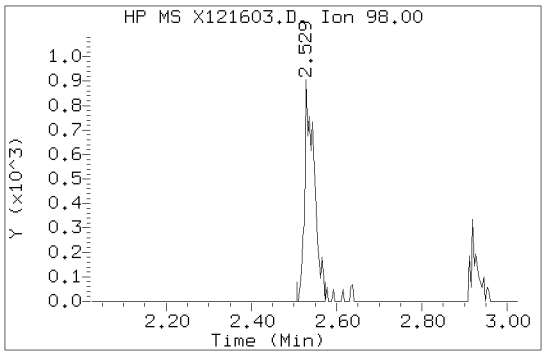
BEFORE

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



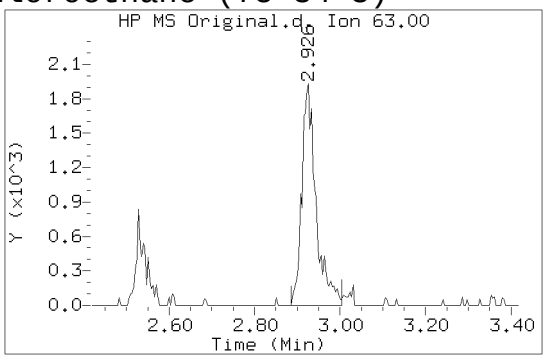
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

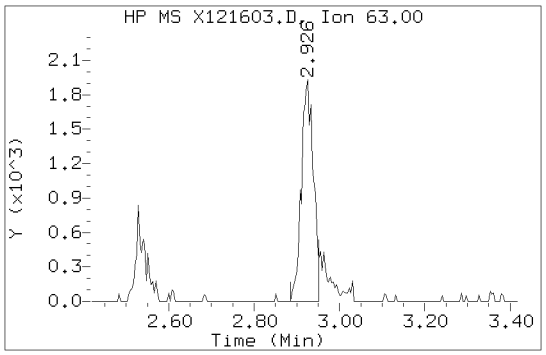
BEFORE

MASS
63
AREA
4504
HEIGHT
1931
27-Dec-2022
16:03
linh
pham



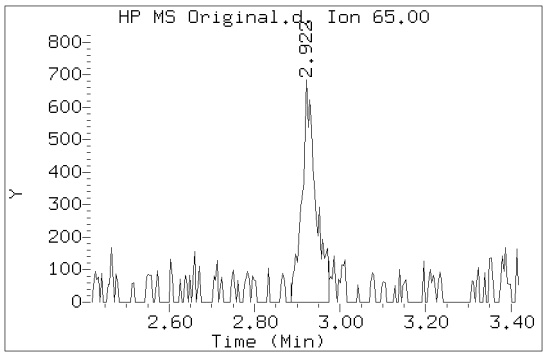
AFTER

MASS
63
AREA
3874
HEIGHT
1931
27-Dec-2022
16:07
linh
pham



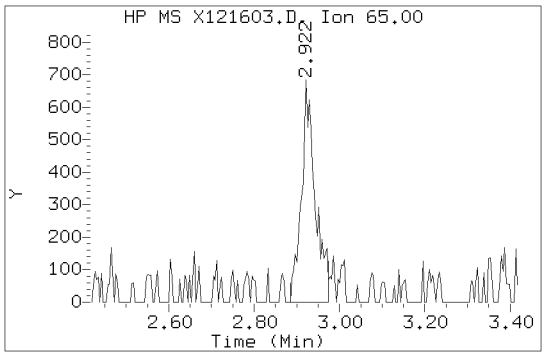
BEFORE

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:03
linh
pham



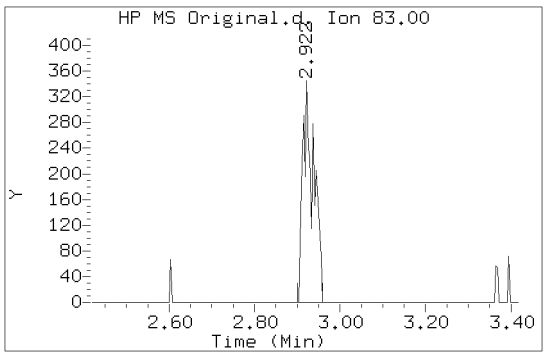
AFTER

MASS
65
AREA
1548
HEIGHT
684
27-Dec-2022
16:07
linh
pham



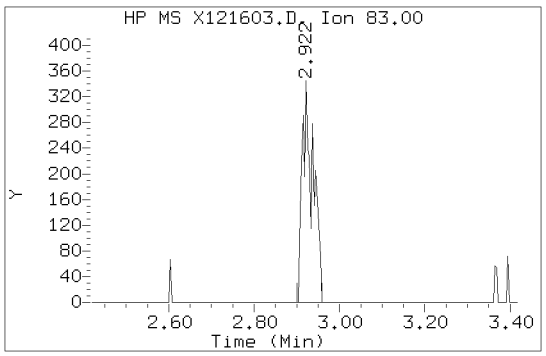
BEFORE

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

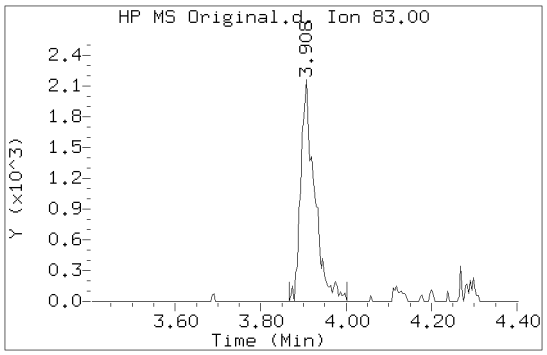


Chloroform (67-66-3)

Reason Code:

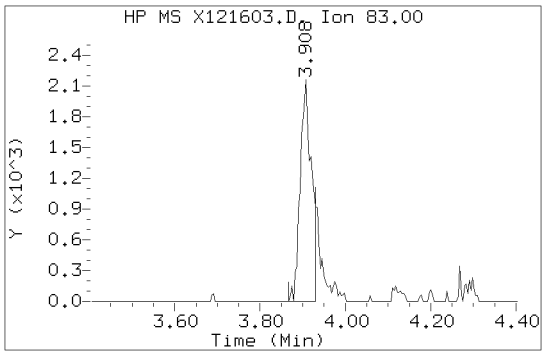
BEFORE

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



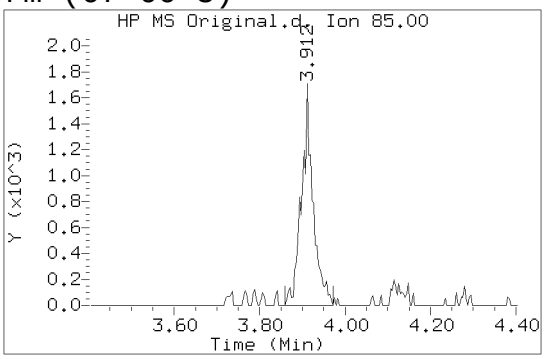
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroform (67-66-3)

Reason Code:

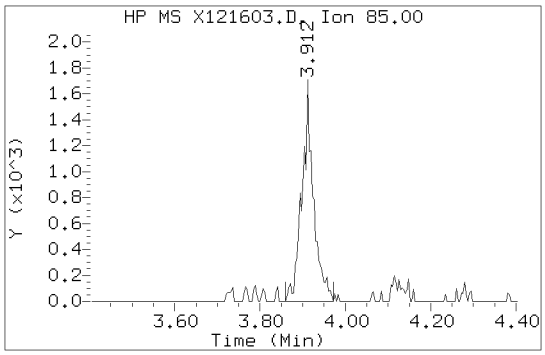
BEFORE

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

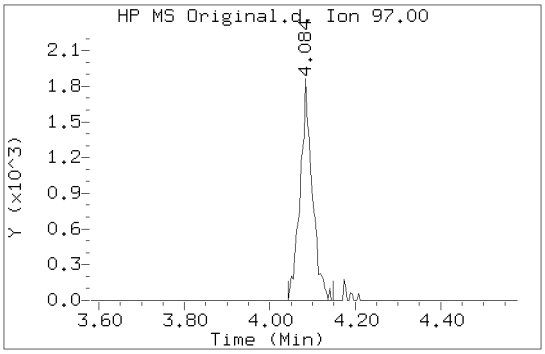


1,1,1-Trichloroethane (71-55-6)

Reason Code:

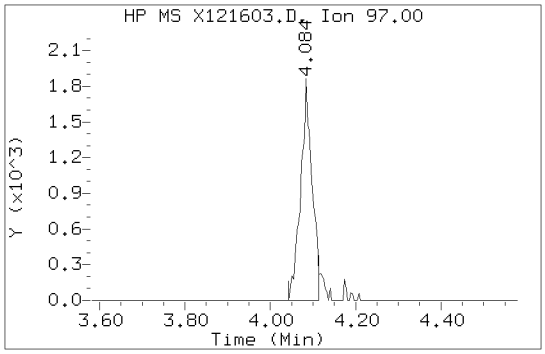
BEFORE

MASS
97
AREA
3710
HEIGHT
1863
27-Dec-2022
16:03
linh
pham



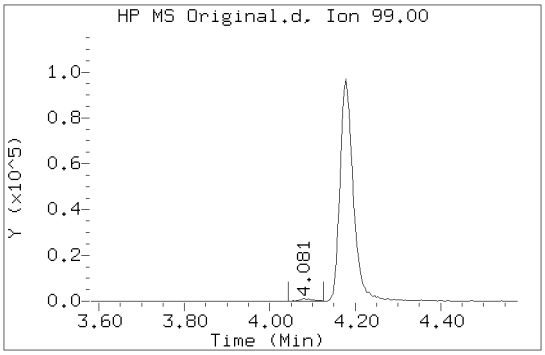
AFTER

MASS
97
AREA
3512
HEIGHT
1863
27-Dec-2022
16:07
linh
pham



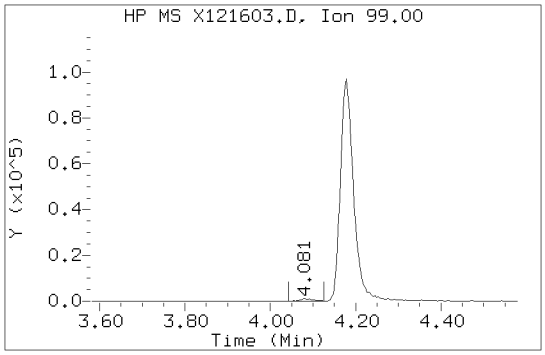
BEFORE

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:03
linh
pham



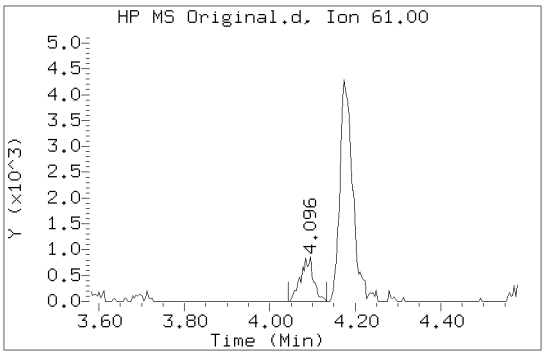
AFTER

MASS
99
AREA
2299
HEIGHT
1029
27-Dec-2022
16:07
linh
pham



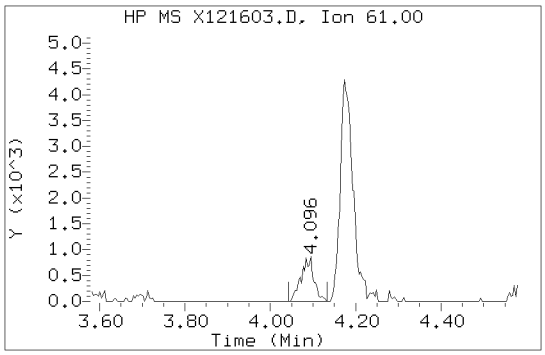
BEFORE

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



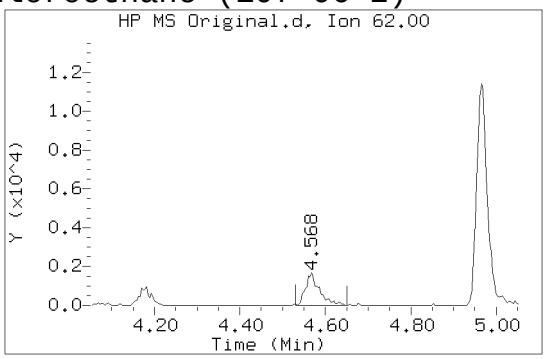
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

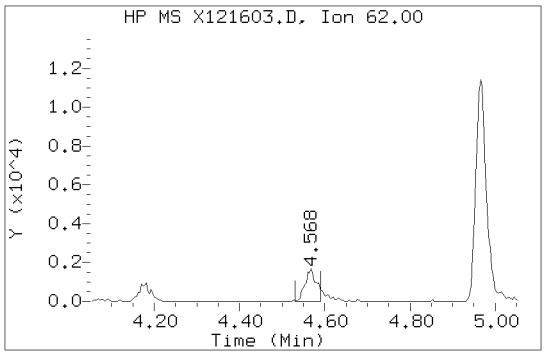
BEFORE

MASS
62
AREA
3822
HEIGHT
1678
27-Dec-2022
16:03
linh
pham



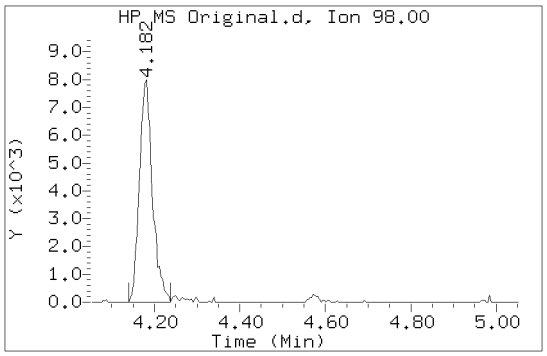
AFTER

MASS
62
AREA
3129
HEIGHT
1678
27-Dec-2022
16:07
linh
pham



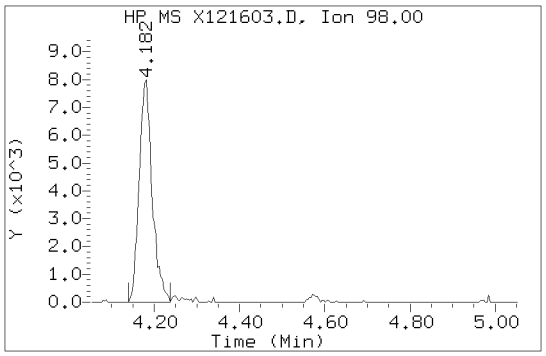
BEFORE

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

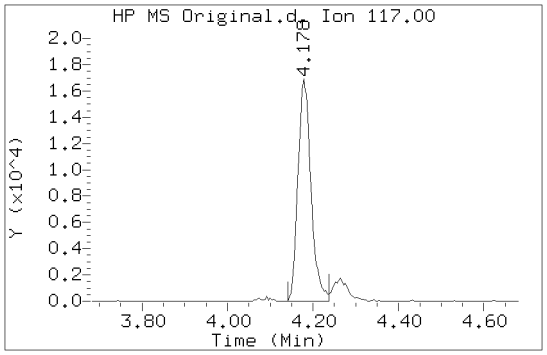


Carbon Tetrachloride (56-23-5)

Reason Code:

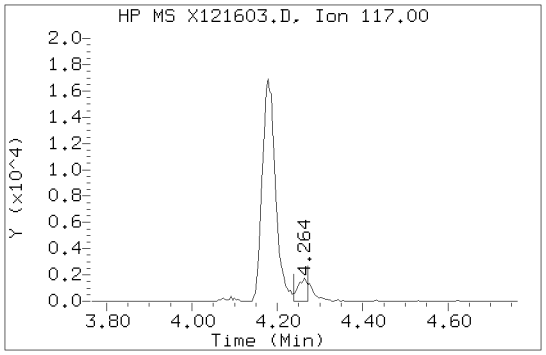
BEFORE

MASS
117
AREA
36559
HEIGHT
16920
27-Dec-2022
16:03
linh
pham



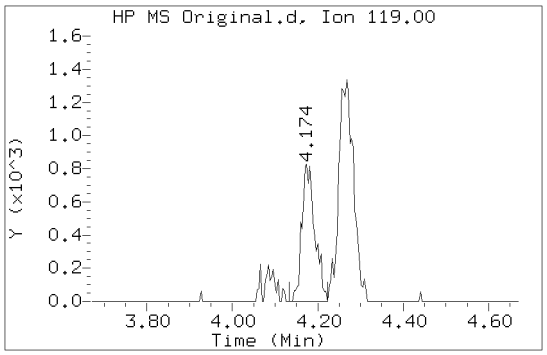
AFTER

MASS
117
AREA
2763
HEIGHT
1744
27-Dec-2022
16:07
linh
pham



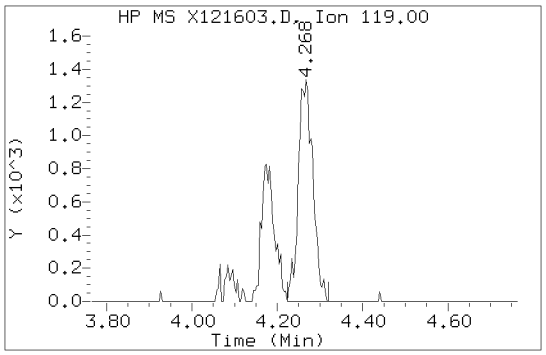
BEFORE

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

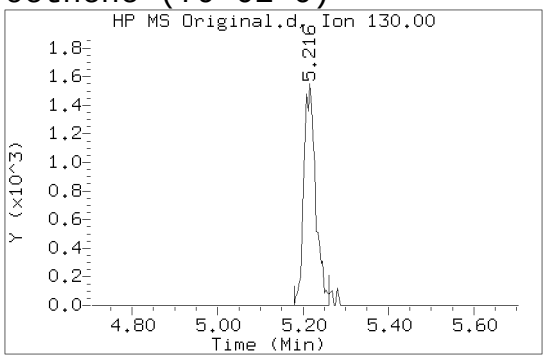


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

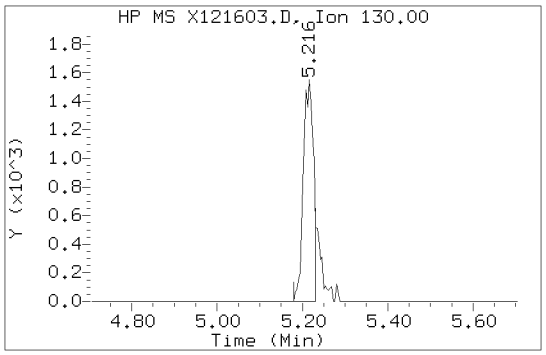
Trichloroethene (79-01-6)

Reason Code:

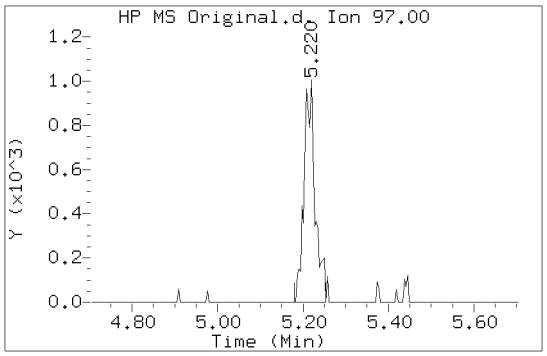
BEFORE
MASS
130
AREA
3011
HEIGHT
1551
27-Dec-2022
16:03
linh
pham



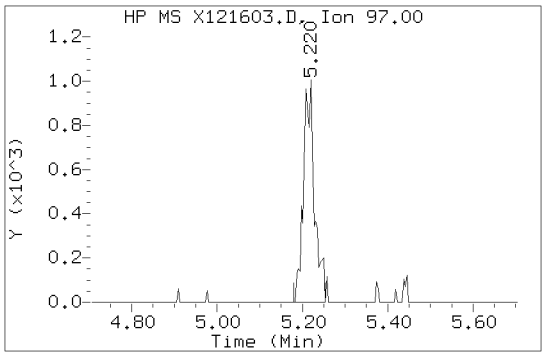
AFTER
MASS
130
AREA
2583
HEIGHT
1551
27-Dec-2022
16:07
linh
pham



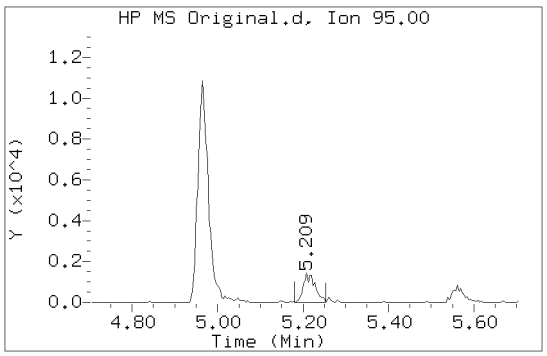
BEFORE
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:03
linh
pham



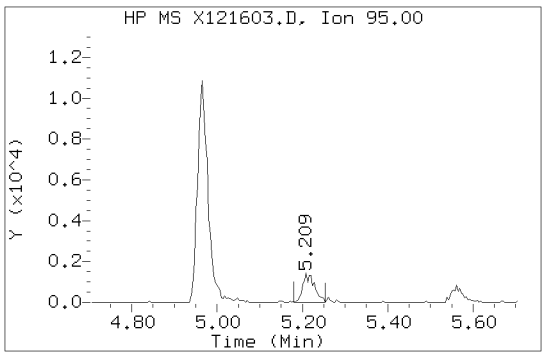
AFTER
MASS
97
AREA
1808
HEIGHT
1006
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:03
linh
pham



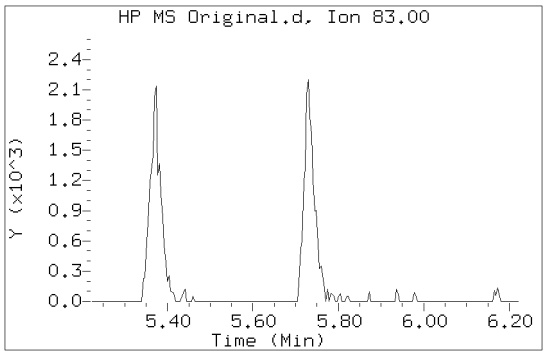
AFTER
MASS
95
AREA
2693
HEIGHT
1431
27-Dec-2022
16:07
linh
pham



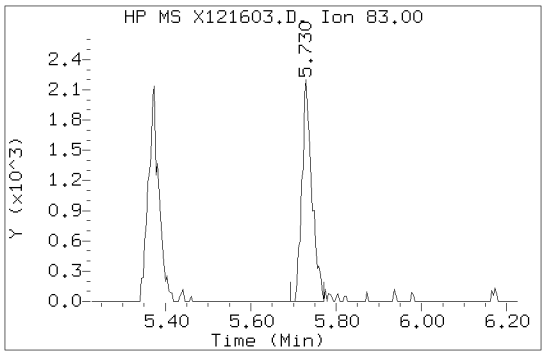
Bromodichloromethane (75-27-4)

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



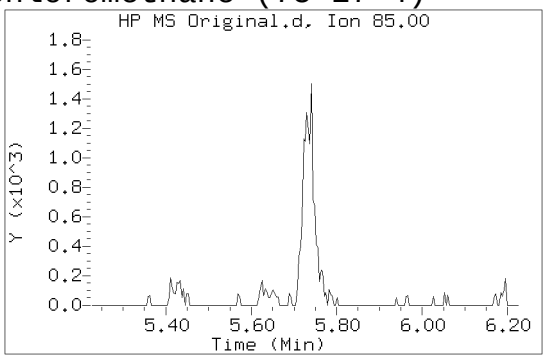
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromodichloromethane (75-27-4)

Reason Code:

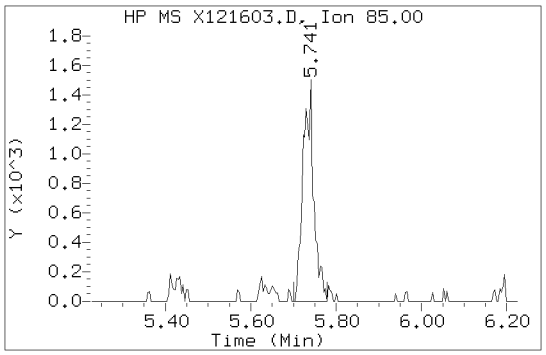
BEFORE

MASS
85
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



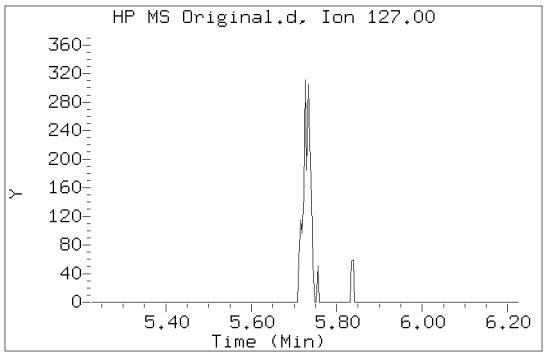
AFTER

MASS
85
AREA
2639
HEIGHT
1503
27-Dec-2022
16:07
linh
pham



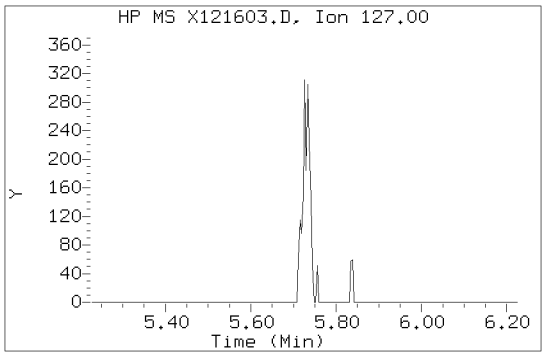
BEFORE

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

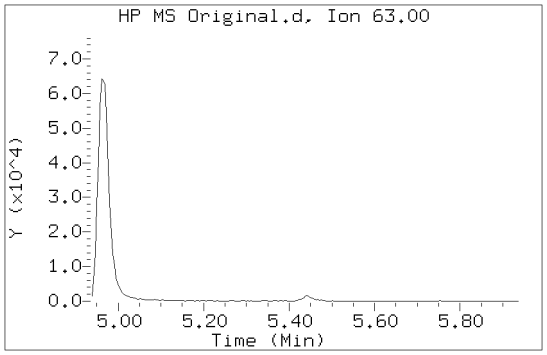


1,2-Dichloropropane (78-87-5)

Reason Code:

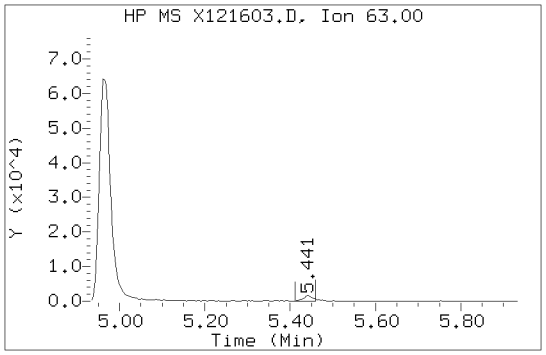
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



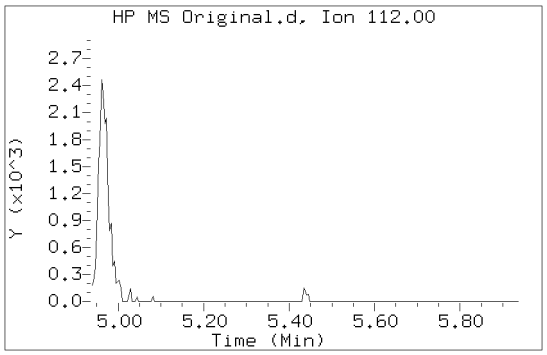
AFTER

MASS
63
AREA
2449
HEIGHT
1587
27-Dec-2022
16:07
linh
pham



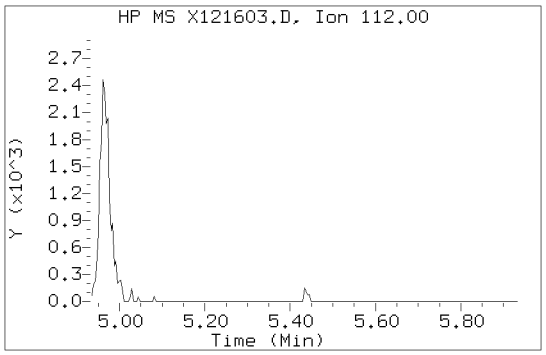
BEFORE

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



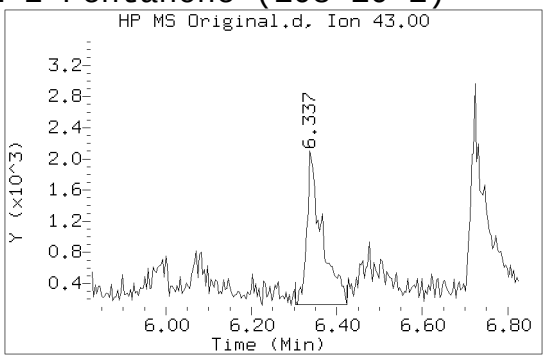
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

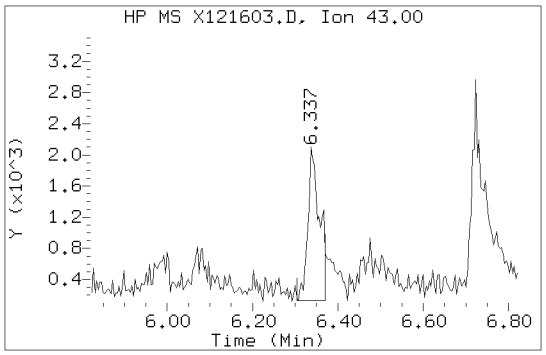
BEFORE

MASS
43
AREA
4873
HEIGHT
1970
27-Dec-2022
16:03
linh
pham



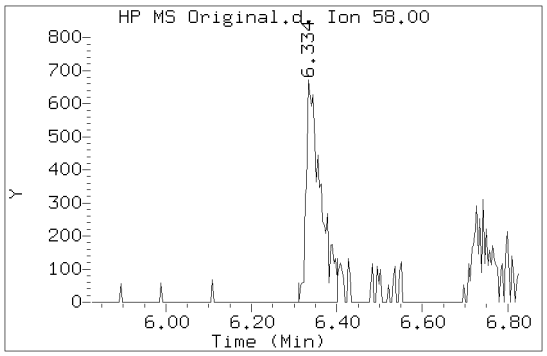
AFTER

MASS
43
AREA
3741
HEIGHT
1970
27-Dec-2022
16:07
linh
pham



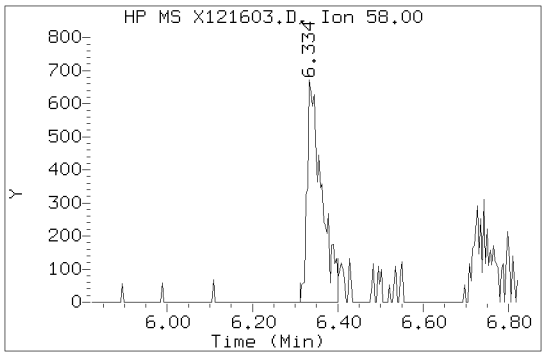
BEFORE

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:03
linh
pham



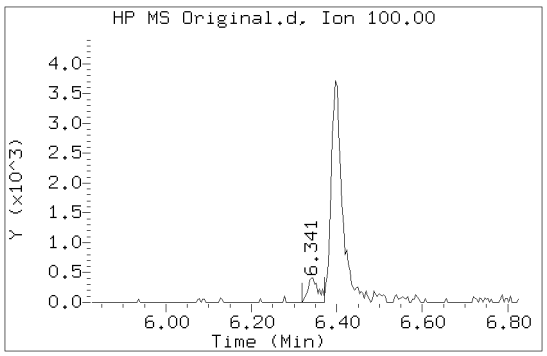
AFTER

MASS
58
AREA
1585
HEIGHT
672
27-Dec-2022
16:07
linh
pham



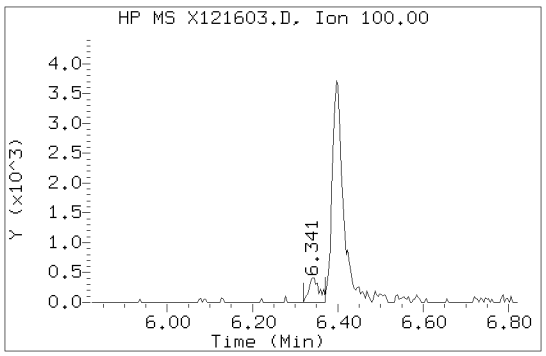
BEFORE

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

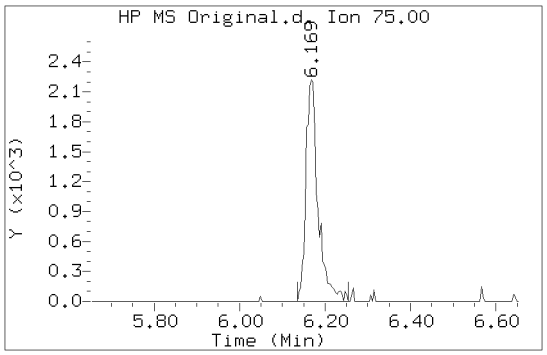


cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

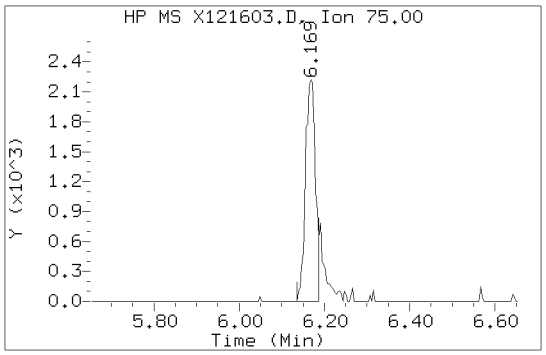
BEFORE

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



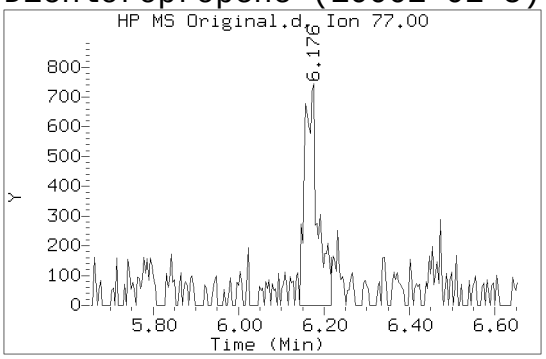
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

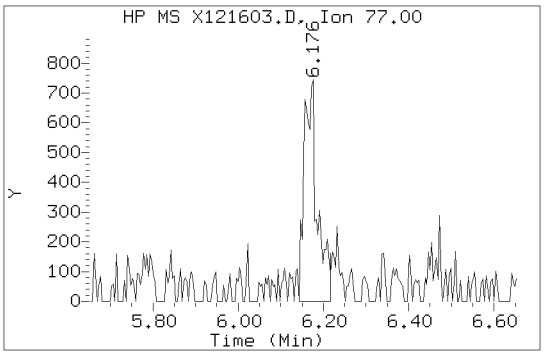
BEFORE

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:03
linh
pham



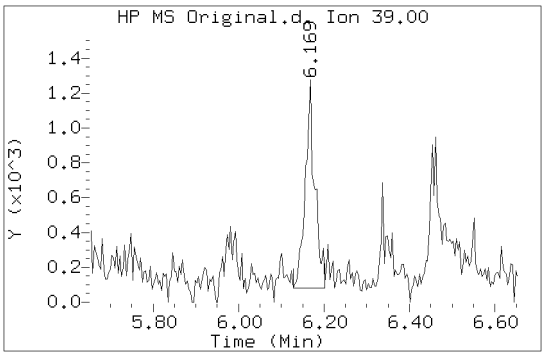
AFTER

MASS
77
AREA
1607
HEIGHT
745
27-Dec-2022
16:07
linh
pham



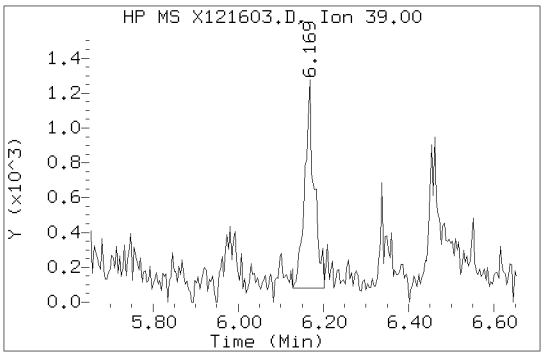
BEFORE

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

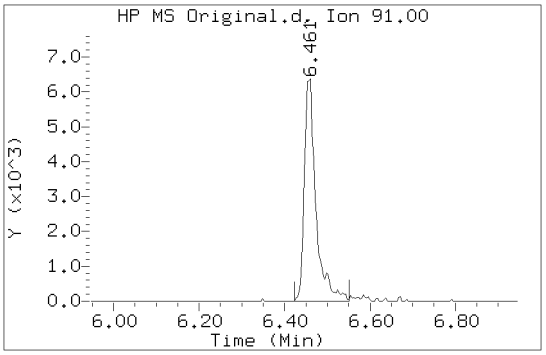


Toluene (108-88-3)

Reason Code:

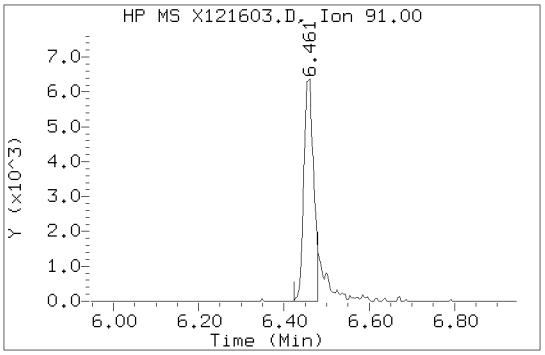
BEFORE

MASS
91
AREA
12225
HEIGHT
6374
27-Dec-2022
16:03
linh
pham



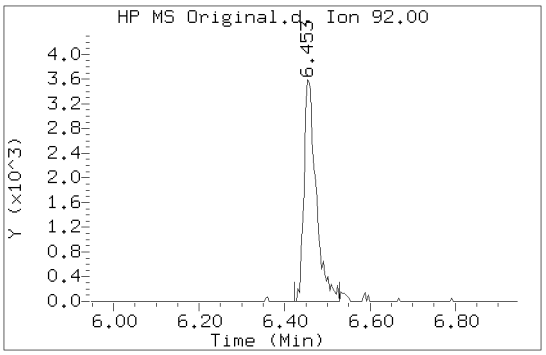
AFTER

MASS
91
AREA
10374
HEIGHT
6374
27-Dec-2022
16:07
linh
pham



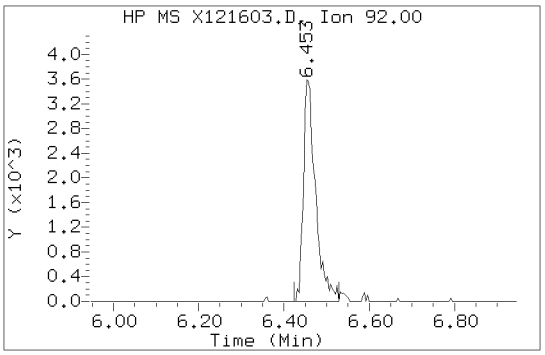
BEFORE

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



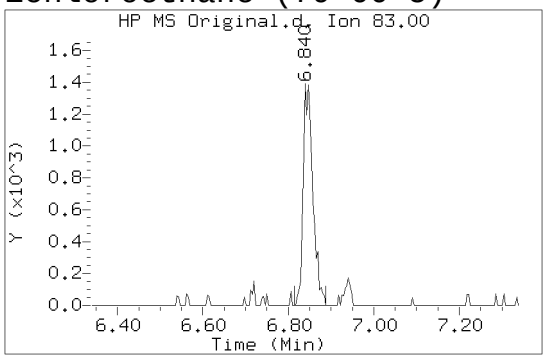
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2-Trichloroethane (79-00-5)

Reason Code:

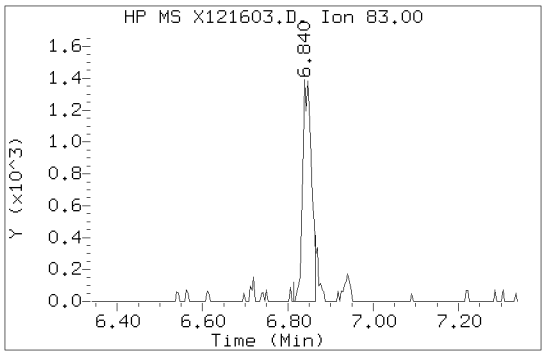
BEFORE

MASS
83
AREA
2247
HEIGHT
1391
27-Dec-2022
16:03
linh
pham



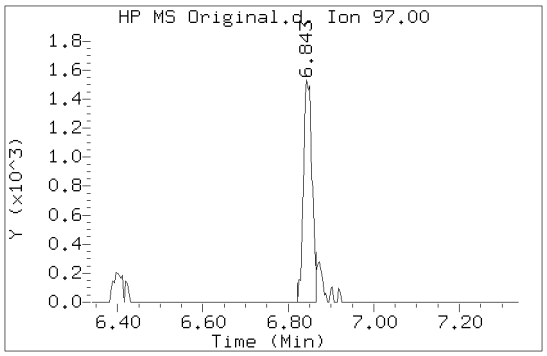
AFTER

MASS
83
AREA
2092
HEIGHT
1391
27-Dec-2022
16:07
linh
pham



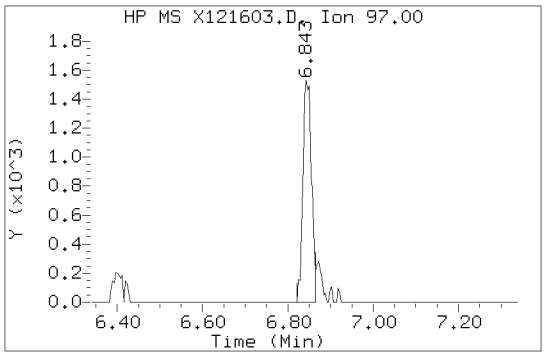
BEFORE

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

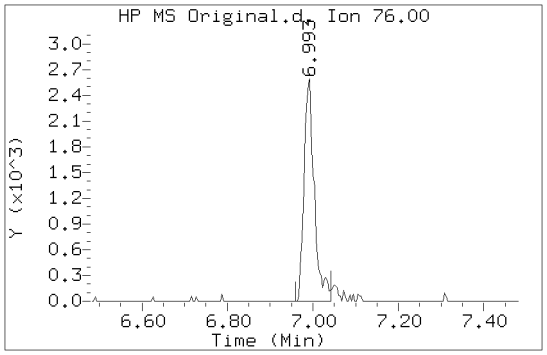


1,3-Dichloropropane (142-28-9)

Reason Code:

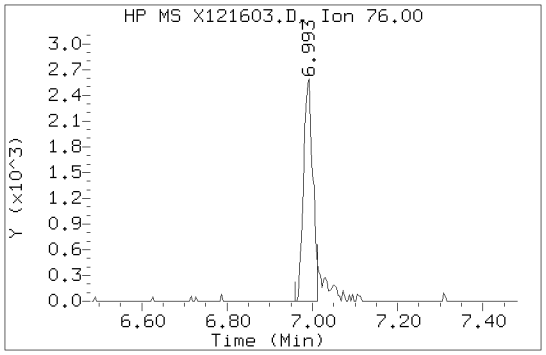
BEFORE

MASS
76
AREA
4415
HEIGHT
2592
27-Dec-2022
16:03
linh
pham



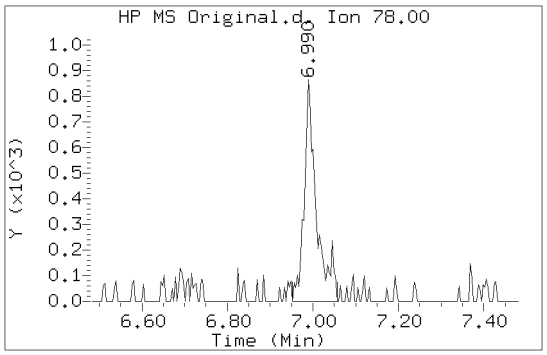
AFTER

MASS
76
AREA
4005
HEIGHT
2592
27-Dec-2022
16:07
linh
pham



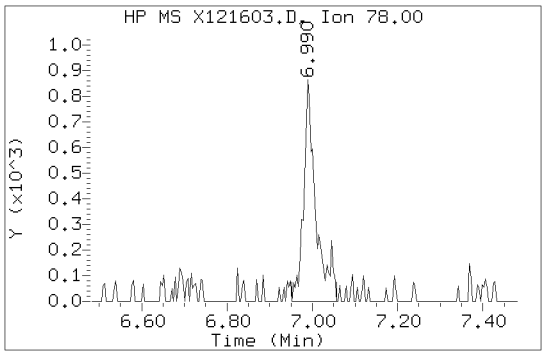
BEFORE

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



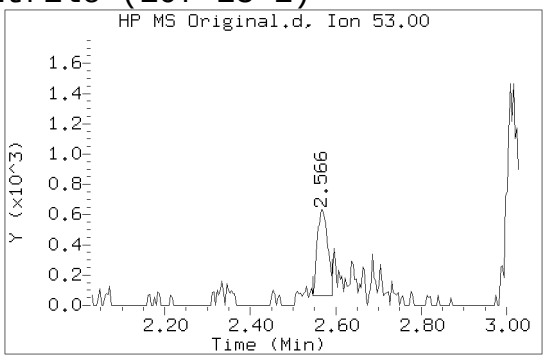
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Acrylonitrile (107-13-1)

Reason Code:

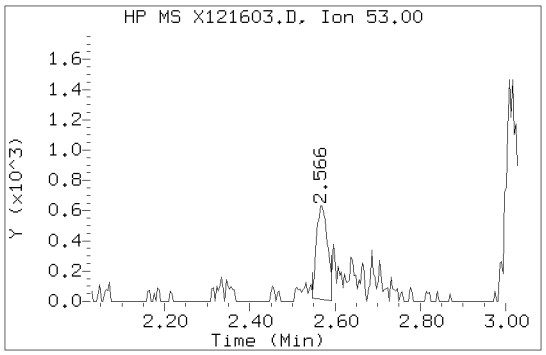
BEFORE

MASS
53
AREA
975
HEIGHT
571
27-Dec-2022
16:03
linh
pham



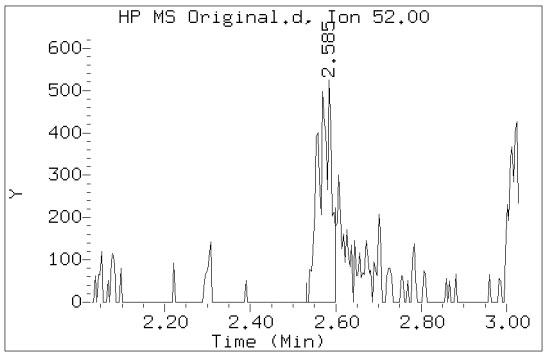
AFTER

MASS
53
AREA
1118
HEIGHT
618
27-Dec-2022
16:07
linh
pham



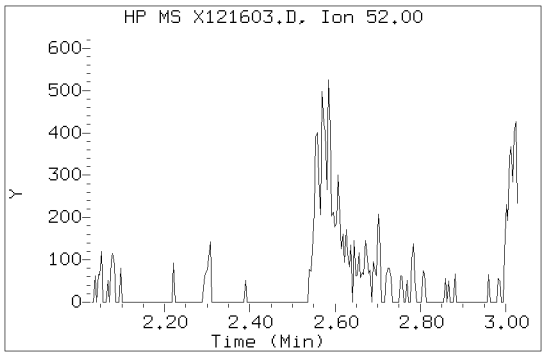
BEFORE

MASS
52
AREA
1100
HEIGHT
525
27-Dec-2022
16:03
linh
pham



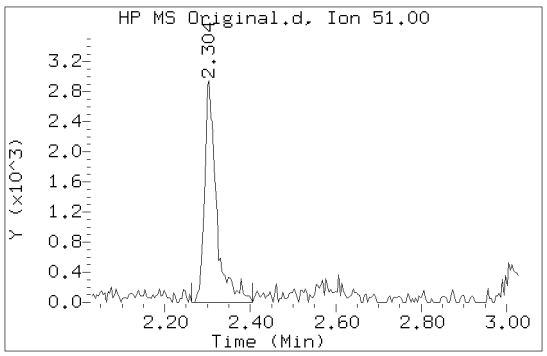
AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



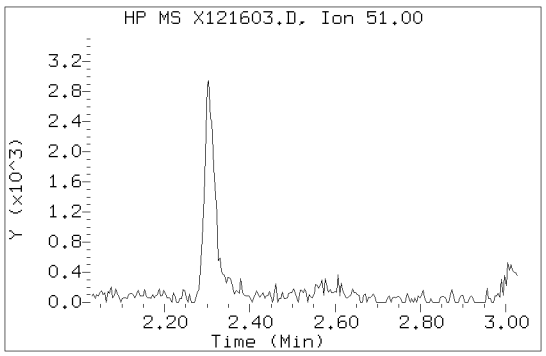
BEFORE

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

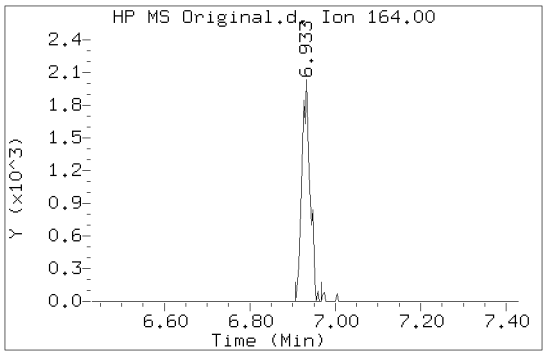


Tetrachloroethene (127-18-4)

Reason Code:

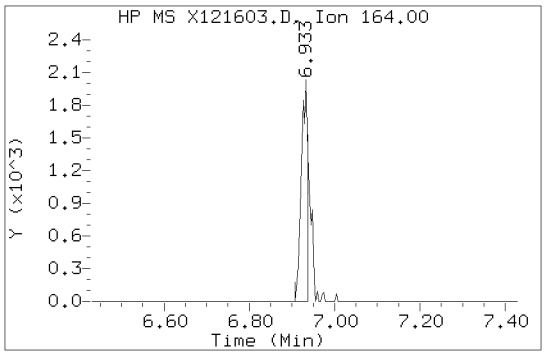
BEFORE

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

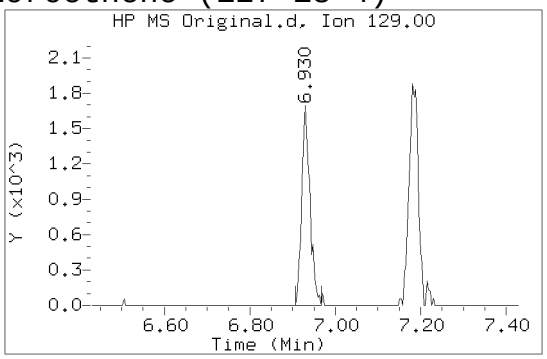


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

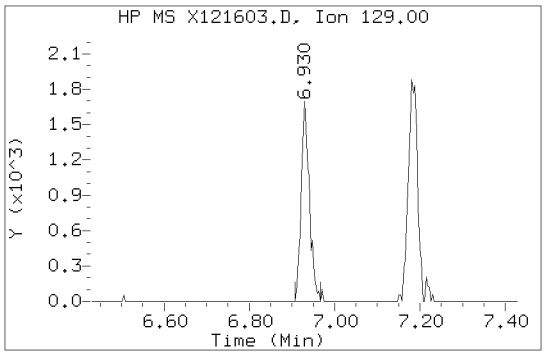
Tetrachloroethene (127-18-4)

Reason Code:

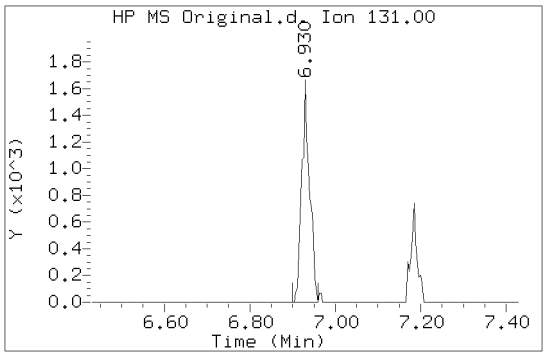
BEFORE
MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:03
linh
pham



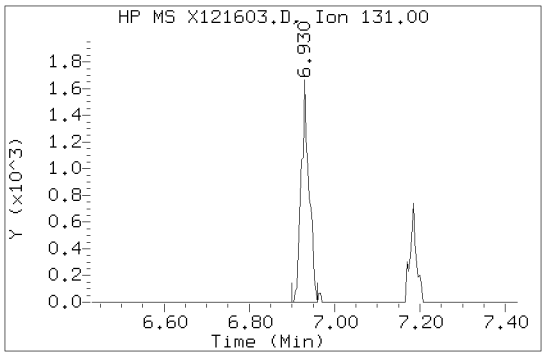
AFTER
MASS
129
AREA
2342
HEIGHT
1697
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
131
AREA
2193
HEIGHT
1665
27-Dec-2022
16:03
linh
pham



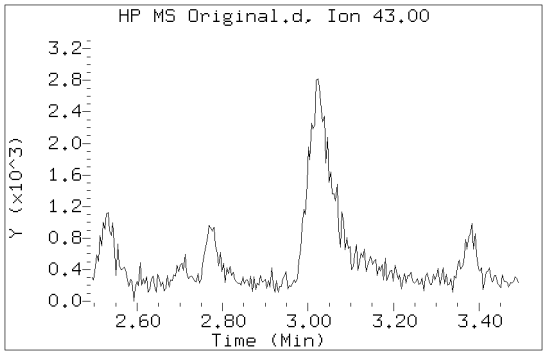
AFTER
MASS
131
AREA
2193
HEIGHT
1665
27-Dec-2022
16:07
linh
pham



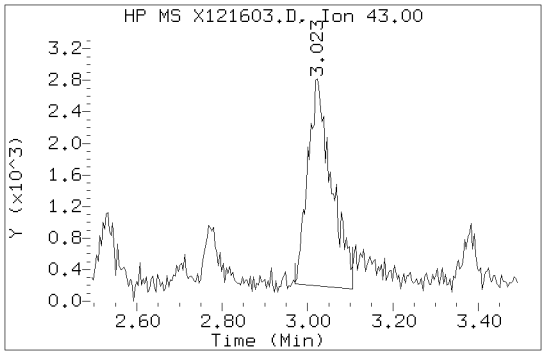
Vinyl Acetate (108-05-4)

Reason Code:

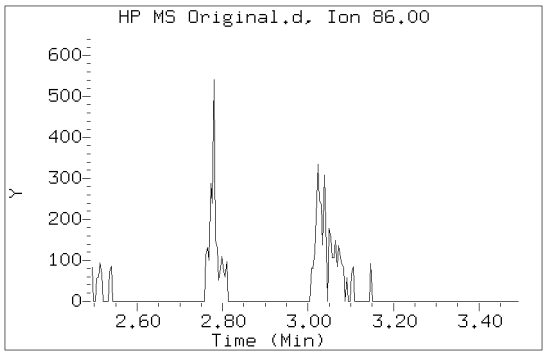
BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



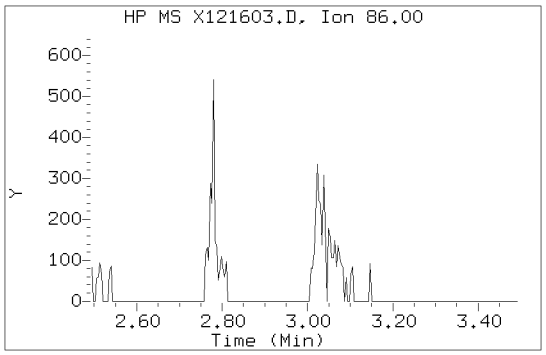
AFTER
MASS
43
AREA
10138
HEIGHT
2622
27-Dec-2022
16:07
linh
pham



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

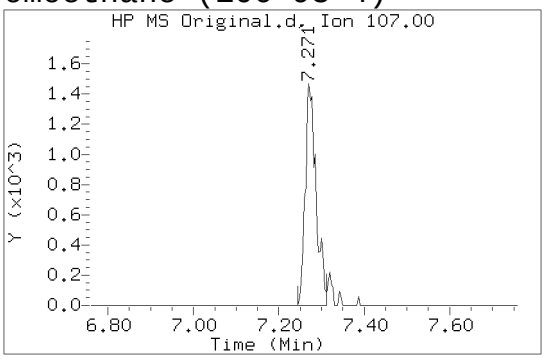


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

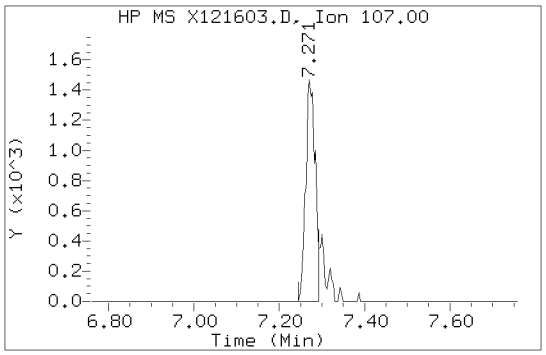
1,2-Dibromoethane (106-93-4)

Reason Code:

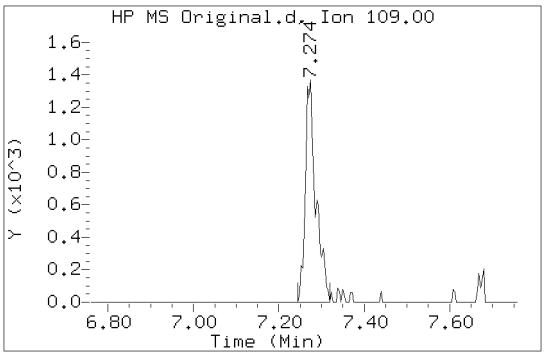
BEFORE
MASS
107
AREA
2627
HEIGHT
1469
27-Dec-2022
16:03
linh
pham



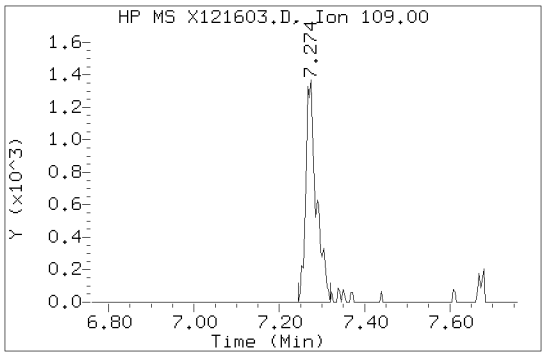
AFTER
MASS
107
AREA
2340
HEIGHT
1469
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:03
linh
pham



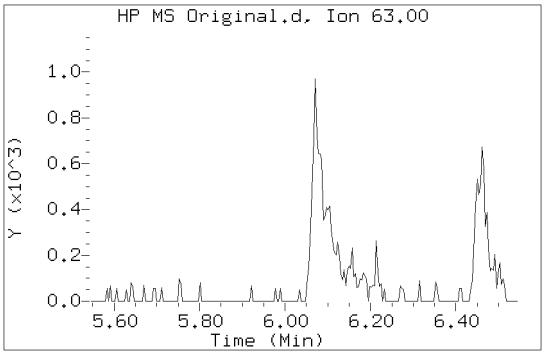
AFTER
MASS
109
AREA
2396
HEIGHT
1369
27-Dec-2022
16:07
linh
pham



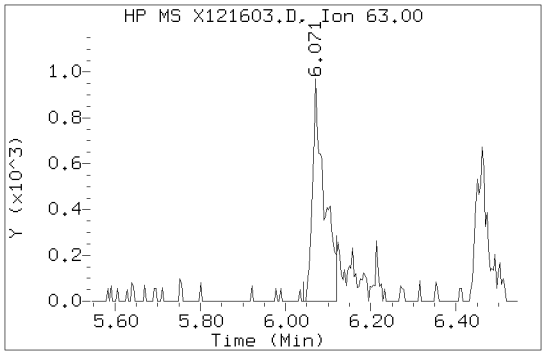
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

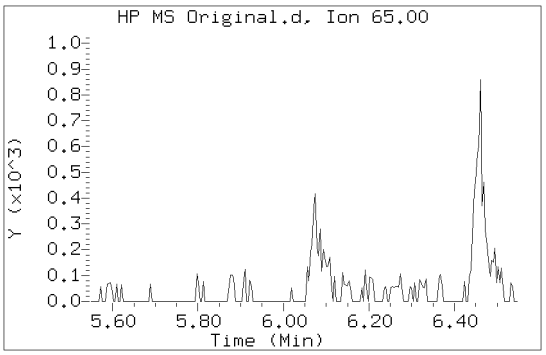
BEFORE
MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



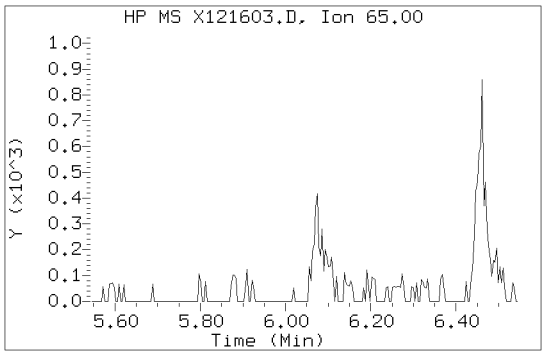
AFTER
MASS
63
AREA
1861
HEIGHT
970
27-Dec-2022
16:07
linh
pham



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



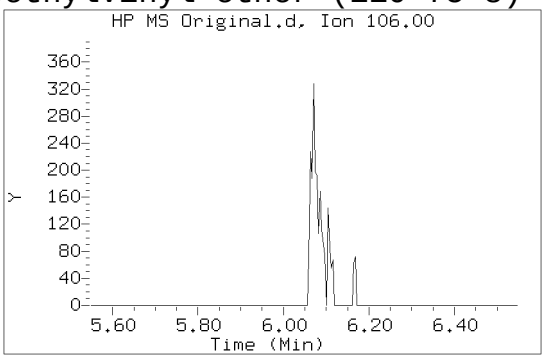
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

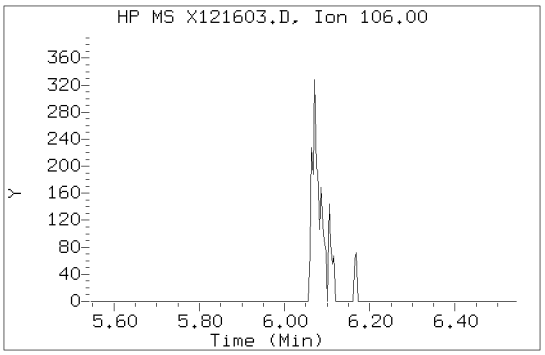
BEFORE

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

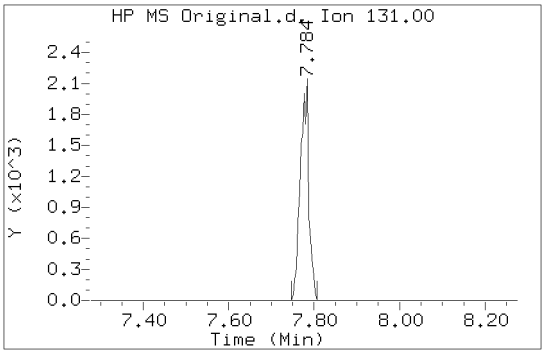


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

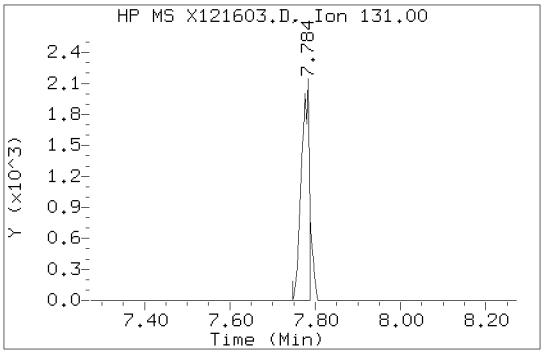
BEFORE

MASS
131
AREA
3036
HEIGHT
2146
27-Dec-2022
16:03
linh
pham



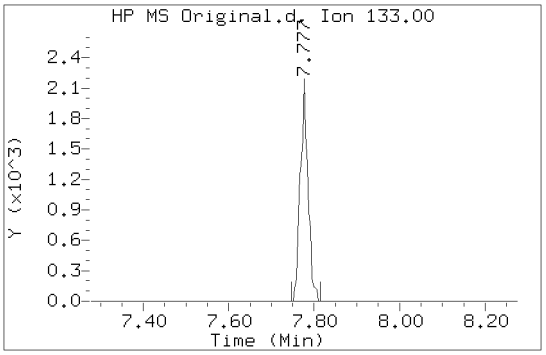
AFTER

MASS
131
AREA
2741
HEIGHT
2146
27-Dec-2022
16:07
linh
pham



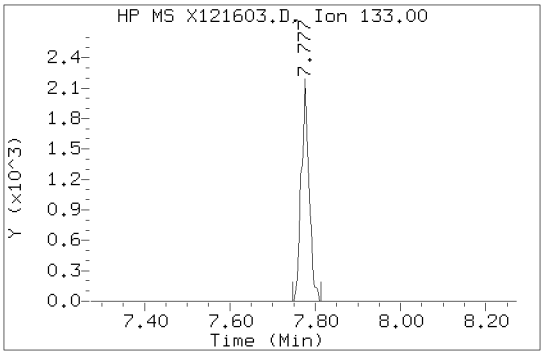
BEFORE

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:03
linh
pham



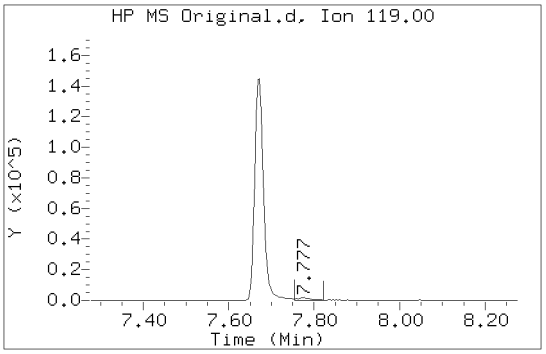
AFTER

MASS
133
AREA
2829
HEIGHT
2191
27-Dec-2022
16:07
linh
pham



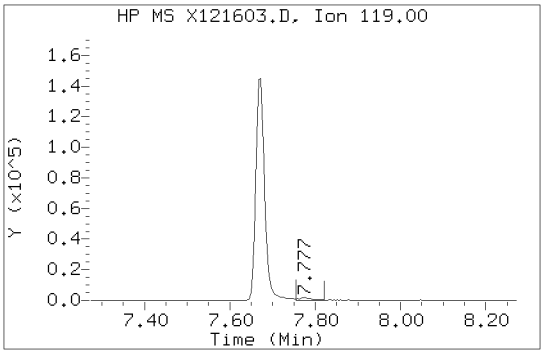
BEFORE

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



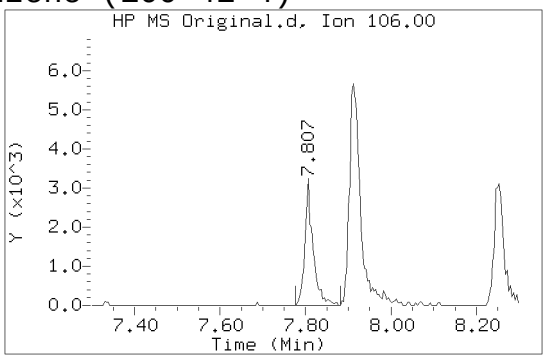
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

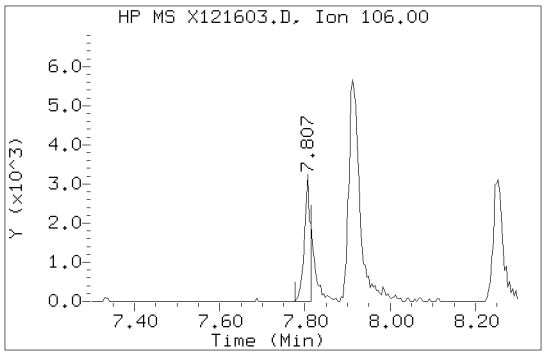
BEFORE

MASS
106
AREA
4331
HEIGHT
3242
27-Dec-2022
16:03
linh
pham



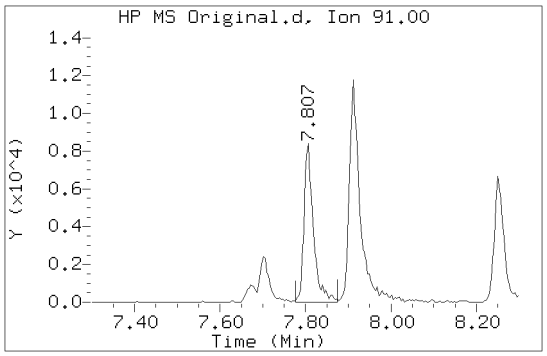
AFTER

MASS
106
AREA
3064
HEIGHT
3242
27-Dec-2022
16:07
linh
pham



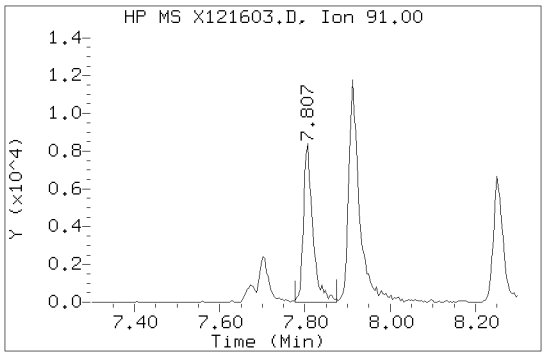
BEFORE

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

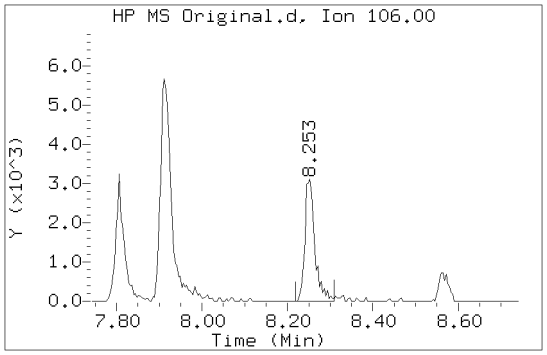


o-Xylene (95-47-6)

Reason Code:

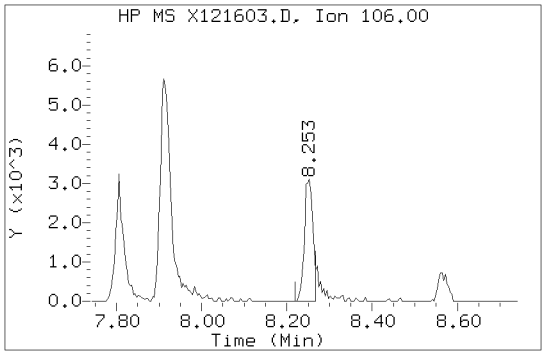
BEFORE

MASS
106
AREA
5100
HEIGHT
3111
27-Dec-2022
16:03
linh
pham



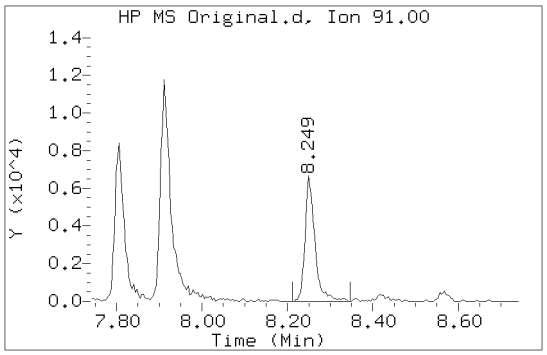
AFTER

MASS
106
AREA
4412
HEIGHT
3111
27-Dec-2022
16:07
linh
pham



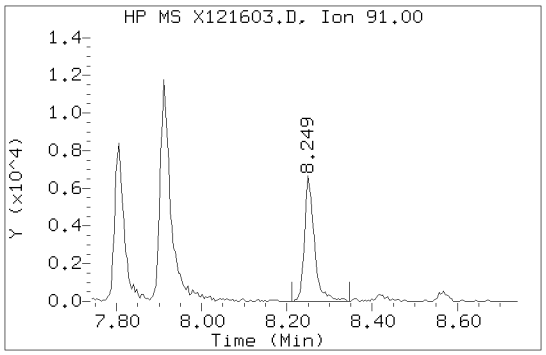
BEFORE

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



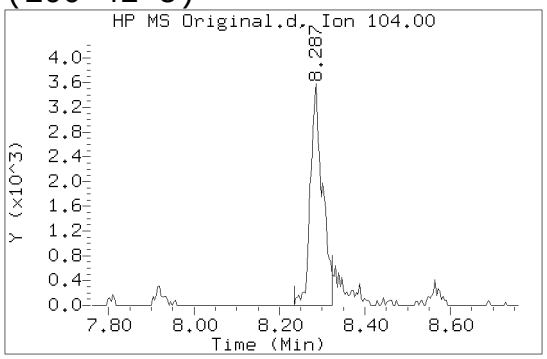
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Styrene (100-42-5)

Reason Code:

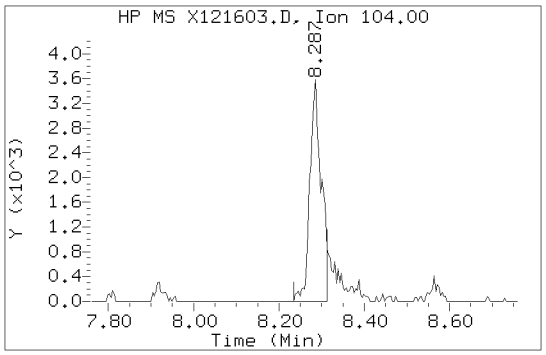
BEFORE

MASS
104
AREA
7074
HEIGHT
3581
27-Dec-2022
16:03
linh
pham



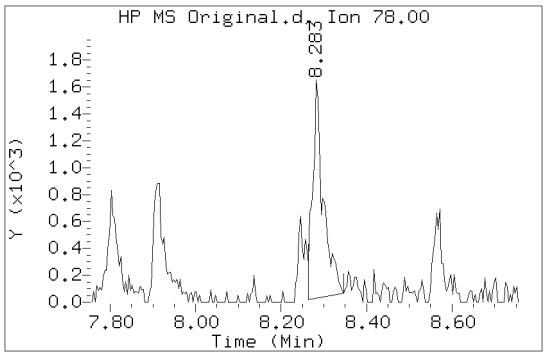
AFTER

MASS
104
AREA
6634
HEIGHT
3581
27-Dec-2022
16:07
linh
pham



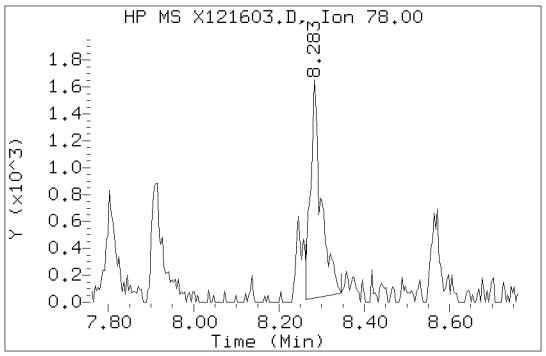
BEFORE

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

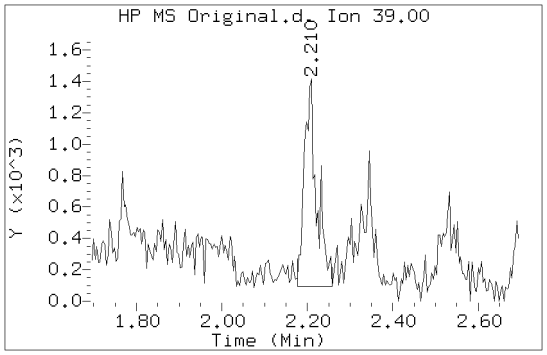


Acetonitrile (75-05-8)

Reason Code:

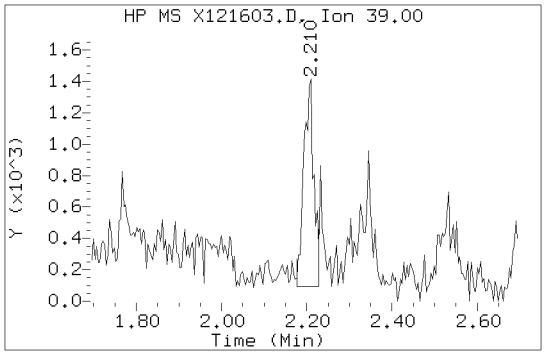
BEFORE

MASS
39
AREA
2674
HEIGHT
1321
27-Dec-2022
16:03
linh
pham



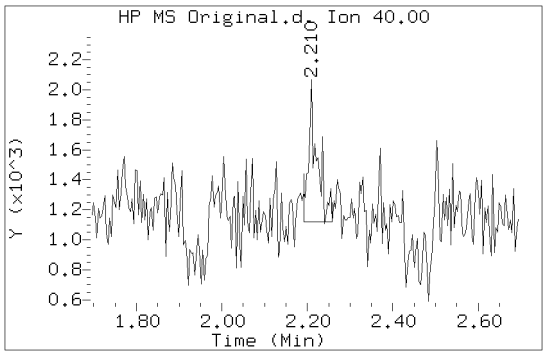
AFTER

MASS
39
AREA
2204
HEIGHT
1321
27-Dec-2022
16:07
linh
pham



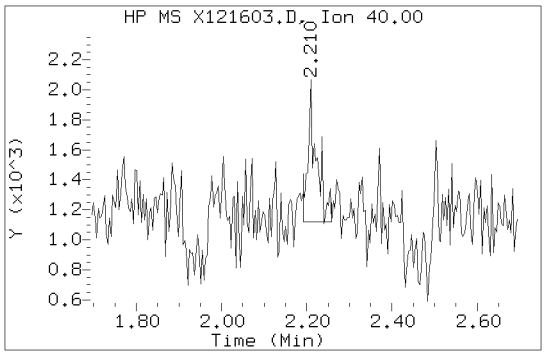
BEFORE

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



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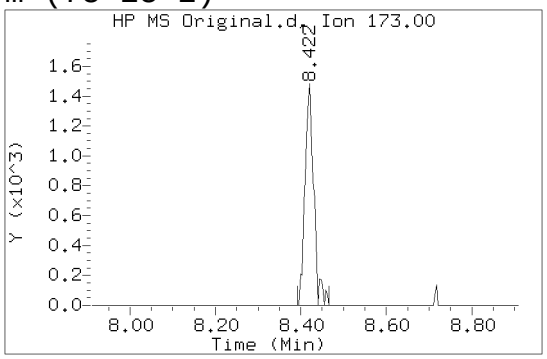
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Bromoform (75-25-2)

Reason Code:

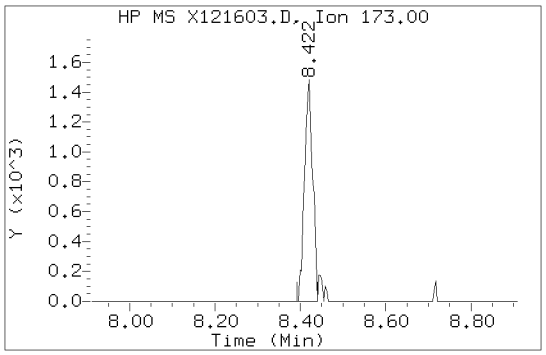
BEFORE

MASS
173
AREA
2158
HEIGHT
1483
27-Dec-2022
16:03
linh
pham



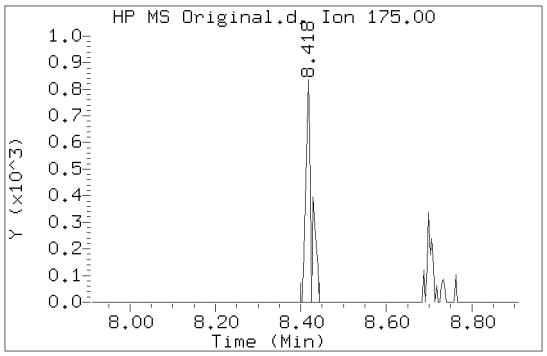
AFTER

MASS
173
AREA
2013
HEIGHT
1483
27-Dec-2022
16:07
linh
pham



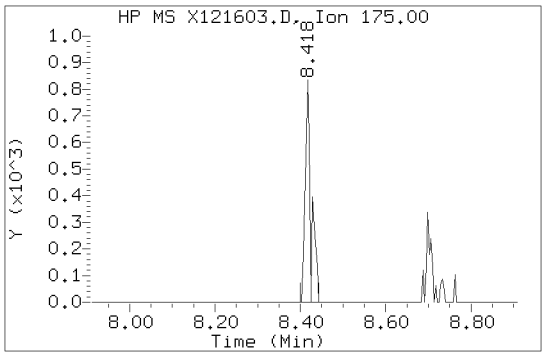
BEFORE

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:03
linh
pham



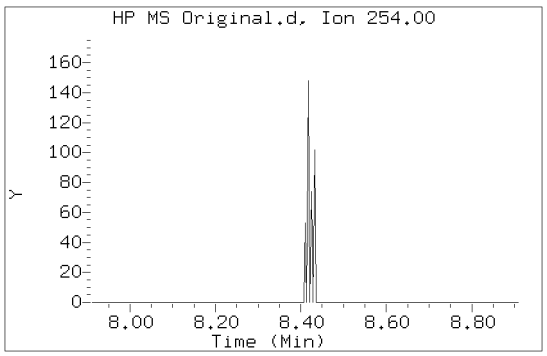
AFTER

MASS
175
AREA
807
HEIGHT
835
27-Dec-2022
16:07
linh
pham



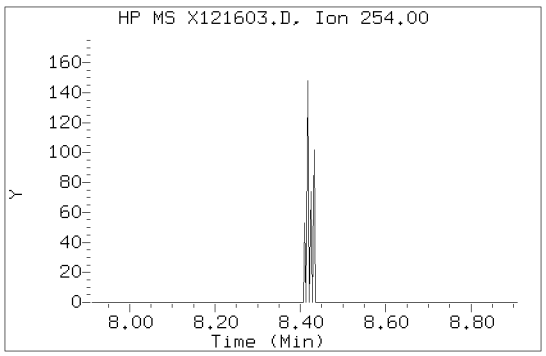
BEFORE

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

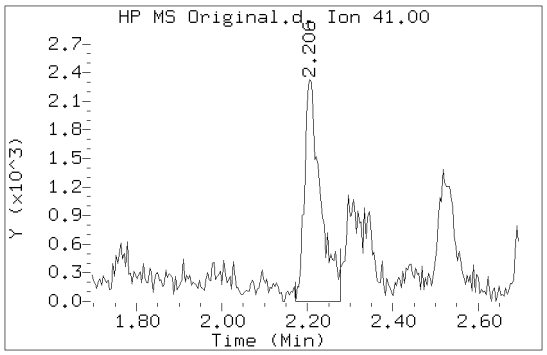


Allyl Chloride (107-05-1)

Reason Code:

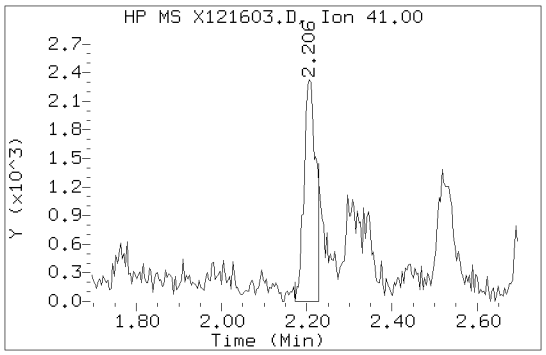
BEFORE

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



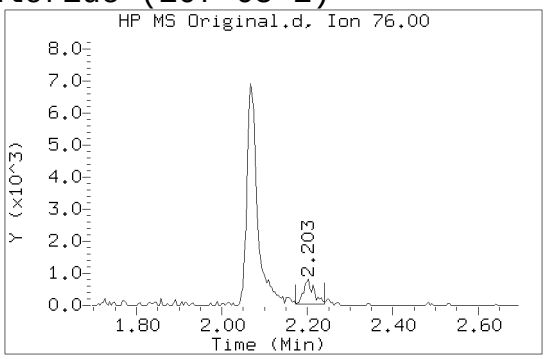
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Allyl Chloride (107-05-1)

Reason Code:

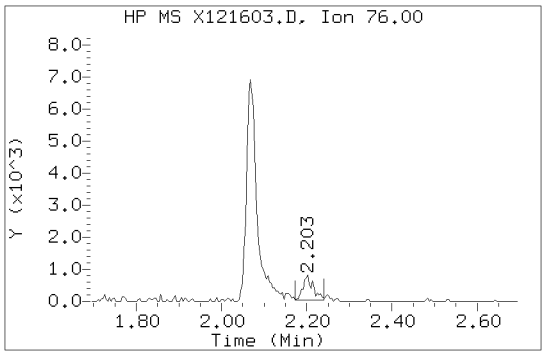
BEFORE

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

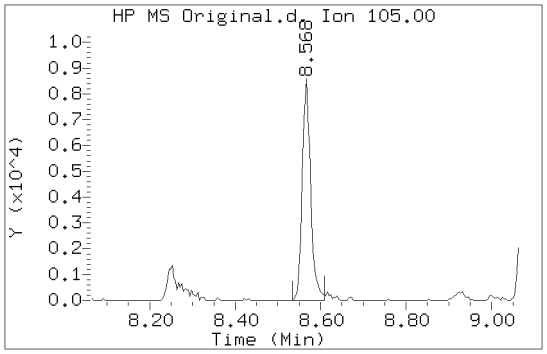


Isopropylbenzene (98-82-8)

Reason Code:

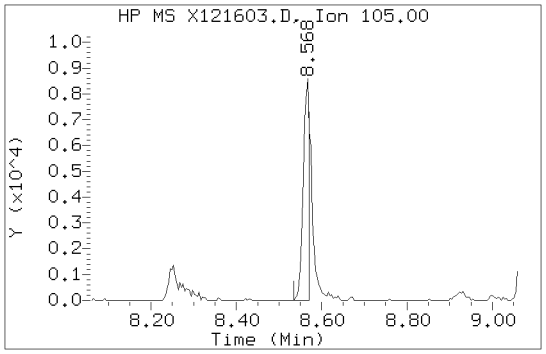
BEFORE

MASS
105
AREA
12091
HEIGHT
8588
27-Dec-2022
16:03
linh
pham



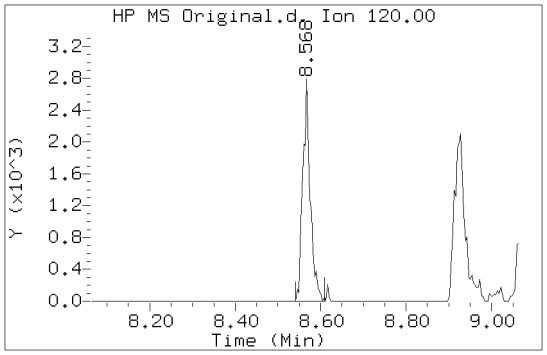
AFTER

MASS
105
AREA
8757
HEIGHT
8588
27-Dec-2022
16:07
linh
pham



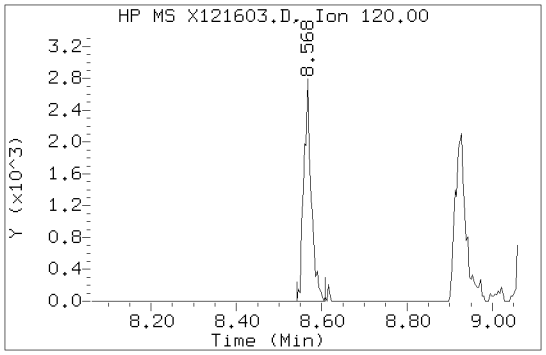
BEFORE

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

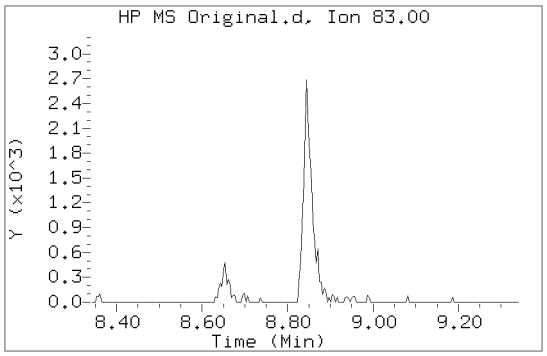


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

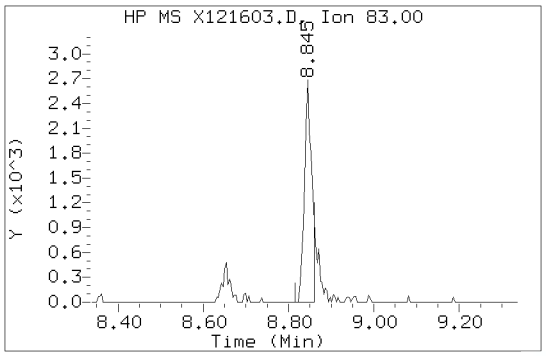
BEFORE

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



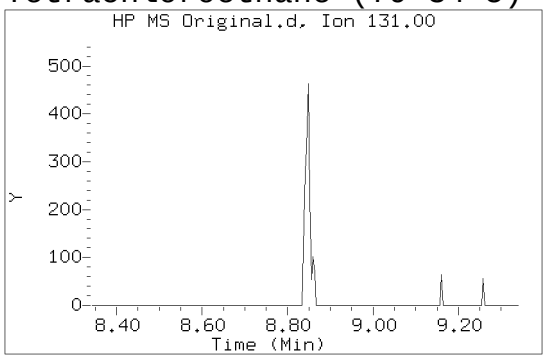
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

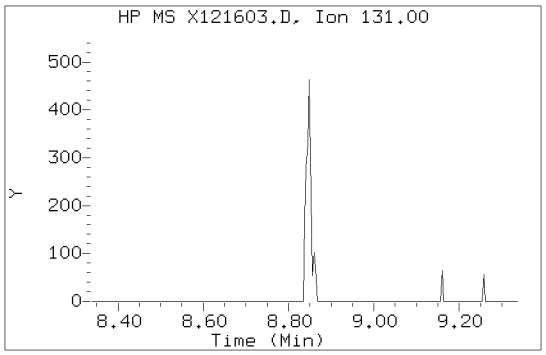
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



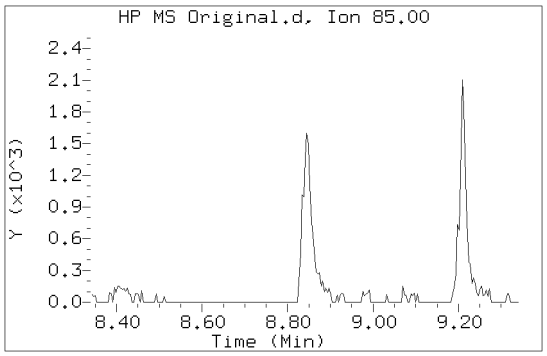
AFTER

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



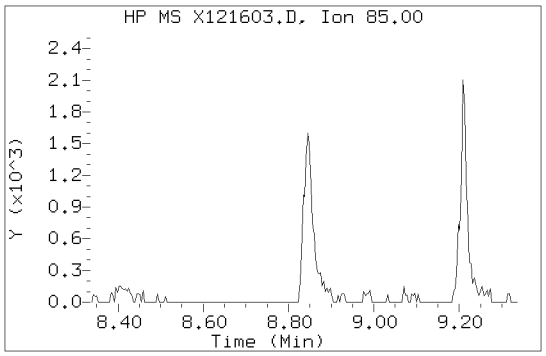
BEFORE

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

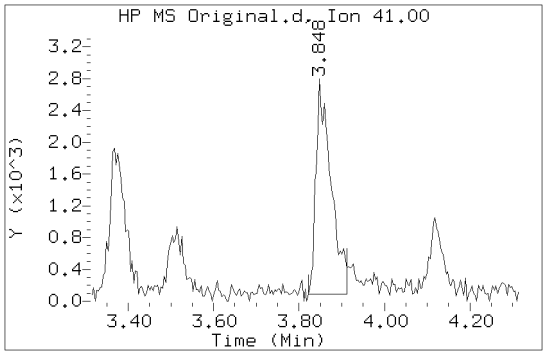


Methacrylonitrile (126-98-7)

Reason Code:

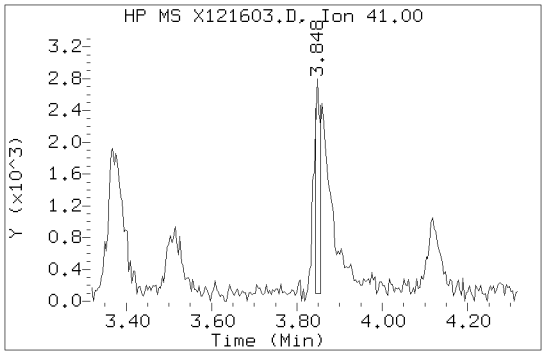
BEFORE

MASS
41
AREA
6587
HEIGHT
2708
27-Dec-2022
16:03
linh
pham



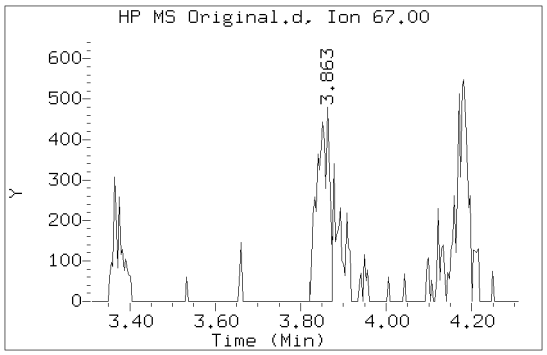
AFTER

MASS
41
AREA
2066
HEIGHT
2701
27-Dec-2022
16:07
linh
pham



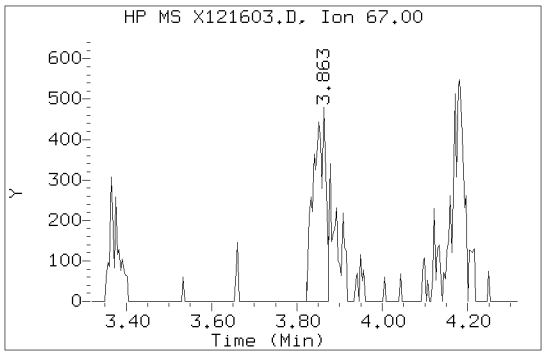
BEFORE

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



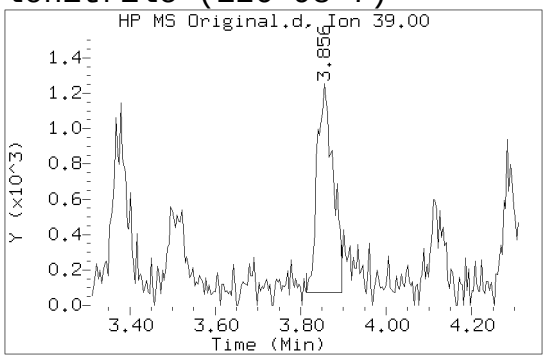
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methacrylonitrile (126-98-7)

Reason Code:

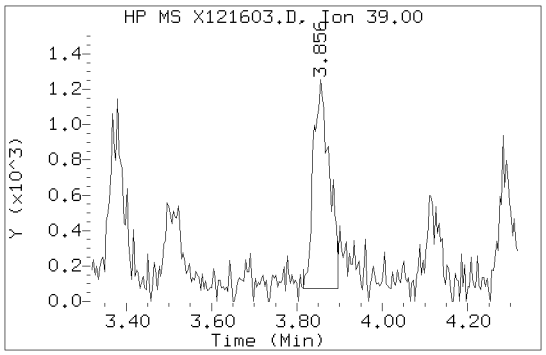
BEFORE

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

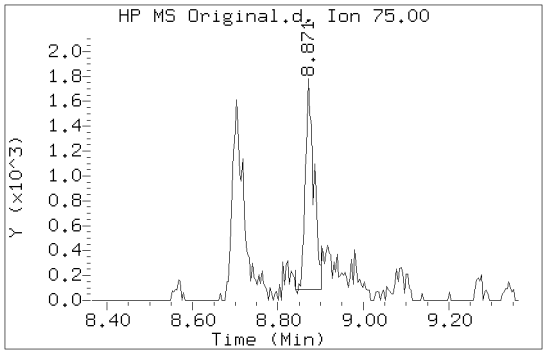


1,2,3-Trichloropropane (96-18-4)

Reason Code:

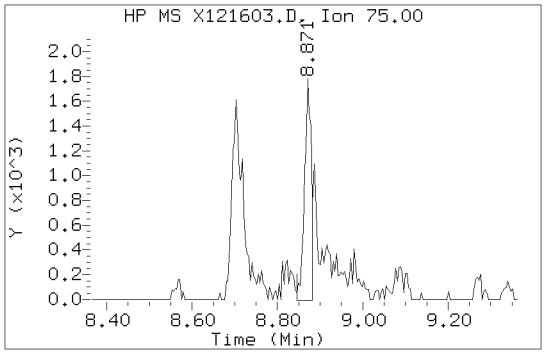
BEFORE

MASS
75
AREA
2351
HEIGHT
1693
27-Dec-2022
16:03
linh
pham



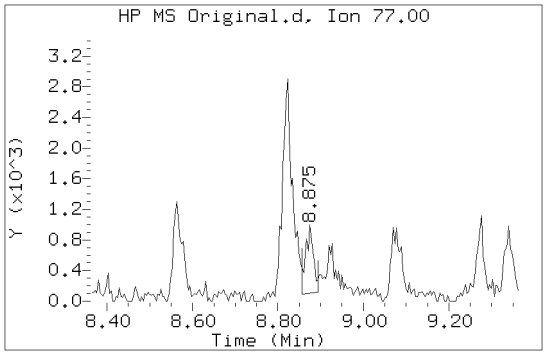
AFTER

MASS
75
AREA
2019
HEIGHT
1788
27-Dec-2022
16:07
linh
pham



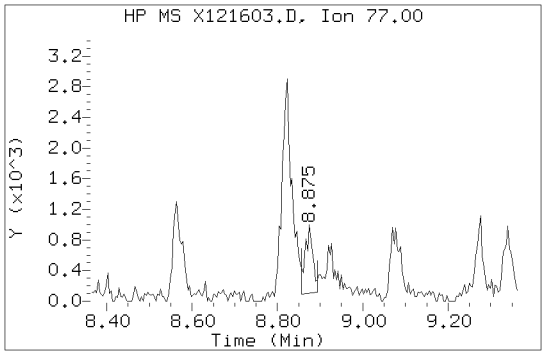
BEFORE

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

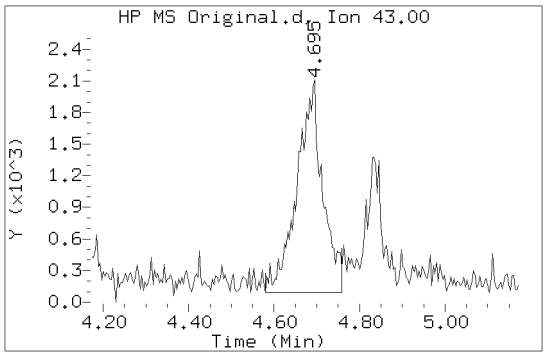


Isobutyl Alcohol (78-83-1)

Reason Code:

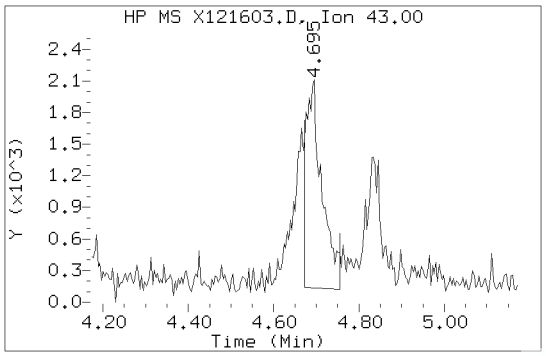
BEFORE

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



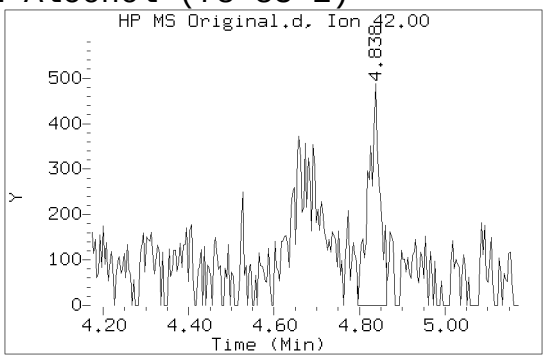
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutyl Alcohol (78-83-1)

Reason Code:

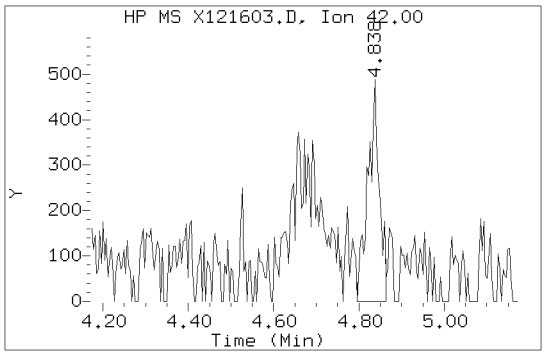
BEFORE

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:03
linh
pham



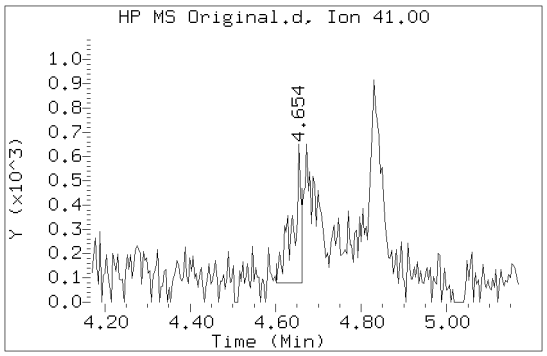
AFTER

MASS
42
AREA
904
HEIGHT
488
27-Dec-2022
16:07
linh
pham



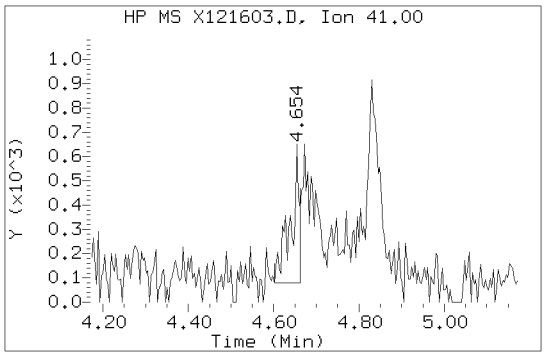
BEFORE

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

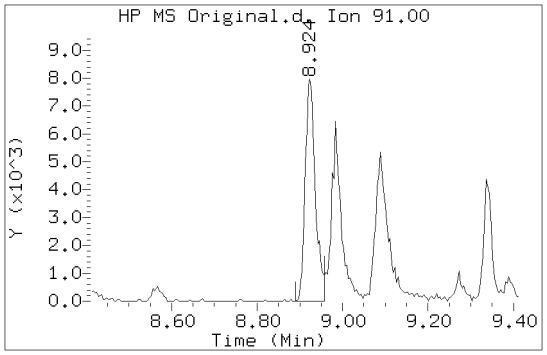


n-Propylbenzene (106-65-1)

Reason Code:

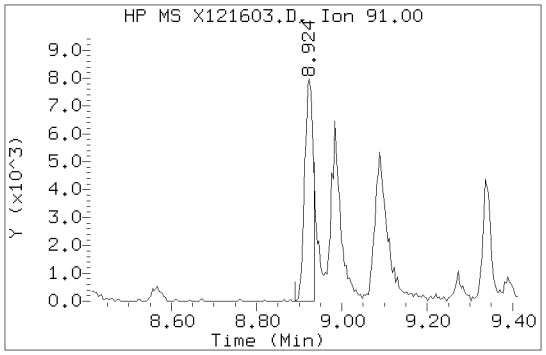
BEFORE

MASS
91
AREA
13496
HEIGHT
7972
27-Dec-2022
16:03
linh
pham



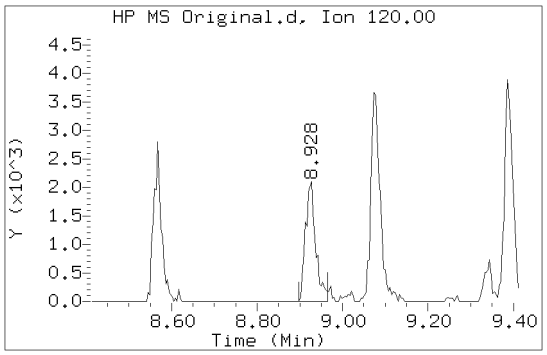
AFTER

MASS
91
AREA
11163
HEIGHT
7972
27-Dec-2022
16:07
linh
pham



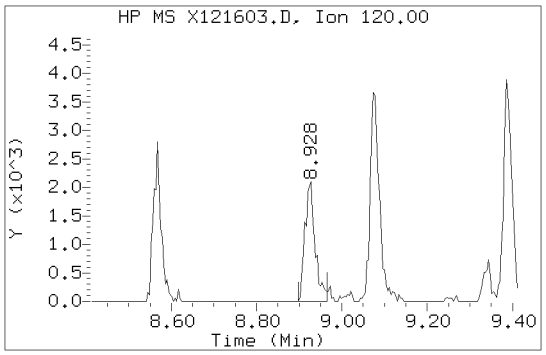
BEFORE

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

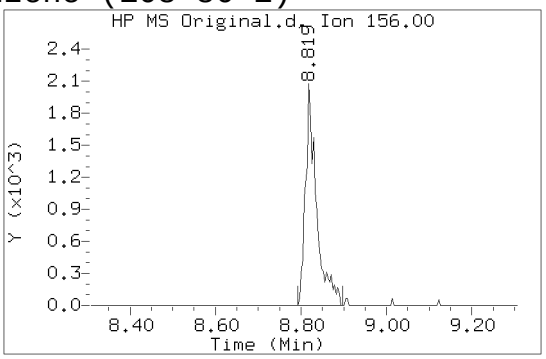


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

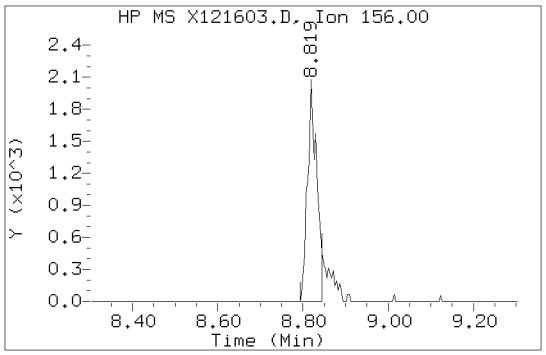
Bromobenzene (108-86-1)

Reason Code:

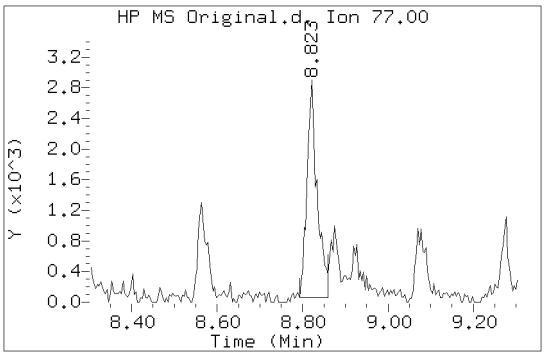
BEFORE
MASS
156
AREA
3747
HEIGHT
2077
27-Dec-2022
16:03
linh
pham



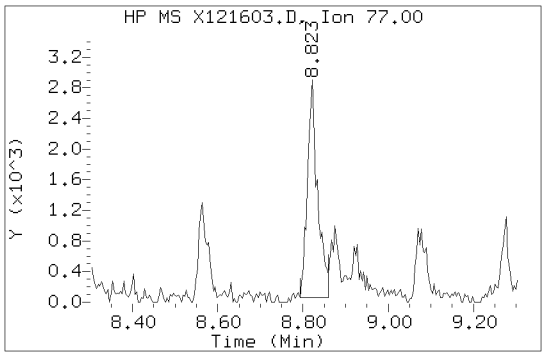
AFTER
MASS
156
AREA
3147
HEIGHT
2077
27-Dec-2022
16:07
linh
pham



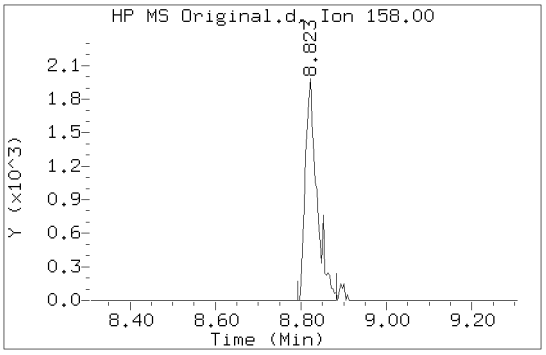
BEFORE
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:03
linh
pham



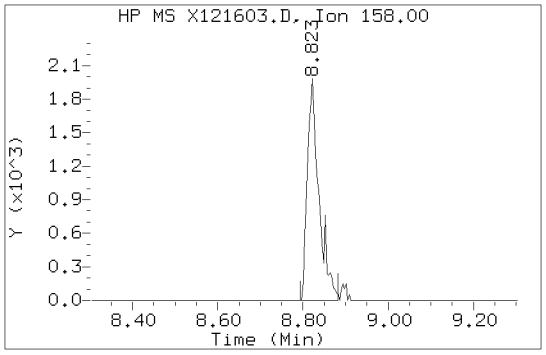
AFTER
MASS
77
AREA
4719
HEIGHT
2841
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:03
linh
pham



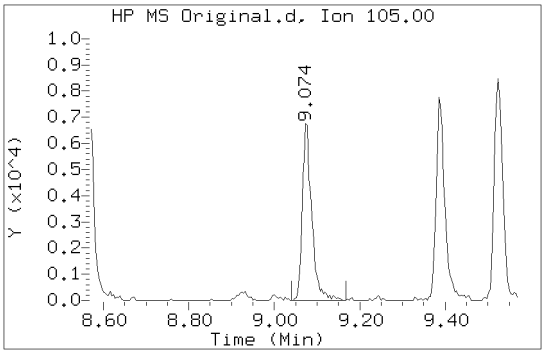
AFTER
MASS
158
AREA
3772
HEIGHT
1983
27-Dec-2022
16:07
linh
pham



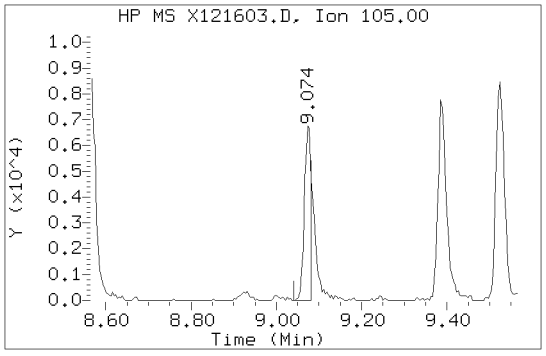
1,3,5-Trimethylbenzene (108-67-8)

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

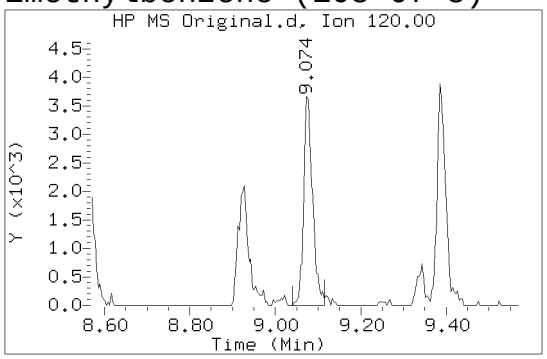


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

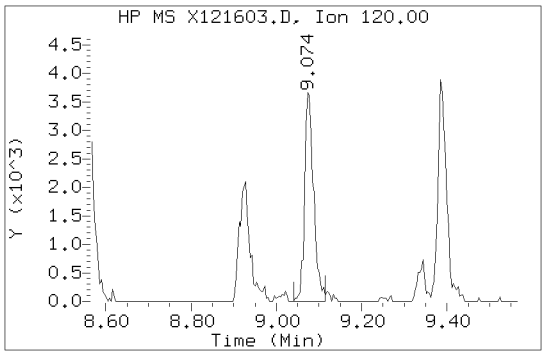
1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

BEFORE
MASS
120
AREA
5450
HEIGHT
3663
27-Dec-2022
16:03
linh
pham



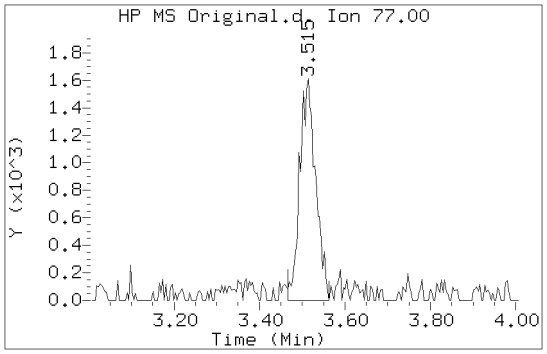
AFTER
MASS
120
AREA
5450
HEIGHT
3663
27-Dec-2022
16:07
linh
pham



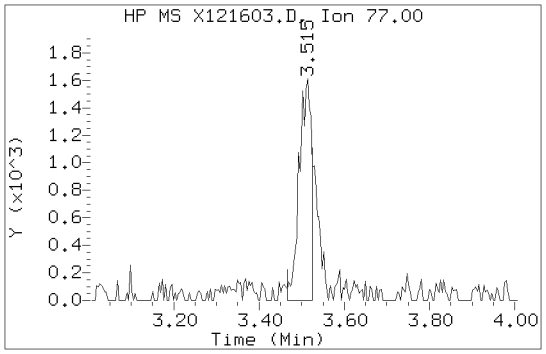
2,2-Dichloropropane (594-20-7)

Reason Code:

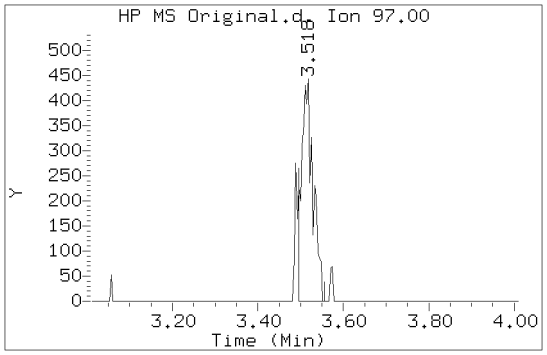
BEFORE
MASS
77
AREA
4217
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



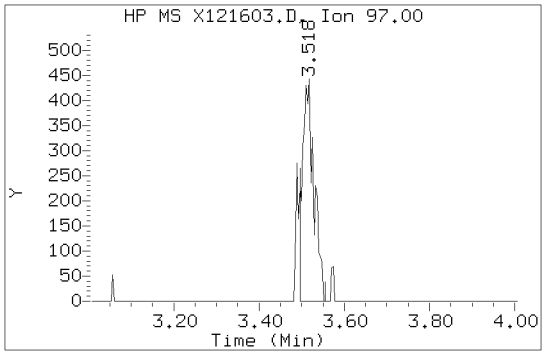
AFTER
MASS
77
AREA
3238
HEIGHT
1612
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
97
AREA
843
HEIGHT
443
27-Dec-2022
16:03
linh
pham



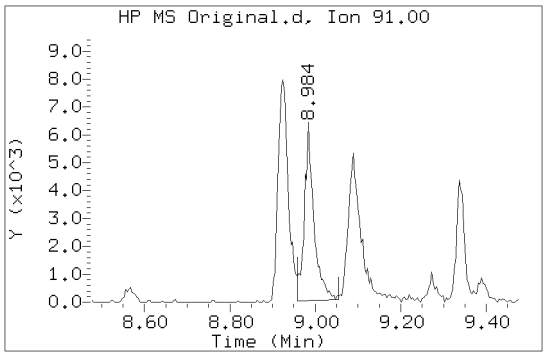
AFTER
MASS
97
AREA
843
HEIGHT
443
27-Dec-2022
16:07
linh
pham



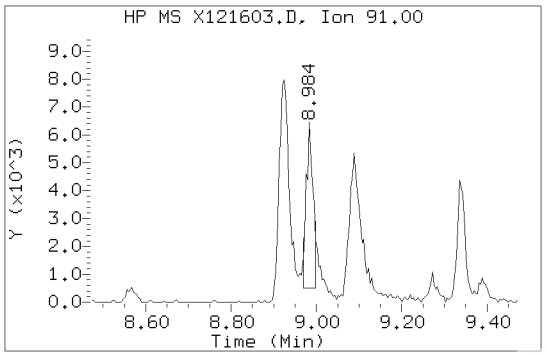
2-Chlorotoluene (95-49-8)

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



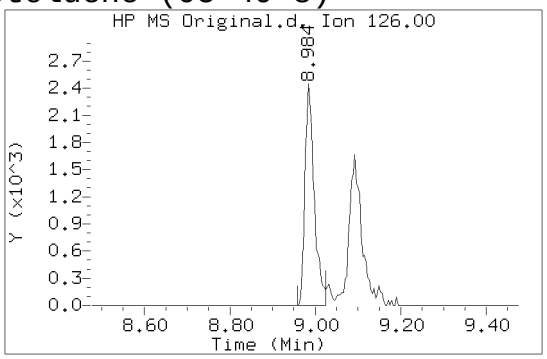
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

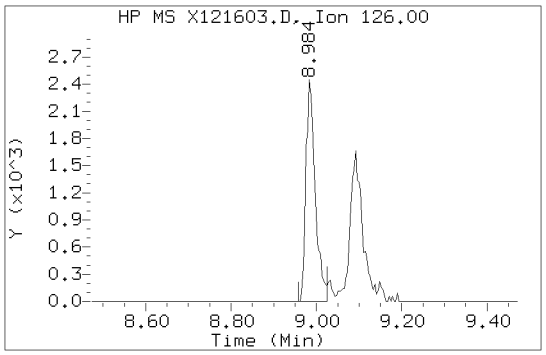
BEFORE

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

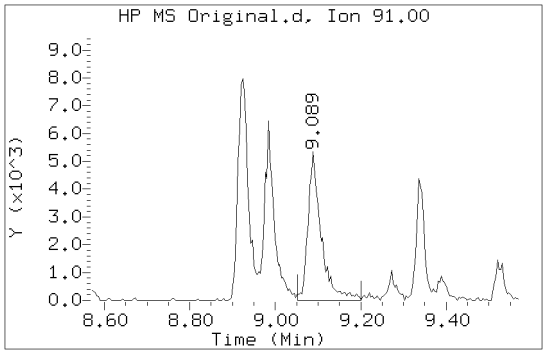


4-Chlorotoluene (106-43-4)

Reason Code:

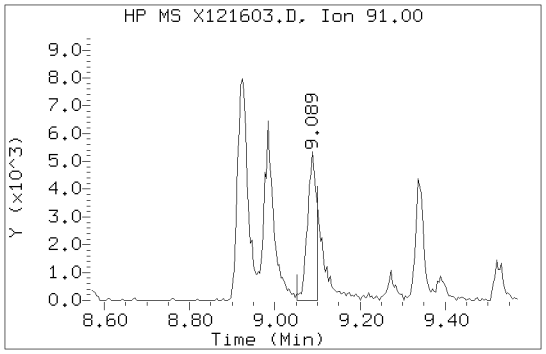
BEFORE

MASS
91
AREA
11481
HEIGHT
5337
27-Dec-2022
16:03
linh
pham



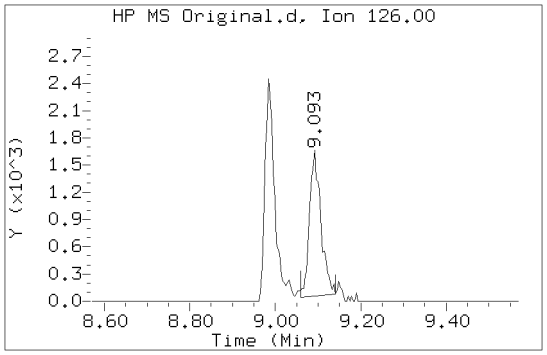
AFTER

MASS
91
AREA
7644
HEIGHT
5337
27-Dec-2022
16:07
linh
pham



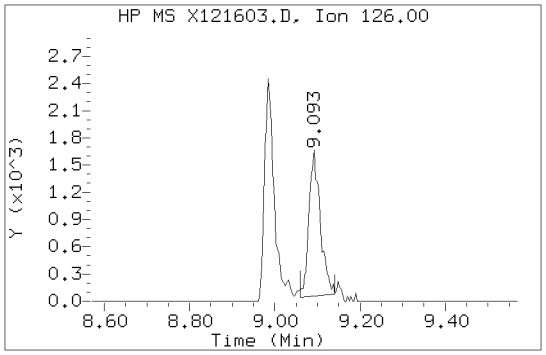
BEFORE

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

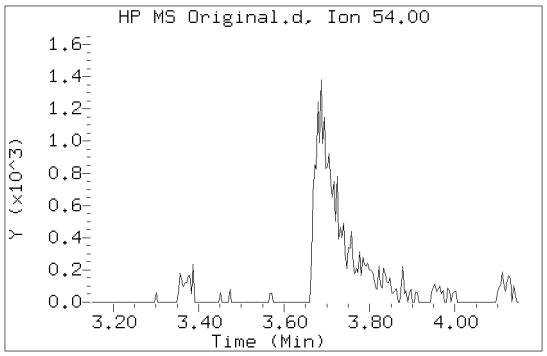


Propionitrile (107-12-0)

Reason Code:

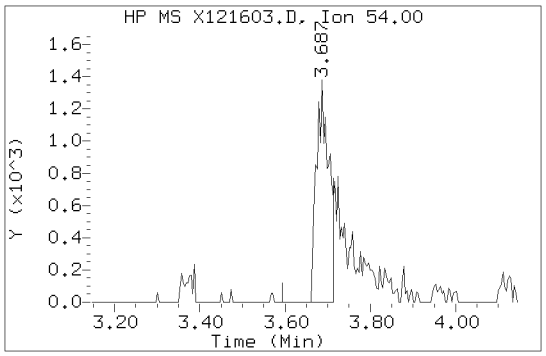
BEFORE

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

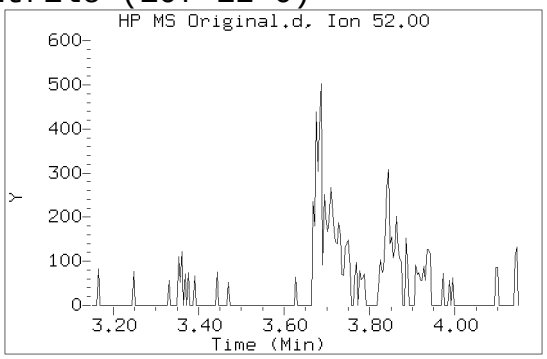


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

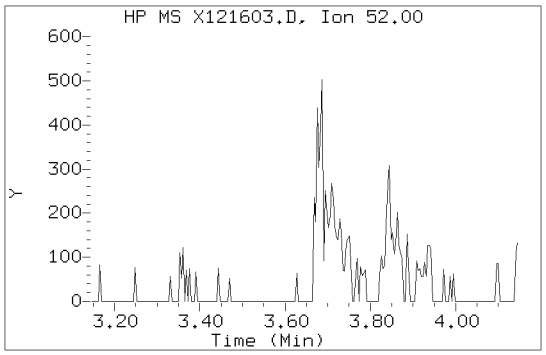
Propionitrile (107-12-0)

Reason Code:

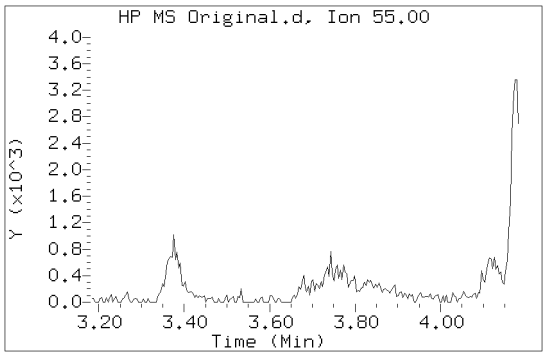
BEFORE
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



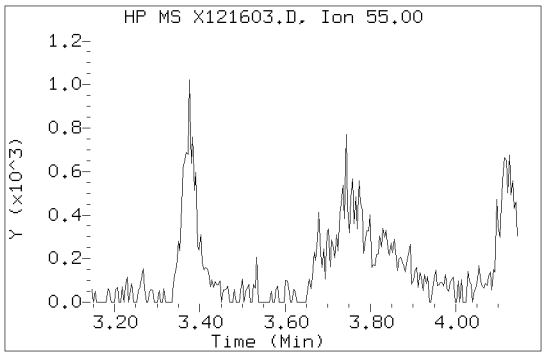
AFTER
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



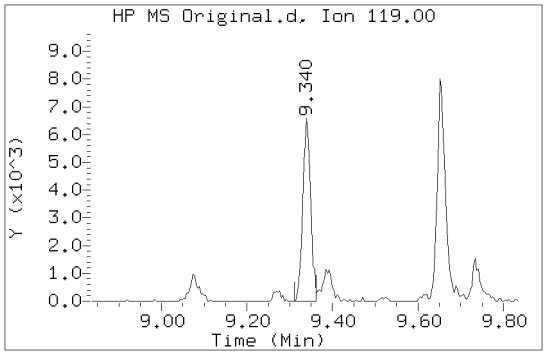
AFTER
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



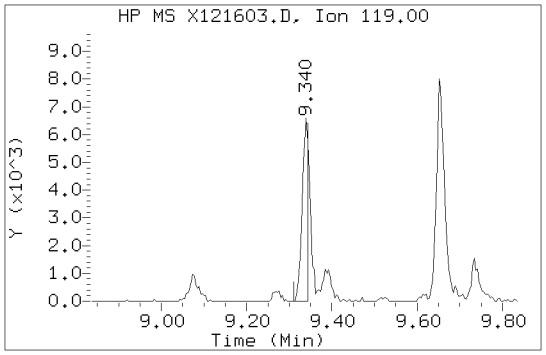
tert-Butylbenzene (98-06-6)

Reason Code:

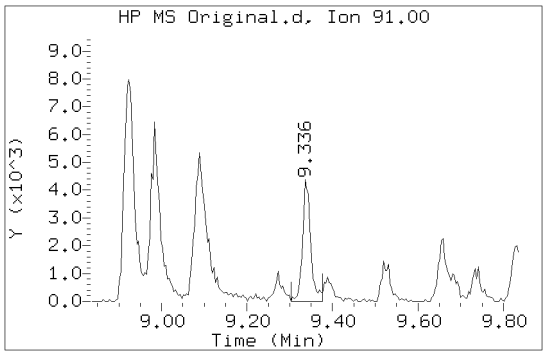
BEFORE
MASS
119
AREA
8660
HEIGHT
6598
27-Dec-2022
16:03
linh
pham



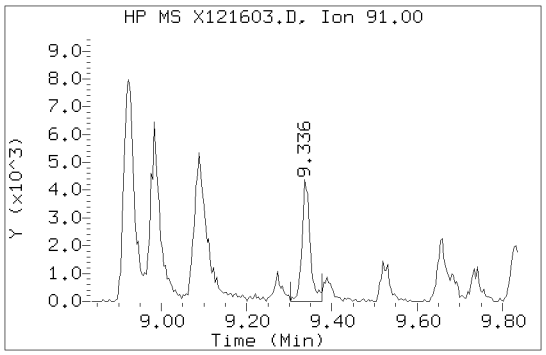
AFTER
MASS
119
AREA
6389
HEIGHT
6598
27-Dec-2022
16:07
linh
pham



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



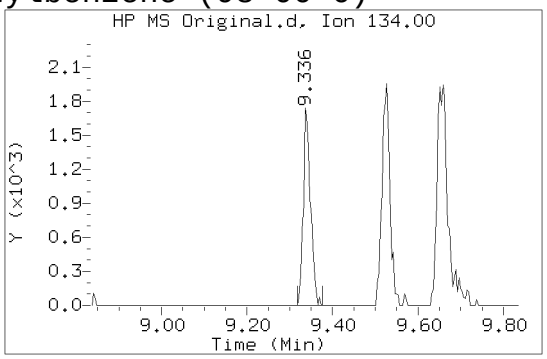
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butylbenzene (98-06-6)

Reason Code:

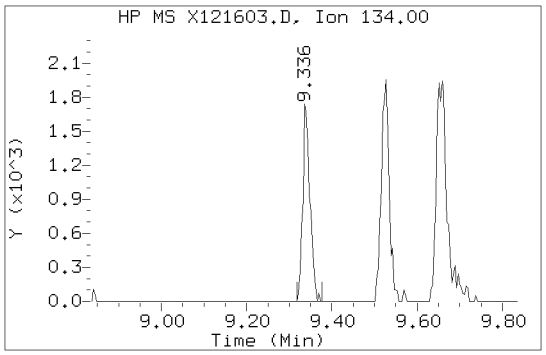
BEFORE

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

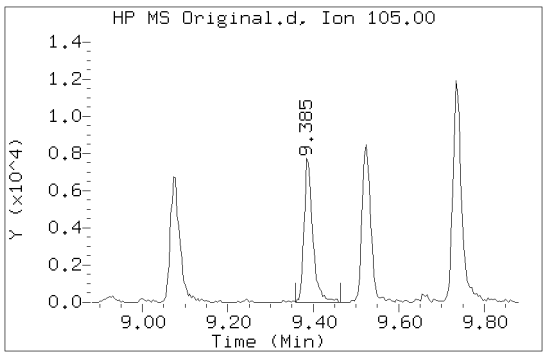


1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

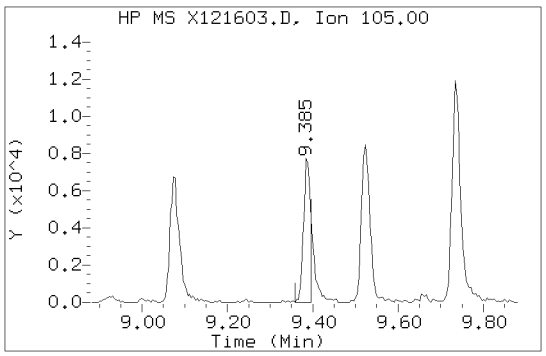
BEFORE

MASS
105
AREA
11065
HEIGHT
7775
27-Dec-2022
16:03
linh
pham



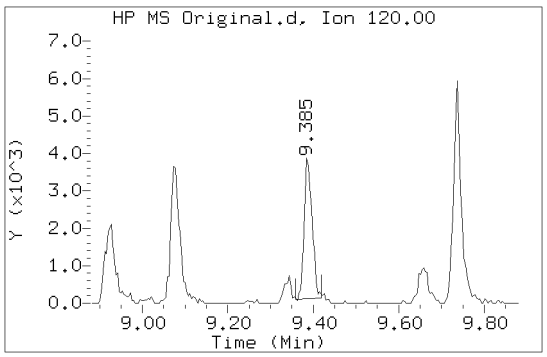
AFTER

MASS
105
AREA
8496
HEIGHT
7775
27-Dec-2022
16:07
linh
pham



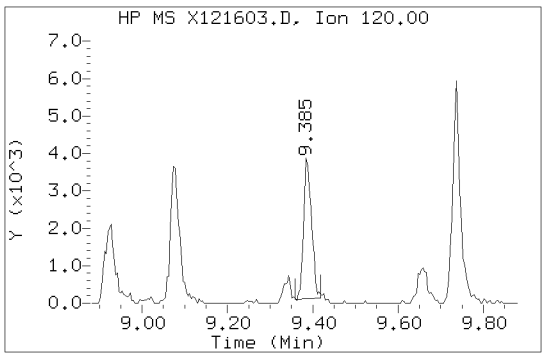
BEFORE

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

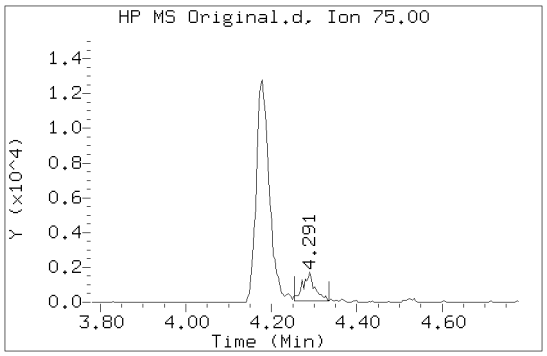


1,1-Dichloropropene (563-58-6)

Reason Code:

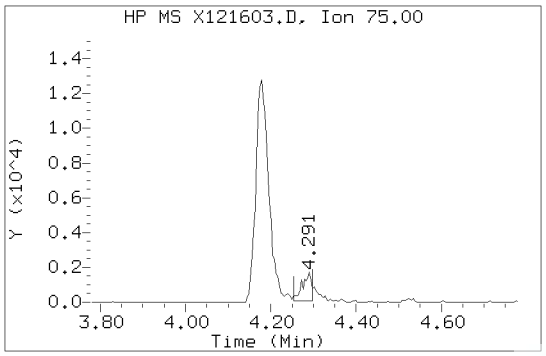
BEFORE

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



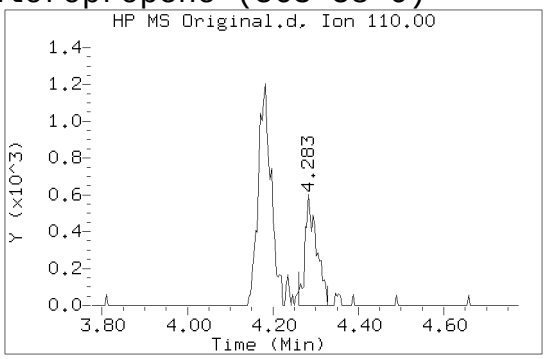
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

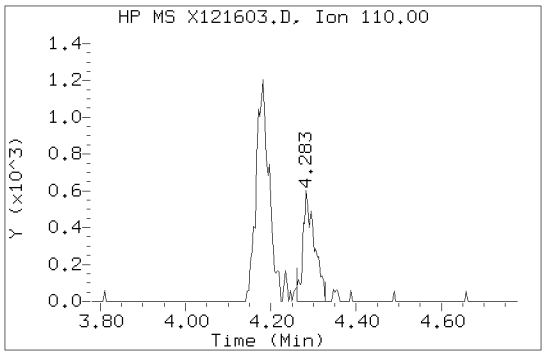
BEFORE

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:03
linh
pham



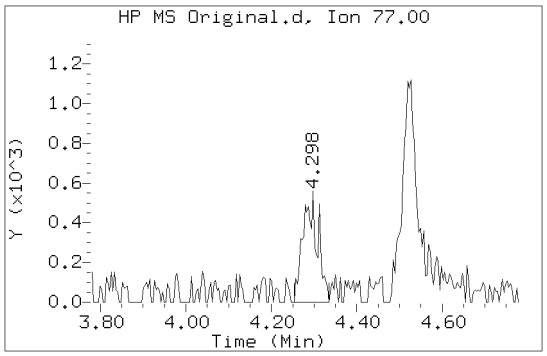
AFTER

MASS
110
AREA
1143
HEIGHT
603
27-Dec-2022
16:07
linh
pham



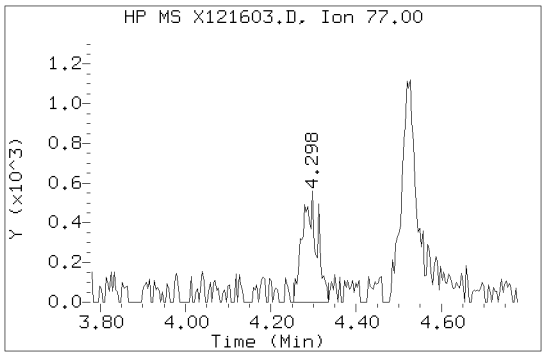
BEFORE

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

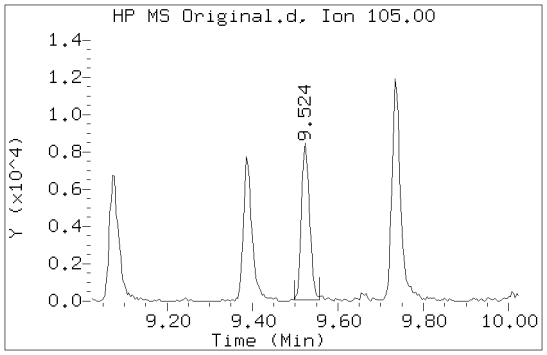


sec-Butylbenzene (135-98-8)

Reason Code:

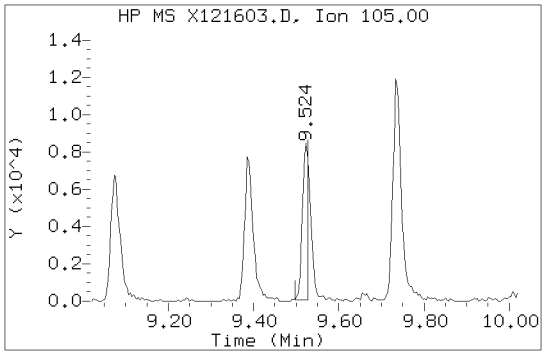
BEFORE

MASS
105
AREA
11512
HEIGHT
8394
27-Dec-2022
16:03
linh
pham



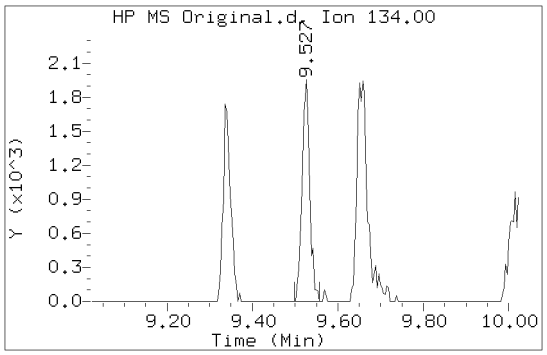
AFTER

MASS
105
AREA
7938
HEIGHT
8394
27-Dec-2022
16:07
linh
pham



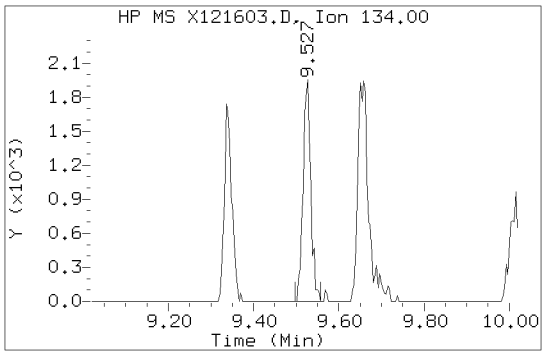
BEFORE

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



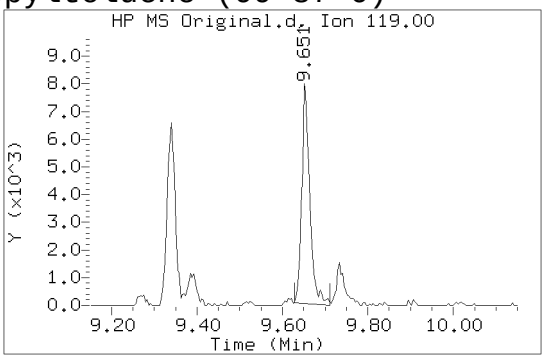
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

Reason Code:

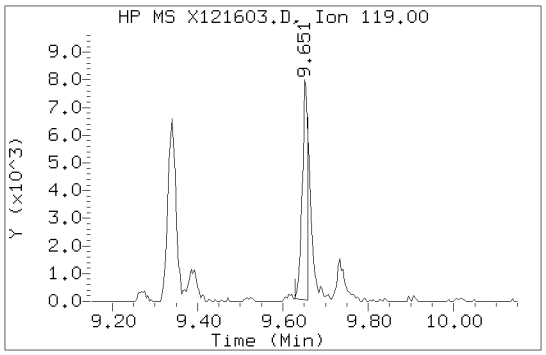
BEFORE

MASS
119
AREA
10660
HEIGHT
7944
27-Dec-2022
16:03
linh
pham



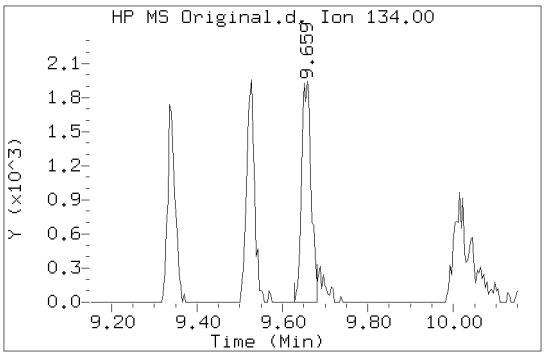
AFTER

MASS
119
AREA
7343
HEIGHT
7944
27-Dec-2022
16:07
linh
pham



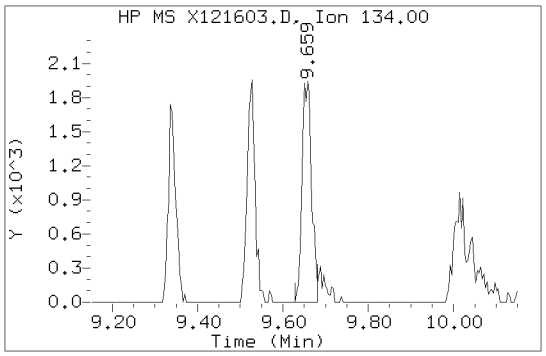
BEFORE

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:03
linh
pham



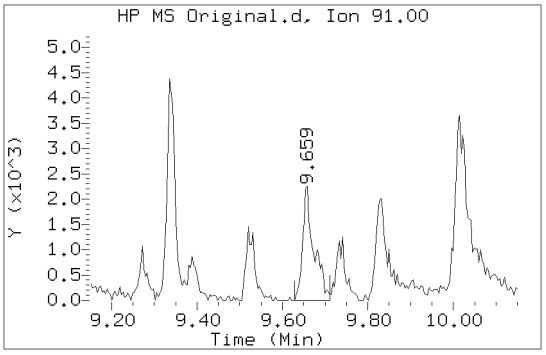
AFTER

MASS
134
AREA
3102
HEIGHT
1946
27-Dec-2022
16:07
linh
pham



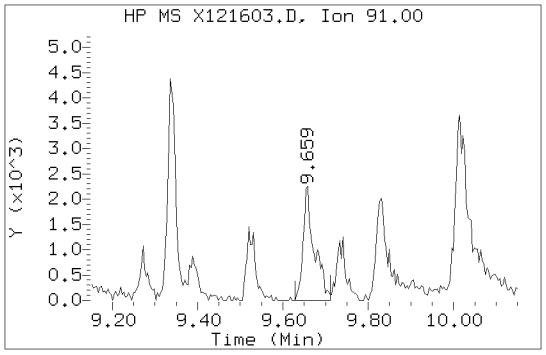
BEFORE

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

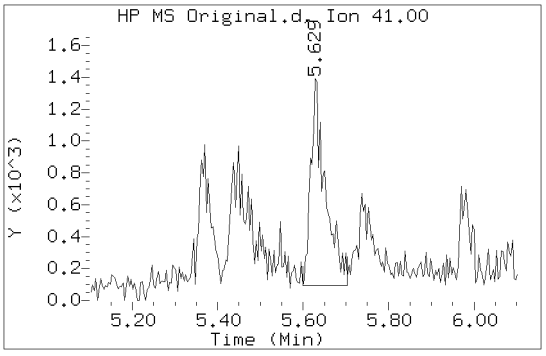


Methyl Methacrylate (80-62-6)

Reason Code:

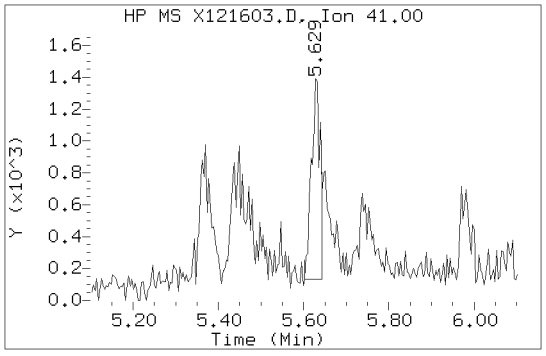
BEFORE

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



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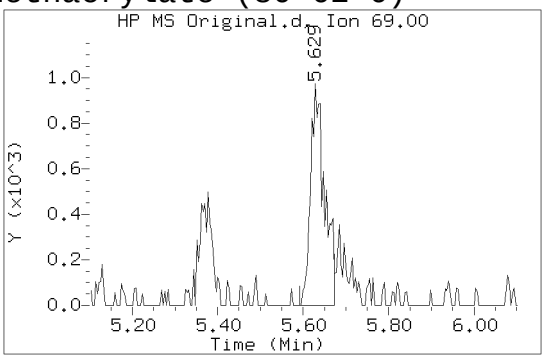
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Methacrylate (80-62-6)

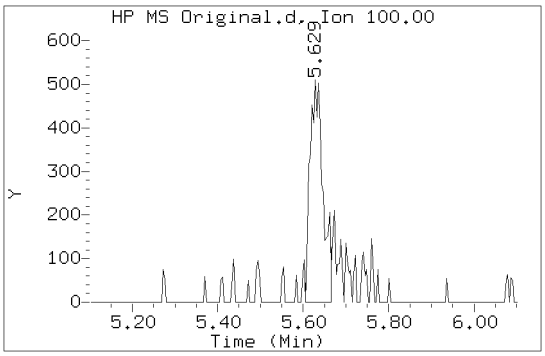
BEFORE

MASS
69
AREA
2216
HEIGHT
973
27-Dec-2022
16:03
linh
pham



BEFORE

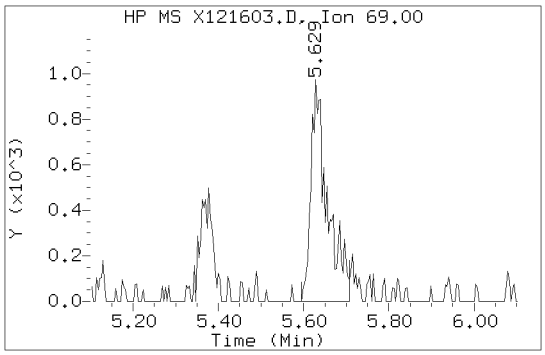
MASS
100
AREA
1074
HEIGHT
510
27-Dec-2022
16:03
linh
pham



Reason Code:

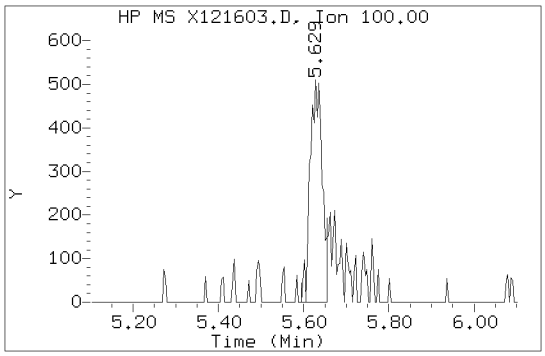
AFTER

MASS
69
AREA
2595
HEIGHT
973
27-Dec-2022
16:07
linh
pham



AFTER

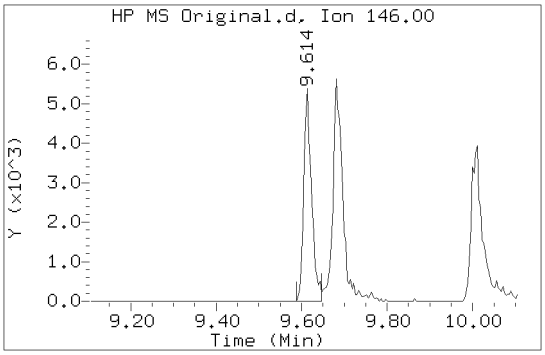
MASS
100
AREA
1011
HEIGHT
510
27-Dec-2022
16:07
linh
pham



1,3-Dichlorobenzene (541-73-1)

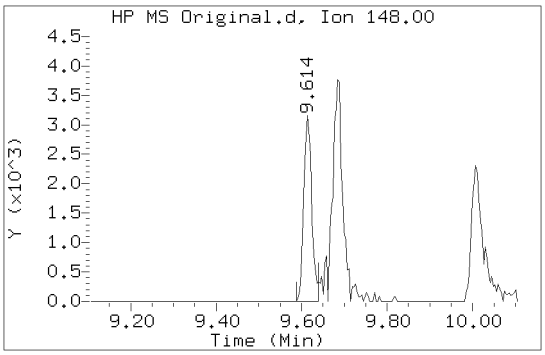
BEFORE

MASS
146
AREA
6964
HEIGHT
5387
27-Dec-2022
16:03
linh
pham



BEFORE

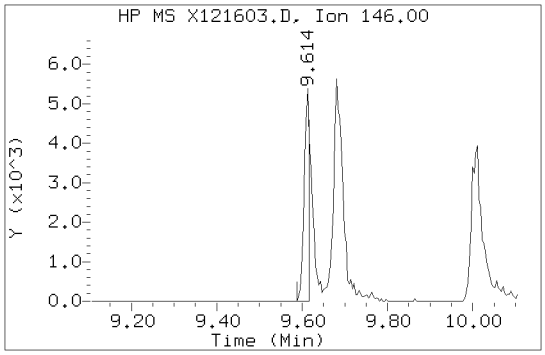
MASS
148
AREA
4216
HEIGHT
3157
27-Dec-2022
16:03
linh
pham



Reason Code:

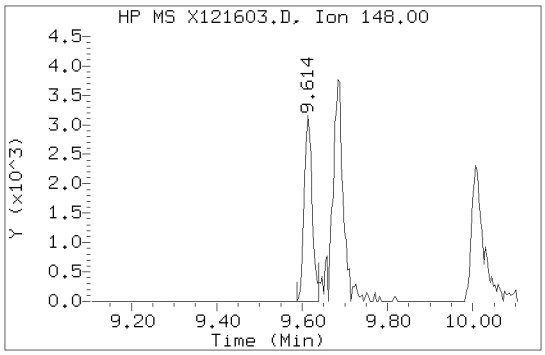
AFTER

MASS
146
AREA
4677
HEIGHT
5387
27-Dec-2022
16:07
linh
pham



AFTER

MASS
148
AREA
4216
HEIGHT
3157
27-Dec-2022
16:07
linh
pham



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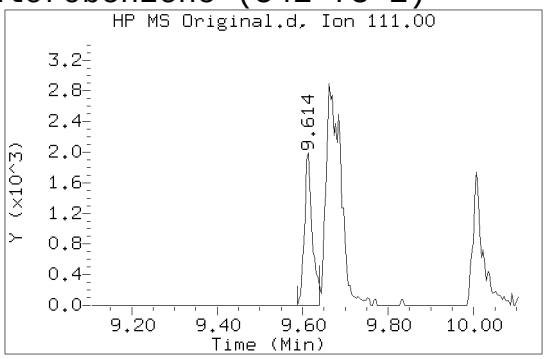
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

1,3-Dichlorobenzene (541-73-1)

Reason Code:

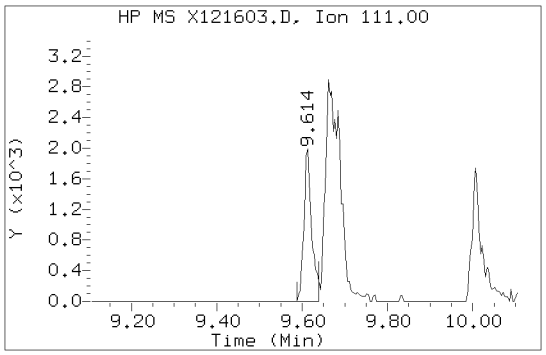
BEFORE

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

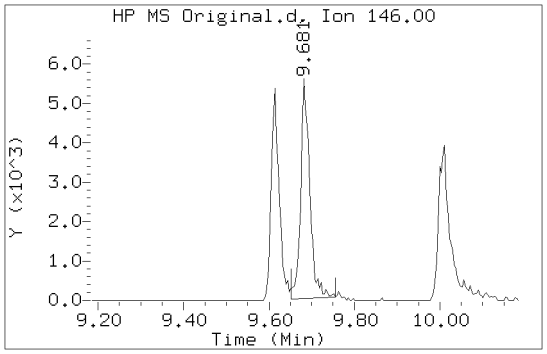


1,4-Dichlorobenzene (106-46-7)

Reason Code:

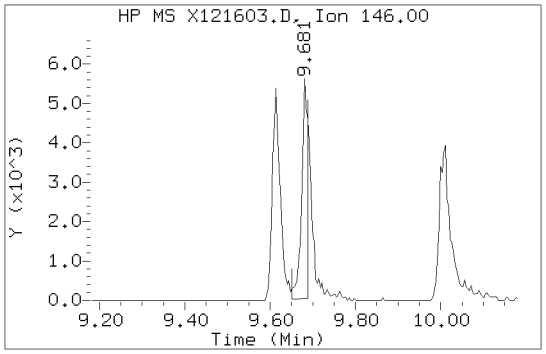
BEFORE

MASS
146
AREA
8510
HEIGHT
5586
27-Dec-2022
16:03
linh
pham



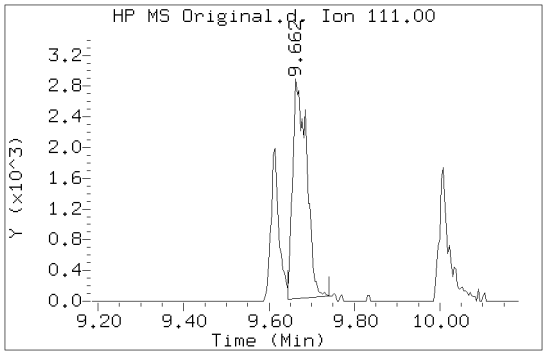
AFTER

MASS
146
AREA
5674
HEIGHT
5587
27-Dec-2022
16:07
linh
pham



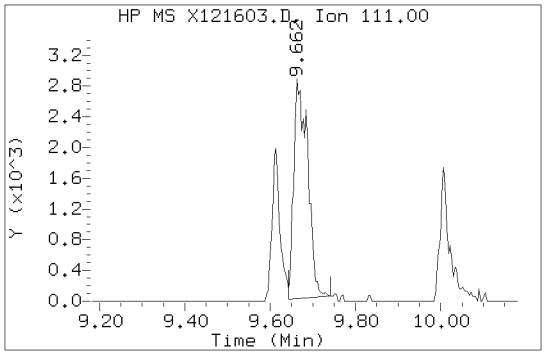
BEFORE

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:03
linh
pham



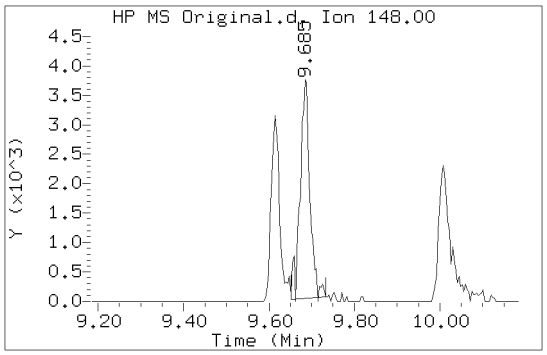
AFTER

MASS
111
AREA
6571
HEIGHT
2862
27-Dec-2022
16:07
linh
pham



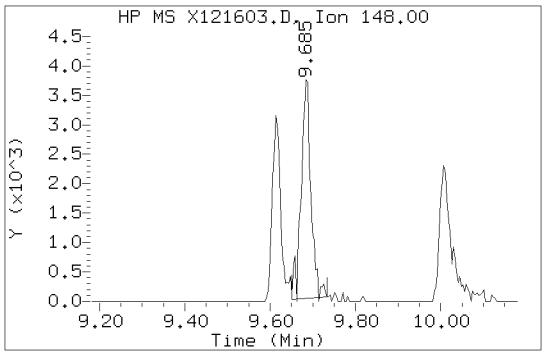
BEFORE

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



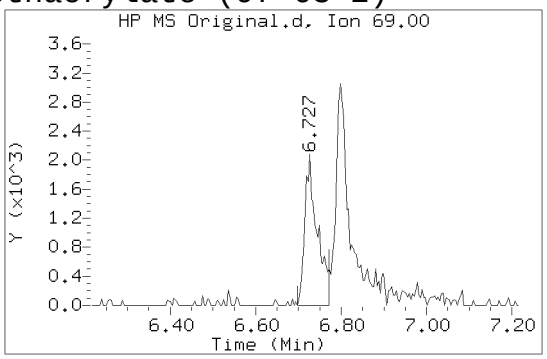
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

Reason Code:

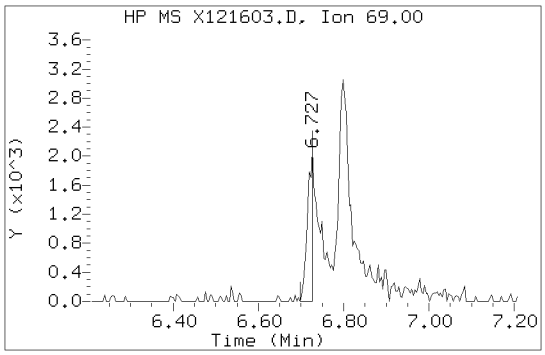
BEFORE

MASS
69
AREA
4283
HEIGHT
2083
27-Dec-2022
16:03
linh
pham



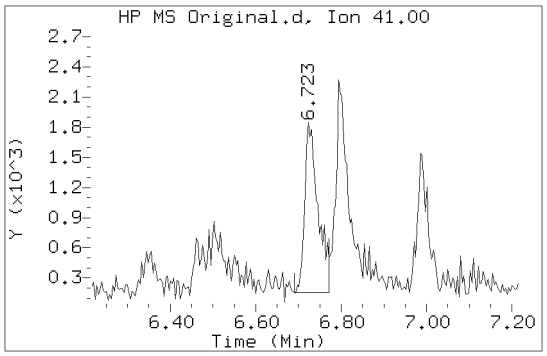
AFTER

MASS
69
AREA
1935
HEIGHT
2083
27-Dec-2022
16:07
linh
pham



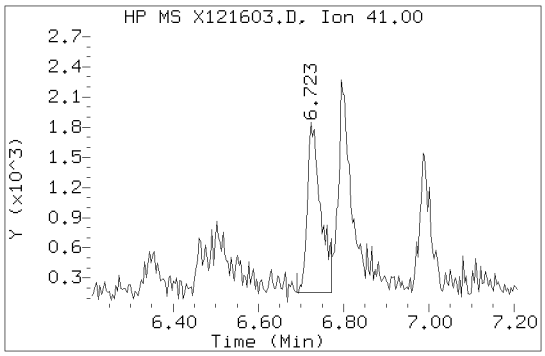
BEFORE

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

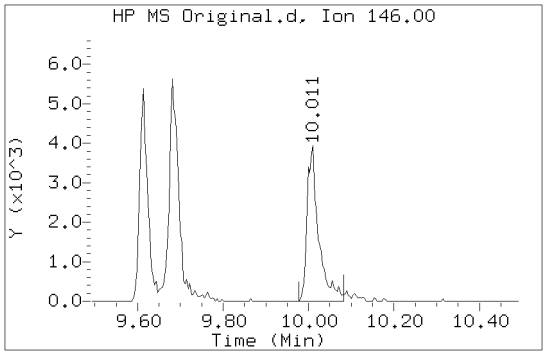


1,2-Dichlorobenzene (95-50-1)

Reason Code:

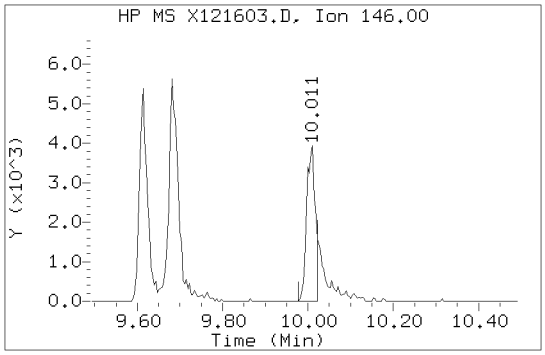
BEFORE

MASS
146
AREA
7400
HEIGHT
3934
27-Dec-2022
16:03
linh
pham



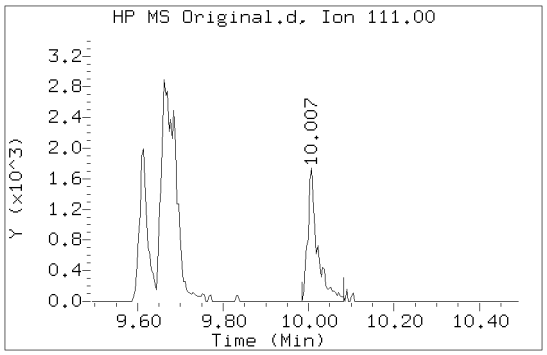
AFTER

MASS
146
AREA
5504
HEIGHT
3934
27-Dec-2022
16:07
linh
pham



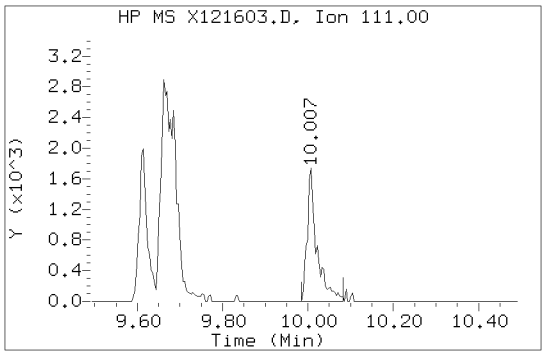
BEFORE

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



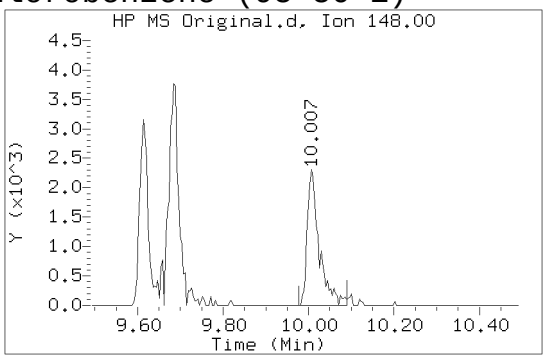
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

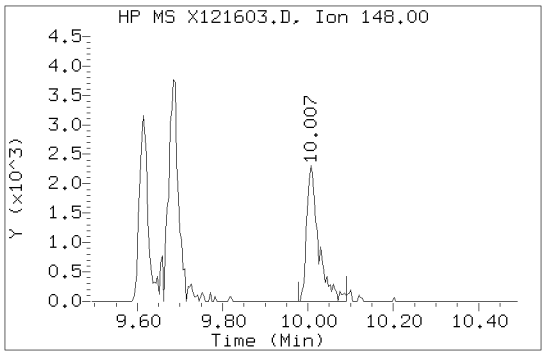
BEFORE

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

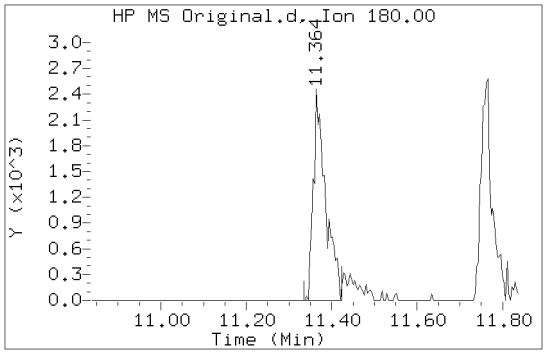


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

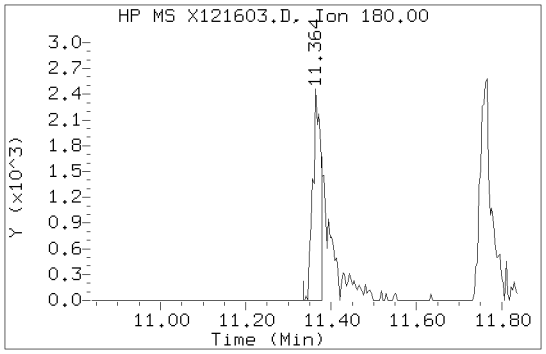
BEFORE

MASS
180
AREA
4912
HEIGHT
2459
27-Dec-2022
16:03
linh
pham



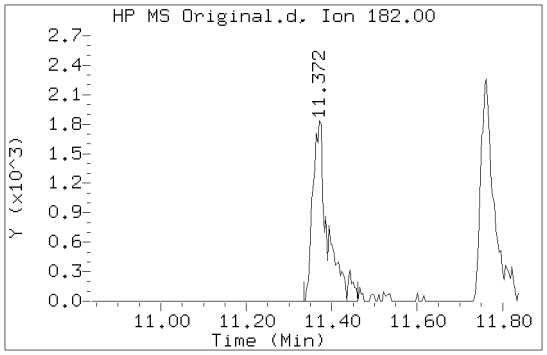
AFTER

MASS
180
AREA
3187
HEIGHT
2459
27-Dec-2022
16:07
linh
pham



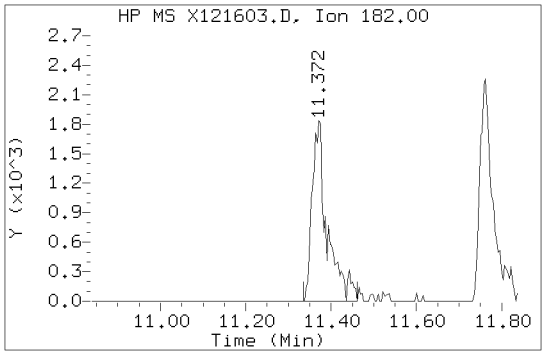
BEFORE

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:03
linh
pham



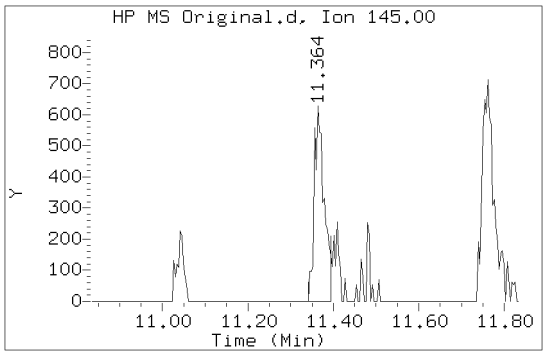
AFTER

MASS
182
AREA
4514
HEIGHT
1835
27-Dec-2022
16:07
linh
pham



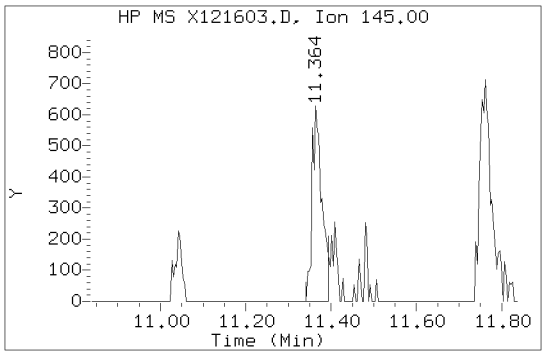
BEFORE

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

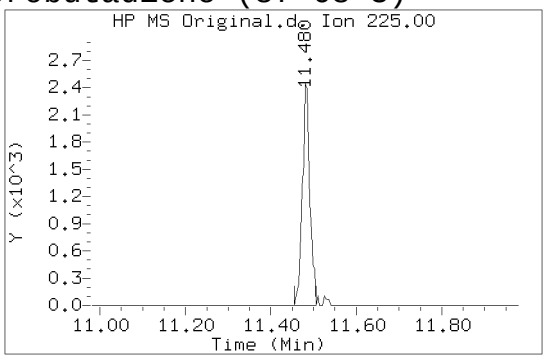


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

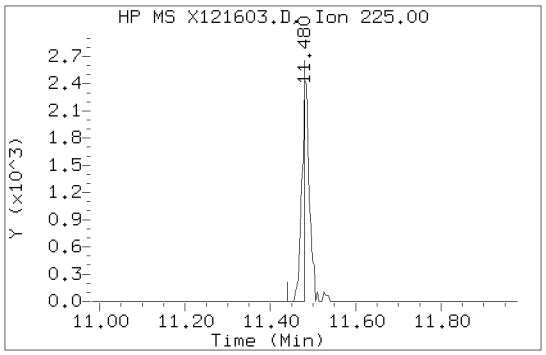
Hexachlorobutadiene (87-68-3)

Reason Code:

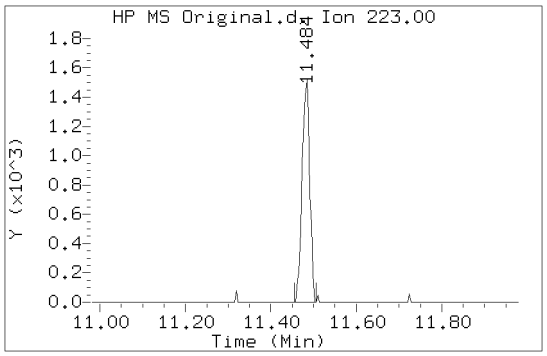
BEFORE
MASS
225
AREA
3038
HEIGHT
2444
27-Dec-2022
16:03
linh
pham



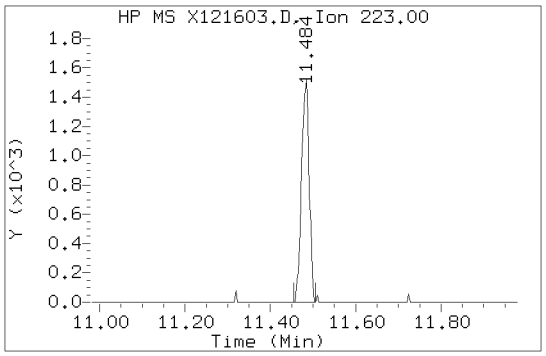
AFTER
MASS
225
AREA
1477
HEIGHT
2444
27-Dec-2022
16:07
linh
pham



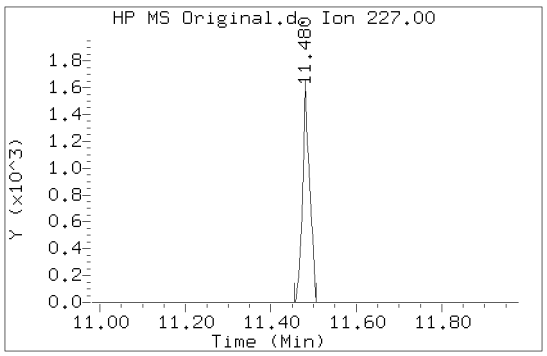
BEFORE
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:03
linh
pham



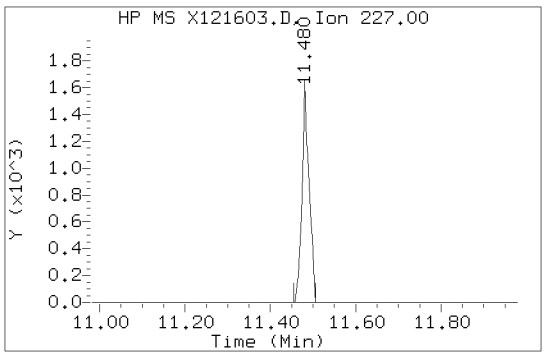
AFTER
MASS
223
AREA
1952
HEIGHT
1518
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:03
linh
pham



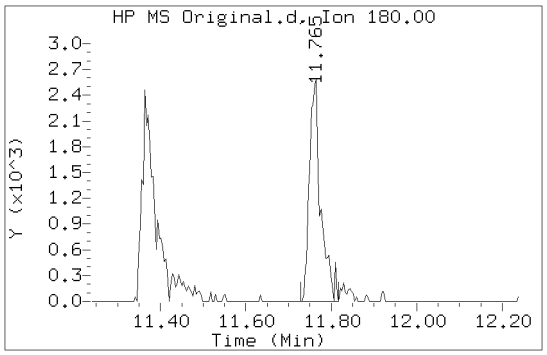
AFTER
MASS
227
AREA
1938
HEIGHT
1652
27-Dec-2022
16:07
linh
pham



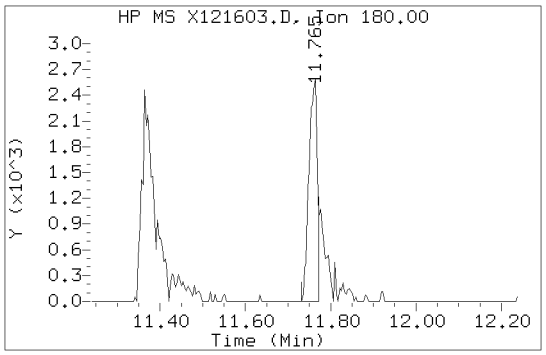
1,2,3-Trichlorobenzene (87-61-6)

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



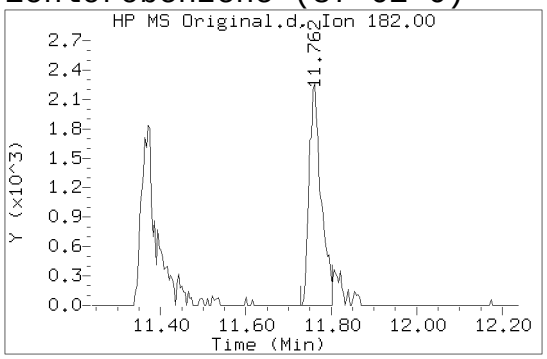
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

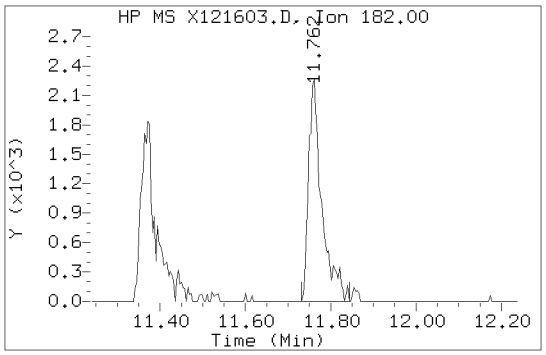
BEFORE

MASS
182
AREA
4404
HEIGHT
2261
27-Dec-2022
16:03
linh
pham



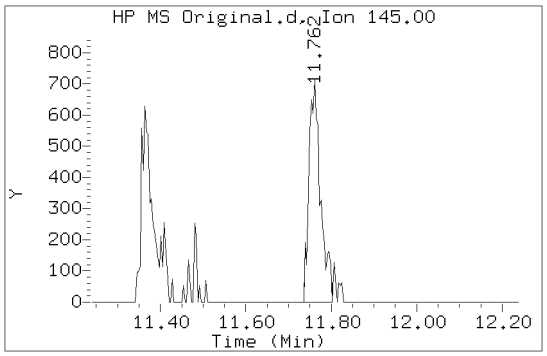
AFTER

MASS
182
AREA
4881
HEIGHT
2261
27-Dec-2022
16:07
linh
pham



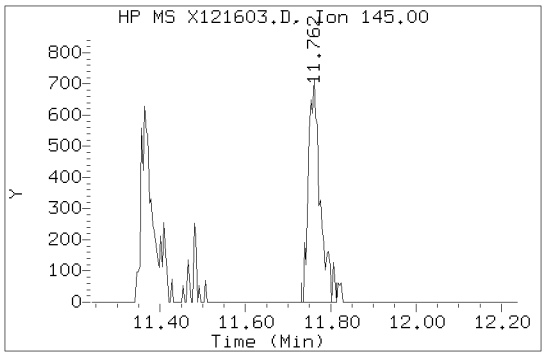
BEFORE

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

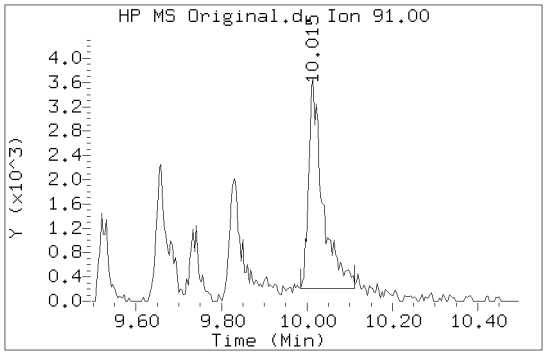


n-Butylbenzene (104-51-8)

Reason Code:

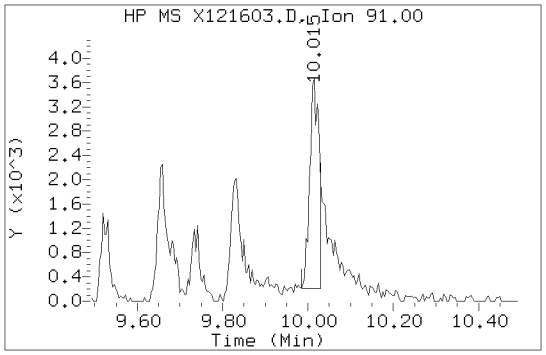
BEFORE

MASS
91
AREA
8005
HEIGHT
3451
27-Dec-2022
16:03
linh
pham



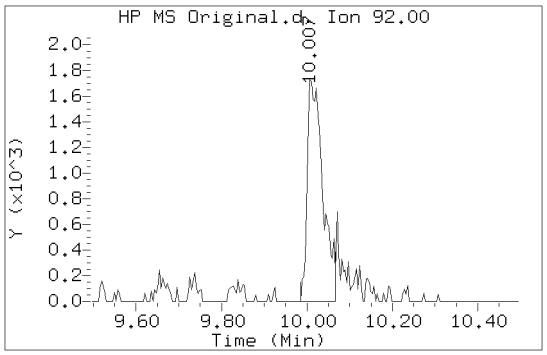
AFTER

MASS
91
AREA
5149
HEIGHT
3451
27-Dec-2022
16:07
linh
pham



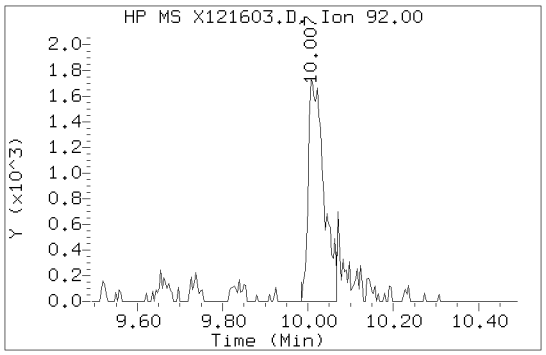
BEFORE

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



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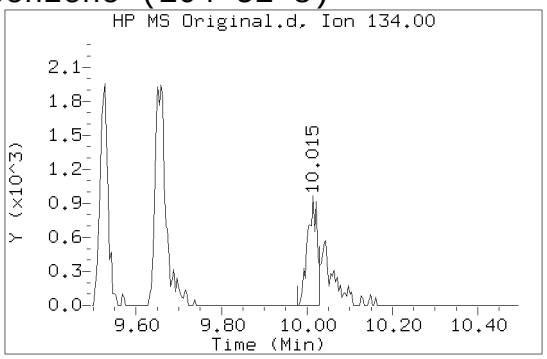
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

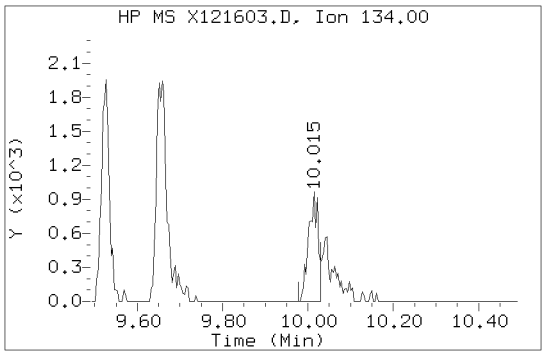
BEFORE

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

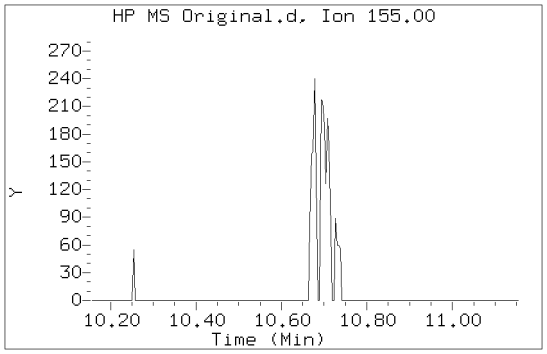


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

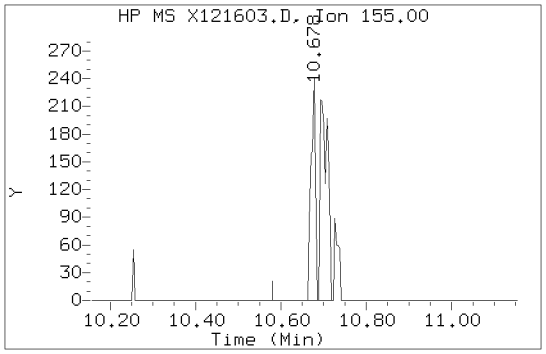
BEFORE

MASS
155
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



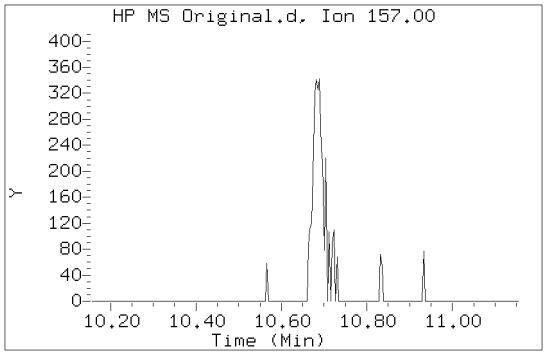
AFTER

MASS
155
AREA
441
HEIGHT
240
27-Dec-2022
16:07
linh
pham



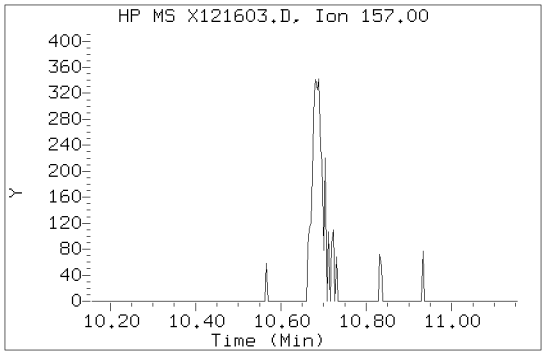
BEFORE

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



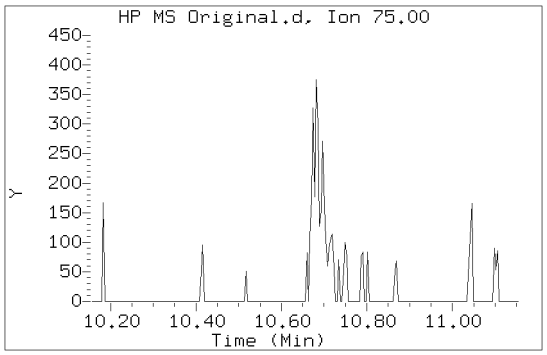
AFTER

MASS
157
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



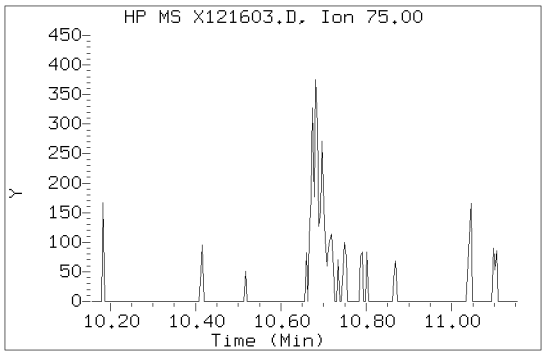
BEFORE

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



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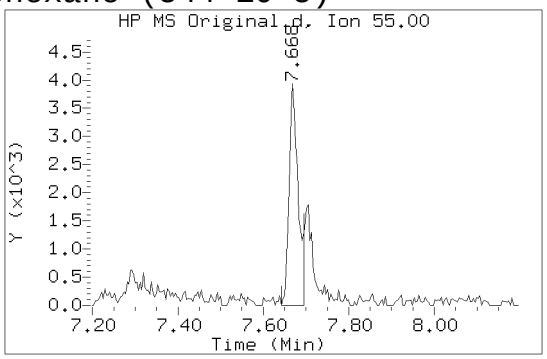
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

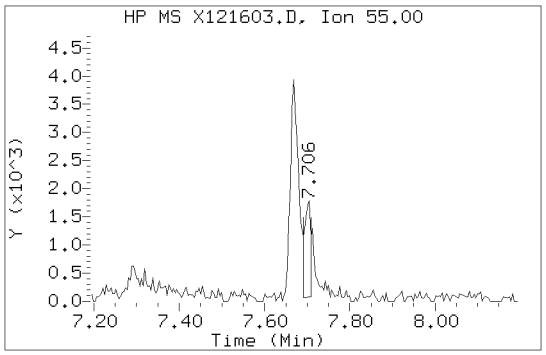
1-Chlorohexane (544-10-5)

Reason Code:

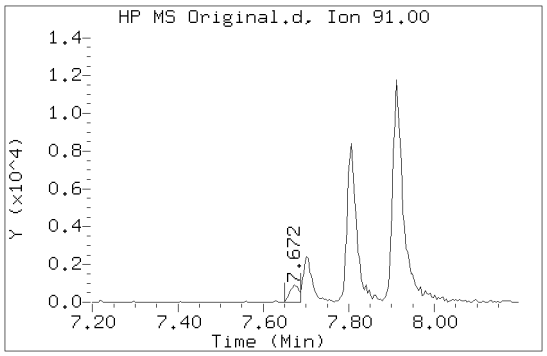
BEFORE
MASS
55
AREA
5785
HEIGHT
3936
27-Dec-2022
16:03
linh
pham



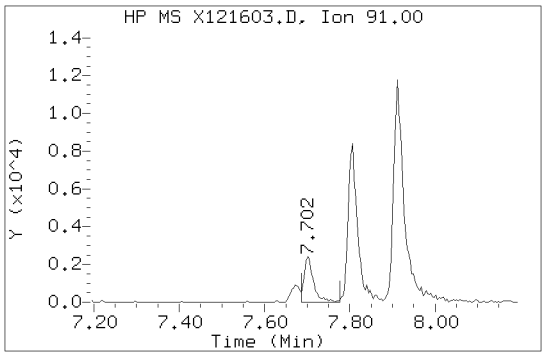
AFTER
MASS
55
AREA
1829
HEIGHT
1707
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
91
AREA
1355
HEIGHT
933
27-Dec-2022
16:03
linh
pham



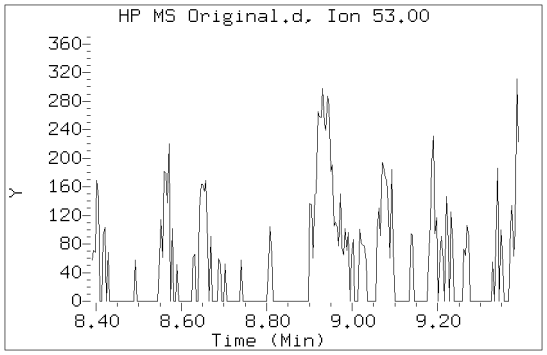
AFTER
MASS
91
AREA
3802
HEIGHT
2430
27-Dec-2022
16:07
linh
pham



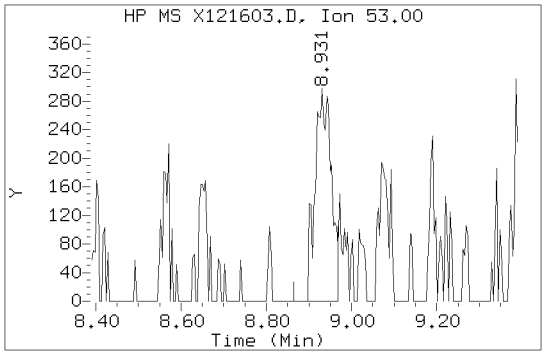
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

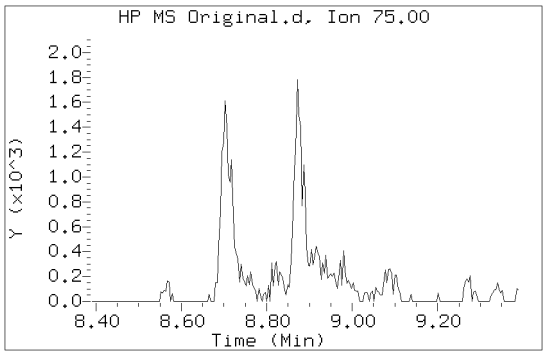
BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



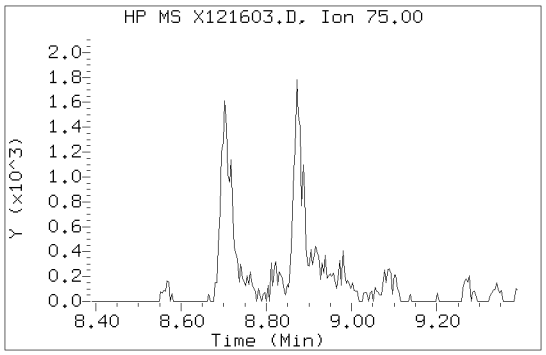
AFTER
MASS
53
AREA
792
HEIGHT
298
27-Dec-2022
16:07
linh
pham



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

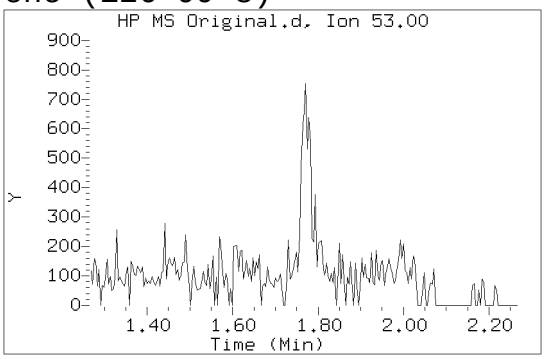


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroprene (126-99-8)

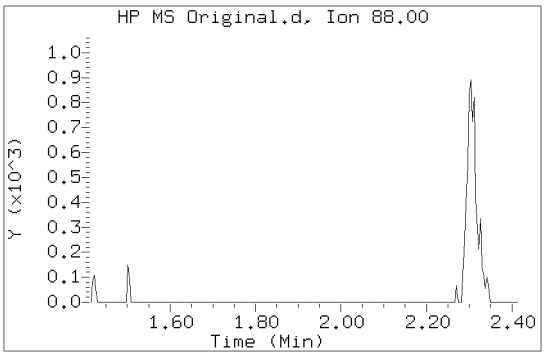
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

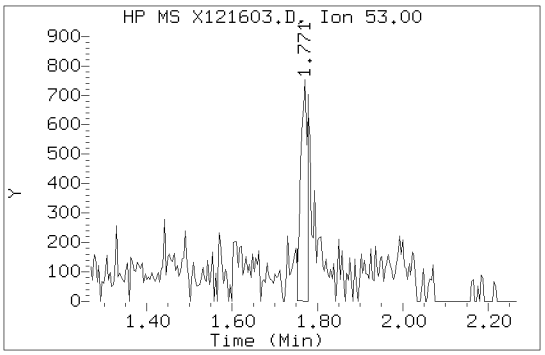
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

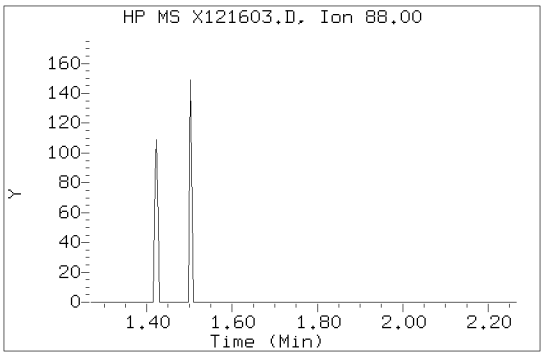
AFTER

MASS
53
AREA
900
HEIGHT
751
27-Dec-2022
16:07
linh
pham



AFTER

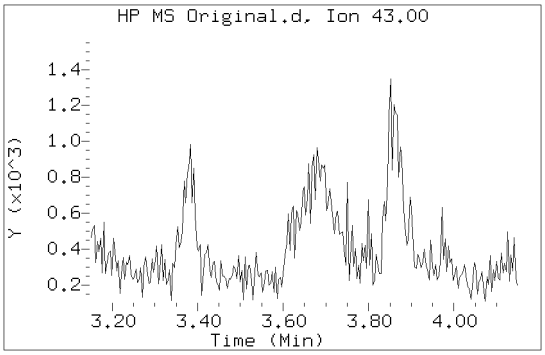
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Ethyl Acetate (141-78-6)

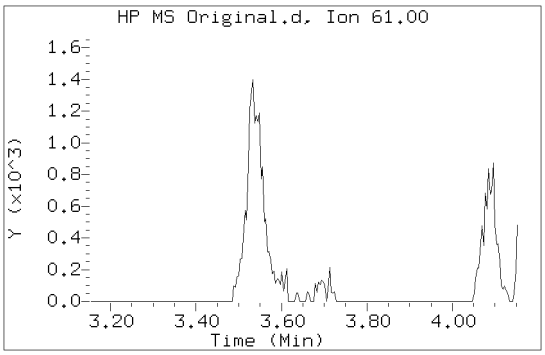
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

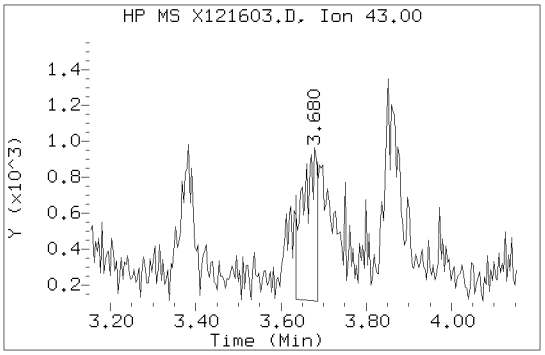
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

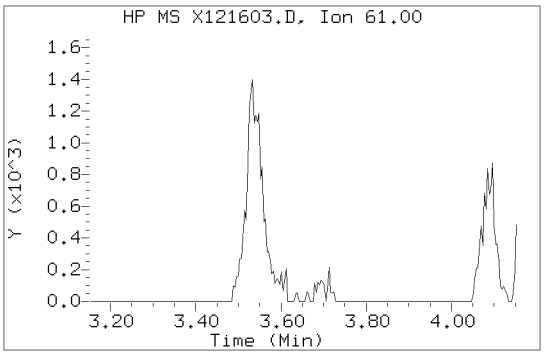
AFTER

MASS
43
AREA
2065
HEIGHT
853
27-Dec-2022
16:07
linh
pham



AFTER

MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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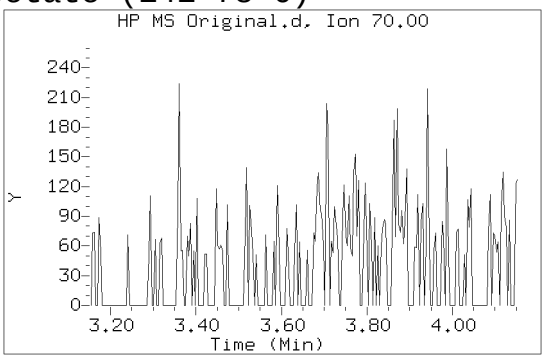
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Acetate (141-78-6)

Reason Code:

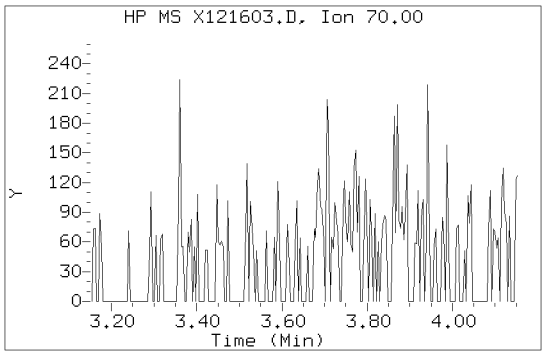
BEFORE

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

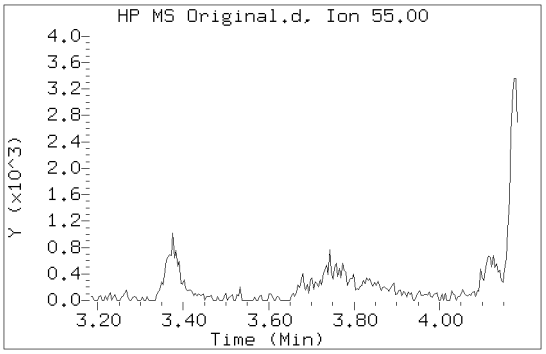


Methyl Acrylate (96-33-3)

Reason Code:

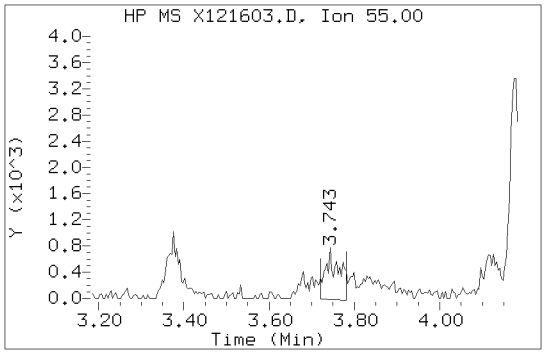
BEFORE

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



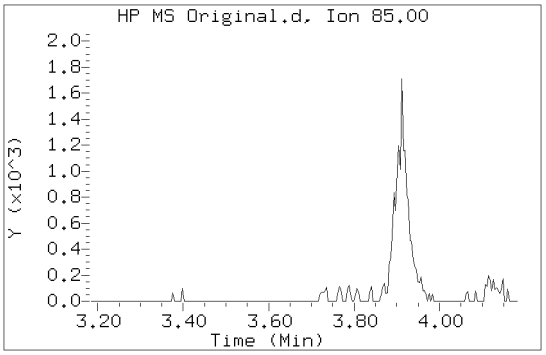
AFTER

MASS
55
AREA
1765
HEIGHT
787
27-Dec-2022
16:07
linh
pham



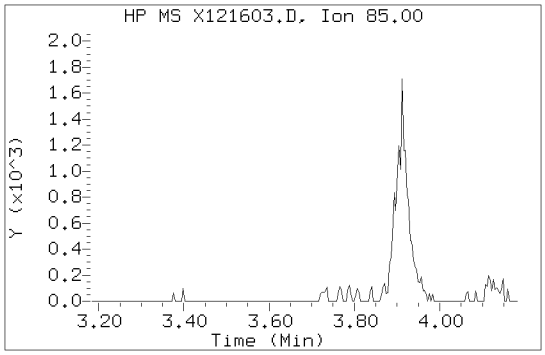
BEFORE

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

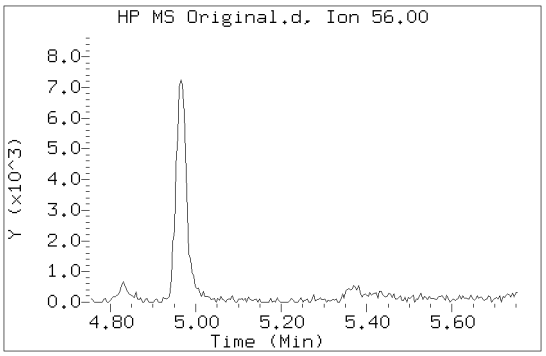


n-Butanol (71-36-3)

Reason Code:

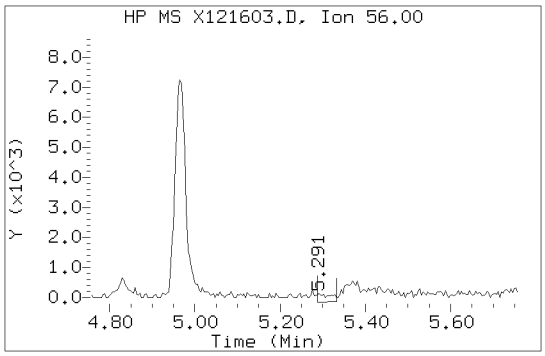
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
56
AREA
622
HEIGHT
300
27-Dec-2022
16:07
linh
pham



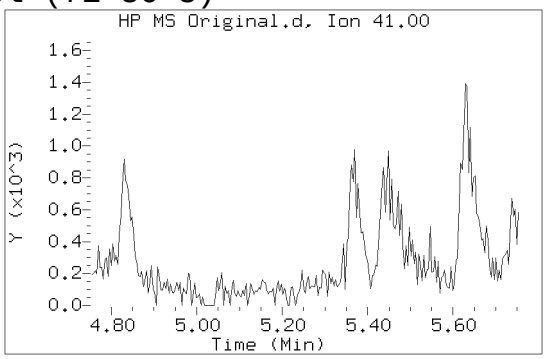
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butanol (71-36-3)

Reason Code:

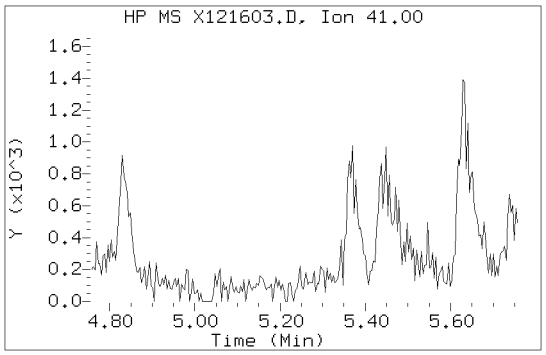
BEFORE

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

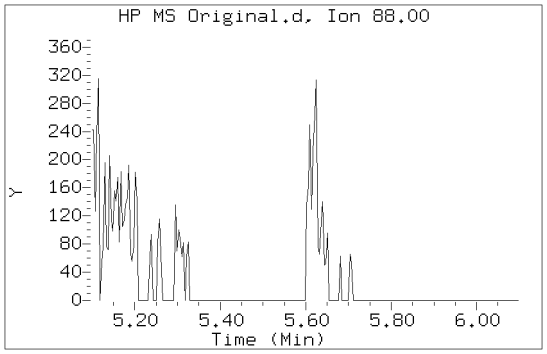


1,4-Dioxane ()

Reason Code:

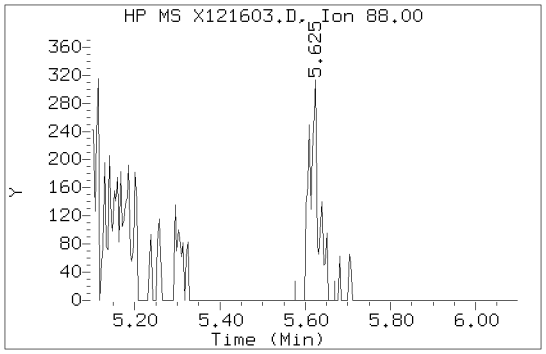
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



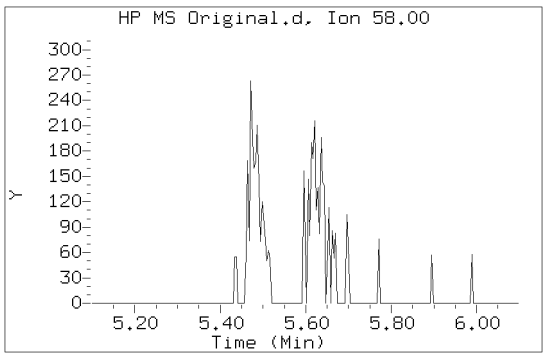
AFTER

MASS
88
AREA
462
HEIGHT
313
27-Dec-2022
16:07
linh
pham



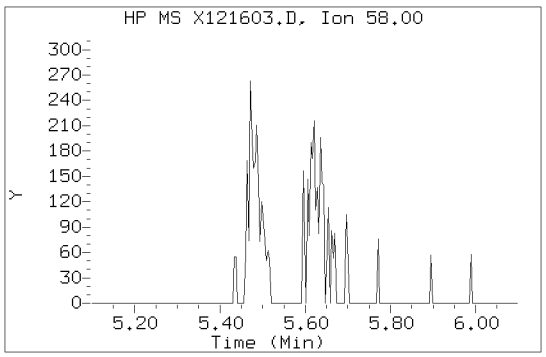
BEFORE

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

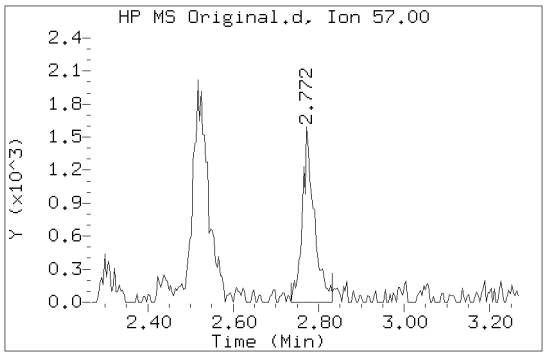


n-Hexane (110-54-3)

Reason Code:

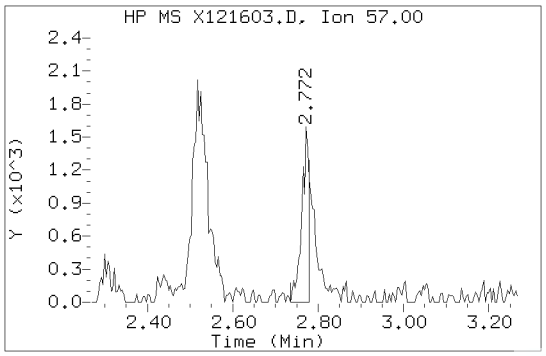
BEFORE

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



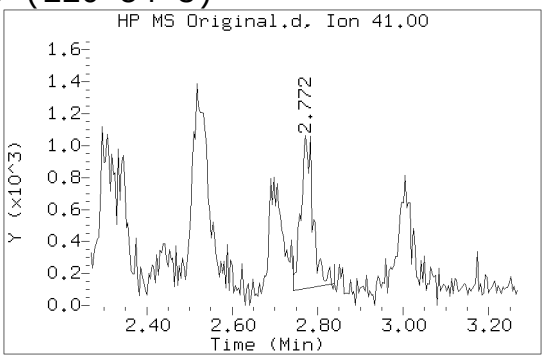
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

n-Hexane (110-54-3)

Reason Code:

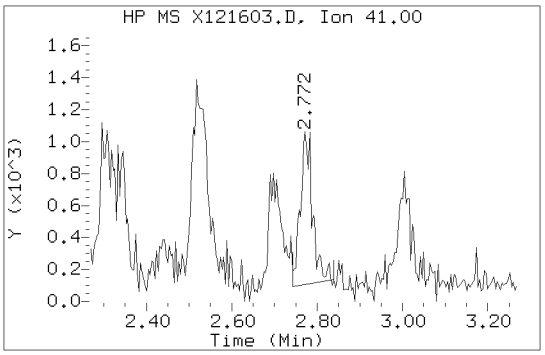
BEFORE

MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:03
linh
pham



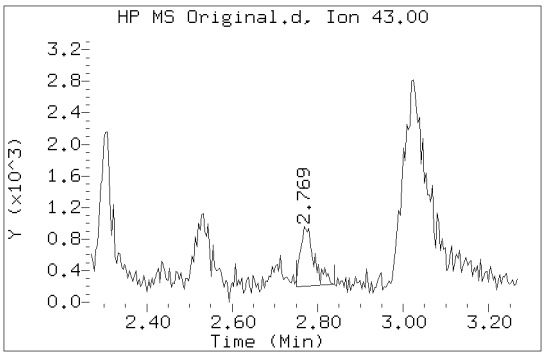
AFTER

MASS
41
AREA
1918
HEIGHT
958
27-Dec-2022
16:07
linh
pham



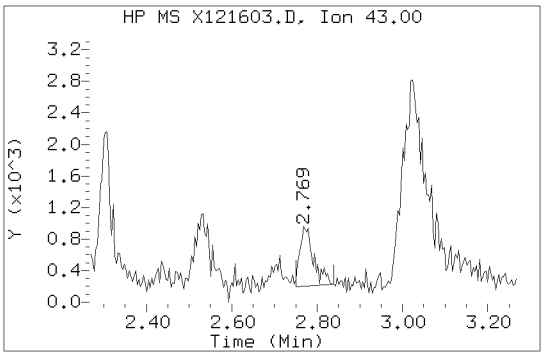
BEFORE

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

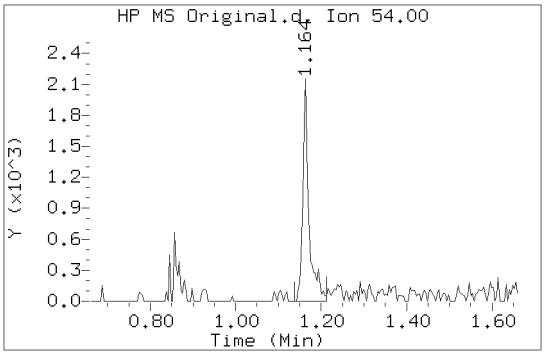


1,3-Butadiene (106-99-0)

Reason Code:

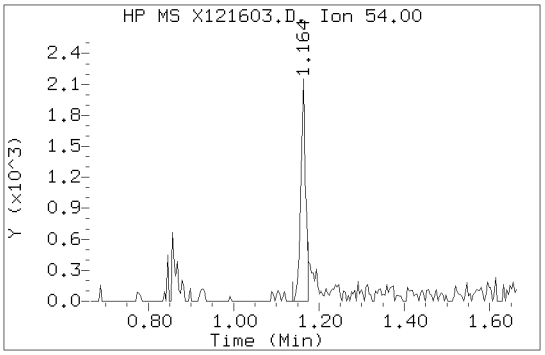
BEFORE

MASS
54
AREA
2206
HEIGHT
2153
27-Dec-2022
16:03
linh
pham



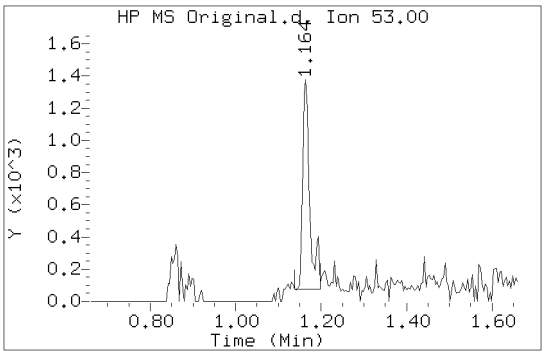
AFTER

MASS
54
AREA
1793
HEIGHT
2153
27-Dec-2022
16:07
linh
pham



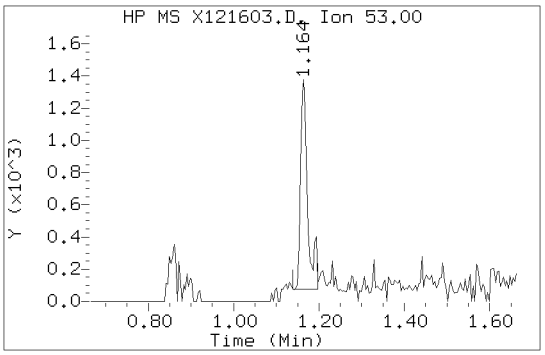
BEFORE

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

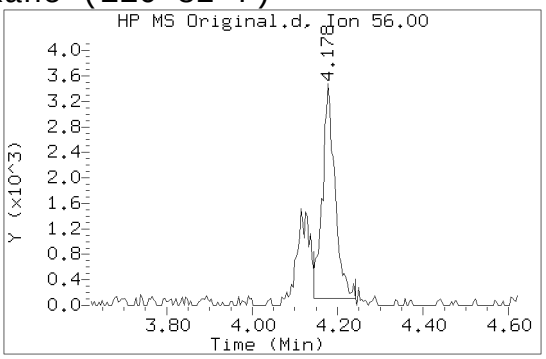


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

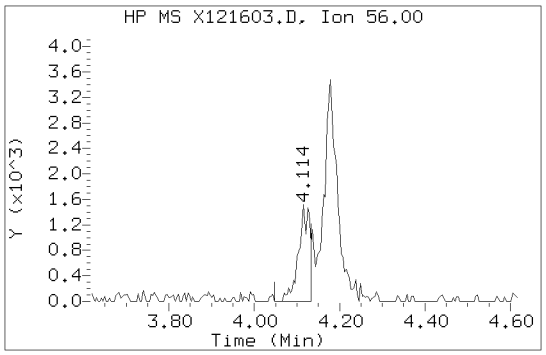
Cyclohexane (110-82-7)

Reason Code:

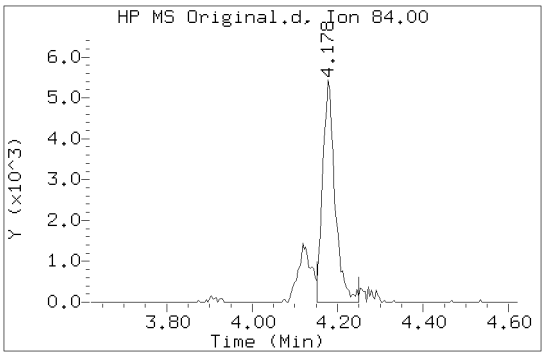
BEFORE
MASS
56
AREA
6884
HEIGHT
3363
27-Dec-2022
16:03
linh
pham



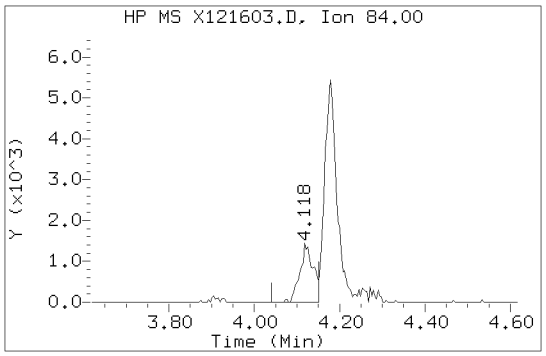
AFTER
MASS
56
AREA
2803
HEIGHT
1514
27-Dec-2022
16:07
linh
pham



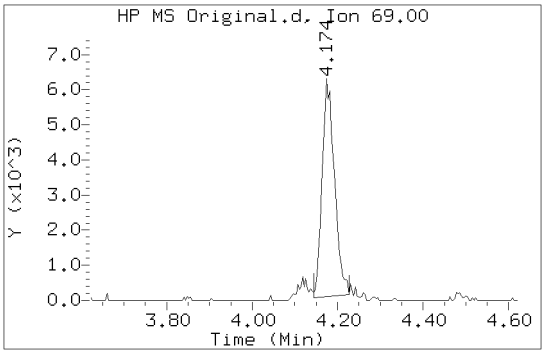
BEFORE
MASS
84
AREA
10951
HEIGHT
5440
27-Dec-2022
16:03
linh
pham



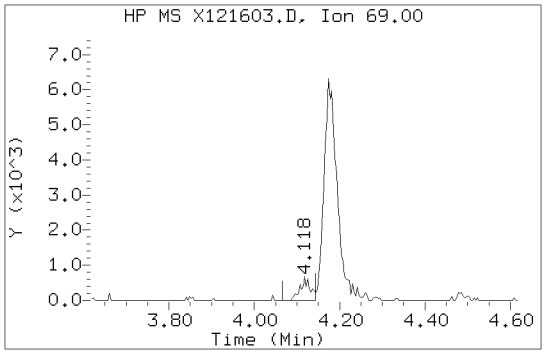
AFTER
MASS
84
AREA
3197
HEIGHT
1443
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
69
AREA
12449
HEIGHT
6206
27-Dec-2022
16:03
linh
pham



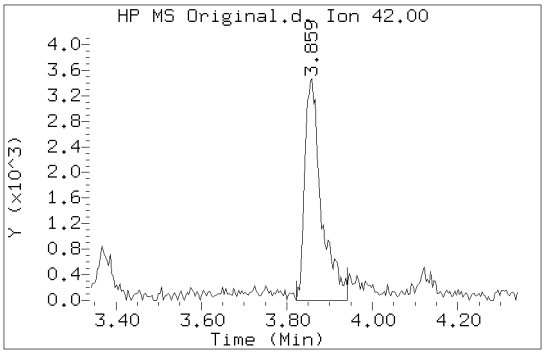
AFTER
MASS
69
AREA
1108
HEIGHT
681
27-Dec-2022
16:07
linh
pham



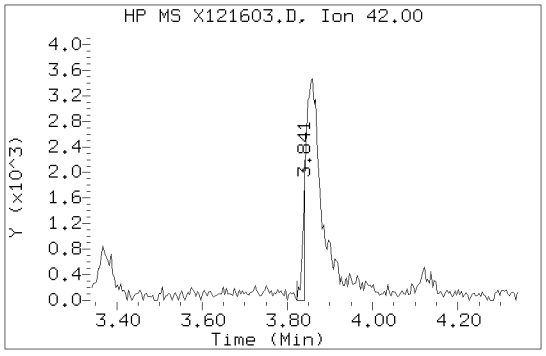
Tetrahydrofuran (109-99-9)

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



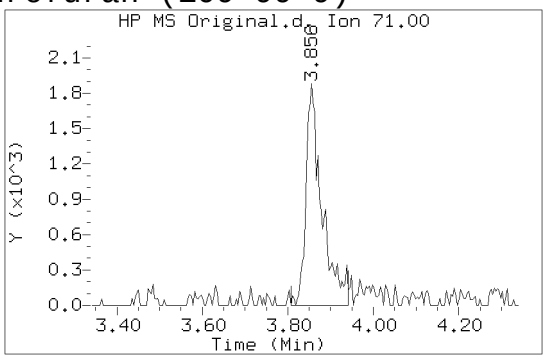
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrahydrofuran (109-99-9)

Reason Code:

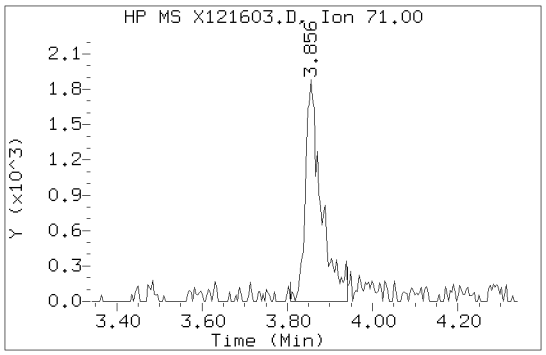
BEFORE

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

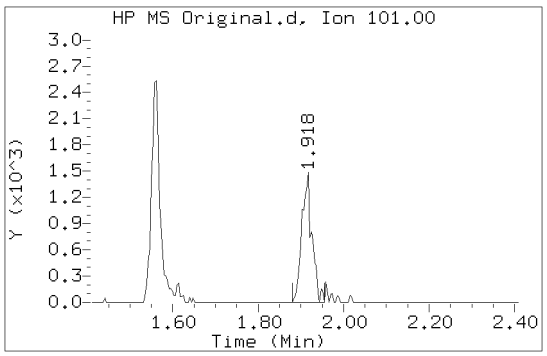


Freon TF (76-13-1)

Reason Code:

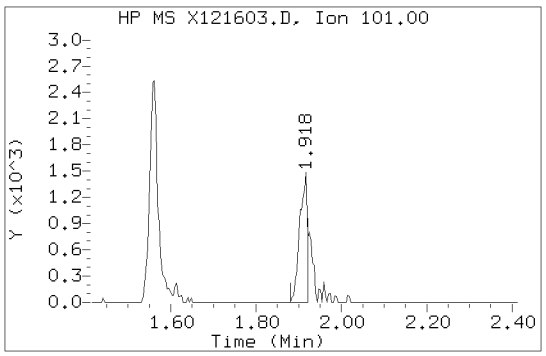
BEFORE

MASS
101
AREA
2478
HEIGHT
1484
27-Dec-2022
16:03
linh
pham



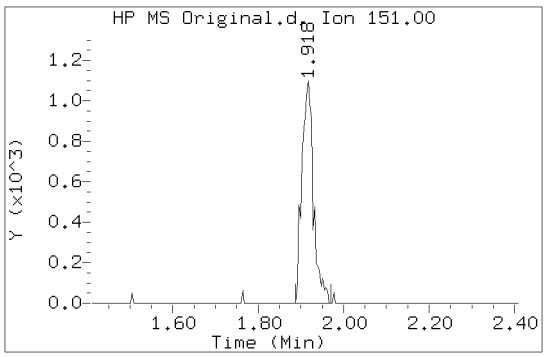
AFTER

MASS
101
AREA
1851
HEIGHT
1484
27-Dec-2022
16:07
linh
pham



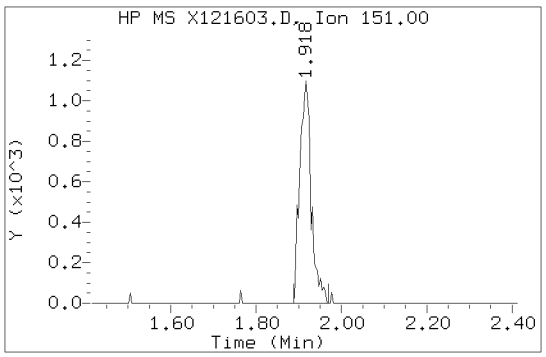
BEFORE

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

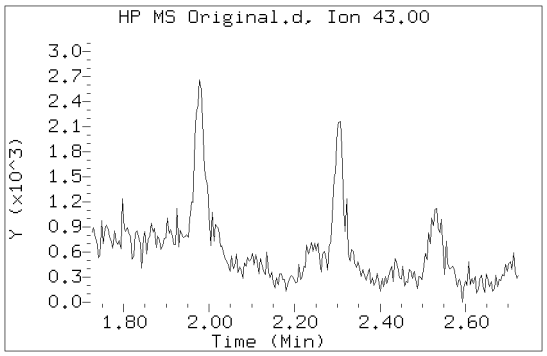


Methyl Acetate (79-20-9)

Reason Code:

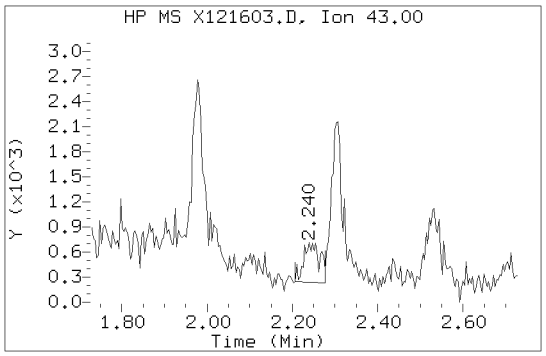
BEFORE

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

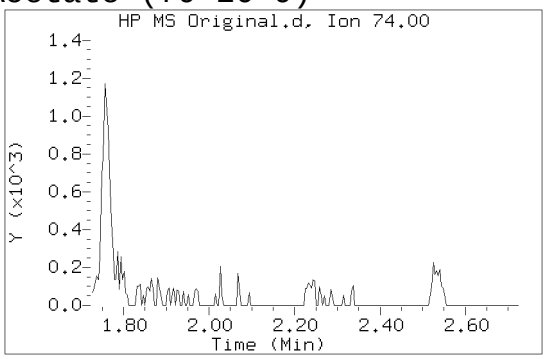


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121603.D
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Acetate (79-20-9)

Reason Code:

BEFORE
MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER
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74
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27-Dec-2022
16:07
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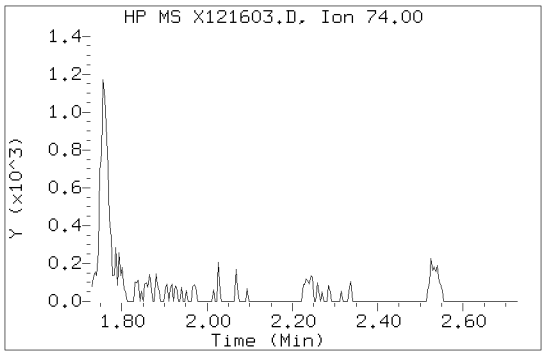

Methylcyclohexane (108-87-2)

Reason Code:

BEFORE
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1416
27-Dec-2022
16:03
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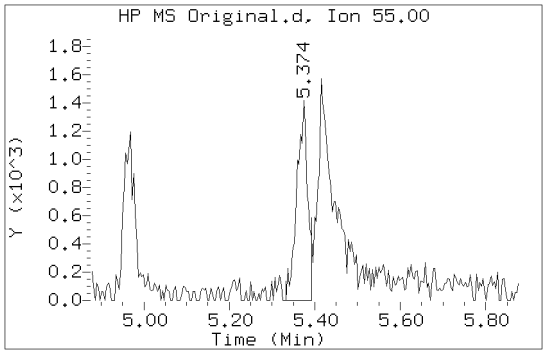

AFTER
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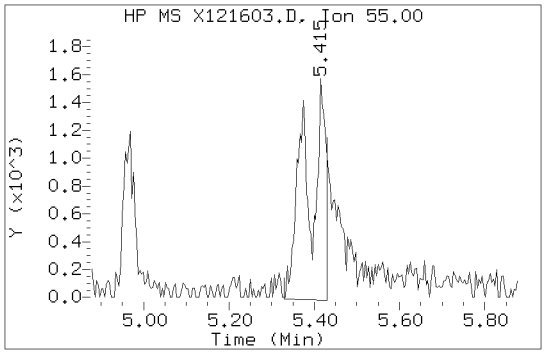

BEFORE
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2141
27-Dec-2022
16:03
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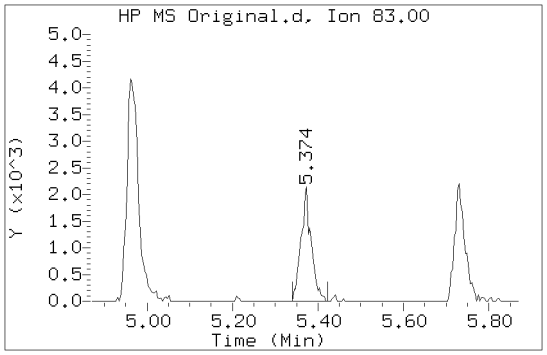

AFTER
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27-Dec-2022
16:07
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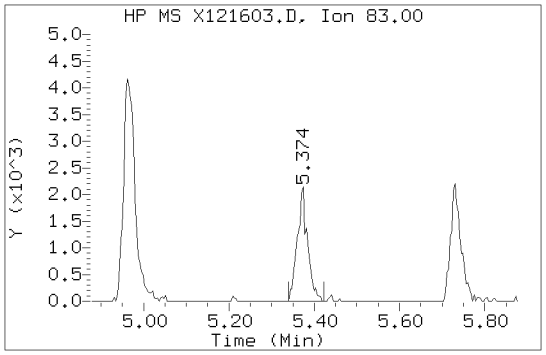

Butyl acrylate (141-32-2)

Reason Code:

BEFORE
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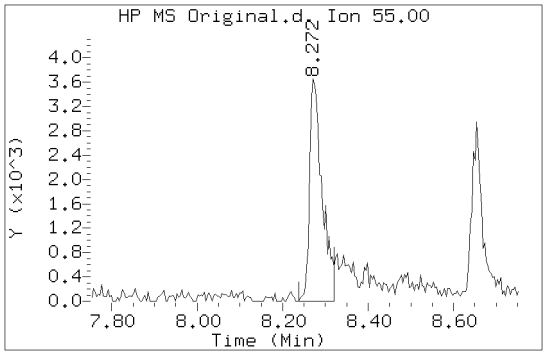

AFTER
MASS
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AREA
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3653
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16:07
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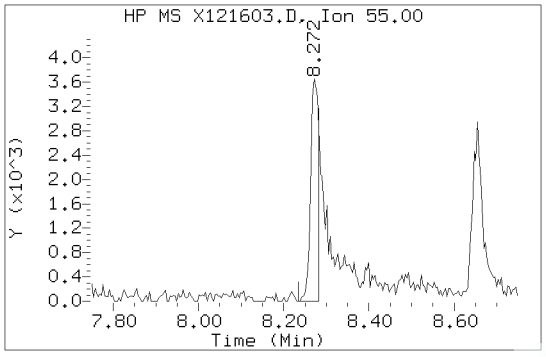

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl acrylate (141-32-2)

Reason Code:

BEFORE

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AREA
3795
HEIGHT
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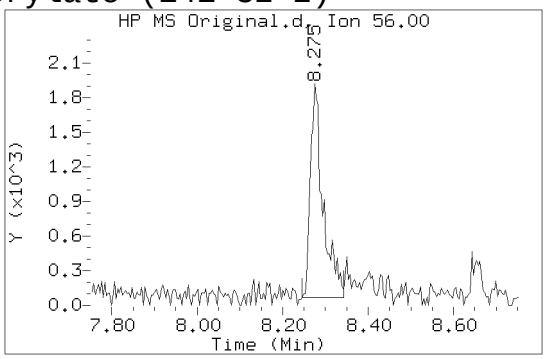
27-Dec-2022
16:03
linh
pham



AFTER

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1923
27-Dec-2022
16:07
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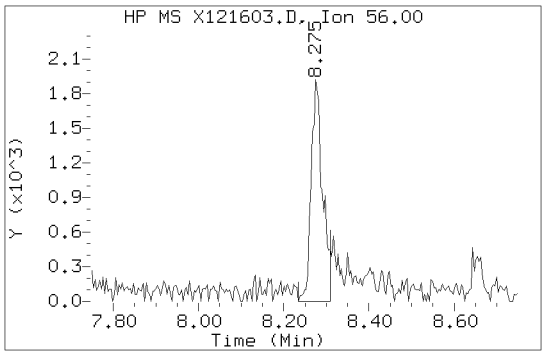

BEFORE

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AREA
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27-Dec-2022
16:03
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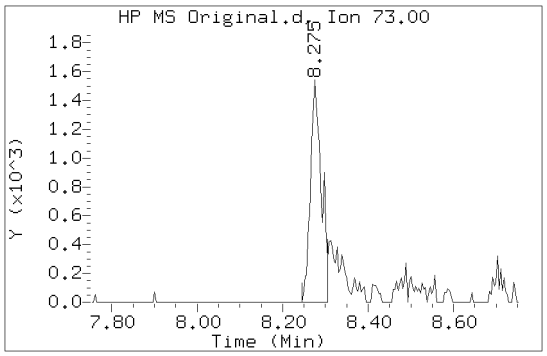

AFTER

MASS
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27-Dec-2022
16:07
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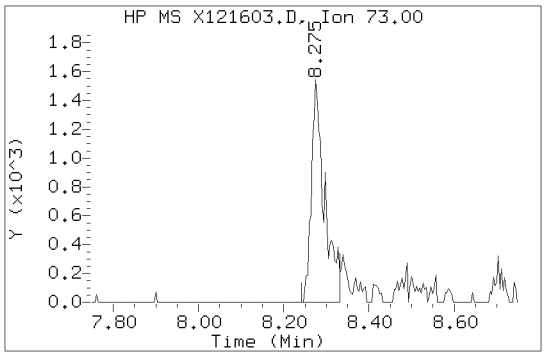

1,2,3-Trimethylbenzene (526-73-8)

Reason Code:

BEFORE

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AREA
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HEIGHT
11860
27-Dec-2022
16:03
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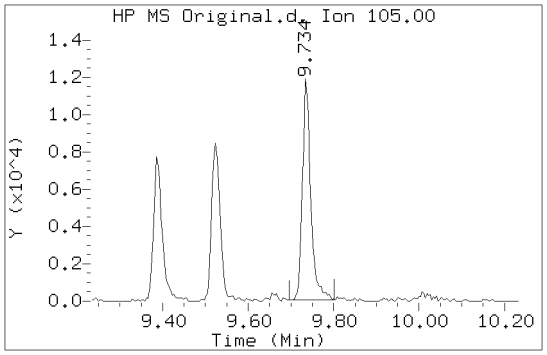
pham



AFTER

MASS
105
AREA
9626
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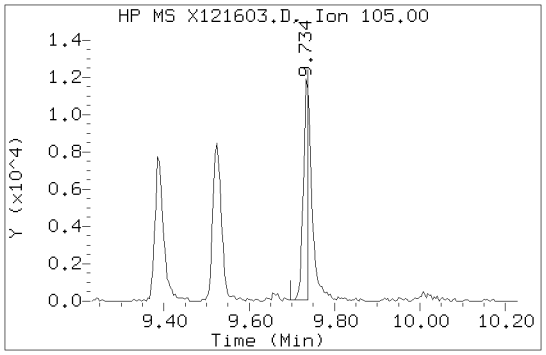
11860
27-Dec-2022
16:07
linh
pham



Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE

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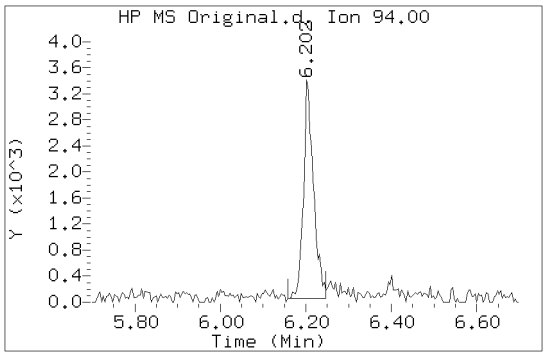
AREA
5523
HEIGHT
3352
27-Dec-2022
16:03
linh
pham



AFTER

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16:07
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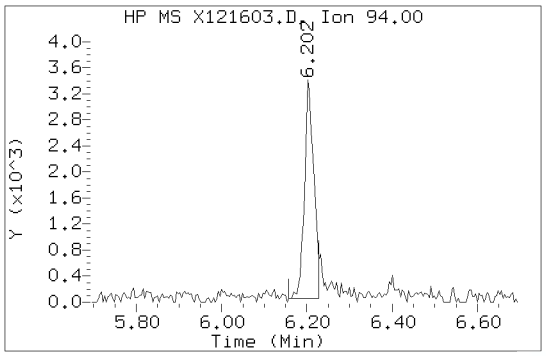

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Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

Dimethyl Disulfide (624-92-0)

BEFORE
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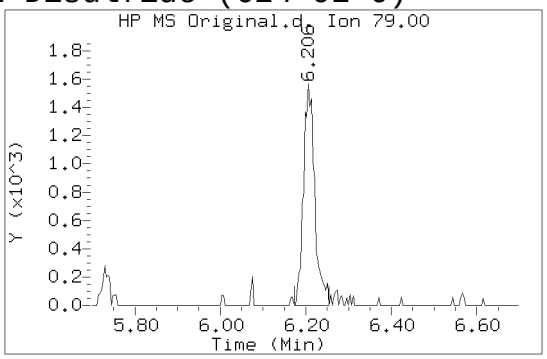
79
AREA
2905
HEIGHT
1568
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER
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79
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2905
HEIGHT
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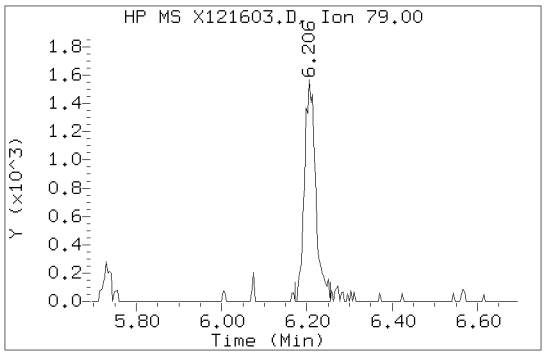
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
45
AREA
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1593
27-Dec-2022
16:03
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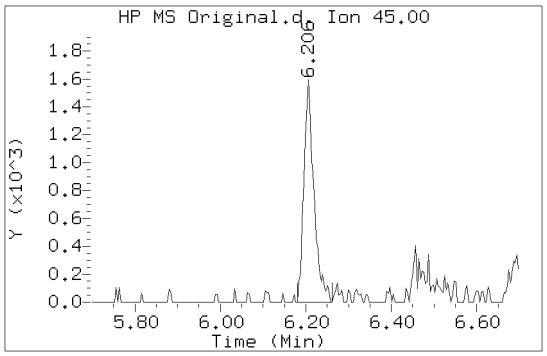
pham



AFTER
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16:07
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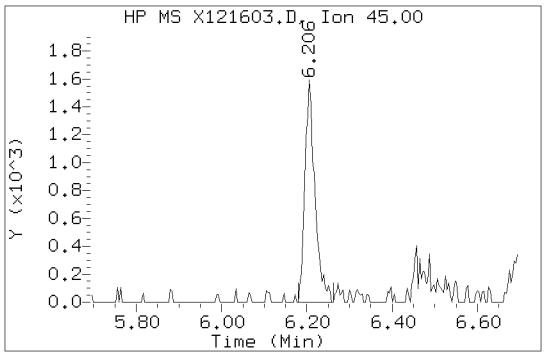

4-Bromofluorobenzene (460-00-4)

BEFORE
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AREA
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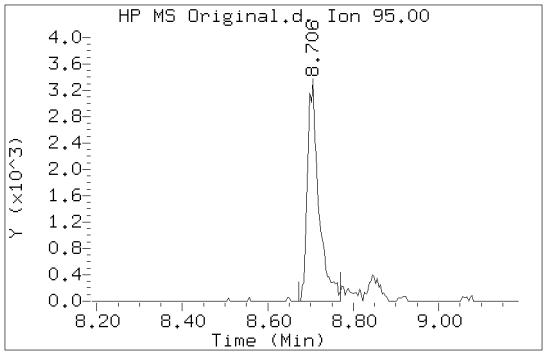
HEIGHT
3372
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER
MASS
95
AREA
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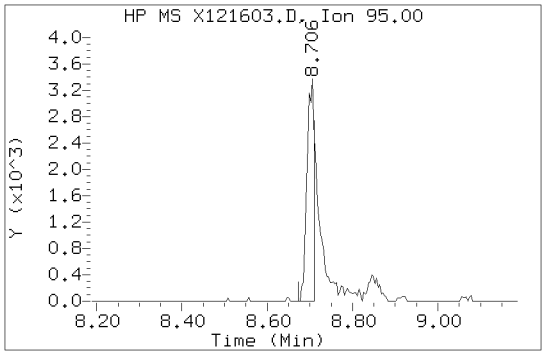
HEIGHT
3372
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
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AREA
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HEIGHT
3502
27-Dec-2022
16:03
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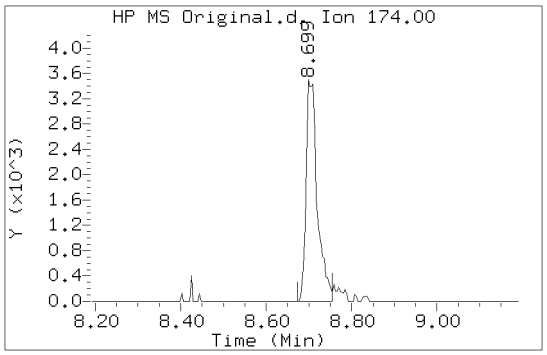
pham



AFTER
MASS
174
AREA
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3502
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16:07
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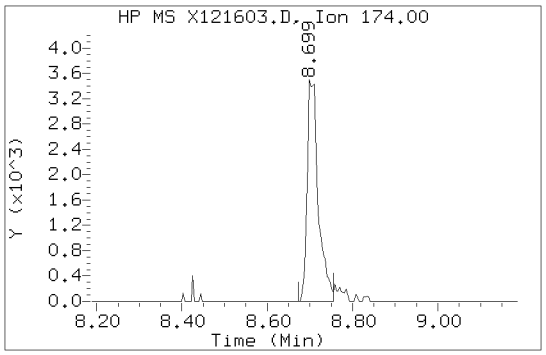
pham



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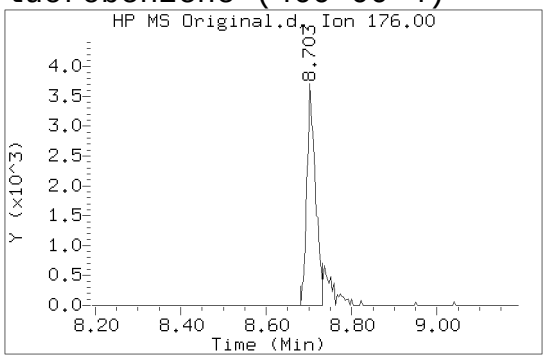
Inj Date : 16-DEC-2022 12:20
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
176
AREA
5204
HEIGHT
3711
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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AREA
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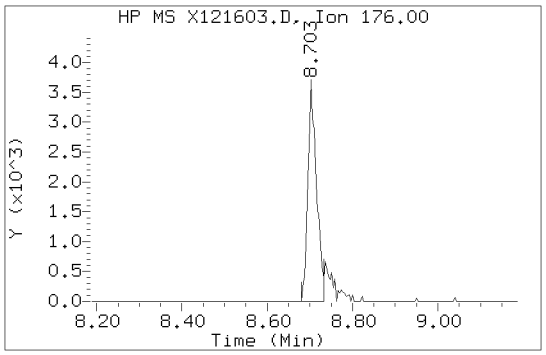
HEIGHT
3711
27-Dec-2022
16:07
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D Page 1
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

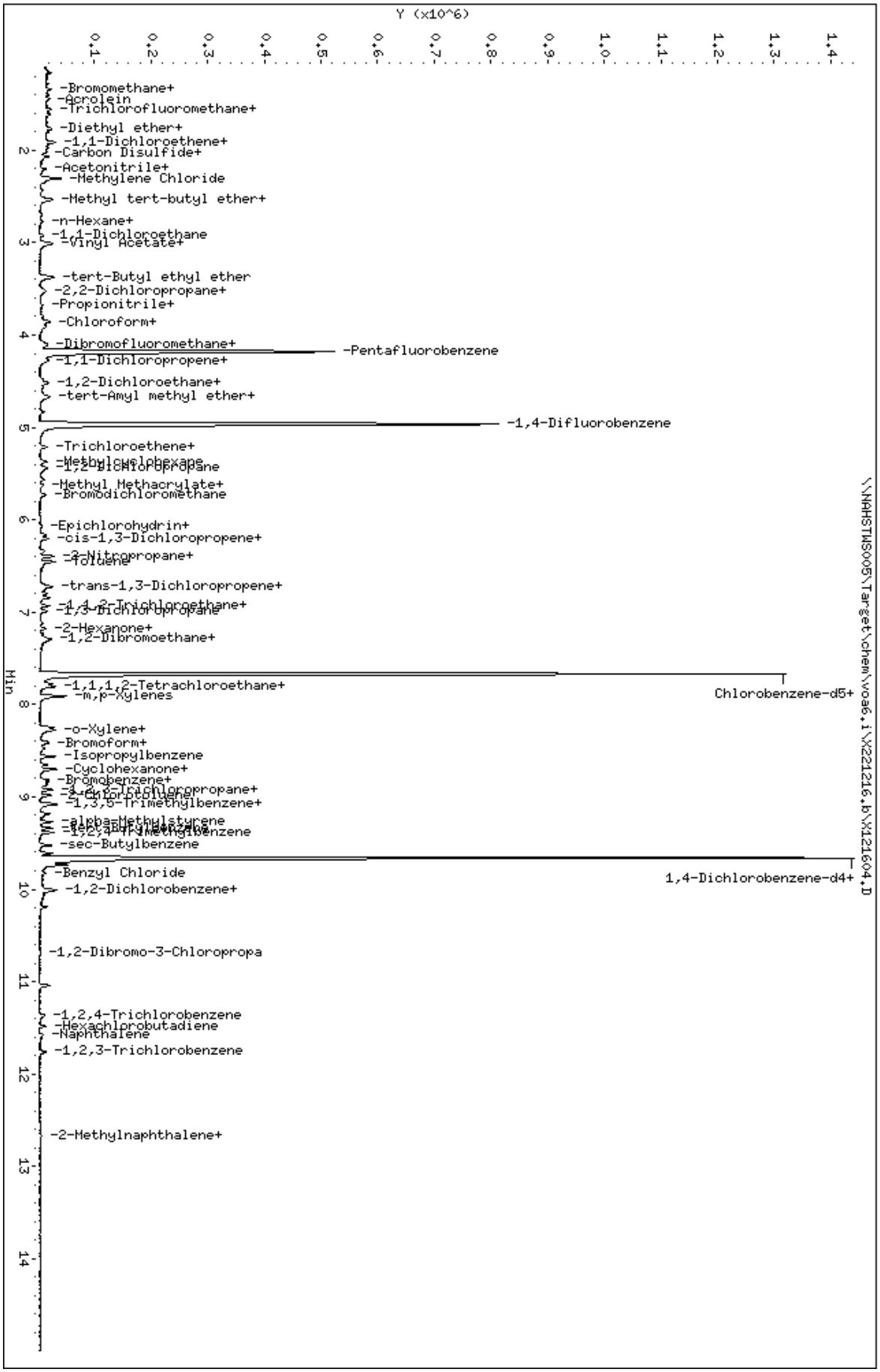
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.743	3.743	(0.896)	3084	1.00000	1.00(M)
	162 Butyl acrylate	55	8.271	8.271	(1.078)	7647	1.00000	0.90
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	2911	1.00000	1.30
	3 Chloromethane	50	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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Date : 16-DEC-2022 12:41
Client ID: VSTD001
Sample Info: VSTD001;VSTD0011;3;
Purge Volume: 5.0
Column phase: DB624

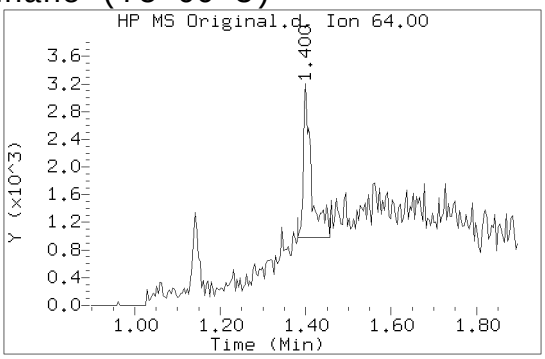
Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Chloroethane (75-00-3)

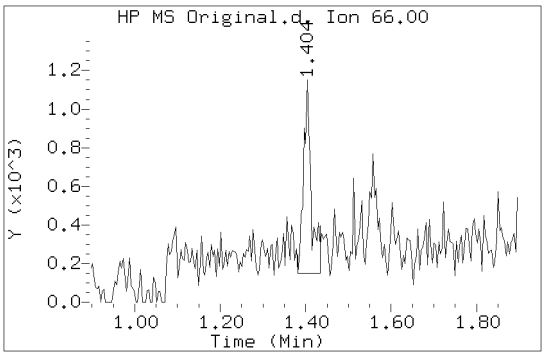
BEFORE

MASS
64
AREA
2984
HEIGHT
2221
27-Dec-2022
16:03
linh
pham



BEFORE

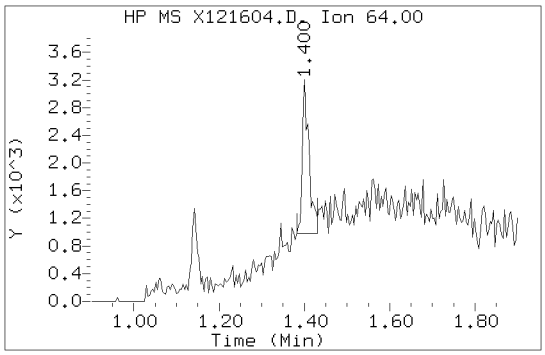
MASS
66
AREA
1262
HEIGHT
1002
27-Dec-2022
16:03
linh
pham



Reason Code:

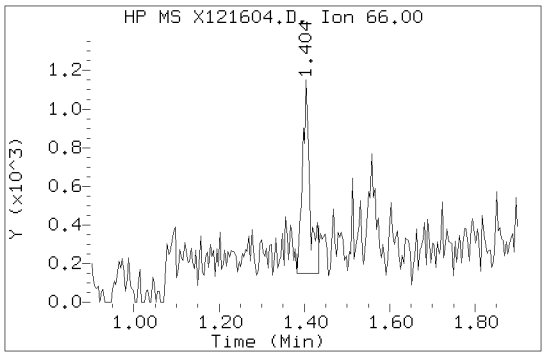
AFTER

MASS
64
AREA
2516
HEIGHT
2221
27-Dec-2022
16:07
linh
pham



AFTER

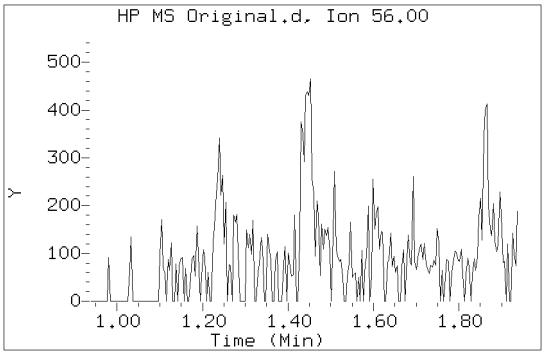
MASS
66
AREA
1262
HEIGHT
1002
27-Dec-2022
16:07
linh
pham



Acrolein (107-02-8)

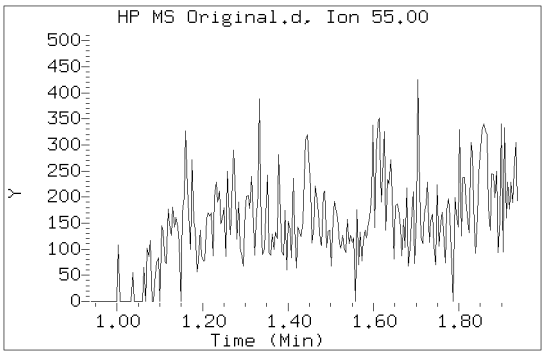
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

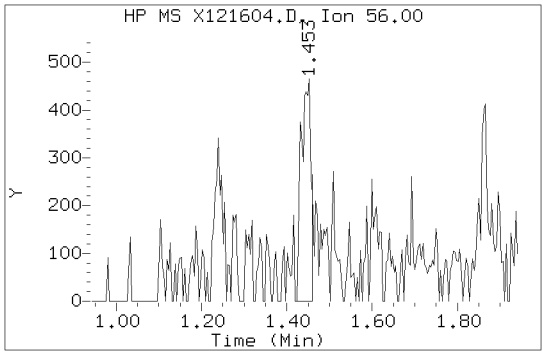
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

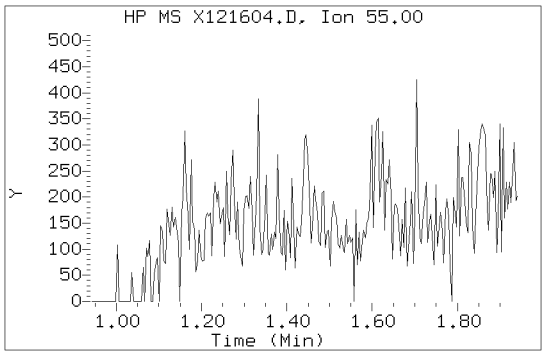
AFTER

MASS
56
AREA
761
HEIGHT
465
27-Dec-2022
16:07
linh
pham



AFTER

MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



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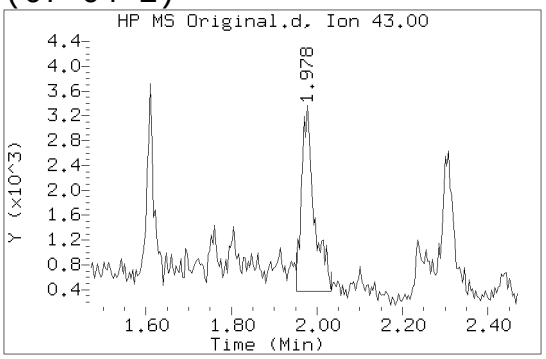
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acetone (67-64-1)

Reason Code:

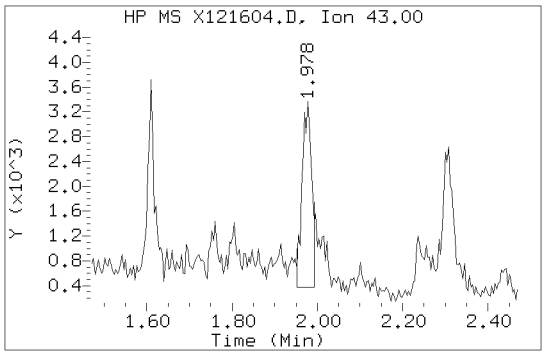
BEFORE

MASS
43
AREA
6265
HEIGHT
2993
27-Dec-2022
16:03
linh
pham



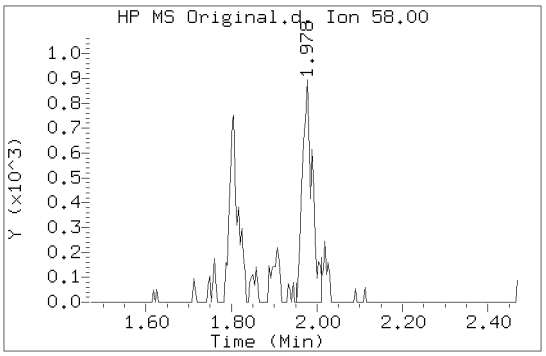
AFTER

MASS
43
AREA
4787
HEIGHT
2993
27-Dec-2022
16:07
linh
pham



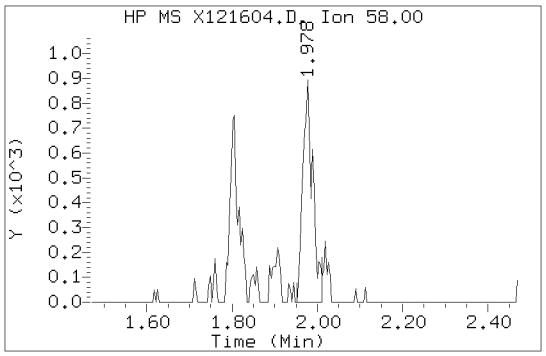
BEFORE

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

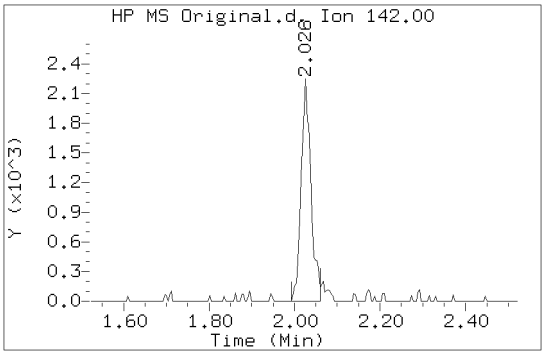


Iodomethane (74-88-4)

Reason Code:

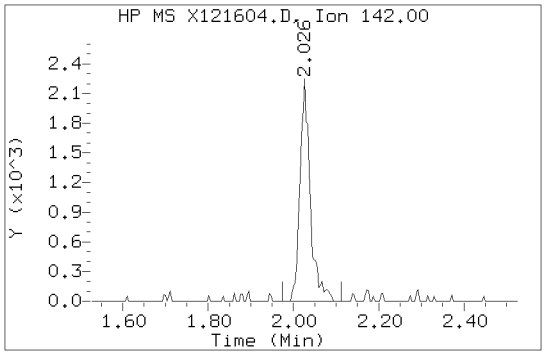
BEFORE

MASS
142
AREA
3661
HEIGHT
2248
27-Dec-2022
16:03
linh
pham



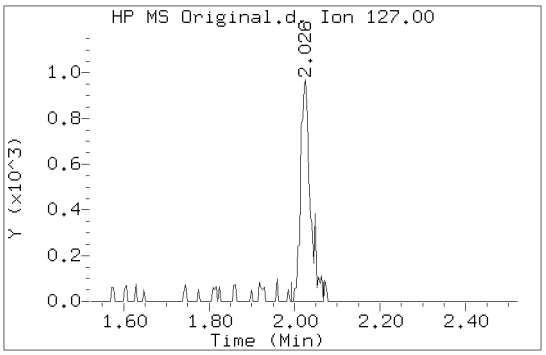
AFTER

MASS
142
AREA
3865
HEIGHT
2248
27-Dec-2022
16:07
linh
pham



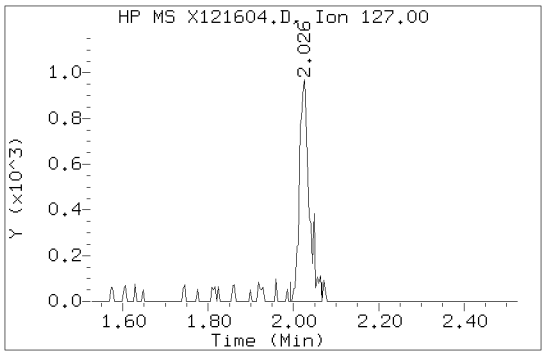
BEFORE

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



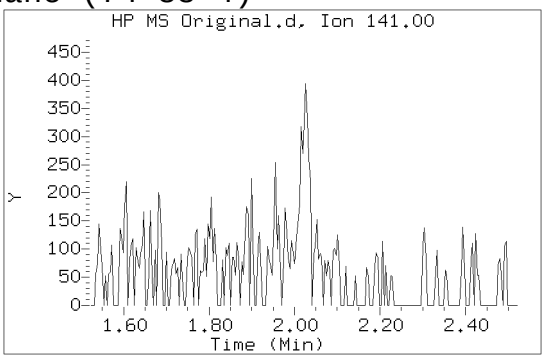
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Iodomethane (74-88-4)

Reason Code:

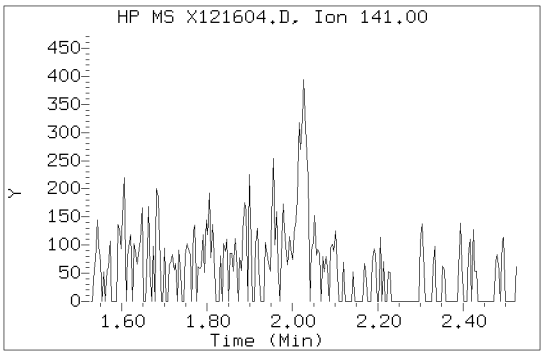
BEFORE

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

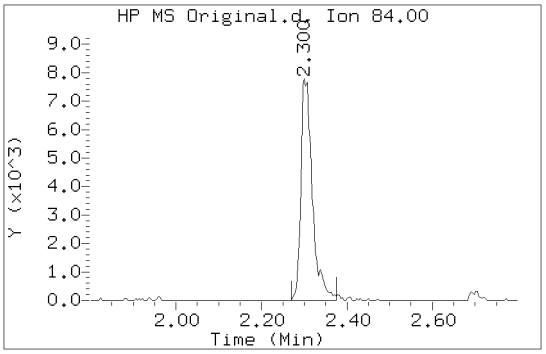


Methylene Chloride (75-09-2)

Reason Code:

BEFORE

MASS
84
AREA
14864
HEIGHT
7788
27-Dec-2022
16:03
linh
pham



AFTER

MASS
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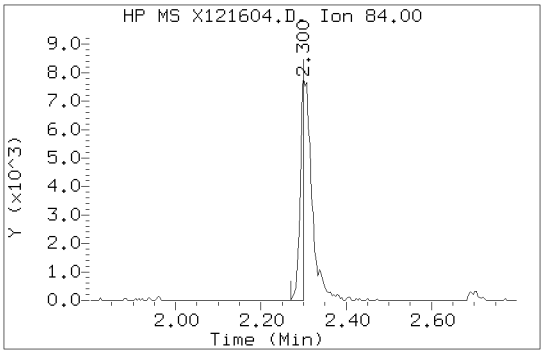
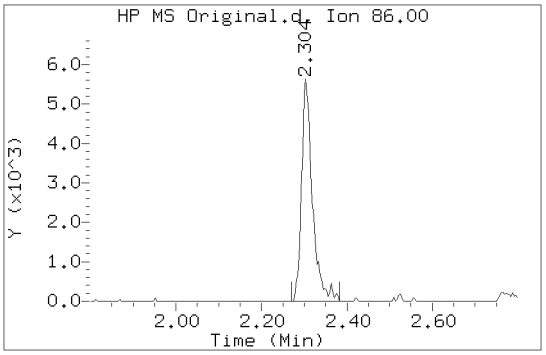
AREA
5355
HEIGHT
7788
27-Dec-2022
16:07
linh
pham



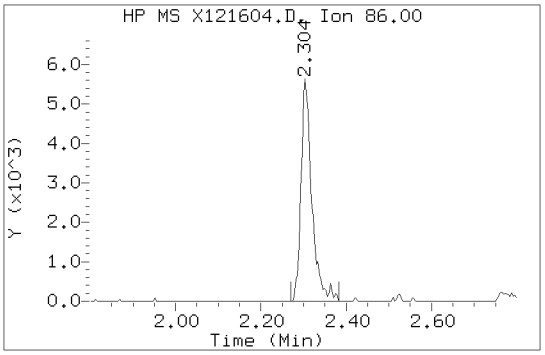
BEFORE

MASS
86
AREA
10161
HEIGHT
5637
27-Dec-2022
16:03
linh
pham



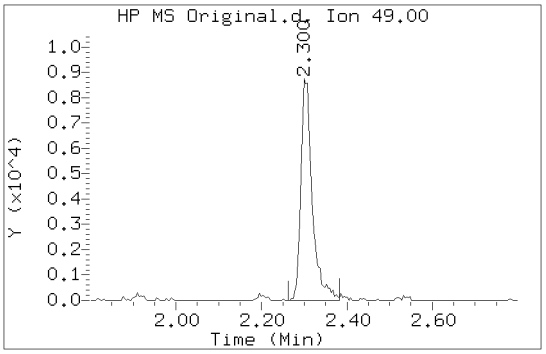
AFTER

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
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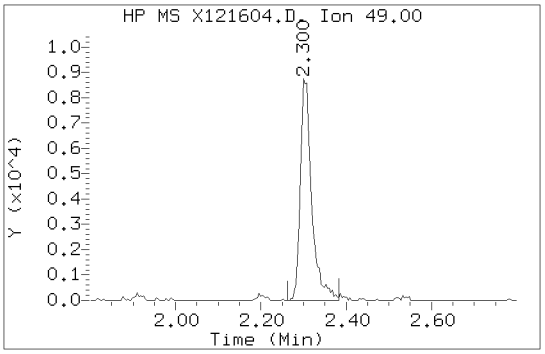

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Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Butanone (78-93-3)

BEFORE

MASS
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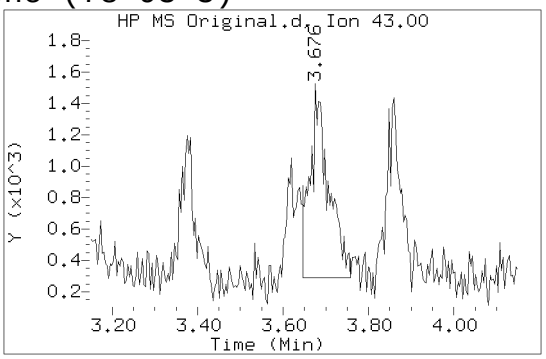
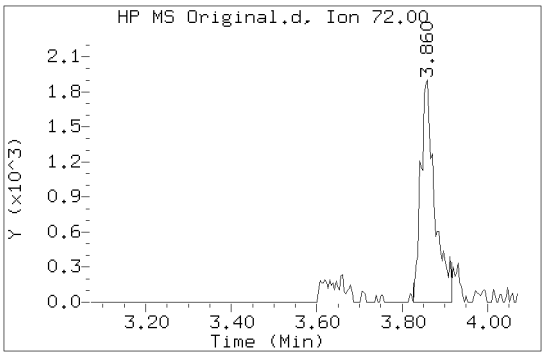
AREA
3758
HEIGHT
1236
27-Dec-2022
16:03
linh
pham



BEFORE

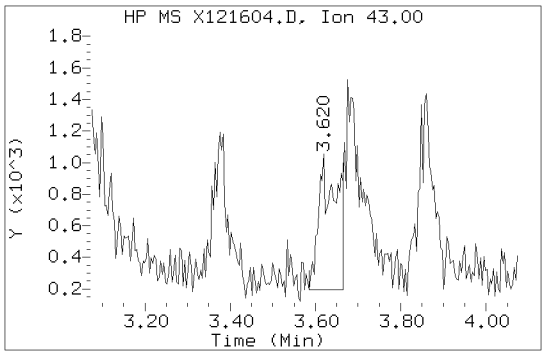
MASS
72
AREA
4320
HEIGHT
1902
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
43
AREA
2498
HEIGHT
859
27-Dec-2022
16:07
linh
pham



AFTER

MASS
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AREA
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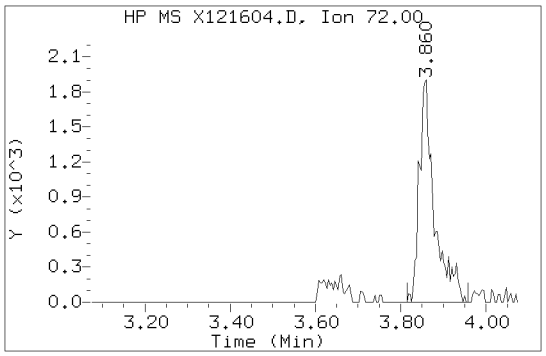
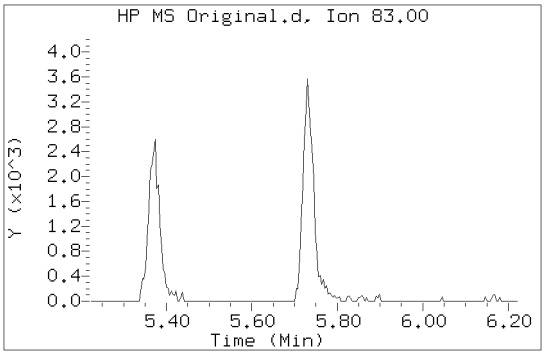
HEIGHT
1902
27-Dec-2022
16:07
linh
pham



Bromodichloromethane (75-27-4)

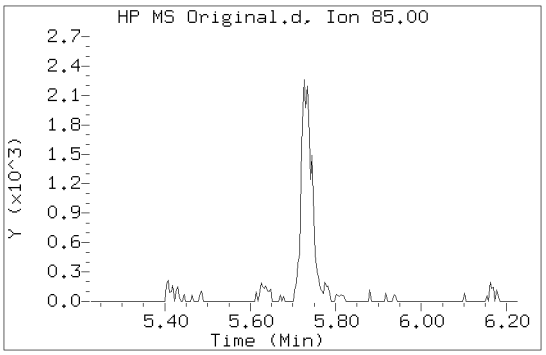
BEFORE

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
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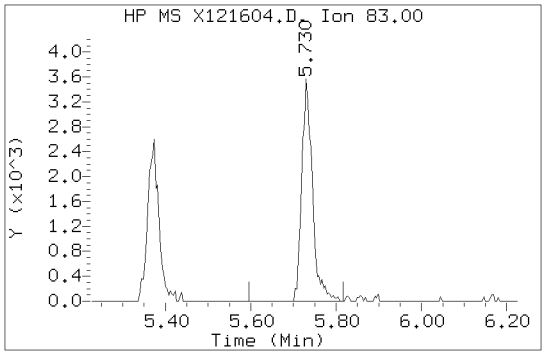
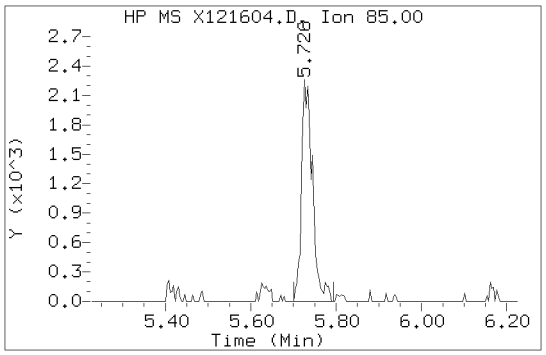
AREA
6296
HEIGHT
3568
27-Dec-2022
16:07
linh
pham



AFTER

MASS
85
AREA
4084
HEIGHT
2261
27-Dec-2022
16:07
linh
pham



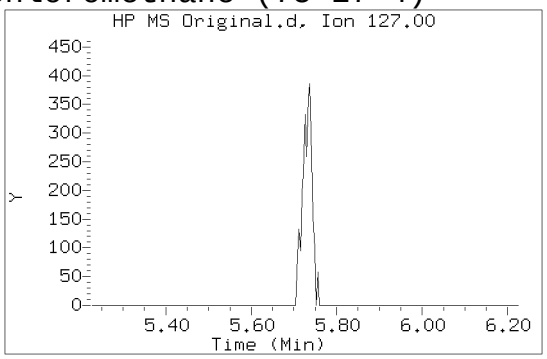
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Bromodichloromethane (75-27-4)

Reason Code:

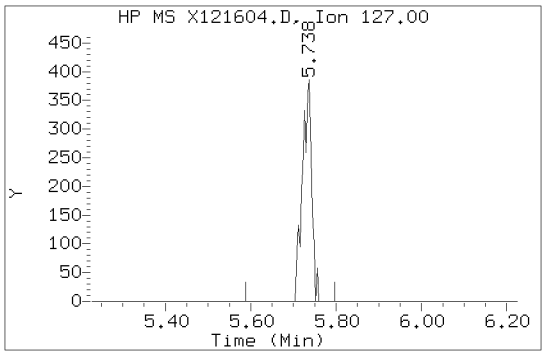
BEFORE

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

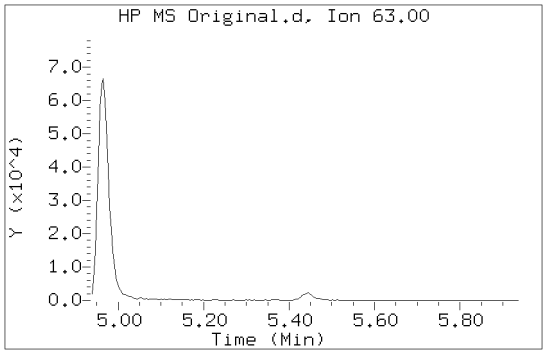


1,2-Dichloropropane (78-87-5)

Reason Code:

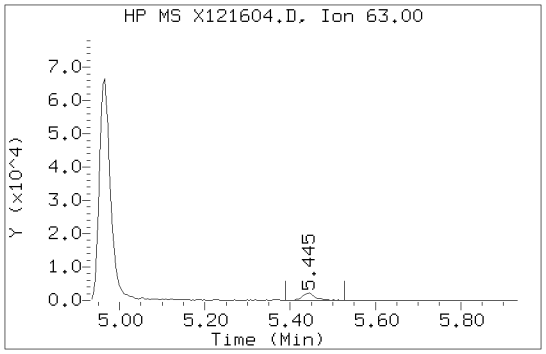
BEFORE

MASS
63
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



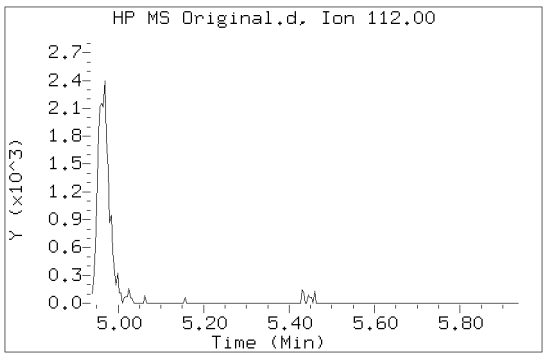
AFTER

MASS
63
AREA
4604
HEIGHT
2381
27-Dec-2022
16:07
linh
pham



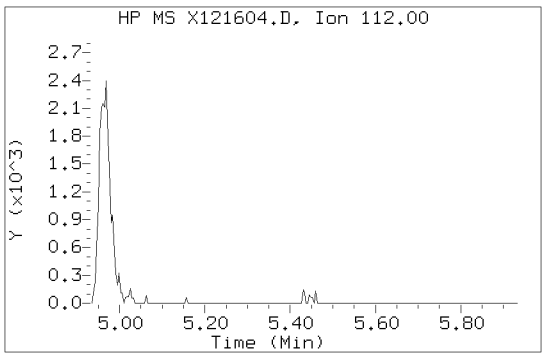
BEFORE

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

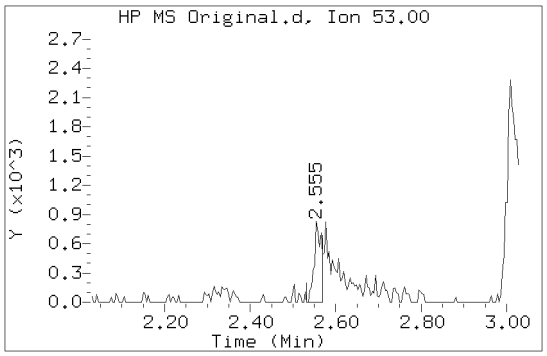


Acrylonitrile (107-13-1)

Reason Code:

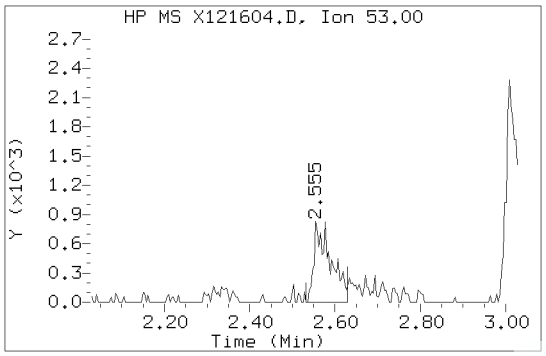
BEFORE

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



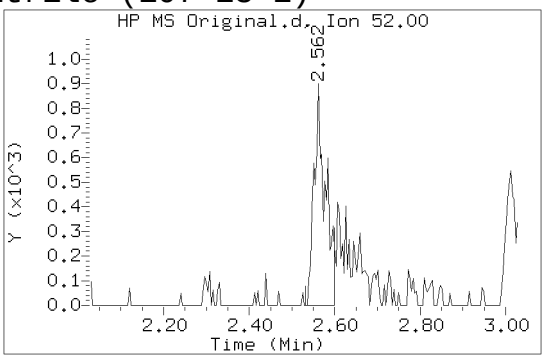
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

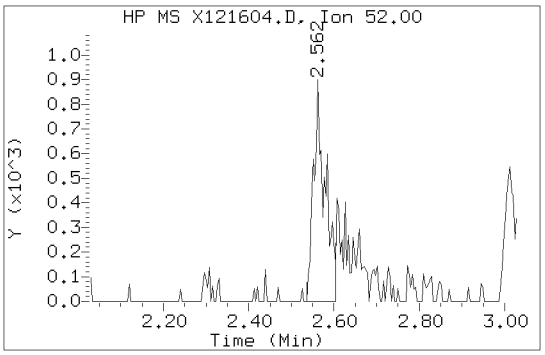
BEFORE

MASS
52
AREA
1657
HEIGHT
900
27-Dec-2022
16:03
linh
pham



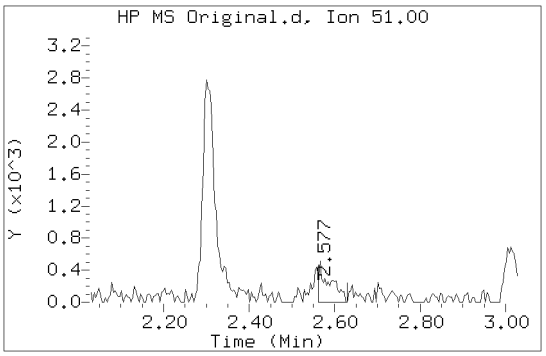
AFTER

MASS
52
AREA
1692
HEIGHT
900
27-Dec-2022
16:07
linh
pham



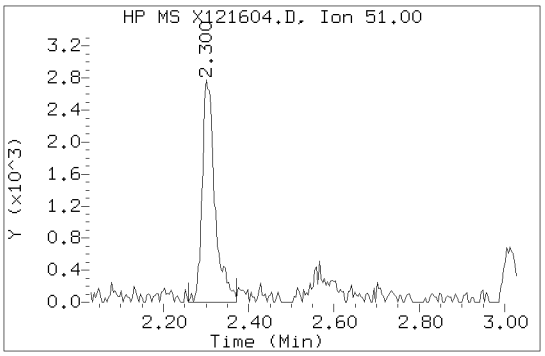
BEFORE

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

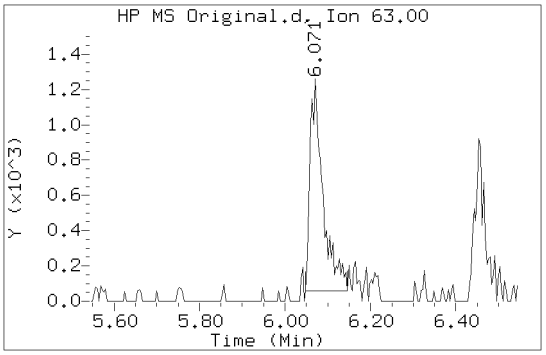


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

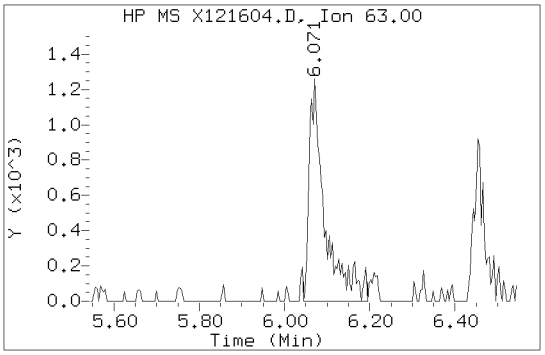
BEFORE

MASS
63
AREA
2513
HEIGHT
1202
27-Dec-2022
16:03
linh
pham



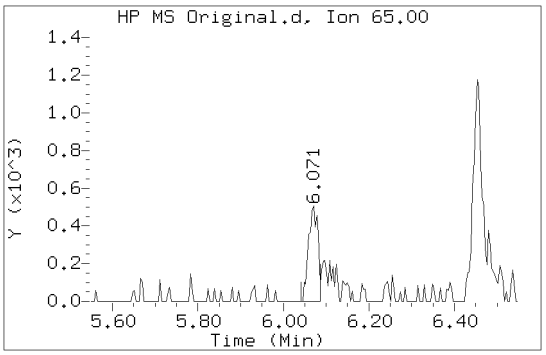
AFTER

MASS
63
AREA
3202
HEIGHT
1260
27-Dec-2022
16:07
linh
pham



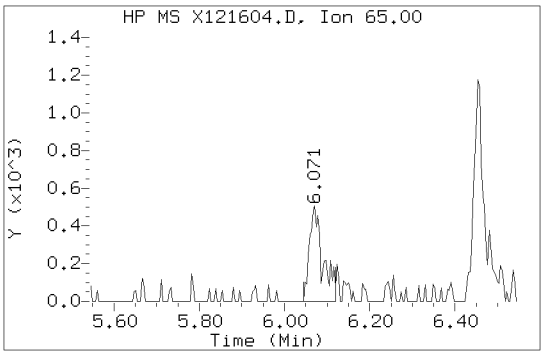
BEFORE

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



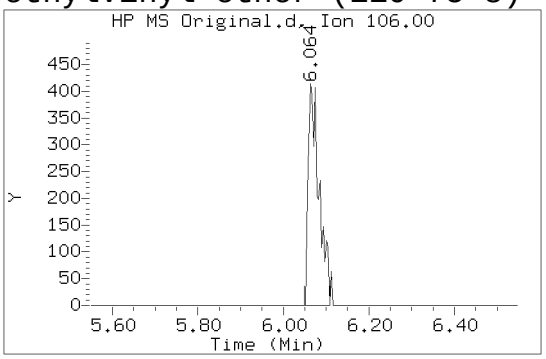
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

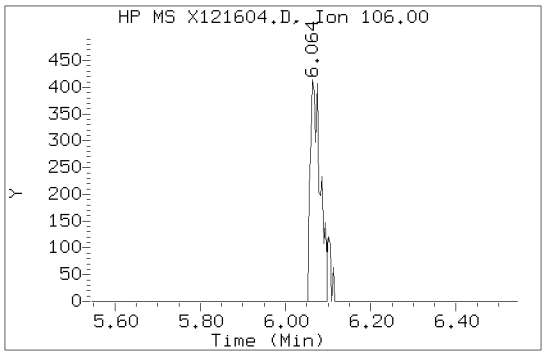
BEFORE

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

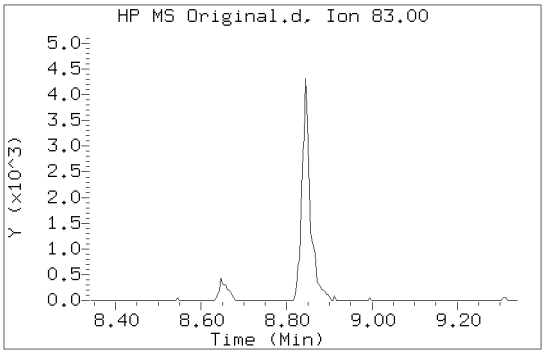


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

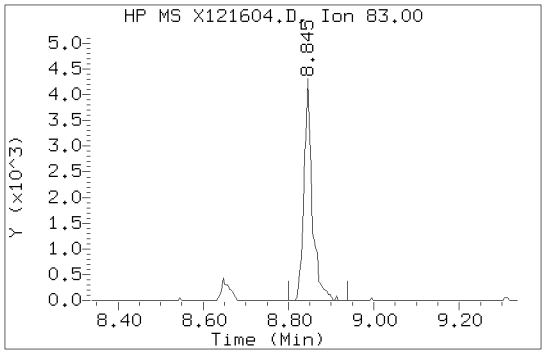
BEFORE

MASS
83
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



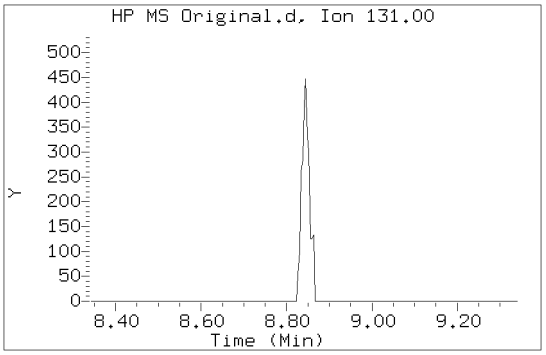
AFTER

MASS
83
AREA
5934
HEIGHT
4312
27-Dec-2022
16:07
linh
pham



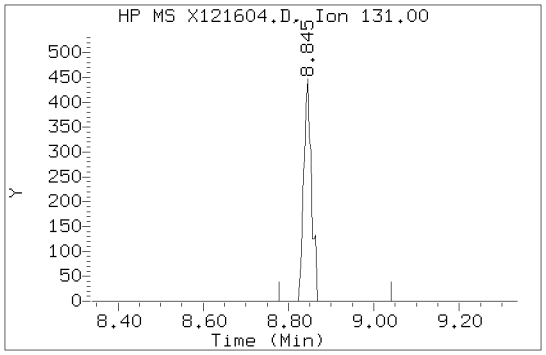
BEFORE

MASS
131
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



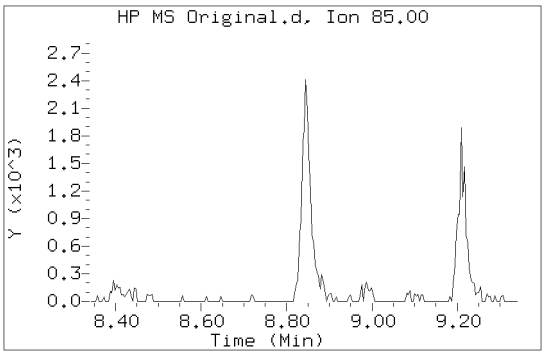
AFTER

MASS
131
AREA
574
HEIGHT
447
27-Dec-2022
16:07
linh
pham



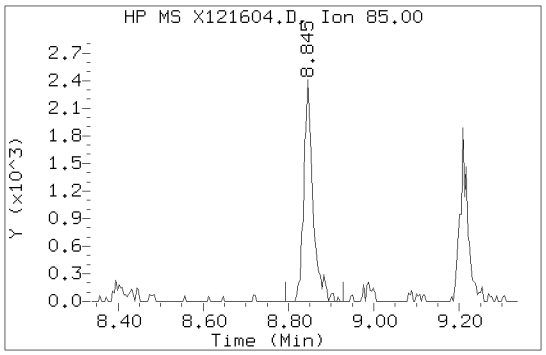
BEFORE

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

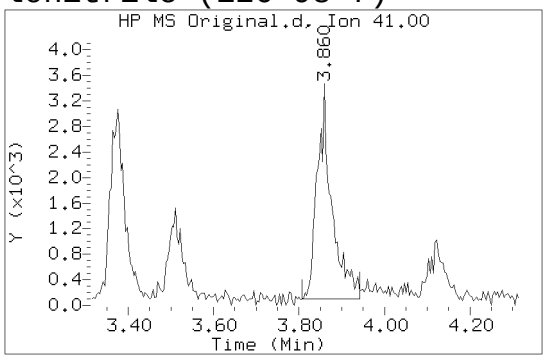


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

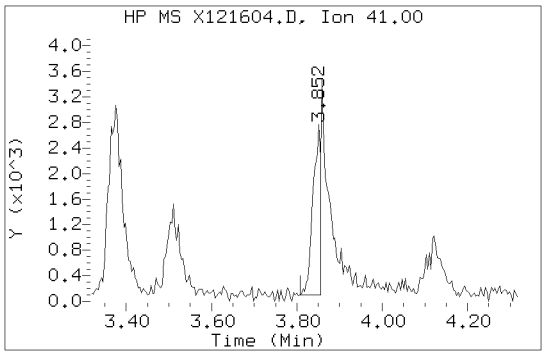
Methacrylonitrile (126-98-7)

Reason Code:

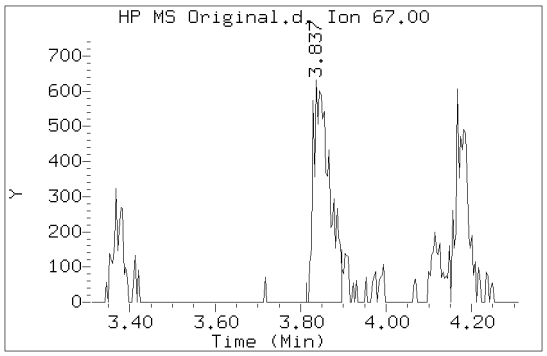
BEFORE
MASS
41
AREA
7966
HEIGHT
3370
27-Dec-2022
16:03
linh
pham



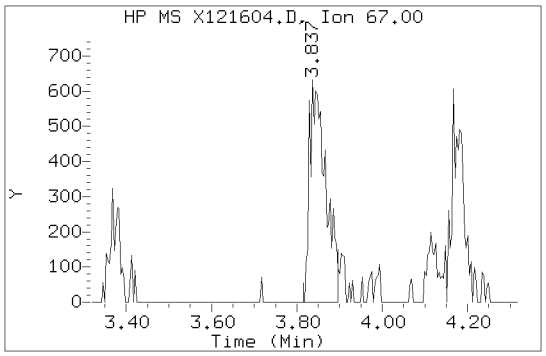
AFTER
MASS
41
AREA
3285
HEIGHT
2668
27-Dec-2022
16:07
linh
pham



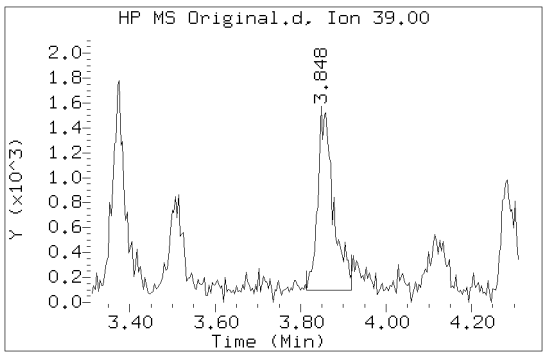
BEFORE
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:03
linh
pham



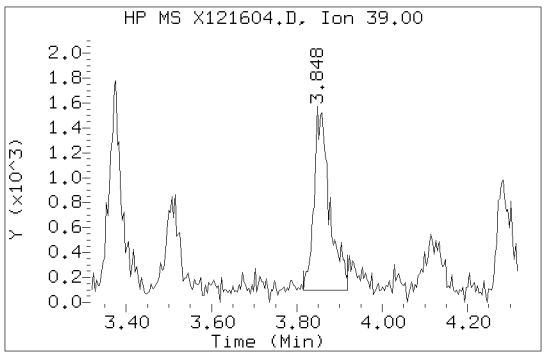
AFTER
MASS
67
AREA
1649
HEIGHT
632
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:03
linh
pham



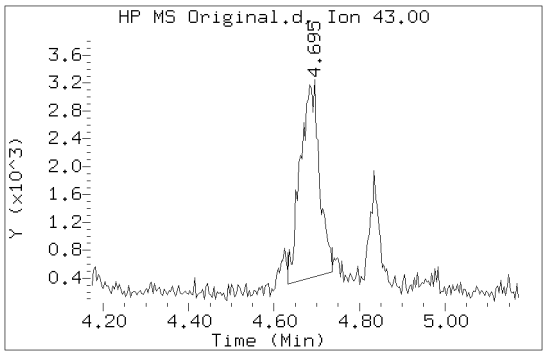
AFTER
MASS
39
AREA
3700
HEIGHT
1473
27-Dec-2022
16:07
linh
pham



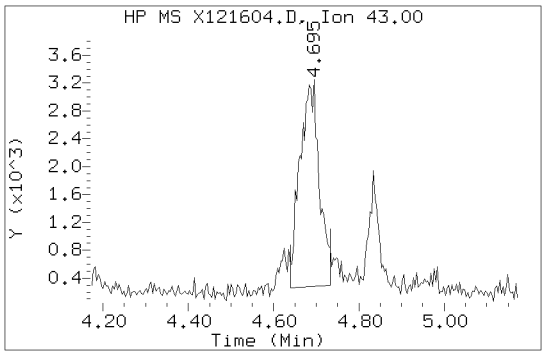
Isobutyl Alcohol (78-83-1)

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

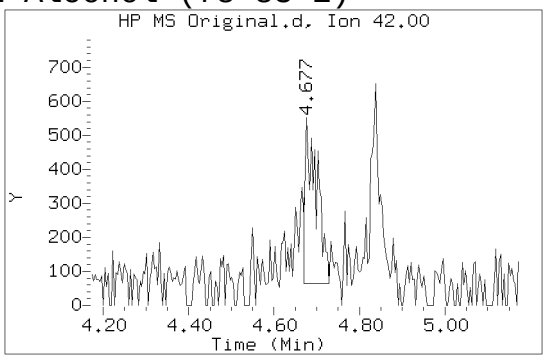


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Isobutyl Alcohol (78-83-1)

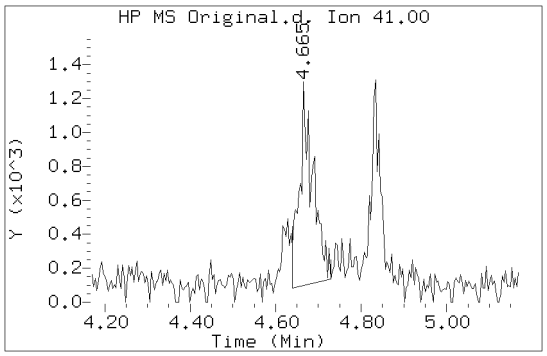
BEFORE

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:03
linh
pham



BEFORE

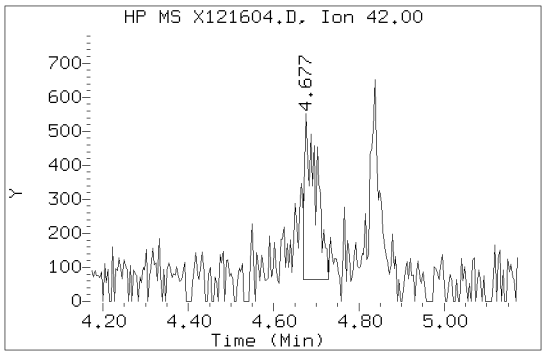
MASS
41
AREA
2650
HEIGHT
1200
27-Dec-2022
16:03
linh
pham



Reason Code:

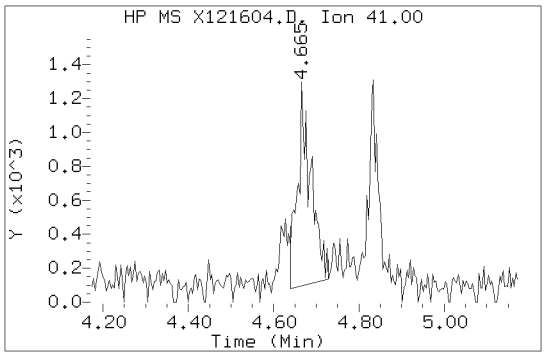
AFTER

MASS
42
AREA
953
HEIGHT
488
27-Dec-2022
16:07
linh
pham



AFTER

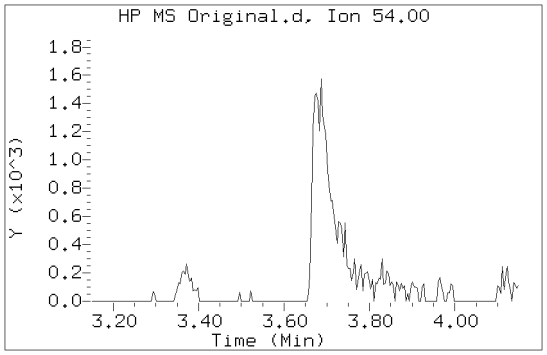
MASS
41
AREA
2656
HEIGHT
1201
27-Dec-2022
16:07
linh
pham



Propionitrile (107-12-0)

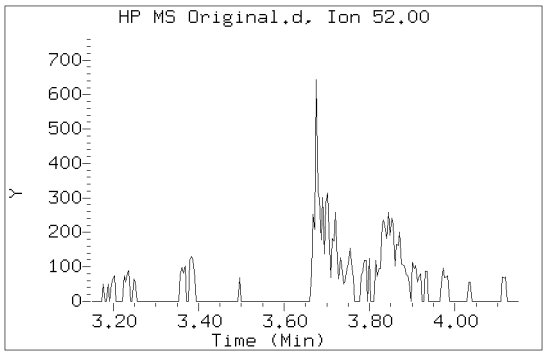
BEFORE

MASS
54
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

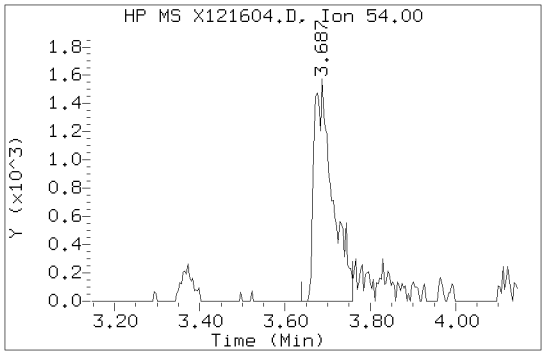
MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

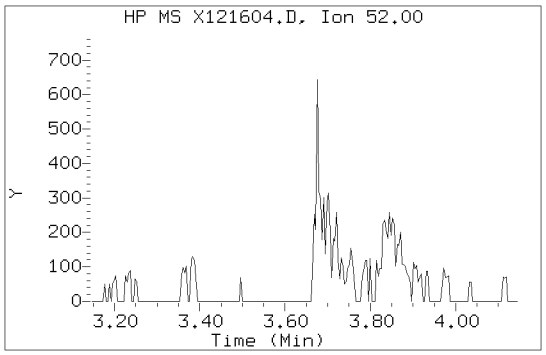
AFTER

MASS
54
AREA
4742
HEIGHT
1574
27-Dec-2022
16:07
linh
pham



AFTER

MASS
52
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



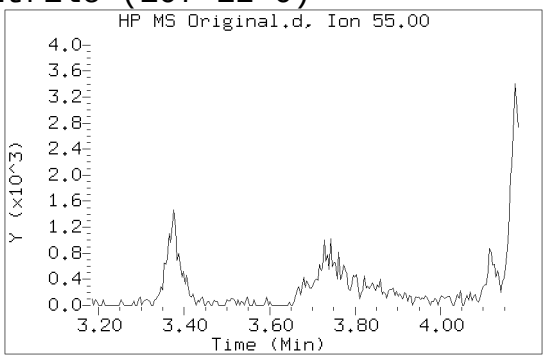
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Propionitrile (107-12-0)

Reason Code:

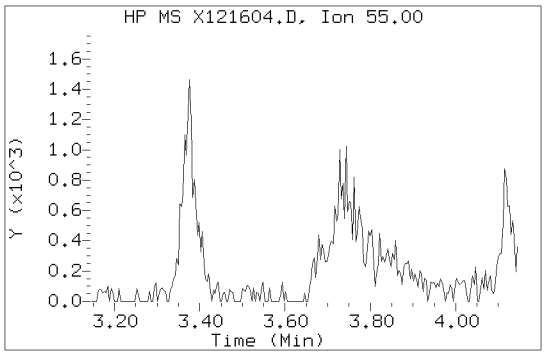
BEFORE

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

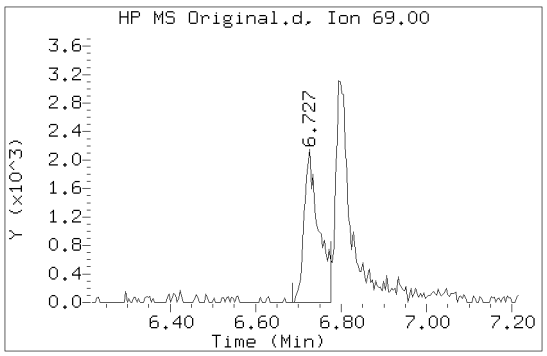


Ethyl Methacrylate (97-63-2)

Reason Code:

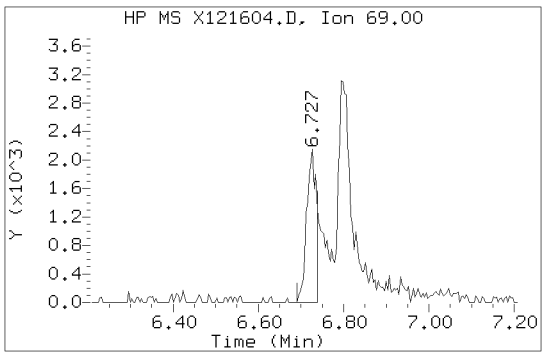
BEFORE

MASS
69
AREA
5177
HEIGHT
2156
27-Dec-2022
16:03
linh
pham



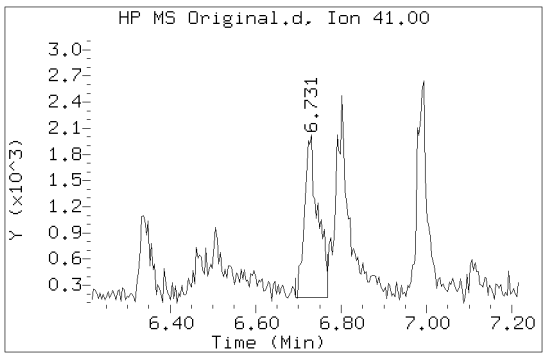
AFTER

MASS
69
AREA
3303
HEIGHT
2156
27-Dec-2022
16:07
linh
pham



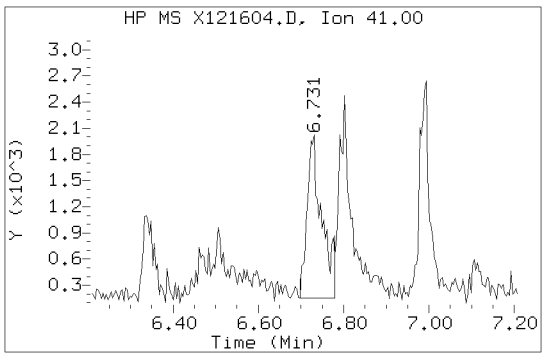
BEFORE

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

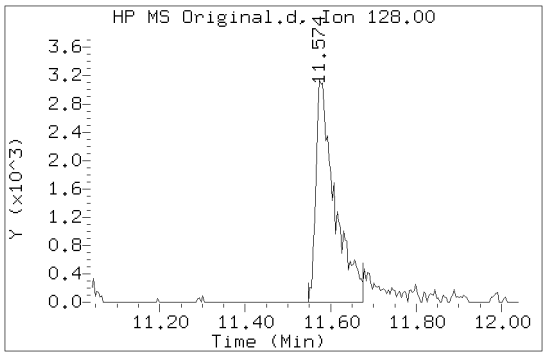


Naphthalene (91-20-3)

Reason Code:

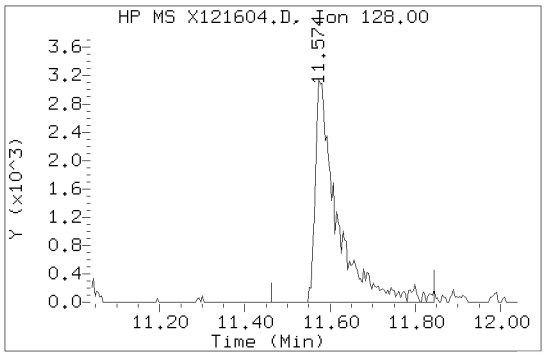
BEFORE

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



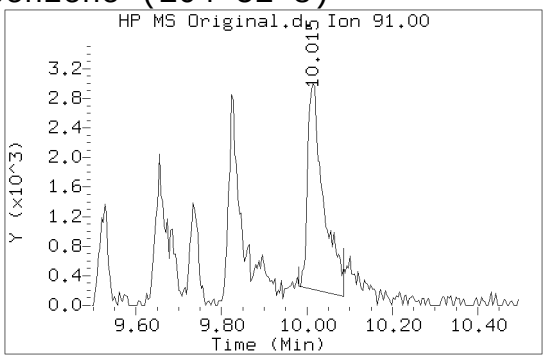
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

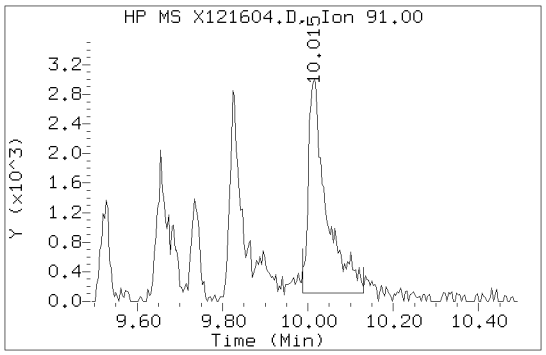
BEFORE

MASS
91
AREA
7194
HEIGHT
2783
27-Dec-2022
16:03
linh
pham



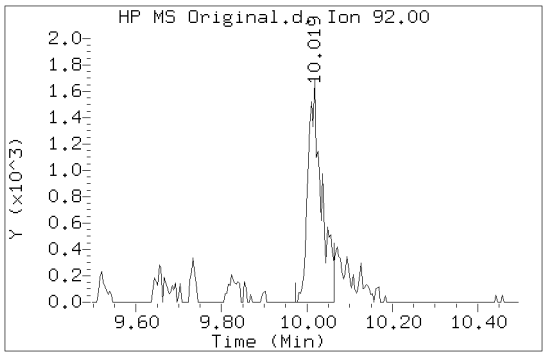
AFTER

MASS
91
AREA
8459
HEIGHT
2887
27-Dec-2022
16:07
linh
pham



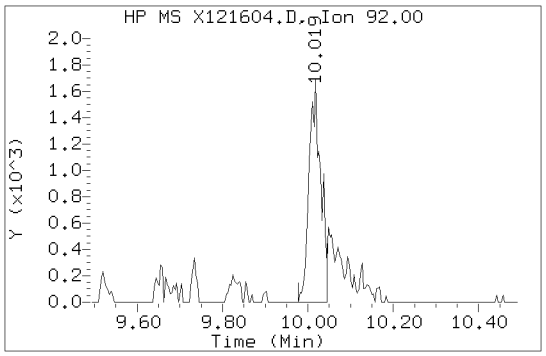
BEFORE

MASS
92
AREA
3696
HEIGHT
1686
27-Dec-2022
16:03
linh
pham



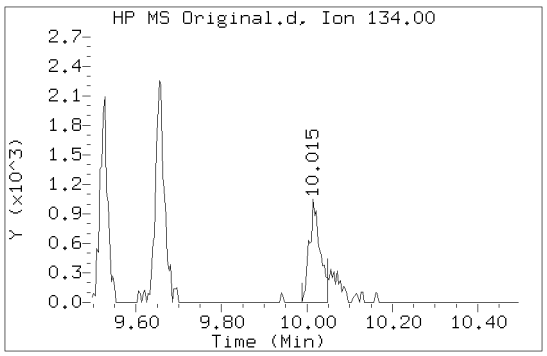
AFTER

MASS
92
AREA
3188
HEIGHT
1686
27-Dec-2022
16:07
linh
pham



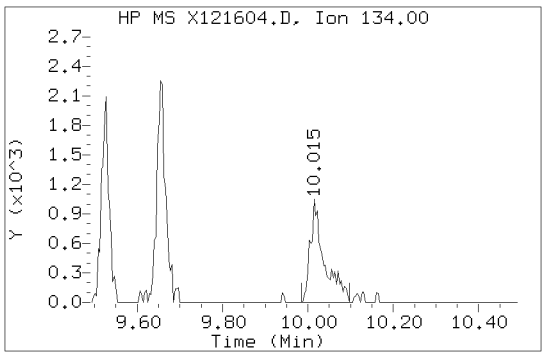
BEFORE

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

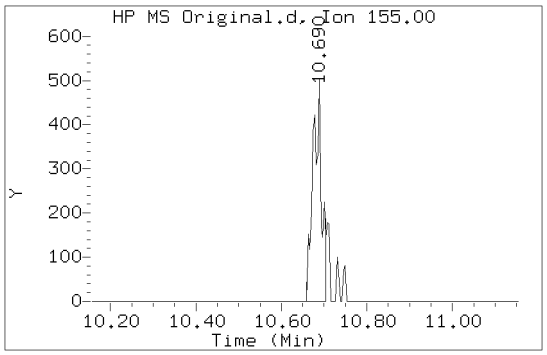


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

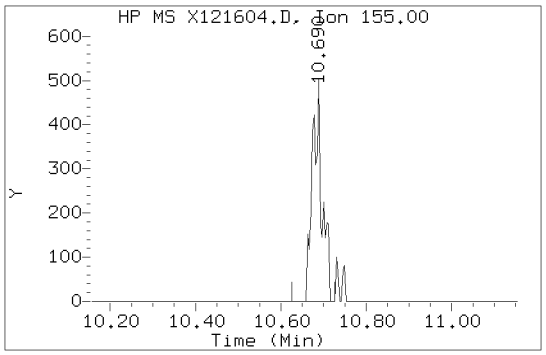
BEFORE

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



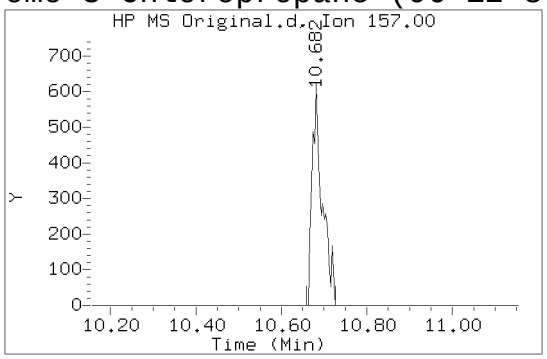
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

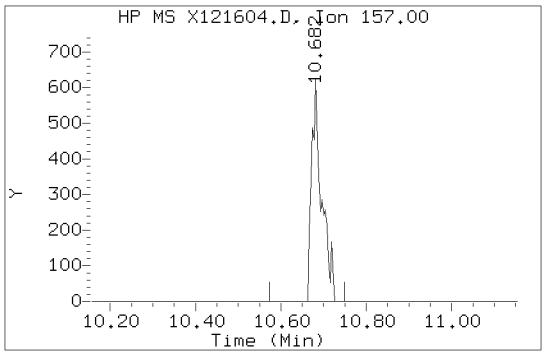
BEFORE

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:03
linh
pham



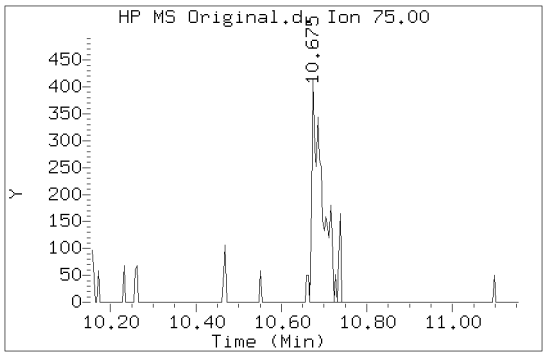
AFTER

MASS
157
AREA
1023
HEIGHT
622
27-Dec-2022
16:07
linh
pham



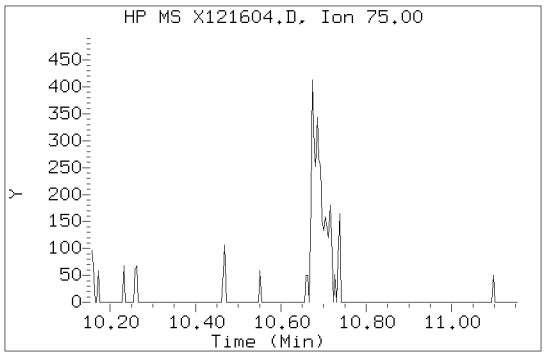
BEFORE

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

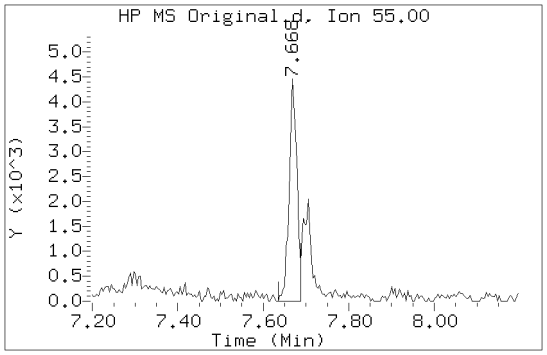


1-Chlorohexane (544-10-5)

Reason Code:

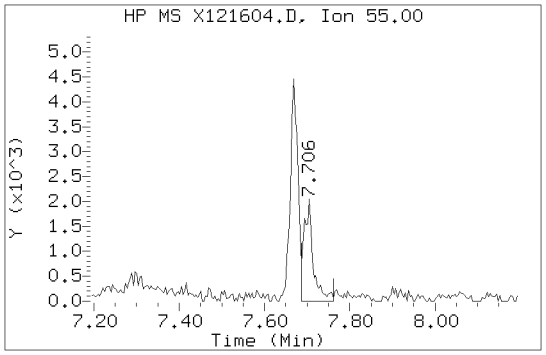
BEFORE

MASS
55
AREA
5660
HEIGHT
4460
27-Dec-2022
16:03
linh
pham



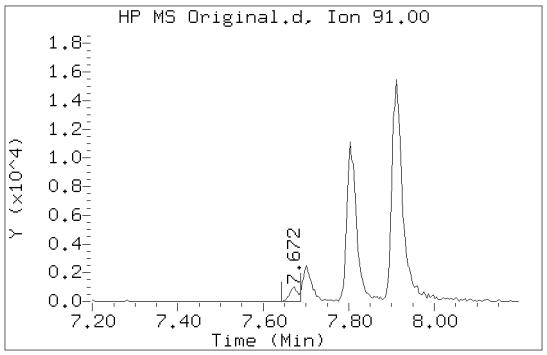
AFTER

MASS
55
AREA
3155
HEIGHT
2048
27-Dec-2022
16:07
linh
pham



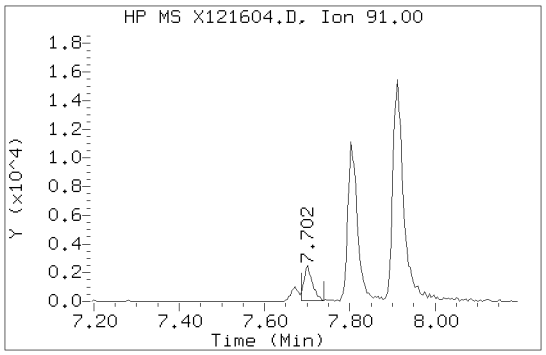
BEFORE

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

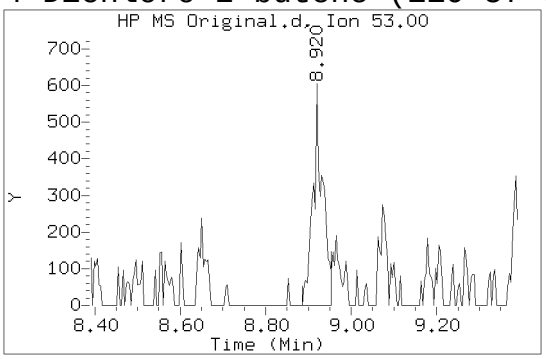


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

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

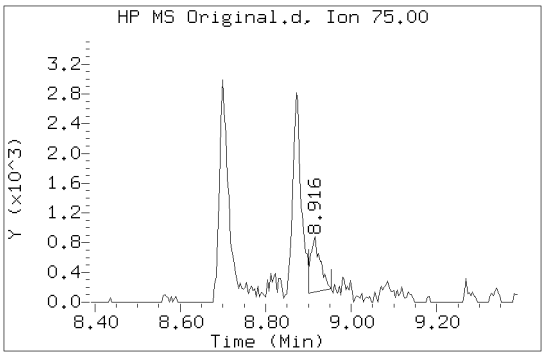
BEFORE

MASS
53
AREA
956
HEIGHT
605
27-Dec-2022
16:03
linh
pham



BEFORE

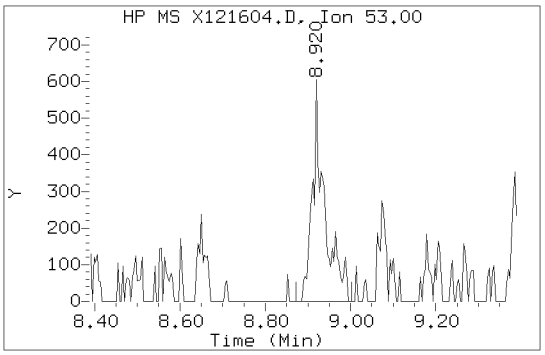
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:03
linh
pham



Reason Code:

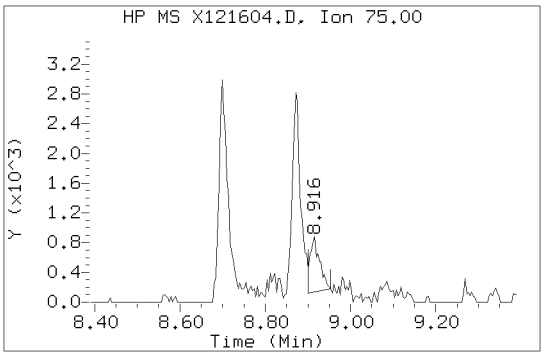
AFTER

MASS
53
AREA
1196
HEIGHT
605
27-Dec-2022
16:07
linh
pham



AFTER

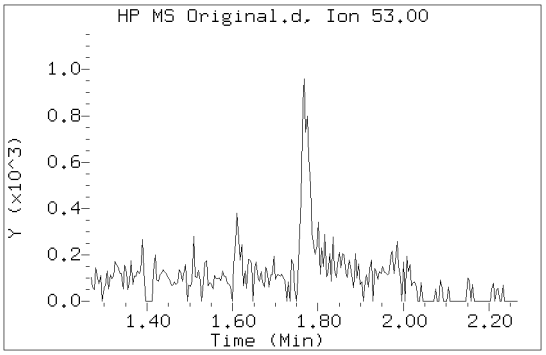
MASS
75
AREA
1166
HEIGHT
745
27-Dec-2022
16:07
linh
pham



Chloroprene (126-99-8)

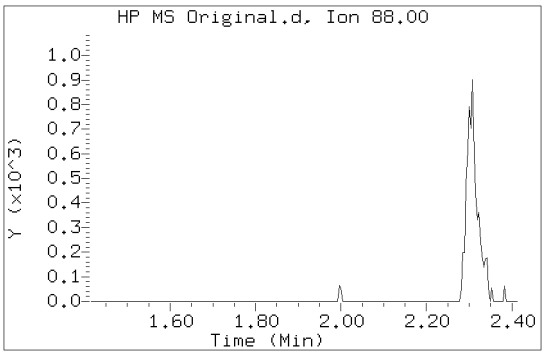
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



BEFORE

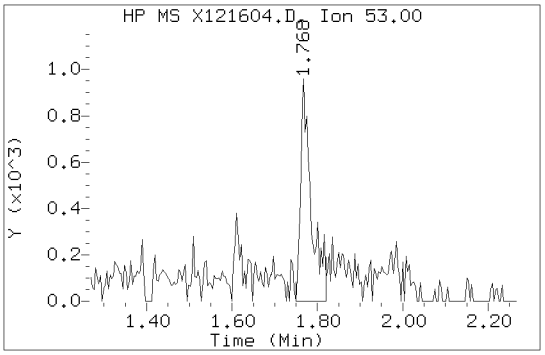
MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

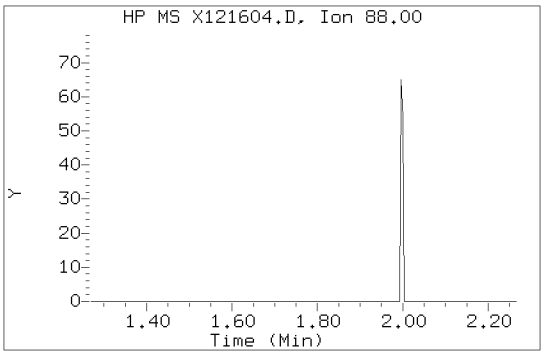
AFTER

MASS
53
AREA
1686
HEIGHT
959
27-Dec-2022
16:07
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham

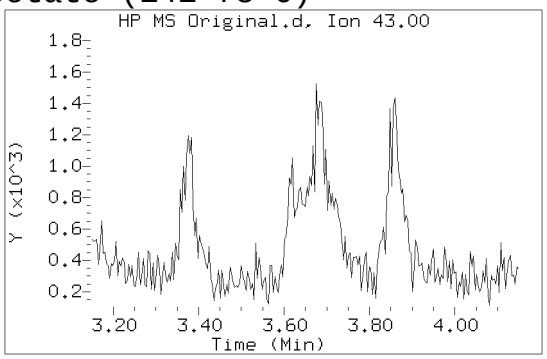


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

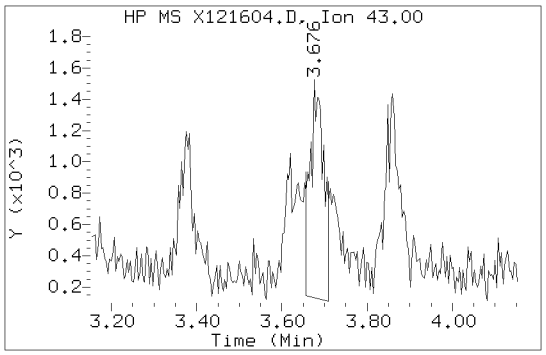
Ethyl Acetate (141-78-6)

Reason Code:

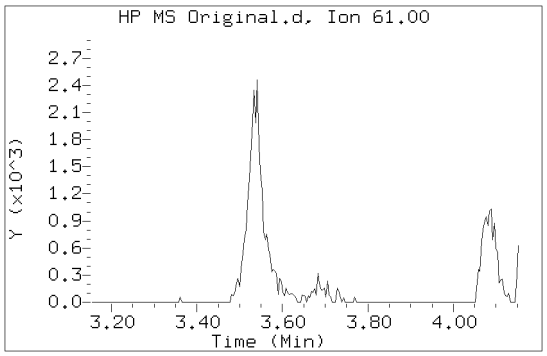
BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



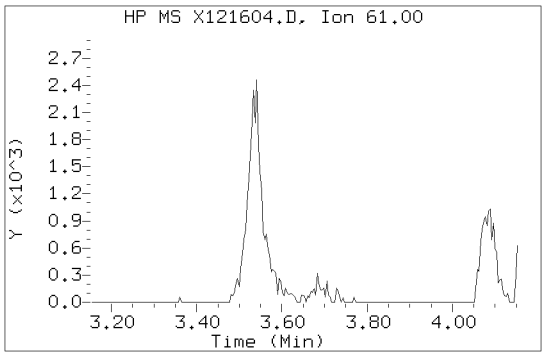
AFTER
MASS
43
AREA
3144
HEIGHT
1392
27-Dec-2022
16:07
linh
pham



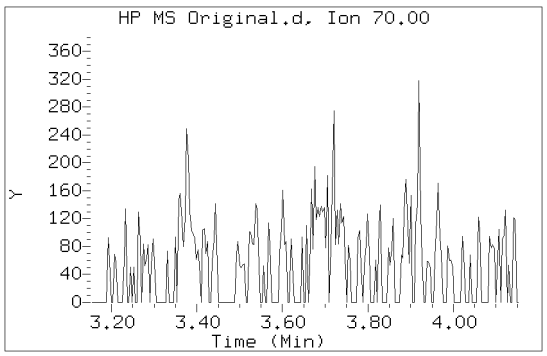
BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



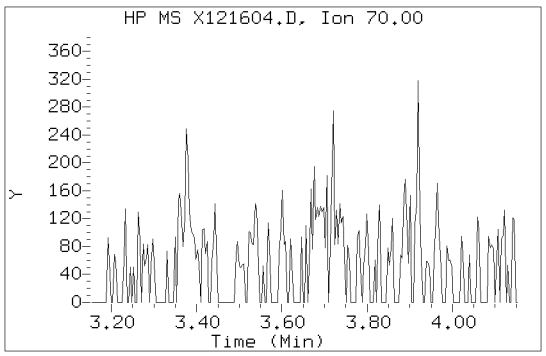
AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



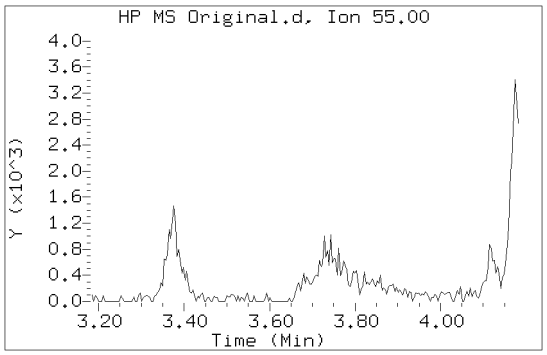
AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



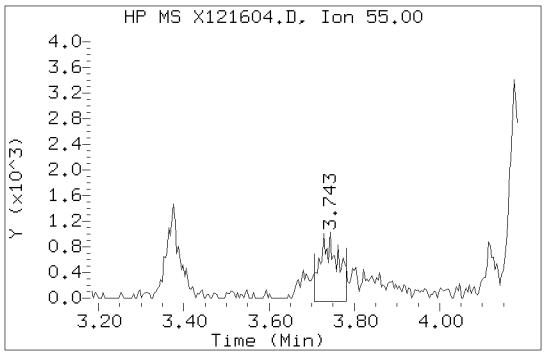
Methyl Acrylate (96-33-3)

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



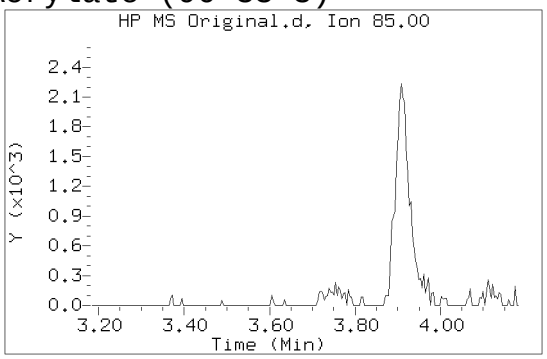
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acrylate (96-33-3)

Reason Code:

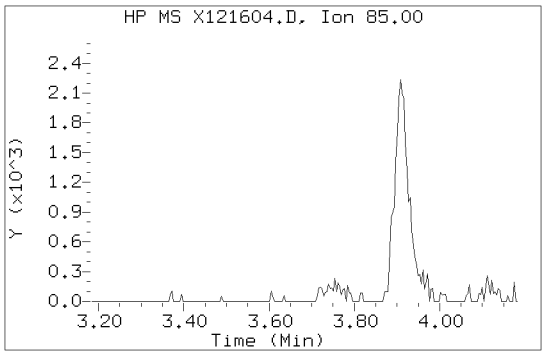
BEFORE

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

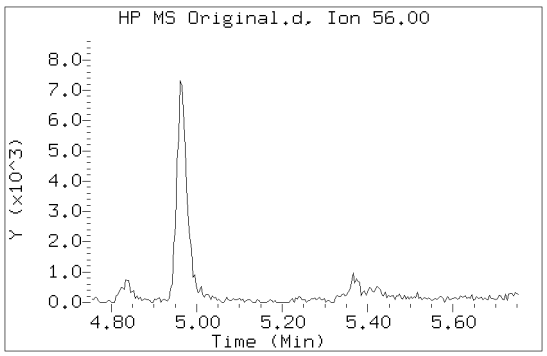


n-Butanol (71-36-3)

Reason Code:

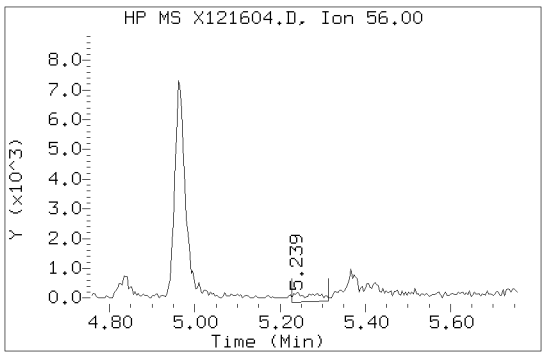
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



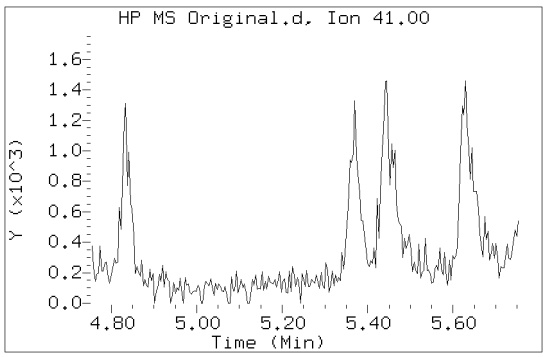
AFTER

MASS
56
AREA
1171
HEIGHT
317
27-Dec-2022
16:07
linh
pham



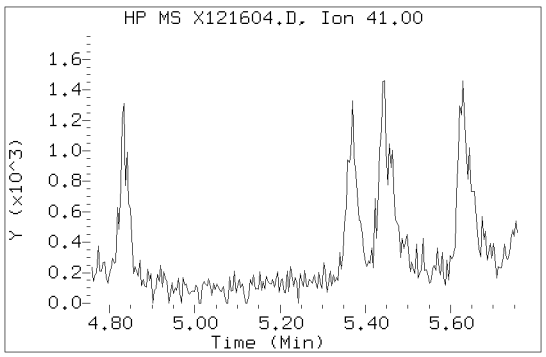
BEFORE

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

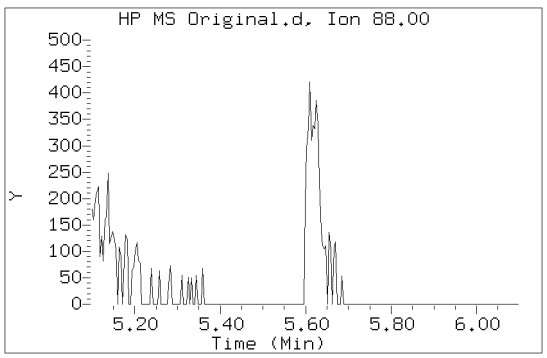


1,4-Dioxane ()

Reason Code:

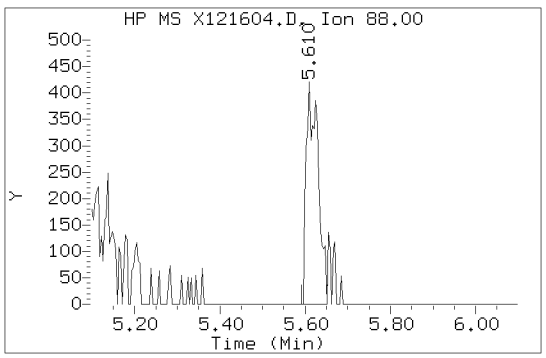
BEFORE

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



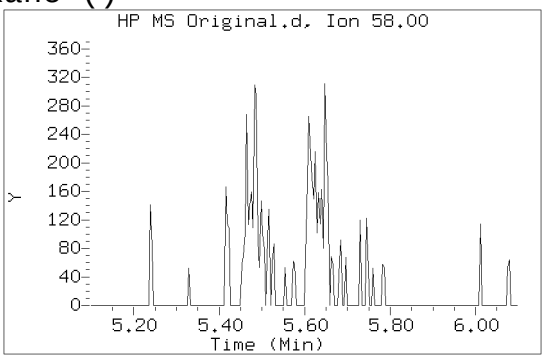
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

1,4-Dioxane ()

Reason Code:

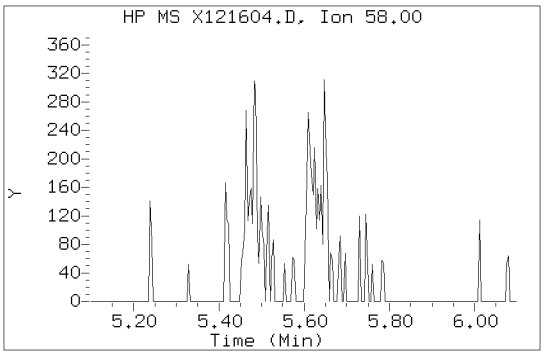
BEFORE

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

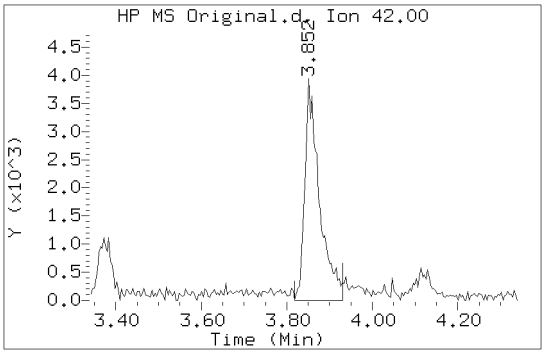


Tetrahydrofuran (109-99-9)

Reason Code:

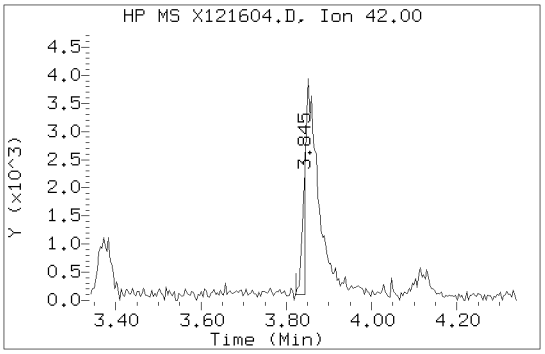
BEFORE

MASS
42
AREA
9396
HEIGHT
3939
27-Dec-2022
16:03
linh
pham



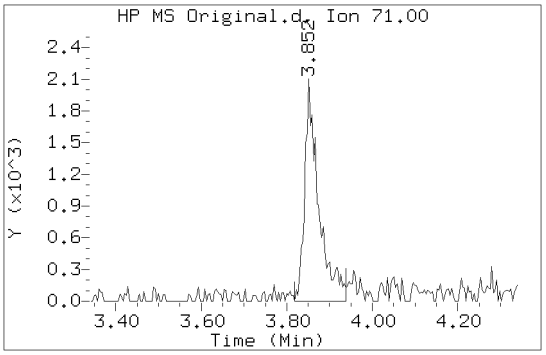
AFTER

MASS
42
AREA
1361
HEIGHT
2190
27-Dec-2022
16:07
linh
pham



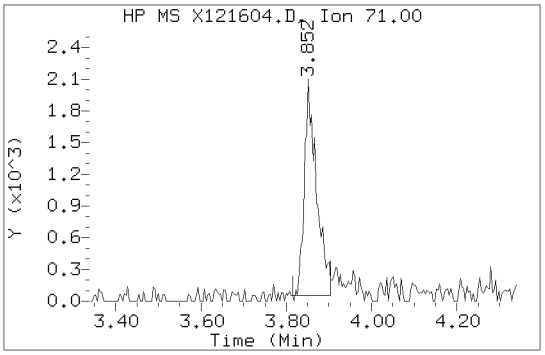
BEFORE

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

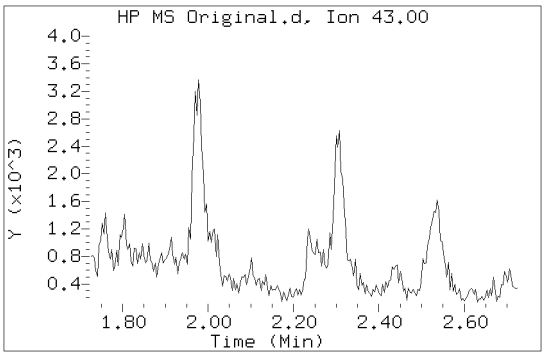


Methyl Acetate (79-20-9)

Reason Code:

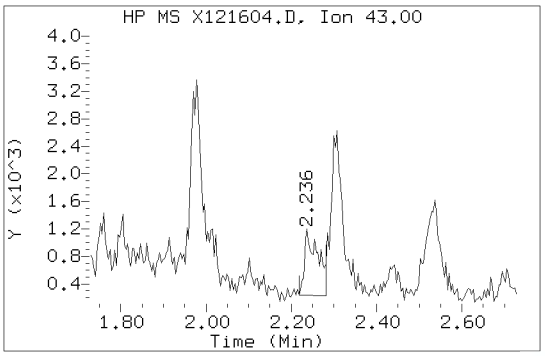
BEFORE

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

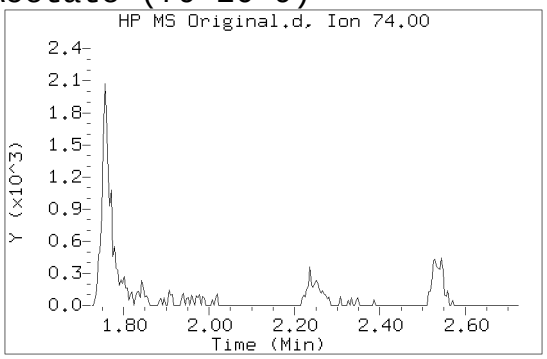


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

Methyl Acetate (79-20-9)

BEFORE

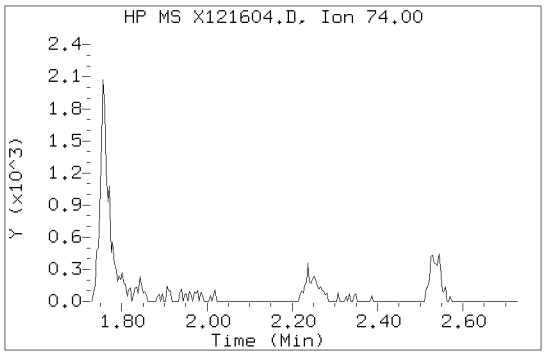
MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

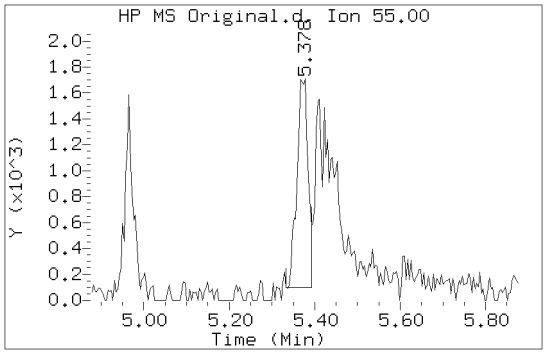
MASS
74
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



Methylcyclohexane (108-87-2)

BEFORE

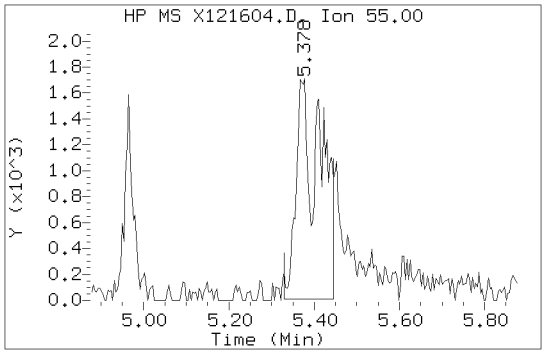
MASS
55
AREA
2998
HEIGHT
1612
27-Dec-2022
16:03
linh
pham



Reason Code:

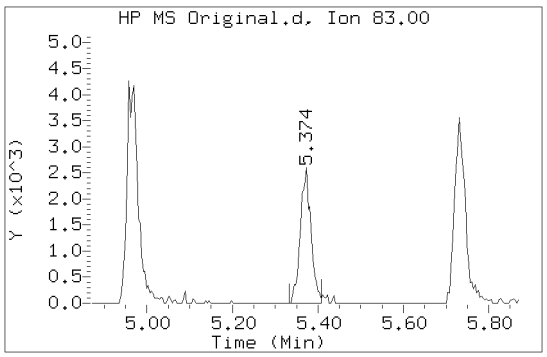
AFTER

MASS
55
AREA
6848
HEIGHT
1699
27-Dec-2022
16:07
linh
pham



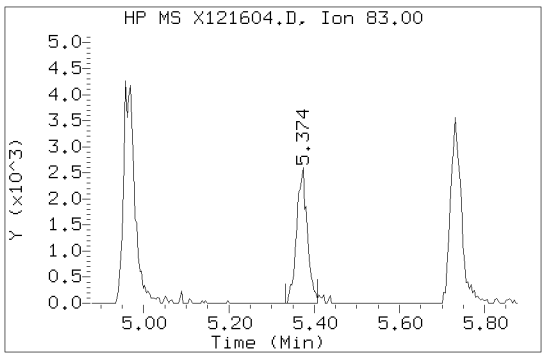
BEFORE

MASS
83
AREA
4577
HEIGHT
2601
27-Dec-2022
16:03
linh
pham



AFTER

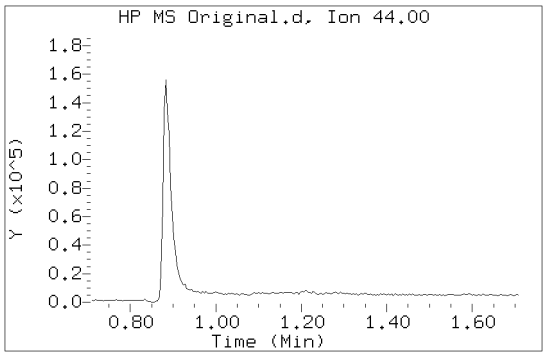
MASS
83
AREA
4577
HEIGHT
2601
27-Dec-2022
16:07
linh
pham



Acetaldehyde (75-07-0)

BEFORE

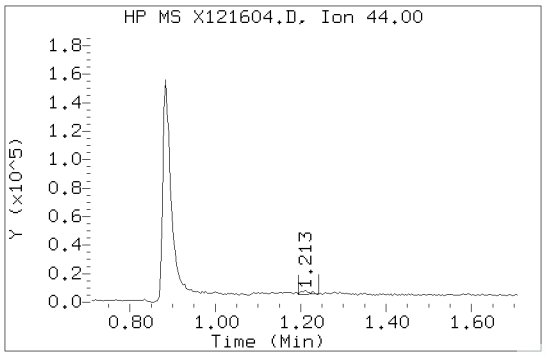
MASS
44
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

MASS
44
AREA
3384
HEIGHT
2655
27-Dec-2022
16:07
linh
pham

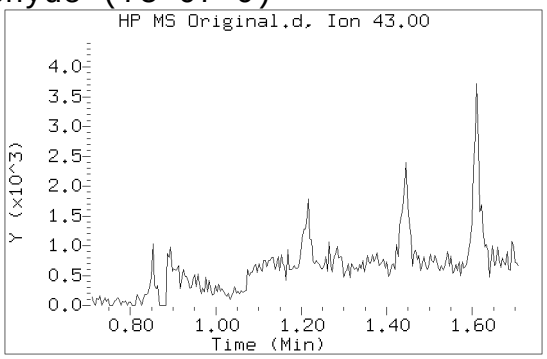


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

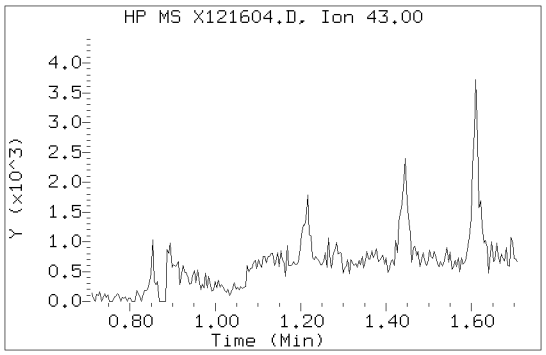
Acetaldehyde (75-07-0)

Reason Code:

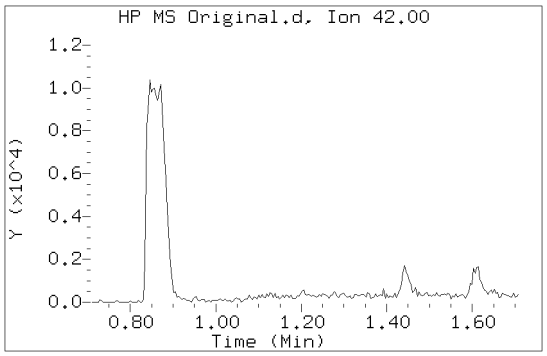
BEFORE
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



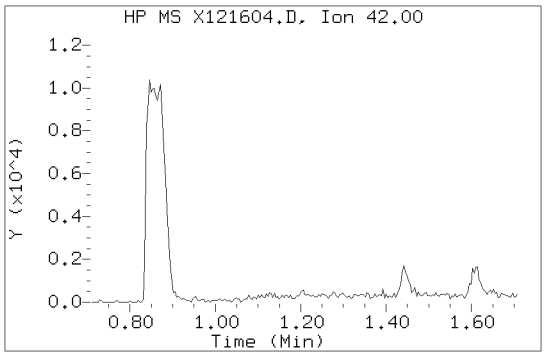
AFTER
MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



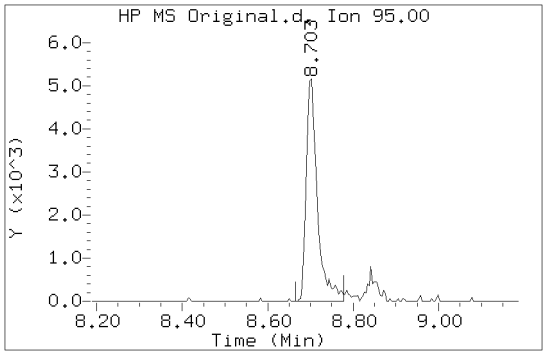
AFTER
MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



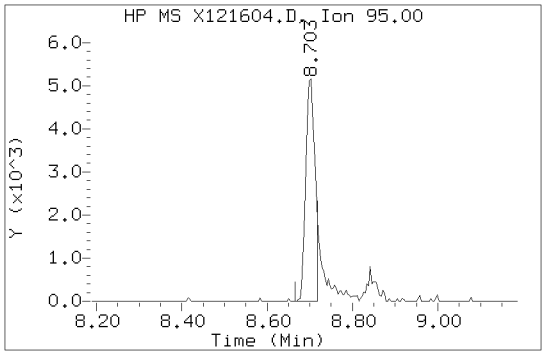
4-Bromofluorobenzene (460-00-4)

Reason Code:

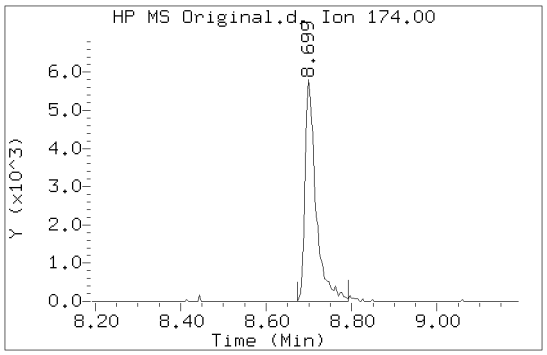
BEFORE
MASS
95
AREA
9514
HEIGHT
5159
27-Dec-2022
16:03
linh
pham



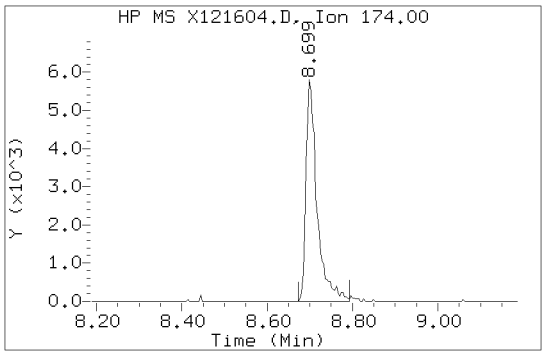
AFTER
MASS
95
AREA
7790
HEIGHT
5159
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
174
AREA
10505
HEIGHT
5802
27-Dec-2022
16:03
linh
pham



AFTER
MASS
174
AREA
10505
HEIGHT
5802
27-Dec-2022
16:07
linh
pham



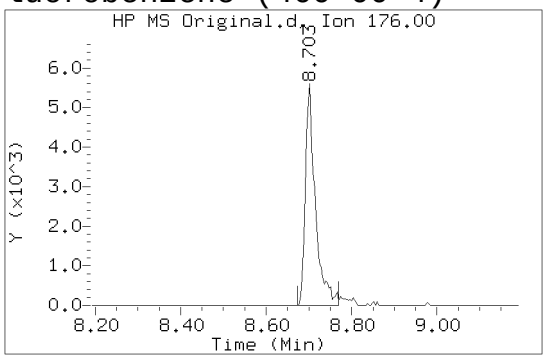
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121604.D
Inj Date : 16-DEC-2022 12:41
InstruID : voa6.i
LabSampID : VSTD001

4-Bromofluorobenzene (460-00-4)

Reason Code:

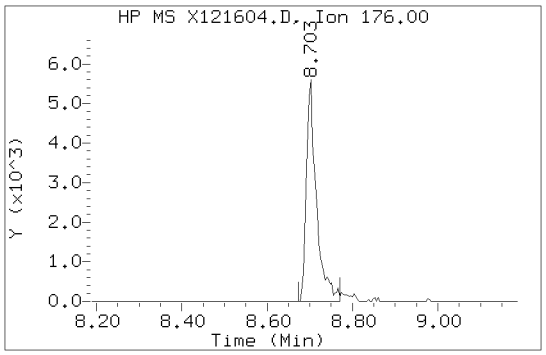
BEFORE

MASS
176
AREA
9226
HEIGHT
5603
27-Dec-2022
16:03
linh
pham



AFTER

MASS
176
AREA
9226
HEIGHT
5603
27-Dec-2022
16:07
linh
pham



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
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
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   :
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 12:41 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

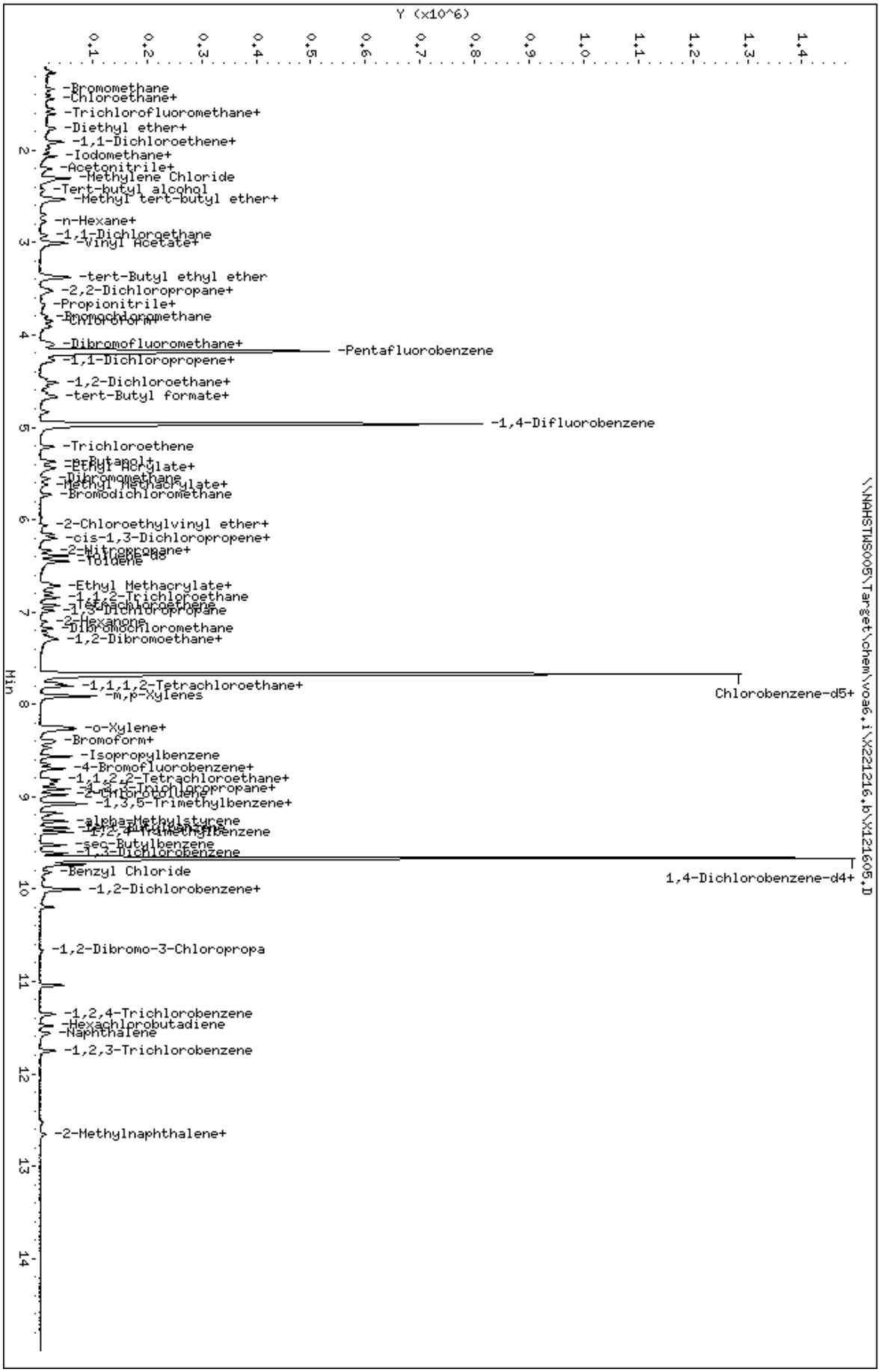
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.720	3.720	(0.891)	5443	2.00000	1.75(M)
	162	Butyl acrylate	55	8.267	8.267	(1.078)	15015	2.00000	1.77
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	6239	2.00000	2.33
	3	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

	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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Client ID: VSTD002
Sample Info: VSTD002;VSTD0021;4;
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 13:02
InstruID : voa6.i
LabSampID : VSTD002

Bromomethane (74-83-9)

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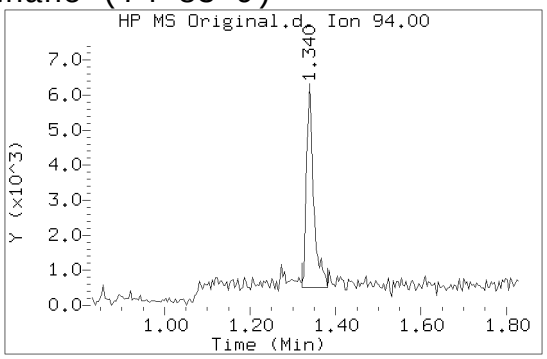

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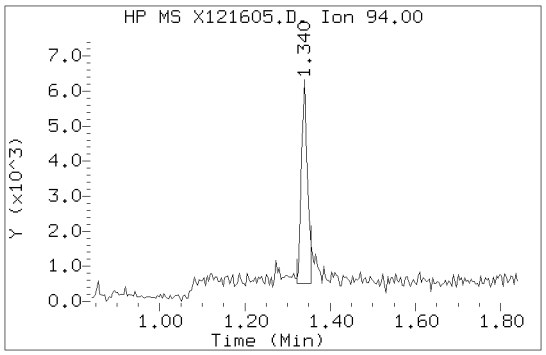

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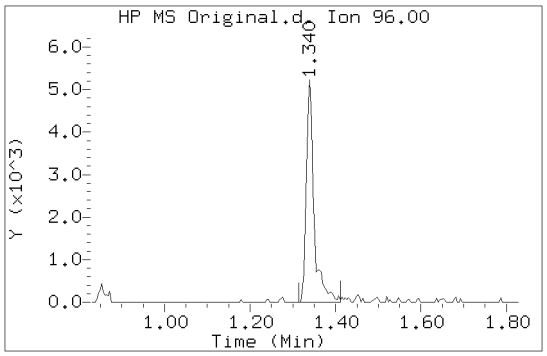

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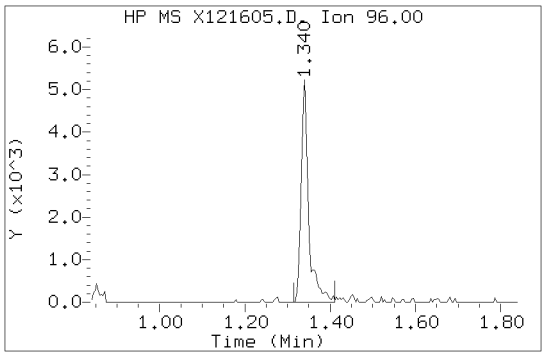

Reason Code:

Chloroethane (75-00-3)

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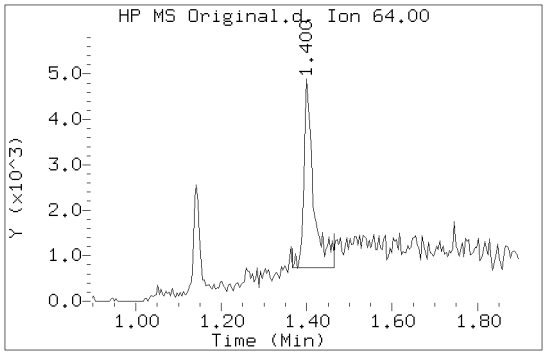

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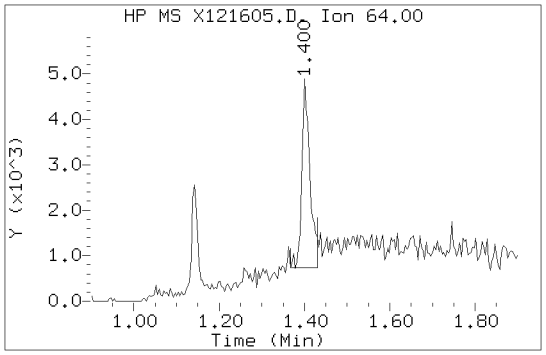

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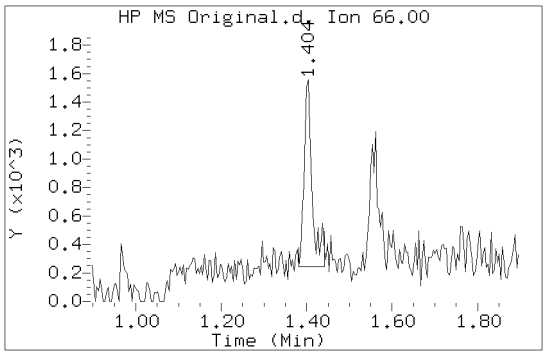

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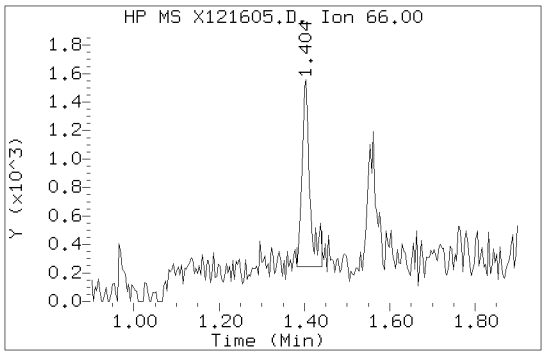

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InstruID : voa6.i
LabSampID : VSTD002

Acrolein (107-02-8)

Reason Code:

BEFORE

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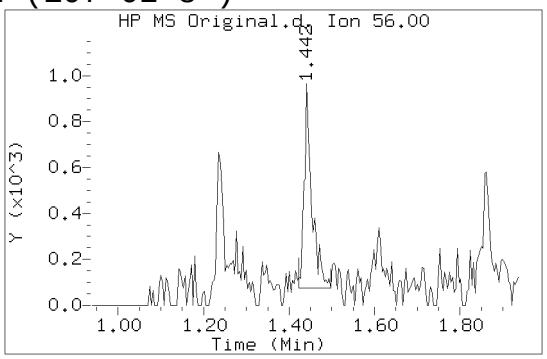

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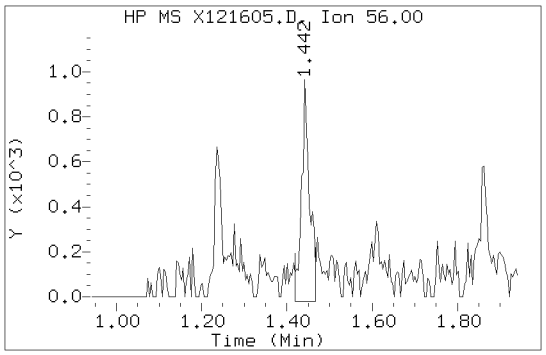

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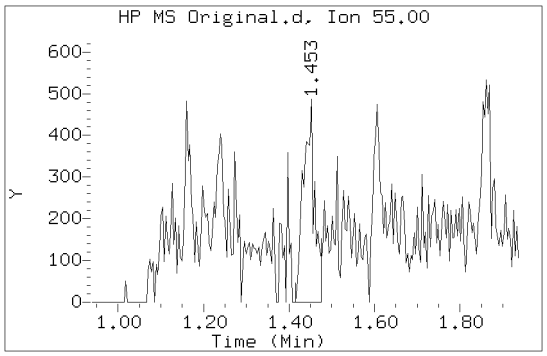

AFTER

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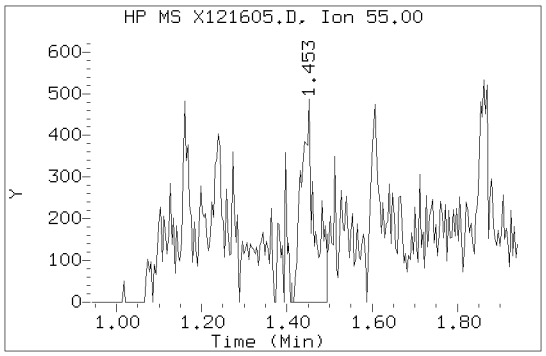

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Reason Code:

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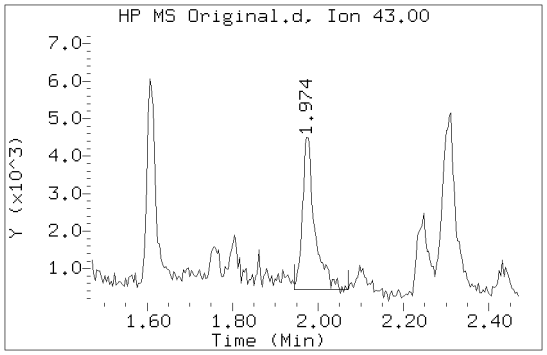

AFTER

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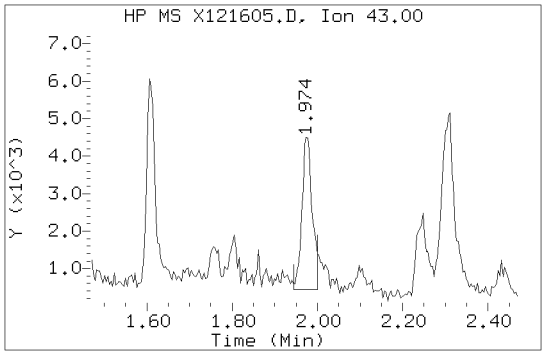

BEFORE

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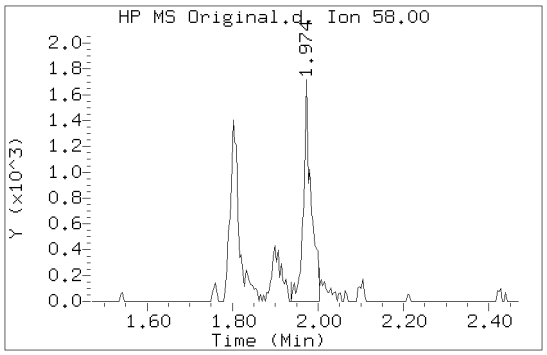

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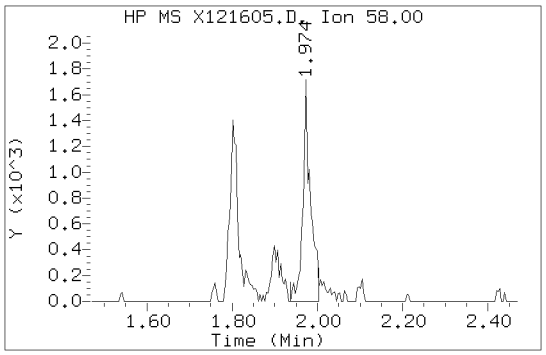

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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Methylene Chloride (75-09-2)

BEFORE
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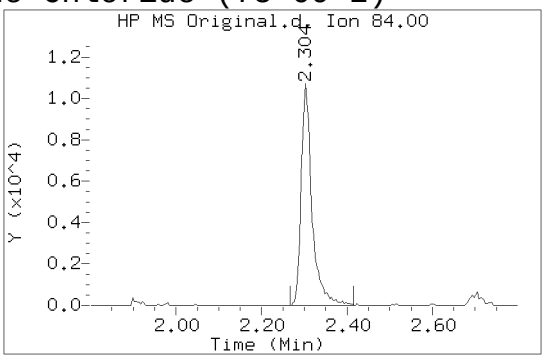

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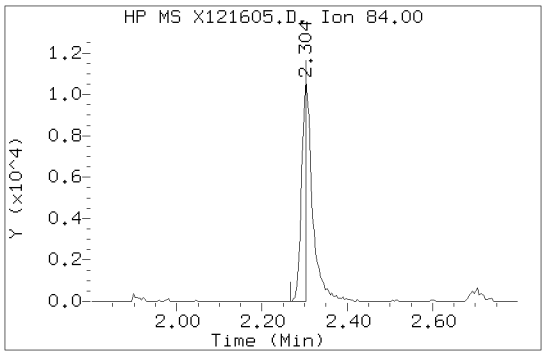

BEFORE
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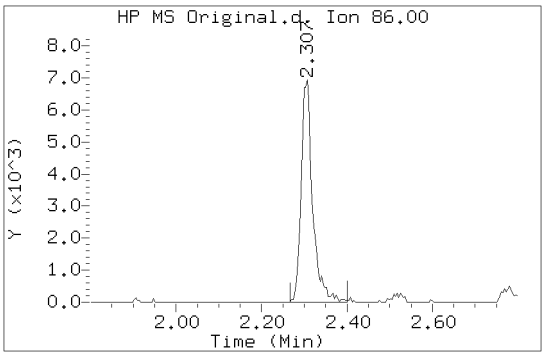

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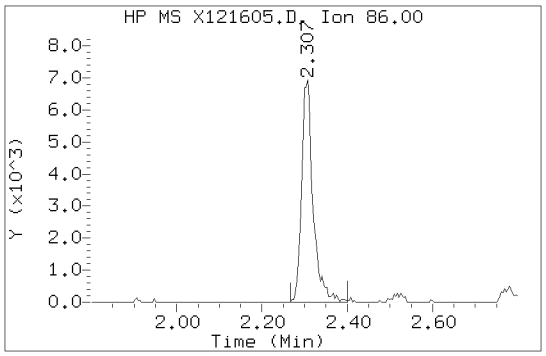

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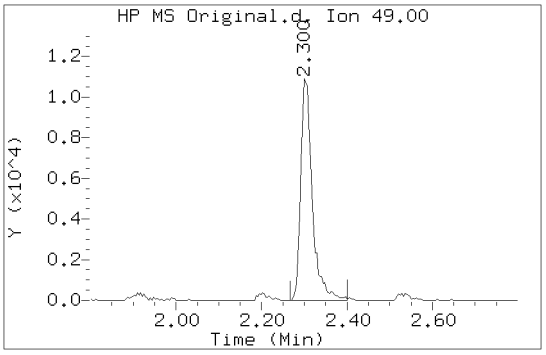
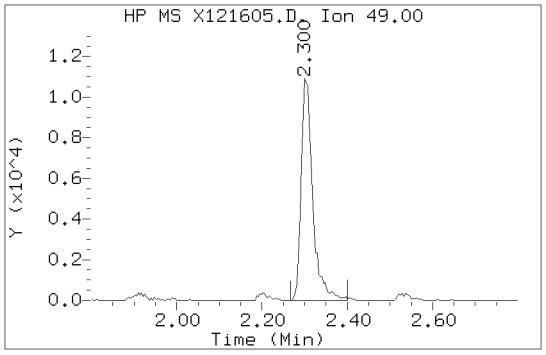
linh
pham

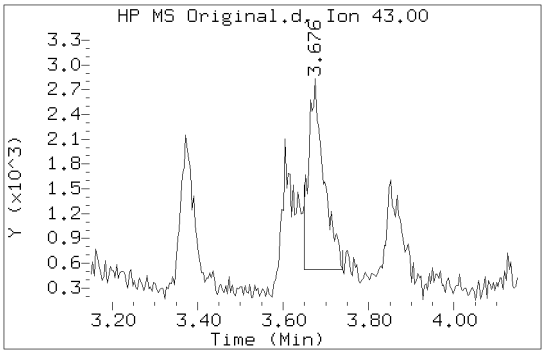


AFTER
MASS
49
AREA
21067
HEIGHT
10905
27-Dec-2022
16:07
linh
pham



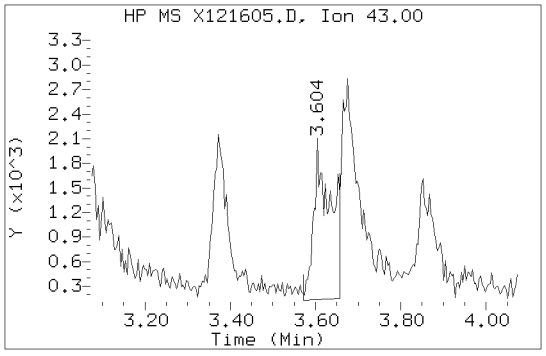
2-Butanone (78-93-3)

BEFORE
MASS
43
AREA
5778
HEIGHT
2307
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER
MASS
43
AREA
5418
HEIGHT
1969
27-Dec-2022
16:07
linh
pham



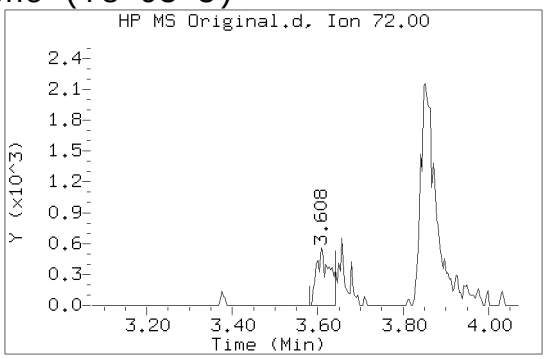
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

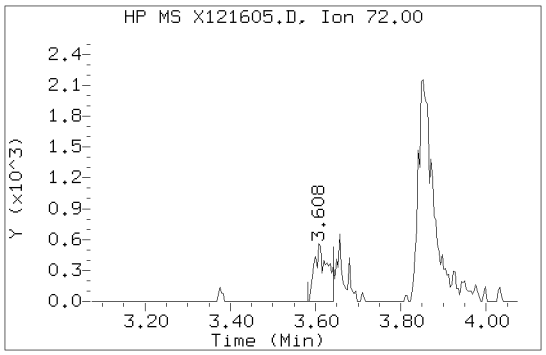
BEFORE

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

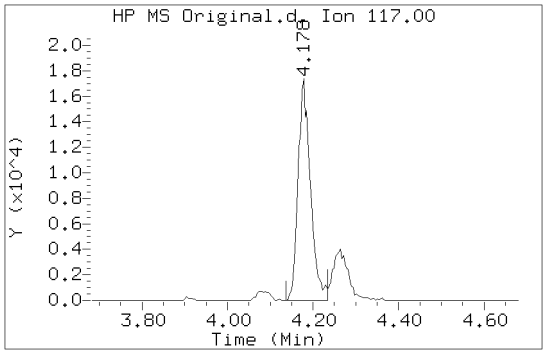


Carbon Tetrachloride (56-23-5)

Reason Code:

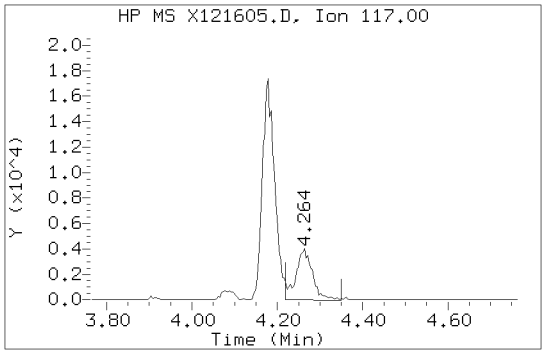
BEFORE

MASS
117
AREA
35555
HEIGHT
17376
27-Dec-2022
16:03
linh
pham



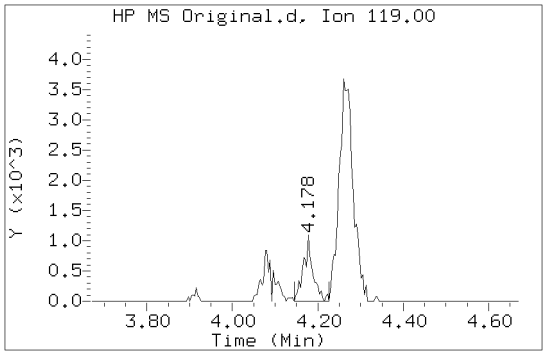
AFTER

MASS
117
AREA
11092
HEIGHT
4036
27-Dec-2022
16:07
linh
pham



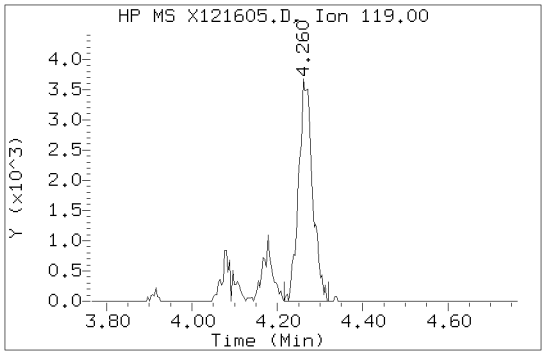
BEFORE

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

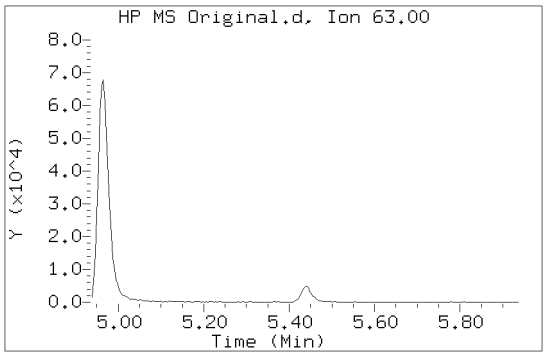


1,2-Dichloropropane (78-87-5)

Reason Code:

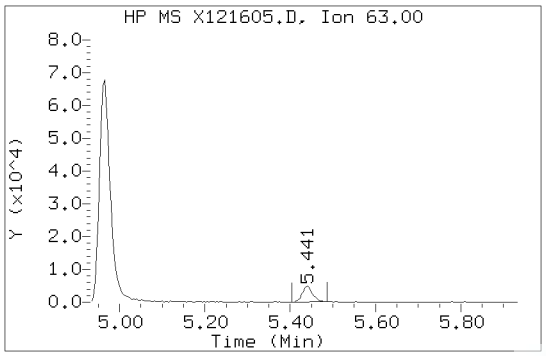
BEFORE

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



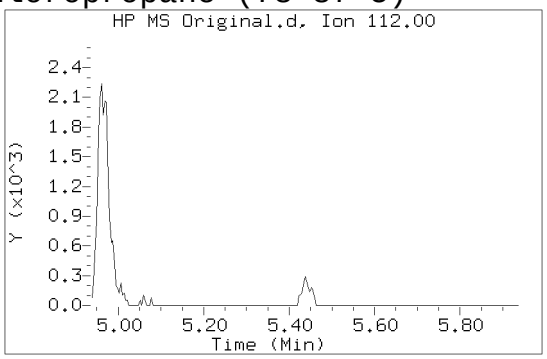
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

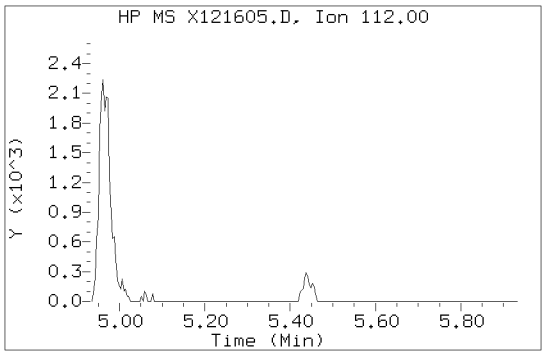
BEFORE

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

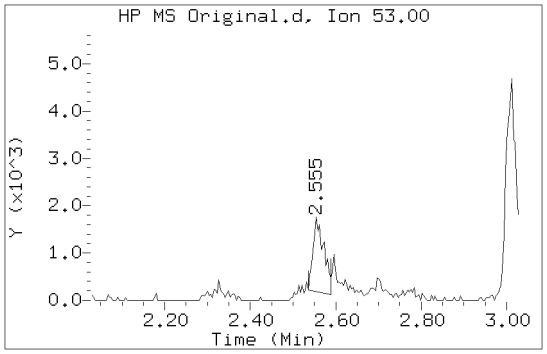


Acrylonitrile (107-13-1)

Reason Code:

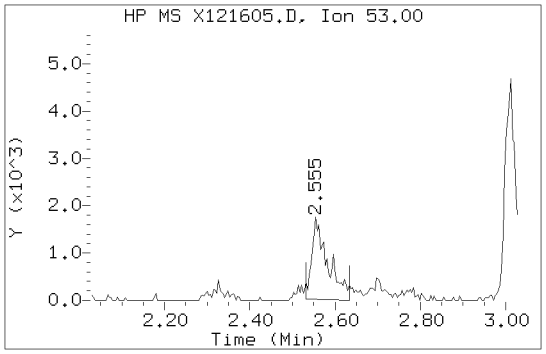
BEFORE

MASS
53
AREA
2810
HEIGHT
1577
27-Dec-2022
16:03
linh
pham



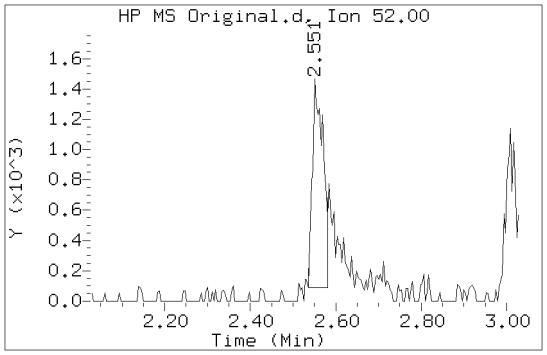
AFTER

MASS
53
AREA
4557
HEIGHT
1735
27-Dec-2022
16:07
linh
pham



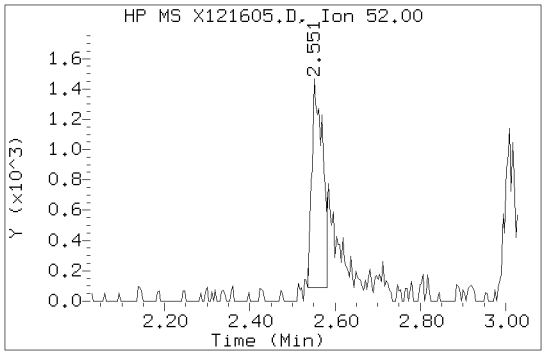
BEFORE

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:03
linh
pham



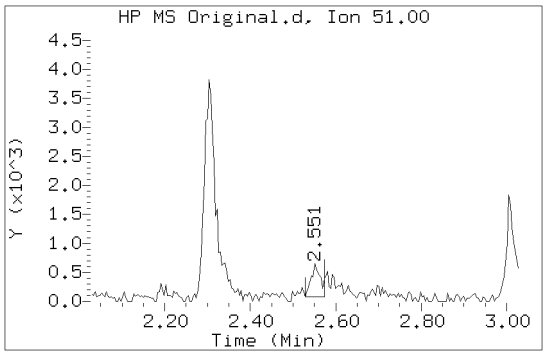
AFTER

MASS
52
AREA
2408
HEIGHT
1379
27-Dec-2022
16:07
linh
pham



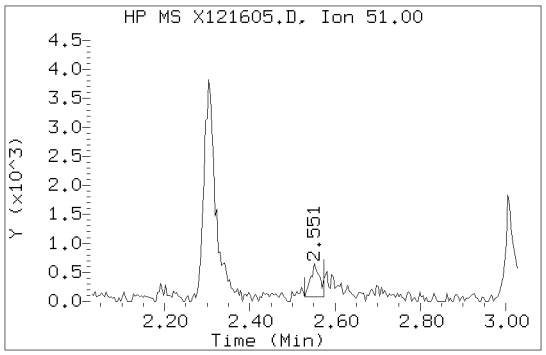
BEFORE

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



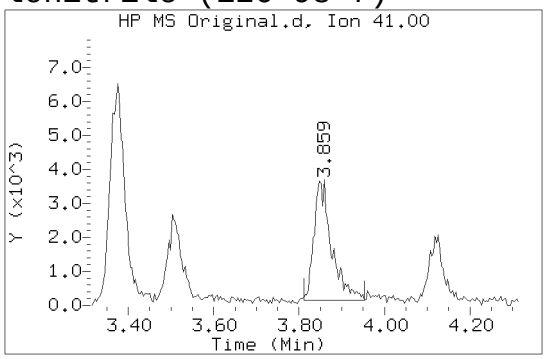
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Methacrylonitrile (126-98-7)

Reason Code:

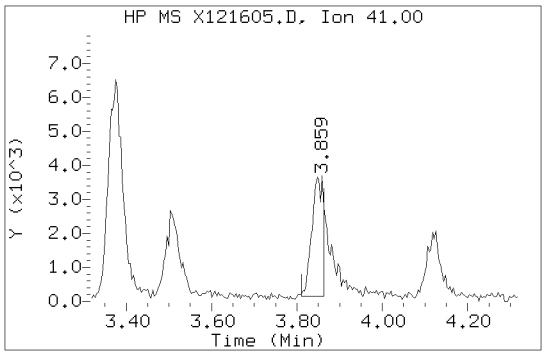
BEFORE

MASS
41
AREA
10013
HEIGHT
3544
27-Dec-2022
16:03
linh
pham



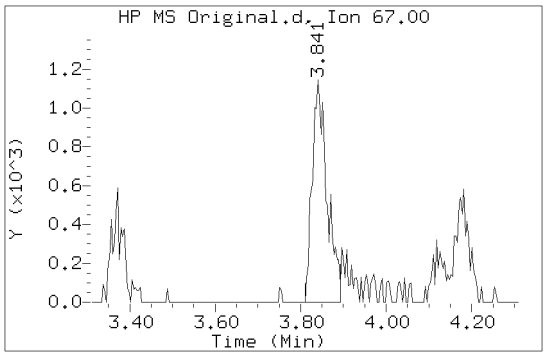
AFTER

MASS
41
AREA
6388
HEIGHT
3544
27-Dec-2022
16:07
linh
pham



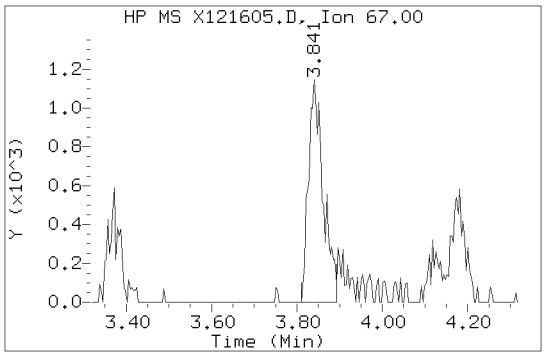
BEFORE

MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:03
linh
pham



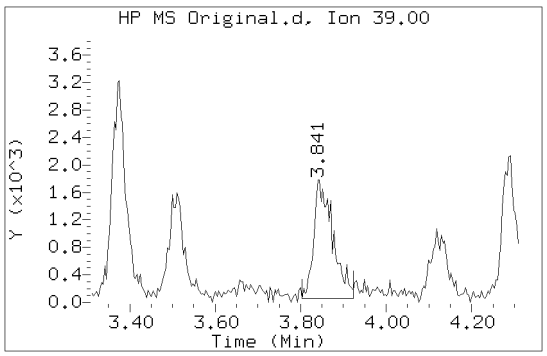
AFTER

MASS
67
AREA
2751
HEIGHT
1145
27-Dec-2022
16:07
linh
pham



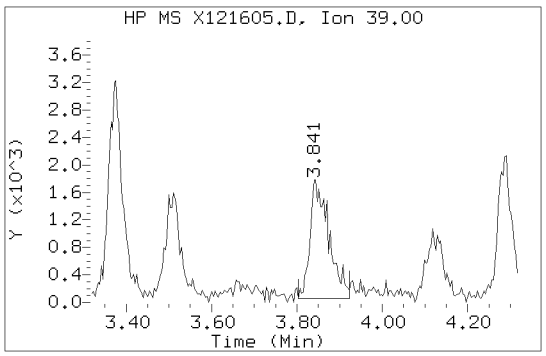
BEFORE

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

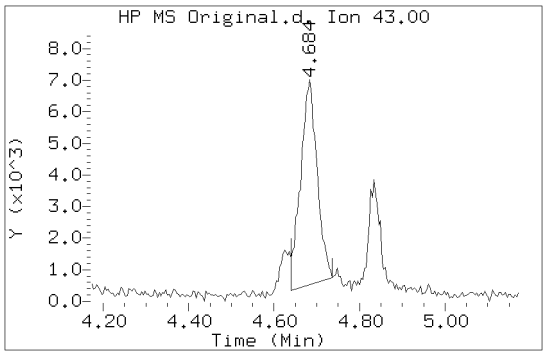


Isobutyl Alcohol (78-83-1)

Reason Code:

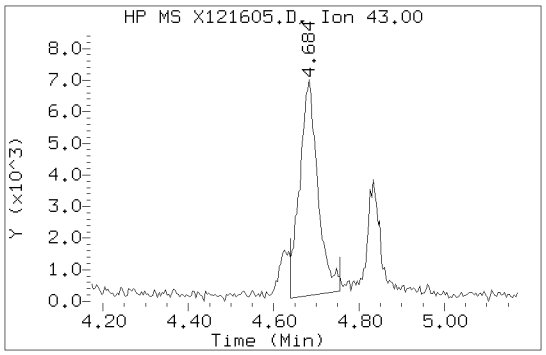
BEFORE

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



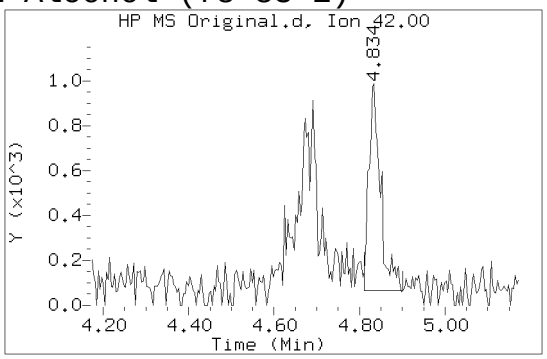
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Isobutyl Alcohol (78-83-1)

Reason Code:

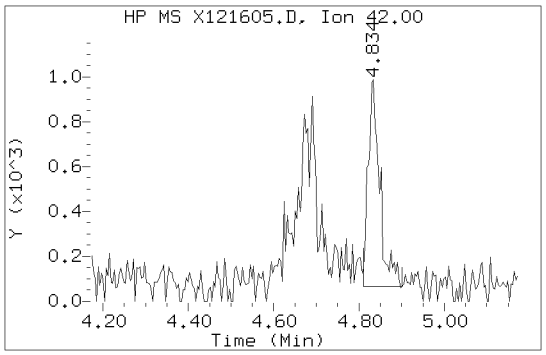
BEFORE

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:03
linh
pham



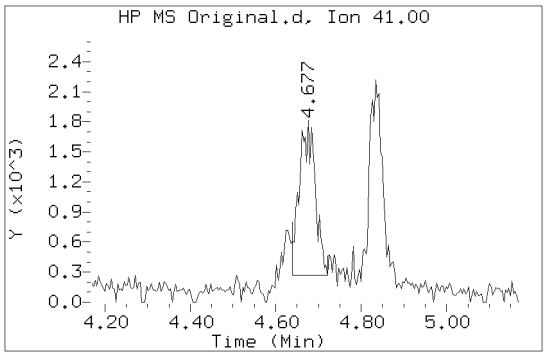
AFTER

MASS
42
AREA
1728
HEIGHT
920
27-Dec-2022
16:07
linh
pham



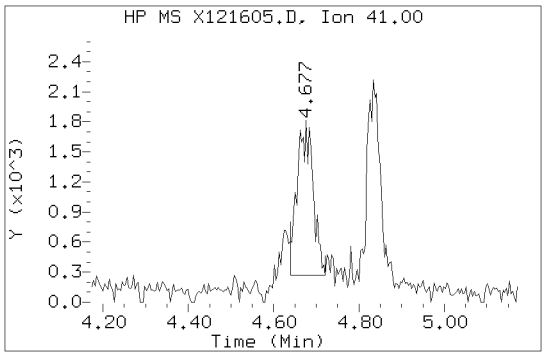
BEFORE

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

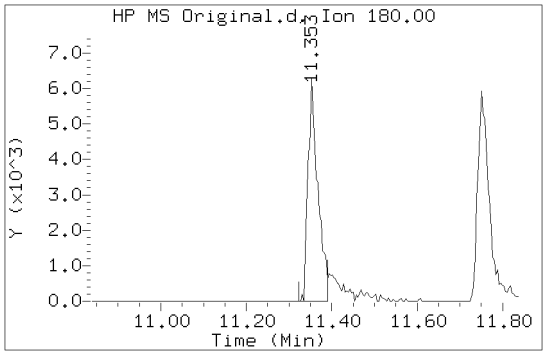


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

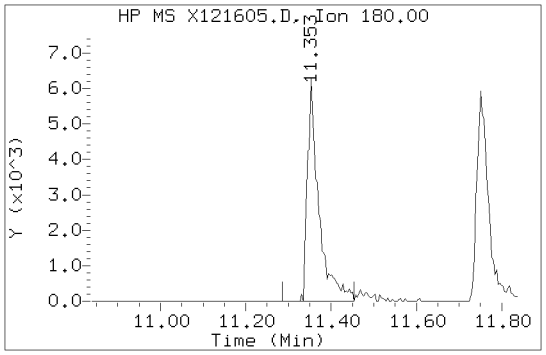
BEFORE

MASS
180
AREA
10131
HEIGHT
6269
27-Dec-2022
16:03
linh
pham



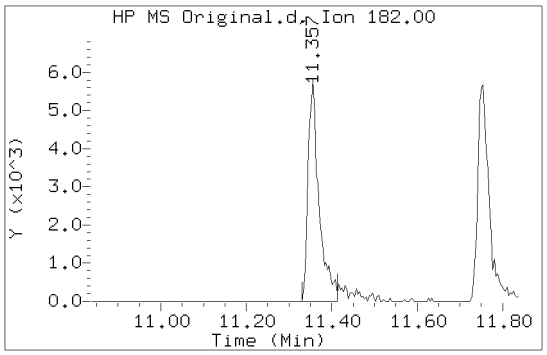
AFTER

MASS
180
AREA
11764
HEIGHT
6269
27-Dec-2022
16:07
linh
pham



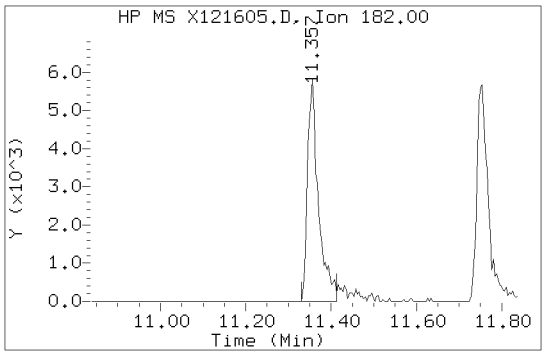
BEFORE

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



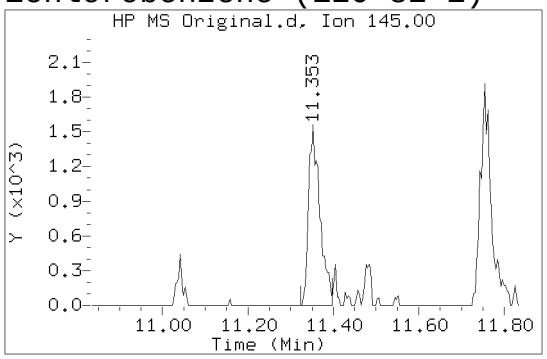
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

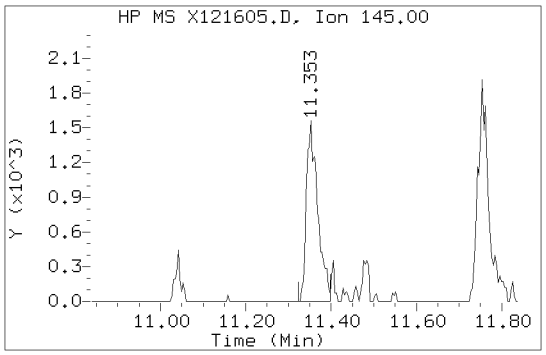
BEFORE

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

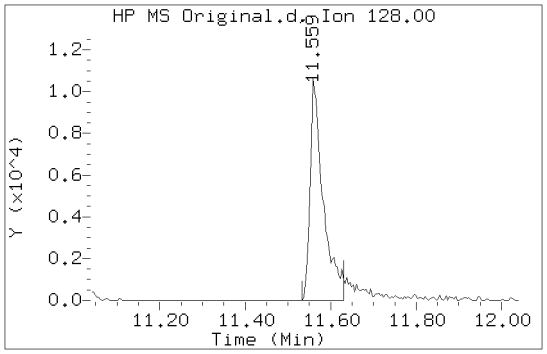


Naphthalene (91-20-3)

Reason Code:

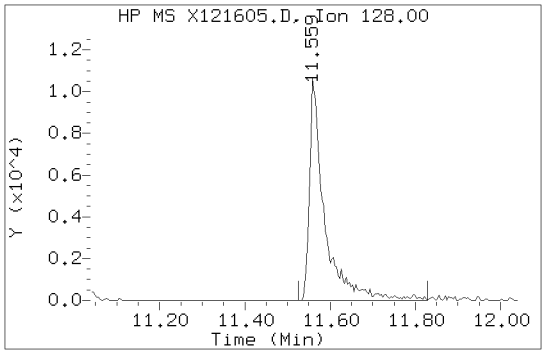
BEFORE

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

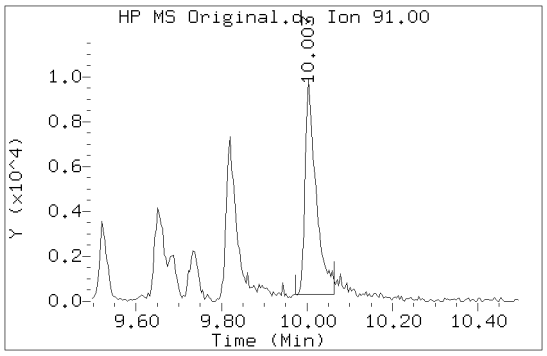


n-Butylbenzene (104-51-8)

Reason Code:

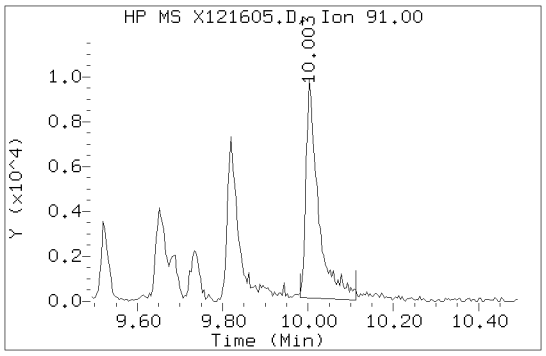
BEFORE

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



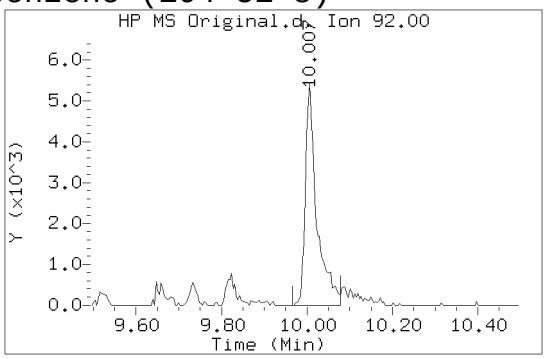
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butylbenzene (104-51-8)

Reason Code:

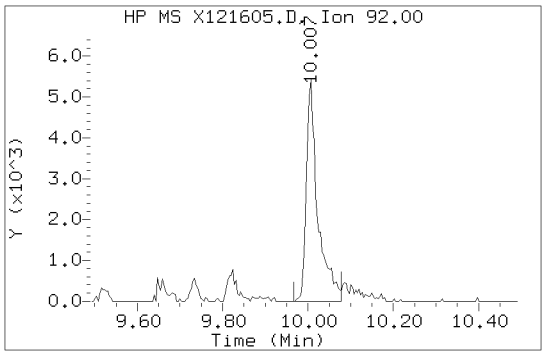
BEFORE

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:03
linh
pham



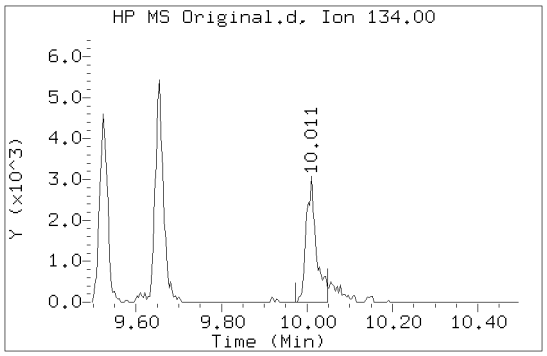
AFTER

MASS
92
AREA
10185
HEIGHT
5422
27-Dec-2022
16:07
linh
pham



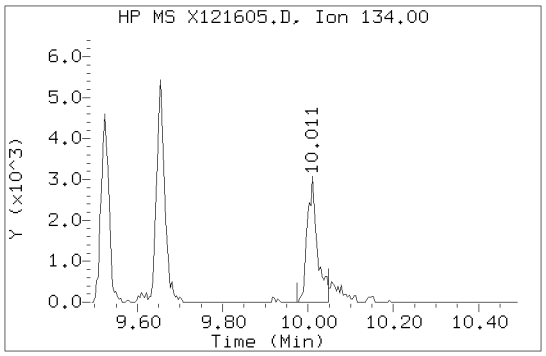
BEFORE

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

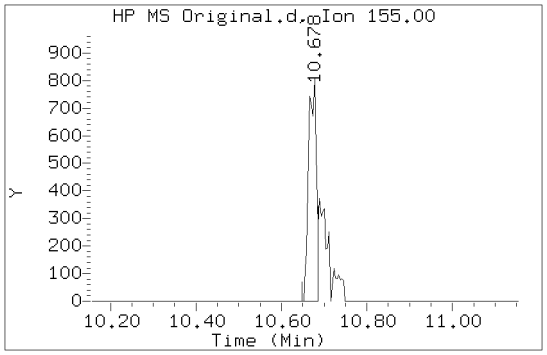


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

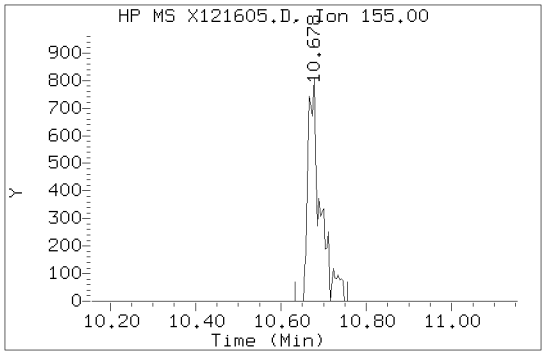
BEFORE

MASS
155
AREA
1026
HEIGHT
806
27-Dec-2022
16:03
linh
pham



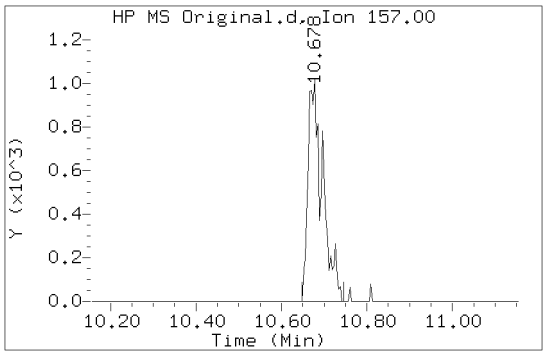
AFTER

MASS
155
AREA
1619
HEIGHT
806
27-Dec-2022
16:07
linh
pham



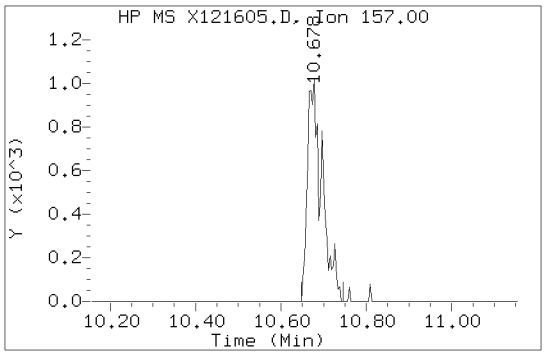
BEFORE

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



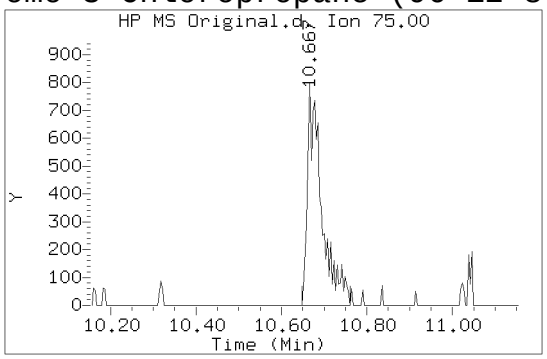
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

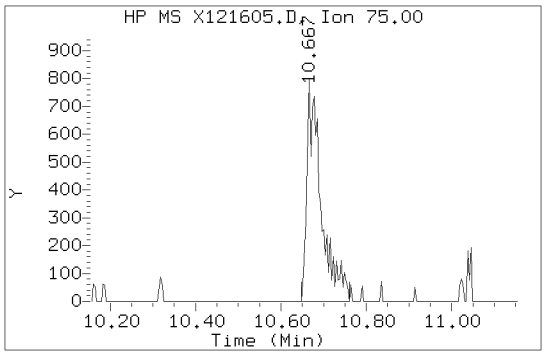
BEFORE

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

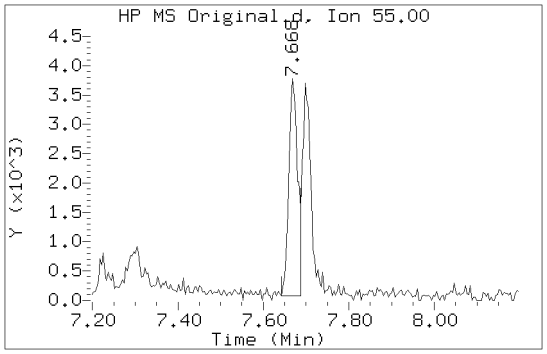


1-Chlorohexane (544-10-5)

Reason Code:

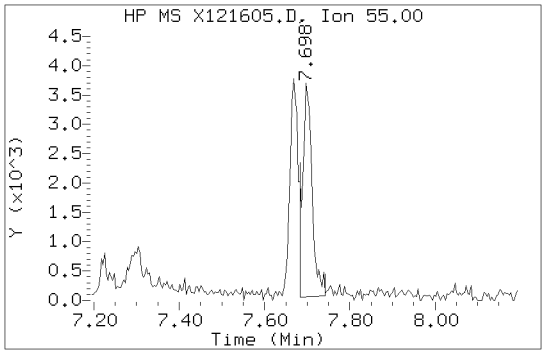
BEFORE

MASS
55
AREA
5357
HEIGHT
3703
27-Dec-2022
16:03
linh
pham



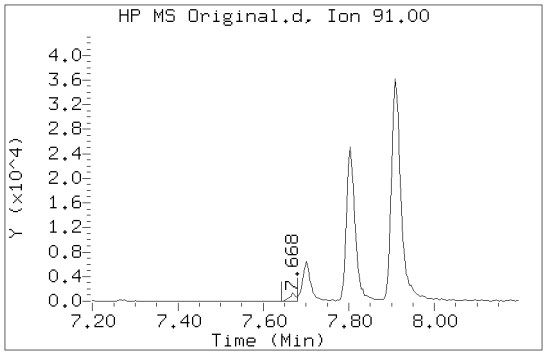
AFTER

MASS
55
AREA
5855
HEIGHT
3647
27-Dec-2022
16:07
linh
pham



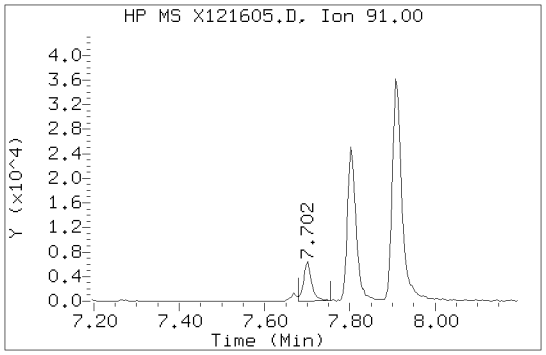
BEFORE

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

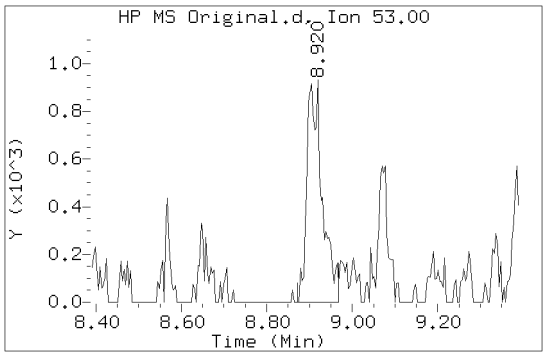


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

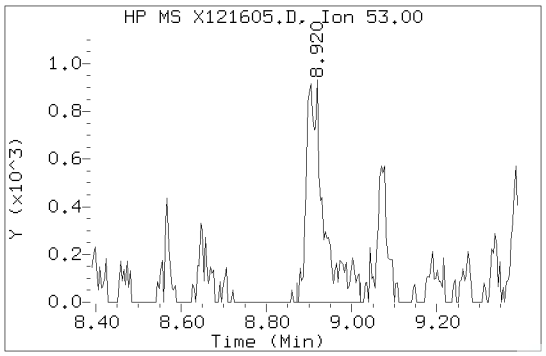
BEFORE

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



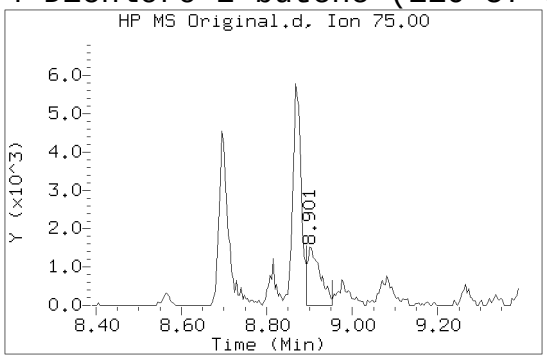
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

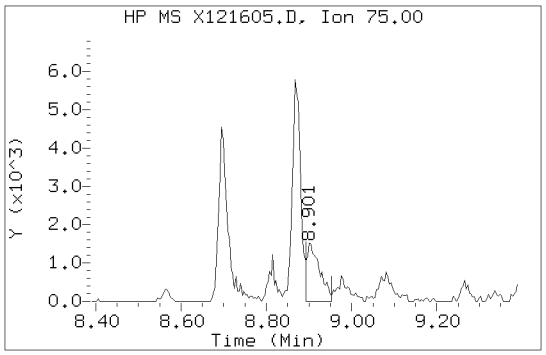
BEFORE

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

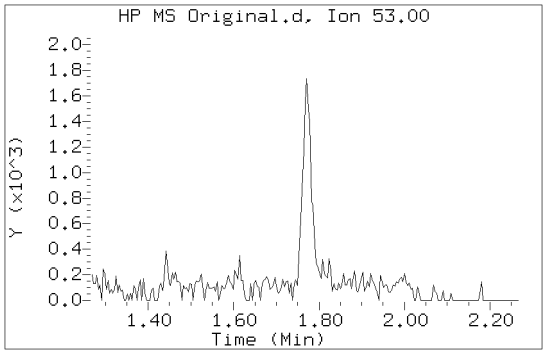


Chloroprene (126-99-8)

Reason Code:

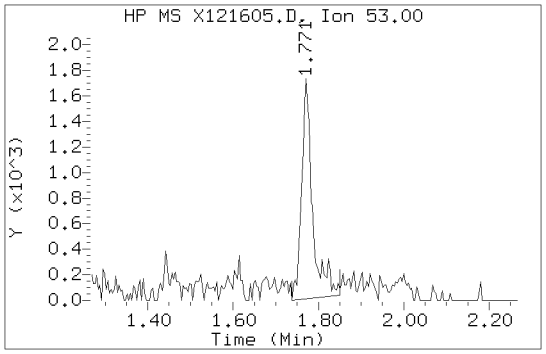
BEFORE

MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



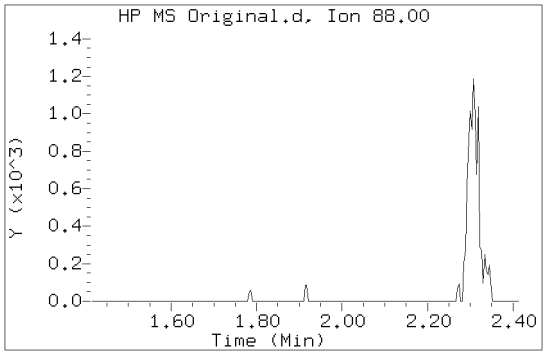
AFTER

MASS
53
AREA
3126
HEIGHT
1722
27-Dec-2022
16:07
linh
pham



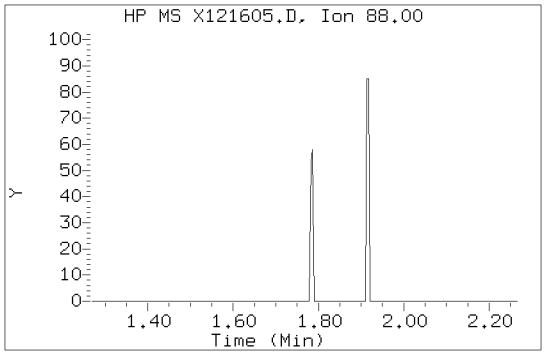
BEFORE

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

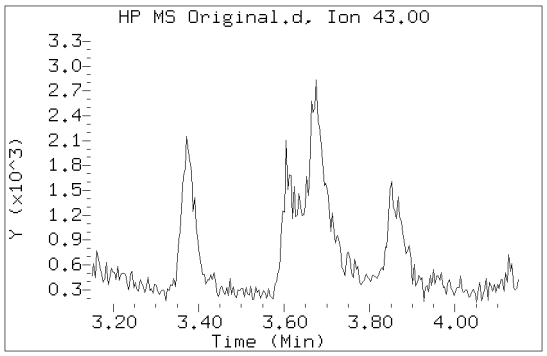


Ethyl Acetate (141-78-6)

Reason Code:

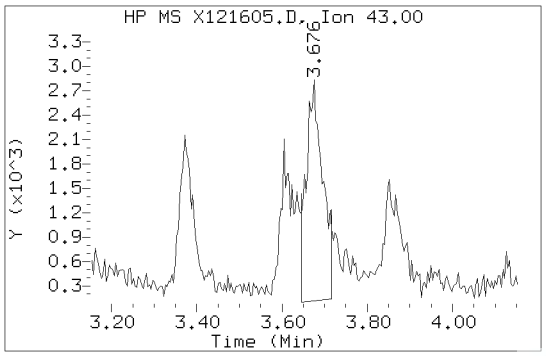
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

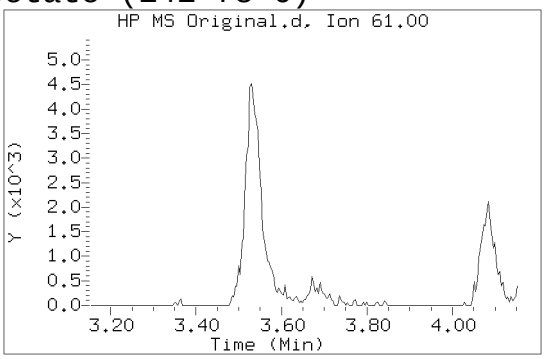
MASS
43
AREA
7422
HEIGHT
2716
27-Dec-2022
16:07
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

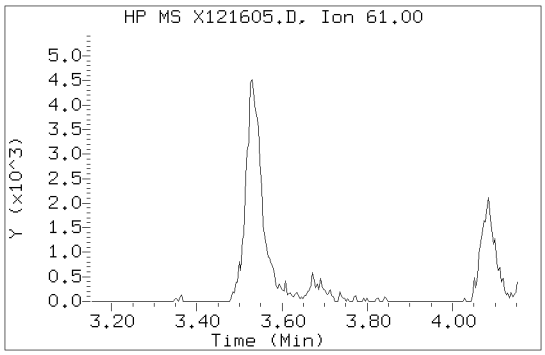
Ethyl Acetate (141-78-6)

BEFORE
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

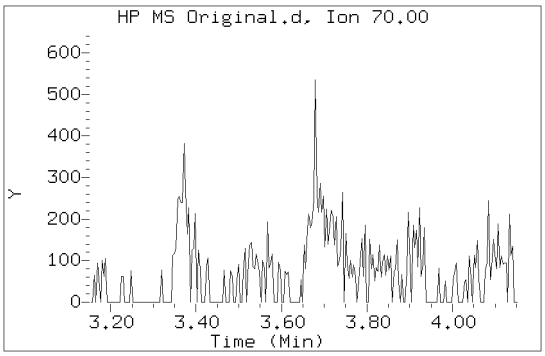


Reason Code:

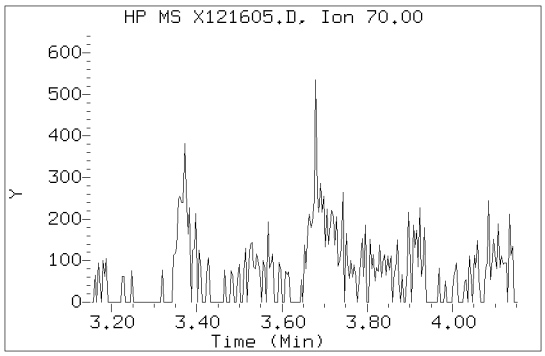
AFTER
MASS
61
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



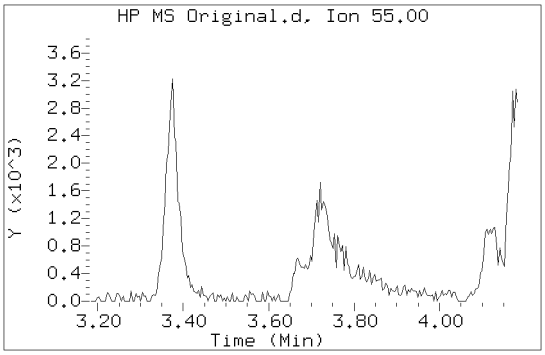
AFTER
MASS
70
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



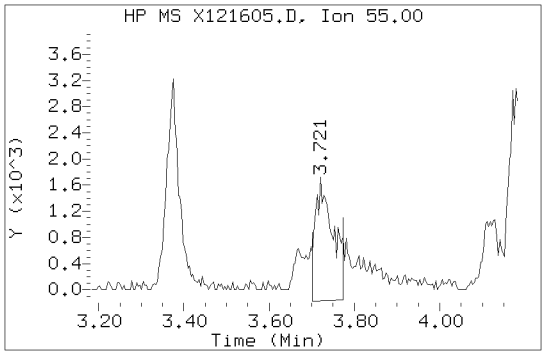
Methyl Acrylate (96-33-3)

Reason Code:

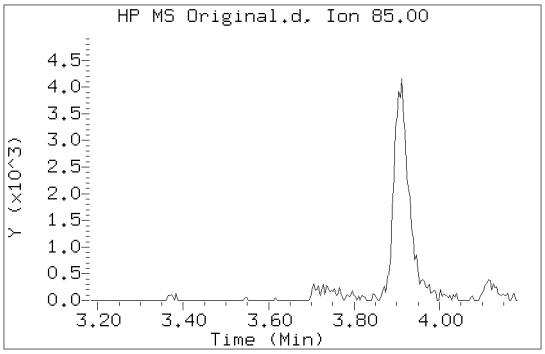
BEFORE
MASS
55
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



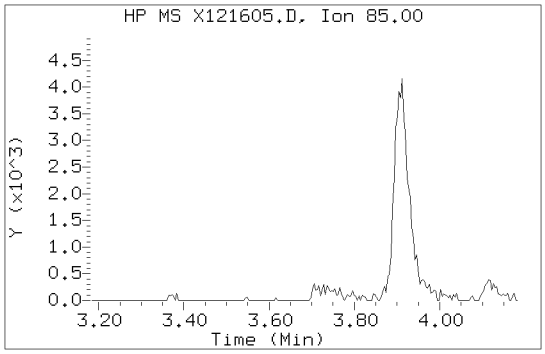
AFTER
MASS
55
AREA
5443
HEIGHT
1892
27-Dec-2022
16:07
linh
pham



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



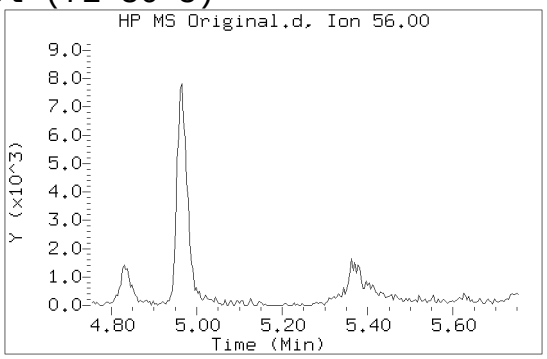
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121605.D
Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

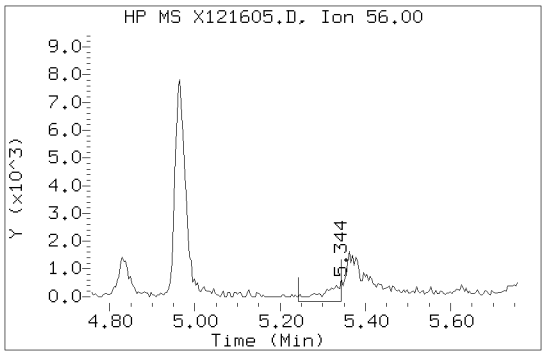
BEFORE

MASS
56
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



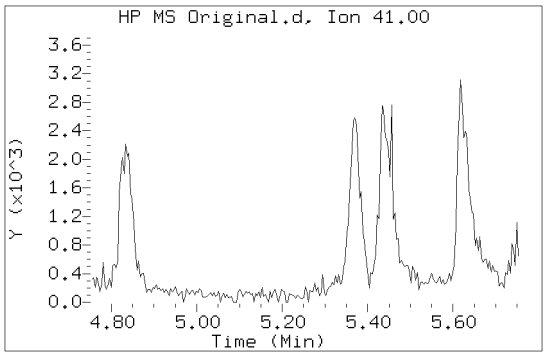
AFTER

MASS
56
AREA
2004
HEIGHT
808
27-Dec-2022
16:07
linh
pham



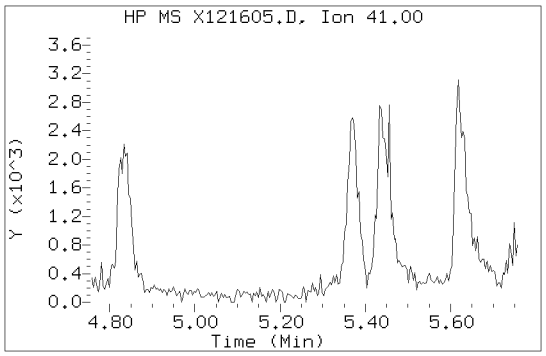
BEFORE

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

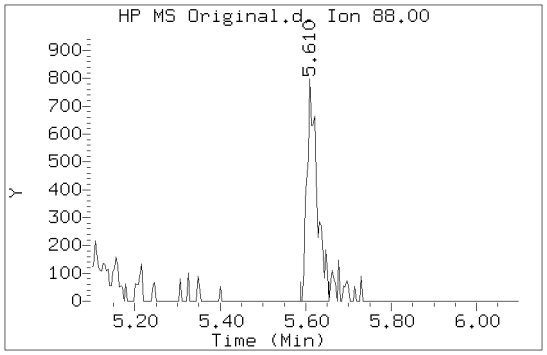


1,4-Dioxane ()

Reason Code:

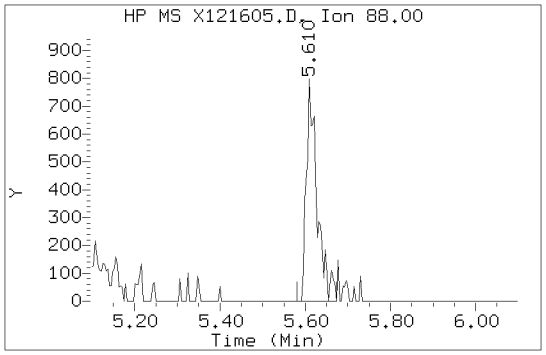
BEFORE

MASS
88
AREA
1335
HEIGHT
798
27-Dec-2022
16:03
linh
pham



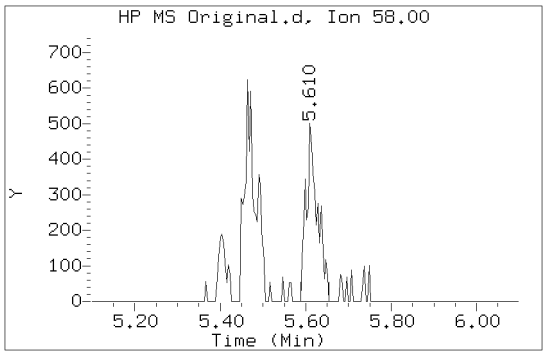
AFTER

MASS
88
AREA
1409
HEIGHT
798
27-Dec-2022
16:07
linh
pham



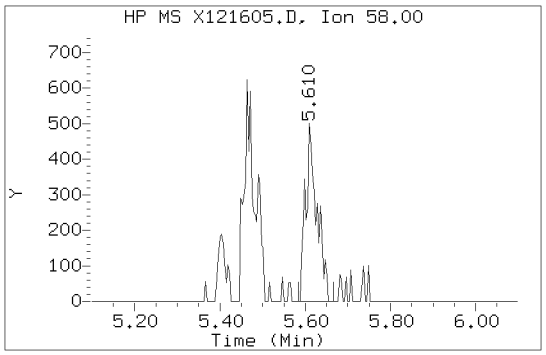
BEFORE

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



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Inj Date : 16-DEC-2022 13:02
InstruID : voa6.i
LabSampID : VSTD002

Tetrahydrofuran (109-99-9)

Reason Code:

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27-Dec-2022
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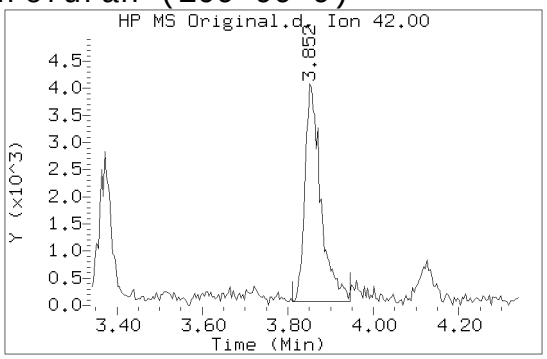

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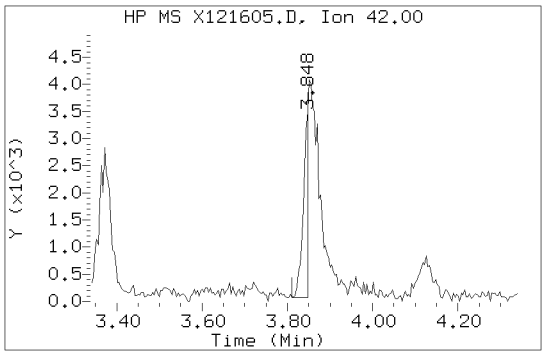

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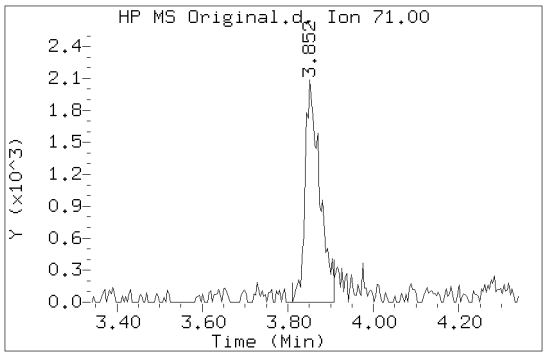

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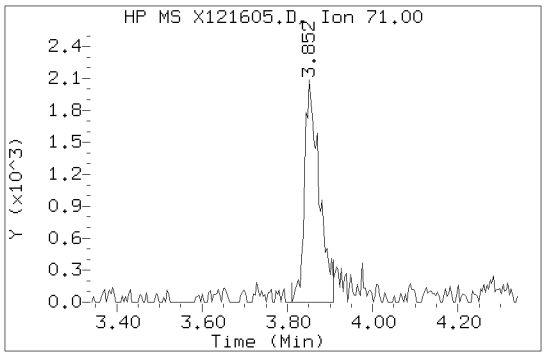

Methylcyclohexane (108-87-2)

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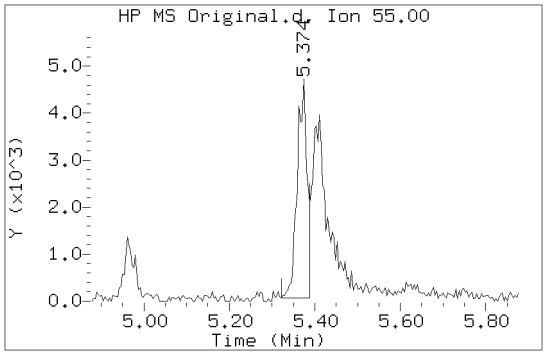

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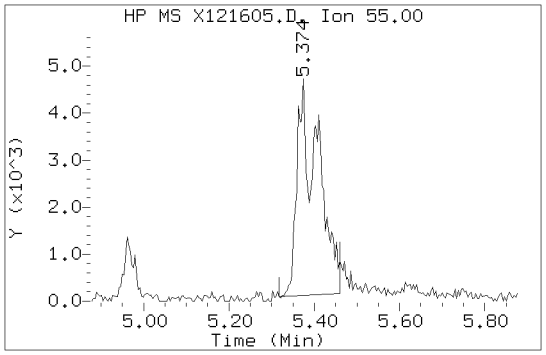

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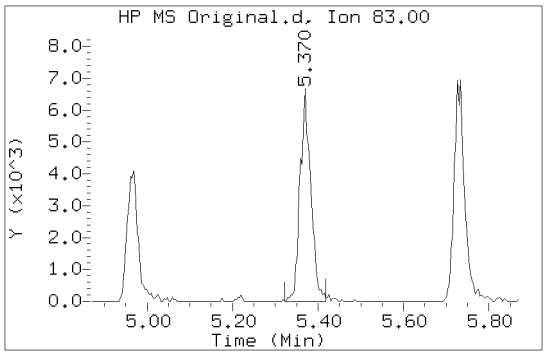

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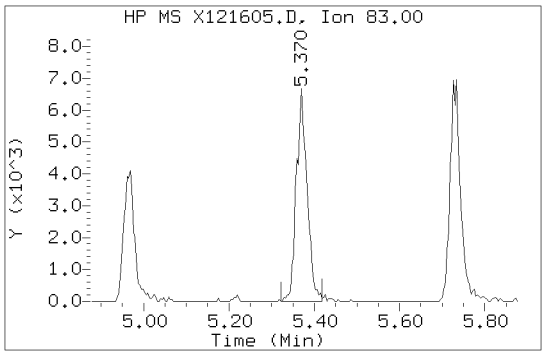

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InstruID : voa6.i
LabSampID : VSTD002

Acetaldehyde (75-07-0)

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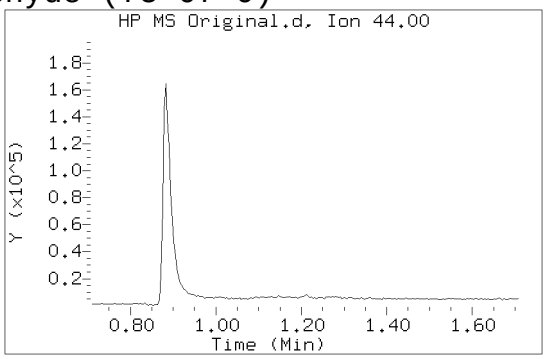

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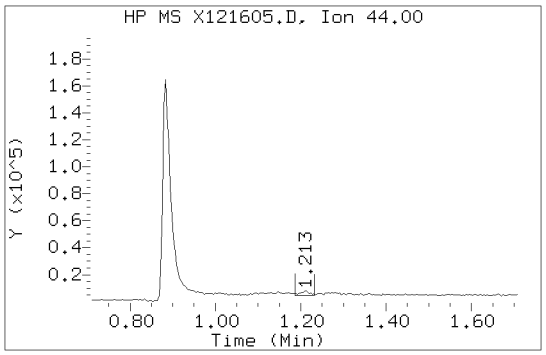

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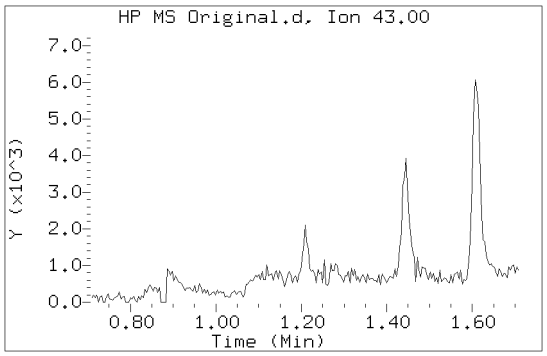

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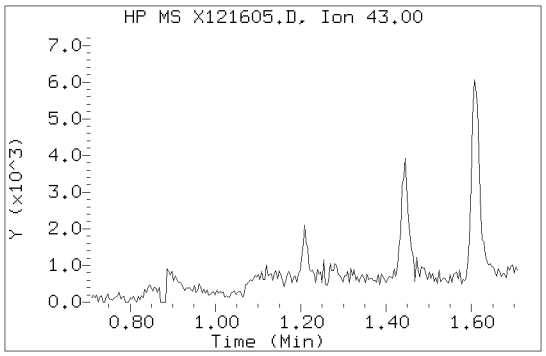

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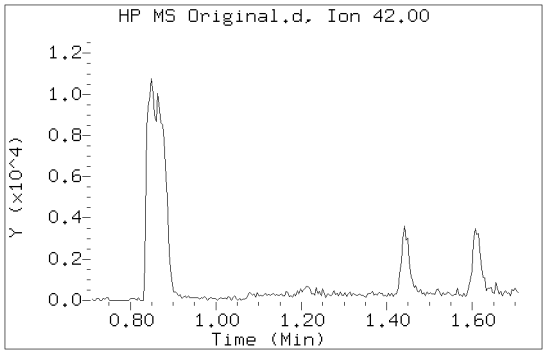

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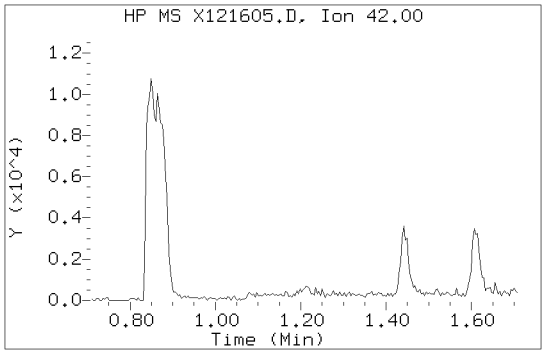

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D Page 1
Report Date: 27-Dec-2022 16:07

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

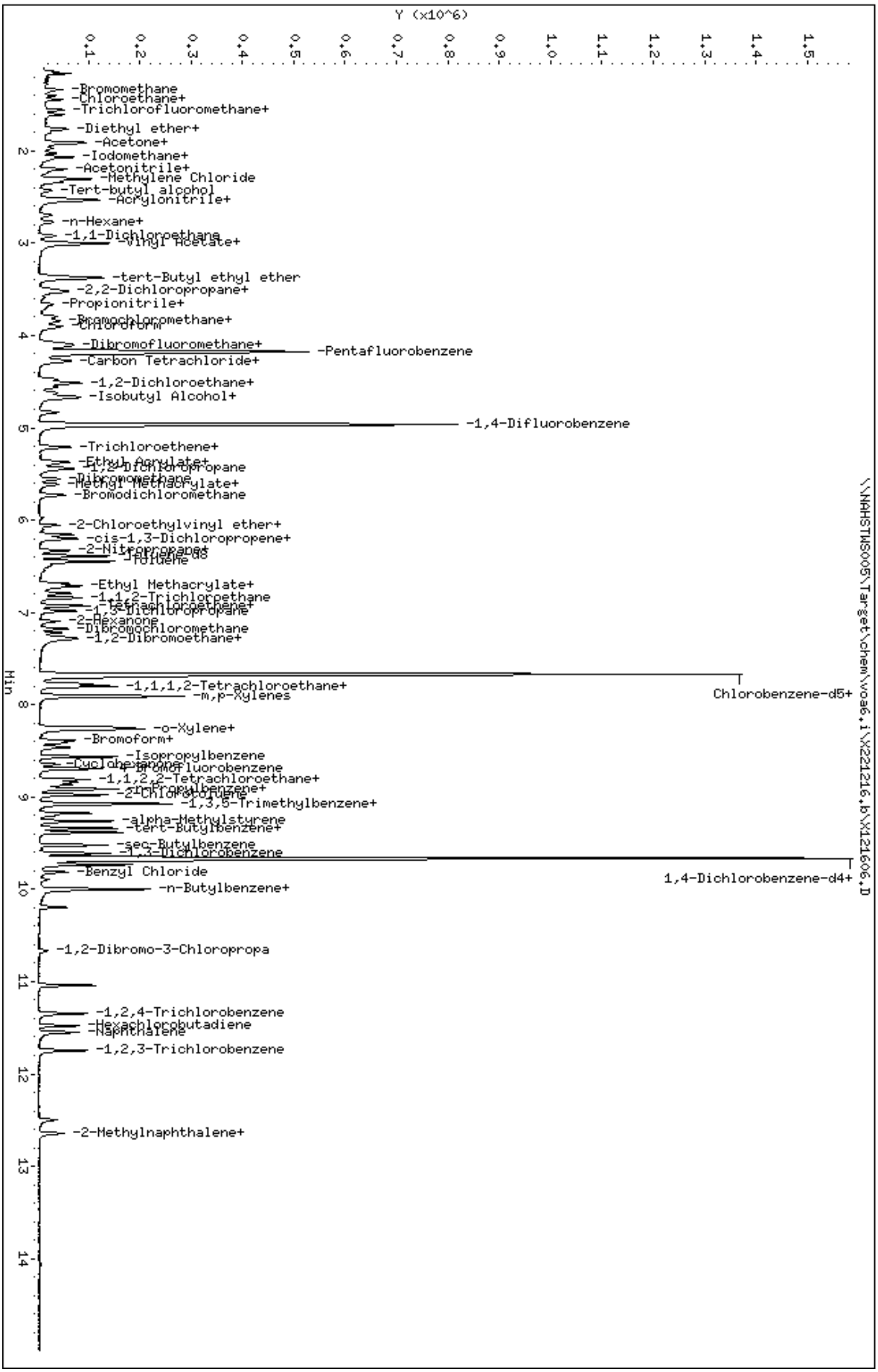
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.705	3.705	(0.887)	14950	5.00000	4.88(M)
	162	Butyl acrylate	55	8.260	8.260	(1.077)	38320	5.00000	4.48
	2	Dichlorodifluoromethane	85	0.972	0.972	(0.233)	15008	5.00000	5.11
	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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Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

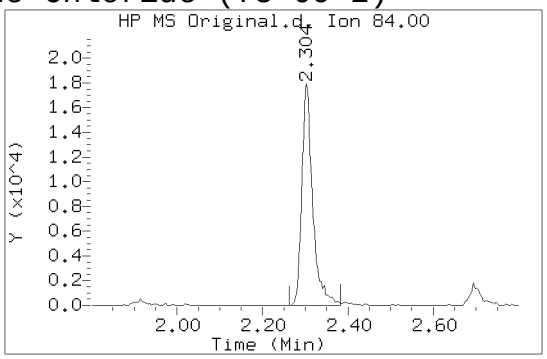
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

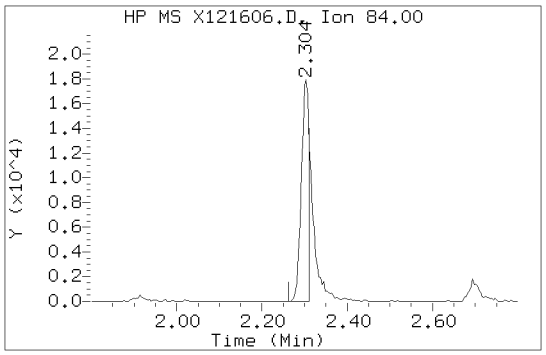
Methylene Chloride (75-09-2)

Reason Code:

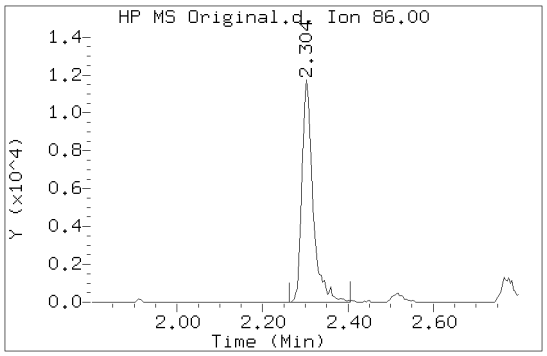
BEFORE
MASS
84
AREA
32325
HEIGHT
17936
27-Dec-2022
16:03
linh
pham



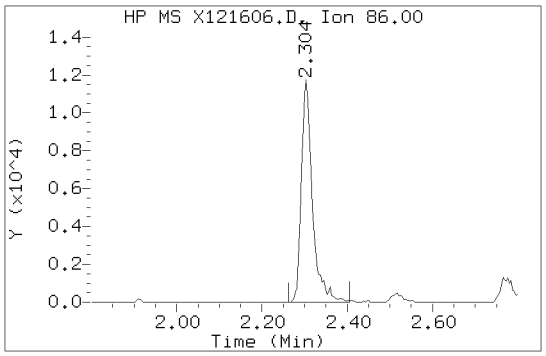
AFTER
MASS
84
AREA
22932
HEIGHT
17936
27-Dec-2022
16:07
linh
pham



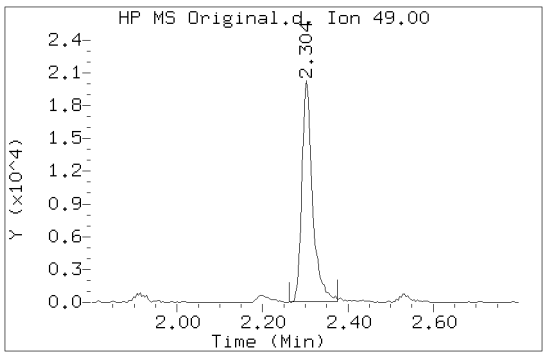
BEFORE
MASS
86
AREA
21691
HEIGHT
11740
27-Dec-2022
16:03
linh
pham



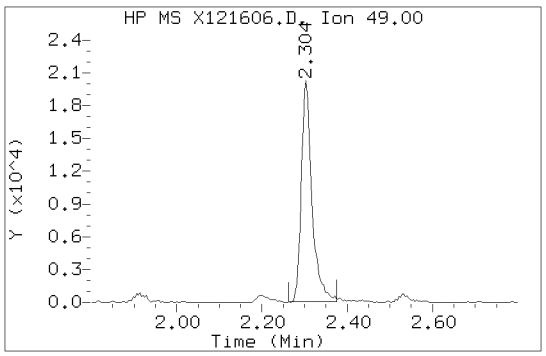
AFTER
MASS
86
AREA
21691
HEIGHT
11740
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
49
AREA
35909
HEIGHT
20222
27-Dec-2022
16:03
linh
pham



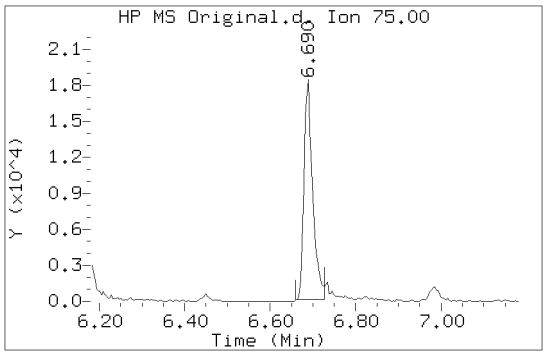
AFTER
MASS
49
AREA
35909
HEIGHT
20222
27-Dec-2022
16:07
linh
pham



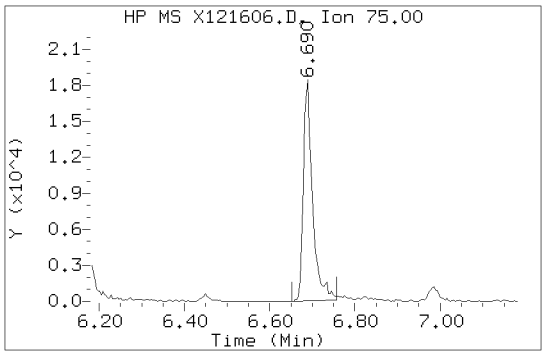
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
75
AREA
26483
HEIGHT
18306
27-Dec-2022
16:03
linh
pham



AFTER
MASS
75
AREA
28399
HEIGHT
18443
27-Dec-2022
16:07
linh
pham



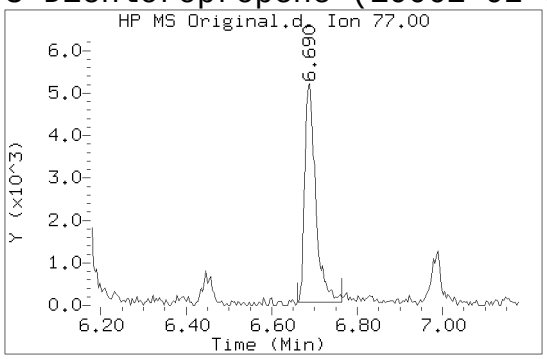
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

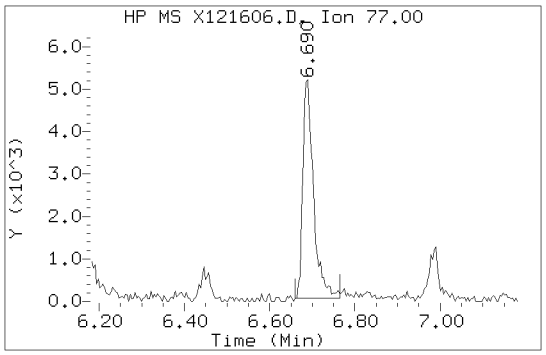
BEFORE

MASS
77
AREA
9244
HEIGHT
5154
27-Dec-2022
16:03
linh
pham



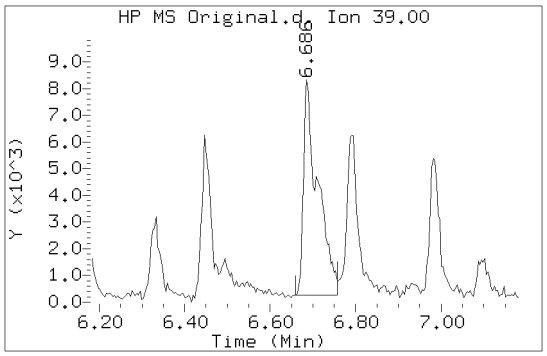
AFTER

MASS
77
AREA
9244
HEIGHT
5154
27-Dec-2022
16:07
linh
pham



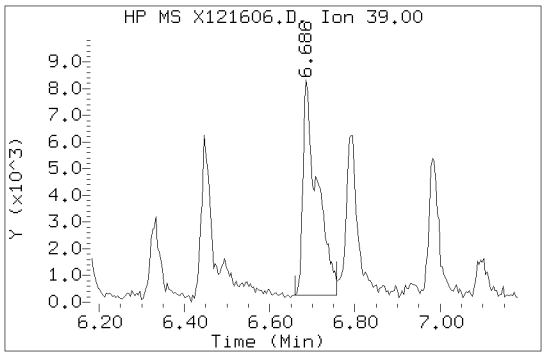
BEFORE

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

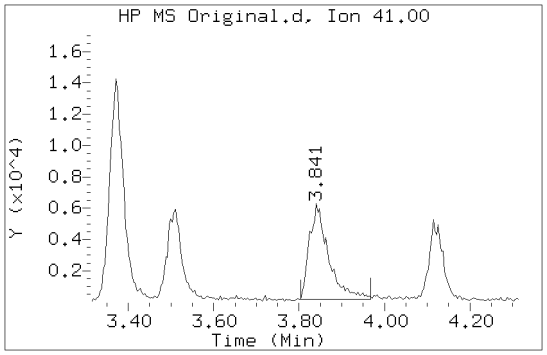


Methacrylonitrile (126-98-7)

Reason Code:

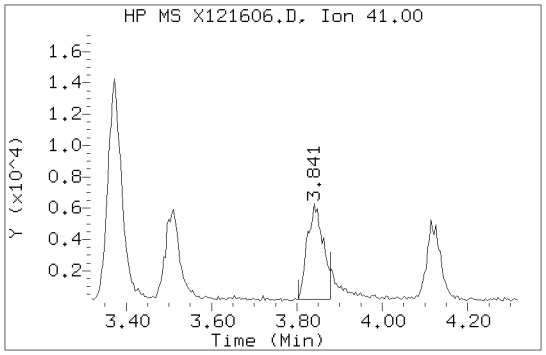
BEFORE

MASS
41
AREA
18790
HEIGHT
6109
27-Dec-2022
16:03
linh
pham



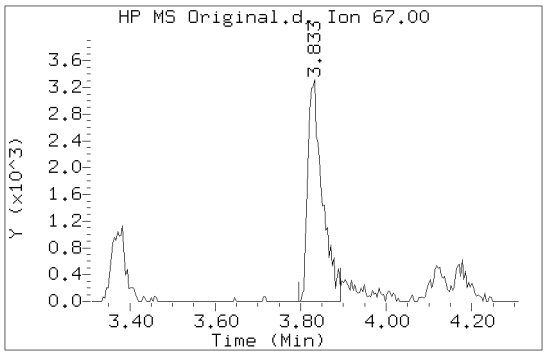
AFTER

MASS
41
AREA
15701
HEIGHT
6109
27-Dec-2022
16:07
linh
pham



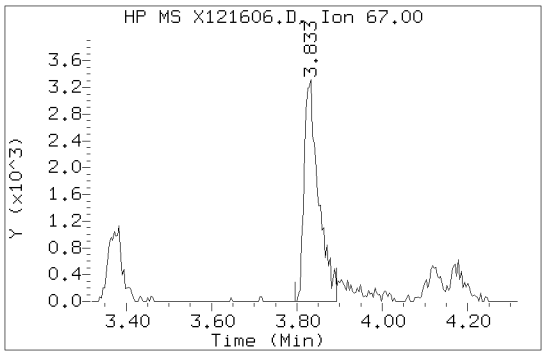
BEFORE

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



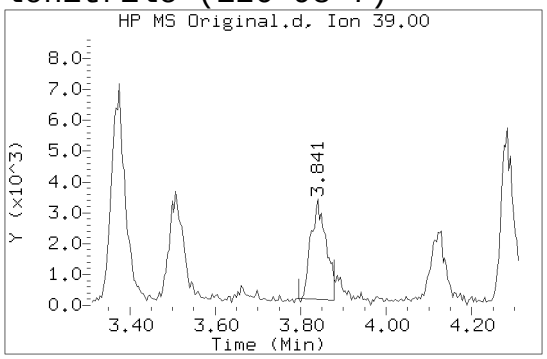
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methacrylonitrile (126-98-7)

Reason Code:

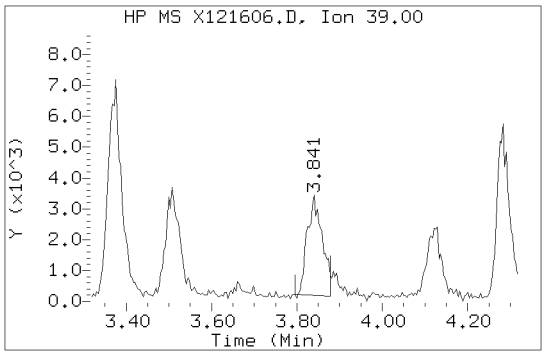
BEFORE

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

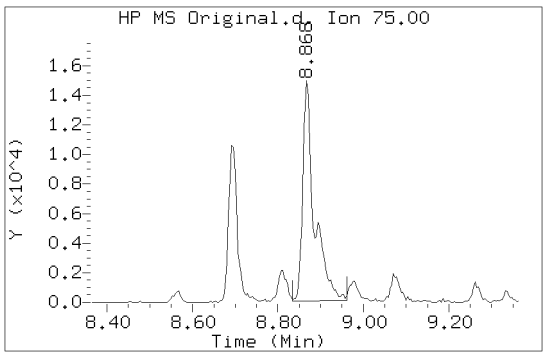


1,2,3-Trichloropropane (96-18-4)

Reason Code:

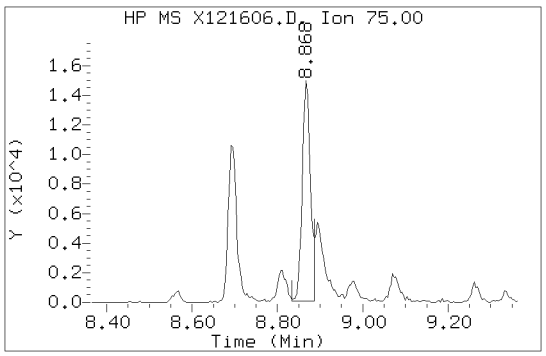
BEFORE

MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham



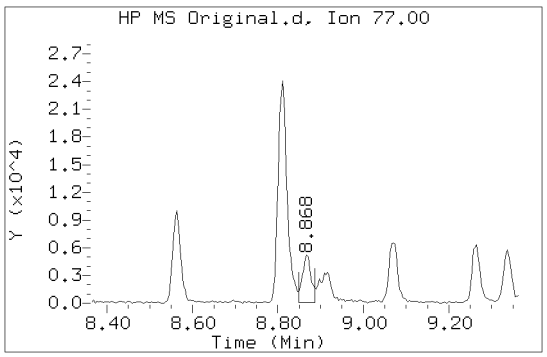
AFTER

MASS
75
AREA
20685
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



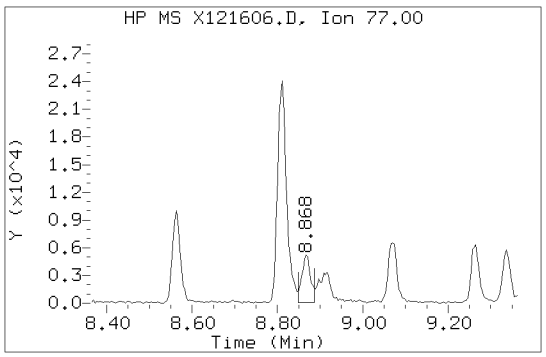
BEFORE

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

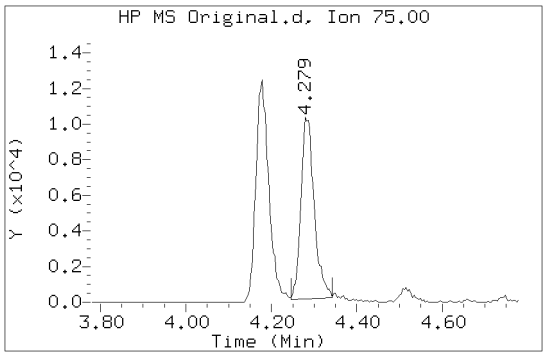


1,1-Dichloropropene (563-58-6)

Reason Code:

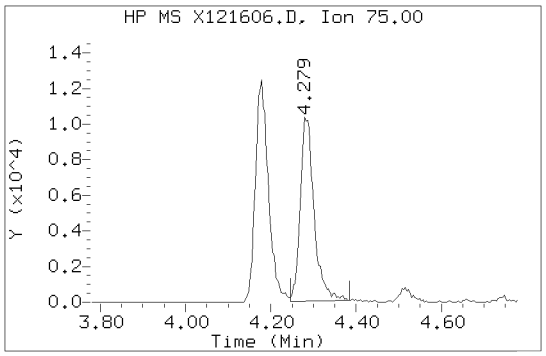
BEFORE

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

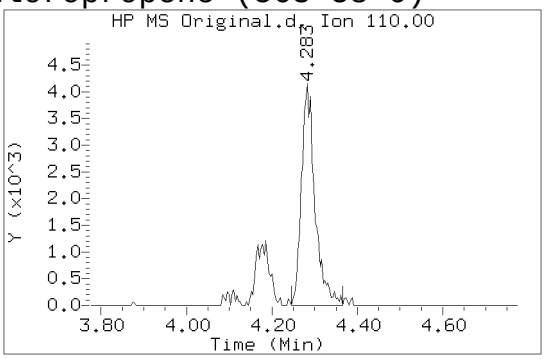


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

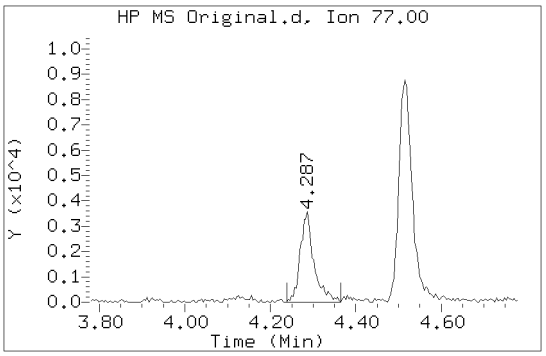
BEFORE

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:03
linh
pham



BEFORE

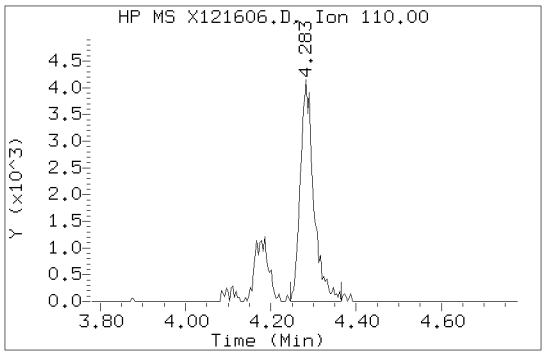
MASS
77
AREA
8083
HEIGHT
3567
27-Dec-2022
16:03
linh
pham



Reason Code:

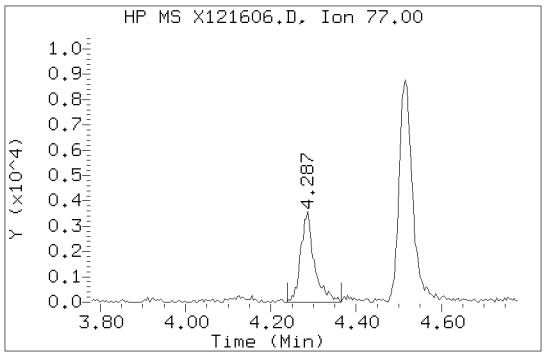
AFTER

MASS
110
AREA
9244
HEIGHT
4151
27-Dec-2022
16:07
linh
pham



AFTER

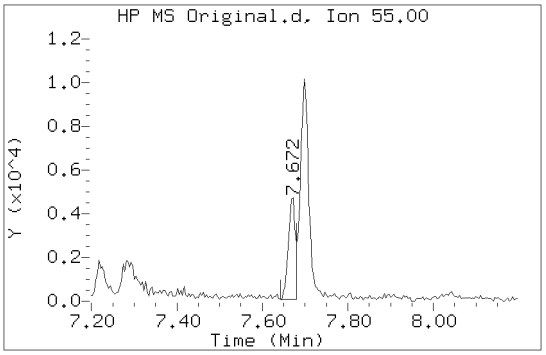
MASS
77
AREA
8083
HEIGHT
3567
27-Dec-2022
16:07
linh
pham



1-Chlorohexane (544-10-5)

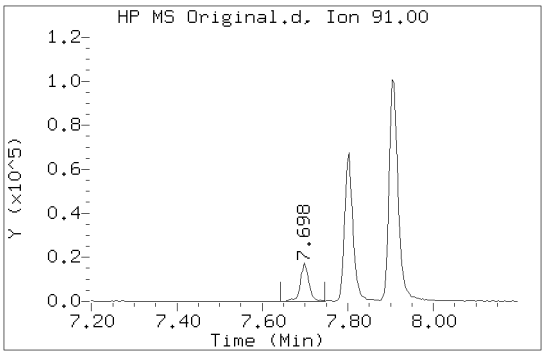
BEFORE

MASS
55
AREA
5371
HEIGHT
4660
27-Dec-2022
16:03
linh
pham



BEFORE

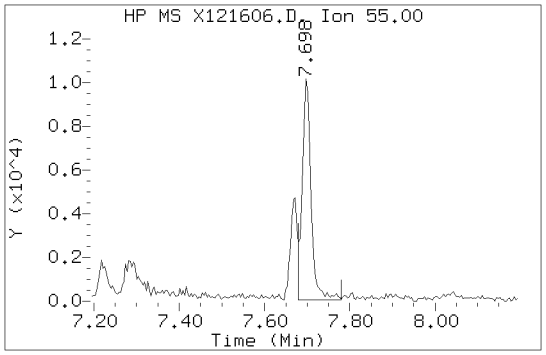
MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:03
linh
pham



Reason Code:

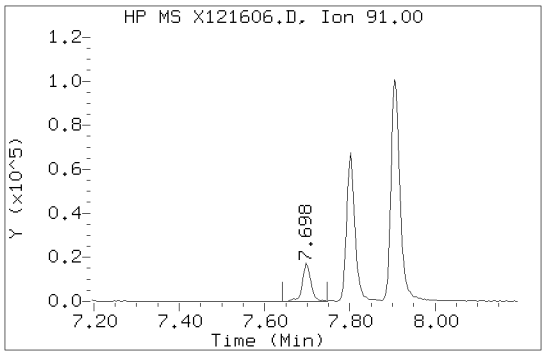
AFTER

MASS
55
AREA
15210
HEIGHT
10126
27-Dec-2022
16:07
linh
pham



AFTER

MASS
91
AREA
24578
HEIGHT
17336
27-Dec-2022
16:07
linh
pham



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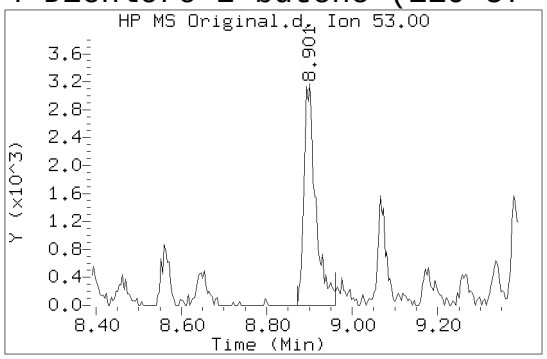
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

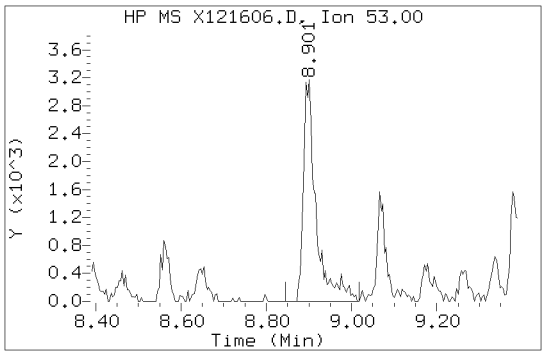
trans-1,4-Dichloro-2-butene (110-57-6)

BEFORE
MASS
53
AREA
6122
HEIGHT
3172
27-Dec-2022
16:03
linh
pham

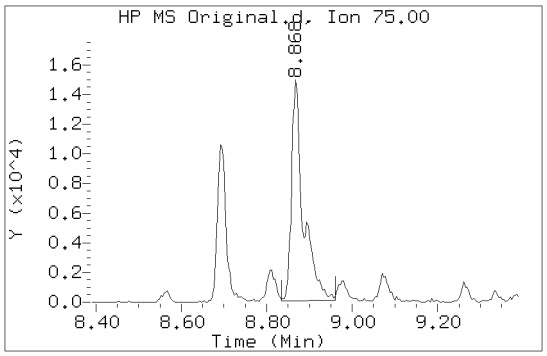


Reason Code:

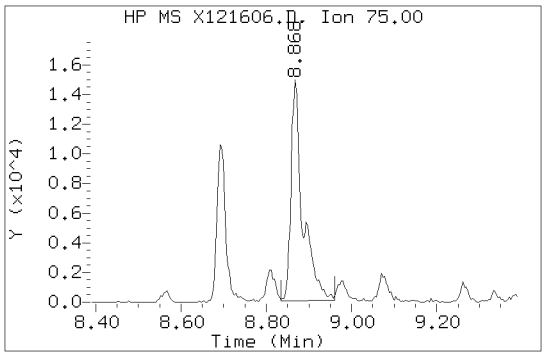
AFTER
MASS
53
AREA
6648
HEIGHT
3172
27-Dec-2022
16:07
linh
pham



BEFORE
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:03
linh
pham

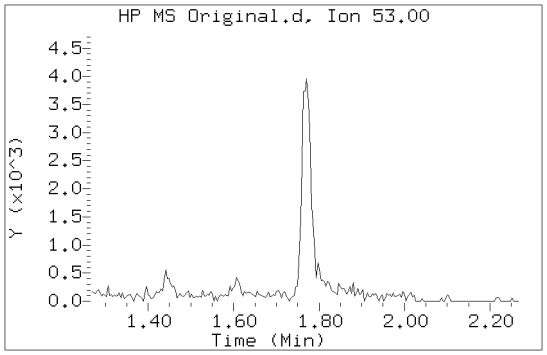


AFTER
MASS
75
AREA
28905
HEIGHT
14911
27-Dec-2022
16:07
linh
pham



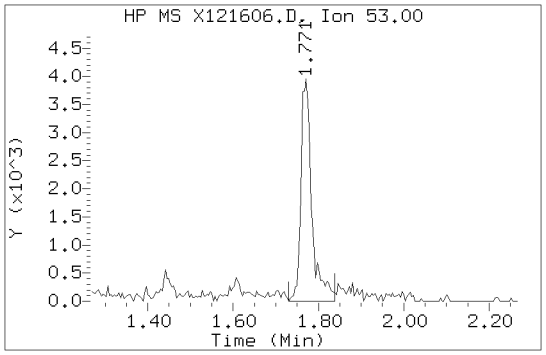
Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham

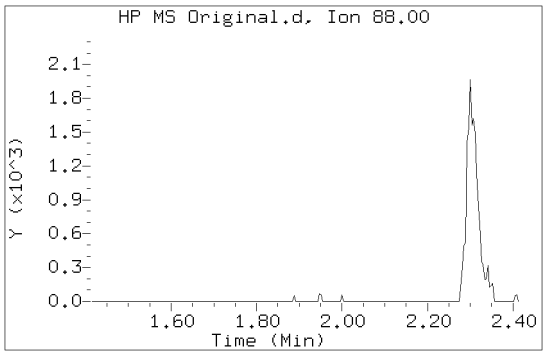


Reason Code:

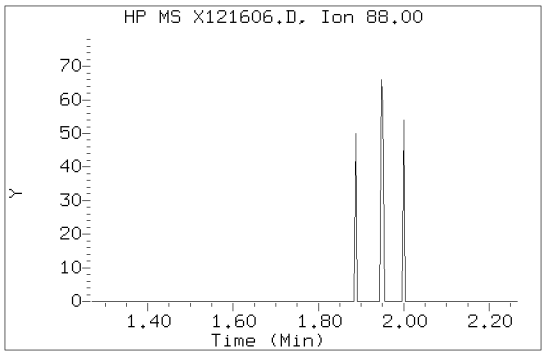
AFTER
MASS
53
AREA
7154
HEIGHT
3955
27-Dec-2022
16:07
linh
pham



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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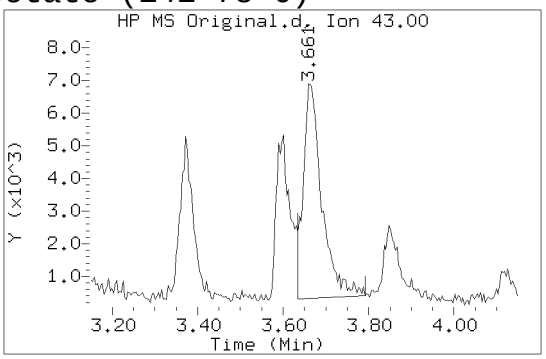
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

Reason Code:

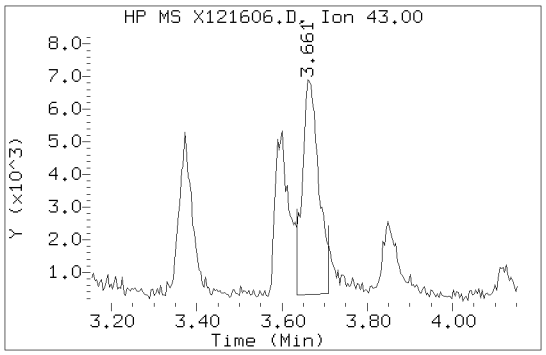
BEFORE

MASS
43
AREA
20113
HEIGHT
6576
27-Dec-2022
16:03
linh
pham



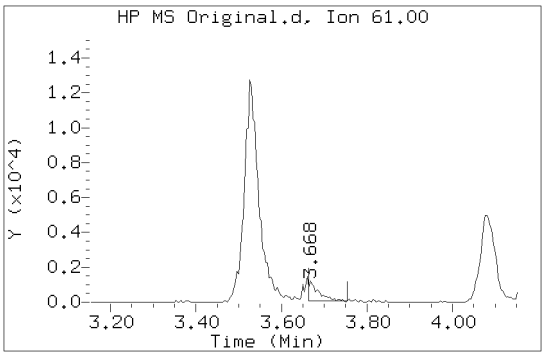
AFTER

MASS
43
AREA
18020
HEIGHT
6576
27-Dec-2022
16:07
linh
pham



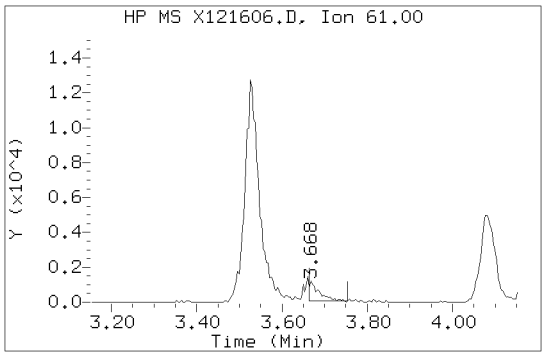
BEFORE

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:03
linh
pham



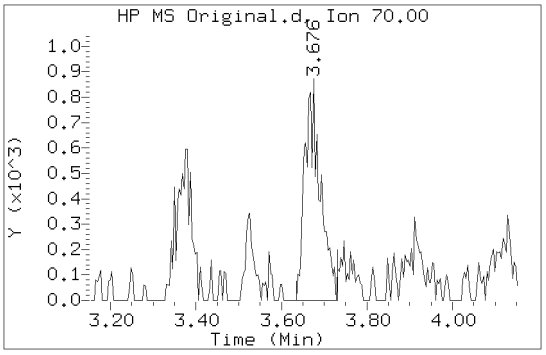
AFTER

MASS
61
AREA
1766
HEIGHT
1155
27-Dec-2022
16:07
linh
pham



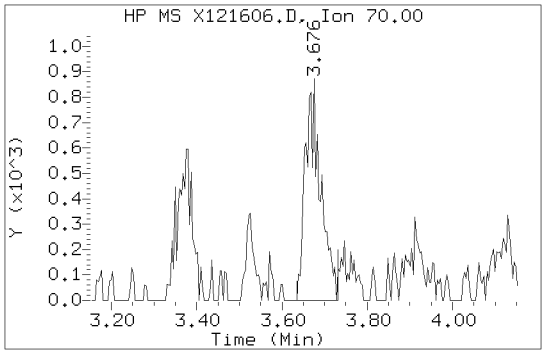
BEFORE

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

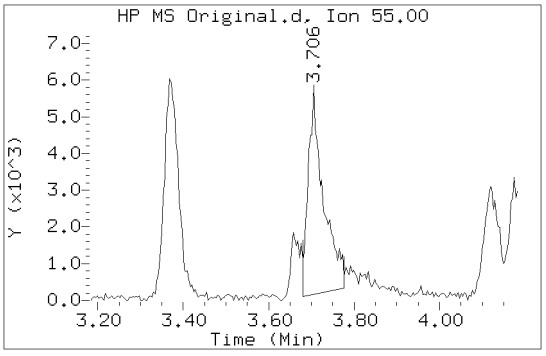


Methyl Acrylate (96-33-3)

Reason Code:

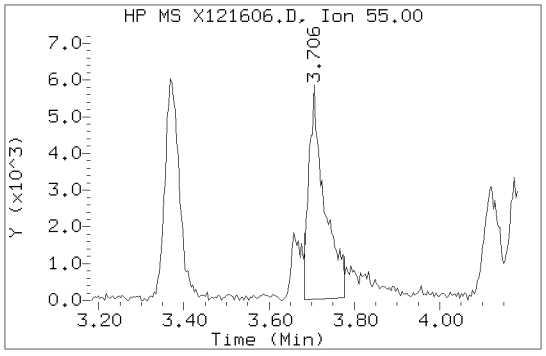
BEFORE

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



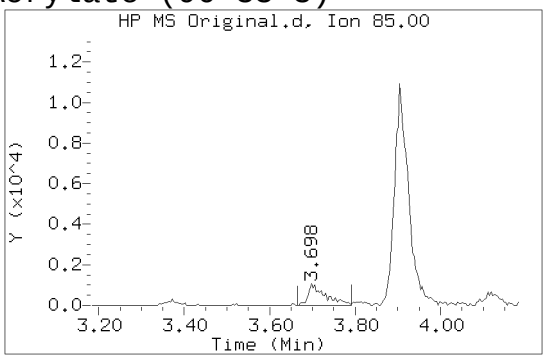
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methyl Acrylate (96-33-3)

Reason Code:

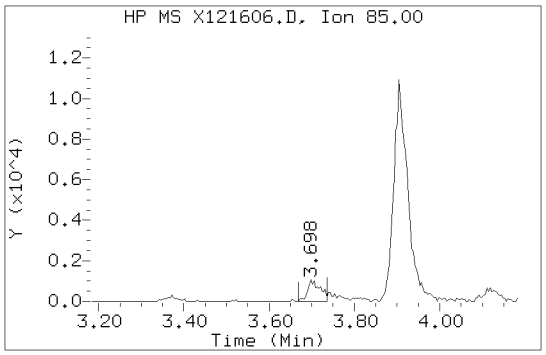
BEFORE

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

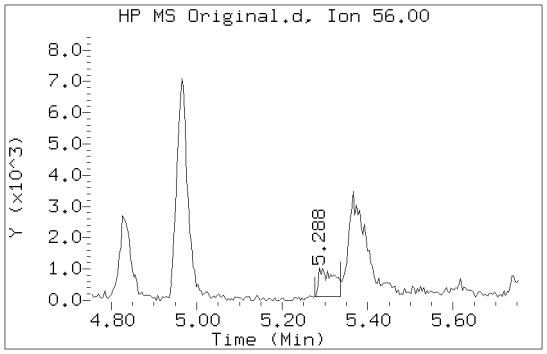


n-Butanol (71-36-3)

Reason Code:

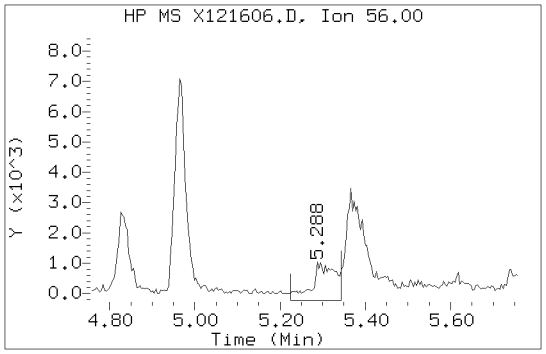
BEFORE

MASS
56
AREA
2243
HEIGHT
922
27-Dec-2022
16:03
linh
pham



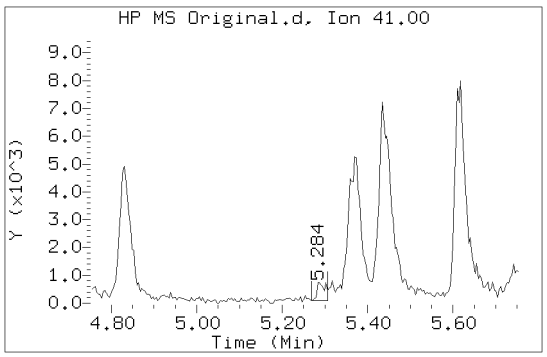
AFTER

MASS
56
AREA
4891
HEIGHT
1266
27-Dec-2022
16:07
linh
pham



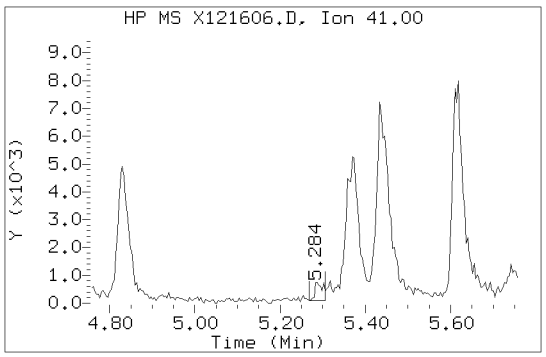
BEFORE

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

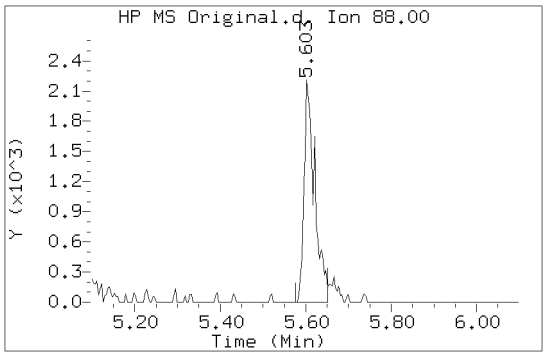


1,4-Dioxane ()

Reason Code:

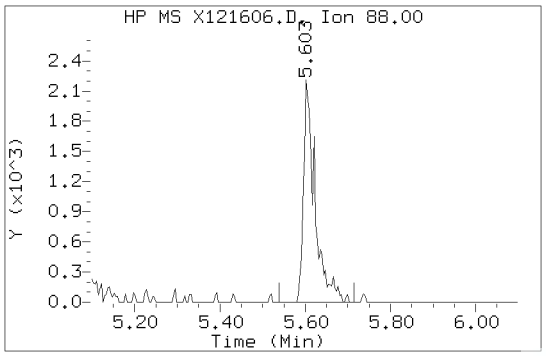
BEFORE

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



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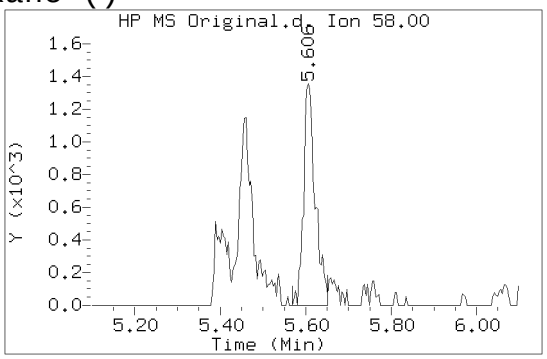
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

1,4-Dioxane ()

Reason Code:

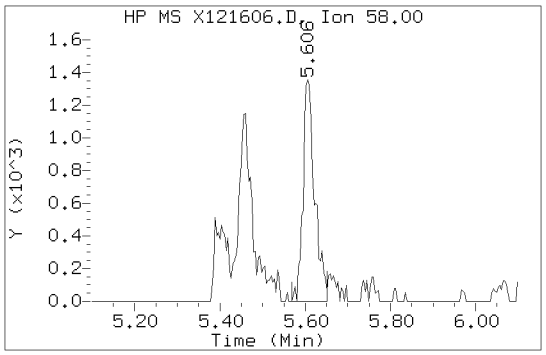
BEFORE

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

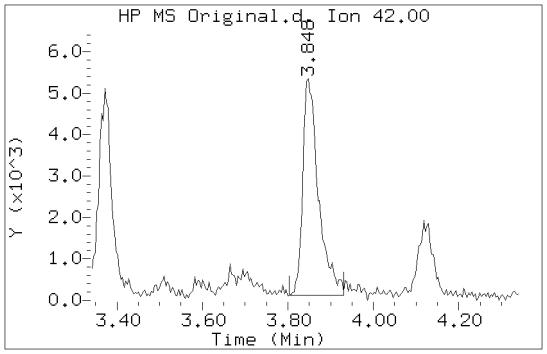


Tetrahydrofuran (109-99-9)

Reason Code:

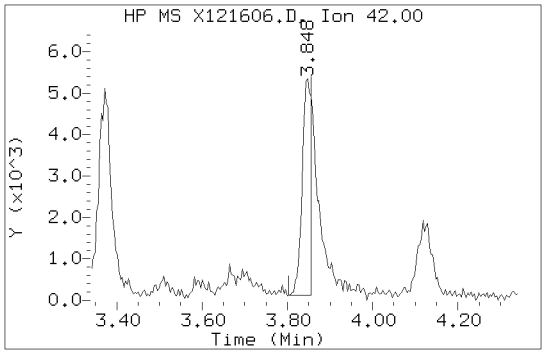
BEFORE

MASS
42
AREA
13557
HEIGHT
5225
27-Dec-2022
16:03
linh
pham



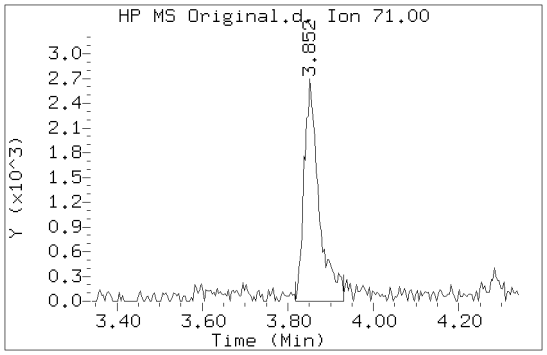
AFTER

MASS
42
AREA
7598
HEIGHT
5225
27-Dec-2022
16:07
linh
pham



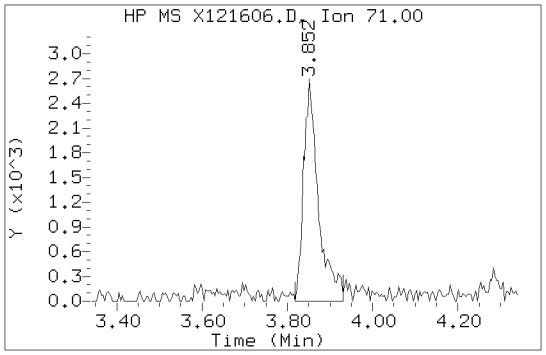
BEFORE

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

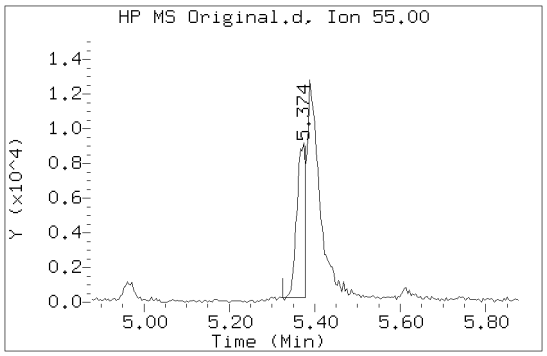


Methylcyclohexane (108-87-2)

Reason Code:

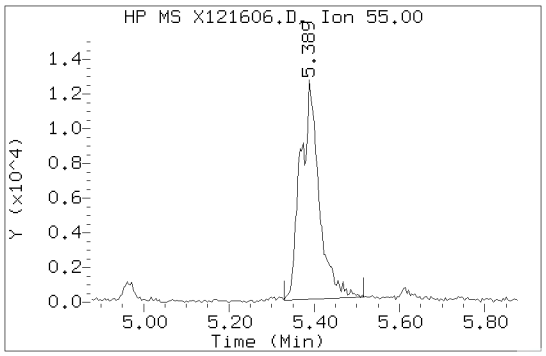
BEFORE

MASS
55
AREA
12381
HEIGHT
8941
27-Dec-2022
16:03
linh
pham



AFTER

MASS
55
AREA
38650
HEIGHT
12647
27-Dec-2022
16:07
linh
pham

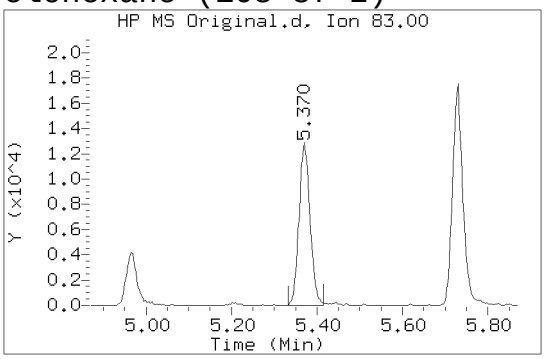


Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

Methylcyclohexane (108-87-2)

BEFORE

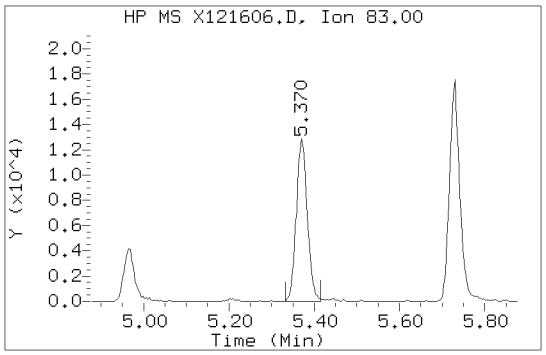
MASS
83
AREA
23564
HEIGHT
12870
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

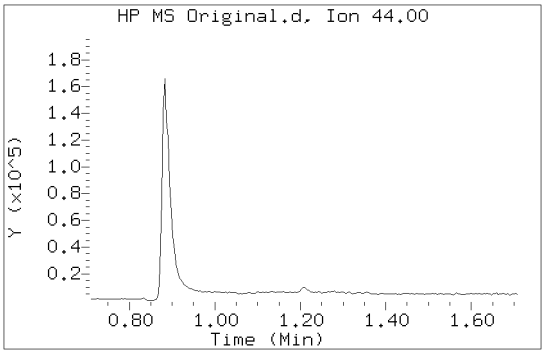
MASS
83
AREA
23564
HEIGHT
12870
27-Dec-2022
16:07
linh
pham



Acetaldehyde (75-07-0)

BEFORE

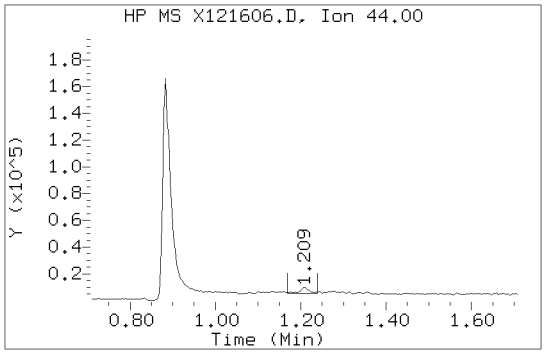
MASS
44
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



Reason Code:

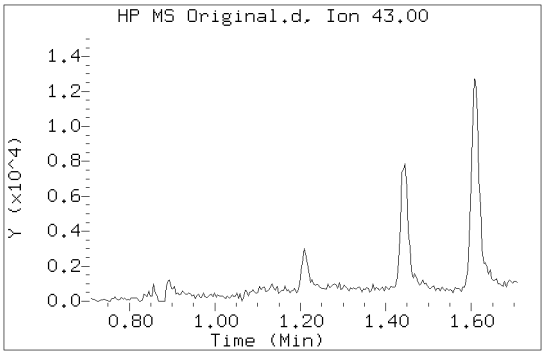
AFTER

MASS
44
AREA
6161
HEIGHT
4314
27-Dec-2022
16:07
linh
pham



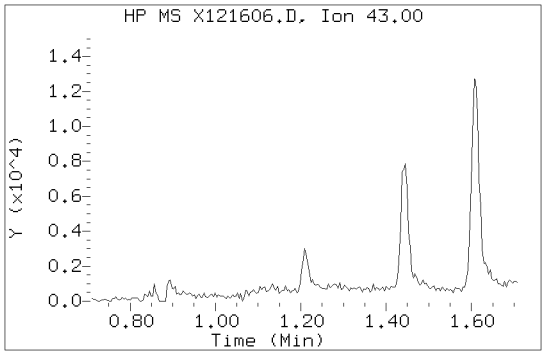
BEFORE

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



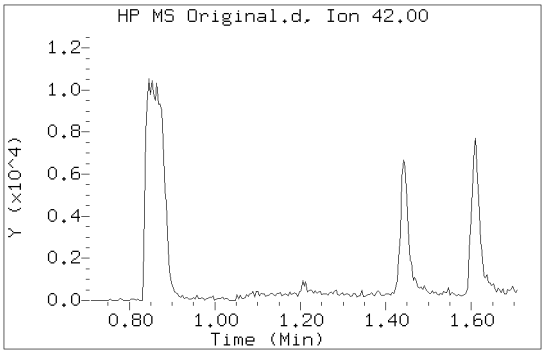
AFTER

MASS
43
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



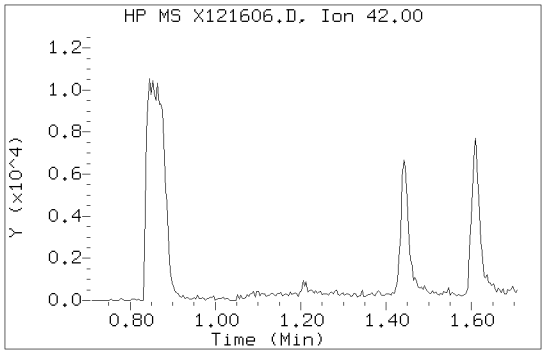
BEFORE

MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:03
linh
pham



AFTER

MASS
42
AREA
0
HEIGHT
0
27-Dec-2022
16:07
linh
pham



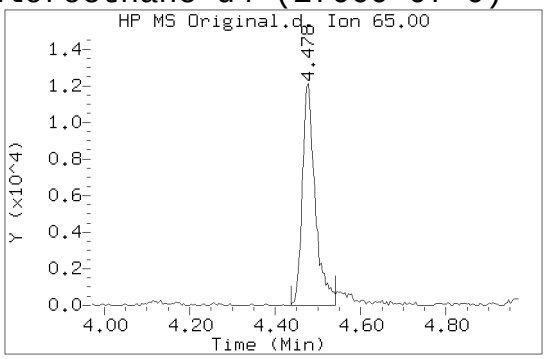
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121606.D
Inj Date : 16-DEC-2022 13:23
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

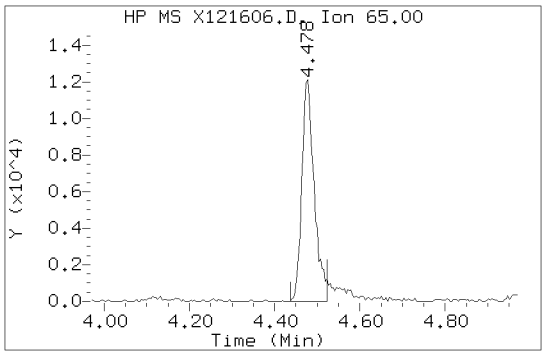
BEFORE

MASS
65
AREA
25815
HEIGHT
12121
27-Dec-2022
16:03
linh
pham



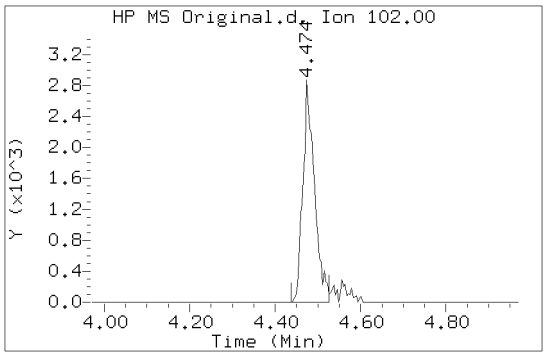
AFTER

MASS
65
AREA
24938
HEIGHT
12121
27-Dec-2022
16:07
linh
pham



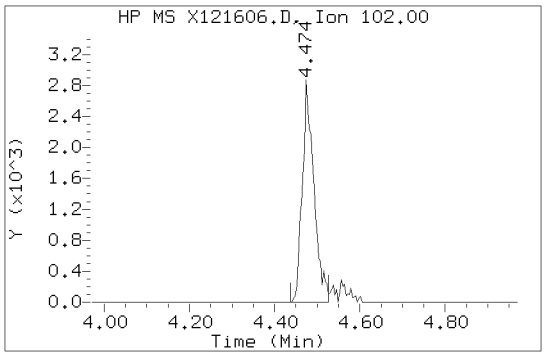
BEFORE

MASS
102
AREA
5492
HEIGHT
2873
27-Dec-2022
16:03
linh
pham



AFTER

MASS
102
AREA
5492
HEIGHT
2873
27-Dec-2022
16:07
linh
pham



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
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

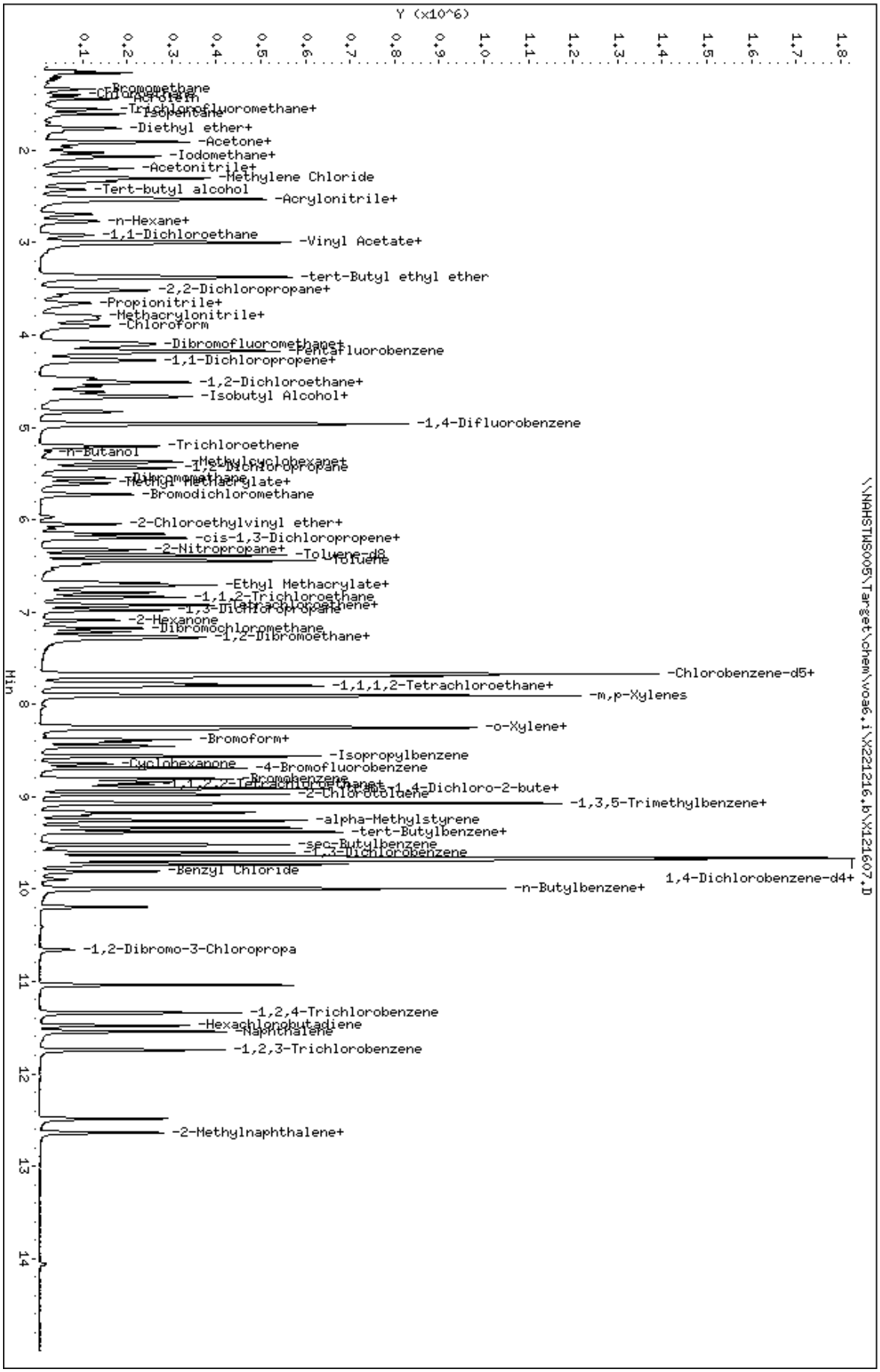
		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.690	3.690	(0.883)	57874	20.0000	18.55(M)
	162 Butyl acrylate	55	8.252	8.252	(1.076)	156518	20.0000	18.50
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	63382	20.0000	19.96
	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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Sample Info: VSTD020;VSTD020;1;6;
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Column phase: DB624
Instrument: voa6,i
Operator: PC
Column diameter: 0.18
Page 1
-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+
-Pentafluorobenzene
-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+
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-2-Nitropropane+
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-Toluene
-Ethyl Methacrylate+
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-Tetrachloroethene+
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-Dibromochloromethane
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-Cyclohexanone
-4-Bromofluorobenzene
-Bromobenzene
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-1,3,5-Trimethylbenzene+
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-Benzyl Chloride
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-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 : 16-DEC-2022 13:43
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LabSampID : VSTD020

Chloroprene (126-99-8)

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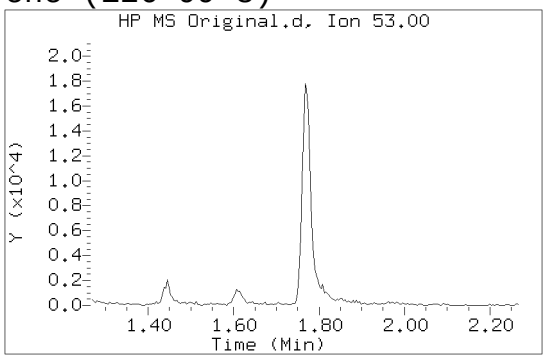

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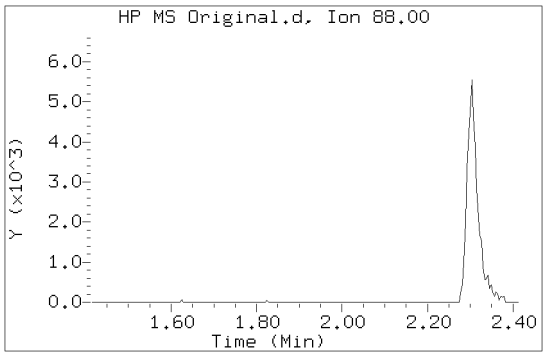

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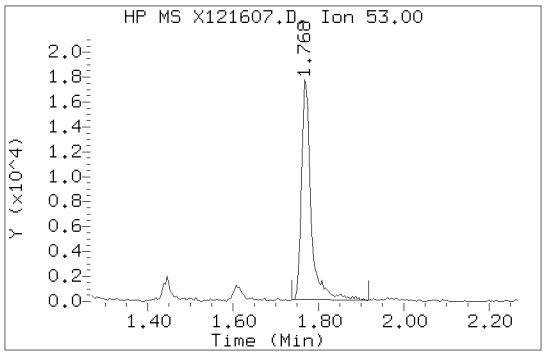

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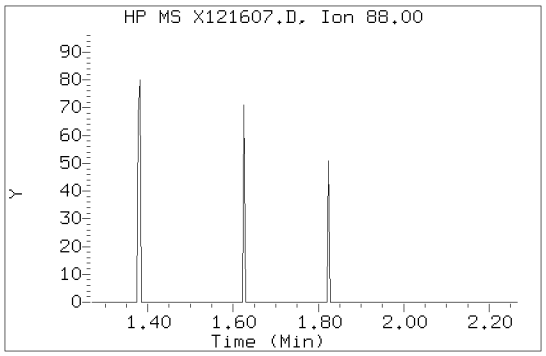

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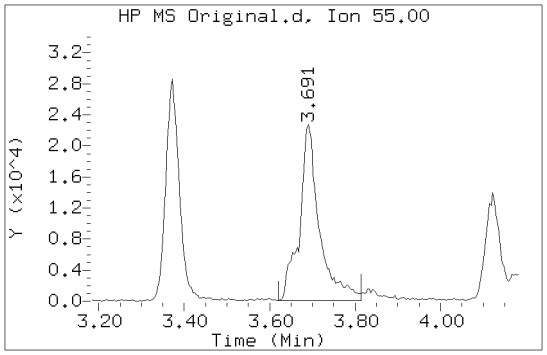

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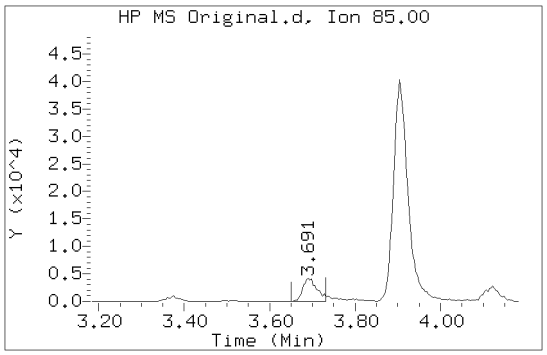

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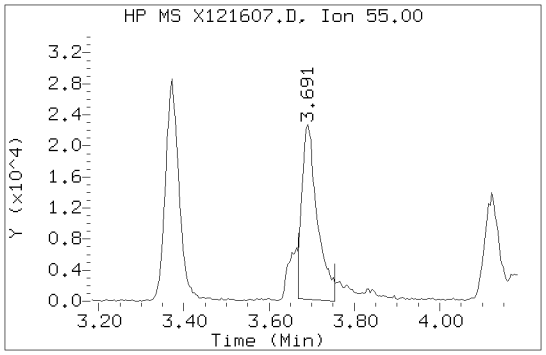

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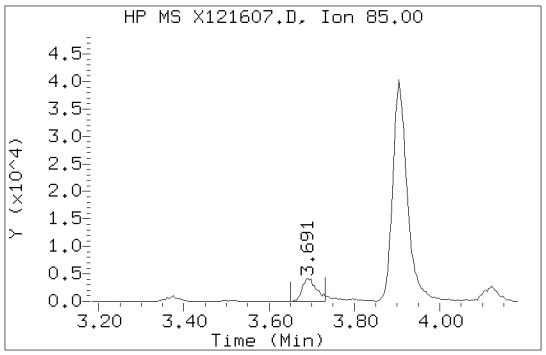

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InstruID : voa6.i
LabSampID : VSTD020

1,4-Dioxane ()

Reason Code:

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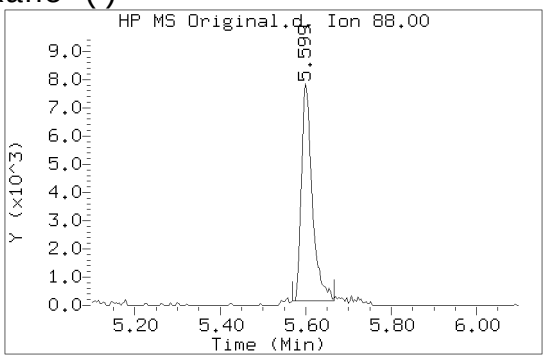

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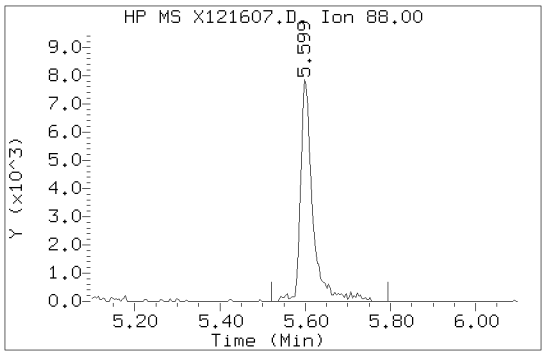

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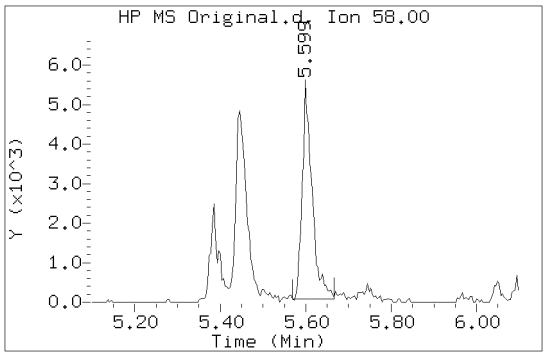

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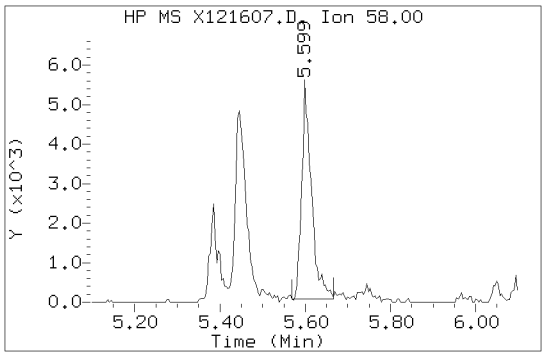

Cyclohexane (110-82-7)

Reason Code:

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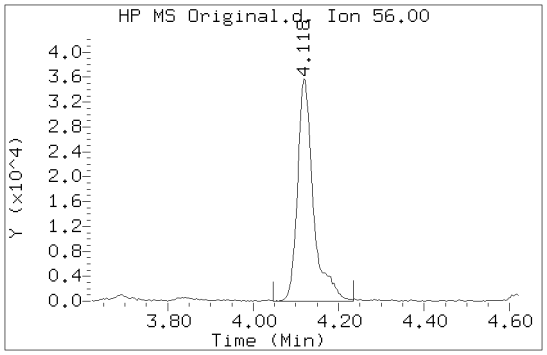

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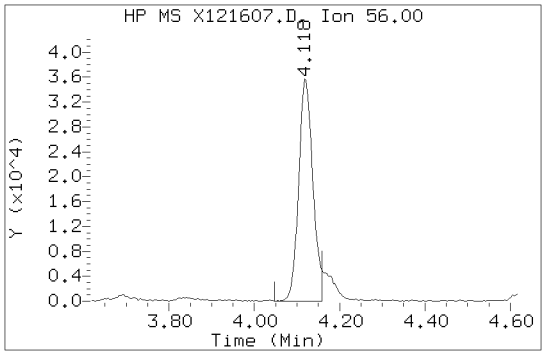

BEFORE

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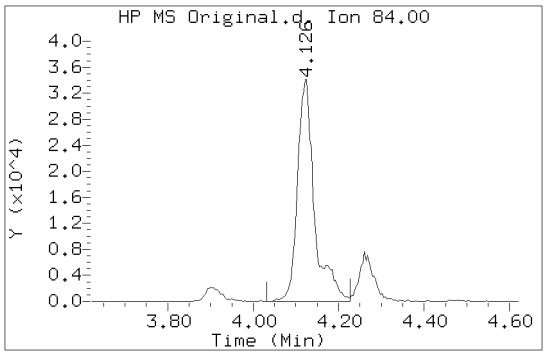

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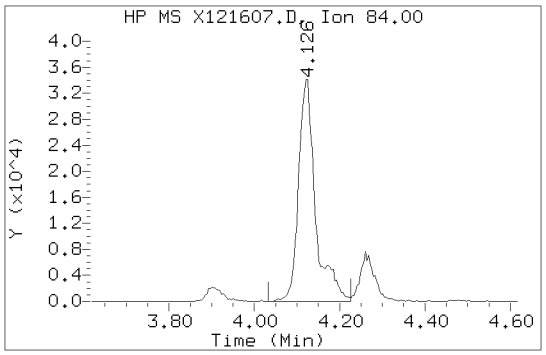

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LabSampID : VSTD020

Cyclohexane (110-82-7)

Reason Code:

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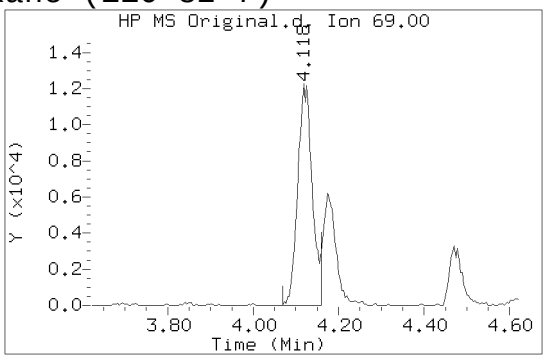

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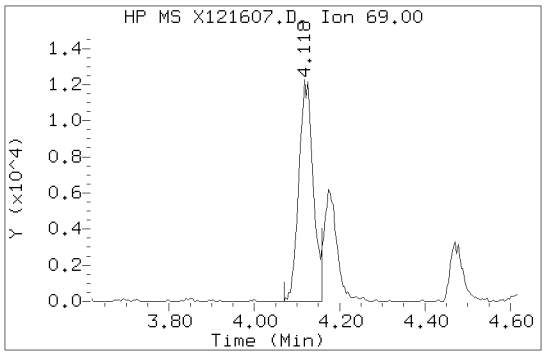

Acetaldehyde (75-07-0)

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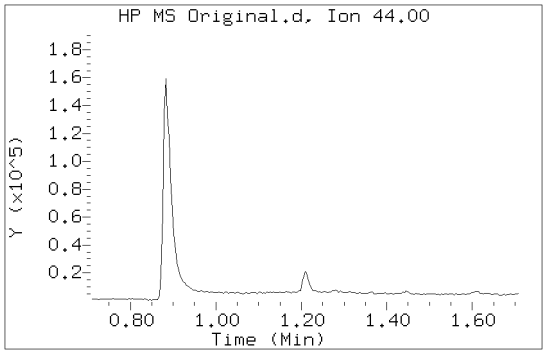

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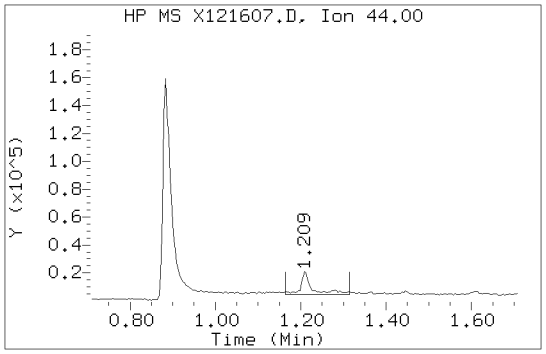

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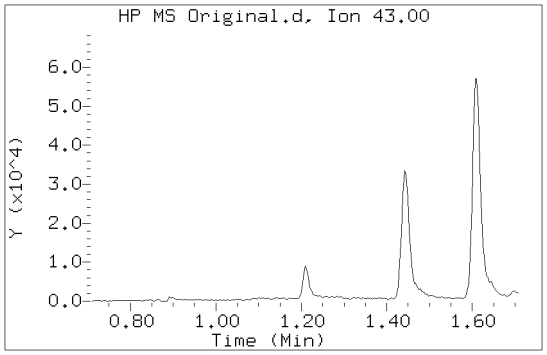

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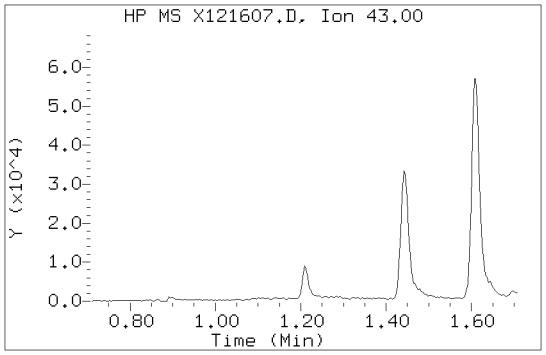

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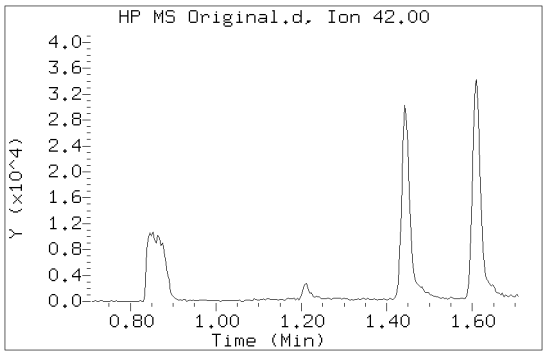

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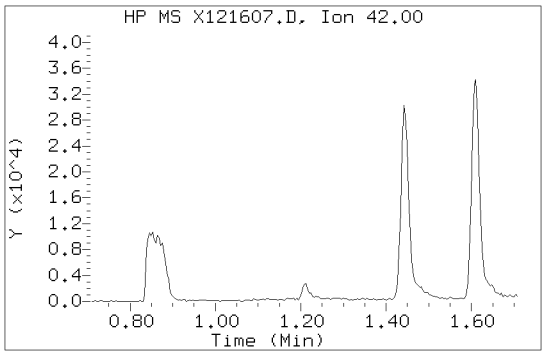

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D Page 1
Report Date: 27-Dec-2022 16:07

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   :
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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

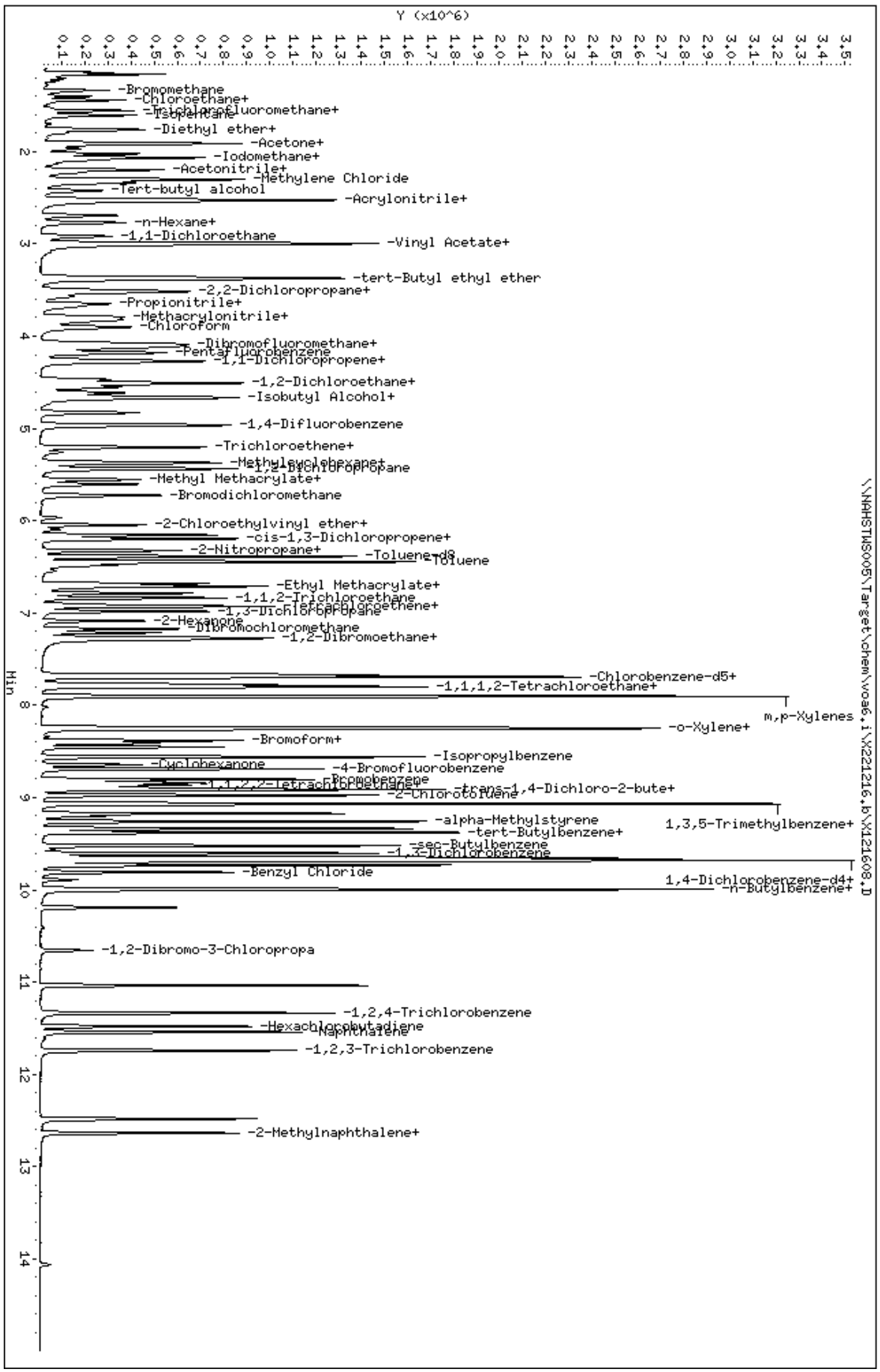
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	151068	50.0000	48.62(M)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	415774	50.0000	48.76
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	160392	50.0000	50.11
	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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Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121608.D
Y (x10^6)
Min
-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
-2,2-Dichloropropane+
-Propionitrile+
-Methacrylonitrile+
-Chloroform
-Dibromofluoromethane+
-Pentafluorobenzene
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Chloroethylvinyl ether+
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-2-Nitropropane+
-Toluene-d8
-Toluene
-Ethyl Methacrylate+
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-Tetrachloroethene+
-1,3-Dichloropropane
-2-Hexanone
-Dibromochloromethane
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-Bromoform+
-Isopropylbenzene
-Cyclohexanone
-4-Bromofluorobenzene
-Bromobenzene
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-alpha-Methylstyrene
1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
-1,3-Dichlorobenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
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-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

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

BEFORE

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16:03
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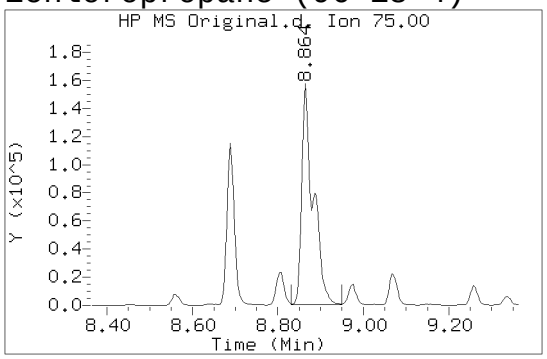

BEFORE

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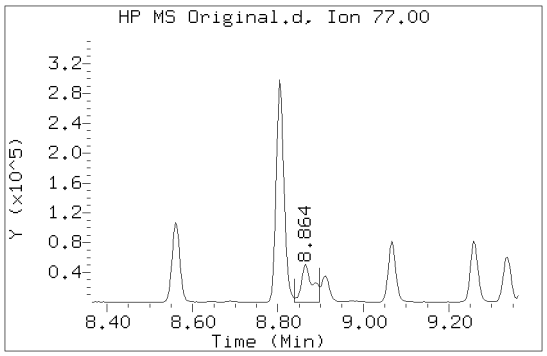

Reason Code:

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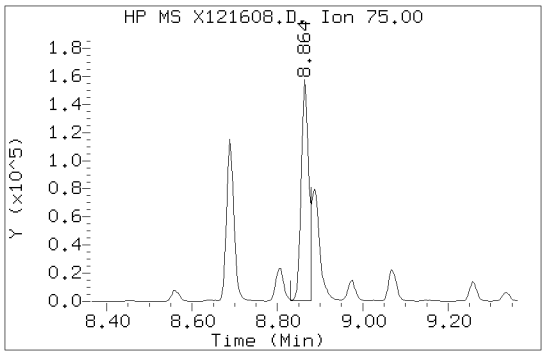

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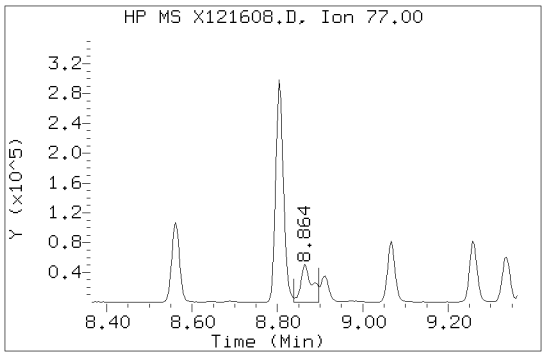

Chloroprene (126-99-8)

BEFORE

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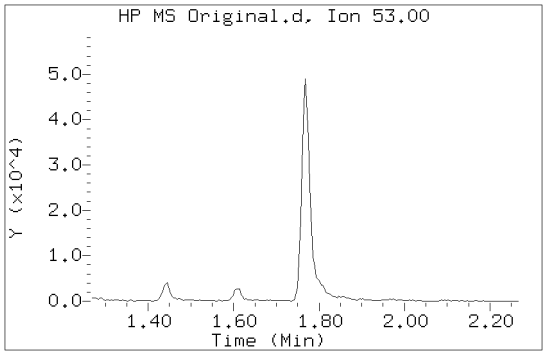

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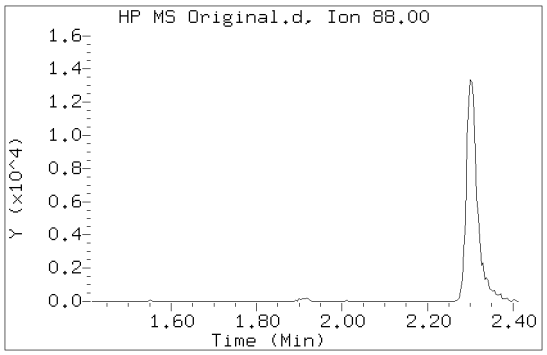

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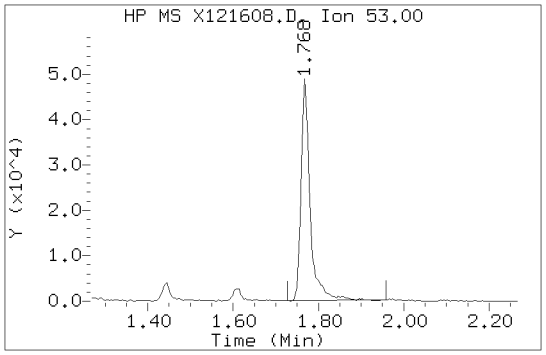

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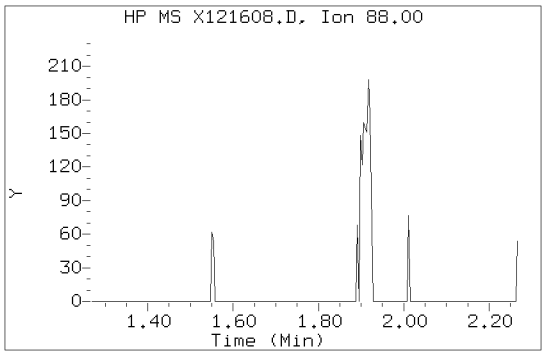

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Inj Date : 16-DEC-2022 14:04
InstruID : voa6.i
LabSampID : VSTD050

Methyl Acrylate (96-33-3)

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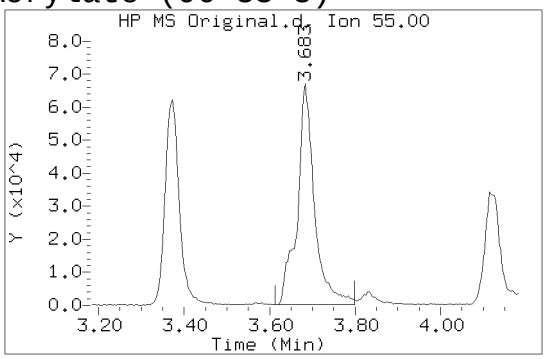

BEFORE

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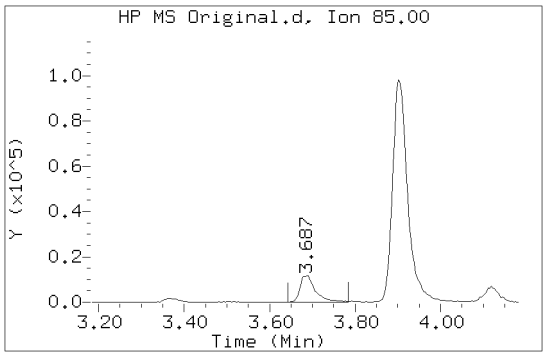

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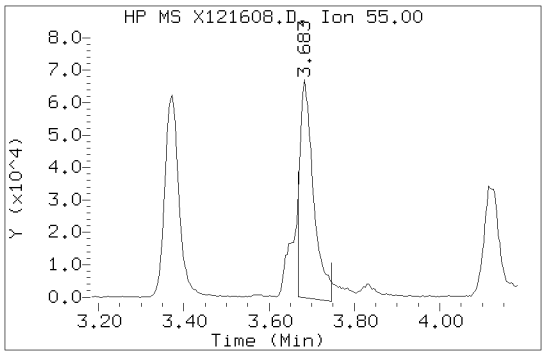

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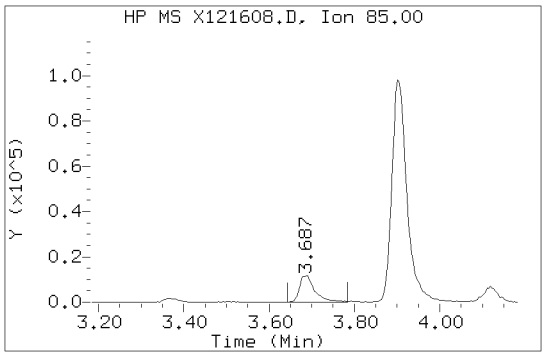

Acetaldehyde (75-07-0)

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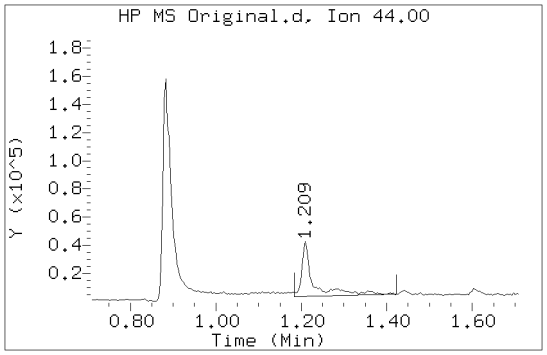

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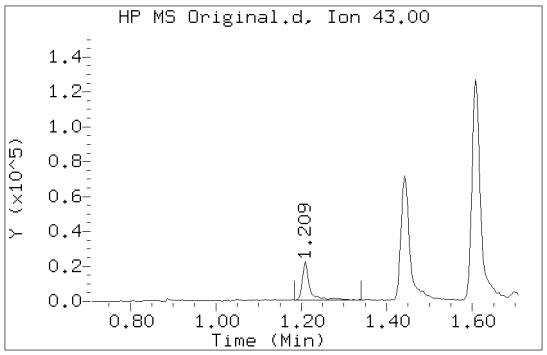

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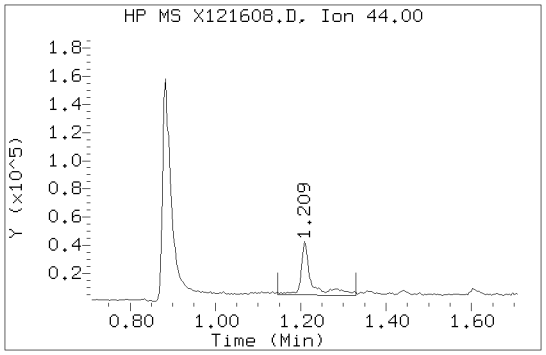

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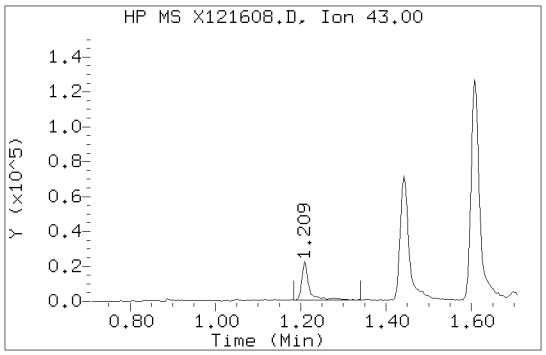

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InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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16:03
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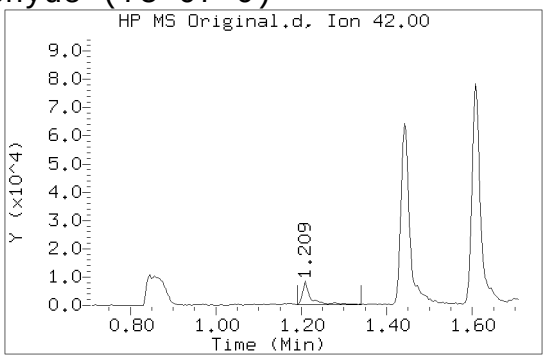

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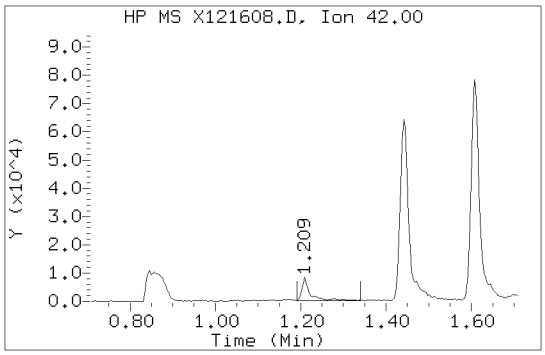

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121609.D
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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

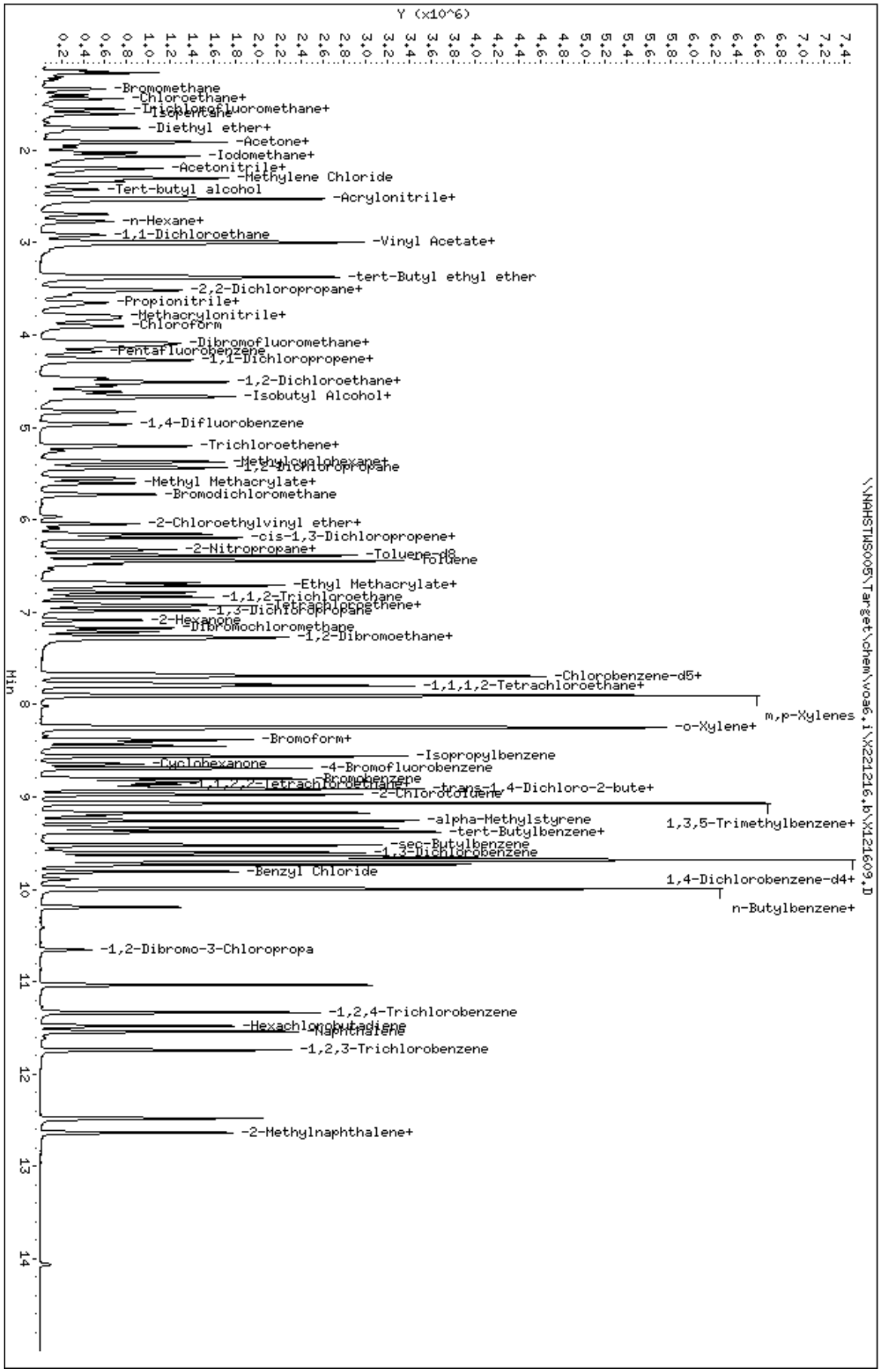
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.683	3.683	(0.882)	308372	100.000	99.90(M)
	162 Butyl acrylate	55	8.249	8.249	(1.076)	901265	100.000	103.44
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	309019	100.000	96.81
	3 Chloromethane	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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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

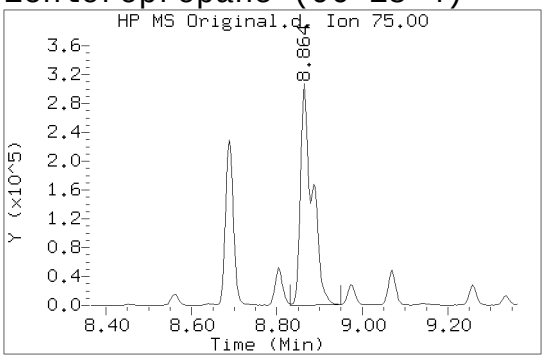
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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

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AREA
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HEIGHT
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27-Dec-2022
16:03
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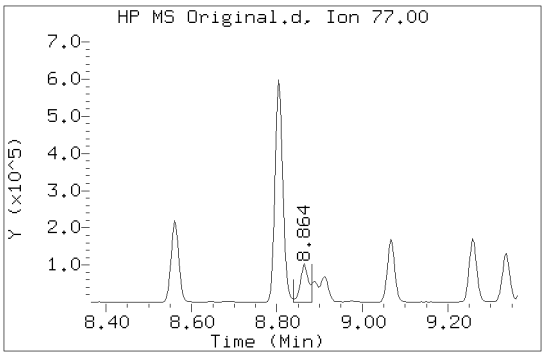

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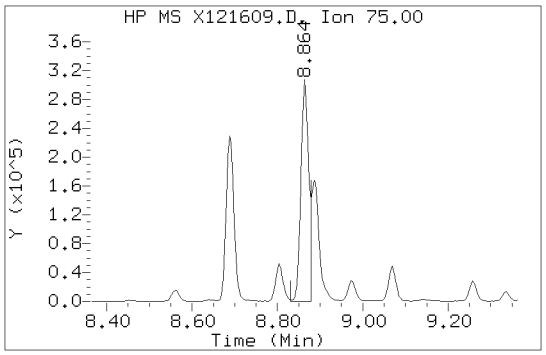

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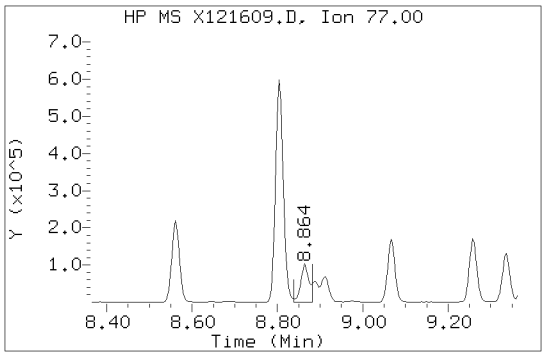

Chloroprene (126-99-8)

BEFORE

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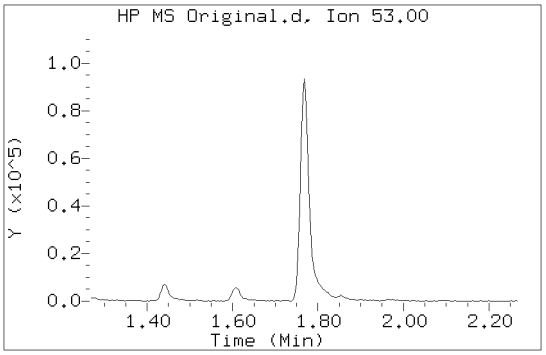

BEFORE

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16:03
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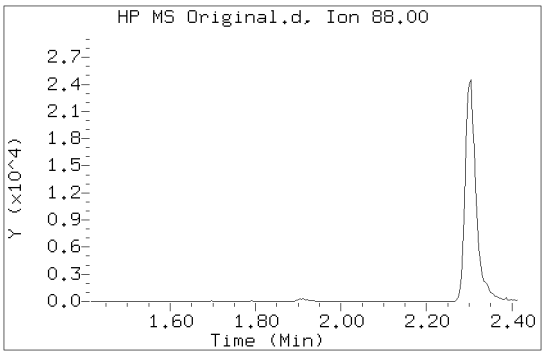

Reason Code:

AFTER

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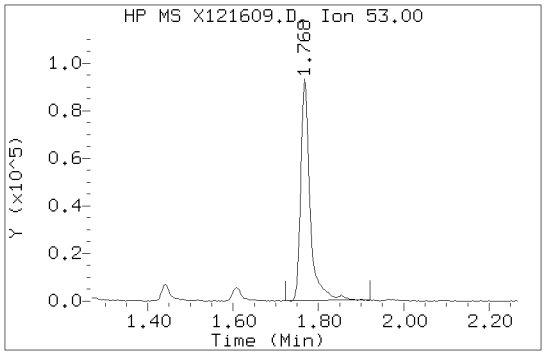

AFTER

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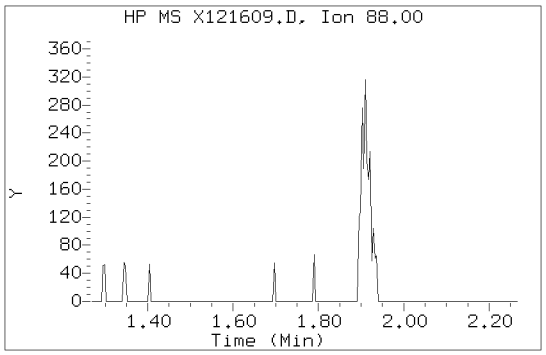

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Methyl Acrylate (96-33-3)

BEFORE

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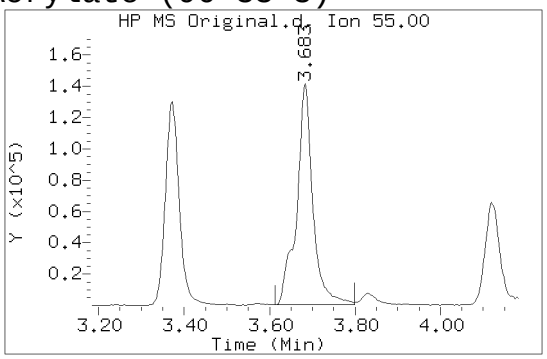

BEFORE

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27-Dec-2022
16:03
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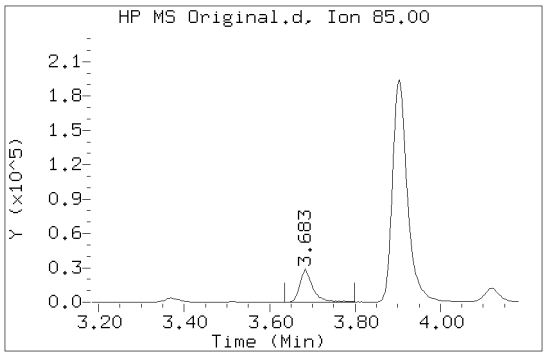

Reason Code:

AFTER

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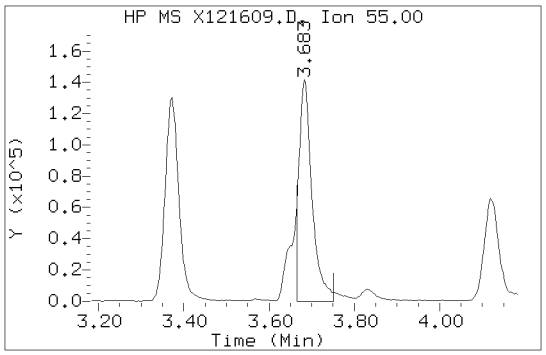

AFTER

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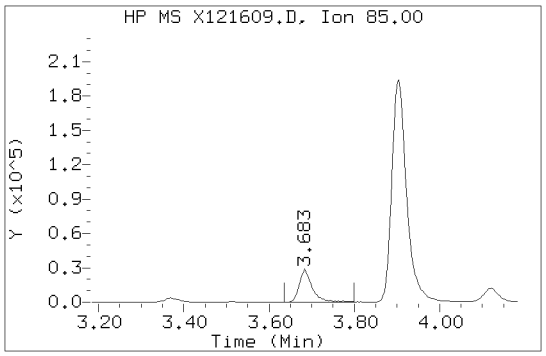

Acetaldehyde (75-07-0)

BEFORE

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AREA
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HEIGHT
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27-Dec-2022
16:03
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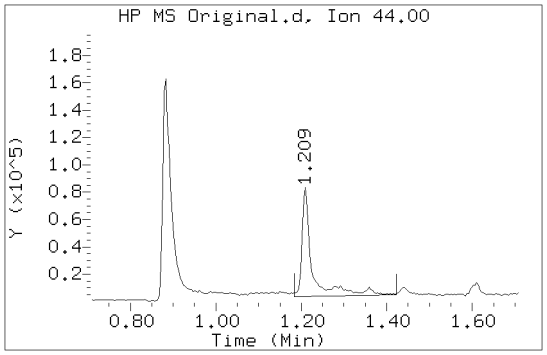
pham



BEFORE

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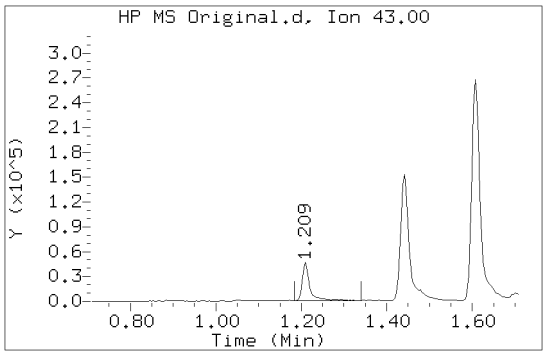
43
AREA
58307
HEIGHT
46134
27-Dec-2022
16:03
linh
pham



Reason Code:

AFTER

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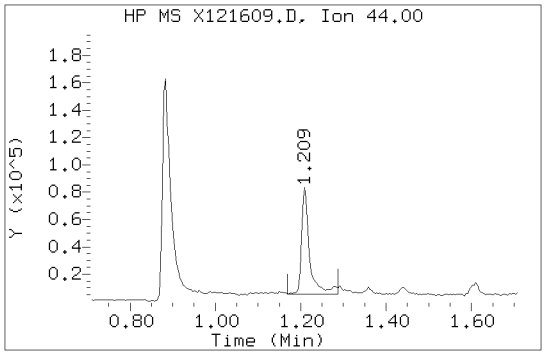

AFTER

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27-Dec-2022
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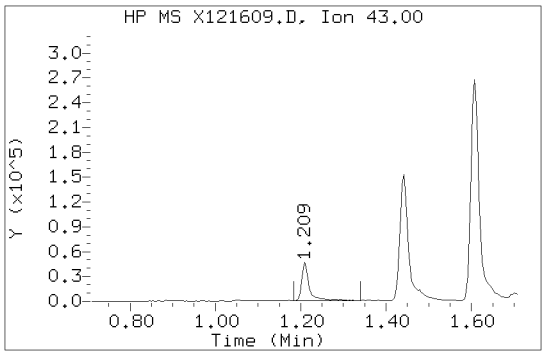

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Inj Date : 16-DEC-2022 14:25
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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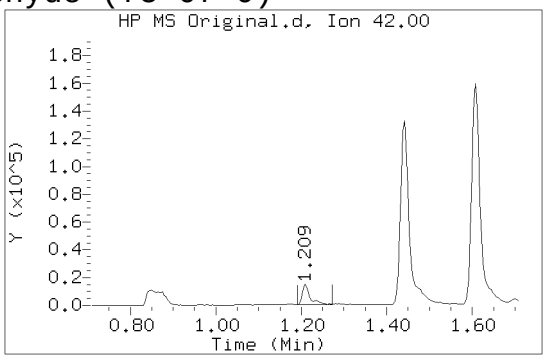
HEIGHT
14674
27-Dec-2022
16:03
linh
pham



AFTER

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27-Dec-2022
16:06
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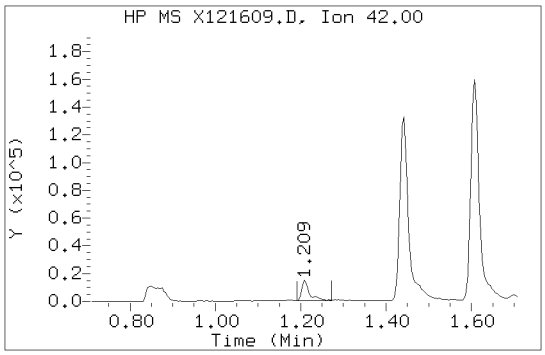

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D Page 1
Report Date: 27-Dec-2022 16:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D
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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   :
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

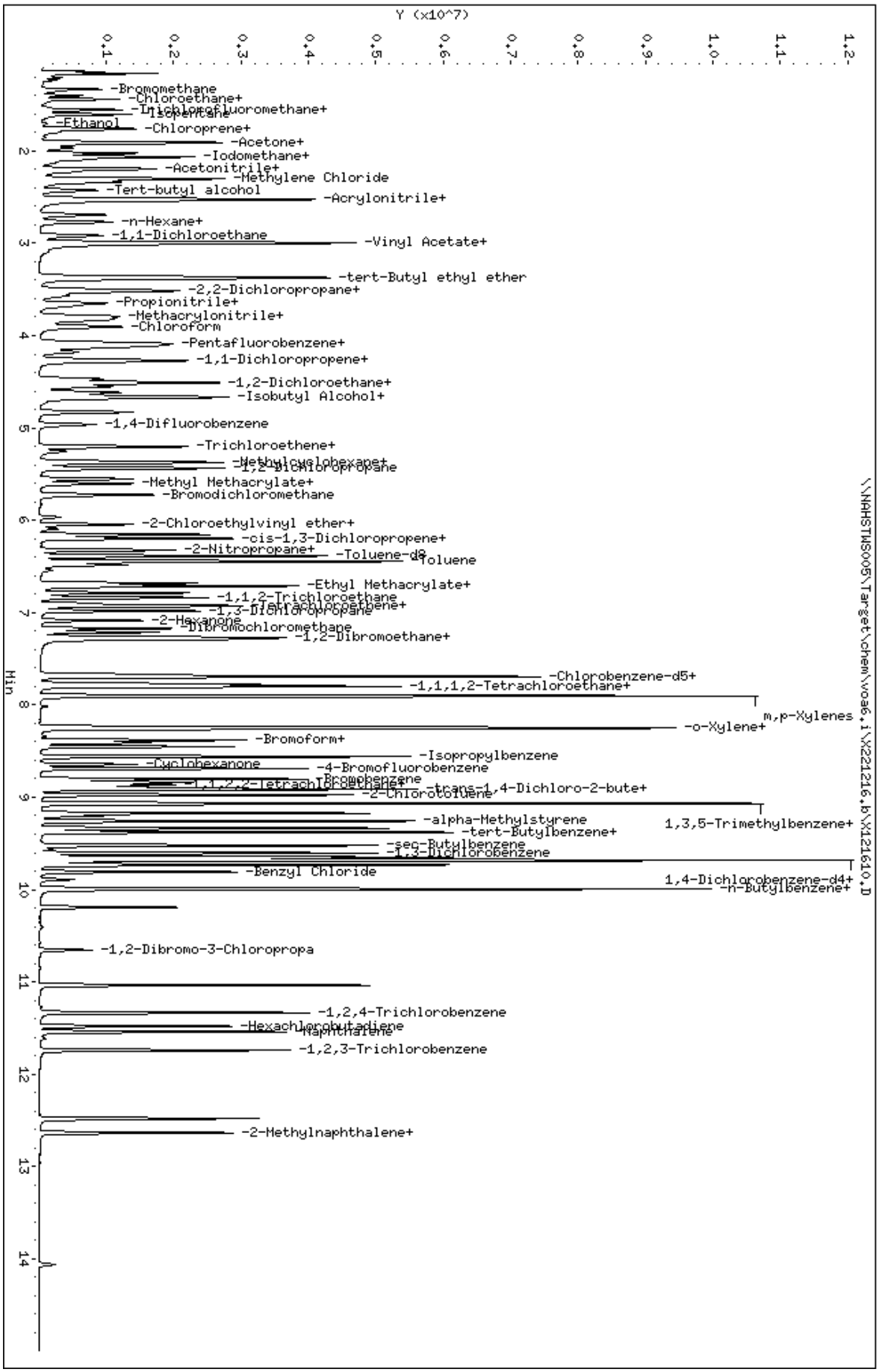
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.683	3.683	(0.882)	479571	150.000	157.93(M)
	162	Butyl acrylate	55	8.248	8.248	(1.076)	1470193	150.000	167.53
	2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	476130	150.000	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.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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
\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121610.D
Min
-Bromomethane
-Chloroethane+
-Trichlorofluoromethane+
-Isopentane
-Ethanol
-Chloroprene+
-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
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-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+
-trans-1,4-Dichloro-2-bute+
-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+

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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27-Dec-2022
16:04
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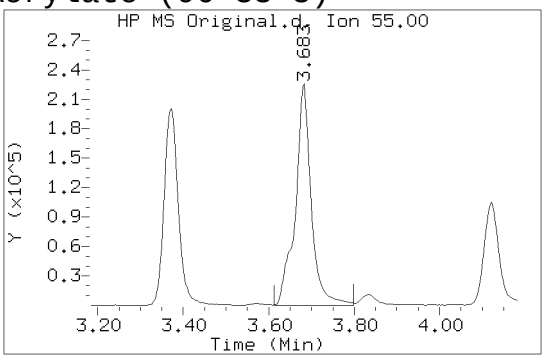

BEFORE

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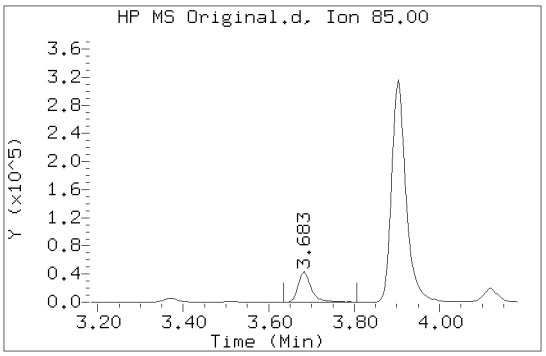

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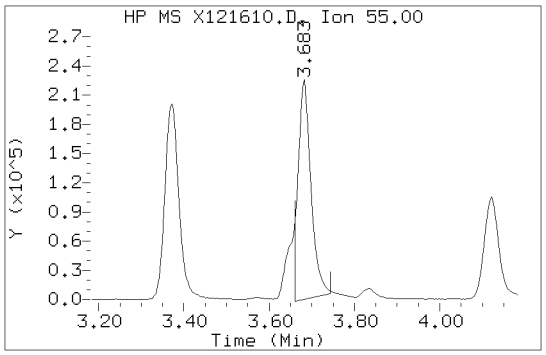

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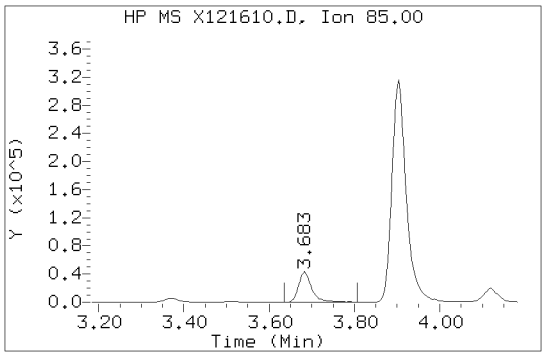

Acetaldehyde (75-07-0)

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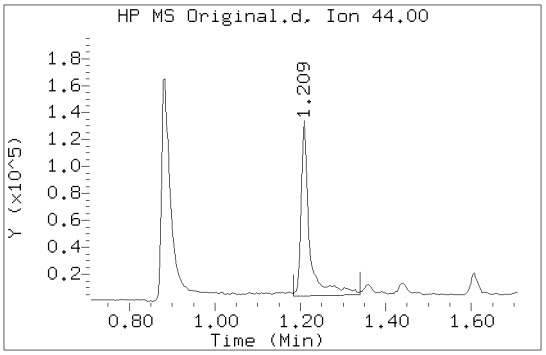

BEFORE

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16:04
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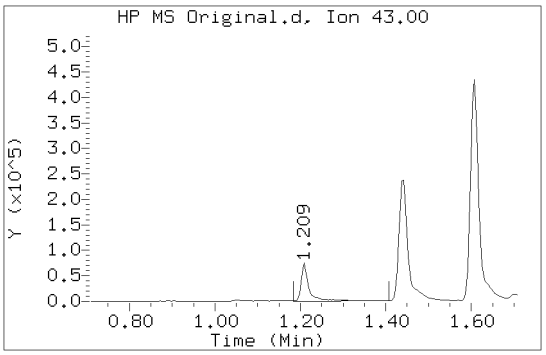

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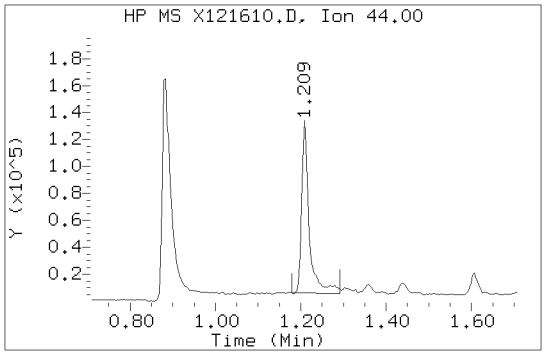

AFTER

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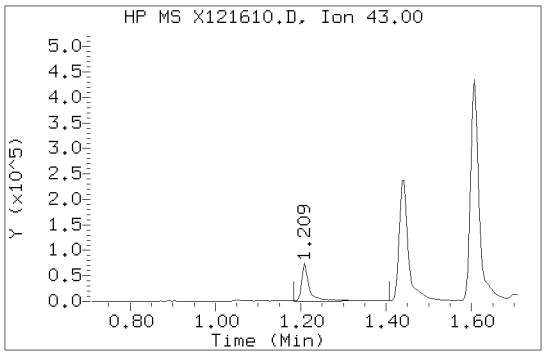

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Inj Date : 16-DEC-2022 14:46
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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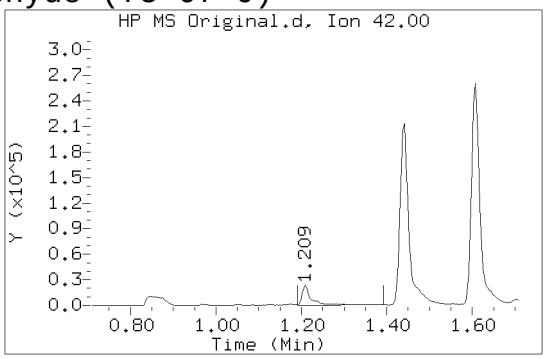
HEIGHT
23932
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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HEIGHT
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27-Dec-2022
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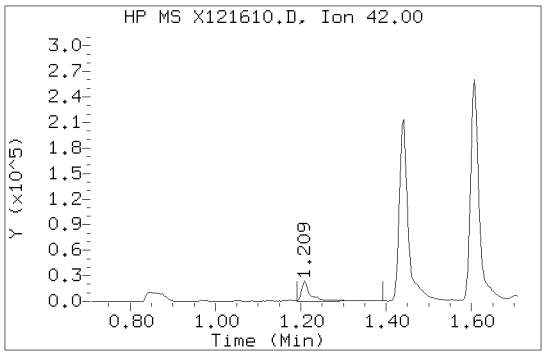

Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D Page 1
Report Date: 27-Dec-2022 16:07

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   :
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

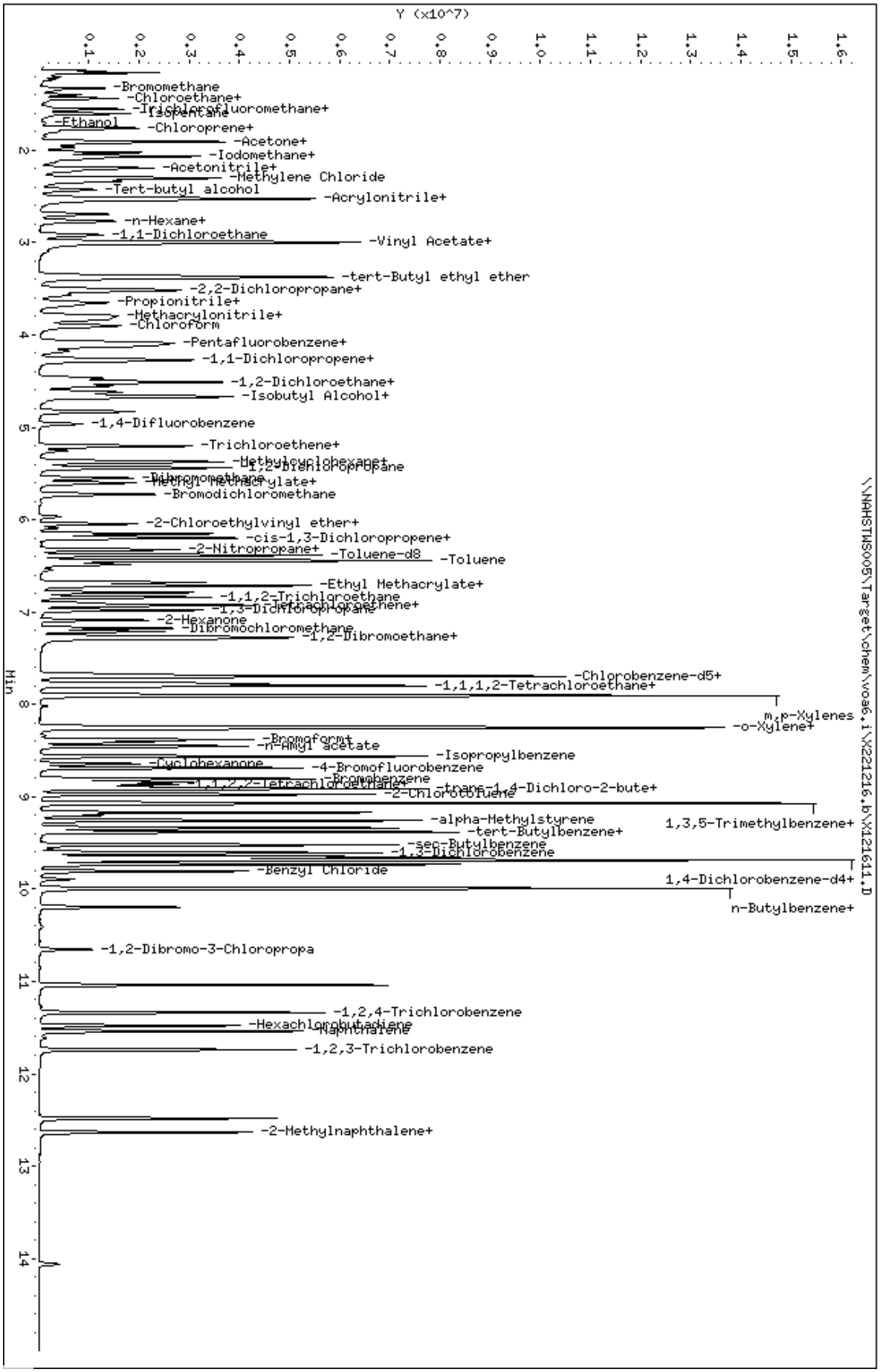
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.683	3.683	(0.882)	646827	200.000	211.32(AM)
	162 Butyl acrylate	55	8.252	8.252	(1.076)	2063916	200.000	228.52(A)
	2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	635808	200.000	200.44(A)
	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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Date : 16-DEC-2022 15:07
Client ID: WSTD200
Sample Info: WSTD200;WSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

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

\\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121611.D

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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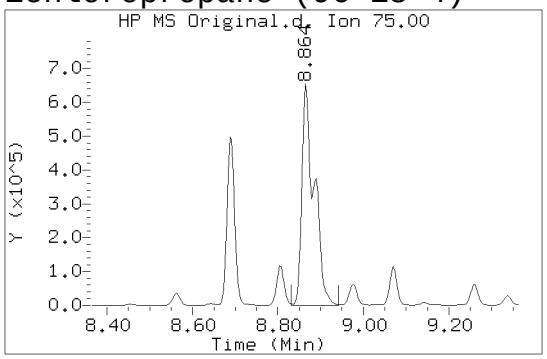
HEIGHT
654512
27-Dec-2022
16:04
linh
pham



BEFORE

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27-Dec-2022
16:04
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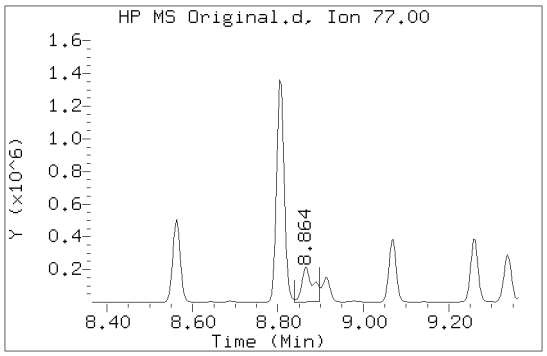

Reason Code:

AFTER

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16:06
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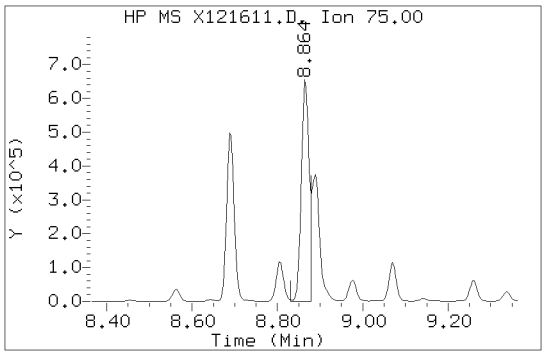

AFTER

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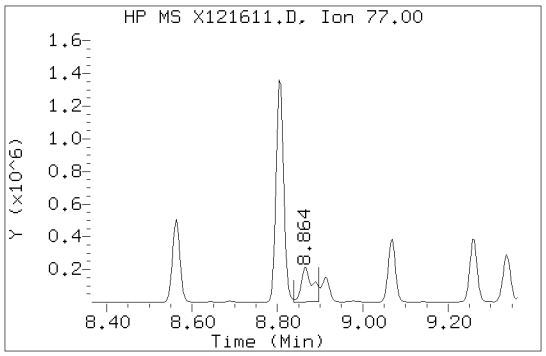

Methyl Acrylate (96-33-3)

BEFORE

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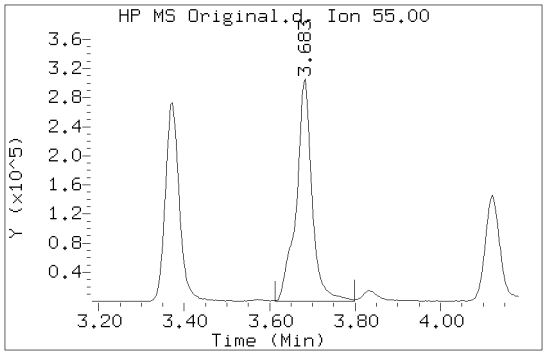

BEFORE

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27-Dec-2022
16:04
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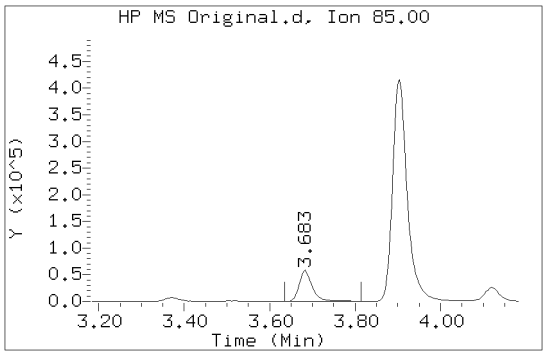

Reason Code:

AFTER

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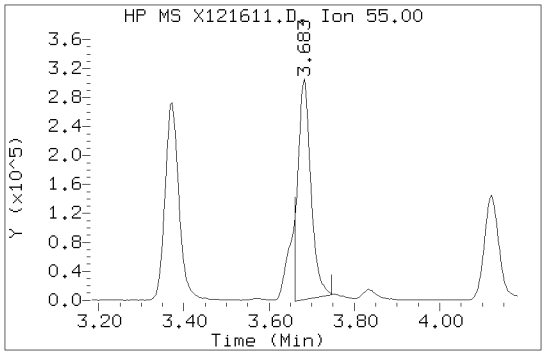

AFTER

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16:06
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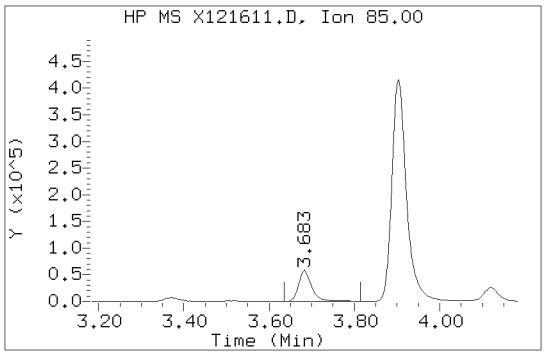

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Inj Date : 16-DEC-2022 15:07
InstruID : voa6.i
LabSampID : VSTD200

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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HEIGHT
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27-Dec-2022
16:04
linh
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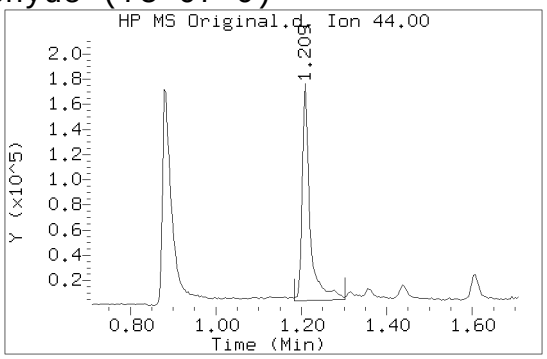

AFTER

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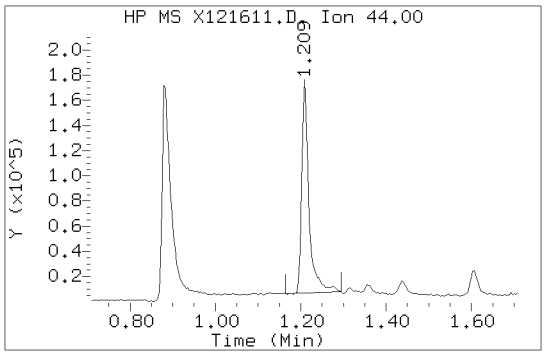

BEFORE

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27-Dec-2022
16:04
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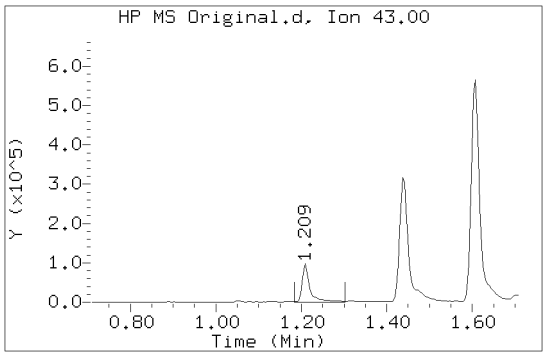

AFTER

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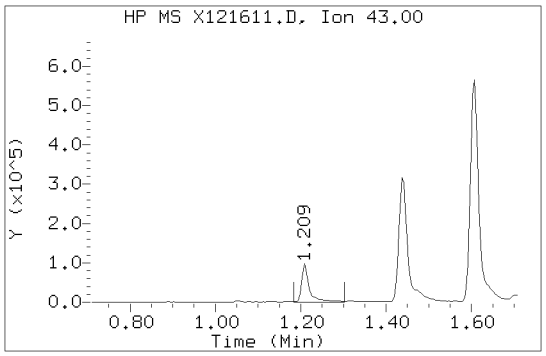

BEFORE

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27-Dec-2022
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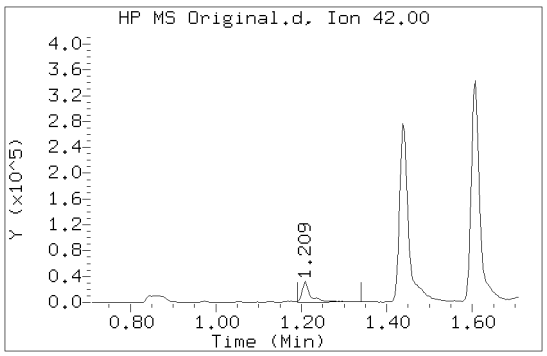

AFTER

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16:06
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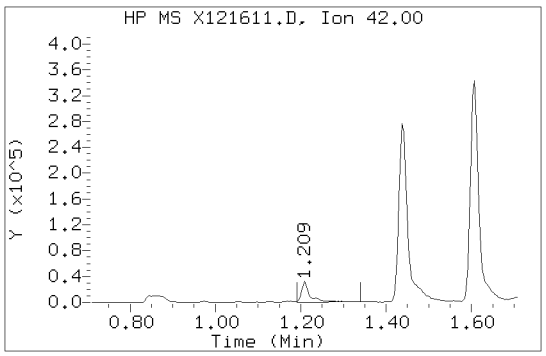


Data File: \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D Page 1
Report Date: 13-Feb-2023 13:08

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

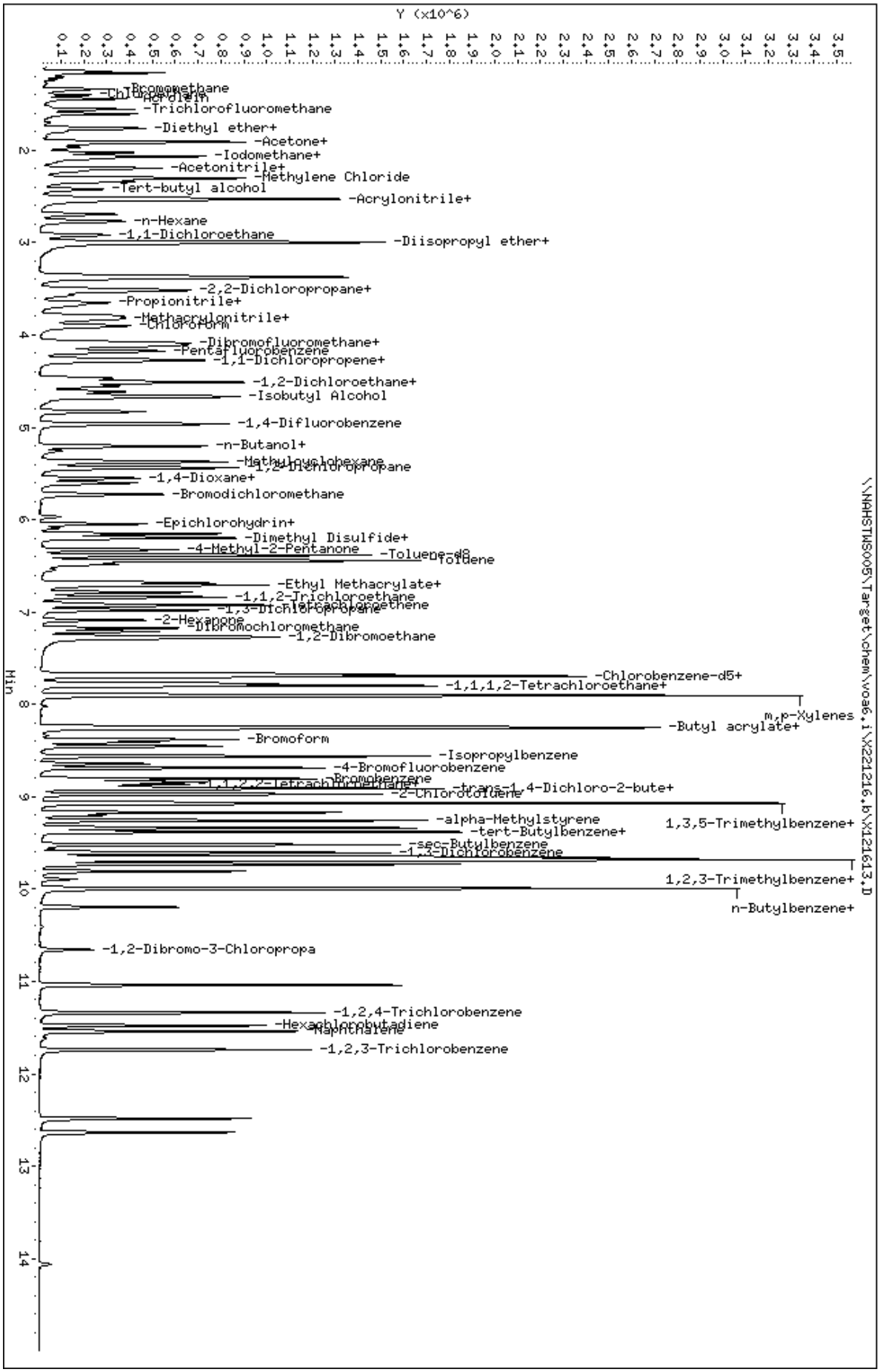
			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	417137	47.9449	47.94
	2	Dichlorodifluoromethane	85	0.972	0.969	(0.233)	166984	52.1924	52.19
	3	Chloromethane	50	1.077	1.077	(0.258)	207623	50.1741	50.17
	5	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

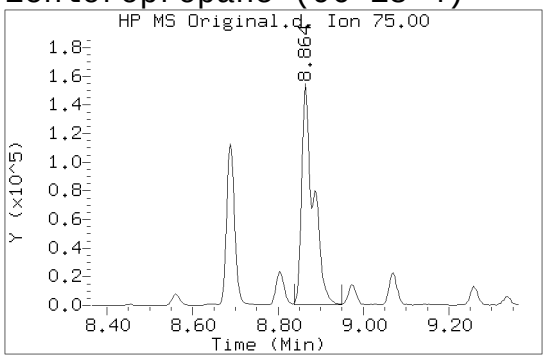
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D
Inj Date : 16-DEC-2022 15:49
InstruID : voa6.i
LabSampID : ICV

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

Reason Code:

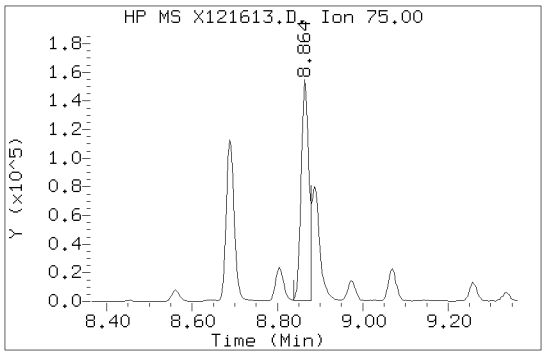
BEFORE

MASS
75
AREA
301229
HEIGHT
154590
27-Dec-2022
16:04
linh
pham



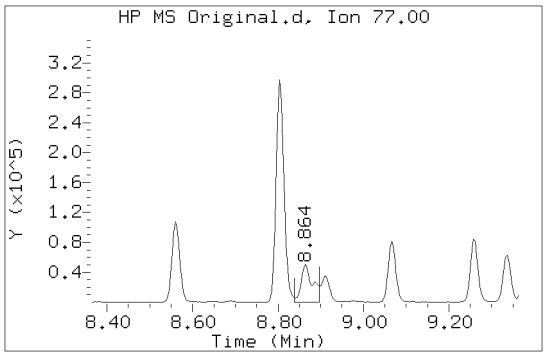
AFTER

MASS
75
AREA
201551
HEIGHT
154590
13-Feb-2023
13:08
linh
pham



BEFORE

MASS
77
AREA
98445
HEIGHT
50627
27-Dec-2022
16:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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13-Feb-2023
13:08
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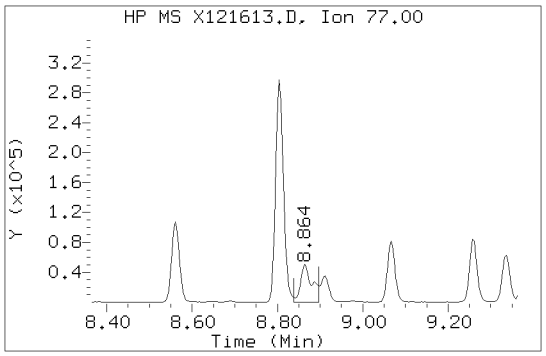
pham



Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
53
AREA
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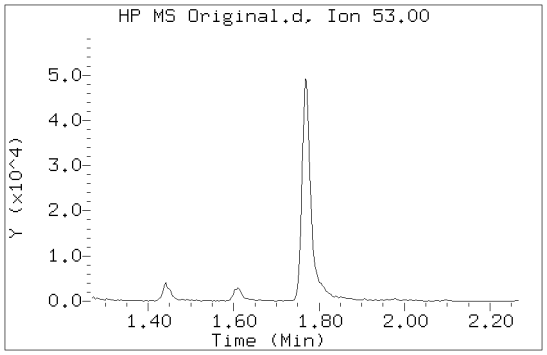
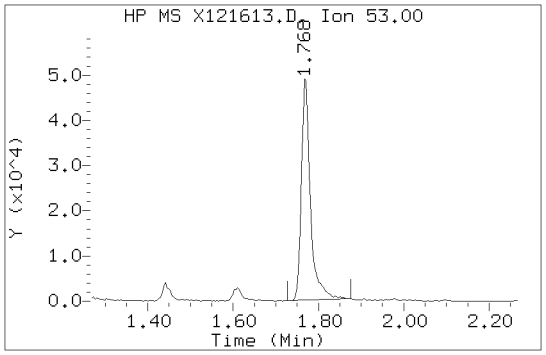
HEIGHT
0
27-Dec-2022
16:04
linh
pham



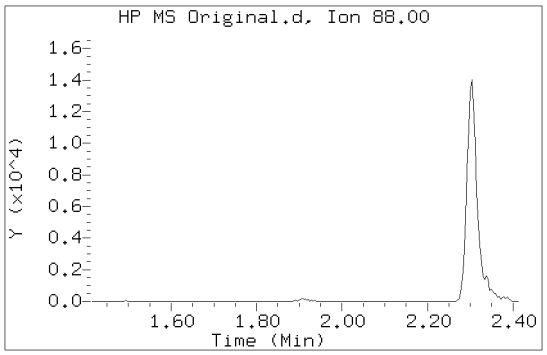
AFTER

MASS
53
AREA
74243
HEIGHT
48931
13-Feb-2023
13:08
linh
pham



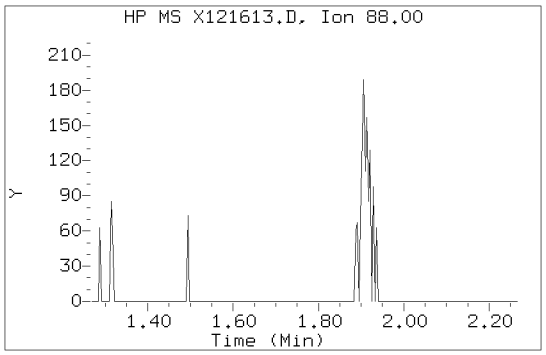
BEFORE

MASS
88
AREA
0
HEIGHT
0
27-Dec-2022
16:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
13-Feb-2023
13:08
linh
pham



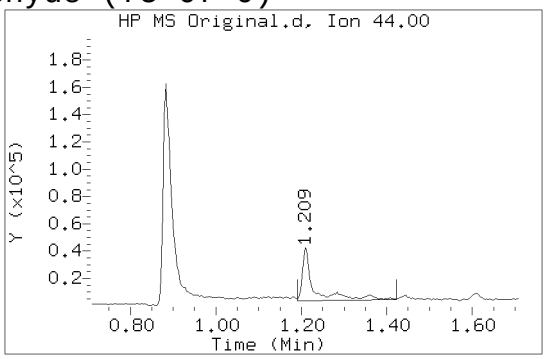
Data File : \\NAHSTWS005\Target\chem\voa6.i\X221216.b\X121613.D
Inj Date : 16-DEC-2022 15:49
InstruID : voa6.i
LabSampID : ICV

Acetaldehyde (75-07-0)

Reason Code:

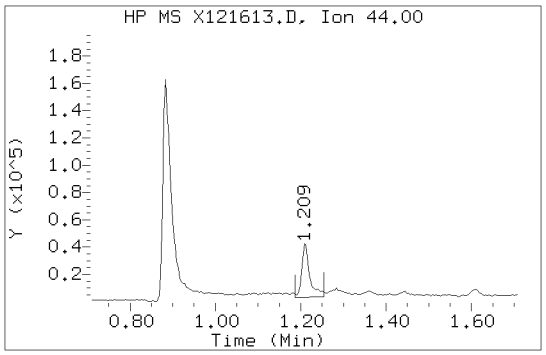
BEFORE

MASS
44
AREA
75387
HEIGHT
39303
27-Dec-2022
16:04
linh
pham



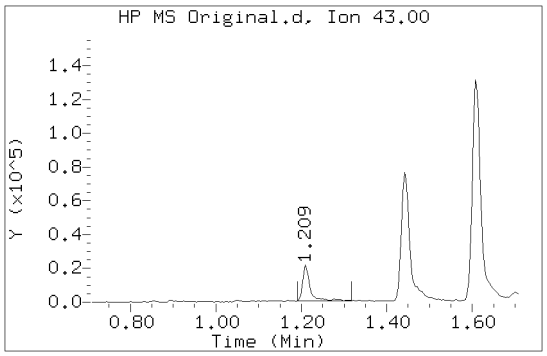
AFTER

MASS
44
AREA
52697
HEIGHT
39303
13-Feb-2023
13:08
linh
pham



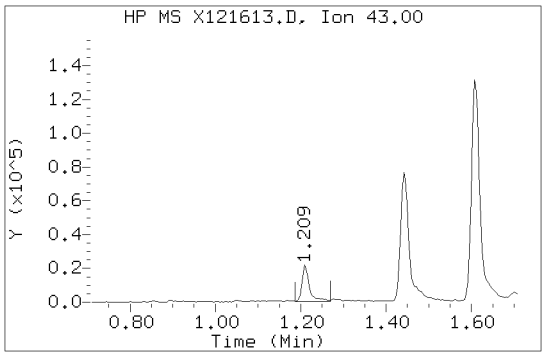
BEFORE

MASS
43
AREA
27778
HEIGHT
21502
27-Dec-2022
16:04
linh
pham



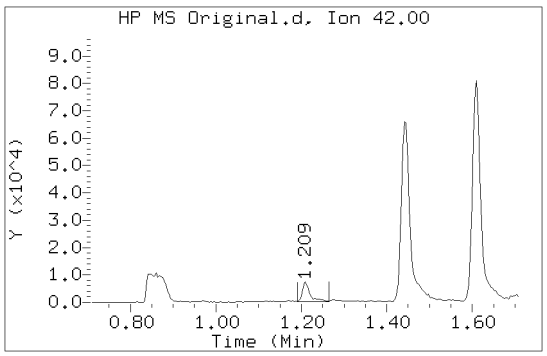
AFTER

MASS
43
AREA
26760
HEIGHT
21664
13-Feb-2023
13:08
linh
pham



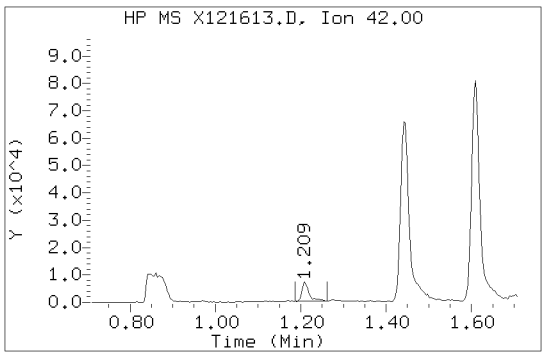
BEFORE

MASS
42
AREA
8969
HEIGHT
7131
27-Dec-2022
16:04
linh
pham



AFTER

MASS
42
AREA
8550
HEIGHT
7027
13-Feb-2023
13:08
linh
pham



right solutions.
right partner.

Raw Data VOA6 427191

Volatiles by by EPA 8260

Workorder

HS23011525

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\X230202.b\X020201.D Page 1
Report Date: 02-Feb-2023 14:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 02-FEB-2023 13:46
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\X230202.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	149696			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	26248			15.00- 40.00	17.53
8.687	8.889	(0.000)	75	70192			30.00- 60.00	46.89
8.687	8.889	(0.000)	96	10642			5.00- 9.00	7.11
8.687	8.889	(0.000)	173	627			0.00- 2.00	0.51
8.687	8.889	(0.000)	174	123608			50.00- 0.00	82.57
8.687	8.889	(0.000)	175	9737			5.00- 9.00	7.88
8.687	8.889	(0.000)	176	121272			95.00- 101.00	98.11
8.687	8.889	(0.000)	177	7731			5.00- 9.00	6.37

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.53
75	30.00 - 60.00% of mass 95	46.89
96	5.00 - 9.00% of mass 95	7.11
173	Less than 2.00% of mass 174	0.42 (0.51)
174	Greater than 50.00% of mass 95	82.57
175	5.00 - 9.00% of mass 174	6.50 (7.88)
176	95.00 - 101.00% of mass 174	81.01 (98.11)
177	5.00 - 9.00% of mass 176	5.16 (6.37)

Data File: X020201.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1573	65.20	107	96.90	424	139.00	168
37.10	6704	65.80	67	98.00	1181	140.00	301
38.00	5721	66.90	463	98.90	85	140.90	1086
39.00	3315	68.00	15484	102.80	97	141.90	228
40.00	1584	69.00	15803	103.90	845	142.90	1235
41.10	1132	70.10	1861	105.10	565	144.90	75
42.00	1681	71.00	218	105.90	711	145.70	246
42.90	1225	71.90	668	106.90	528	147.10	67
44.00	1645	73.00	6647	108.90	344	147.70	270
45.00	1341	74.00	22936	109.90	104	148.80	95
45.90	113	75.00	70192	110.60	99	149.80	127
47.00	1744	76.00	6753	112.10	130	152.70	249
47.90	1130	77.00	1133	112.90	181	153.60	75
49.00	5488	77.80	524	115.00	178	154.80	340
50.00	26248	78.90	4197	116.00	405	155.80	67
51.00	8107	79.90	1400	116.80	837	157.00	260
52.00	399	80.90	3850	117.80	532	158.80	107
53.00	192	81.90	882	118.90	826	160.90	353
54.00	224	83.10	267	120.10	140	171.20	94
55.00	2550	85.00	164	124.10	68	172.80	627
56.00	2638	86.00	148	125.80	63	173.90	123608
57.00	4162	87.00	6005	126.70	134	174.90	9737
57.90	346	87.90	5989	128.00	566	175.90	121272
58.80	124	91.00	592	129.00	327	176.90	7731
60.00	1563	91.90	3796	129.90	408	177.80	306
61.00	6378	93.00	6132	130.70	181	186.00	160
62.00	6235	94.00	15826	131.80	69	278.00	54
63.00	5087	95.00	149696	135.00	211		
64.10	453	96.00	10642	136.80	180		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D

Date : 02-FEB-2023 13:46

Client ID: BFB

Instrument: voa6.i

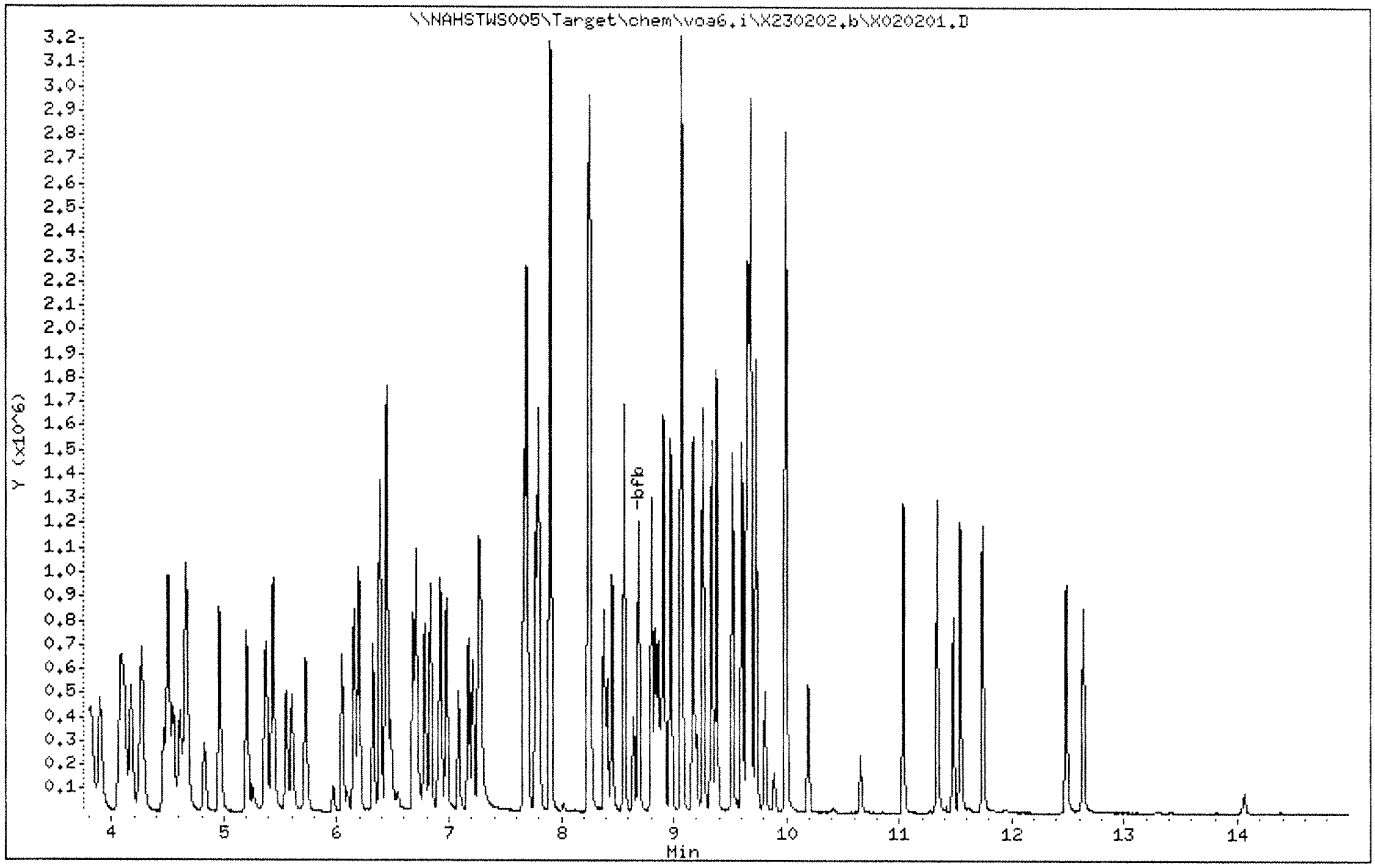
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D

Date : 02-FEB-2023 13:46

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

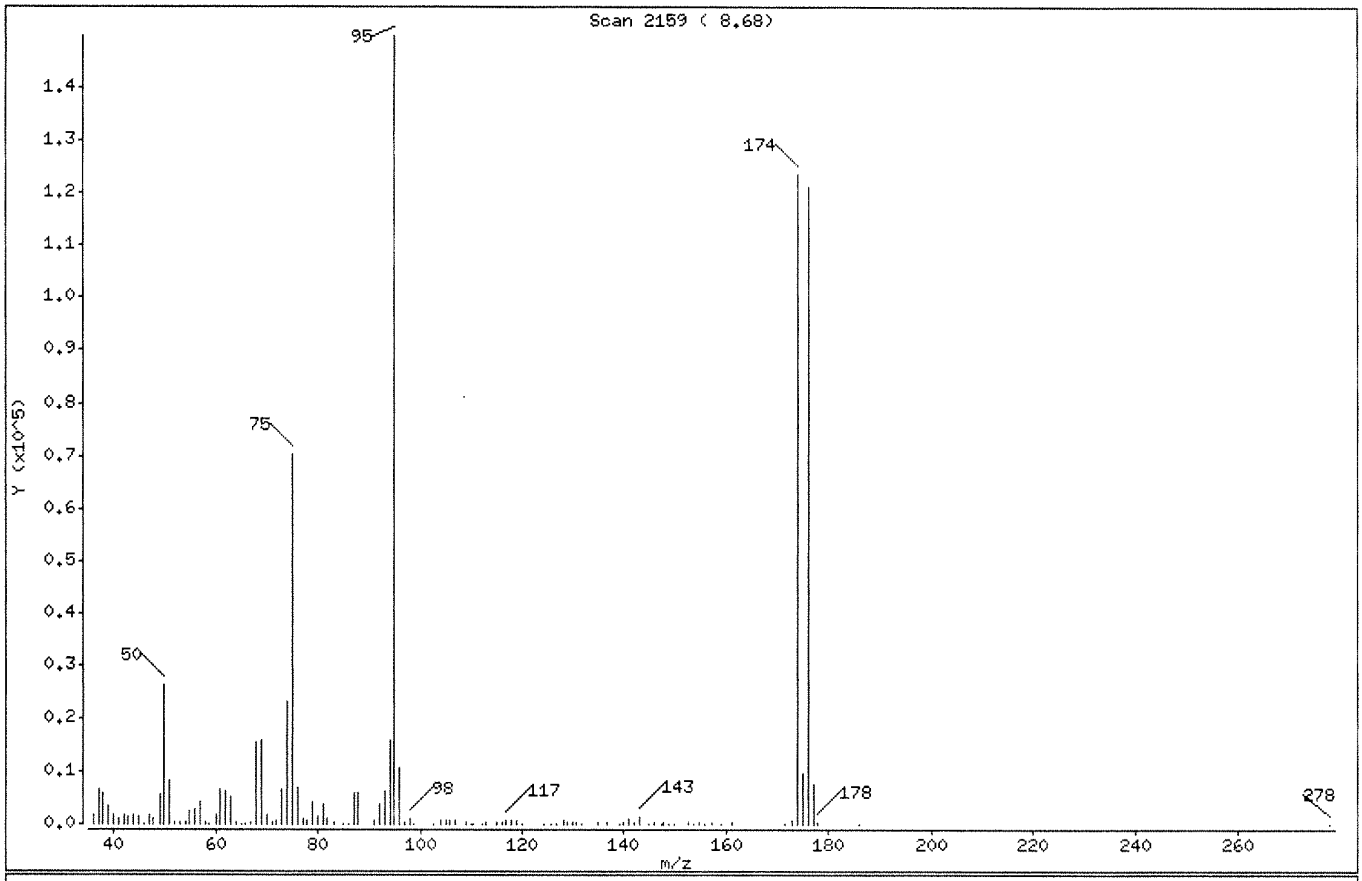
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.53
75	30.00 - 60.00% of mass 95	46.89
96	5.00 - 9.00% of mass 95	7.11
173	Less than 2.00% of mass 174	0.42 (0.51)
174	Greater than 50.00% of mass 95	82.57
175	5.00 - 9.00% of mass 174	6.50 (7.88)
176	95.00 - 101.00% of mass 174	81.01 (98.11)
177	5.00 - 9.00% of mass 176	5.16 (6.37)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D

Date : 02-FEB-2023 13:46

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: X020201.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1573	65.20	107	96.90	424	139.00	168
37.10	6704	65.80	67	98.00	1181	140.00	301
38.00	5721	66.90	463	98.90	85	140.90	1086
39.00	3315	68.00	15484	102.80	97	141.90	228
40.00	1584	69.00	15803	103.90	845	142.90	1235
41.10	1132	70.10	1861	105.10	565	144.90	75
42.00	1681	71.00	218	105.90	711	145.70	246
42.90	1225	71.90	668	106.90	528	147.10	67
44.00	1645	73.00	6647	108.90	344	147.70	270
45.00	1341	74.00	22936	109.90	104	148.80	95
45.90	113	75.00	70192	110.60	99	149.80	127
47.00	1744	76.00	6753	112.10	130	152.70	249
47.90	1130	77.00	1133	112.90	181	153.60	75
49.00	5488	77.80	524	115.00	178	154.80	340
50.00	26248	78.90	4197	116.00	405	155.80	67
51.00	8107	79.90	1400	116.80	837	157.00	260
52.00	399	80.90	3850	117.80	532	158.80	107
53.00	192	81.90	882	118.90	826	160.90	353
54.00	224	83.10	267	120.10	140	171.20	94
55.00	2550	85.00	164	124.10	68	172.80	627
56.00	2638	86.00	148	125.80	63	173.90	123608
57.00	4162	87.00	6005	126.70	134	174.90	9737
57.90	346	87.90	5989	128.00	566	175.90	121272
58.80	124	91.00	592	129.00	327	176.90	7731
60.00	1563	91.90	3796	129.90	408	177.80	306
61.00	6378	93.00	6132	130.70	181	186.00	160
62.00	6235	94.00	15826	131.80	69	278.00	54
63.00	5087	95.00	149696	135.00	211		
64.10	453	96.00	10642	136.80	180		

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020201.D
Inj Date : 02-FEB-2023 13:46
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020203.D Page 1
Report Date: 09-Feb-2023 15:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020203.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 02-FEB-2023 14:28
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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: 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)	583476	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	61218	1000.00	1147.78
140 1,3-Butadiene	54	1.164	1.164	(0.279)	174489	50.0000	43.57
25 Methacrylonitrile	41	3.818	3.818	(0.914)	215124	50.0000	52.06
12 Isobutyl Alcohol	43	4.669	4.669	(1.118)	732711	1000.00	1116.45
13 Acetonitrile	39	2.195	2.195	(0.525)	268674	500.000	505.94
14 Allyl Chloride	41	2.195	2.195	(0.525)	534010	50.0000	52.79
4 Propionitrile	54	3.645	3.645	(0.873)	311471	500.000	523.16
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	100273	50.0000	56.60
194 Acetaldehyde	44	1.209	1.209	(0.289)	50010	200.000	127.77(M)
23 Chloroprene	53	1.767	1.767	(0.423)	81327	50.0000	40.99(M)
130 Ethyl Acetate	43	3.645	3.645	(0.873)	250571	50.0000	55.03
40 Methyl Methacrylate	41	5.602	5.602	(1.341)	222203	50.0000	55.85
49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	225205	50.0000	54.34
142 Tetrahydrofuran	42	3.836	3.836	(0.918)	70376	100.000	96.92
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	502238	50.0000	50.18
156 Diisopropyl ether	45	2.993	2.993	(0.716)	762866	50.0000	50.40
182 Epichlorohydrin	57	6.093	6.093	(1.228)	85347	200.000	216.34
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1104502	50.0000	50.78
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	442612	50.0000	108.00

3 Chloromethane	50	1.074	1.074 (0.257)	267981	50.0000	50.72
5 Vinyl Chloride	62	1.141	1.141 (0.273)	217447	50.0000	42.66

	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)	158975	50.0000	41.54
	7 Chloroethane	64	1.400	1.400	(0.335)	144524	50.0000	40.73
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	304014	50.0000	42.62
	9 Acrolein	56	1.441	1.441	(0.345)	33308	100.000	83.93
	10 Acetone	43	1.966	1.966	(0.471)	180136	100.000	110.03
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	181924	50.0000	41.08
	15 Iodomethane	142	2.026	2.026	(0.485)	565777	100.000	97.15
	16 Acrylonitrile	53	2.528	2.528	(0.605)	164065	100.000	109.23
	17 Methylene Chloride	84	2.299	2.299	(0.550)	273521	50.0000	45.02
	18 Methyl tert-butyl ether	73	2.528	2.528	(0.605)	729858	50.0000	50.35
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	1010500	100.000	87.21
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	230672	50.0000	46.54
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	1221898	100.000	96.03
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	412323	50.0000	47.40
	24 2-Butanone	43	3.574	3.574	(0.856)	196507	100.000	112.75
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	354294	50.0000	47.97
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	278317	50.0000	46.14
	28 Chloroform	83	3.900	3.900	(0.934)	473684	50.0000	48.58
	29 Bromochloromethane	128	3.791	3.791	(0.908)	150403	50.0000	45.54
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	262527	50.0000	46.84
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	374944	50.0000	48.47
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	313038	50.0000	50.10
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	382055	50.0000	52.98
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	304392	50.0000	45.62
$	35 1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	298019	50.0000	50.39
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	880046	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	1024596	50.0000	48.75
	38 Trichloroethene	130	5.205	5.205	(1.049)	296779	50.0000	49.79
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	394491	50.0000	50.01
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	299069	100.000	133.28
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	275402	50.0000	49.26
	44 Dibromomethane	93	5.550	5.550	(1.119)	184545	50.0000	48.56
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	488667	100.000	111.41
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	488013	50.0000	52.68
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	820599	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	992628	50.0000	48.95
	50 Toluene	91	6.442	6.442	(0.840)	1114427	50.0000	49.13
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	422801	50.0000	55.00
	52 2-Hexanone	43	7.083	7.083	(0.924)	358355	100.000	120.08
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	228761	50.0000	50.27
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	467165	50.0000	52.15
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	339959	50.0000	51.76
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	222295	50.0000	47.36
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	302512	50.0000	53.17
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	201027	50.0000	47.26
	59 Chlorobenzene	112	7.690	7.690	(1.003)	788115	50.0000	48.98
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	307471	50.0000	51.35
	61 Ethylbenzene	106	7.799	7.799	(1.017)	373840	50.0000	49.33
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	955643	100.000	97.82
	63 o-Xylene	106	8.241	8.241	(1.075)	477399	50.0000	49.51
	64 Styrene	104	8.256	8.256	(1.077)	850913	50.0000	52.65
	66 Bromoform	173	8.410	8.410	(1.097)	237420	50.0000	52.18

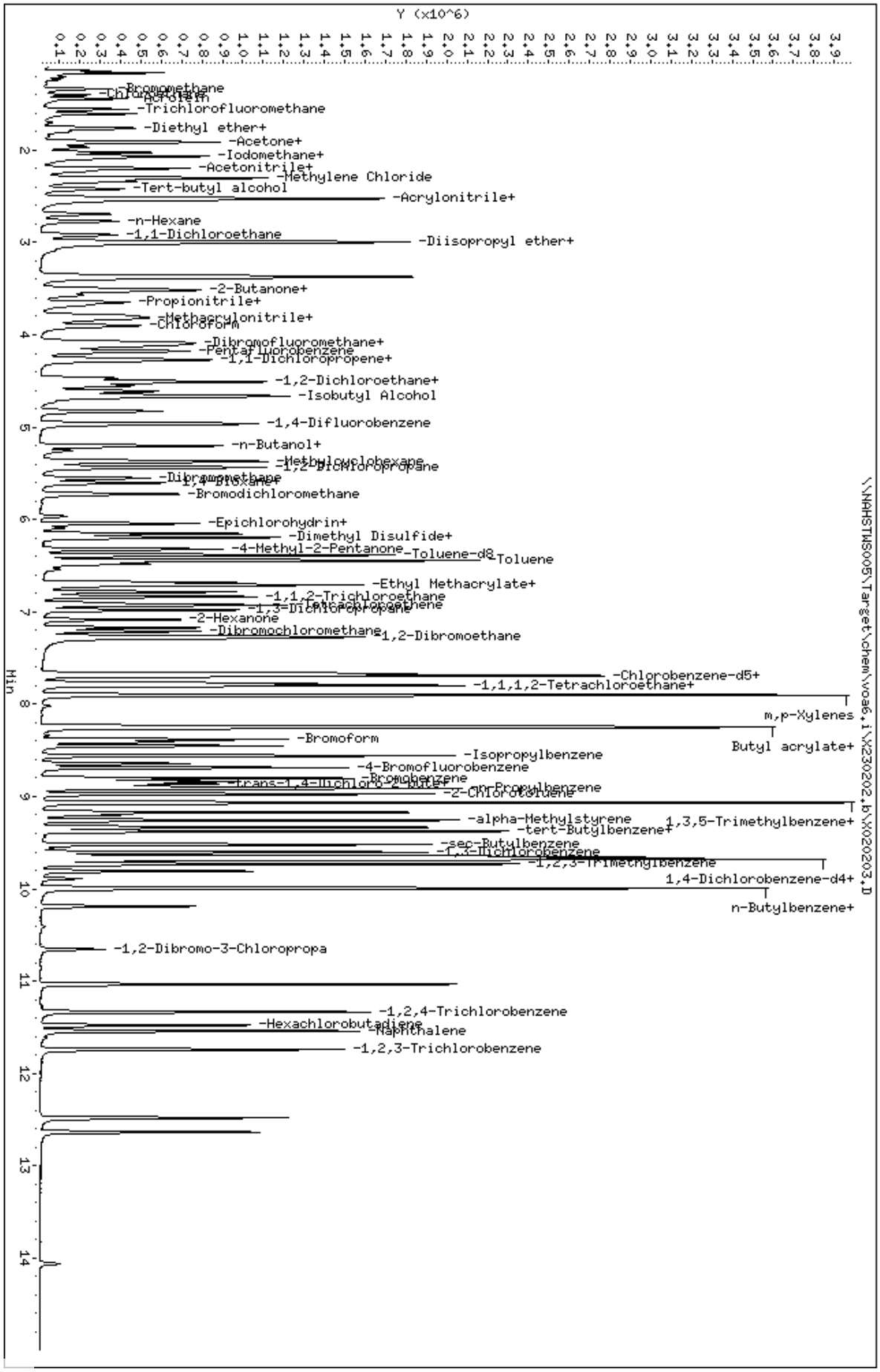
67	Isopropylbenzene	105	8.560	8.560 (1.116)	1106230	50.0000	50.21
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	365279	50.0000	50.74

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020203.D Page 3
Report Date: 09-Feb-2023 15:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	388063	50.0000	51.19
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	451653	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	293290	50.0000	58.35(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1310228	50.0000	52.37
	74 Bromobenzene	156	8.803	8.803	(0.911)	382706	50.0000	51.64
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	987073	50.0000	53.40
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	868149	50.0000	52.88
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1017565	50.0000	54.37
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	780094	50.0000	51.56
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1022536	50.0000	52.58
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1069575	50.0000	53.13
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	975729	50.0000	54.09
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	648426	50.0000	52.72
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	680507	50.0000	50.70
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	841682	50.0000	48.47
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	651006	50.0000	51.39
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	65090	50.0000	56.54
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	460295	50.0000	57.58
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	173812	50.0000	49.07
	92 Naphthalene	128	11.540	11.540	(1.194)	1060839	50.0000	58.32
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	429378	50.0000	56.08
M	94 1,2-Dichloroethylene (total)	96				508989	100.000	(a)
	141 Cyclohexane	56	4.121	4.121	(0.987)	259718	50.0000	44.30
	138 Freon TF	101	1.910	1.910	(0.457)	171329	50.0000	40.00(M)
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	605612	50.0000	56.21
	146 Methyl Acetate	43	2.228	2.228	(0.533)	143247	50.0000	54.55
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	475143	1000.00	1176.04
	149 Isopropyl Alcohol	45	2.086	2.086	(0.499)	255946	1000.00	1213.02

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;;
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Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Bromomethane
Chloroethane
Acrolein
-Trichlorofluoromethane
-Diethyl ether+
-Acetone+
-Iodomethane+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane
-1,1-Dichloroethane
-Diisopropyl ether+
-2-Butanone+
-Propionitrile+
-Methacrylonitrile+
-Chloroform
-Dibromofluoromethane+
-Pentafluorobenzene
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol
-1,4-Difluorobenzene
-n-Butanol+
-Methylcyclohexane
-1,2-Dichloropropane
-Dibromomethane
1,4-Dioxane+
-Bromodichloromethane
-Epichlorohydrin+
-Dimethyl Disulfide+
-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
Butyl acrylate+
-Bromoform
-Isopropylbenzene
-4-Bromofluorobenzene
-Bromobenzene
-trans-1,4-Dichloro-2-bute
-n-Propylbenzene
-2-Chlorotoluene
-alpha-Methylstyrene
1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
-1,3-Dichlorobenzene
-1,2,3-Trimethylbenzene
1,4-Dichlorobenzene-d4+
n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

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Inj Date : 02-FEB-2023 14:28
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

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09-Feb-2023
15:23
Kori
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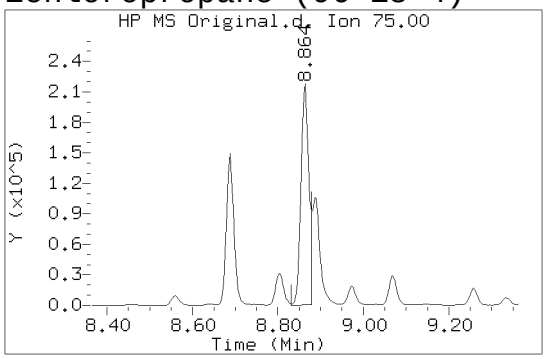

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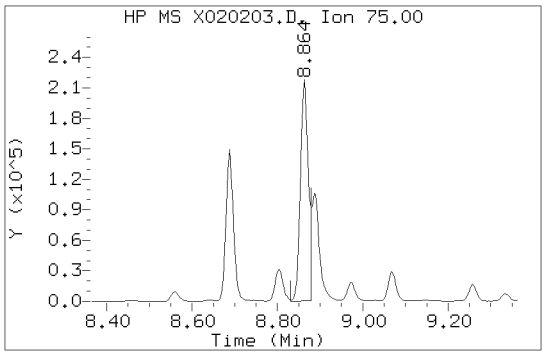

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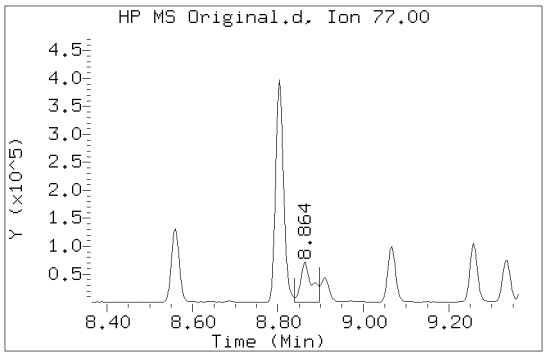

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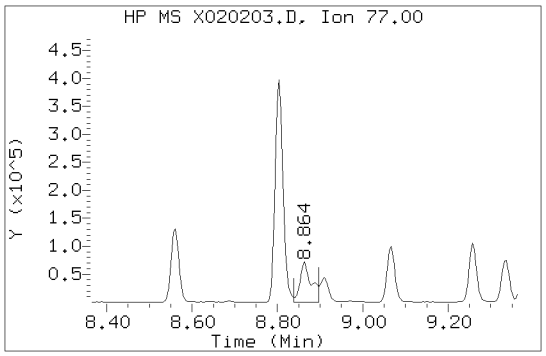

Chloroprene (126-99-8)

Reason Code:

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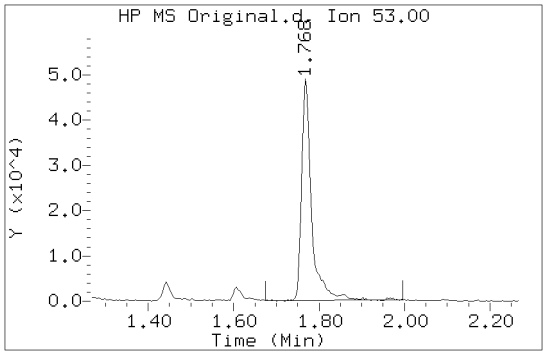

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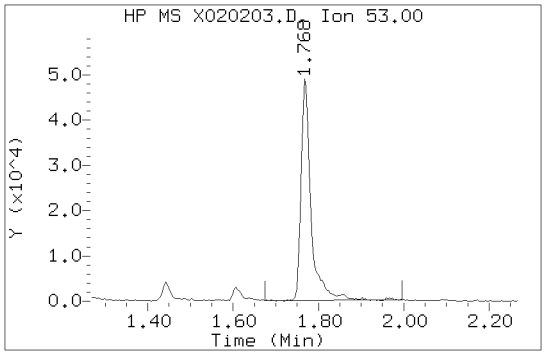

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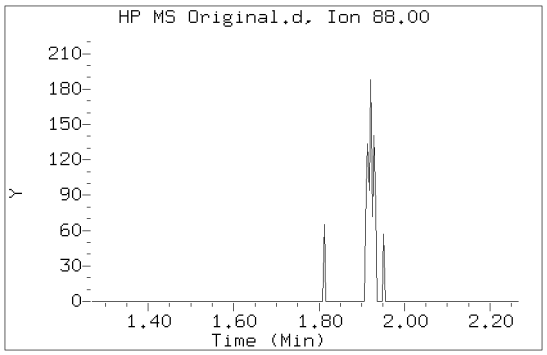

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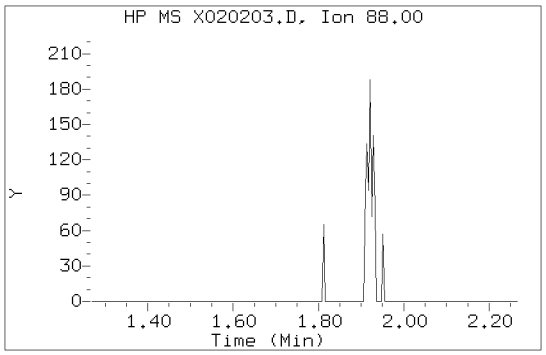

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InstruID : voa6.i
LabSampID : CCV

Freon TF (76-13-1)

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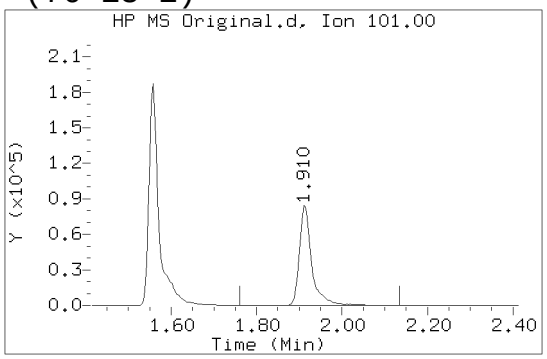

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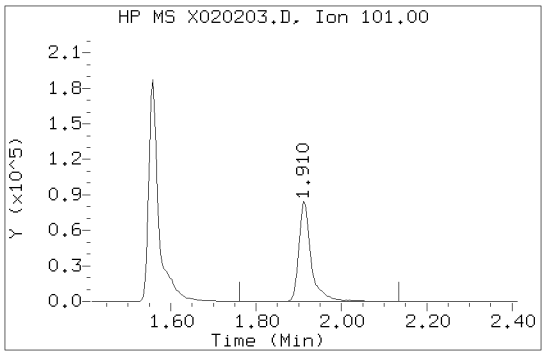

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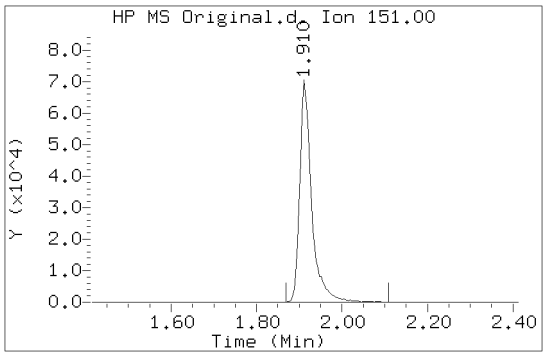

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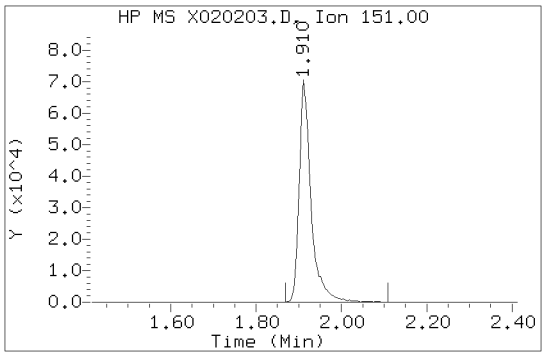

Acetaldehyde (75-07-0)

Reason Code:

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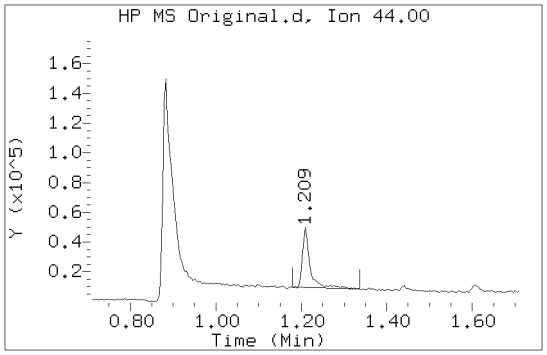

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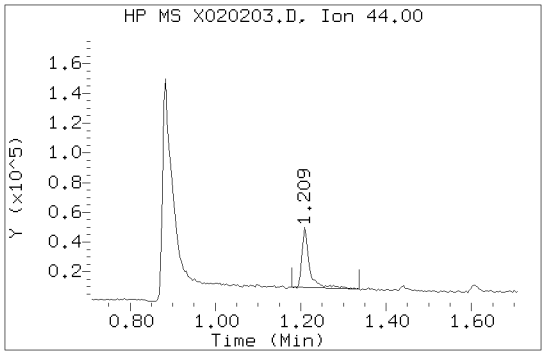

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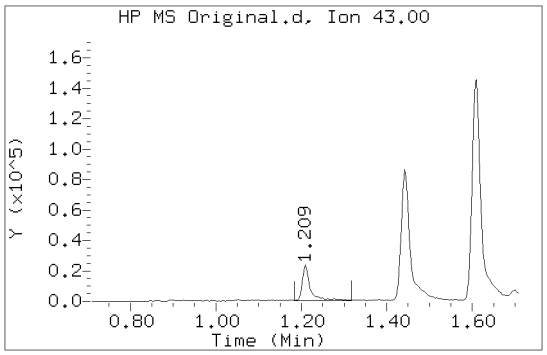

AFTER

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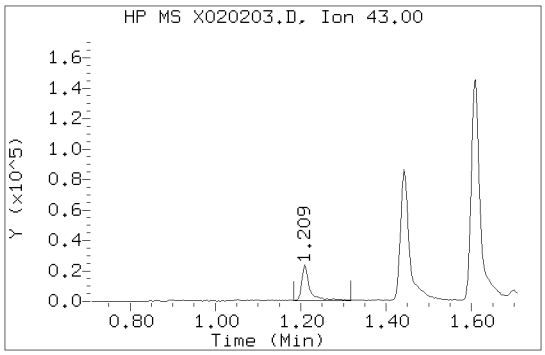

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InstruID : voa6.i
LabSampID : CCV

Acetaldehyde (75-07-0)

Reason Code:

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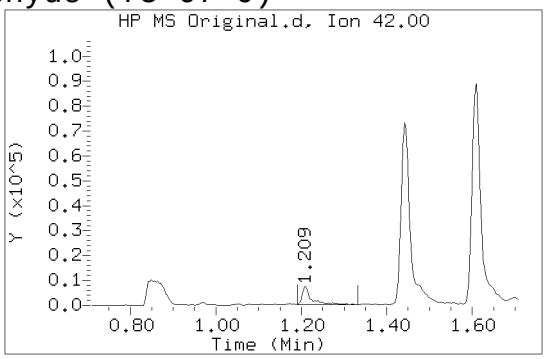

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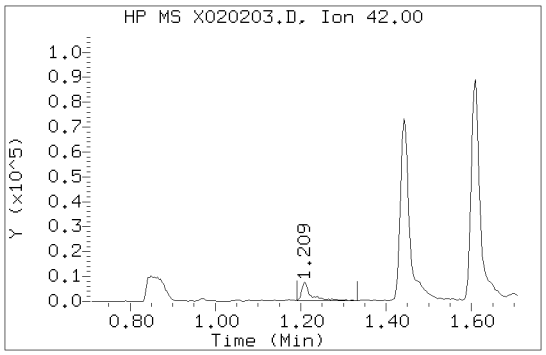


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020204.D Page 1
Report Date: 09-Feb-2023 15:23

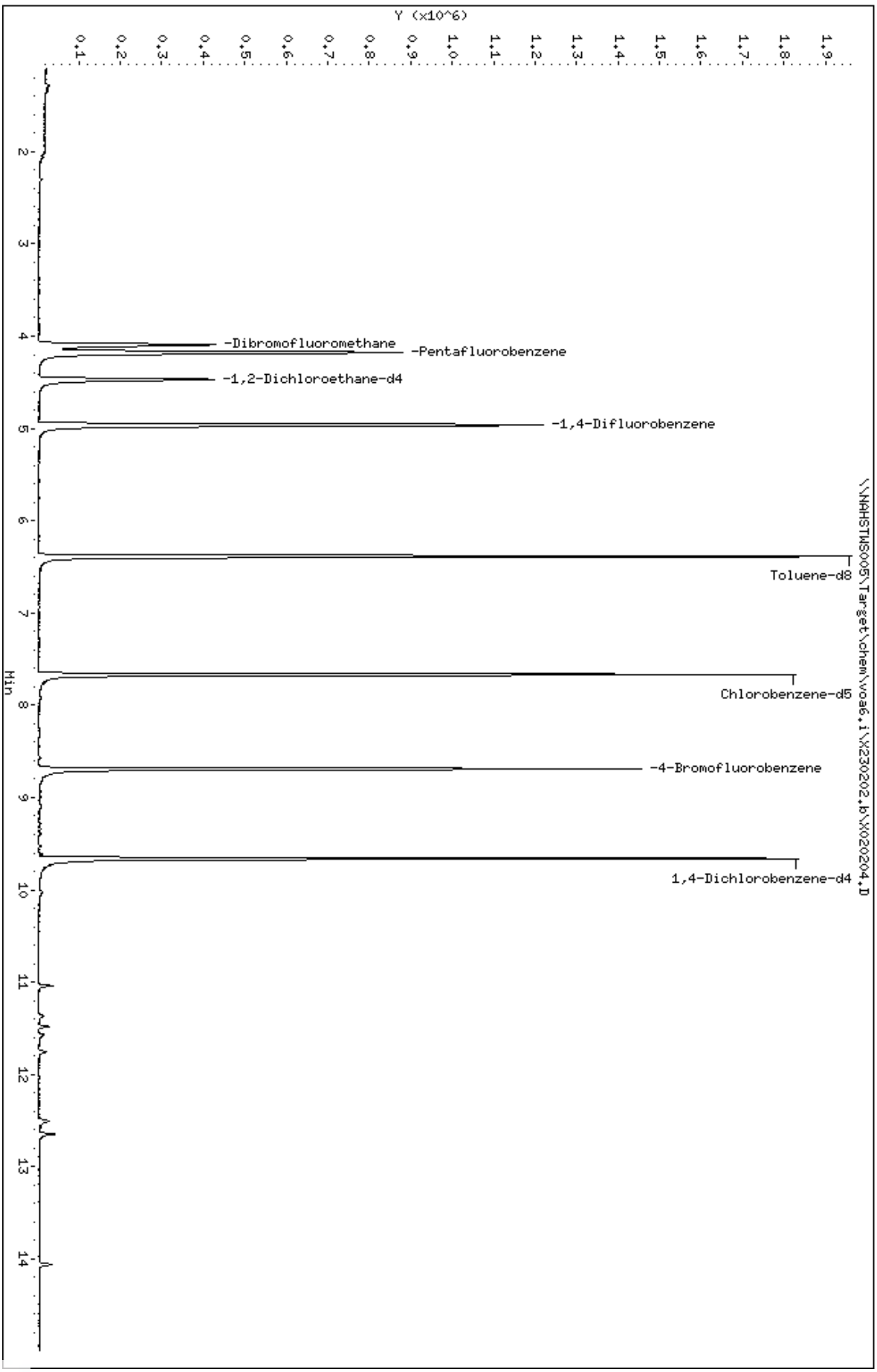
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020204.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 02-FEB-2023 14:49
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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	4.178	(1.000)	730612	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	308376	43.9374	43.93
$ 35 1,2-Dichloroethane-d4	65	4.470	4.466	(1.070)	347934	47.0055	47.00
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1012385	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	908237	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1180130	52.5830	52.58
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	424856	50.6439	50.64
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	456862	50.0000	



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Date : 02-FEB-2023 14:49
Client ID: CCB
Sample Info: CCB:CCB:::
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020204.D
Inj Date : 02-FEB-2023 14:49
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020205.D Page 1
Report Date: 09-Feb-2023 15:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020205.D
Lab Smp Id: VLCSW-230202 Client Smp ID: VLCSW-230202
Inj Date : 02-FEB-2023 15:10
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230202;VLCSW-230202;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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: 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)	594963	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	24592	452.177	452.17(a)
140 1,3-Butadiene	54	1.160	1.164	(0.278)	86267	21.1266	21.12
25 Methacrylonitrile	41	3.818	3.818	(0.914)	87366	20.7380	20.73
12 Isobutyl Alcohol	43	4.672	4.669	(1.118)	293271	438.240	438.23
13 Acetonitrile	39	2.195	2.195	(0.525)	115189	212.726	212.72
14 Allyl Chloride	41	2.195	2.195	(0.525)	220376	21.3686	21.36
4 Propionitrile	54	3.653	3.645	(0.874)	123490	203.418	203.41(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	39678	22.3095	22.30
194 Acetaldehyde	44	1.209	1.209	(0.289)	87720	236.565	236.56
23 Chloroprene	53	1.771	1.767	(0.424)	40311	19.9268	19.92(M)
130 Ethyl Acetate	43	3.656	3.645	(0.875)	108810	23.4373	23.43
40 Methyl Methacrylate	41	5.606	5.602	(1.342)	88361	21.7811	21.78
49 Ethyl Methacrylate	69	6.708	6.708	(1.351)	90634	22.0542	22.05
142 Tetrahydrofuran	42	3.840	3.836	(0.919)	27154	34.7084	34.70
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	239643	23.3661	23.36
156 Diisopropyl ether	45	2.997	2.993	(0.717)	311315	20.1709	20.17
182 Epichlorohydrin	57	6.097	6.093	(1.228)	35375	91.8801	91.88
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	470299	21.0994	21.09
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	227060	54.5299	54.52

3 Chloromethane	50	1.074	1.074 (0.257)	120708	23.6437	23.64
5 Vinyl Chloride	62	1.141	1.141 (0.273)	104505	20.1074	20.10

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020205.D Page 2
Report Date: 09-Feb-2023 15:23

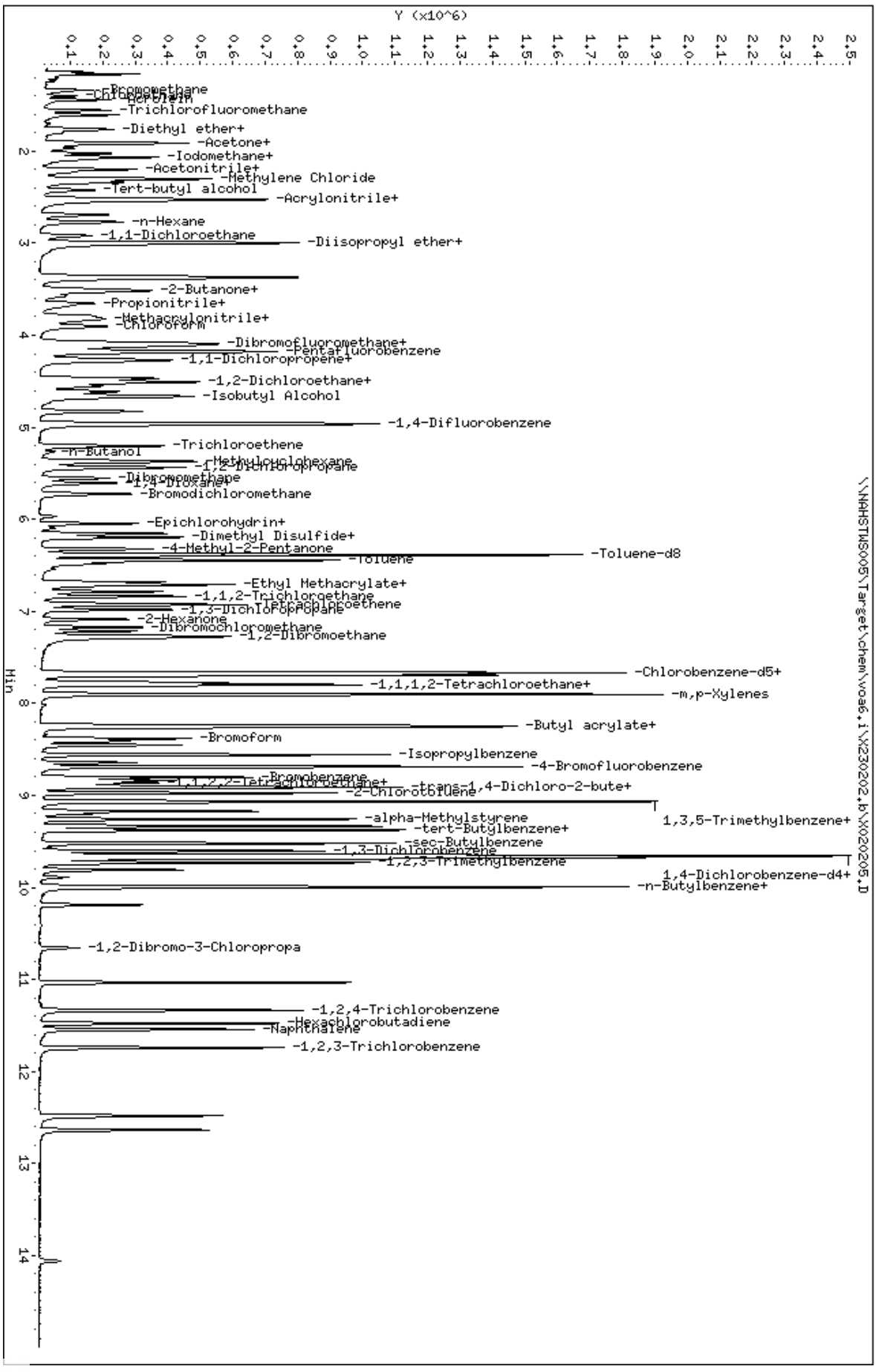
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
6	Bromomethane	94	1.336	1.336	(0.320)	71935	19.4178	19.41
7	Chloroethane	64	1.400	1.400	(0.335)	64477	17.8236	17.82
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	154853	21.2911	21.29
9	Acrolein	56	1.441	1.441	(0.345)	16111	41.2994	41.29
10	Acetone	43	1.970	1.966	(0.472)	75792	45.3817	45.38
11	1,1-Dichloroethene	96	1.910	1.910	(0.457)	84464	18.7053	18.70
15	Iodomethane	142	2.026	2.026	(0.485)	222991	40.4860	40.48
16	Acrylonitrile	53	2.532	2.528	(0.606)	66029	43.1145	43.11
17	Methylene Chloride	84	2.299	2.299	(0.550)	120639	19.4774	19.47
18	Methyl tert-butyl ether	73	2.528	2.528	(0.605)	301513	20.3998	20.39
19	Carbon Disulfide	76	2.063	2.067	(0.494)	466440	39.4813	39.48
20	trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	103777	20.5350	20.53
21	Vinyl Acetate	43	2.993	2.993	(0.716)	578196	44.5638	44.56
22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	177259	19.9858	19.98
24	2-Butanone	43	3.574	3.574	(0.856)	76905	45.1417	45.14
26	2,2-Dichloropropane	77	3.503	3.507	(0.838)	174926	23.2290	23.22
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	118520	19.2708	19.27
28	Chloroform	83	3.904	3.900	(0.935)	200779	20.1975	20.19
29	Bromochloromethane	128	3.791	3.791	(0.908)	62299	18.5007	18.50
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.980)	258273	45.1934	45.19
31	1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	177716	22.5324	22.53
32	1,1-Dichloropropene	75	4.279	4.275	(0.862)	156883	25.3212	25.32
33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	166375	23.2682	23.26
34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	155136	23.4481	23.44
$ 35	1,2-Dichloroethane-d4	65	4.466	4.466	(1.069)	305949	50.7356	50.73
* 36	1,4-Difluorobenzene	114	4.965	4.961	(1.000)	872700	50.0000	
37	Benzene	78	4.507	4.507	(0.908)	442781	21.2468	21.24
38	Trichloroethene	130	5.205	5.205	(1.048)	131469	22.2419	22.24
39	Bromodichloromethane	83	5.726	5.722	(1.153)	162465	20.7728	20.77
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	119749	53.8185	53.81
42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	113989	20.5625	20.56
44	Dibromomethane	93	5.553	5.550	(1.119)	75882	20.1389	20.13
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	199713	45.3525	45.35
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	198763	21.6395	21.63
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	823868	50.0000	
$ 48	Toluene-d8	98	6.382	6.386	(0.832)	979100	48.0933	48.09
50	Toluene	91	6.445	6.442	(0.841)	504336	22.1472	22.14
51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	173578	22.7714	22.77
52	2-Hexanone	43	7.086	7.083	(0.924)	145894	48.6955	48.69
53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	94630	20.7138	20.71
54	1,3-Dichloropropane	76	6.982	6.978	(0.911)	194962	21.6813	21.68
55	Dibromochloromethane	129	7.176	7.173	(0.936)	138469	21.0007	21.00
56	Tetrachloroethene	164	6.925	6.925	(0.903)	116973	24.8266	24.82
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	124710	21.8333	21.83
58	1-Chlorohexane	55	7.694	7.694	(1.550)	119162	28.2543	28.25
59	Chlorobenzene	112	7.694	7.690	(1.003)	353547	21.8887	21.88
60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	131209	21.8284	21.82
61	Ethylbenzene	106	7.799	7.799	(1.017)	180425	23.7138	23.71
62	m,p-Xylenes	106	7.904	7.904	(1.031)	461222	47.0243	47.02
63	o-Xylene	106	8.241	8.241	(1.075)	222271	22.9605	22.96
64	Styrene	104	8.260	8.256	(1.077)	378989	23.3572	23.35
66	Bromoform	173	8.410	8.410	(1.097)	97153	21.2686	21.26

67 Isopropylbenzene	105	8.560	8.560 (1.116)	574786	25.9890	25.98
68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	156473	21.2095	21.20

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	386427	50.7801	50.78
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	462872	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	116712	22.6606	22.66(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	693479	27.0478	27.04
	74 Bromobenzene	156	8.803	8.803	(0.911)	169211	22.2819	22.28
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	504775	26.6508	26.65
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	423017	25.1428	25.14
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	493524	25.7314	25.73
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	422004	27.2192	27.21
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	514275	25.8052	25.80
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	597762	28.9775	28.97
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	530388	28.6927	28.69
	83 1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	310849	24.6618	24.66
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	320708	23.3168	23.31
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	483146	27.9327	27.93
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	306509	23.6117	23.61
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	27762	23.5862	23.58
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	234647	28.6423	28.64
	91 Hexachlorobutadiene	225	11.476	11.480	(1.188)	123867	34.2291	34.22
	92 Naphthalene	128	11.544	11.540	(1.195)	480316	25.7687	25.76
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	214272	27.3093	27.30
M	94 1,2-Dichloroethylene (total)	96				222297	39.8058	39.80
M	95 Xylenes (total)	106				683493	69.9848	69.98
	141 Cyclohexane	56	4.118	4.121	(0.986)	162532	27.6791	27.67
	138 Freon TF	101	1.910	1.910	(0.457)	99600	22.8053	22.80
	147 Methylcyclohexane	55	5.377	5.377	(1.083)	266715	24.9673	24.96
	146 Methyl Acetate	43	2.228	2.228	(0.533)	54090	20.2040	20.20
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.580)	201447	488.983	488.98
	149 Isopropyl Alcohol	45	2.090	2.086	(0.500)	107268	498.570	498.56

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Date : 02-FEB-2023 15:10
Client ID: VLCSW-230202
Sample Info: VLCSW-230202,VLCSW-230202,3,,LCS
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Bromomethane
Chloroethane
Acrolein
Trichlorofluoromethane
Diethyl ether+
Acetone+
Iodomethane+
Acetonitrile+
Methylene Chloride
Tert-butyl alcohol
Acrylonitrile+
n-Hexane
1,1-Dichloroethane
Diisopropyl 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
1,4-Dioxane+
Bromodichloromethane
Epichlorohydrin+
Dimethyl Disulfide+
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
Butyl acrylate+
Bromoform
Isopropylbenzene
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+
n-Butylbenzene+
1,2-Dibromo-3-Chloropropa
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene

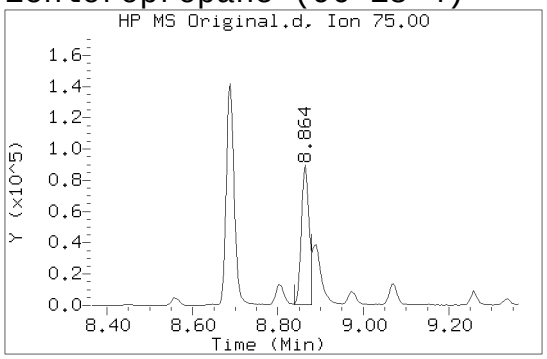
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020205.D
Inj Date : 02-FEB-2023 15:10
InstruID : voa6.i
LabSampID : VLCSW-230202

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

Reason Code:

BEFORE

MASS
75
AREA
116712
HEIGHT
89632
09-Feb-2023
15:23
Kori
Bagsby



AFTER

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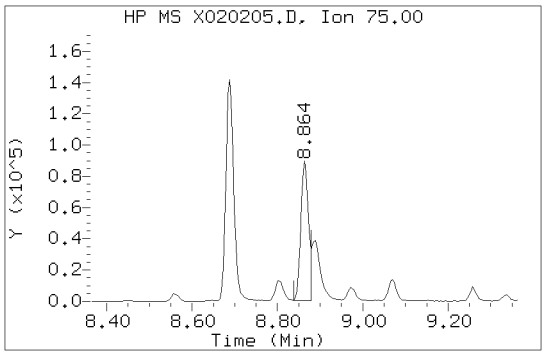

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09-Feb-2023
15:23
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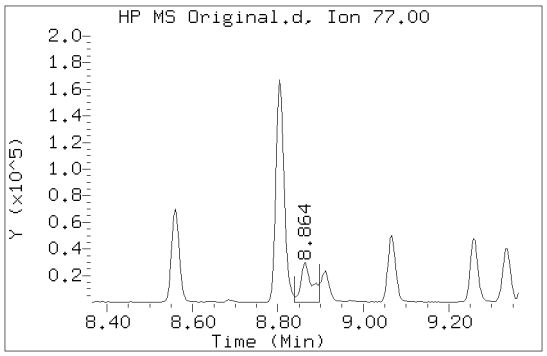
Bagsby



AFTER

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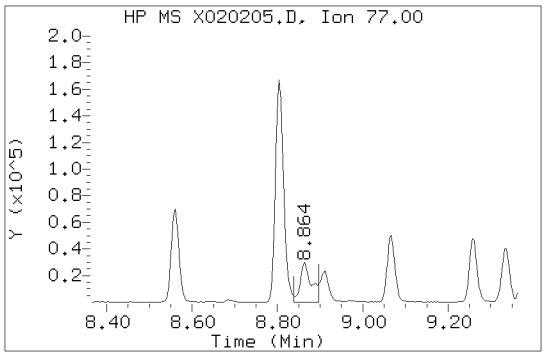
57310
HEIGHT
29644
09-Feb-2023
15:23
Kori
Bagsby



Chloroprene (126-99-8)

Reason Code:

BEFORE

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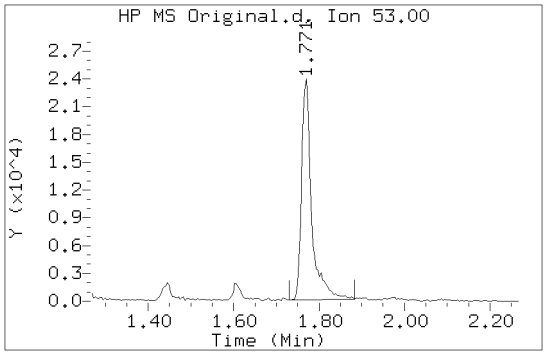
AREA
40311
HEIGHT
23856
09-Feb-2023
15:23
Kori
Bagsby



AFTER

MASS
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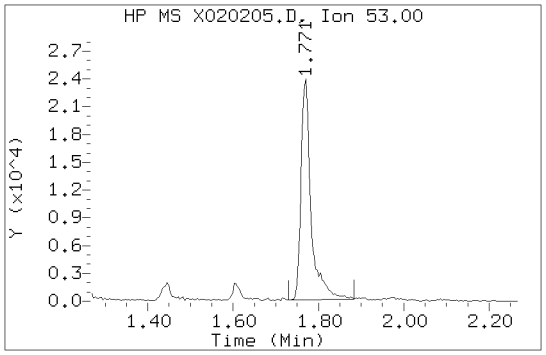
AREA
40311
HEIGHT
23856
09-Feb-2023
15:23
Kori
Bagsby



BEFORE

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AREA
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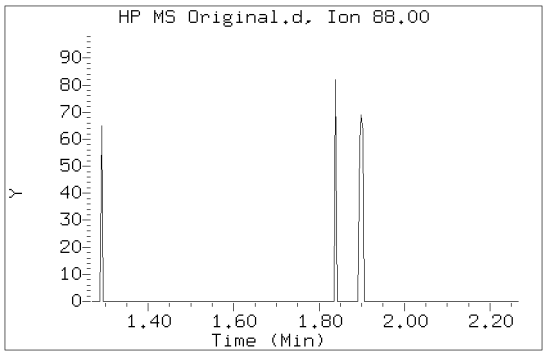
HEIGHT
0
09-Feb-2023
15:23
Kori
Bagsby



AFTER

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HEIGHT
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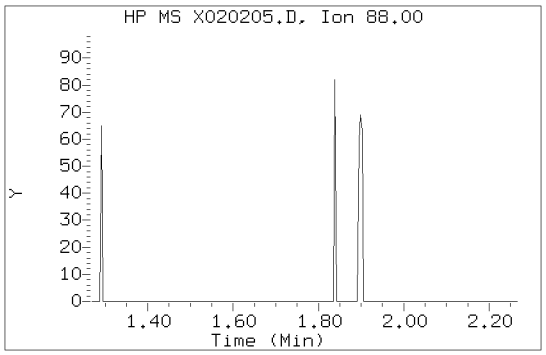
09-Feb-2023
15:23
Kori
Bagsby



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020208.D Page 1
Report Date: 09-Feb-2023 15:28

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020208.D
Lab Smp Id: VBLKW-230202 Client Smp ID: VBLKW-230202
Inj Date : 02-FEB-2023 16:13
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230202;VBLKW-230202;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 8 QC Sample: BLANK
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	4.174	4.174	(1.000)	709559	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	306011	44.8977	44.89
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	346070	48.1344	48.13
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	999005	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	876582	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1144704	52.8464	52.84
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	416641	51.4572	51.45
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	449203	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020208.D

Date : 02-FEB-2023 16:13

Client ID: VBLKW-230202

Instrument: voa6.i

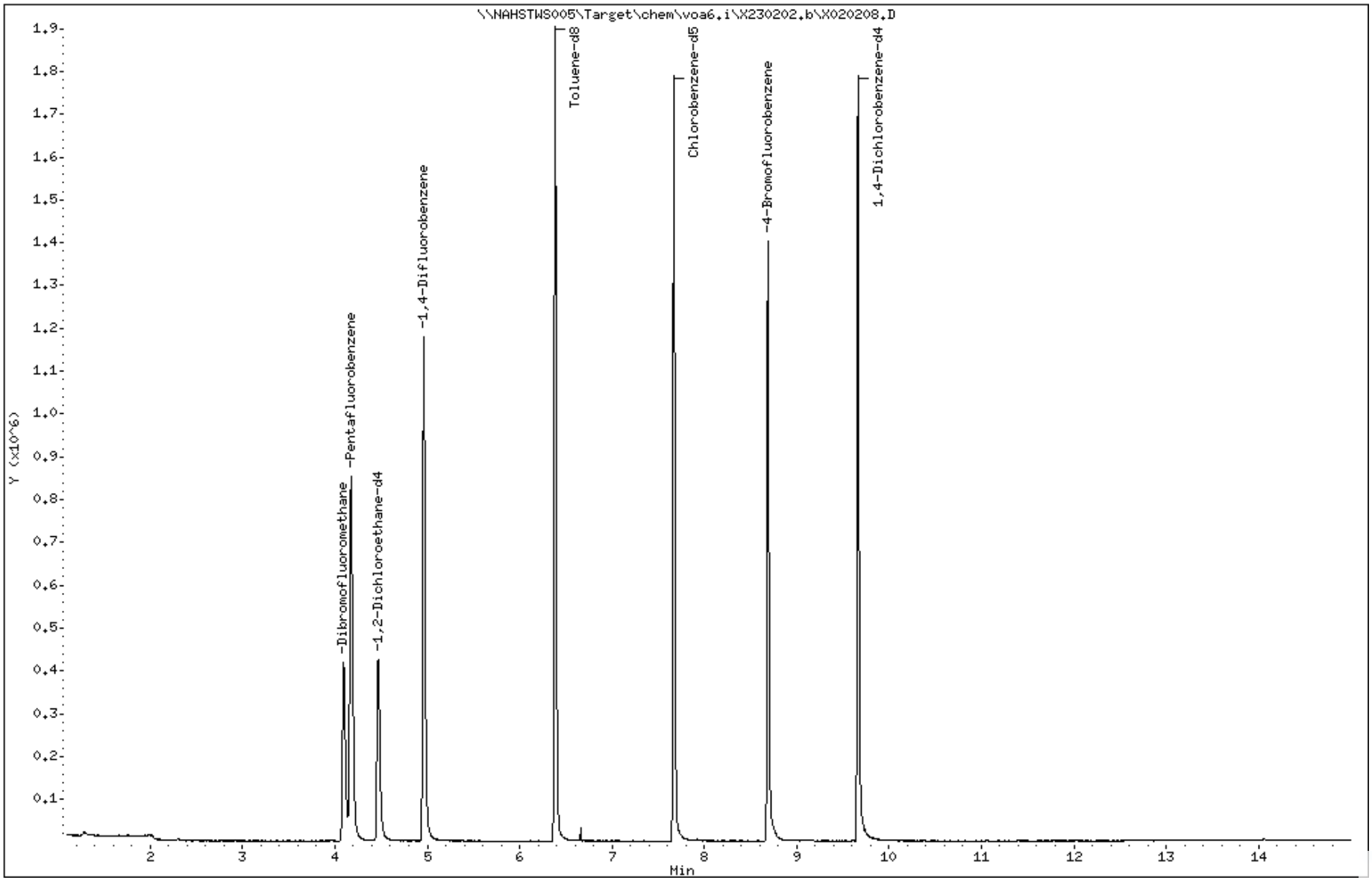
Sample Info: VBLKW-230202;VBLKW-230202;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 02-FEB-2023 16:13
InstruID : voa6.i
LabSampID : VBLKW-230202

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020209.D Page 1
Report Date: 13-Feb-2023 14:52

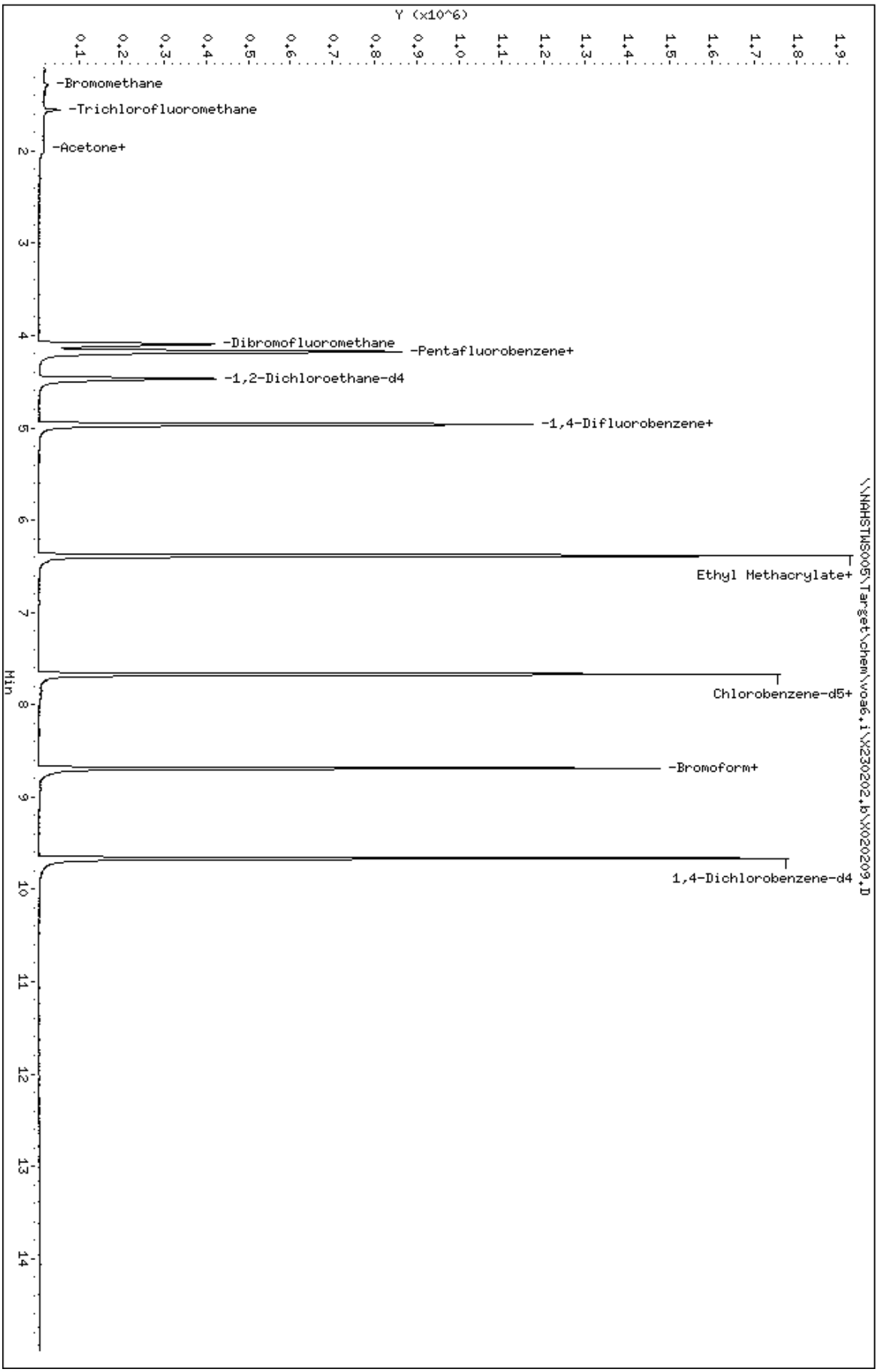
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020209.D
Lab Smp Id: HS23011525-01 Client Smp ID: HS23011525-01
Inj Date : 02-FEB-2023 16:35
Operator : PC Inst ID: voa6.i
Smp Info : HS23011525-01;HS23011525-01;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 9
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)	714642	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	300467	43.7666	43.76
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	342855	47.3525	47.35
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1000725	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	884781	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1143064	52.2817	52.28
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	418129	51.1628	51.16
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	459330	50.0000	



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Date : 02-FEB-2023 16:35
Client ID: HS23011525-01
Sample Info: HS23011525-01;HS23011525-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020209.D
Inj Date : 02-FEB-2023 16:35
InstruID : voa6.i
LabSampID : HS23011525-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020217.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020217.D
Lab Smp Id: HS23011294-08MS Client Smp ID: HS23011294-08MS
Inj Date : 02-FEB-2023 19:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23011294-08MS;HS23011294-08MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.174	(1.000)	708429	50.0000	
135	1,4-Dioxane	88	5.602	5.598	(1.341)	24851	383.753	383.75(a)
140	1,3-Butadiene	54	1.160	1.164	(0.278)	73715	15.1612	15.16
25	Methacrylonitrile	41	3.822	3.818	(0.915)	89179	17.7779	17.77
12	Isobutyl Alcohol	43	4.672	4.669	(1.118)	307933	386.449	386.44
13	Acetonitrile	39	2.195	2.195	(0.525)	123389	191.372	191.37
14	Allyl Chloride	41	2.195	2.195	(0.525)	233001	18.9742	18.97
4	Propionitrile	54	3.649	3.645	(0.873)	134255	185.730	185.72(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	39450	20.2648	20.26
194	Acetaldehyde	44	1.209	1.209	(0.289)	87439	194.247	194.24
23	Chloroprene	53	1.767	1.767	(0.423)	42672	17.7154	17.71(M)
130	Ethyl Acetate	43	3.649	3.649	(0.873)	100782	18.2312	18.23
40	Methyl Methacrylate	41	5.606	5.602	(1.342)	88596	18.3411	18.34
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	87248	18.6225	18.62
142	Tetrahydrofuran	42	3.840	3.840	(0.919)	32622	35.0475	35.04
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	224178	20.5753	20.57
156	Diisopropyl ether	45	2.997	2.997	(0.717)	336183	18.2934	18.29
182	Epichlorohydrin	57	6.097	6.093	(1.229)	20820	48.6430	48.64
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	500253	21.1260	21.12
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	55828	11.5717	11.57

3 Chloromethane	50	1.074	1.074 (0.257)	95793	16.4959	16.49
5 Vinyl Chloride	62	1.141	1.141 (0.273)	94303	15.2384	15.23

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020217.D Page 2
Report Date: 13-Feb-2023 14:53

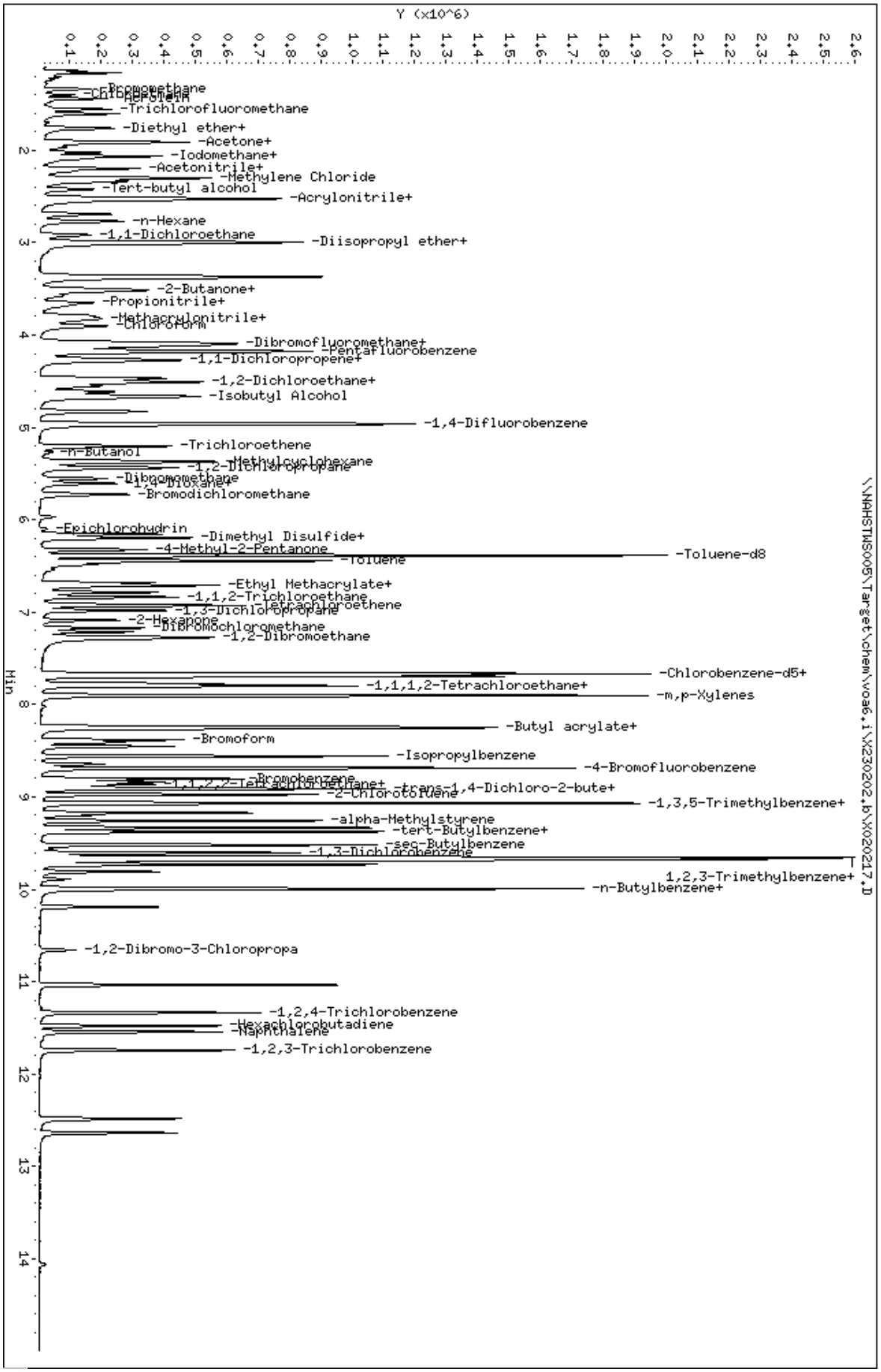
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	70530	16.3007	16.30
	7 Chloroethane	64	1.400	1.400	(0.335)	63204	14.6733	14.67
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	162865	18.8062	18.80
	9 Acrolein	56	1.441	1.441	(0.345)	17735	38.3940	38.39
	10 Acetone	43	1.970	1.970	(0.472)	48951	24.6000	24.60
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	88194	16.4031	16.40
	15 Iodomethane	142	2.026	2.026	(0.485)	194526	30.6595	30.65
	16 Acrylonitrile	53	2.532	2.528	(0.606)	70030	38.4031	38.40
	17 Methylene Chloride	84	2.300	2.300	(0.550)	118931	16.1262	16.12
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.606)	327355	18.6009	18.60
	19 Carbon Disulfide	76	2.063	2.067	(0.494)	504447	35.8596	35.85
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.604)	111768	18.5740	18.57
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	554223	35.8745	35.87
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	186405	17.6508	17.65
	24 2-Butanone	43	3.578	3.570	(0.856)	67497	34.0691	34.06
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	175533	19.5762	19.57
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	122612	16.7431	16.74
	28 Chloroform	83	3.904	3.900	(0.935)	206478	17.4440	17.44
	29 Bromochloromethane	128	3.792	3.791	(0.908)	62625	15.6188	15.61
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	293441	43.1156	43.11
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	197182	20.9963	20.99
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	168092	23.7978	23.79
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	164589	20.1910	20.19
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	170417	22.5938	22.59
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	342035	47.6518	47.65
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	994906	50.0000	
	37 Benzene	78	4.508	4.507	(0.909)	469783	19.7736	19.77
	38 Trichloroethene	130	5.205	5.205	(1.049)	143642	21.3164	21.31
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	164471	18.4462	18.44
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	115634	18.2971	18.29
	44 Dibromomethane	93	5.550	5.553	(1.119)	74891	17.4345	17.43
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.825)	199430	41.3752	41.37
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	193998	18.5264	18.52
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	901784	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1153170	51.7494	51.74
	50 Toluene	91	6.446	6.446	(0.841)	524393	21.0384	21.03
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	166592	19.1705	19.17
	52 2-Hexanone	43	7.087	7.083	(0.924)	129621	39.5259	39.52
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	91395	18.2772	18.27
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	193337	19.6429	19.64
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	137861	19.1019	19.10
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	123210	23.8909	23.89
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	124597	19.9288	19.92
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	126119	26.2308	26.23
	59 Chlorobenzene	112	7.694	7.694	(1.003)	352600	19.9439	19.94
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	131543	19.9931	19.99
	61 Ethylbenzene	106	7.799	7.795	(1.017)	187672	22.5351	22.53
	62 m,p-Xylenes	106	7.904	7.900	(1.031)	473258	44.0824	44.08
	63 o-Xylene	106	8.241	8.241	(1.075)	224700	21.2059	21.20
	64 Styrene	104	8.260	8.256	(1.077)	375201	21.1258	21.12
	66 Bromoform	173	8.410	8.410	(1.097)	93733	18.7470	18.74
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	590482	24.3918	24.39

	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	152287	19.4305	19.43
$	69 4-Bromofluorobenzene	95	8.687	8.687 (1.133)	435042	52.2272	52.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	491734	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	112855	20.6257	20.62(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	691934	25.4035	25.40
	74 Bromobenzene	156	8.803	8.803	(0.911)	167031	20.7038	20.70
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	499047	24.8018	24.80
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	417759	23.3729	23.37
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	482406	23.6755	23.67
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	433998	26.3498	26.34
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	496696	23.4603	23.46
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	605534	27.6313	27.63
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	525432	26.7562	26.75
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	294969	22.0283	22.02
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	307479	21.0429	21.04
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	452118	24.8162	24.81
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	284576	20.6354	20.63
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	25952	20.7654	20.76
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.173)	199654	22.9404	22.94
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	99660	25.9618	25.96
	92 Naphthalene	128	11.544	11.540	(1.195)	429341	21.6819	21.68
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	183659	22.0337	22.03
M	94 1,2-Dichloroethylene (total)	96				234380	35.3170	35.31
M	95 Xylenes (total)	106				697958	65.2883	65.28
	141 Cyclohexane	56	4.121	4.118	(0.987)	183976	26.3751	26.37
	138 Freon TF	101	1.913	1.913	(0.458)	102856	19.7788	19.77
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	293793	24.1240	24.12
	146 Methyl Acetate	43	2.228	2.225	(0.533)	56470	17.7146	17.71
	148 Tert-Butyl alcohol	59	2.427	2.419	(0.581)	197904	403.442	403.44
	149 Isopropyl Alcohol	45	2.090	2.086	(0.500)	106810	416.928	416.92

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 : 02-FEB-2023 19:23
Client ID: HS23011294-08HS
Sample Info: HS23011294-08HS;HS23011294-08HS;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\X230202.b\X020217.D
Inj Date : 02-FEB-2023 19:23
InstruID : voa6.i
LabSampID : HS23011294-08MS

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

Reason Code:

BEFORE

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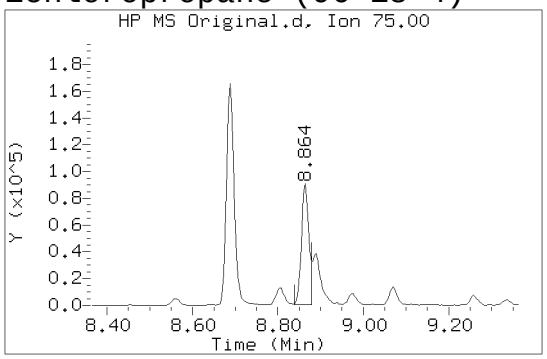
09-Feb-2023
15:23
Kori
Bagsby



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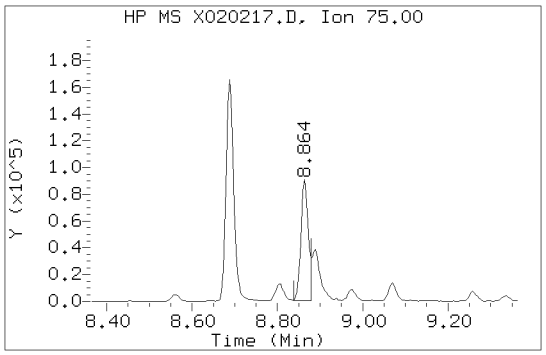
Bags



BEFORE

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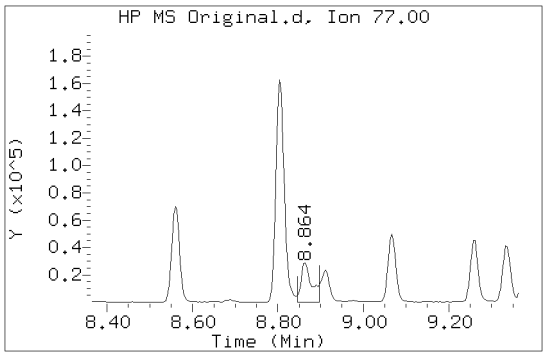
09-Feb-2023
15:23
Kori
Bagsby



AFTER

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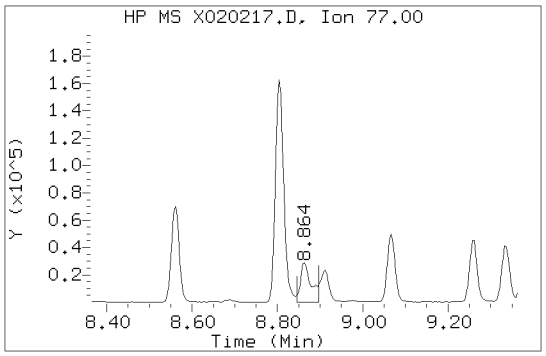

Chloroprene (126-99-8)

Reason Code:

BEFORE

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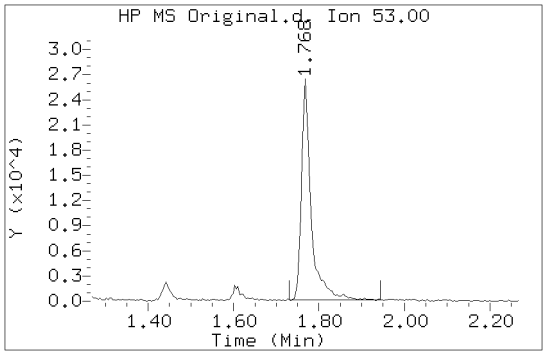

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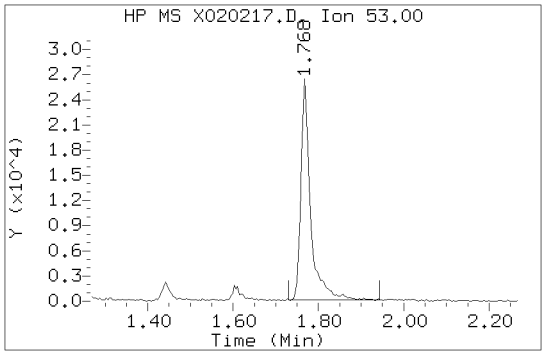

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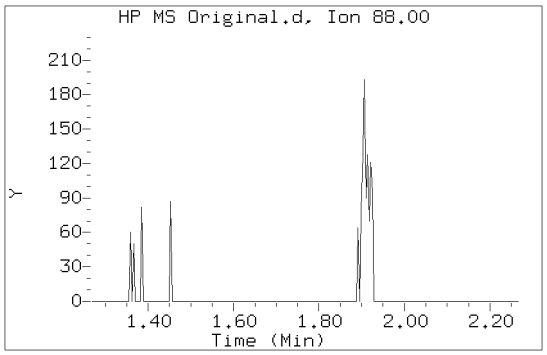

AFTER

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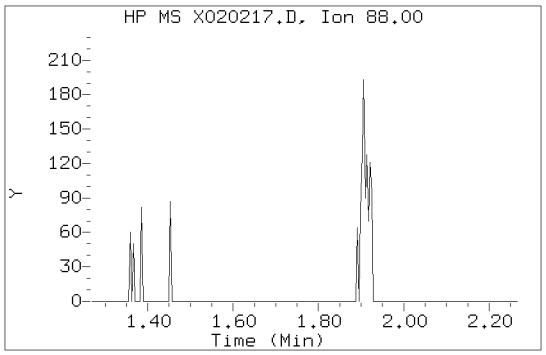

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Report Date: 14-Feb-2023 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020218.D
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Operator : PC Inst ID: voa6.i
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Misc Info : V6;WATER;0;1;
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Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	712554	50.0000	
135 1,4-Dioxane	88	5.602	5.598	(1.341)	24829	381.194	381.19(a)
140 1,3-Butadiene	54	1.160	1.164	(0.278)	69336	14.1780	14.17
25 Methacrylonitrile	41	3.818	3.818	(0.914)	87643	17.3706	17.37
12 Isobutyl Alcohol	43	4.672	4.669	(1.118)	292650	365.143	365.14
13 Acetonitrile	39	2.194	2.195	(0.525)	118953	183.424	183.42
14 Allyl Chloride	41	2.194	2.195	(0.525)	231115	18.7117	18.71
4 Propionitrile	54	3.649	3.645	(0.873)	130251	179.147	179.14(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	38038	19.4910	19.49
194 Acetaldehyde	44	1.209	1.209	(0.289)	85168	187.370	187.37
23 Chloroprene	53	1.767	1.767	(0.423)	42481	17.5340	17.53(M)
130 Ethyl Acetate	43	3.653	3.649	(0.874)	100150	18.0120	18.01
40 Methyl Methacrylate	41	5.606	5.602	(1.342)	89452	18.4111	18.41
49 Ethyl Methacrylate	69	6.712	6.708	(1.353)	83095	17.6304	17.63
142 Tetrahydrofuran	42	3.840	3.840	(0.919)	31005	32.9430	32.94
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	219916	20.2218	20.22
156 Diisopropyl ether	45	2.997	2.997	(0.717)	337966	18.2840	18.28
182 Epichlorohydrin	57	6.097	6.093	(1.229)	19435	45.3167	45.31
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	494570	20.9250	20.92
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	52801	10.9044	10.90

3 Chloromethane	50	1.074	1.074 (0.257)	92555	15.9331	15.93
5 Vinyl Chloride	62	1.141	1.141 (0.273)	91691	14.7305	14.73

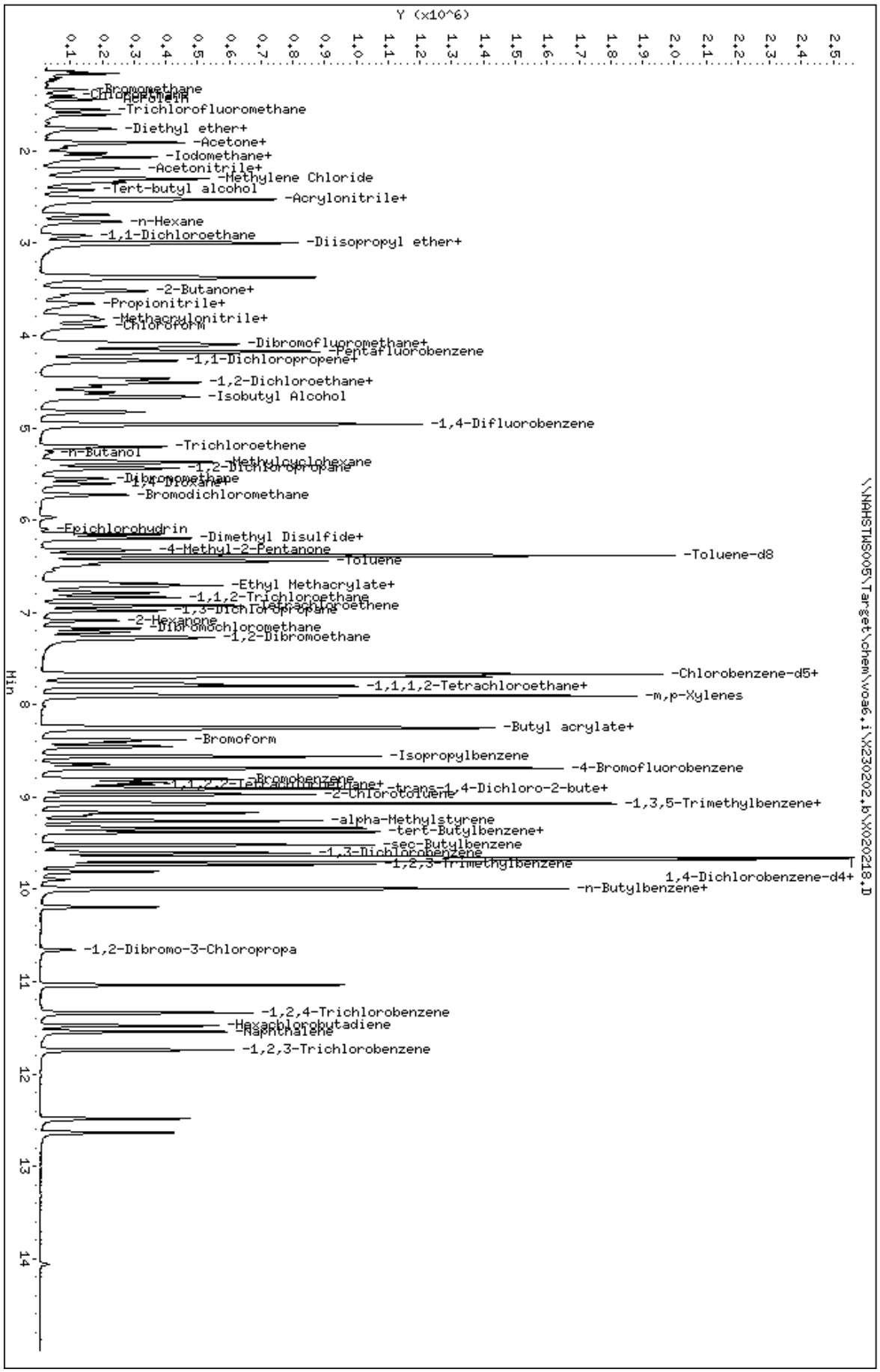
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	66976	15.4883	15.48
	7 Chloroethane	64	1.400	1.400	(0.335)	61292	14.1471	14.14
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	157793	18.1150	18.11
	9 Acrolein	56	1.441	1.441	(0.345)	16902	36.5269	36.52
	10 Acetone	43	1.970	1.970	(0.472)	50962	25.4636	25.46
	11 1,1-Dichloroethene	96	1.910	1.910	(0.457)	85788	15.8633	15.86
	15 Iodomethane	142	2.022	2.026	(0.484)	214690	33.2864	33.28
	16 Acrylonitrile	53	2.532	2.528	(0.606)	69967	38.1465	38.14
	17 Methylene Chloride	84	2.299	2.300	(0.550)	114130	15.3856	15.38
	18 Methyl tert-butyl ether	73	2.528	2.532	(0.605)	320998	18.1341	18.13
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	484349	34.2315	34.23
	20 trans-1,2-Dichloroethene	96	2.528	2.524	(0.605)	105773	17.4759	17.47
	21 Vinyl Acetate	43	2.993	2.993	(0.716)	547809	35.2540	35.25
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	178597	16.8135	16.81
	24 2-Butanone	43	3.578	3.570	(0.856)	66662	33.5075	33.50
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	167311	18.5512	18.55
	27 cis-1,2-Dichloroethene	96	3.525	3.522	(0.844)	120098	16.3048	16.30
	28 Chloroform	83	3.904	3.900	(0.935)	203146	17.0632	17.06
	29 Bromochloromethane	128	3.791	3.791	(0.908)	60953	15.1138	15.11
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	295054	43.1015	43.10
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	189115	20.0207	20.02
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	160857	22.6378	22.63
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	161237	19.6619	19.66
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	162812	21.4569	21.45
$	35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.069)	342861	47.4912	47.49
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1000871	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	457092	19.1247	19.12
	38 Trichloroethene	130	5.205	5.205	(1.049)	136470	20.1314	20.13
	39 Bromodichloromethane	83	5.726	5.722	(1.154)	161890	18.0485	18.04
	42 1,2-Dichloropropane	63	5.437	5.433	(1.096)	114998	18.0880	18.08
	44 Dibromomethane	93	5.550	5.553	(1.119)	74938	17.3414	17.34
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	190891	39.5054	39.50
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	194406	18.4548	18.45
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	904027	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1162118	52.0216	52.02
	50 Toluene	91	6.445	6.446	(0.841)	510049	20.4121	20.41
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	166298	19.0226	19.02
	52 2-Hexanone	43	7.086	7.083	(0.924)	132372	40.2646	40.26
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	93302	18.6122	18.61
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	191052	19.3626	19.36
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	136848	18.9145	18.91
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	118869	22.9920	22.99
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	122788	19.5907	19.59
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	121704	25.1616	25.16
	59 Chlorobenzene	112	7.694	7.694	(1.003)	346334	19.5409	19.54
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	127318	19.3029	19.30
	61 Ethylbenzene	106	7.799	7.795	(1.017)	180484	21.6182	21.61
	62 m,p-Xylenes	106	7.904	7.900	(1.031)	458205	42.5744	42.57
	63 o-Xylene	106	8.241	8.241	(1.075)	216130	20.3465	20.34
	64 Styrene	104	8.260	8.256	(1.077)	365978	20.5553	20.55
	66 Bromoform	173	8.410	8.410	(1.097)	91342	18.2234	18.22
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	574957	23.6916	23.69

	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	150651	19.2577	19.25
$	69 4-Bromofluorobenzene	95	8.687	8.687 (1.133)	441506	52.8709	52.87

	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)	490817	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	111841	20.4785	20.47(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	670838	24.6750	24.67
	74 Bromobenzene	156	8.803	8.803	(0.911)	162224	20.1456	20.14
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	483759	24.0870	24.08
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	400488	22.4485	22.44
	77 4-Chlorotoluene	91	9.069	9.070	(0.939)	460698	22.6523	22.65
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	420910	25.6029	25.60
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	481457	22.7830	22.78
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	586923	26.8321	26.83
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	514550	26.2510	26.25
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	290321	21.7217	21.72
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	302775	20.7597	20.75
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	451206	24.8126	24.81
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	286124	20.7864	20.78
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	25171	20.1807	20.18
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	199516	22.9674	22.96
	91 Hexachlorobutadiene	225	11.480	11.476	(1.188)	99088	25.8615	25.86
	92 Naphthalene	128	11.544	11.540	(1.195)	426811	21.5944	21.59
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	180695	21.7186	21.71
M	94 1,2-Dichloroethylene (total)	96				225871	33.7808	33.78
M	95 Xylenes (total)	106				674335	62.9209	62.92
	141 Cyclohexane	56	4.121	4.118	(0.987)	179412	25.6103	25.61
	138 Freon TF	101	1.910	1.913	(0.457)	98869	18.9021	18.90
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	285909	23.3367	23.33
	146 Methyl Acetate	43	2.232	2.225	(0.534)	56914	17.7505	17.75
	148 Tert-Butyl alcohol	59	2.423	2.419	(0.580)	194949	395.117	395.11
	149 Isopropyl Alcohol	45	2.093	2.086	(0.501)	105102	407.886	407.88

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 02-FEB-2023 19:44
InstruID : voa6.i
LabSampID : HS23011294-08MSD

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

Reason Code:

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13-Feb-2023
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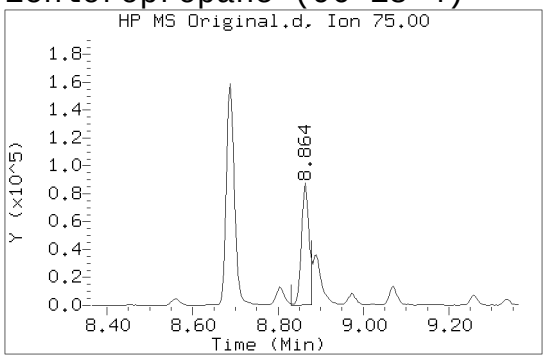

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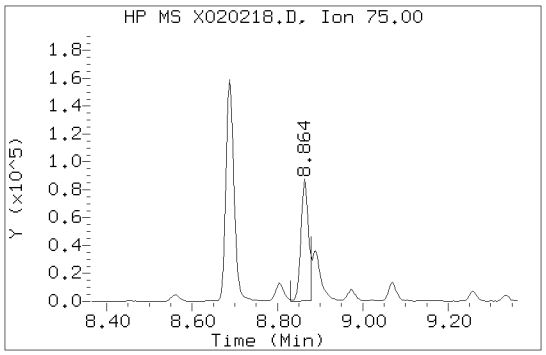

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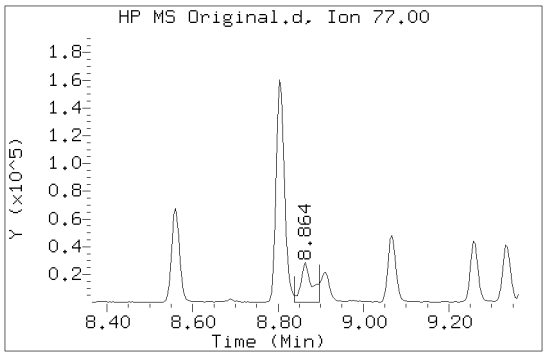

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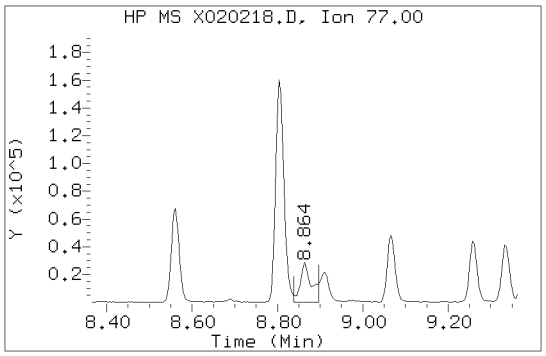

Chloroprene (126-99-8)

Reason Code:

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13-Feb-2023
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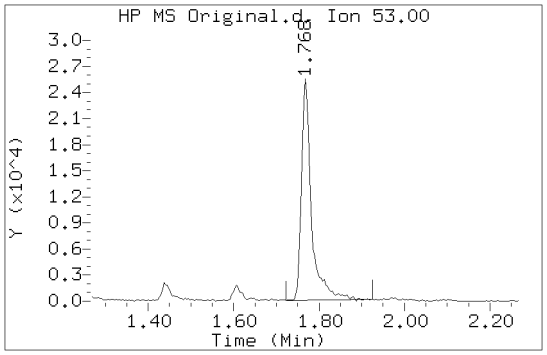

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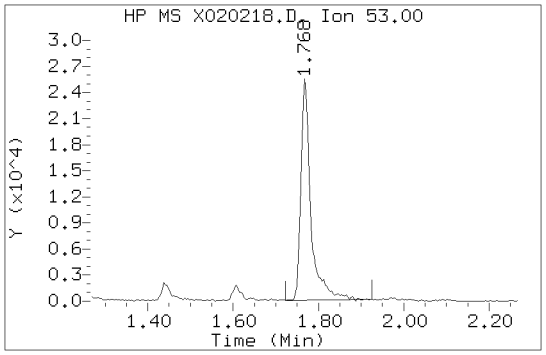

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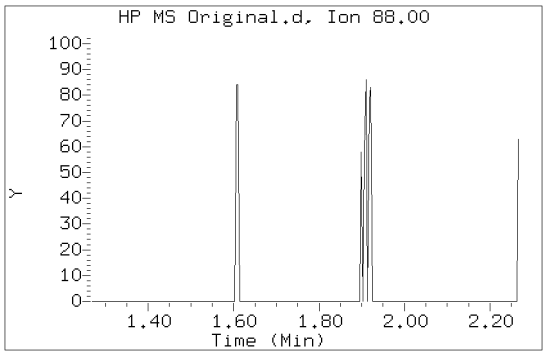

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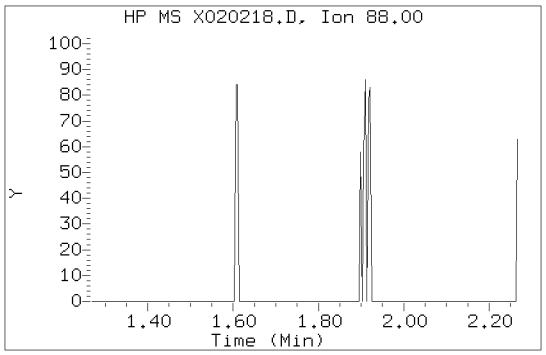

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Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020226.D
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Inj Date : 02-FEB-2023 22:32
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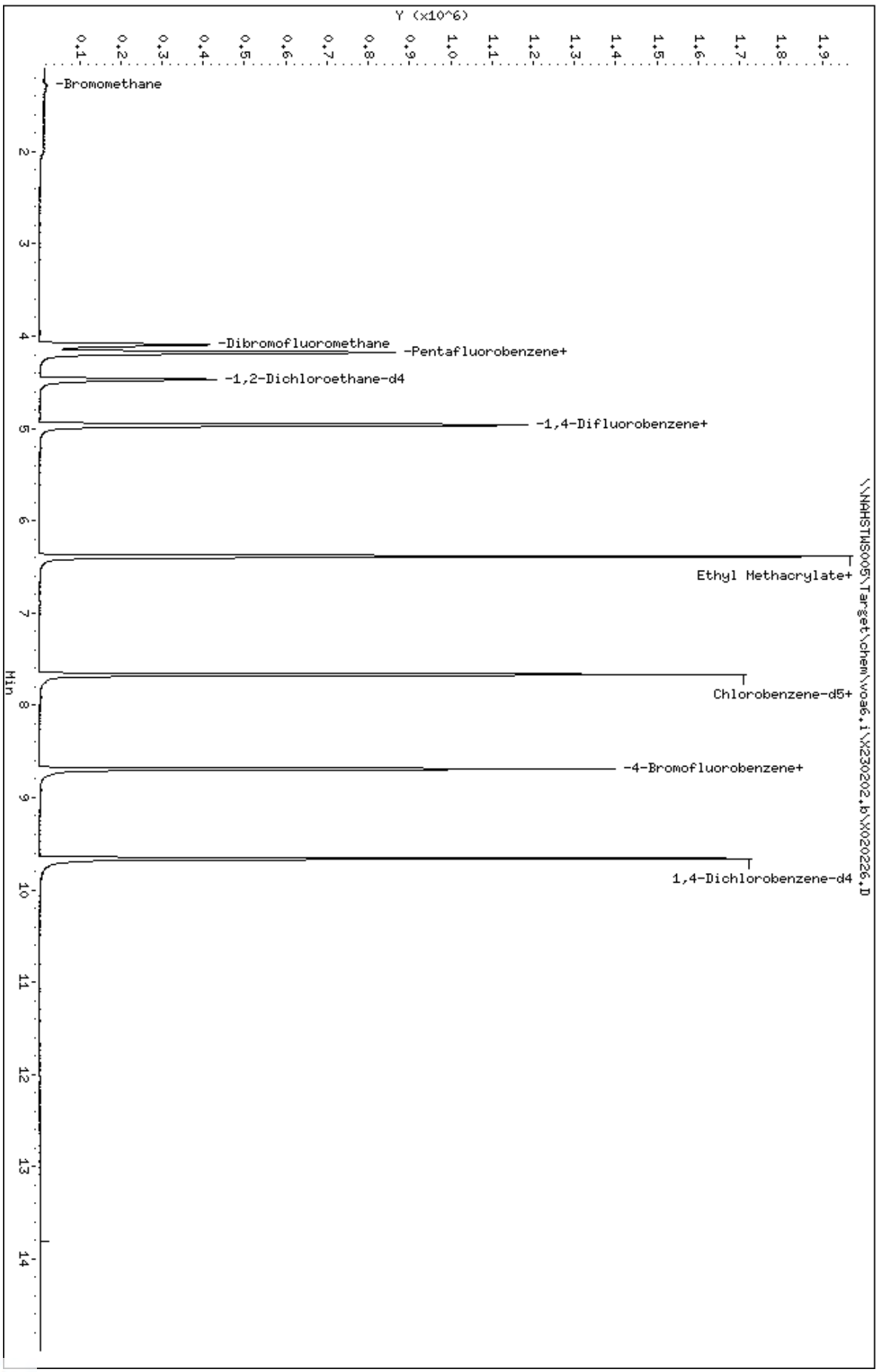
Smp Info : HS23011525-03;HS23011525-03;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	718176	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	304441	44.1286	44.12
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	348146	47.8438	47.84
* 36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1009663	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	884634	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1160210	53.0747	53.07
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	413613	50.6193	50.61
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	450225	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230202,b\X020226,D
Date : 02-FEB-2023 22:32
Client ID: HS23011525-03
Sample Info: HS23011525-03;HS23011525-03;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020226.D
Inj Date : 02-FEB-2023 22:32
InstruID : voa6.i
LabSampID : HS23011525-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020227.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020227.D
Lab Smp Id: HS23011525-04 Client Smp ID: HS23011525-04
Inj Date : 02-FEB-2023 22:53
Operator : PC Inst ID: voa6.i
Smp Info : HS23011525-04;HS23011525-04;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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

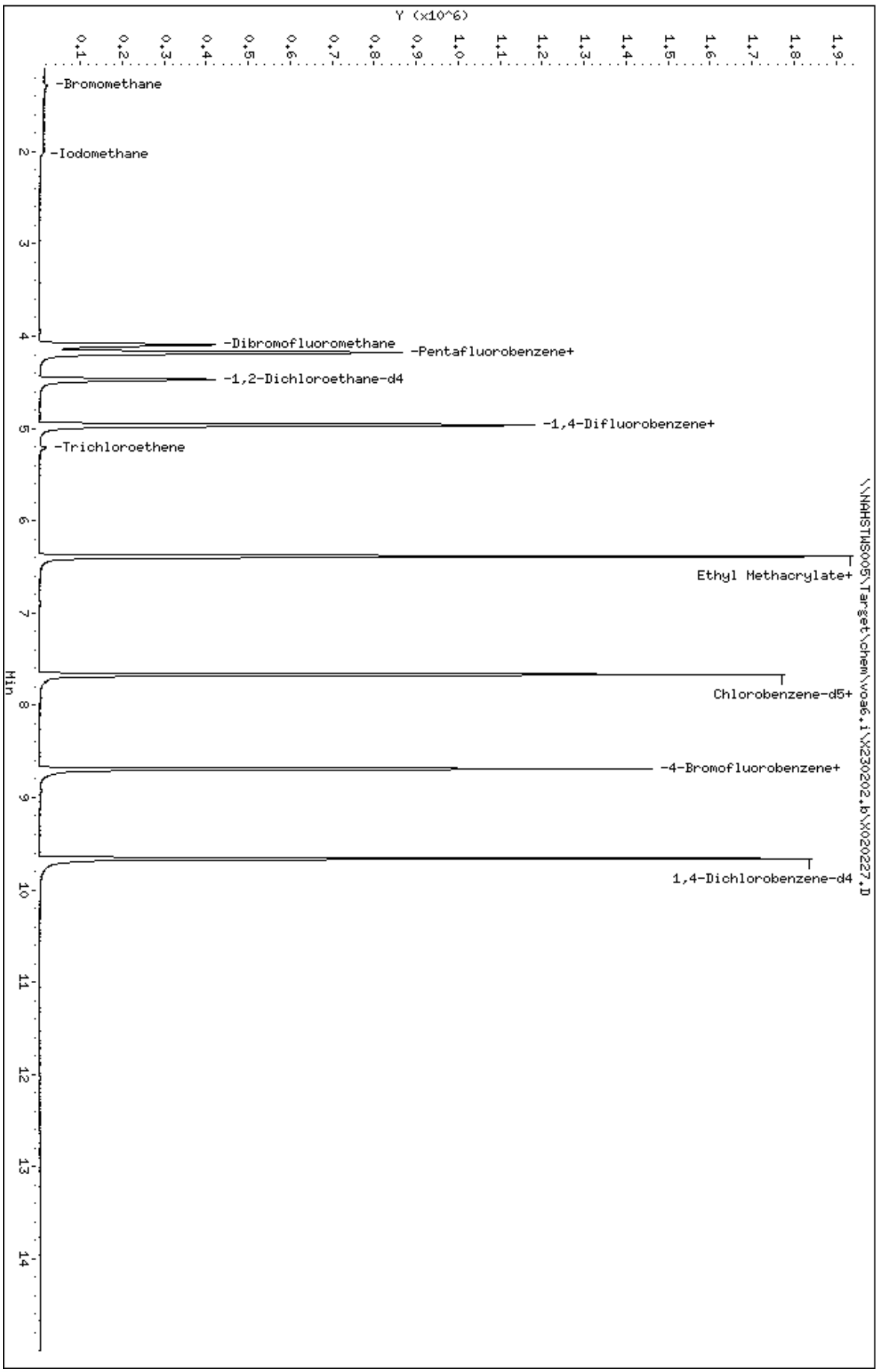
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.178	4.174	(1.000)	717575	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	302151	43.8322	43.83
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	342760	47.1470	47.14
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1001948	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	889646	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1152367	52.4190	52.41
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	426643	51.9181	51.91
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	461114	50.0000	
38 Trichloroethene	130	5.205	5.205	(1.049)	5589	0.82358	0.82(a)

QC Flag Legend

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



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Client ID: HS23011525-04
Sample Info: HS23011525-04;HS23011525-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020227.D

Date : 02-FEB-2023 22:53

Client ID: HS23011525-04

Instrument: voa6.i

Sample Info: HS23011525-04;HS23011525-04;;;

Purge Volume: 5.0

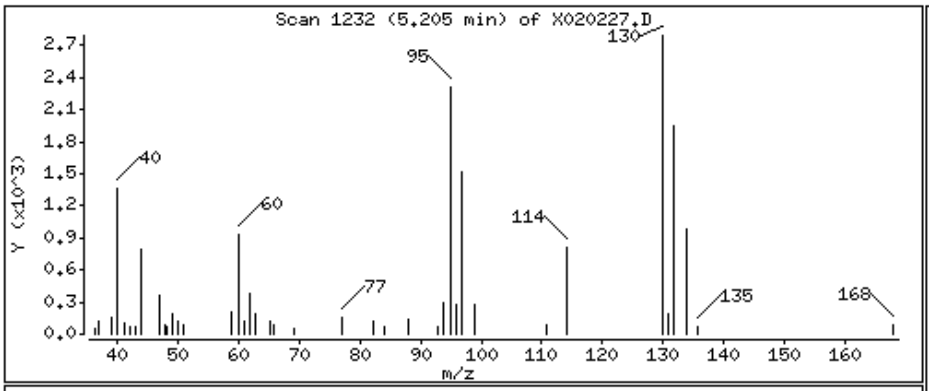
Operator: PC

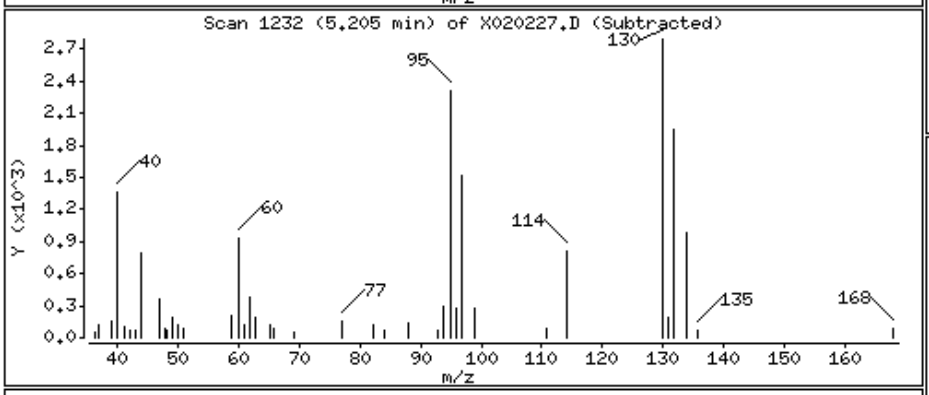
Column phase: DB624

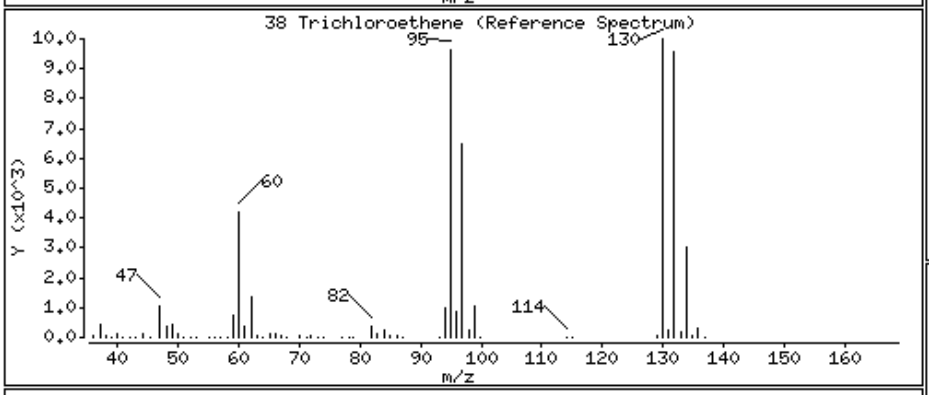
Column diameter: 0.18

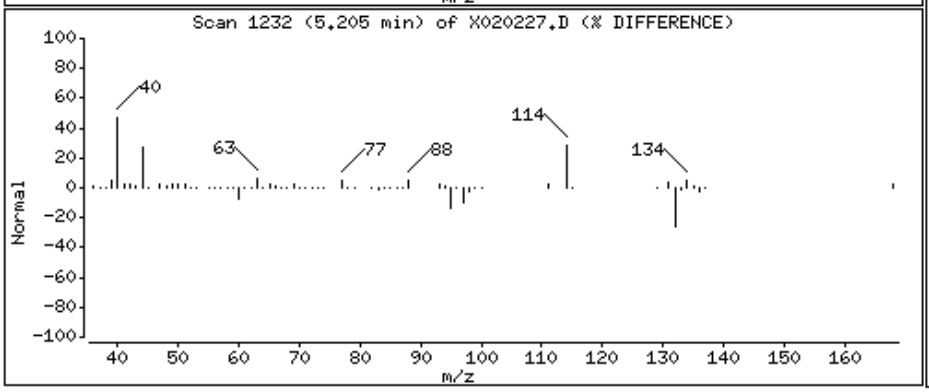
38 Trichloroethene

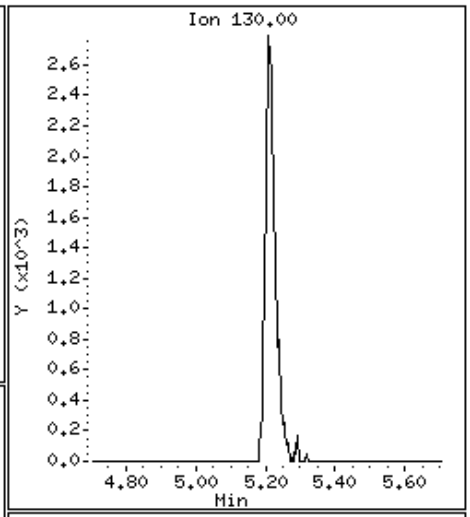
Concentration: 0.82 ug/l

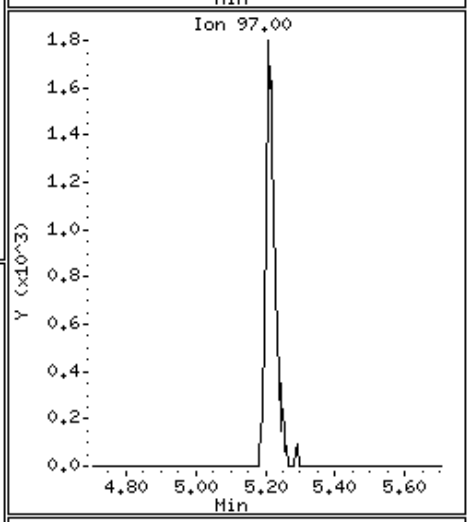


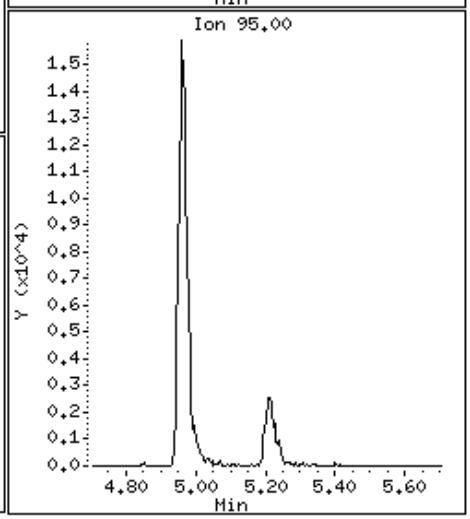












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020227.D
Inj Date : 02-FEB-2023 22:53
InstruID : voa6.i
LabSampID : HS23011525-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020228.D Page 1
Report Date: 13-Feb-2023 14:53

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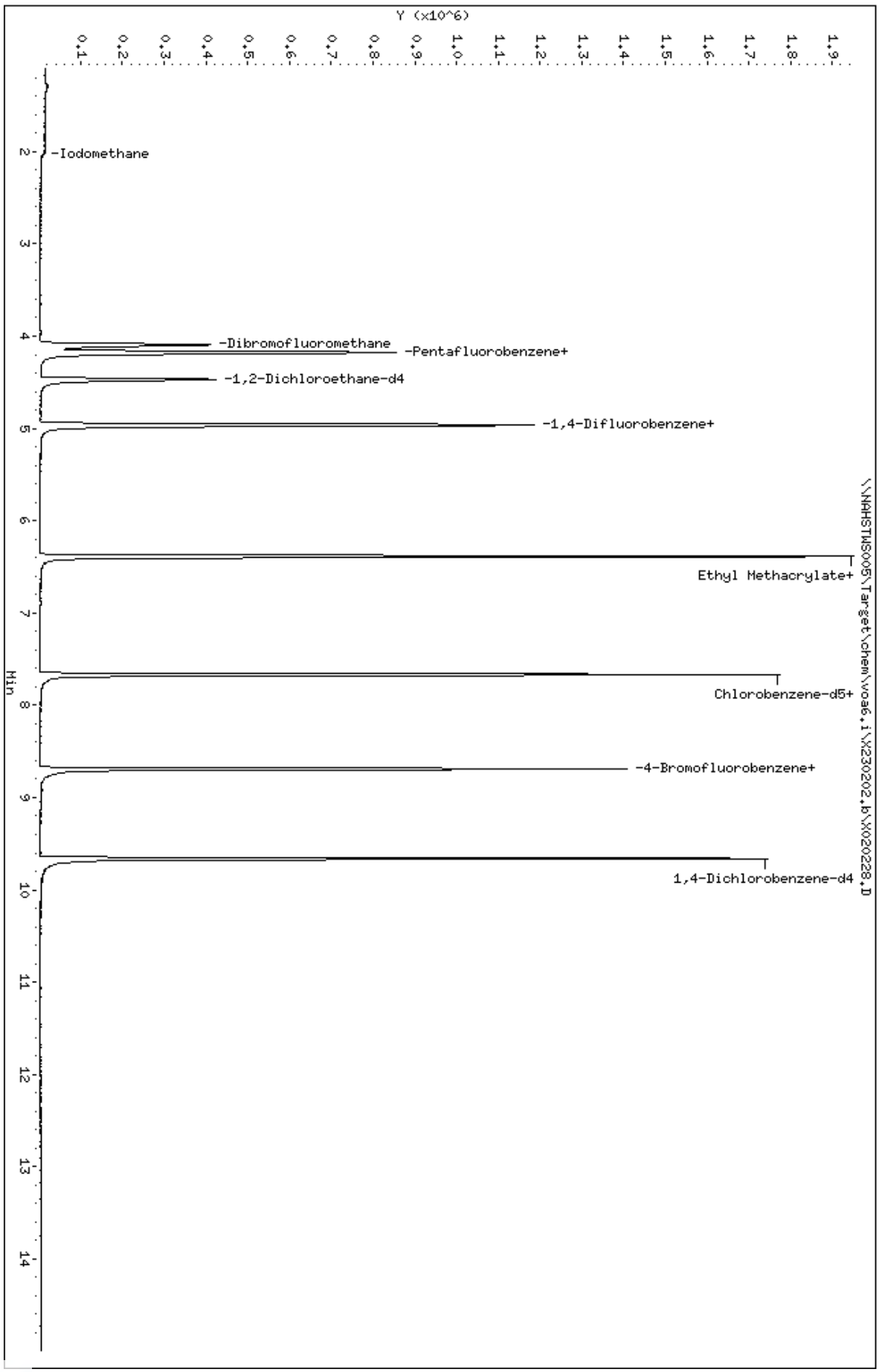
Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020228.D
Lab Smp Id: HS23011525-05 Client Smp ID: HS23011525-05
Inj Date : 02-FEB-2023 23:14
Operator : PC Inst ID: voa6.i
Smp Info : HS23011525-05;HS23011525-05;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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	4.178	4.174	(1.000)	714792	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	302771	44.0942	44.09
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	347017	47.9140	47.91
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1002352	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	897570	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1157846	52.2032	52.20
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	420532	50.7242	50.72
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	451626	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa6.i\%230202.b\%020228.D
Date : 02-FEB-2023 23:14
Client ID: HS23011525-05
Sample Info: HS23011525-05;HS23011525-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020228.D
Inj Date : 02-FEB-2023 23:14
InstruID : voa6.i
LabSampID : HS23011525-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020229.D Page 1
Report Date: 13-Feb-2023 14:53

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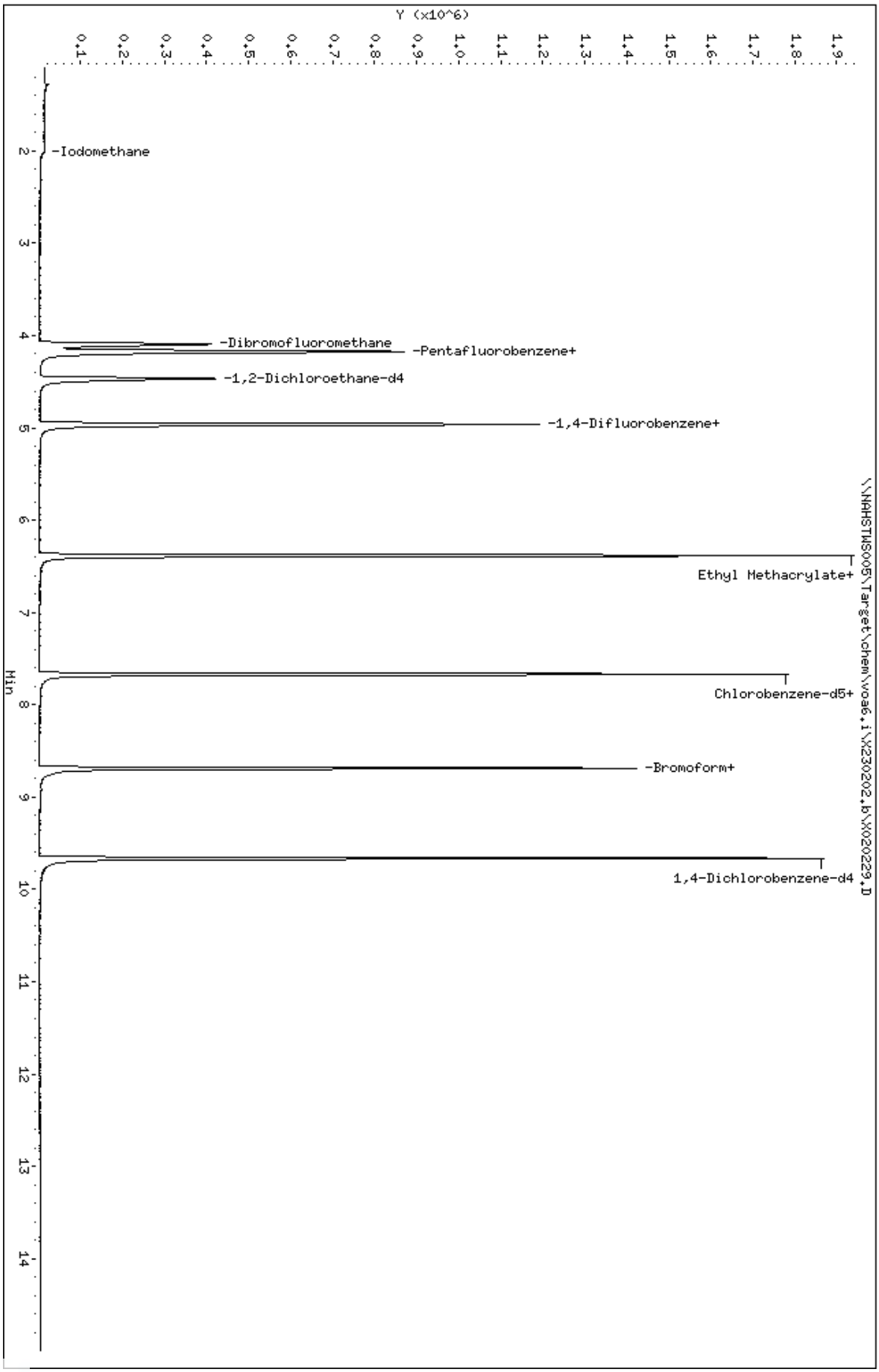
Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020229.D
Lab Smp Id: HS23011525-06 Client Smp ID: HS23011525-06
Inj Date : 02-FEB-2023 23:35
Operator : PC Inst ID: voa6.i
Smp Info : HS23011525-06;HS23011525-06;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 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: 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)	723680	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	305080	43.8840	43.88
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	346636	47.2772	47.27
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1007550	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	891060	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1163330	52.8337	52.83
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	427397	51.9273	51.92
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	472734	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020229.D
Date : 02-FEB-2023 23:35
Client ID: HS23011525-06
Sample Info: HS23011525-06;HS23011525-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020229.D
Inj Date : 02-FEB-2023 23:35
InstruID : voa6.i
LabSampID : HS23011525-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020230.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020230.D
Lab Smp Id: HS23011525-02 Client Smp ID: HS23011525-02
Inj Date : 02-FEB-2023 23:56
Operator : PC Inst ID: voa6.i
Smp Info : HS23011525-02;HS23011525-02;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 09-Feb-2023 15:23 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 29
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

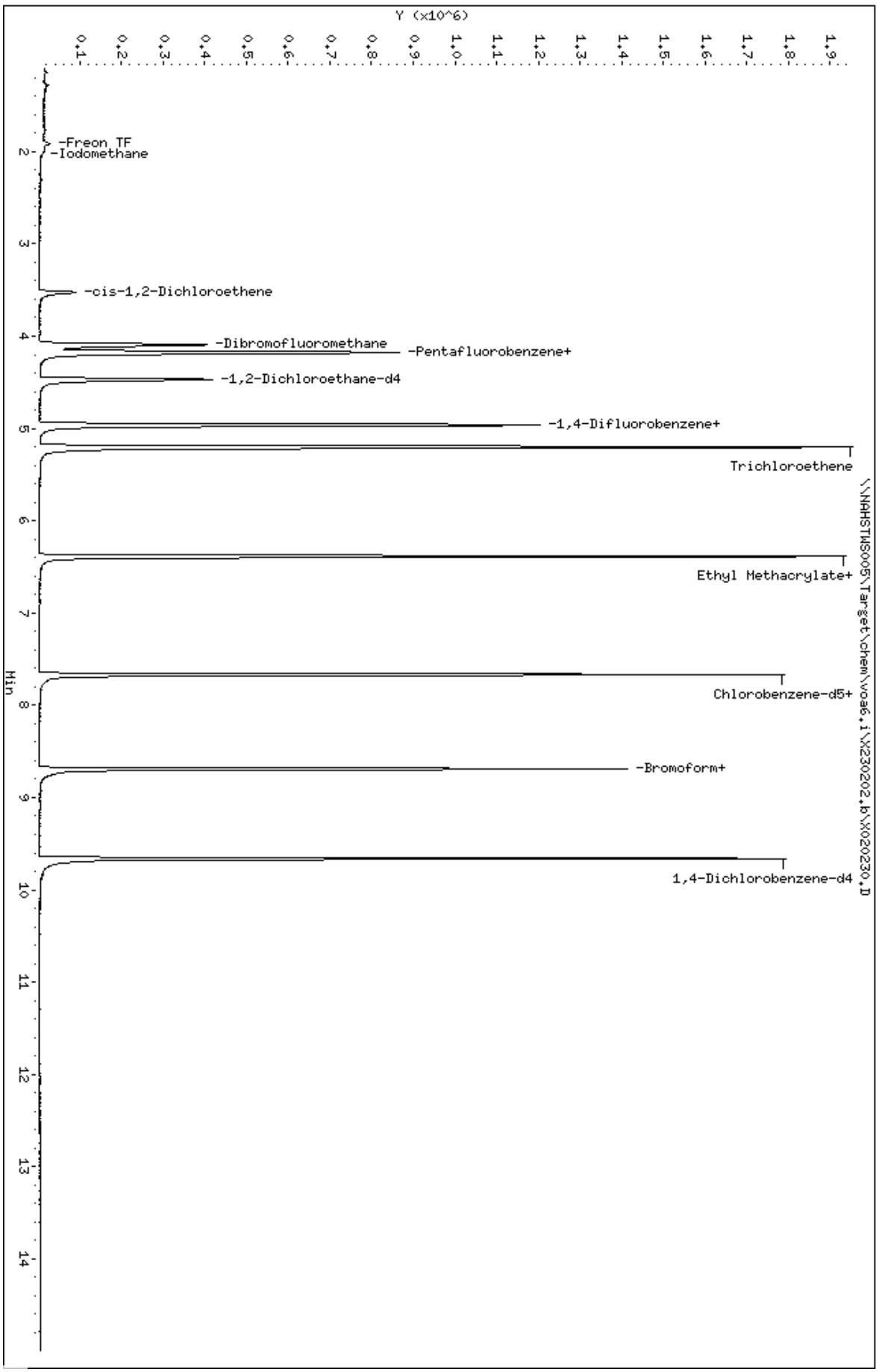
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	720373	50.0000	
$ 30 Dibromofluoromethane	113	4.091	4.095	(0.979)	300567	43.4316	43.43
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	342934	46.9887	46.98
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1007923	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	885868	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1157687	52.8855	52.88
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	417684	51.0457	51.04
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	455447	50.0000	
5 Vinyl Chloride	62	1.141	1.141	(0.273)	5157	0.81950	4.09(a)
27 cis-1,2-Dichloroethene	96	3.529	3.522	(0.845)	54014	7.25350	36.26
38 Trichloroethene	130	5.205	5.205	(1.049)	670450	98.2095	491.04

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6,i\X230202,b\X020230.D
Date : 02-FEB-2023 23:56
Client ID: HS23011525-02
Sample Info: HS23011525-02;HS23011525-02;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020230.D Page 2

Date : 02-FEB-2023 23:56

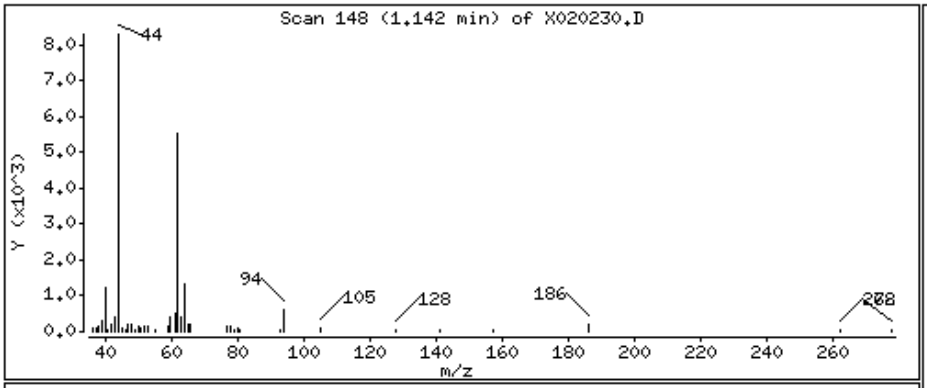
Client ID: HS23011525-02 Instrument: voa6.i

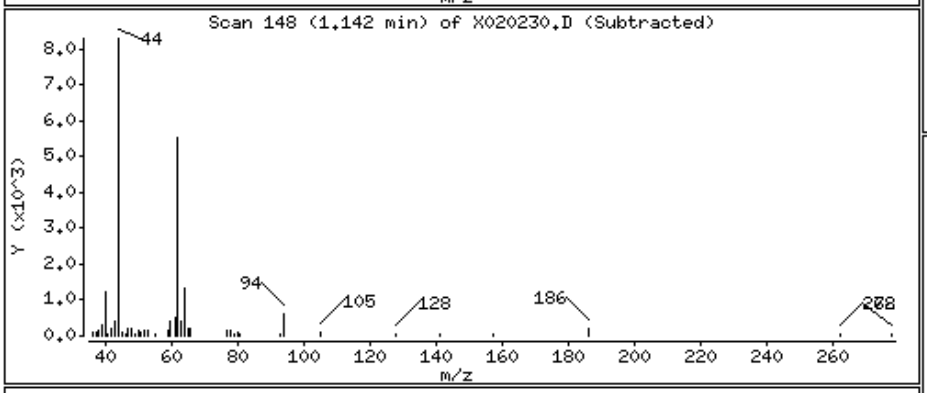
Sample Info: HS23011525-02;HS23011525-02;;;

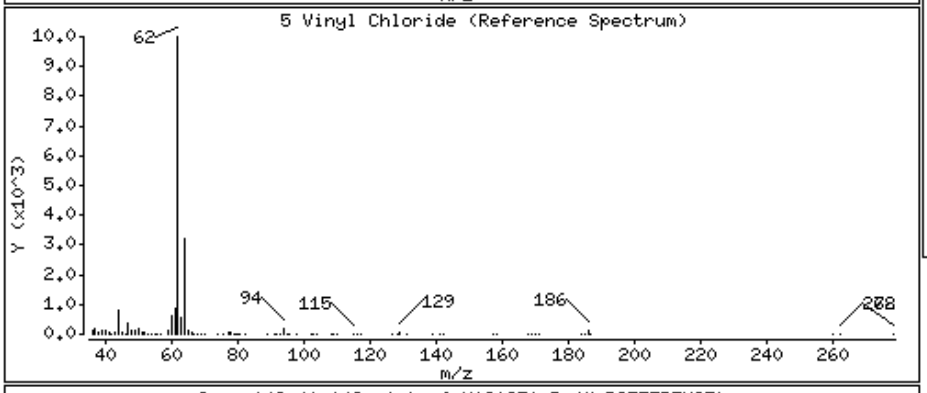
Purge Volume: 5.0 Operator: PC

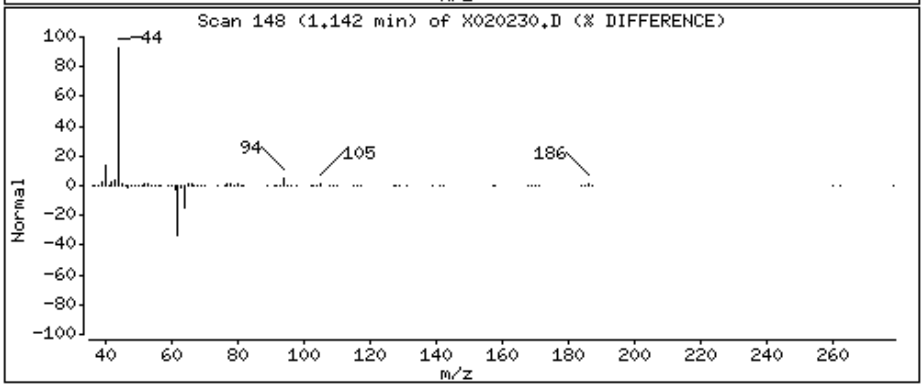
Column phase: DB624 Column diameter: 0.18

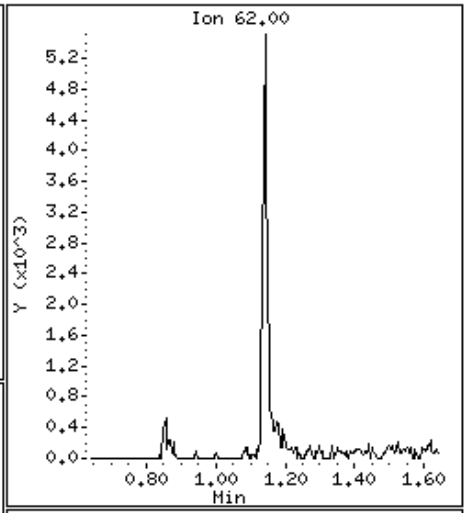
5 Vinyl Chloride Concentration: 4.09 ug/l

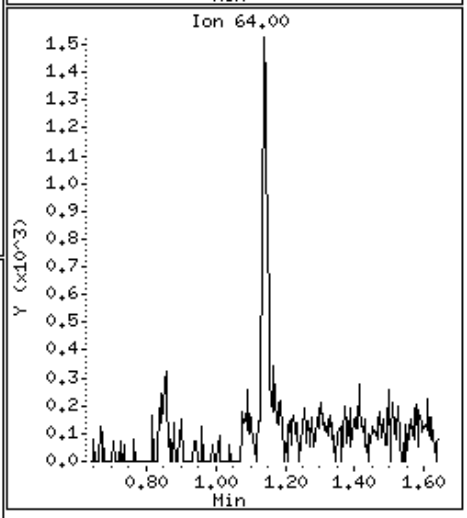












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020230.D Page 3

Date : 02-FEB-2023 23:56

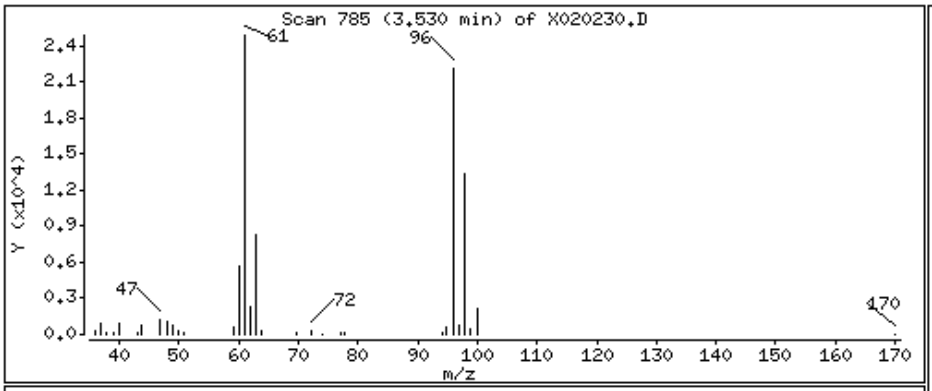
Client ID: HS23011525-02 Instrument: voa6.i

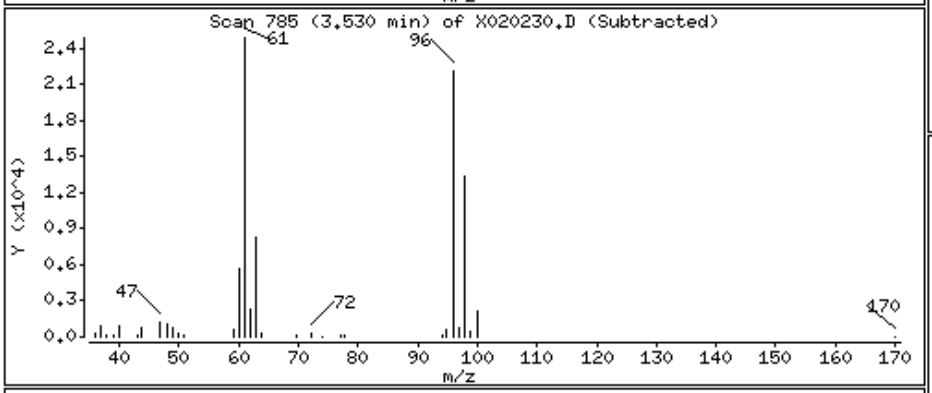
Sample Info: HS23011525-02;HS23011525-02;;;

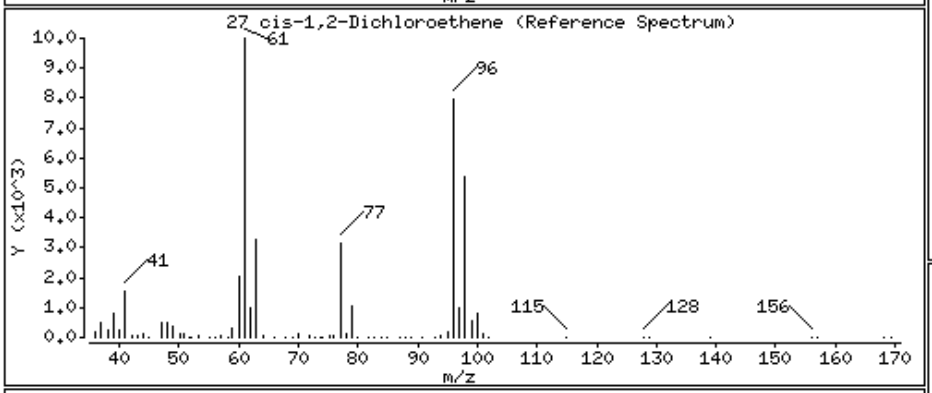
Purge Volume: 5.0 Operator: PC

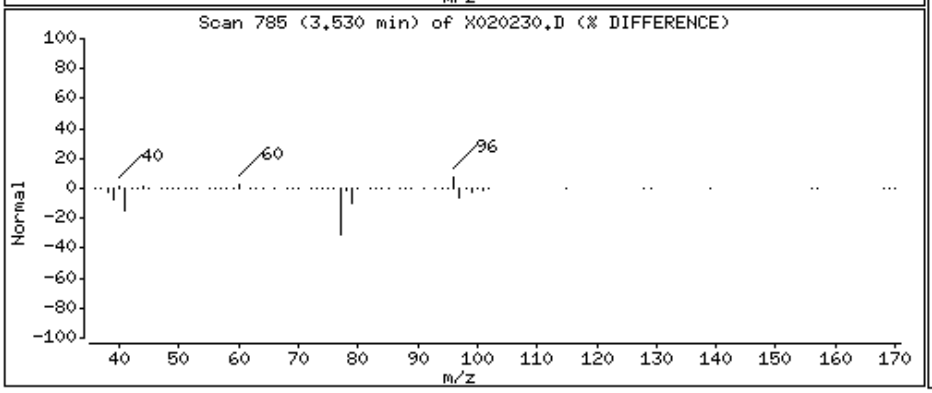
Column phase: DB624 Column diameter: 0.18

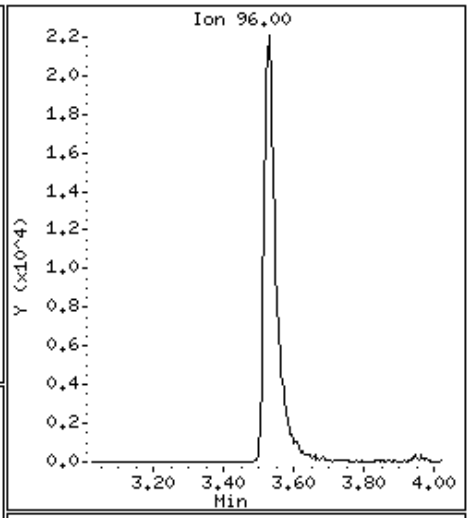
27 cis-1,2-Dichloroethene Concentration: 36.26 ug/l

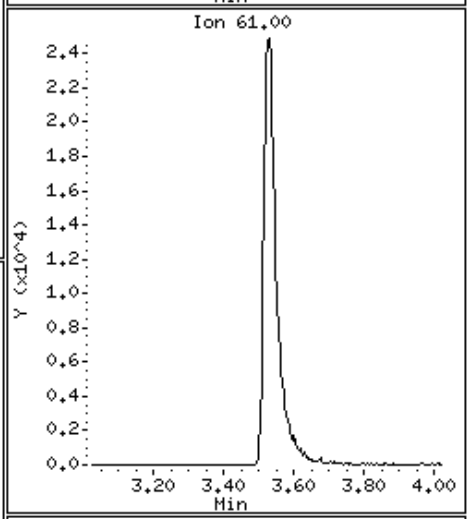


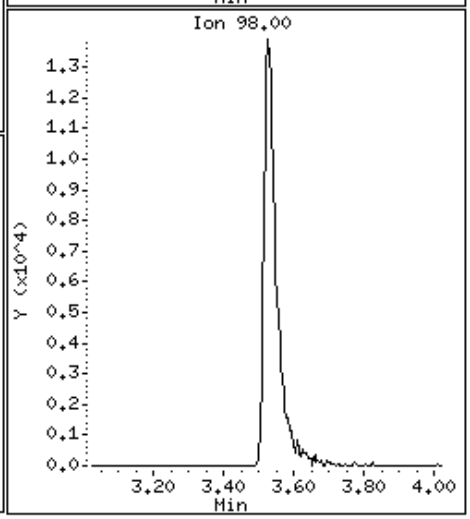












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020230.D Page 4

Date : 02-FEB-2023 23:56

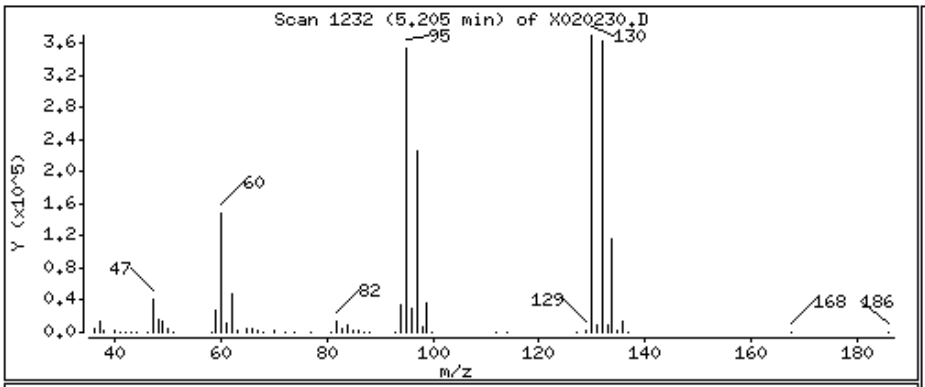
Client ID: HS23011525-02 Instrument: voa6.i

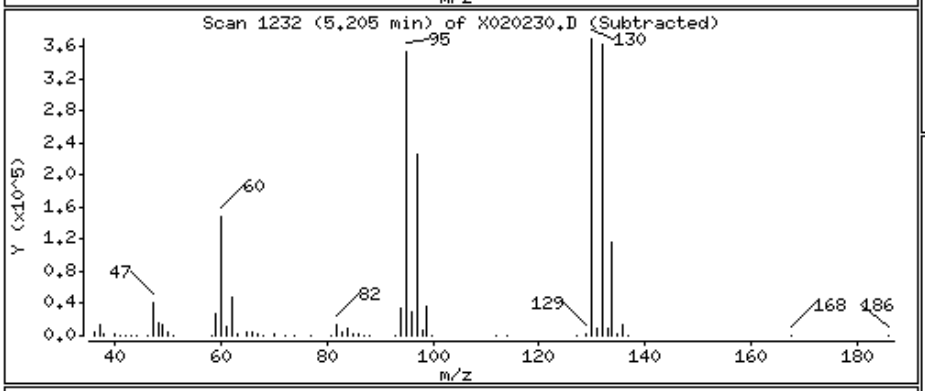
Sample Info: HS23011525-02;HS23011525-02;;;

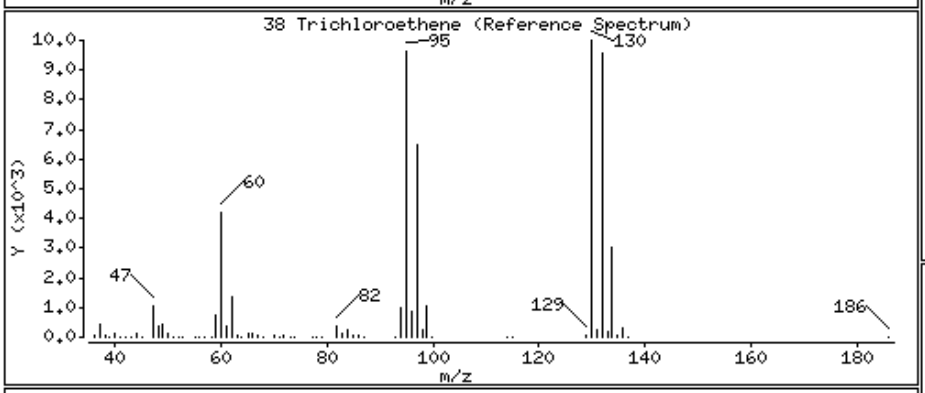
Purge Volume: 5.0 Operator: PC

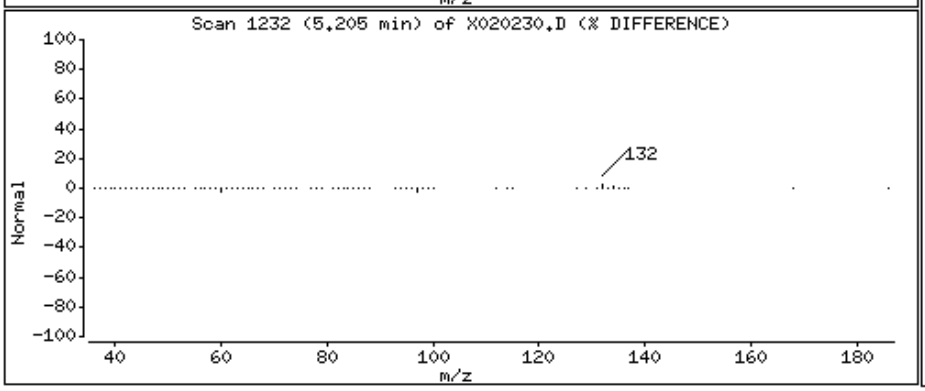
Column phase: DB624 Column diameter: 0.18

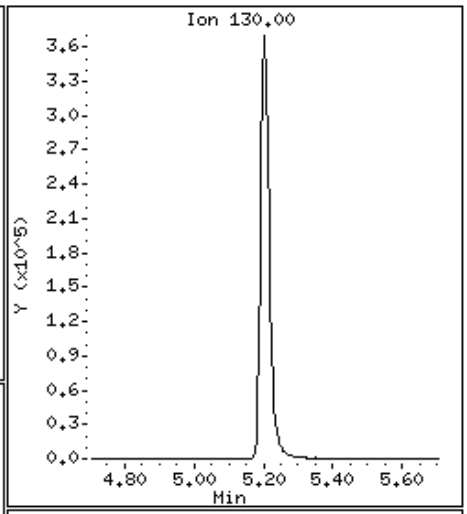
38 Trichloroethene Concentration: 491.04 ug/l

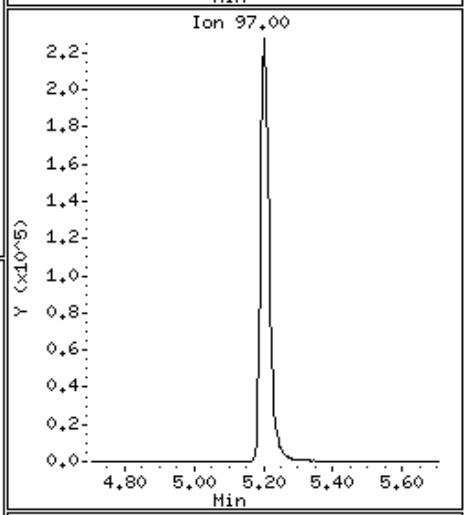


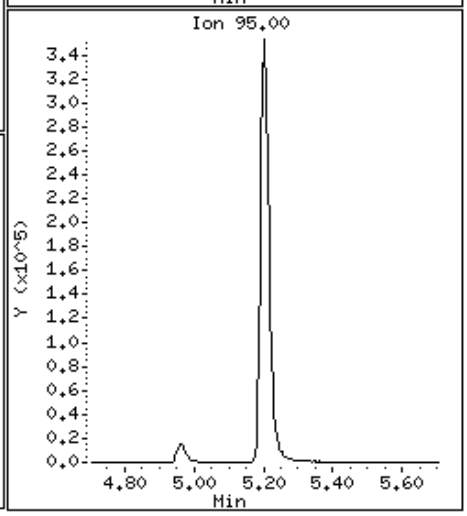












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InstruID : voa6.i
LabSampID : HS23011525-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D Page 1
Report Date: 13-Feb-2023 14:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 03-FEB-2023 00:17
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\8260W.m
Meth Date : 13-Feb-2023 14:53 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
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	4.174	4.174	(1.000)	569105	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.341)	62378	1000.00	1199.06
140 1,3-Butadiene	54	1.164	1.164	(0.279)	177352	50.0000	45.40
25 Methacrylonitrile	41	3.818	3.818	(0.915)	219421	50.0000	54.45
12 Isobutyl Alcohol	43	4.669	4.669	(1.119)	704358	1000.00	1100.35
13 Acetonitrile	39	2.195	2.195	(0.526)	268092	500.000	517.59
14 Allyl Chloride	41	2.195	2.195	(0.526)	531779	50.0000	53.90
4 Propionitrile	54	3.645	3.645	(0.873)	311781	500.000	536.91
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	97480	50.0000	55.74
194 Acetaldehyde	44	1.209	1.209	(0.290)	86149	200.000	243.50
23 Chloroprene	53	1.767	1.767	(0.423)	83828	50.0000	43.32(M)
130 Ethyl Acetate	43	3.649	3.649	(0.874)	242641	50.0000	54.63
40 Methyl Methacrylate	41	5.602	5.602	(1.342)	222224	50.0000	57.26
49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	233855	50.0000	58.31
142 Tetrahydrofuran	42	3.840	3.840	(0.920)	71265	100.000	100.75
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	522224	50.0000	52.61
156 Diisopropyl ether	45	2.997	2.997	(0.718)	745621	50.0000	50.50
182 Epichlorohydrin	57	6.093	6.093	(1.228)	85668	200.000	224.30
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1141388	50.0000	52.91
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	478489	50.0000	119.66

3 Chloromethane	50	1.074	1.074 (0.257)	256773	50.0000	49.87
5 Vinyl Chloride	62	1.141	1.141 (0.273)	223809	50.0000	45.01

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D Page 2
Report Date: 13-Feb-2023 14:53

	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)	156126	50.0000	41.81
	7 Chloroethane	64	1.400	1.400	(0.335)	144919	50.0000	41.88
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	325815	50.0000	46.83
	9 Acrolein	56	1.441	1.441	(0.345)	35410	100.000	91.23
	10 Acetone	43	1.970	1.970	(0.472)	135692	100.000	84.96
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	184967	50.0000	42.82
	15 Iodomethane	142	2.026	2.026	(0.485)	525668	100.000	92.87
	16 Acrylonitrile	53	2.528	2.528	(0.606)	162234	100.000	110.74
	17 Methylene Chloride	84	2.300	2.300	(0.551)	271847	50.0000	45.88
	18 Methyl tert-butyl ether	73	2.532	2.532	(0.607)	715511	50.0000	50.60
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	1005464	100.000	88.97
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	234404	50.0000	48.49
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	1070003	100.000	86.21
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	403232	50.0000	47.52
	24 2-Butanone	43	3.570	3.570	(0.855)	177921	100.000	104.88
	26 2,2-Dichloropropane	77	3.507	3.507	(0.840)	327243	50.0000	45.43
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	276138	50.0000	46.93
	28 Chloroform	83	3.900	3.900	(0.934)	463612	50.0000	48.75
	29 Bromochloromethane	128	3.791	3.791	(0.908)	146884	50.0000	45.60
$	30 Dibromofluoromethane	113	4.095	4.095	(0.981)	244891	50.0000	44.79
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	384485	50.0000	50.96
	32 1,1-Dichloropropene	75	4.275	4.275	(0.862)	329184	50.0000	54.44
	33 1,2-Dichloroethane	62	4.552	4.552	(0.918)	379183	50.0000	54.34
	34 Carbon Tetrachloride	117	4.260	4.260	(0.859)	320059	50.0000	49.57
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	282644	50.0000	49.00
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	851640	50.0000	
	37 Benzene	78	4.507	4.507	(0.909)	1033467	50.0000	50.81
	38 Trichloroethene	130	5.205	5.205	(1.049)	312492	50.0000	54.17
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	379233	50.0000	49.68
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	291291	100.000	134.15
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	267962	50.0000	49.53
	44 Dibromomethane	93	5.553	5.553	(1.119)	179463	50.0000	48.80
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	491794	100.000	113.57
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	460458	50.0000	51.37
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	810096	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	951602	50.0000	47.53
	50 Toluene	91	6.446	6.446	(0.841)	1132994	50.0000	50.59
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	403429	50.0000	54.23
	52 2-Hexanone	43	7.083	7.083	(0.924)	339399	100.000	115.20
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	228416	50.0000	50.84
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	459727	50.0000	51.99
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	336297	50.0000	51.87
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	239249	50.0000	51.64
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	301619	50.0000	53.70
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	215569	50.0000	52.37
	59 Chlorobenzene	112	7.694	7.694	(1.003)	797627	50.0000	50.22
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	307617	50.0000	52.04
	61 Ethylbenzene	106	7.795	7.795	(1.017)	392484	50.0000	52.46
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	984611	100.000	102.09
	63 o-Xylene	106	8.241	8.241	(1.075)	491043	50.0000	51.58
	64 Styrene	104	8.256	8.256	(1.077)	858394	50.0000	53.80
	66 Bromoform	173	8.410	8.410	(1.097)	237924	50.0000	52.97

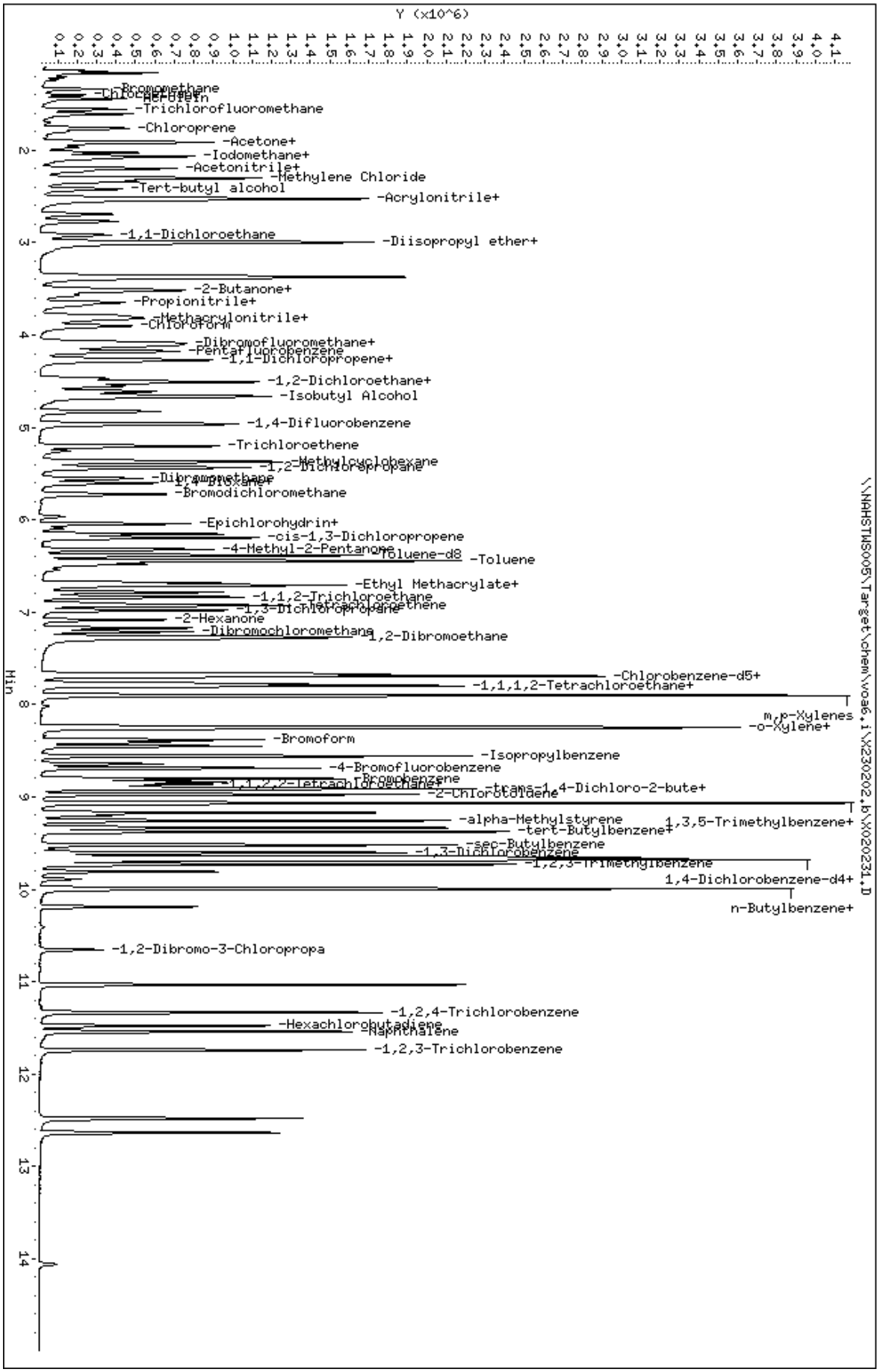
67	Isopropylbenzene	105	8.560	8.560 (1.116)	1189128	50.0000	54.68
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	363674	50.0000	50.93

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D Page 3
Report Date: 13-Feb-2023 14:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	379320	50.0000	50.69
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	447952	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	296926	50.0000	59.57(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1394504	50.0000	56.20
	74 Bromobenzene	156	8.803	8.803	(0.911)	385565	50.0000	52.46
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1049139	50.0000	57.23
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	904464	50.0000	55.54
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	1050391	50.0000	56.58
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	859557	50.0000	57.28
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1075676	50.0000	55.77
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1174576	50.0000	58.83
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1063252	50.0000	59.43
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	670659	50.0000	54.98
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	702753	50.0000	52.79
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	911890	50.0000	52.78
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	675931	50.0000	53.80
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	67457	50.0000	59.08
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	491572	50.0000	62.00
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	195200	50.0000	55.48
	92 Naphthalene	128	11.540	11.540	(1.194)	1136449	50.0000	63.00
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	472539	50.0000	62.23
M	94 1,2-Dichloroethylene (total)	96				510542	100.000	(a)
	141 Cyclohexane	56	4.118	4.118	(0.987)	288278	50.0000	50.24
	138 Freon TF	101	1.913	1.913	(0.458)	185744	50.0000	44.46
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	639466	50.0000	61.34
	146 Methyl Acetate	43	2.225	2.225	(0.533)	140629	50.0000	54.91
	148 Tert-Butyl alcohol	59	2.419	2.419	(0.580)	486677	1000.00	1235.01
	149 Isopropyl Alcohol	45	2.086	2.086	(0.500)	261660	1000.00	1271.42

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-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

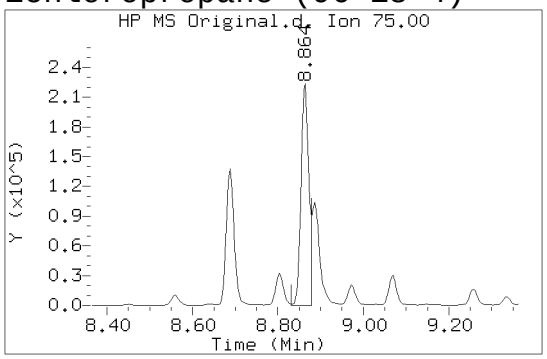
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230202.b\X020231.D
Inj Date : 03-FEB-2023 00:17
InstruID : voa6.i
LabSampID : CCV-END

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

Reason Code:

BEFORE

MASS
75
AREA
296926
HEIGHT
223315
09-Feb-2023
15:23
Kori
Bagsby



AFTER

MASS
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AREA
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HEIGHT
223315
13-Feb-2023
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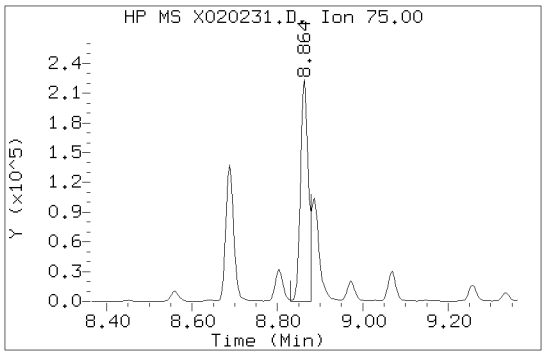
Bags



BEFORE

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72363
09-Feb-2023
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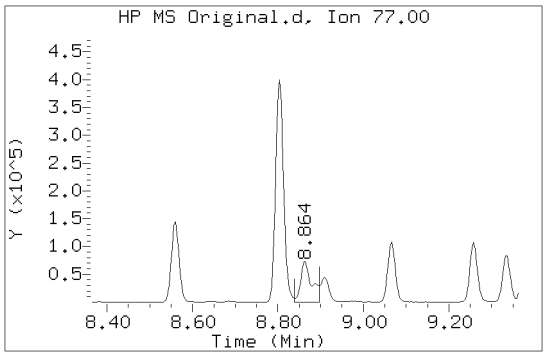
Kori
Bagsby



AFTER

MASS
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HEIGHT
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13-Feb-2023
14:52
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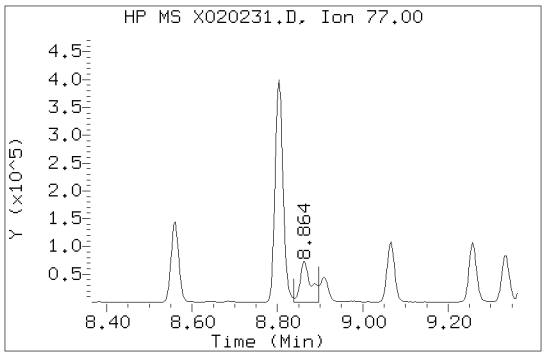
Bags



Chloroprene (126-99-8)

Reason Code:

BEFORE

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AREA
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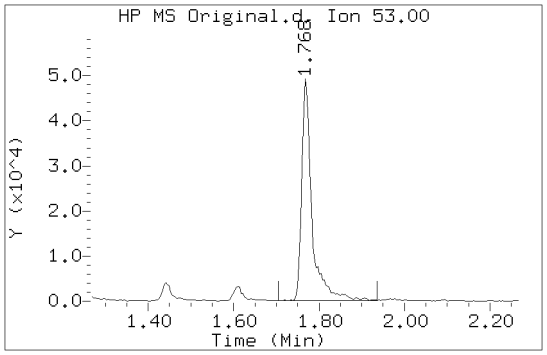
HEIGHT
49132
09-Feb-2023
15:23
Kori
Bagsby



AFTER

MASS
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AREA
83828
HEIGHT
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13-Feb-2023
14:52
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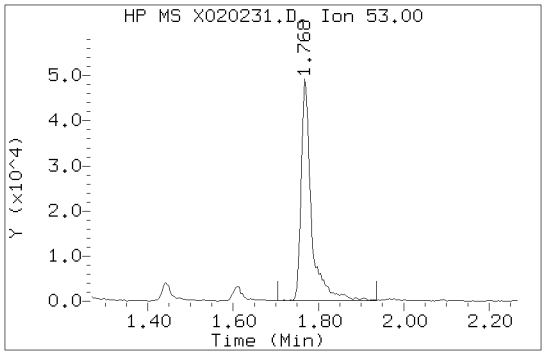
Bags



BEFORE

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AREA
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HEIGHT
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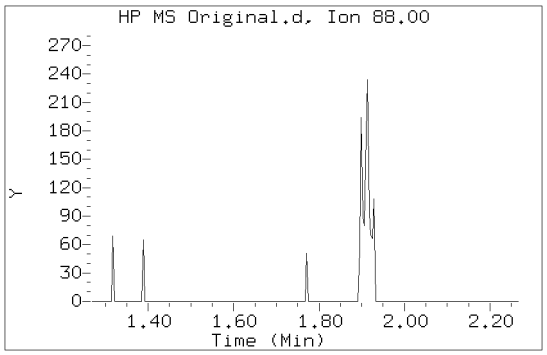
09-Feb-2023
15:23
Kori
Bagsby



AFTER

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AREA
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HEIGHT
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13-Feb-2023
14:52
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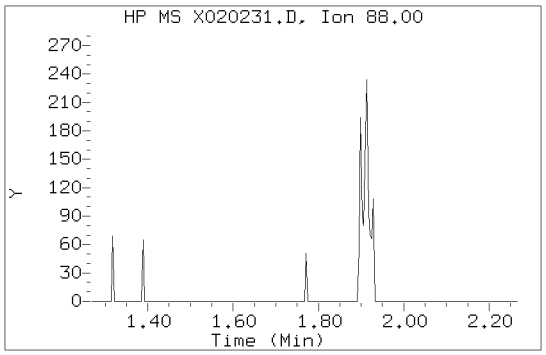
Bags



right solutions.
right partner.

Raw Data VOA6 427296

Volatiles by by EPA 8260

Workorder

HS23011525

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\X230203.b\X020301.D Page 1
Report Date: 03-Feb-2023 10:47

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020301.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 03-FEB-2023 10:20
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.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	129312			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	22816			15.00- 40.00	17.64
8.687	8.889	(0.000)	75	63504			30.00- 60.00	49.11
8.687	8.889	(0.000)	96	8522			5.00- 9.00	6.59
8.687	8.889	(0.000)	173	705			0.00- 2.00	0.68
8.687	8.889	(0.000)	174	104112			50.00- 0.00	80.51
8.687	8.889	(0.000)	175	7860			5.00- 9.00	7.55
8.687	8.889	(0.000)	176	102472			95.00- 101.00	98.42
8.687	8.889	(0.000)	177	6483			5.00- 9.00	6.33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.64
75	30.00 - 60.00% of mass 95	49.11
96	5.00 - 9.00% of mass 95	6.59
173	Less than 2.00% of mass 174	0.55 (0.68)
174	Greater than 50.00% of mass 95	80.51
175	5.00 - 9.00% of mass 174	6.08 (7.55)
176	95.00 - 101.00% of mass 174	79.24 (98.42)
177	5.00 - 9.00% of mass 176	5.01 (6.33)

Data File: X020301.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	1191	64.00	547	95.00	129312	140.90	1051
37.10	5499	65.00	190	96.00	8522	141.80	158
38.00	4875	65.90	101	97.00	467	142.90	1066
39.00	3253	66.90	394	98.00	669	143.80	115
39.90	1103	68.00	13324	102.70	110	144.80	80
41.00	1092	69.00	11596	103.90	735	145.90	215
42.00	1537	70.10	1697	105.00	318	146.60	82
42.90	910	70.90	176	105.90	436	147.90	289
44.00	1819	72.00	679	106.80	161	148.60	69
45.00	1457	73.10	5290	108.90	51	148.90	77
46.00	92	74.00	20088	109.90	138	149.70	77
47.00	1421	75.00	63504	111.90	121	151.70	116
48.00	1018	76.00	5982	112.70	183	152.70	99
49.00	5676	76.90	897	115.20	139	153.70	115
50.00	22816	77.90	720	115.80	487	154.70	390
51.00	7156	78.90	3139	116.90	776	156.80	313
52.10	502	80.00	1344	117.80	294	158.80	170
53.00	154	80.90	3512	118.70	579	160.60	197
53.90	199	81.90	590	123.00	55	172.90	705
55.00	2034	83.00	322	123.70	97	173.90	104112
56.10	2540	84.10	102	128.00	560	174.90	7860
57.00	3412	85.90	73	128.80	184	175.90	102472
58.00	270	87.00	4828	130.00	372	176.90	6483
59.00	57	88.10	4676	130.90	182	177.80	157
60.00	902	91.00	385	134.80	115	185.80	145
61.00	5331	92.00	3501	136.70	147	207.00	62
62.00	5352	93.00	4688	139.10	90		
63.00	3795	94.00	14453	139.80	101		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020301.D

Date : 03-FEB-2023 10:20

Client ID: BFB

Instrument: voa6.i

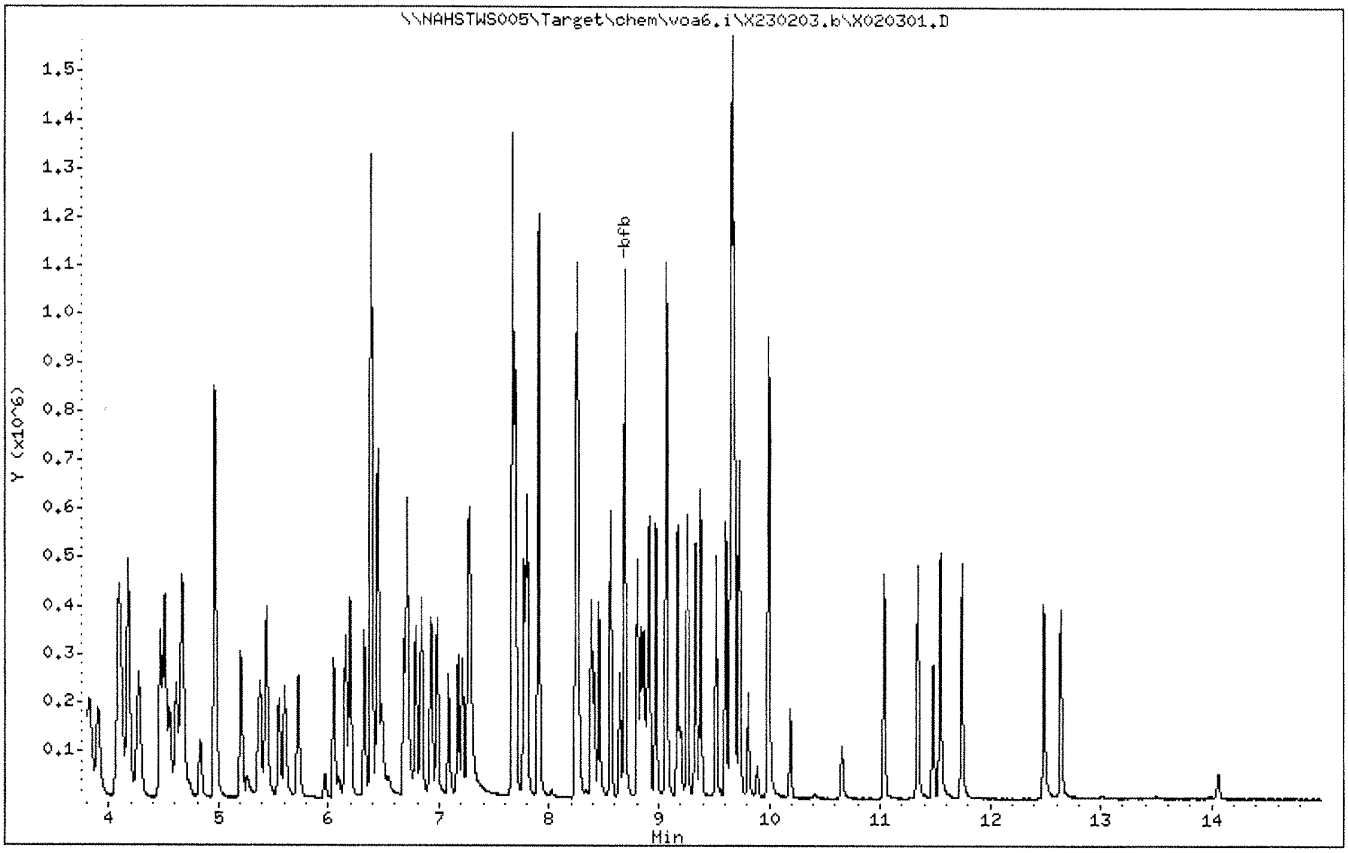
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



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Date : 03-FEB-2023 10:20

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

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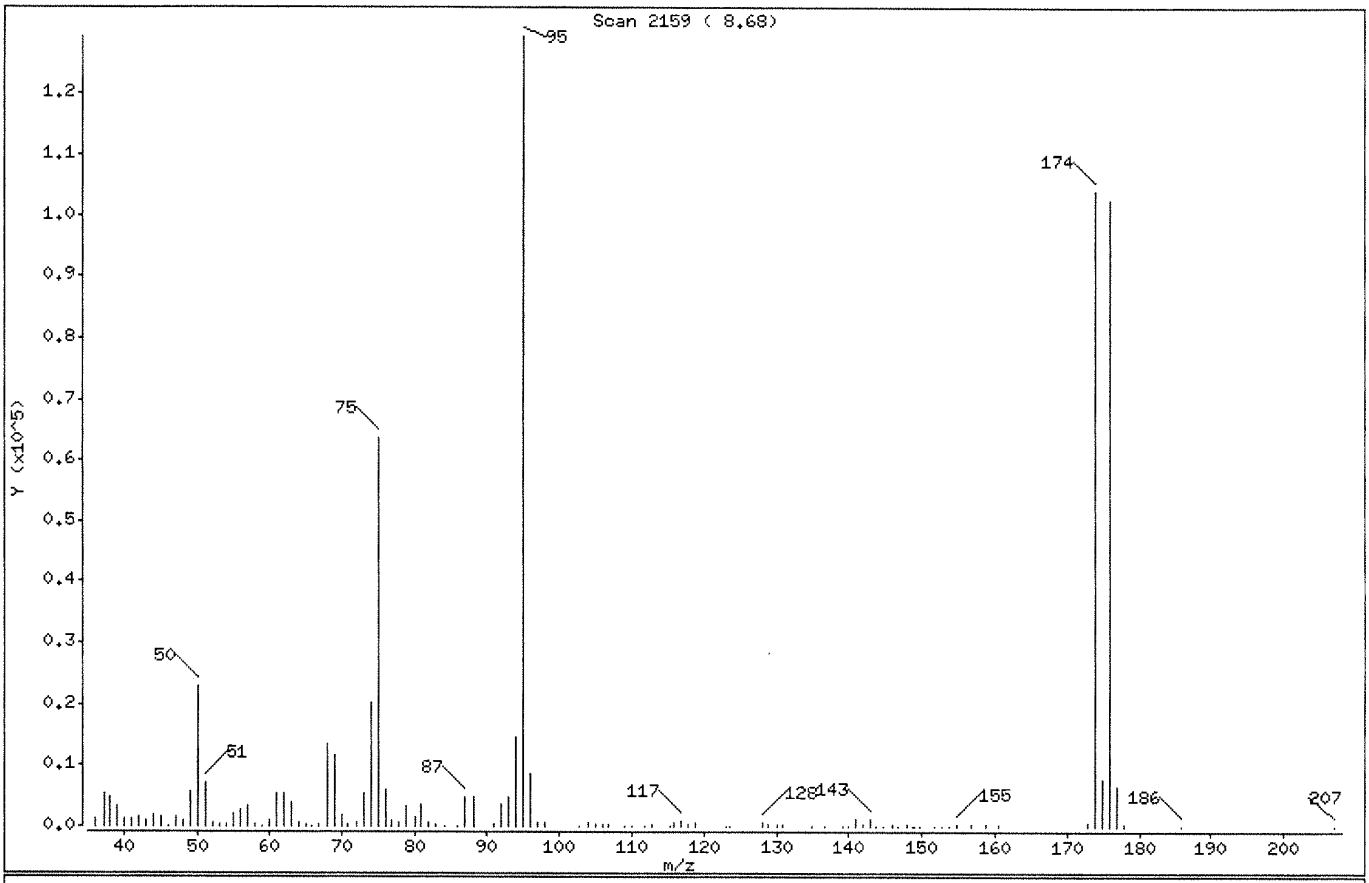
Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
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173	Less than 2.00% of mass 174	0.55 (0.68)
174	Greater than 50.00% of mass 95	80.51
175	5.00 - 9.00% of mass 174	6.08 (7.55)
176	95.00 - 101.00% of mass 174	79.24 (98.42)
177	5.00 - 9.00% of mass 176	5.01 (6.33)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020301.D

Date : 03-FEB-2023 10:20

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

Data File: X020301.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	1191	64.00	547	95.00	129312	140.90	1051
37.10	5499	65.00	190	96.00	8522	141.80	158
38.00	4875	65.90	101	97.00	467	142.90	1066
39.00	3253	66.90	394	98.00	669	143.80	115
39.90	1103	68.00	13324	102.70	110	144.80	80
41.00	1092	69.00	11596	103.90	735	145.90	215
42.00	1537	70.10	1697	105.00	318	146.60	82
42.90	910	70.90	176	105.90	436	147.90	289
44.00	1819	72.00	679	106.80	161	148.60	69
45.00	1457	73.10	5290	108.90	51	148.90	77
46.00	92	74.00	20088	109.90	138	149.70	77
47.00	1421	75.00	63504	111.90	121	151.70	116
48.00	1018	76.00	5982	112.70	183	152.70	99
49.00	5676	76.90	897	115.20	139	153.70	115
50.00	22816	77.90	720	115.80	487	154.70	390
51.00	7156	78.90	3139	116.90	776	156.80	313
52.10	502	80.00	1344	117.80	294	158.80	170
53.00	154	80.90	3512	118.70	579	160.60	197
53.90	199	81.90	590	123.00	55	172.90	705
55.00	2034	83.00	322	123.70	97	173.90	104112
56.10	2540	84.10	102	128.00	560	174.90	7860
57.00	3412	85.90	73	128.80	184	175.90	102472
58.00	270	87.00	4828	130.00	372	176.90	6483
59.00	57	88.10	4676	130.90	182	177.80	157
60.00	902	91.00	385	134.80	115	185.80	145
61.00	5331	92.00	3501	136.70	147	207.00	62
62.00	5352	93.00	4688	139.10	90		
63.00	3795	94.00	14453	139.80	101		

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020301.D
Inj Date : 03-FEB-2023 10:20
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020303.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 03-FEB-2023 11:02
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 13-Feb-2023 14:07 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)	594086	50.0000	
135 1,4-Dioxane	88	5.594	5.594	(1.340)	67426	1000.00	1241.60
140 1,3-Butadiene	54	1.163	1.163	(0.279)	177040	50.0000	43.42
25 Methacrylonitrile	41	3.814	3.814	(0.914)	226704	50.0000	53.89
12 Isobutyl Alcohol	43	4.668	4.668	(1.119)	737392	1000.00	1103.52
13 Acetonitrile	39	2.194	2.194	(0.526)	284973	500.000	527.05
14 Allyl Chloride	41	2.194	2.194	(0.526)	565414	50.0000	54.90
4 Propionitrile	54	3.645	3.645	(0.873)	336939	500.000	555.83
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	103272	50.0000	58.34
194 Acetaldehyde	44	1.208	1.208	(0.290)	89914	200.000	243.45
130 Ethyl Acetate	43	3.649	3.649	(0.874)	260638	50.0000	56.22
40 Methyl Methacrylate	41	5.602	5.602	(1.342)	240253	50.0000	59.30
49 Ethyl Methacrylate	69	6.708	6.708	(1.352)	241936	50.0000	58.30
142 Tetrahydrofuran	42	3.840	3.840	(0.920)	78601	100.000	106.62
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	518120	50.0000	51.70
156 Diisopropyl ether	45	2.993	2.993	(0.717)	790488	50.0000	51.29
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	595135	50.0000	53.63
182 Epichlorohydrin	57	6.093	6.093	(1.228)	95794	200.000	242.21
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	1142571	50.0000	52.46
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	479968	50.0000	114.99

3 Chloromethane	50	1.077	1.077 (0.258)	268349	50.0000	49.92
5 Vinyl Chloride	62	1.141	1.141 (0.273)	222331	50.0000	42.84

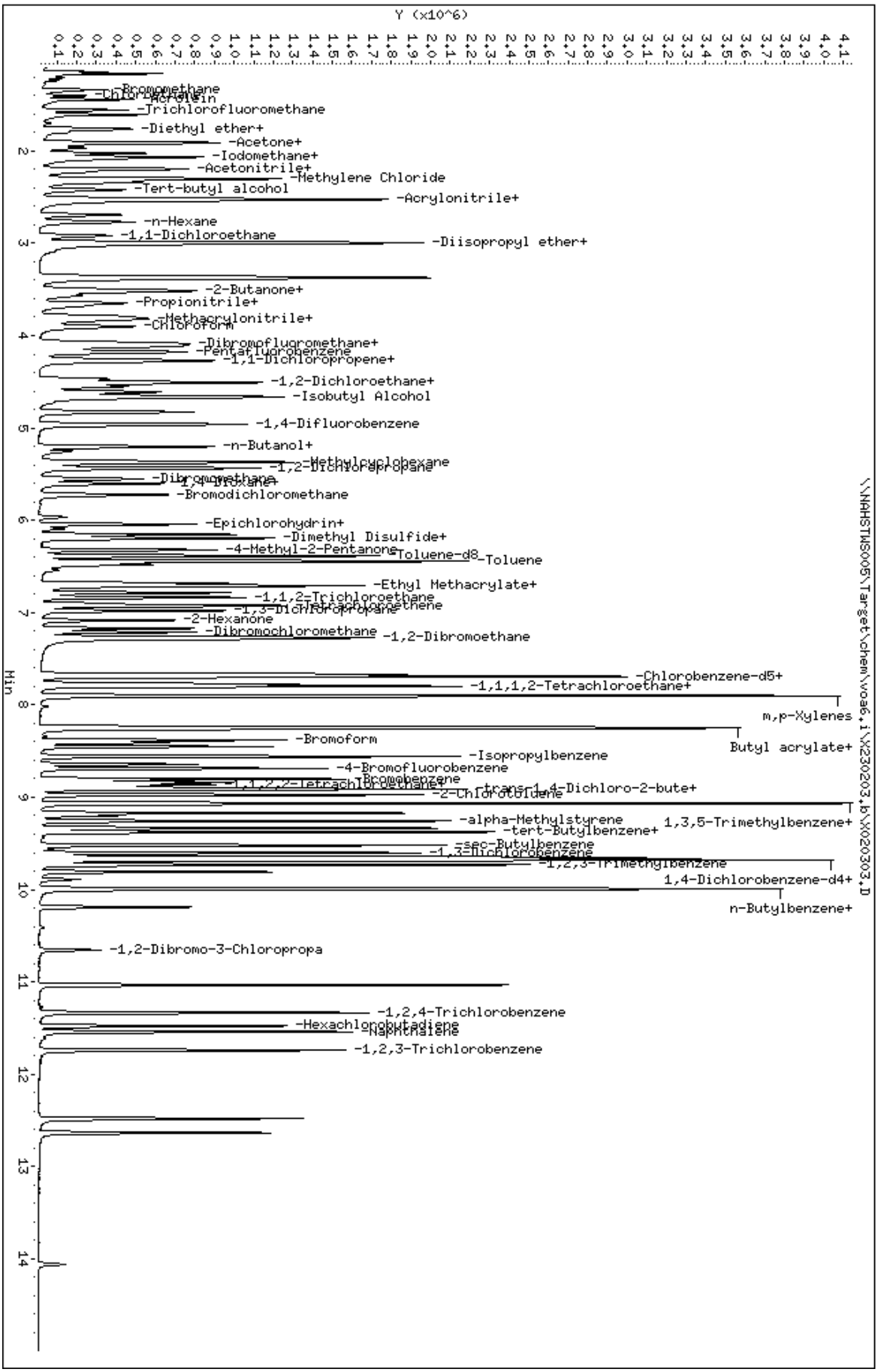
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
6	Bromomethane	94	1.340	1.340	(0.321)	156137	50.0000	40.13
7	Chloroethane	64	1.400	1.400	(0.335)	148676	50.0000	41.15
8	Trichlorofluoromethane	101	1.557	1.557	(0.373)	323874	50.0000	44.59
9	Acrolein	56	1.441	1.441	(0.345)	40380	100.000	99.40
10	Acetone	43	1.969	1.969	(0.472)	175713	100.000	105.41
11	1,1-Dichloroethene	96	1.909	1.909	(0.458)	181004	50.0000	40.14
15	Iodomethane	142	2.026	2.026	(0.485)	576746	100.000	97.26
16	Acrylonitrile	53	2.528	2.528	(0.606)	172722	100.000	112.94
17	Methylene Chloride	84	2.299	2.299	(0.551)	270395	50.0000	43.72
18	Methyl tert-butyl ether	73	2.528	2.528	(0.606)	750523	50.0000	50.85
19	Carbon Disulfide	76	2.067	2.067	(0.495)	1036933	100.000	87.89
20	trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	235697	50.0000	46.70
21	Vinyl Acetate	43	2.993	2.993	(0.717)	1426860	100.000	110.13
22	1,1-Dichloroethane	63	2.918	2.918	(0.699)	416544	50.0000	47.03
24	2-Butanone	43	3.570	3.570	(0.855)	202963	100.000	114.34
26	2,2-Dichloropropane	77	3.506	3.506	(0.840)	383616	50.0000	51.01
27	cis-1,2-Dichloroethene	96	3.521	3.521	(0.844)	278865	50.0000	45.40
28	Chloroform	83	3.900	3.900	(0.934)	468196	50.0000	47.16
29	Bromochloromethane	128	3.791	3.791	(0.908)	149241	50.0000	44.38
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.981)	253828	50.0000	44.47
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.978)	384616	50.0000	48.83
32	1,1-Dichloropropene	75	4.275	4.275	(0.862)	326159	50.0000	52.13
33	1,2-Dichloroethane	62	4.552	4.552	(0.918)	383300	50.0000	53.09
34	Carbon Tetrachloride	117	4.260	4.260	(0.859)	321420	50.0000	48.11
$ 35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	289045	50.0000	48.01
* 36	1,4-Difluorobenzene	114	4.961	4.961	(1.000)	881142	50.0000	
37	Benzene	78	4.507	4.507	(0.909)	1044393	50.0000	49.63
38	Trichloroethene	130	5.205	5.205	(1.049)	300884	50.0000	50.41
39	Bromodichloromethane	83	5.726	5.726	(1.154)	386357	50.0000	48.92
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	302337	100.000	134.57
42	1,2-Dichloropropane	63	5.433	5.433	(1.095)	278130	50.0000	49.69
44	Dibromomethane	93	5.549	5.549	(1.119)	180860	50.0000	47.53
45	4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	501327	100.000	114.40
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	487911	50.0000	52.61
* 47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	819861	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	977316	50.0000	48.24
50	Toluene	91	6.445	6.445	(0.841)	1135811	50.0000	50.12
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.346)	425531	50.0000	55.28
52	2-Hexanone	43	7.083	7.083	(0.924)	355859	100.000	119.35
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	227622	50.0000	50.06
54	1,3-Dichloropropane	76	6.978	6.978	(0.910)	468025	50.0000	52.30
55	Dibromochloromethane	129	7.173	7.173	(0.935)	336537	50.0000	51.28
56	Tetrachloroethene	164	6.925	6.925	(0.903)	239233	50.0000	51.02
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	301073	50.0000	52.96
58	1-Chlorohexane	55	7.694	7.694	(1.551)	221634	50.0000	52.04
59	Chlorobenzene	112	7.694	7.694	(1.003)	795442	50.0000	49.48
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	307763	50.0000	51.45
61	Ethylbenzene	106	7.799	7.799	(1.017)	391787	50.0000	51.74
62	m,p-Xylenes	106	7.904	7.904	(1.031)	986751	100.000	101.09
63	o-Xylene	106	8.241	8.241	(1.075)	486431	50.0000	50.49
64	Styrene	104	8.256	8.256	(1.077)	855623	50.0000	52.98
66	Bromoform	173	8.410	8.410	(1.097)	238042	50.0000	52.36

67	Isopropylbenzene	105	8.560	8.560 (1.116)	1163860	50.0000	52.88
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	382870	50.0000	53.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	383353	50.0000	50.62
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	452221	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	299510	50.0000	59.52(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	1381074	50.0000	55.13
	74 Bromobenzene	156	8.803	8.803	(0.911)	387180	50.0000	52.18
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1021258	50.0000	55.18
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	896649	50.0000	54.54
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	1039496	50.0000	55.47
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	828015	50.0000	54.66
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1052982	50.0000	54.08
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	1141864	50.0000	56.65
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1043900	50.0000	57.80
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	661686	50.0000	53.73
	84 1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	689268	50.0000	51.29
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	920792	50.0000	52.80
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	659613	50.0000	52.00
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	67206	50.0000	58.30
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	479293	50.0000	59.88(M)
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	212219	50.0000	59.69
	92 Naphthalene	128	11.540	11.540	(1.194)	1121101	50.0000	61.56
	93 1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	446545	50.0000	58.25
M	94 1,2-Dichloroethylene (total)	96				514562	100.000	(a)
	141 Cyclohexane	56	4.117	4.117	(0.987)	301771	50.0000	50.38
	138 Freon TF	101	1.913	1.913	(0.458)	190748	50.0000	43.73
	147 Methylcyclohexane	55	5.377	5.377	(1.084)	675063	50.0000	62.58
	146 Methyl Acetate	43	2.228	2.228	(0.534)	141998	50.0000	53.11
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	504066	1000.00	1225.35
	149 Isopropyl Alcohol	45	2.089	2.089	(0.501)	277859	1000.00	1293.36

QC Flag Legend

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



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Date : 03-FEB-2023 11:02
Client ID: CCV
Sample Info: CCV,CCV,2,,
Purge Volume: 5.0
Column phase: DB624

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

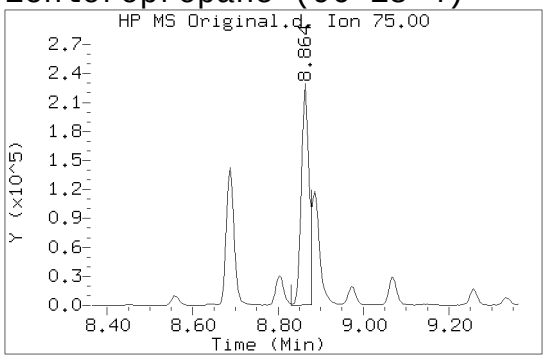
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020303.D
Inj Date : 03-FEB-2023 11:02
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

BEFORE

MASS
75
AREA
299510
HEIGHT
229141
09-Feb-2023
17:24
Kori
Bagsby



AFTER

MASS
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AREA
299510
HEIGHT
229141
13-Feb-2023
14:07
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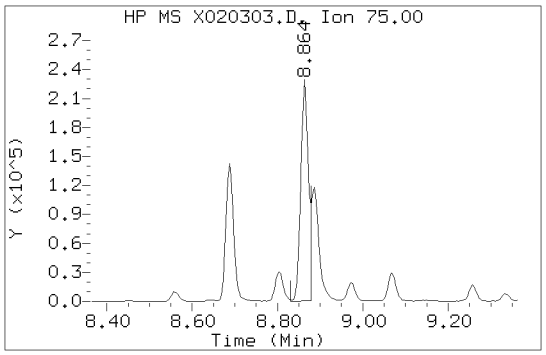

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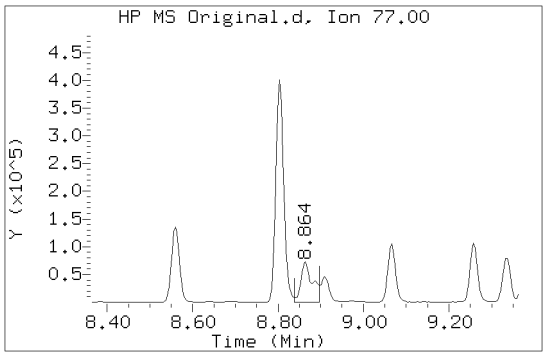

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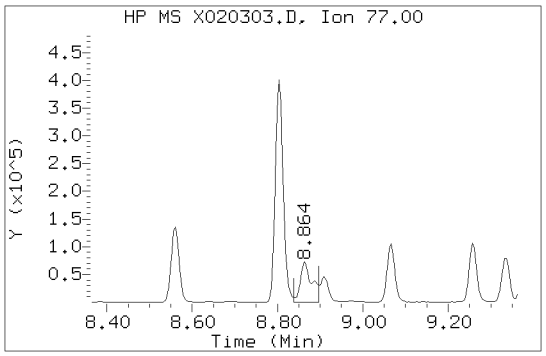

1,2,4-Trichlorobenzene (120-82-1)

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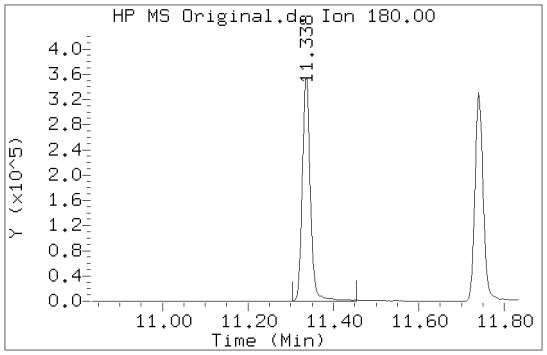

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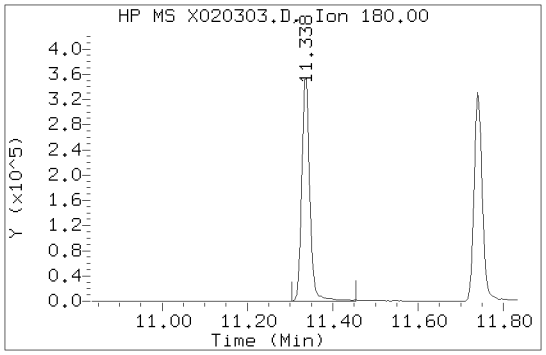

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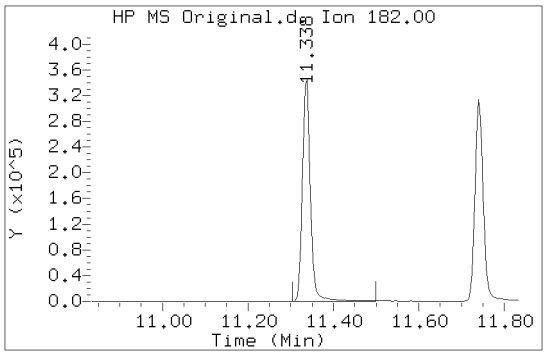

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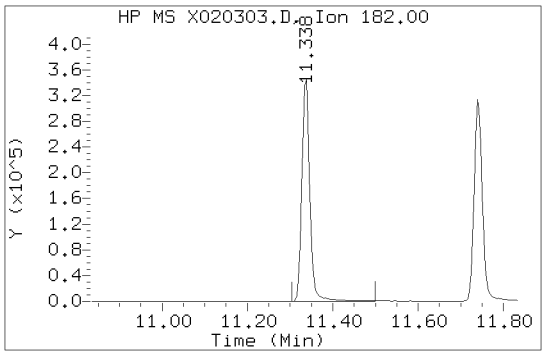

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InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

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09-Feb-2023
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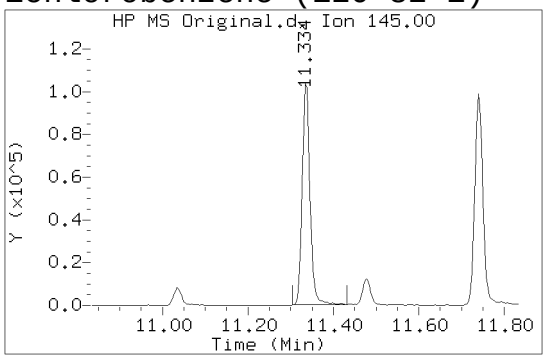

AFTER

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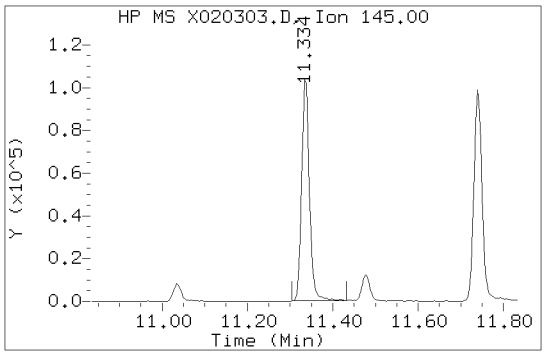


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020304.D Page 1
Report Date: 09-Feb-2023 17:24

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020304.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 03-FEB-2023 11:23
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 09-Feb-2023 17:24 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)	723831	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	309331	44.4885	44.48
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	347005	47.3174	47.31
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1024527	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	910274	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1177579	52.3519	52.35
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	432540	51.4435	51.44
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	466160	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020304.D

Date : 03-FEB-2023 11:23

Client ID: CCB

Instrument: voa6.i

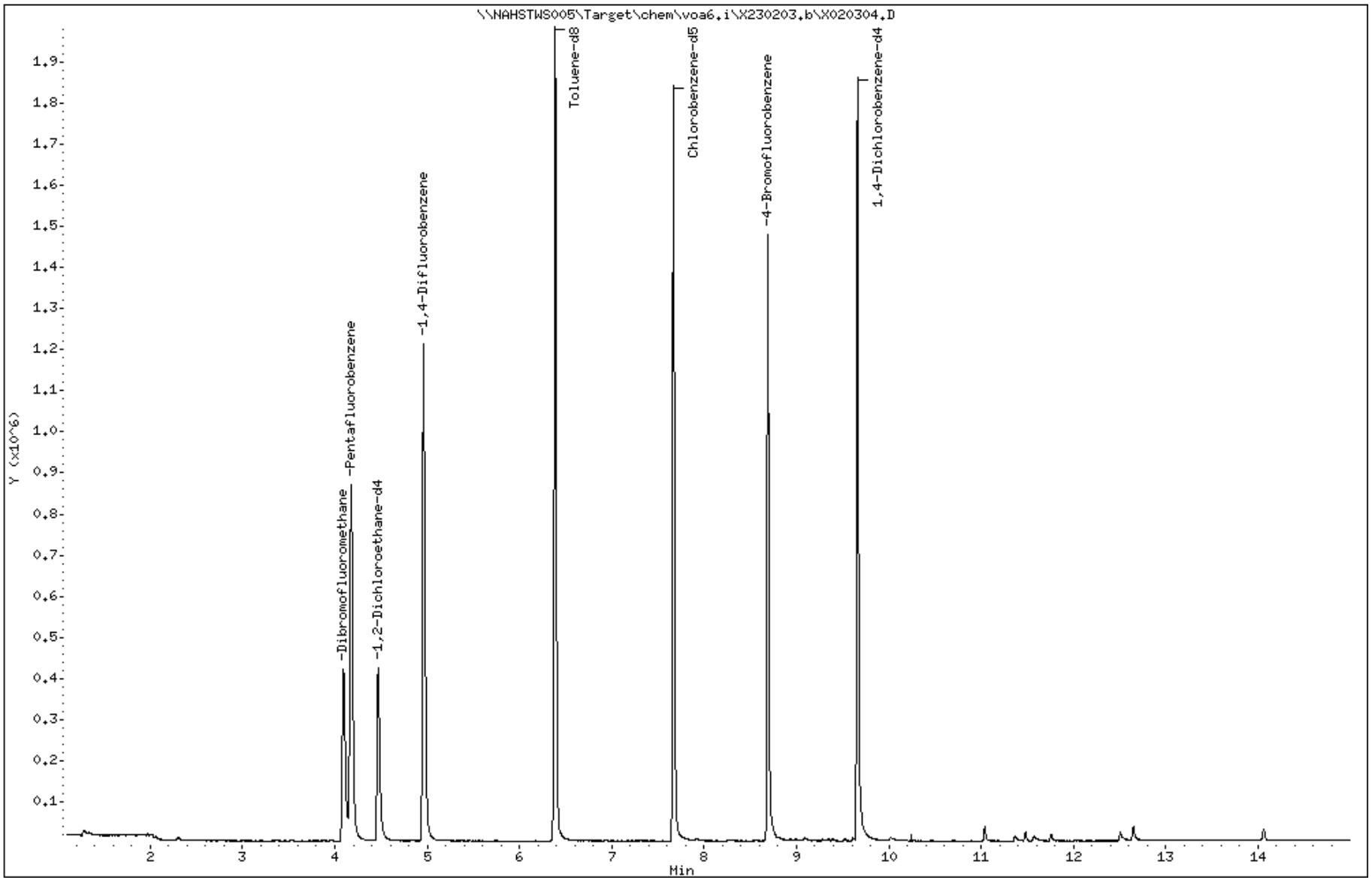
Sample Info: CCB;CCB;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 03-FEB-2023 11:23
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020305.D Page 1
Report Date: 13-Feb-2023 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020305.D
Lab Smp Id: VLCSW-230203 Client Smp ID: VLCSW-230203
Inj Date : 03-FEB-2023 11:44
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230203;VLCSW-230203;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:07 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	4.174	4.174	(1.000)	593012	50.0000	
135	1,4-Dioxane	88	5.602	5.594	(1.342)	26039	480.358	480.35(a)
140	1,3-Butadiene	54	1.160	1.163	(0.278)	72951	17.9243	17.92
25	Methacrylonitrile	41	3.821	3.814	(0.916)	93277	22.2140	22.21
12	Isobutyl Alcohol	43	4.672	4.668	(1.119)	297419	445.900	445.90
13	Acetonitrile	39	2.194	2.194	(0.526)	106038	196.470	196.47
14	Allyl Chloride	41	2.194	2.194	(0.526)	217414	21.1508	21.15
4	Propionitrile	54	3.649	3.645	(0.874)	132239	218.546	218.54(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	38795	21.4113	21.41
130	Ethyl Acetate	43	3.653	3.649	(0.875)	108167	23.3754	23.37
40	Methyl Methacrylate	41	5.606	5.602	(1.343)	94857	23.4593	23.45
49	Ethyl Methacrylate	69	6.708	6.708	(1.352)	100935	24.4060	24.40
142	Tetrahydrofuran	42	3.840	3.840	(0.920)	29679	38.3666	38.36
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	207977	20.2316	20.23
156	Diisopropyl ether	45	2.993	2.993	(0.717)	311769	20.2668	20.26
200	Dimethyl Disulfide	94	6.194	6.194	(0.808)	226728	19.9593	19.95
182	Epichlorohydrin	57	6.097	6.093	(1.229)	38133	98.2417	98.24
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	432747	19.3698	19.36
2	Dichlorodifluoromethane	85	0.969	0.969	(0.232)	179582	43.3508	43.35
3	Chloromethane	50	1.074	1.077	(0.257)	108878	21.6069	21.60

5 Vinyl Chloride	62	1.141	1.141 (0.273)	92409	17.8386	17.83
6 Bromomethane	94	1.336	1.340 (0.320)	66773	18.2049	18.20

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020305.D Page 2
Report Date: 13-Feb-2023 14:07

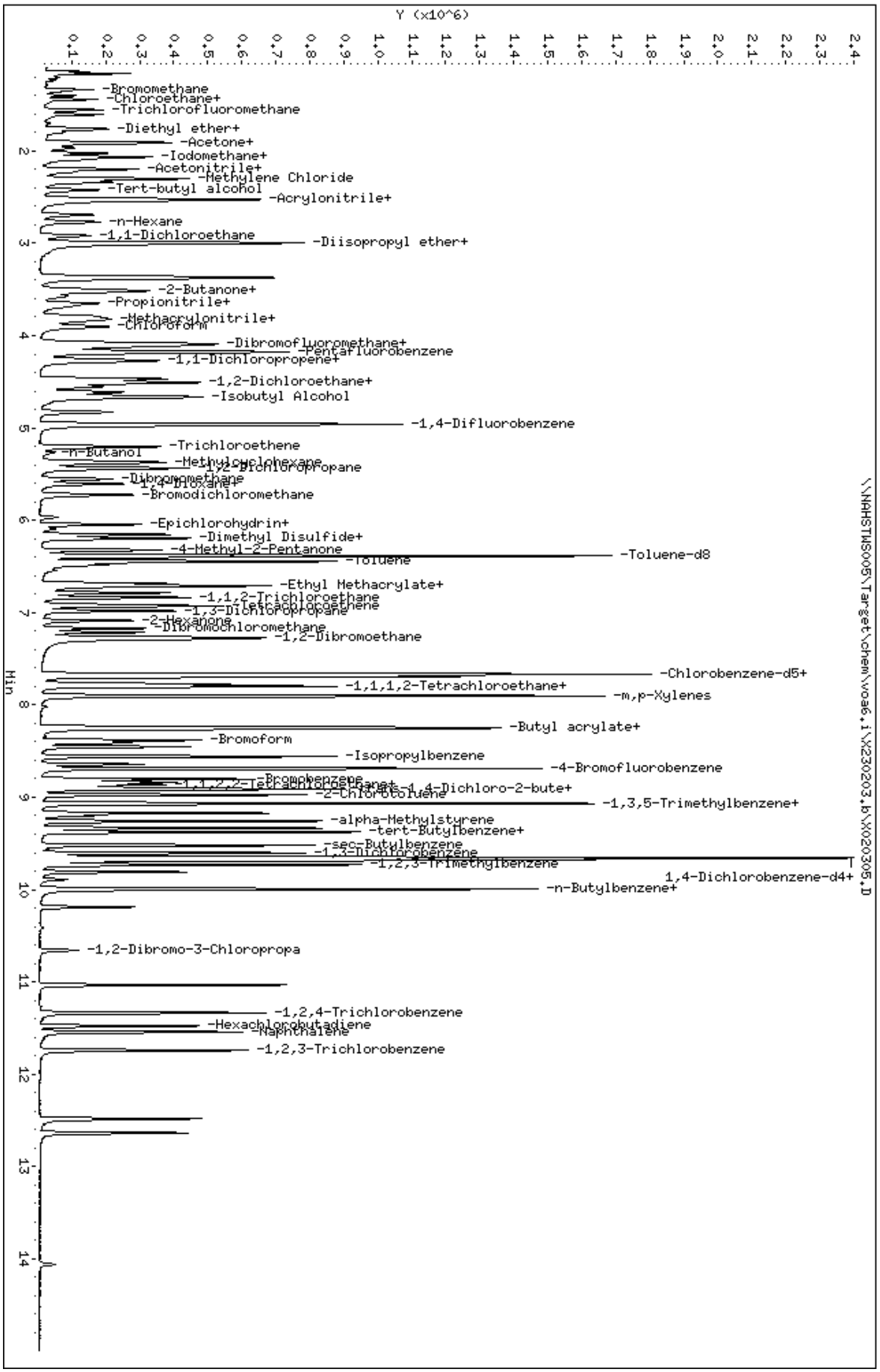
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	7 Chloroethane	64	1.400	1.400	(0.335)	61601	17.0846	17.08
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	131779	18.1782	18.17
	9 Acrolein	56	1.441	1.441	(0.345)	12633	33.0922	33.09
	10 Acetone	43	1.970	1.969	(0.472)	75330	45.2533	45.25
	11 1,1-Dichloroethene	96	1.910	1.909	(0.458)	75991	16.8843	16.88
	15 Iodomethane	142	2.026	2.026	(0.485)	201404	37.0465	37.04
	16 Acrylonitrile	53	2.532	2.528	(0.607)	63083	41.3264	41.32
	17 Methylene Chloride	84	2.299	2.299	(0.551)	118871	19.2551	19.25
	18 Methyl tert-butyl ether	73	2.532	2.528	(0.607)	307869	20.8984	20.89
	19 Carbon Disulfide	76	2.067	2.067	(0.495)	419412	35.6175	35.61
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	97523	19.3610	19.36
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	577970	44.6930	44.69
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	169962	19.2261	19.22
	24 2-Butanone	43	3.574	3.570	(0.856)	75869	44.7110	44.71
	26 2,2-Dichloropropane	77	3.503	3.506	(0.839)	155754	20.7511	20.75
	27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.844)	114057	18.6062	18.60
	28 Chloroform	83	3.904	3.900	(0.935)	194042	19.5840	19.58
	29 Bromochloromethane	128	3.795	3.791	(0.909)	61540	18.3354	18.33
$	30 Dibromofluoromethane	113	4.091	4.095	(0.980)	259774	45.6071	45.60
	31 1,1,1-Trichloroethane	97	4.076	4.080	(0.977)	159181	20.2488	20.24
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	133145	21.3544	21.35
	33 1,2-Dichloroethane	62	4.556	4.552	(0.918)	159235	22.1293	22.12
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	131837	19.8010	19.80
$	35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.070)	297855	49.5622	49.56
*	36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	878233	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	420351	20.0434	20.04
	38 Trichloroethene	130	5.205	5.205	(1.049)	121987	20.5078	20.50
	39 Bromodichloromethane	83	5.726	5.726	(1.154)	158769	20.1723	20.17
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.218)	117815	52.6157	52.61
	42 1,2-Dichloropropane	63	5.433	5.433	(1.095)	110060	19.7287	19.72
	44 Dibromomethane	93	5.550	5.549	(1.119)	75814	19.9941	19.99
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	207998	46.3641	46.36
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.240)	193539	20.9380	20.93
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	839324	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	977988	47.1540	47.15
	50 Toluene	91	6.445	6.445	(0.841)	462133	19.9202	19.92
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.347)	167642	21.8541	21.85
	52 2-Hexanone	43	7.086	7.083	(0.924)	147758	48.4095	48.40
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	94219	20.2441	20.24
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	192190	20.9795	20.97
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	136212	20.2779	20.27
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	97835	20.3823	20.38
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	125106	21.4993	21.49
	58 1-Chlorohexane	55	7.694	7.694	(1.551)	92984	21.9084	21.90
	59 Chlorobenzene	112	7.694	7.694	(1.003)	326285	19.8289	19.82
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	124064	20.2596	20.25
	61 Ethylbenzene	106	7.799	7.799	(1.017)	160785	20.7433	20.74
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	405230	40.5548	40.55
	63 o-Xylene	106	8.241	8.241	(1.075)	199278	20.2063	20.20
	64 Styrene	104	8.260	8.256	(1.077)	346645	20.9704	20.97
	66 Bromoform	173	8.410	8.410	(1.097)	95639	20.5516	20.55
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	472043	20.9504	20.95

	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	158004	21.3674	21.36
$	69	4-Bromofluorobenzene	95	8.687	8.687 (1.133)	384015	49.5354	49.53

	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)	463946	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	118633	22.9803	22.98(M)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	558677	21.7397	21.73
	74 Bromobenzene	156	8.803	8.803	(0.911)	159208	20.9161	20.91
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	416922	21.9614	21.96
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	371000	22.0000	22.00
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	425959	22.1573	22.15
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	333128	21.4370	21.43
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	430318	21.5425	21.54
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	452247	21.8726	21.87
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	414306	22.3611	22.36
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	272619	21.5786	21.57
	84 1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	289237	20.9801	20.98
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	357127	21.0653	21.06
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	276531	21.2530	21.25
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	27275	23.1206	23.12
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	193891	23.6126	23.61
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	81645	22.5541	22.55
	92 Naphthalene	128	11.544	11.540	(1.195)	439629	23.5312	23.53
	93 1,2,3-Trichlorobenzene	180	11.742	11.738	(1.215)	181782	23.1148	23.11
M	94 1,2-Dichloroethylene (total)	96				211580	37.9671	37.96
M	95 Xylenes (total)	106				604508	60.7610	60.76
	141 Cyclohexane	56	4.118	4.117	(0.987)	124917	21.6320	21.63
	138 Freon TF	101	1.910	1.913	(0.458)	76720	17.6243	17.62
	147 Methylcyclohexane	55	5.381	5.377	(1.085)	237956	22.1348	22.13
	146 Methyl Acetate	43	2.228	2.228	(0.534)	56673	21.2384	21.23
	148 Tert-Butyl alcohol	59	2.423	2.423	(0.581)	205592	500.686	500.68
	149 Isopropyl Alcohol	45	2.090	2.089	(0.501)	108494	505.927	505.92

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: WLCSW-230203;WLCSW-230203;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

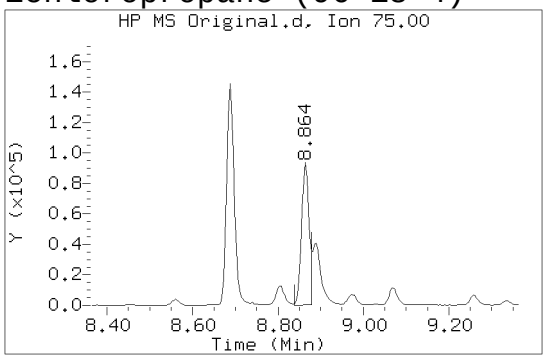
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020305.D
Inj Date : 03-FEB-2023 11:44
InstruID : voa6.i
LabSampID : VLCSW-230203

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

Reason Code:

BEFORE

MASS
75
AREA
118633
HEIGHT
93522
09-Feb-2023
17:24
Kori
Bagsby



AFTER

MASS
75
AREA
118633
HEIGHT
93522
13-Feb-2023
14:07
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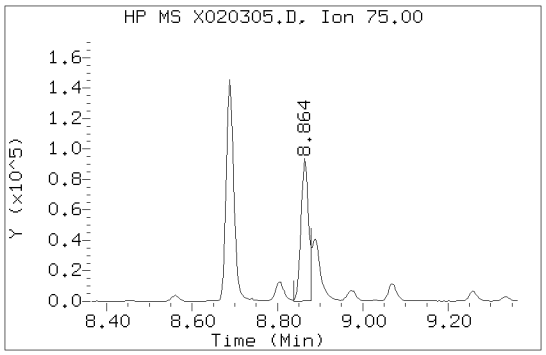

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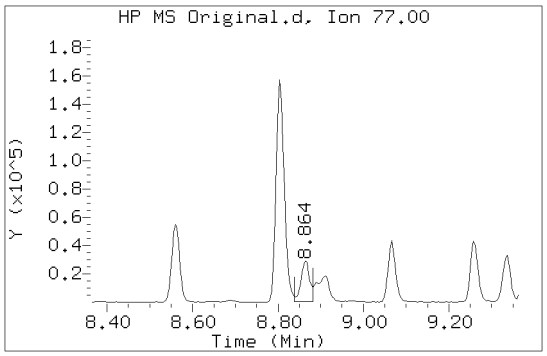

AFTER

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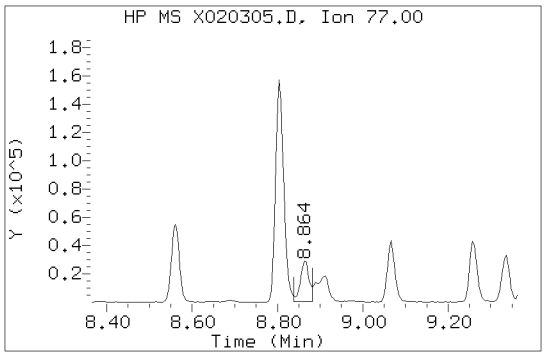
Bags



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020307.D Page 1
Report Date: 14-Feb-2023 12:16

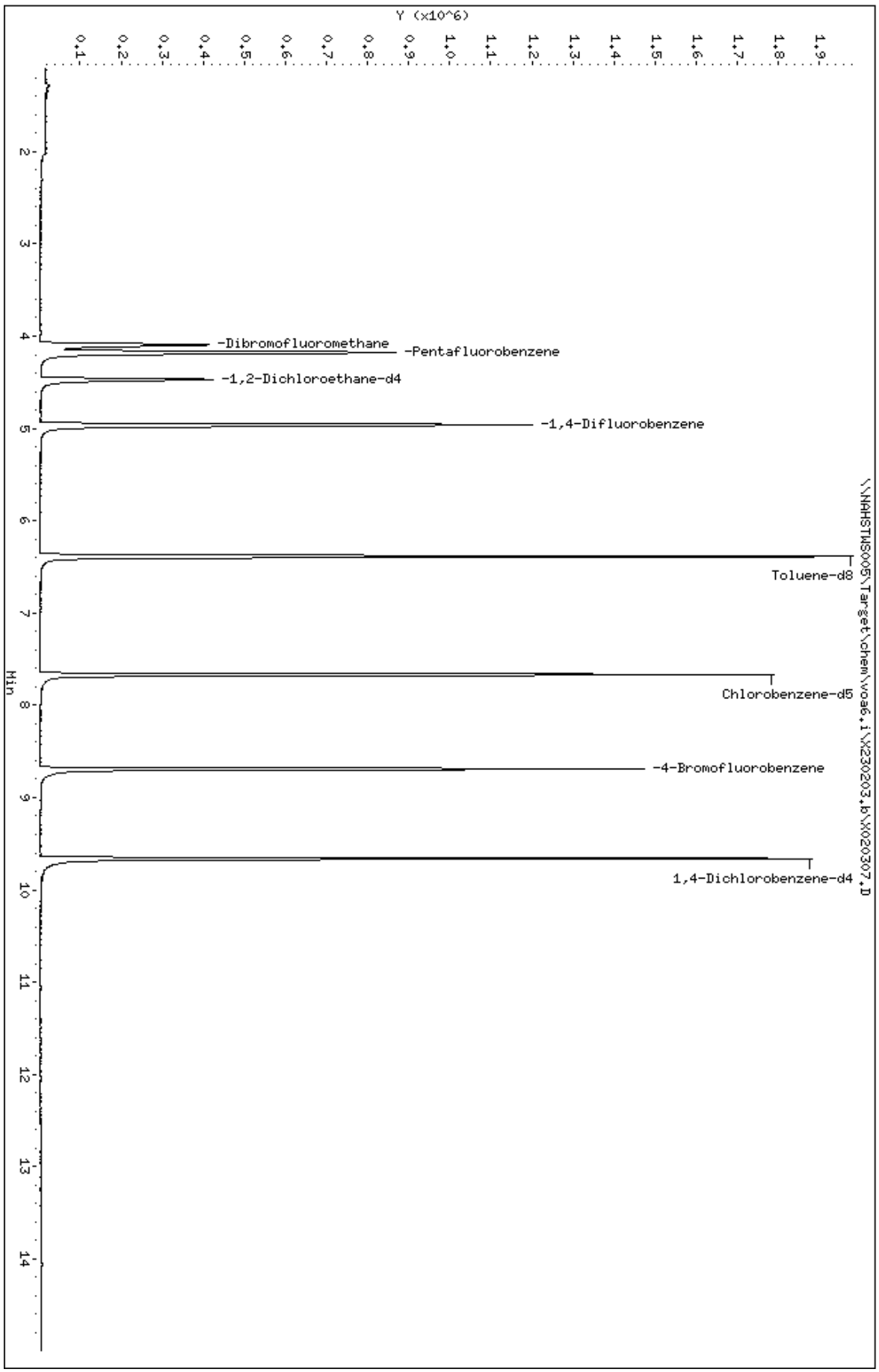
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020307.D
Lab Smp Id: VBLKW-230203 Client Smp ID: VBLKW-230203
Inj Date : 03-FEB-2023 12:26
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230203;VBLKW-230203;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:09 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	4.174	4.178	(1.000)	725153	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	308263	44.2531	44.25
$ 35 1,2-Dichloroethane-d4	65	4.466	4.470	(1.070)	348254	47.4007	47.40
* 36 1,4-Difluorobenzene	114	4.961	4.961	(1.000)	1022005	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	915781	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1184056	52.3233	52.32
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	437185	51.6830	51.68
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	467996	50.0000	



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Date : 03-FEB-2023 12:26
Client ID: VBLKW-230203
Sample Info: VBLKW-230203;VBLKW-230203;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\X230203.b\X020307.D
Inj Date : 03-FEB-2023 12:26
InstruID : voa6.i
LabSampID : VBLKW-230203

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020315.D Page 1
Report Date: 14-Feb-2023 12:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020315.D
Lab Smp Id: HS23011233-07MS Client Smp ID: HS23011233-07MS
Inj Date : 03-FEB-2023 15:25
Operator : PC Inst ID: voa6.i
Smp Info : HS2301233-07MS;HS23011233-07MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230203.b\8260W.m
Meth Date : 13-Feb-2023 14:09 voa6.i Quant Type: ISTD
Cal Date : 16-DEC-2022 14:04 Cal File: X121608.D
Als bottle: 15 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.178	(1.000)	718397	50.0000	
135 1,4-Dioxane	88	5.595	5.595	(1.340)	25559	389.210	389.20(a)
140 1,3-Butadiene	54	1.160	1.160	(0.278)	70633	14.3258	14.32
25 Methacrylonitrile	41	3.821	3.818	(0.916)	87156	17.1336	17.13
12 Isobutyl Alcohol	43	4.669	4.672	(1.119)	309839	383.446	383.44
13 Acetonitrile	39	2.195	2.195	(0.526)	126379	193.290	193.28
14 Allyl Chloride	41	2.195	2.195	(0.526)	238218	19.1299	19.12
4 Propionitrile	54	3.649	3.645	(0.874)	131140	178.903	178.90(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.890	(1.159)	39664	19.9953	19.99
194 Acetaldehyde	44	1.209	1.209	(0.290)	86143	188.049	188.04
130 Ethyl Acetate	43	3.653	3.649	(0.875)	101199	18.0526	18.05
40 Methyl Methacrylate	41	5.606	5.602	(1.343)	89919	18.3567	18.35
49 Ethyl Methacrylate	69	6.708	6.708	(1.351)	84653	17.6467	17.64
142 Tetrahydrofuran	42	3.840	3.840	(0.920)	31004	32.6482	32.64
145 alpha-Methylstyrene	118	9.332	9.257	(0.966)	6238	0.56215	0.56(a)
156 Diisopropyl ether	45	2.997	2.993	(0.718)	345607	18.5453	18.54
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	253526	20.3857	20.38
182 Epichlorohydrin	57	6.101	6.093	(1.229)	25326	57.3188	57.31
166 1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	503368	20.8722	20.87
2 Dichlorodifluoromethane	85	0.969	0.969	(0.232)	55013	11.2557	11.25

3 Chloromethane	50	1.074	1.074 (0.257)	99707	16.8732	16.87
5 Vinyl Chloride	62	1.141	1.141 (0.274)	99669	15.8820	15.88

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230203.b\X020315.D Page 2
Report Date: 14-Feb-2023 12:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	6 Bromomethane	94	1.336	1.336	(0.320)	74268	16.8588	16.85
	7 Chloroethane	64	1.400	1.400	(0.335)	67120	15.3663	15.36
	8 Trichlorofluoromethane	101	1.557	1.557	(0.373)	170186	19.3789	19.37
	9 Acrolein	56	1.441	1.441	(0.345)	17490	37.4158	37.41
	10 Acetone	43	1.970	1.970	(0.472)	52439	25.9892	25.98
	11 1,1-Dichloroethene	96	1.910	1.910	(0.458)	92057	16.8840	16.88
	15 Iodomethane	142	2.022	2.022	(0.485)	205498	31.7876	31.78
	16 Acrylonitrile	53	2.532	2.528	(0.607)	71114	38.4565	38.45
	17 Methylene Chloride	84	2.300	2.300	(0.551)	123003	16.4469	16.44
	18 Methyl tert-butyl ether	73	2.532	2.528	(0.607)	358924	20.1117	20.11
	19 Carbon Disulfide	76	2.067	2.063	(0.495)	535972	37.5719	37.57
	20 trans-1,2-Dichloroethene	96	2.524	2.524	(0.605)	115705	18.9614	18.96
	21 Vinyl Acetate	43	2.993	2.993	(0.717)	530721	33.8766	33.87
	22 1,1-Dichloroethane	63	2.918	2.918	(0.699)	194466	18.1586	18.15
	24 2-Butanone	43	3.574	3.570	(0.856)	68216	33.9644	33.96
	26 2,2-Dichloropropane	77	3.503	3.503	(0.839)	185423	20.3922	20.39
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.844)	133305	17.9507	17.95
	28 Chloroform	83	3.900	3.900	(0.934)	225122	18.7552	18.75
	29 Bromochloromethane	128	3.792	3.788	(0.908)	66561	16.3701	16.37
$	30 Dibromofluoromethane	113	4.091	4.095	(0.980)	304040	44.0566	44.05
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.978)	200015	21.0024	21.00
	32 1,1-Dichloropropene	75	4.279	4.275	(0.862)	171721	23.7438	23.74
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	165767	19.8606	19.86
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	174925	22.6499	22.64
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	350895	48.2046	48.20
*	36 1,4-Difluorobenzene	114	4.965	4.961	(1.000)	1018697	50.0000	
	37 Benzene	78	4.507	4.508	(0.908)	489887	20.1382	20.13
	38 Trichloroethene	130	5.205	5.205	(1.048)	150934	21.8754	21.87
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	170865	18.7158	18.71
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	121713	18.8092	18.80
	44 Dibromomethane	93	5.553	5.550	(1.119)	78791	17.9140	17.91
	45 4-Methyl-2-Pentanone	43	6.322	6.322	(0.824)	202525	41.2349	41.23
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	208228	19.4210	19.42
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	918895	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1177654	51.8641	51.86
	50 Toluene	91	6.446	6.442	(0.841)	546017	21.4980	21.49
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	175260	19.6969	19.69
	52 2-Hexanone	43	7.087	7.083	(0.924)	134100	40.1302	40.13
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	97172	19.0706	19.07
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	199374	19.8791	19.87
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	145785	19.8237	19.82
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	126621	24.0951	24.09
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	129417	20.3143	20.31
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	131652	26.7421	26.74
	59 Chlorobenzene	112	7.694	7.690	(1.003)	364269	20.2203	20.22
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	135380	20.1931	20.19
	61 Ethylbenzene	106	7.799	7.799	(1.017)	192484	22.6825	22.68
	62 m,p-Xylenes	106	7.904	7.900	(1.031)	488016	44.6106	44.61
	63 o-Xylene	106	8.241	8.241	(1.075)	232425	21.5265	21.52
	64 Styrene	104	8.260	8.256	(1.077)	283065	15.6412	15.64
	66 Bromoform	173	8.410	8.410	(1.097)	96452	18.9315	18.93
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	607488	24.6271	24.62

	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837 (0.915)	156328	19.5845	19.58
$	69 4-Bromofluorobenzene	95	8.687	8.687 (1.133)	444525	52.3718	52.37